नालको NALCO

Annual Report 2022-23



Our **Vision**

To be a Premier and Integrated Company in the Aluminium value chain with strategic presence in Mining both domestic & global, Metals and Energy sectors.



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Registered Office & Corporate Office

National Aluminium Company Limited
CIN: L27203OR1981GOI000920
NALCO Bhawan, Plot No. P/1, Nayapalli,
Bhubaneswar - 751 013, Odisha
Tel. : 0674-2303197
Email: company_secretary@nalcoindia.co.in
Website : www.nalcoindia.com

42nd Annual General Meeting

Date & Time: Thursday, the 21st September, 2023 at 11.00 a.m.
Deemed Venue: NALCO Bhawan, P/1, Nayapalli,
Bhubaneswar - 751 013.
Mode: Video Conferencing/OAVM





Year at a glance

PHYSICAL

Bauxite (MT)	74,56,776
Alumina Hydrate (MT)	21,23,000
Aluminium (MT)	4,60,000
Power (Net) (MU)	5,788
Wind Power (MU)	280

FINANCIAL

Export Turnover (₹ in Crore)	4,217
Gross Sales (₹ in Crore)	14,171
Profit Before Tax (₹ in Crore)	1,955
Profit After Tax (₹ in Crore)	1,544
Earning Per Share (₹)	8.41
Book Value Per Share (₹)	72.08
Dividend (₹ Per Share)	4.50

Board of Directors

01.	**Shri Sridhar Patra**	*Chairman-cum-Managing Director*
02.	**Shri Sanjay Lohiya, IAS**	*Part-time Official Director*
03.	**Dr. Veena Kumari Dermal, IPoS**	*Part-time Official Director*
04.	**Shri Radhashyam Mahapatro**	*Director (HR)*
05.	**Shri Ramesh Chandra Joshi**	*Director (Finance)*
06.	**Shri Sadashiv Samantaray**	*Director (Commercial)*
07.	**Shri Pankaj Kumar Sharma**	*Director (Production) & Director (P&T) -Addl. Charge [Director (Production) - w.e.f. 01.02.2023 and Additional Charge of Director (P&T) - w.e.f. 01.08.2023]*
08.	**Shri Ravi Nath Jha**	*Part-time Non-official (Independent) Director*
09.	**Dr. B. R. Ramakrishna**	*Part-time Non-official (Independent) Director*
10.	**Adv. George Kurian**	*Part-time Non-official (Independent) Director*
11.	**Dr. Ajay Narang**	*Part-time Non-official (Independent) Director*
12.	**Shri Y. P. Chillio**	*Part-time Non-official (Independent) Director*
13.	**Ms. (Dr.) Shatorupa**	*Part-time Non-official (Independent) Director*
14.	**Adv. Dushyant Upadhyay**	*Part-time Non-official (Independent) Director*
15.	**Shri Sanjay Ramanlal Patel**	*Part-time Non-official (Independent) Director*
16.	**Shri Bijay Kumar Das**	*Director (Production) - (Upto 31.01.2023)*
17.	**Shri Manasa Prasad Mishra**	*Director (P&T) - (Upto 31.07.2023)*

GGM & Company Secretary
Shri Nayan Kumar Mohanty

Board of Directors



SHRI SRIDHAR PATRA
Chairman-cum-Managing Director

Shri Sridhar Patra has been appointed as Chairman-cum-Managing Director of the Company w.e.f. 17th December, 2019.

Shri Sridhar Patra joined the Company as Director (Finance) on 01.09.2018. He resumed the office of Chairman-cum-Managing Director w.e.f. 01.12.2019. Before joining NALCO, he had served as Director (Finance) of THDC India Limited for more than 5 years.

Born on 12.10.1964, Shri Patra is a member of the Institute of Chartered Accountants of India and rank holder graduate in Commerce from Utkal University. Shri Patra is a seasoned Finance & Accounts Professional. Over three decades of experience in finance and accounts functions of various Public Sector Undertakings like Odisha Mining Corporation Ltd., Indian Rare Earths Ltd. and Mangalore Refinery & Petrochemicals Ltd (A subsidiary of ONGC Ltd.) with exposure in Corporate Accounts, Budgetary Control, Direct & Indirect Tax Management, Strategic Financial & Business Planning, Financial evaluation of Contracts, Cost Excellence and Treasury function, he has demonstrated commitment to organizational growth. Shri Patra has contributed significantly as an academician to professional accounting institutions apart from his employment in PSUs.

Board of Directors



SHRI SANJAY LOHIYA, IAS
Part-time Official Director

Shri Sanjay Lohiya, an IAS Officer of 1994 batch (Assam Meghalaya cadre) joined as Joint Secretary, Ministry of Mines in October, 2020 and later become Additional Secretary in March 2021. He joined Indian Administrative Service (IAS) after graduating from Delhi University. Before joining as Joint Secretary, Ministry of Mines, he held the post of Principal Secretary to Chief Minister, Govt. of Assam. He worked in various capacities in Government of Assam. He has already worked in Govt. of India as Director, PMO and as Joint Secretary, Ministry of Agriculture and Farmers' Welfare during 2011-2016. During his tenure in Govt. of Assam, he worked in various departments like Finance, Agriculture, and urban development in various capacities and has wide experience.



DR. VEENA KUMARI DERMAL, IPoS
Part-time Official Director

Dr. Veena Kumari Dermal belongs to 1998 batch of Indian Postal Service (IPoS) of Government of India. She is currently working as Joint Secretary dealing with Mineral Policy, Legislation and International Co-operation in the Ministry of Mines, Government of India, New Delhi.

Dr. Veena Kumari Dermal served in various capacities in the Postal Department at All India level. She has joined as Director in the Ministry of Mines in 2017 and got promoted as Joint Secretary in 2020. She has been associated with amendments to MMDR Act in 2020, 2021 and 2023 and all the subordinate legislations to the Act. She has deep understanding of mineral policy in India.

Dr. Veena Kumari Dermal has done B.Sc. (Agriculture), M.Sc. (Horticulture) from Kerala Agriculture University and Ph.D. in Horticulture from Indian Agricultural Research Institute in New Delhi. She has done Post Graduate Diploma in Public Policy from IIM, Bangalore. She has undergone various short-term courses at the National and International level.

Dr. Veena Kumari Dermal has abundant experience of working in Government and Public Sectors.

Board of Directors



SHRI RADHASHYAM MAHAPATRO
Director (HR)

Shri Radhashyam Mahapatro joined the Company as Director (HR) w.e.f. 01.01.2020.

Shri Mahapatro has rich experience in Power, Oil and Coal Sectors in different capacities and successfully shouldered varied and higher responsibilities. He is a physics graduate from Khallikote College, Brahmapur, Odisha and did his Post Graduation in Industrial Relation & Labour Welfare from Berhampur University. Shri Mahapatro has handled many areas of HR functions. During his tenure in NHPC, Engineers India Limited and Central Coalfields Ltd, he was instrumental in the introduction of Productive work culture through Team Work.

Shri Mahapatro's areas of interest include improving productivity, human development, creation of employment through skill development, sports, culture and improvement of human dignity. He has passionately worked for reformation in administration to make it responsive to the need and aspirations of the communities. His forte includes transparency, leadership and teamwork.



SHRI RAMESH CHANDRA JOSHI
Director (Finance)

Shri Ramesh Chandra Joshi assumed the charge as Director (Finance) of Navratna CPSE, National Aluminum Company Limited w.e.f. 04th February, 2022. Shri Joshi brings forth over three decades of multifaceted experience across various organizational tiers. He holds degrees in Commerce and Law, and is also a certified Cost & Management Accountant. In 1994, he embarked on his journey at NALCO, displaying unwavering dedication, relentless determination, and tireless efforts, all of which propelled him to ascend to this esteemed position.

Shri Joshi stands as a seasoned professional in Finance & Accounts, recognized for his astute decision-making process, adept analytical skills, effective problem-solving and insightful business acumen, result-oriented leadership, and a collaborative team-driven approach. His steadfast dedication to organizational advancement remains resolute.

At NALCO, he has adeptly steered through a multitude of financial operations. His expertise extends beyond the fundamental domains of accounting, encompassing a profound understanding of financial planning and analysis, comprehensive Financial Reporting, strategic business mapping, as well as intricate contractual and regulatory nuances. Furthermore, he places paramount importance on value creation through strategic capital expenditure and an unwavering commitment to enhancing market capitalization, showcasing his strategic vision and dedication to the organization's financial growth.

Notably, he serves as a nominee director on the Board of M/s. Angul Aluminium Park Pvt. Ltd, a joint venture of NALCO, further underscoring his influential presence within the corporate landscape.

Board of Directors



SHRI SADVASHIV SAMANTARAY
Director (Commercial)

Shri Sadashiv Samantaray has joined as Director (Commercial) of National Aluminium Company Limited, a Navratna CPSE on 22.03.2022. He was inducted as a Director of KABIL (Khanij Bidesh India Limited) and was entrusted with additional role of CEO w.e.f. 10.08.2023.

Born in the year 1965, Shri Samantaray had been a position holder all throughout his education in schools and colleges. After completing his B.Tech. (Mechanical) with University Merit certificates in all the four years of graduation from GB Pant University of Ag & Technology, Pantnagar, now in Uttarakhand, he joined NALCO as Graduate Engineer Trainee in the year 1985 (2nd batch of GETs). He has done his MBA from Utkal University with specialization in Marketing and Finance. He has also completed PG Diploma in Business administration and PD Diploma in Marketing Management.

Through his sincerity, hard work, dedication and competence on strategic management, he rose to the level of Executive Director (Commercial) before being selected as Director (Commercial).

Shri Samantaray has more than 36 years of rich experience in Plants and commercial areas. Working at Plants he was involved in erection, commissioning, operations and production planning in CPP and Smelter. Due to his strategies and planning, NALCO could achieve highest levels of production and productivity. He was involved in many critical decisions and landmark achievements at Plants like restoration of burnt single line coal cable belt at CPP in record time to save NALCO from catastrophe, scientific spares planning, design and implementation of MIS system, strategy for enhancing critical equipment availability at Smelter to increase productivity, Optimization of logistics system etc.

He has strong multi-disciplinary commercial experience in Marketing (export & domestic market involving all products), supply chain management (procurement, stores, inventory control) and logistics. During his long career he had introduced many landmark initiatives in the company such as maiden MOU system with customer, LME linked pricing mechanism, LME registration of metal, e-tendering for export, formulation of commercial manuals and guidelines to bring transparency, augmentation of logistics system for efficient supply chain and cost savings, opening of master stock yard at strategic locations, launch of mobile APPs for customers (NAGINAA) and vendors (NAMASYA), customer and supplier satisfaction index etc. He was deeply involved in development and launching of several value added products including launching of more than 12 new niche products. Under his leadership the commercial functioning of NALCO was developed to be dynamically competent to sense and seize the market opportunities which had resulted in record breaking performances during 2016-17, 2018-19 and 2022-23. During 2022-23 under his leadership, the company had achieved the all-time highest sale of Metal, setting a new benchmark. Out of box strategies taken by him assured supplies of all the major raw materials during the COVID-19 lockdown to sustain the plant operations with zero loss of production while achieving huge savings in procurement cost which helped Company's profitability in 2019-20 and 2020-21 when the LME prices had nosedived. Through dedicated endeavors, the procurement of Goods and Services via GeM (Government e-Marketplace) has been significantly multiplied during 2022-23.

Shri Samantaray is a National Council member of Indian Institute of Materials Management, Fellow in Institute of Engineers with Chartered Engineers certificate, member of Indian Institute of Industrial Engineering.



SHRI PANKAJ KUMAR SHARMA
Director (Production) &
Director (P&T) - Addl. Charge

Shri Pankaj Kumar Sharma has joined Board of Directors of the National Aluminium Company Limited (NALCO) as Director (Production) on 01.02.2023. He graduated from IIT (BHU) in the year 1992 in B.Tech (Electronics) and joined NMDC Limited as Executive Trainee (Electronics) in the same year. He has varied and rich experience of working in all facets of the Open Cast Mining Industry. During his association of more than 30 years with NMDC Ltd., he has successfully completed challenging assignments in different key positions. Before joining NALCO, he was acting as Head – Global Exploration Centre of NMDC Ltd., CEO – NMDC CMDC Ltd. (a JV company of NMDC Ltd.) and CEO – Bastar Railway Private Ltd. (a JV company of NMDC Ltd.). He has not only immensely contributed in the sustainable development of the operating Iron Ore Mines of NMDC Ltd., but also set milestones in the upcoming projects of the subsidiary companies. His technical knowledge and strategic expertise will help NALCO in achieving accelerated growth.

Shri Pankaj Kumar Sharma has been assigned with the additional charge of Director (P&T) w.e.f. 01.08.2023, consequent upon the superannuation of Shri M. P. Mishra, Director (P&T) on 31.07.2023.

Board of Directors



SHRI RAVI NATH JHA
Part-time Non-official (Independent) Director

Shri Ravi Nath Jha is a Bachelor of Science graduate from Ranchi University. His professional expertise is in journalism. He is a social worker. Right from his student days,he has worked with various social and cultural organisations. He was a freelance journalist for various local newspapers of Ranchi. He is continuing as Editor of Antyodaya Sandesh & Antyodaya Sankalp from October, 2003.

He attended a discussion session on Good Governance and Policies organised by Public Policy Research Centre. He has also attended a Youth Conference at Vigyan Bhavan, New Delhi organised by NALCO. He was delegate to the National Conclave of Mines and Minerals which was organised by Ministry of Mines.



DR. B. R. RAMAKRISHNA
Part-time Non-official (Independent) Director

Dr. B. R. Ramakrishna is BSAM, BAMS, MD (Ayu.), MSc & PhD (Yoga) holder and recipient of Gold Medal & Karnataka State Award in BSAM. He is having 30 years of experience of UG & PG Studies, 40 years in Integrative Medicine Practice and 23 years in Research experience. He held very senior positions in Ayurveda, Yoga and Sports in Government of India and Government of Karnataka. He has conducted Ayurveda & Yoga Workshops at Germany, Austria, Spain, Switzerland, Hong Kong, China, France, Italy, Singapore, Malaysia and Thailand from 2006 and IDY Programs in Germany & Austria from 2015.He has also been awarded Best Teacher Award, Torch Bearer of Ayurveda, Adhamya Chetana Award.

Presently, Shri Ramakrishna is working as Vice Chancellor SVYASA Deemed to be University, Bangalore, Professor Emeritus and Director Sushrutha Ayurveda Medical College and Hospital, Bangalore.



ADV. GEORGE KURIAN
Part-time Non-official (Independent) Director

Shri George Kurian is an advocate by profession from Kottayam District of Kerala and has rich and vast experience in practicing as an advocate in various Courts.

Board of Directors



DR. AJAY NARANG
Part-time Non-official (Independent) Director

Dr. Ajay Narang is presently moving forward with his Company's flagship Healthcare venture - Samagra Care, putting forth a disruptive model of medical services made for the complex Indian Landscape. The enterprise focuses on enabling access to high-quality, equitable, timely healthcare in Urban Tier-2 India.

He has more than thirty years of experience in Industry and Business, both in India and United States, having been on the Board of Directors of corporations over the span of his career. Formerly, for nearly two decades, he has worked in the IT Management sector, providing services to several clients in the United States.

At the very beginning of his career, he had immersed himself in the manufacturing and supply industry. As an entrepreneur, he accepted the challenge of managing a sick industrial enterprise, indulged in manufacturing of Cooking Gas Cylinders. Starting at a young age, over the span of a decade, he successfully converted an SSI, the Cylinder manufacturing facility into a highly profitable venture.

By qualification, Dr. Narang is an allopathic General Physician and strives to give back to society and his fellow citizens by engaging in actionable activism and a range of non-profit activities. He has been on the Board of Directors of Hindusthan Samachar, Delhi. He also held the position of All India Vice President of Laghu Udyog Bharati, an All-India Organization in the service of Micro & Small-scale industry; currently he is an Executive Member of its National Working Committee. He is a Trustee of the Vishwa Samvaad Kendra Trust, Bhopal, and is the President of the same.

Govt. of Madhya Pradesh has entrusted him as the President of Jan Bhagidari Samiti of the prestigious Maharani Laxmi Bai Government Girls' Post Graduate Autonomous College, Bhopal.

He has been an honorary erstwhile member of several bodies of the Government as well, namely, the Labour Advisory Board, Madhya Pradesh; Executive Council of MP Council of Science & Technology; Supply Code Panel of MP Electricity Regulatory Commission; General Council of Atal Bihari Vajpayee Hindi University, Bhopal; Regional Advisory Committee, Central Board for Workers Education; and Special Invitee to the National Board of MSME, GoI.



SHRI Y. P. CHILLIO
Part-time Non-official (Independent) Director

Shri Y. P. Chillio is a graduate in political science from Nagaland University. He is a social worker and has worked in different community based organisations in various capacities for the welfare of the public at large. He also served as President, Eastern Naga Students Federation (ENSF), Chairman for Peace Committee Eastern Region Conflict, Nagaland, Chairman for Tribal Development Agency, Vice President of Eastern Nagaland People's Organisation (ENPO), Central Executive Committee Member and Eastern Nagaland People's Organisation. He is a life time member of Indian Red Cross Society, Nagaland.

Board of Directors



MS. (DR.) SHATORUPA
Part-time Non-official (Independent) Director

Ms. (Dr.) Shatorupa is a rank holder from Calcutta University in B.A. (History) and ranked No. 1 with Gold Medal in M.A. She has been awarded PhD in Ancient Indian History and Culture from Banaras Hindu University, 2020. She is a corporate trainer and is a freelance writer with more than 15 years of experience. She held the post of President of the Ladies wing of Bengal National Chamber of Commerce and Industry for two consecutive terms during 2012-14.



ADV. DUSHYANT UPADHYAY
Part-time Non-official (Independent) Director

Shri Dushyant Upadhyay obtained his educational and professional degree (B.Sc., LL.B. and M.A.) from Meerut University (UP).

Shri Upadhyay is having more than 38 years of extensive and varied experience as an advocate in District Court, Bulandshahr (UP), encompassing various criminal laws, labour laws and constitution.

Currently, Shri Upadhyay is a member of National Council and National Executive of Akhil Bhartiya Adhivakta Parishad. He was associated with the organisation Adhivakta Parishad, Uttar Pradesh as State President. In his tenure, he organised many open law forums and manage various law study circles. He is also associated with various registered Social Trust and Societies where he helps in the betterment of society.

Shri Upadhyay also does public campaigns for poor families on community resources, referral programmes, develop and implement welfare scheme to improve the care and wellbeing of women and children.



SHRI SANJAY RAMANLAL PATEL
Part-time Non-official (Independent) Director

Born on 18.05.1970, Shri Sanjay Ramanlal Patel is a graduate in Science (Chemistry) from Gujarat University. He is presently holding the position of Chairman of Agricultural Produce Market Committee (APMC), Khambhat since 2018. He is also the President of Ralej Kedavni Mandal Ralej and Syndicate member of Sardar Patel University, V. V Nagar since 2018.

Senior Management Team



SHRI A. K. SWAIN
Executive Director (S&P)



SHRI S. K. PADHEE
Executive Director (M&R)



SHRI SOMANATH HANSDAH
Chief Vigilance Officer



DR. P. K. PRADHAN
Executive Director (CA)



SHRI S. MOHANTY
Executive Director (BD)



SHRI N. K. MOHANTY
GGM & Company Secretary


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Directors' Report

Dear Members,

Your Directors have great pleasure in presenting before you the 42nd Annual Report of your Company together with the audited financial statements (standalone and consolidated) and Auditors' Report for the financial year ended 31st March, 2023.



Shri Pralhad Joshi, Hon'ble Union Minister of Coal, Mines and Parliamentary Affairs, lighting the ceremonial lamp at a special event held at NALCO Corporate office to highlight the Company's record performance

1.0 PERFORMANCE HIGHLIGHTS:

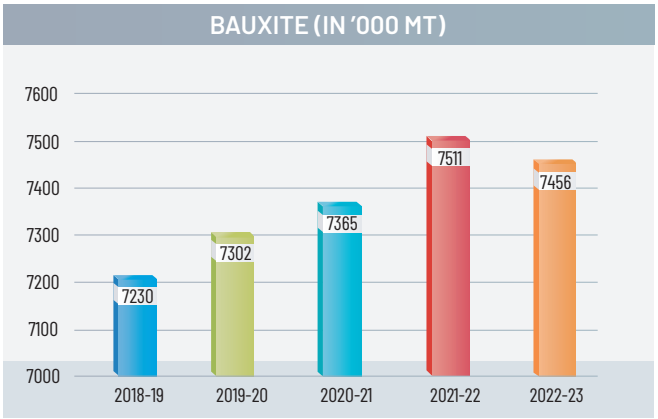
1.1 Physical Performance:

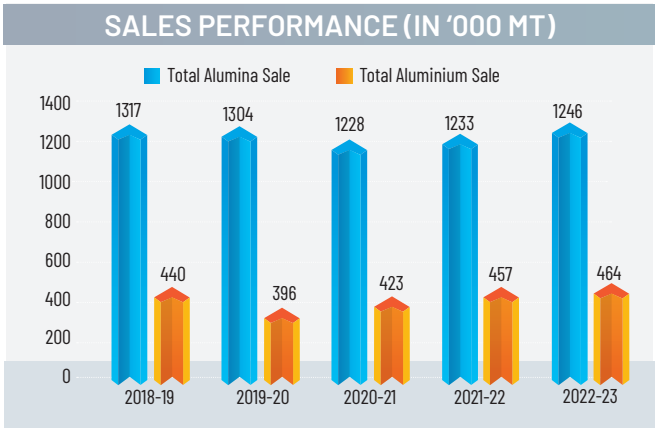
Production	Unit	2022-23	2021-22
Bauxite	MT	74,56,776	75,11,075
Alumina Hydrate	MT	21,23,000	21,22,000
Aluminium	MT	4,60,000	4,60,000
Electricity (Net)-CPP	MU	5,788	5,712
Wind Energy (Net)	MU	280	320



(a) Alumina Refinery achieved Alumina Hydrate production of 21.23 lakh MT against normative capacity of 21.0 lakh MT, which is 101.1% capacity utilization.

(b) Aluminium Smelter achieved full capacity production of 4.6 lakh MT, with all 960 pots in operation for the 2nd consecutive year.





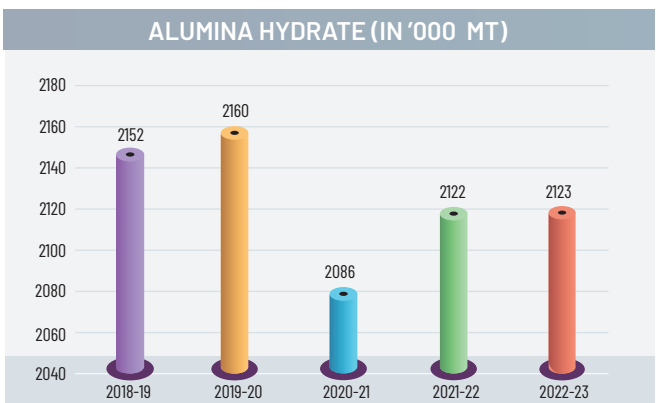
2.0 SALES PERFORMANCE:

A summary of sales achieved during 2022-23 is tabulated hereunder:

Description	Unit	Year ended 31.03.2023	Year ended 31.03.2022
Export			
Alumina	MT	1,182,054	1,154,691
Aluminium	MT	25,214	133,085
Domestic			
Alumina and Hydrate*	MT	64,583	77,995
Aluminium	MT	438,876	323,809
Total Metal Sale	**MT**	**464,090**	**456,893**
Total Chemical Sale	**MT**	**1,246,637**	**1,232,686**

* *Including Special Grade Hydrate.*

Your Company achieved all time high total sales of metal, a growth of 1.58% compared to previous year and domestic sales of metal after experiencing sluggish domestic demand for Aluminium metal during the financial year 2021-22, recovered and registered a 35.54% jump since its inception during financial year 2022-23.



3.0 FINANCIAL PERFORMANCE:

The details of financial performance are given below:

		₹ in crore
Particulars	**2022-23**	**2021-22**
Revenue from Operations	14,255	14,215
Other Income	236	264
Total Income	**14,491**	**14,479**
Cost of raw materials consumed	3,172	1,971
Power & Fuel	4,694	3,388
Employee benefits expenses	1,832	2,356
Other expenses*	2,122	1,972
Depreciation & amortization expenses	716	837
Total expenses	**12,536**	**10,524**
Profit Before Exceptional items	1,955	3,955
Profit Before Tax	1,955	3,955
Tax expenses	411	1,003
Profit After Tax	**1,544**	**2,952**

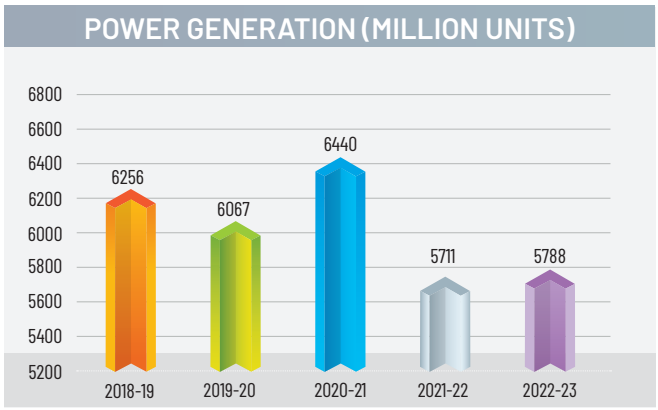
* *Includes changes in inventories of finished goods and work-in-progress and finance costs.*

4.0 FUTURE OUTLOOK:

Market outlook for Alumina and Aluminium Industry is tabulated as under:

Particulars	Calendar Year 2021	Calendar Year 2022	Calendar Year 2023 (Projected)
Alumina			
Global Demand (Million MT)	130.77	134.01	133.46*
Global Supply (Million MT)	131.5	134.36	133.47*
Balance [Surplus/(Deficit)]	0.73	0.35	0.01*
Aluminium Metal			
Global Demand (Million MT)	68.97	69.14	68.88*
Global Supply (Million MT)	67.41	68.94	69.53*
Balance [Surplus/(Deficit)]	-1.56	-0.200	0.650*
Price Trend	**FY 2021-22**	**FY 2022-23**	**FY 2023-24 (till May, 2023)**
LME Price (USD per MT)	2,769	2,490	2,304
Alumina Price Index (as % of LME Price)	12.90%	13.90%	15.10%

* *Projected figures published by CRU for the period January – June, 2023 for Alumina and January - September, 2023 for aluminium metal have been extrapolated to arrive at 2023 figures (Source: June, 2023 CRU).*



5.0 DIVIDEND AND APPROPRIATIONS:

Your Company being a Govt. of India CPSE, pays dividend in compliance with DIPAM's guidelines.

During the year the Company has paid final dividend for the FY 2021-22 @ ₹1.50 per equity share amounting to ₹ 275.49 crore and interim dividend @ ₹ 3.50 per equity share amounting to ₹ 642.82 crore in two tranches for the FY 2022-23. The total dividend payout for the financial year 2022-23 is ₹ 918.32 crore as against ₹1,101.98 crore during the previous year. Dividend payout is 59.48% of the PAT of current financial year against 37.33% of the previous financial year.

The Board of Directors have recommended final dividend @ 20% i.e. ₹ 1.00 per equity share subject to approval of the shareholders in the ensuing Annual General Meeting.

6.0 MOU PERFORMANCE:

Based on financial performance and achievement of other parameters, your Company is rated "Excellent" as per the Memorandum of Understanding (MoU), signed by your Company with the Government of India for the financial year 2021-22.

MOU score for financial year 2022-23 is not yet finalized by DPE.

7.0 RAW MATERIAL SECURITISATION:

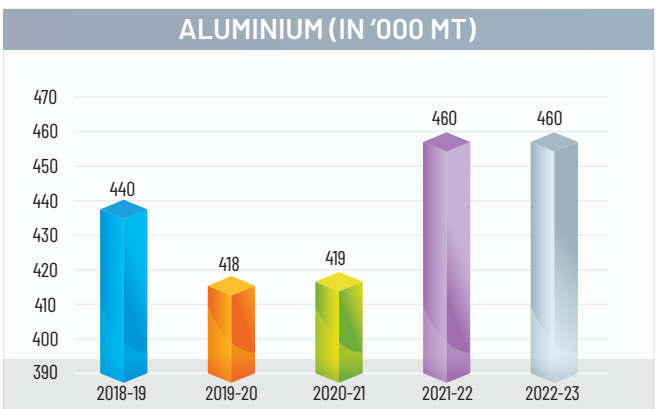
Panchapatmali Bauxite Mines (Central & North Block) and South Block have all statutory clearances with lease validity up to 16.11.2032 and 19.07.2029 respectively. Both the Mines are in operation.

Alumina Refinery Plant is having a captive Steam and Power Plant (SPP). For sustainable supply of coal to SPP, your Company is having 1.141 million MT Fuel Supply Agreement with CIL Subsidiaries. Shortfall quantity, if any, are sourced through coal auction (Spot/Exclusive) route.





Shri Pralhad Joshi, Hon'ble Union Minister of Coal, Mines and Parliamentary Affairs, planting a sapling, prior to the review meeting with the officials of NALCO, during his visit to Bhubaneswar



Aluminium Smelter Plant is having Captive Power Plant (CPP) for sustainable power supply. The CPP is a thermal power plant and requires around 6.8 million MT coal per annum to meet the power generation, as demanded by Smelter plant. For CPP, coal is sourced from the nearby coal mines of M/s. Mahanadi Coalfields Limited (MCL). Your Company is having Fuel Supply Agreement with MCL for 4.716 Million MT Coal, and 0.90 million MT Bridge Linkage coal MoU with MCL. Balance shortfall quantity are sourced through coal auction (Spot/ Exclusive) route.

Utkal-D Coal block has been operationalized in financial year 2022-23.

8.0 PROJECTS UNDER IMPLEMENTATION:

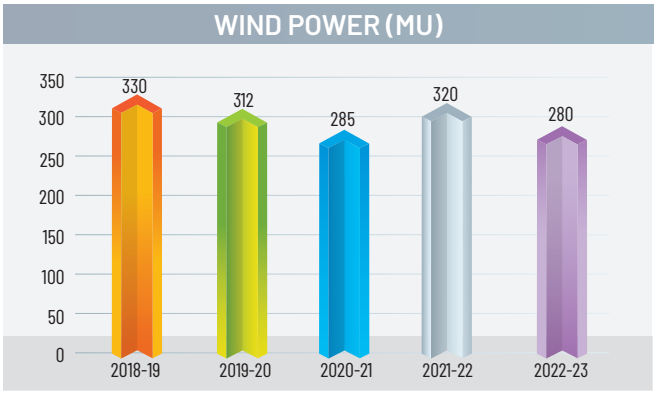
8.1 5th Stream of Alumina Refinery:

Your Company is in the process of setting up of 5th Stream in its existing Alumina Refinery which shall add 1.0 MTPY to its existing installed capacity of 2.1 MTPY, at a projected expenditure of ₹ 6,435.90 crore at December, 2018 price level, based on improved Medium Pressure Digestion technology of M/s. Rio Tinto Alcan Limited (RTAL). Presently the projected cost of the project is being revised to March, 2023 price level.

Your Company has obtained major statutory clearances like Environmental Clearance from MoEF & CC and Consent to Establish (CTE) from Odisha State Pollution Control Board. M/s. Thyssenkrupp Industrial Solutions (India) Private Ltd. has been appointed as EPCM consultant for Alumina Refinery. M/s. M. N. Dasturco, has been appointed as EPCM consultant for Steam and



Sapling plantation by Shri Vivek Bharadwaj, IAS, Secretary (Mines), Govt. of India, during his visit to NALCO Corporate Office at Bhubaneswar



Power Plant of Alumina Refinery. Basic engineering for the project has been completed by M/s. RTAL and overall project completion as on July, 2023 is 57.83%. Site activity comprising of Survey and Soil Investigation and Site Grading work has been completed. Contractors for most of the packages have been mobilized at the site for commencement of construction work. The project is targeted to be commissioned by May, 2025.

8.2 Alternate sourcing of Bauxite for 5th Stream:

Sourcing of bauxite for 5th Stream expansion of Alumina Refinery has been envisaged from Pottangi Mines. However, availability of bauxite from Pottangi Mines is expected beyond the scheduled commissioning of 5th Stream expansion. Hence, sourcing of bauxite from existing Panchpatmali Mines South Block has been planned through setting up of a crushing & conveying system for which a capital expenditure of ₹ 483 crore has been approved.

M/s. DCPL has been engaged as the EPCM consultant for the project. Order for major packages such as Over Land Conveyor, Crusher Plant, Water System, Electrical System and Site & Infrastructure packages are finalized. Site construction activities are under progress. The project is targeted to be completed by January, 2025.

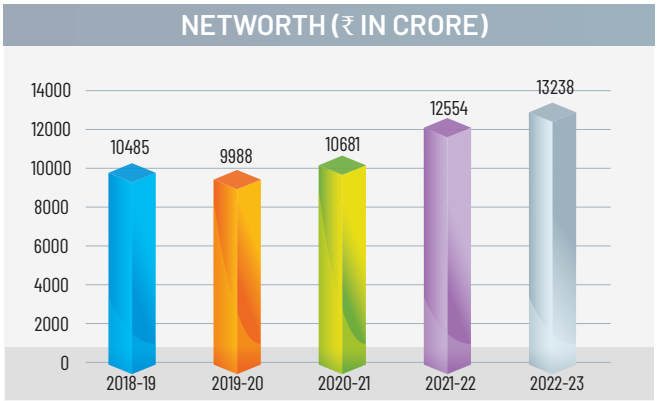
8.3 25.5 MW Wind Power Project:

In pursuit of being a harbinger for harnessing green & clean energy, your Company has established 198.40 MW Wind Power Plants in various states of India. In this noble endeavour, your Company is in the process of augmenting its wind power generation capacity to 223.90 MW by adding another wind power project of capacity 25.5 MW

at Kayathar, Tamil Nadu at a capital expenditure of ₹ 163 crore through M/s. REGen Powertech Pvt. Limited. Substantial progress (65%) has been made on supply and erection of the equipment. However, the job is not completed yet due to fragile financial situation of the executing agency. The executing agency, M/s. REGen has subsequently been referred to NCLT. The final resolution order has been issued by NCLT in February, 2022. As the terms of the approved resolution plan are not favorable in the interest of project execution, your Company has filed a petition at NCLAT for review of approved resolution plan. The decision of NCLAT is awaited.

8.4 Pottangi Bauxite Mines:

Pottangi Bauxite Mines (75 Million Tonnes) has been reserved by Government of India in favour of your Company for meeting the bauxite requirement of 1 Million Tonne Alumina Refinery under expansion. The Mining Plan has already been approved. Important statutory clearances like Forest Clearance, Environment Clearance and Consent to Establish have been obtained. Grant Order for Mining Lease has also been obtained from Government of Odisha. Consultant for preparation of DPR for Pottangi Mines has been engaged. The Mines is likely to be operational in the 1st quarter of financial year 2025-26.



8.5 Utkal-D & E Coal Blocks:

Utkal-D and Utkal-E Coal Blocks (175 Million Tonnes) have been allocated by Government of India as a part of raw material security to the existing operational Units at Captive Power Plant (CPP) and future expansion of your Company. Your Company executed the Mining Lease deed of Utkal-D after obtaining requisite regulatory clearances and completing land acquisition in the Mining Lease area. Appointment of Mine Developer and Operator (MDO) including signing of Coal Mining Agreement has been completed for Utkal-D & Utkal-E Coal Mines.

R&R benefits and PDF list for Utkal-D & Utkal-E Coal Mines have been finalized in RPDAC meeting. 1st tranche of ₹ 80 crore and 2nd tranche of ₹ 100



Nalconians joined the National campaign of 'Har Ghar Tiranga' with patriotic fervour

crore has been released by NALCO towards R&R Funds for Utkal-D & E. Disbursement of R&R benefits by District Authorities is under way.

The activities for development of railway siding are under progress.

All Statutory clearances has been obtained for Utkal-D Coal mines and Mining operations in Utkal-D Coal Mines commenced from 09.11.2022. Coal dispatch started from Utkal-D Coal Mines to Captive power plant (CPP) w.e.f. 18.04.2023.

Forest Clearance, Environment Clearance, Consent to Establish and Consent to Operate have been obtained for Utkal-E Coal mines and Mining Lease deed of Utkal-E has been executed with District Administration in January, 2023. All efforts are being made to operationalize Utkal-D & E Combined Coal mines as per the approved Mining plan.

9.0 CAPITAL EXPENDITURE (CAPEX):

On a standalone basis the Company has achieved a CAPEX of ₹ 1,816.78 crore (excluding investment in joint venture companies). Considering the capitalization done by joint venture companies, on a consolidated basis the CAPEX of the Company stands at ₹ 1,876.16 crore.

10.0 RISK MANAGEMENT POLICY:

A Risk Management Policy has been formulated and approved by the Board of Directors and the same is available in the Company's website www.nalcoindia.com.

11.0 HUMAN RESOURCES MANAGEMENT:

11.1 Presidential Directives on SC/ST reservation:

Your Company complies with all applicable presidential directives and other guidelines in the matter of reservations of SC/ST/OBC/EWS and other categories like PWD and Ex-servicemen.

Your Company's manpower strength is 5,190 as on 31st March, 2023 compared to 5,520 manpower as on 31st March, 2022. Out of these employees, 323 were women employees. As on 31.03.2023, there were 815 SC employees (15.70%), 999 ST employees (19.25%), 805 OBC employees (15.51%), 90 PWD employees (1.73%), 10 EWS employees (0.19%) and 08 Ex-servicemen employees on roll of the Company.

11.2 Industrial Relations:

Your Company continued to maintain a conducive and cordial Industrial Relation climate during the year 2022-23. The healthy practice of sorting



Celebration of International Women's Day



Launching of aluminium LED cap stock (Alloy AA1100) by Shri Vivek Bharadwaj, IAS, Secretary (Mines), Govt. of India

out and settling issues through discussions with trade unions/workers' representatives enabled the Company in ensuring workers' participation at different levels and establishing a peaceful industrial relations climate. Employees are the driving force behind the sustained stellar performance of your Company and they contributed significantly in achieving highest ever production of the Company during 2022-23. As a commitment towards your Company's core values, employees' participation in management was made effective based on mutual respect and trust. Compliance of applicable Labour Laws, adherence to Government Guidelines and consultative decision making, continued to be the core strengths in dealing with employee benefits and welfare issues. Zero tolerance to indiscipline continued to remain the hallmark of the Company's IR philosophy.

11.3 Social Accountability 8000:

For developing and maintaining a decent workplace, your Company has adopted the International Standard, Social Accountability 8000 (SA-8000) since 2009-10. The Certification helped the Company in becoming more transparent in the areas of child labour, forced labour, safe and healthy work environment, working hours, remuneration, freedom of association, collective bargaining process, discrimination and disciplinary practices to all the stakeholders of the Company including employees, customers, suppliers and other interested parties.

All the units of your Company are certified to the latest version of SA 8000 i.e. SA 8000:2014. All the Production Units including Corporate Office are certified to SA 8000:2014 standard since 2017 (New Version). Certification of all production units and Corporate Office are being renewed every 3 years.

12.0 CORPORATE SOCIAL RESPONSIBILITY (CSR):

12.1 Annual Highlights on CSR:

With a legacy of over four decades, NALCO always aims towards achieving sustainable development across the economic, social and environmental dimensions addressing the five P's of sustainability namely people, planet, prosperity, partnership and peace. Inclusive growth by means of comprehensive interventions has always been the thrust of NALCO.

Your Company has been following the mandates of the Companies Act, 2013 while considering CSR project. All the ideas and intended developmental actions have been evaluated against the Schedule-VII of the Act.

The initiatives are also taken up by consulting a wide range of stakeholders, including local people and



Handing over of PCR vans by NALCO to Police Commissionerate Bhubaneswar-Cuttack

local administration. The projects are prioritized as per needs of the community and continuous monitoring is done to improve their impacts.

Your Company has spent ₹39.54 crore in the financial year 2022-23 on various CSR projects against the mandated CSR obligation of ₹36.64 crore complying with the requirements of its CSR policy in line with Companies Act, 2013. The Company has undertaken theme based CSR activities on "Health and Nutrition" as per Department of Public Enterprises, Government of India OM dated 5th April, 2022.

The thrust areas of implementation are Healthcare, Education, Drinking Water, Rural Development, Environmental Sustainability and Development of Iconic city, Puri.

NALCO primarily focuses on identifying gaps in the existing system of delivery to society and intervening meaningfully with them, so as to create a long-term, sustainable impact rather than creating parallel system.

12.2 Important CSR initiatives undertaken during financial year 2022-23:

a) Contribution to Prime Minister CARES Fund.

b) Door step primary medical facility with free medicine through Mobile Health Units equipped with doctor and paramedical staff in periphery villages of S&P Complex, Angul, M&R Complex, Damanjodi, Pottangi Bauxite Mines Area and Utkal-D & E Coal Blocks Area.

c) Development of Community Health Centre (CHC) at Mathalput in Koraput district.

d) Residential education to poor backward and tribal children from periphery villages of M&R Complex, Damanjodi and Pottangi Bauxite Mines Area.

e) Supporting poor and meritorious girl students under Nalco-Ki-Ladli Scheme.

f) Drinking water through pipe in periphery villages of S&P Complex, Angul.

g) Various activities to promote violence free lives among women in the state of Odisha.

h) Infrastructural activities such as construction of roads, culverts, drains and community halls in different rural areas.

i) Various developmental and renovation activities in Iconic City, Puri.

j) Support for construction of pilgrim accommodation blocks in Badrinath.

A detailed report on CSR activities prepared in line with various applicable provisions of the Companies Act, 2013 is attached at **Annexure-I.**



13.0 VISIT OF PARLIAMENTARY COMMITTEES:

During the year 2022-23, study visit of the Department related Parliamentary Standing Committee on Industry on the subject "Implementation of 25% prescribed procurement from MSME by NALCO under the Pubic Procurement Policy and Review of release of payment to MSMEs", Parliamentary Standing Committee on Coal, Mines and Steel on the subject "Self-reliance in Minerals and Metals", Standing Committee on Coal, Mines and Steel on the subject "Joint Venture Projects of the Company" and Study Visit of the Committee on Public Undertakings on the subject "Corporate Governance in CPSUs" were undertaken.

14.0 MANAGEMENT DISCUSSION & ANALYSIS REPORT:

Management Discussion & Analysis Report in line with Regulation 34(3) read with Schedule-V of the SEBI (LODR) Regulations, 2015 is placed at **Annexure-II** to this report.

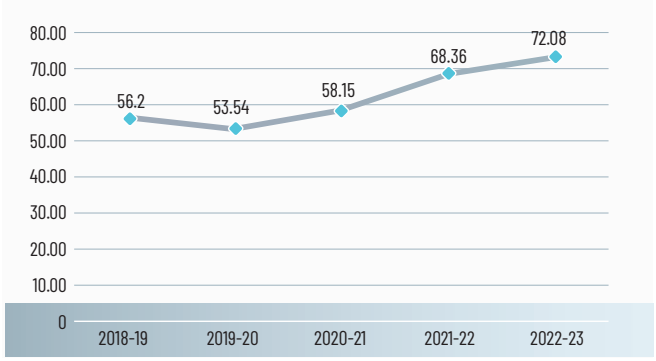
The report also contains:

(a) Various initiatives undertaken to further business development.

(b) The details in respect of adequacy of internal financial controls with reference to the financial statements and risk management practices.

(c) Various initiatives taken up in the field of environment management at different units of the Company.

BOOK VALUE (IN ₹)



15.0 INFORMATION TECHNOLOGY FOR DIGITAL TRANSFORMATION:

15.1 Information Technology (IT):

The global aluminium market is set to grow at a CAGR of over 6%. Aligning with business, Information Technology (IT) is set to play a central role in the business functions at NALCO. Your Company understands that, IT would play a very crucial role for a sustainable growth. Leveraging technology for better business process management has always been the prime focus area at your Company. Your Company's digital initiatives are aimed at seamlessly supporting the business objectives & be the key business driver. Your Company's business processes are continuously modified, automated and digitized to provide tangible benefits and add immense value to the business.



41st Annual General Meeting on 22.09.2022

The IT Framework is built on 5 strategic pillars:

a) Integrated decision support system.

b) IT infrastructure: DC, DR, cloud, network, services.

c) ERP and centralised packages.

d) Dashboard & Analytics.

e) IT-OT integration and historian.

15.2 Digital enablement:

Since 2010, your Company has implemented Enterprise Resource Planning (ERP) integrating all the business functions such as sales & distribution, finance & controlling, materials management, human resource, plant maintenance and production planning to ensure uniformity in process, improved information availability and transparency for information based decision making. Your Company is in the process of implementing payroll in ERP. For improved transparency, speed and accountability, your Company has implemented electronic file handling system (e-Office) across all plants and offices. This has contributed immensely in reduction in use of paper and making offices greener. For secure and ready access to digitized documents, the e-Office Knowledge Management System has been implemented. This system enables a secure and controlled environment for sharing of documents in a central instance across the Company.

15.3 Employee self-service:

Your Company has digitally enabled employee centric services such as payroll, attendance, and income tax including work flow based self-service applications like appraisal, leave, loans, perquisites, tour, medical reimbursements and probation confirmation. Computerized Hospital management



system has been deployed at Company owned hospitals at Angul and Damanjodi to ensure timely medical care for employees and associates.

15.4 Digital enablement for stakeholders:

Your Company has introduced online vendor bill tracking system, Contract labour management system, Recruitment portal, e-Tender for export sales and a series of mobile apps for the benefit of stakeholders. The introduction of e-Bills and e-Measurement Book (e-MBS) and an on-line platform for service vendors will enable faster and transparent bill processing.

15.5 Cloud based services:

E-procurement of goods & services are carried out through GeM Portal, Supplier Relationship Management (SAP SRM) and Central Public Procurement Portal (CPPP). The Company has hosted its website from cloud.

15.6 Governance:

For governance and monitoring, online web-based applications such as capital expenditure monitoring, fund monitoring, compliance management system, bill tracking system, vigilance complaint management system, etc. are in place. These have resulted in timely monitoring and efficient management of capital expenditure, cash flow, statutory compliances and capital proposals.

15.7 Analytics:

To harness the power of data, analytics and visualization, dashboards have been deployed for monitoring Production, Sales & Distribution and Human Resource Management. Your Company has developed and implemented a centralized MIS system as a "Single source of Truth" for all production related information across all plants & offices. This is a precursor to production analytics



Former Chief Justice of India, Hon'ble Mr. Justice Dipak Misra, delivered the 21st Foundation Day Lecture at NALCO

to facilitate decision making at various levels of management.

15.8 Digital Initiatives:

To increase productivity and reduce costs, your plants are taking up initiatives leveraging the power of next generation technologies viz. AI, Robotics, AR/VR:

a) Despatch Automation: Implementation of a fully integrated and automated system for aluminium dispatch. The project purpose is to bring in efficiencies and visibility in dispatch management.

b) Smart Mines: A strategy is being put in place to move towards a connected Mines with visibility and integration of the complete mining value chain.

15.9 IT Infrastructure:

The role of IT is critical in facilitating the business functions. Recognizing this, your Company has an elaborate IT infrastructure in place to address the needs and also ensure uninterrupted service:

a) The Primary Data Center is located at Corporate Office, Bhubaneswar. Data Center uses server virtualization technologies and hosts all centralized applications including ERP and e-Office. As part of the Business Continuity Plan, a Disaster Recovery Data Center is located in a separate seismic zone with a strong and regularly tested business continuity plan in place.

b) Plants and Offices are interconnected with dual MPLS circuits from different service providers for uninterrupted access to applications and services hosted at Corporate Data Center. The WAN bandwidth has been enhanced to cater to the increased load triggered mainly by COVID-19 practices. For increased network availability across locations, a state of the art SDWAN technology is being introduced.

c) Each plant location and Corporate Office have Gigabit Ethernet LAN with Firewall. The Corporate Data Center has gateway protection solutions additionally.

d) Multichannel video conferencing solution for effective communications between all business units.

15.10 Cyber Security:

The Data Centre and the Disaster Recovery sites are ISO 27001:2013 certified for security compliance. The replication between the Disaster Recovery Site and Primary Data Centre is asynchronous with an RPO of 30 minutes. IT infrastructure and application security is ensured with network

gateway and endpoint security solutions. Implementation effectiveness is further assured with application and security audits and mock drills wherein observations are well documented for improvements. Your Company has undertaken an extensive IT security audit encompassing its network devices, Infrastructure devices and applications. For increasing Cyber awareness, every 1st Wednesday of the month was celebrated as Cyber Jagrookta Diwas (CJD). Experts and practitioners from the cyber security domain engage with the employees on the subject.

16.0 TOTAL QUALITY MANAGEMENT:

16.1 Integrated Management System (IMS):

In all units i.e. Mines, Alumina Refinery, CPP, Smelter and Port Facilities, Integrated Management System based on ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 continued to be effectively implemented with regular external audits, internal audits and management review meetings. Recertification of ISO 9001:2015, ISO 14001:2015 of smelter, ISO 9001:2015 of Port Facilities, Mines and CPP were done during this time period. At the closure of financial year, certification status of all the Units w.r.t. ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 remained intact.

16.2 Energy Management System (EnMS):

The EnMS continued to be effectively implemented with regular external audits, internal audits and management review meetings in CPP, Smelter which are included in the Perform, Achieve & Trade (PAT) scheme of BEE. During the financial year, recertification of ISO 50001:2018 of Alumina Refinery was done successfully. At the closure of financial year, certification status of the units w.r.t. ISO 50001:2018 remained intact.

16.3 Quality Circles:

In the financial year, total 35 quality circle projects were completed, whereas several more were in-progress. Further, 15 Quality Circle Teams participated in the National Convention NCQC 2022 of QCFI, out of which 7 numbers received Par-Excellence award. Also, 7 Quality Circle teams participated in the CII State Industry carnival out of which 2 teams were selected and participated in CII East Zone Finals.

16.4 Kaizen by SGA Groups:

As per the Kaizen by SGA scheme, total 3,187 Kaizens were completed during the reporting year, the highest so far.

16.5 Lean Six Sigma:

20 numbers of Lean Six Sigma Green Belt projects have been successfully completed in the financial year with due verification of benefits and savings.

16.6 Business Excellence:

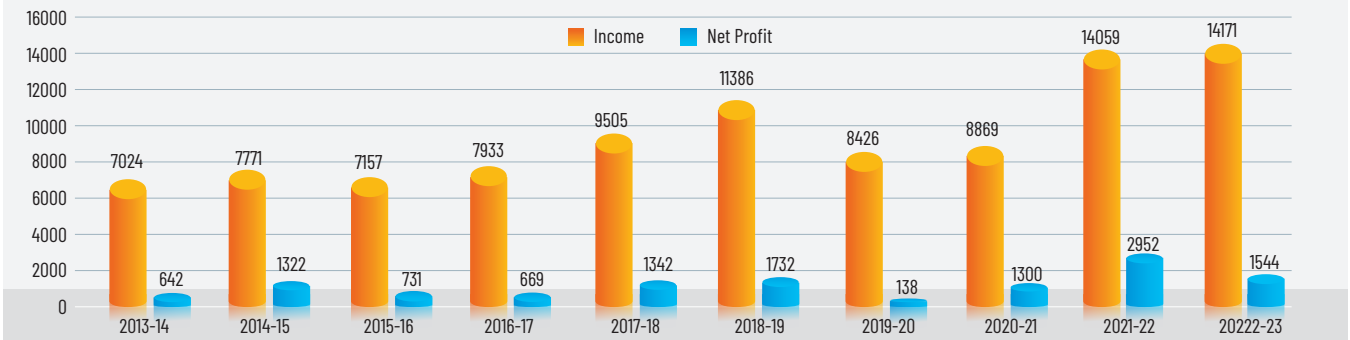
a) Alumina Refinery Unit bagged the prestigious CII-EXIM Bank Business Excellence award for the year 2022 in the 'Platinum' Category during the CII-IQ National Quality Summit and also conferred with consistent progressive organization award.

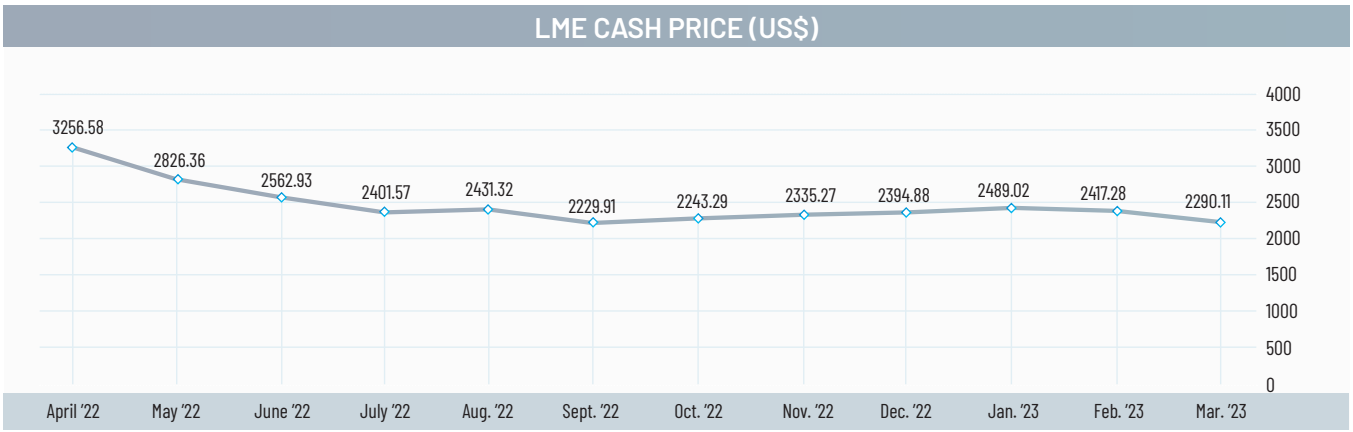
b) Panchpatmali Bauxite Mines and Captive Power Plant Units secured the prestigious "Gold Plus" category recognition on in the CII EXIM Bank Award for Business Excellence 2022.

16.7 5S System Implementation:

Panchpatmali Bauxite Mines was successfully recertified and received QCFI-JUSE 5S Excellence award by Union of Japanese Scientists & Engineers (JUSE) for 5 S work place management system during 8th National conclave on 5 S.

FINANCIAL PERFORMANCE (₹ IN CRORE)





At Smelter and CPP, 5 S work place management system continued to be effectively implemented with regular internal assessments and review meetings by Unit management whereas for Refinery in addition to regular internal assessments and review meetings, external audits have also been done.

17.0 IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY:

(a) Progressive use of Hindi is being implemented as per provision of the Official Language Act, 1963 and Official Language Rules, 1976.

(b) Your Company also holds the Chairmanship position of TOLIC, Bhubaneswar and Angul. Scheduled meetings have been organized at both the locations involving all local PSUs Offices. In this regard, Company's efforts have been appreciated in the meetings by the representatives of RIO, Government of India.

(c) Hindi workshops were organised on 27.04.2022 and 23.09.2022 with faculty support of Shri Nirmal Kumar Dubey, Office In-charge of Regional Implementation Office (East), MHA, Kolkata.

(d) The website of the Company is being regularly updated in bilingual i.e. Hindi and English.

(e) General Knowledge and Hindi quiz competitions were organized on 22.06.2022, in order to encourage the member offices for implementation of the official language, while ensuring the participation of the member offices. Necessary arrangements were also made to telecast the same on Doordarshan.





Blood donation camp organised at Nalco Nagar, Bhubaneswar on the occasion of International Women's Day

(f) Hindi Fortnight 2022 was observed at Corporate Office, Production Units and Regional Offices of the Company to encourage the use of Hindi in official work and various competitions were organised among employees and students.

(g) During the Hindi Day celebrations held on 14th September, 2022, 'Kavi Sammelan' was organised at Mines and Refinery Complex, Damanjodi.

(h) On the occasion of Hindi Fortnight 2022, the official language knowledge and picture expression competitions were organized on 23.09.2022 under the banner of TOLIC(U).

(i) On the occasion of Hindi Fortnight - 2022, employees were rewarded with Shankar Dayal Singh Smriti Puraskar.

(j) On the occasion of 'World Hindi Day', a Travel Memoir Competition was organised for the members of TOLIC(U), Bhubaneswar under the banner of TOLIC(U).

(k) A technical workshop and quiz competition were organised for the members of TOLIC(U), Bhubaneswar under the banner of TOLIC(U) on 15th March, 2023.

(l) Faculty assistance on unicode and tools and techniques of Hindi computing was provided to the member offices of TOLIC, Bhubaneswar.

18.0 SPORTS:

18.1 NALCO: Empowering Sports and Fostering Excellence:

As a distinguished Navratna PSU, your Company has been a steadfast proponent of sports development since its inception. Your Company takes great pride in recruiting sports personalities from various disciplines, including athletes, cricketers, chess players, and women footballers. These former international players have made significant contributions to the promotion of sports as coaches and selectors for state and national teams.

18.2 These are the highlights of some of the remarkable achievements and journeys of the sporting personnel, who continue to inspire and elevate the world of sports:

a) Shri Debasis Mohanty - An Esteemed Cricketing Icon:

Shri Debasis Mohanty, a former pace bowler of the Indian National Cricket Team, has served as a member of the All-India Senior Selection Committee Panel appointed by the BCCI until October, 2022. His invaluable expertise and experience have played a crucial role in shaping the future of Indian cricket.



Shri Sridhar Patra, CMD, NALCO, along with the employees paying rich tributes to Dr. BR Ambedkar on his 131st birth anniversary at M&R Complex, Damanjodi

Your Company is grateful for his outstanding contributions to the sport.

b) Shri Shiv Sundar Das - A Catalyst for Batting Excellence:

Shri Shiv Sundar Das, a former opening batsman of the Indian National Cricket Team, has made significant contributions as a batting coach and national selector. His expertise and dedication have been instrumental in the development of young cricketers. Throughout the year, Shri Das served as the head coach of the NCA Under-19 camp, head coach of NCA Team-D for NCA INTER Matches, and the batting coach for the Punjab Cricket Association for the 2022-23 season. His guidance has undoubtedly strengthened the batting prowess of aspiring cricketers.

c) Ms. Anuradha Biswal - Inspiring Track and Field Athlete:

Ms. Anuradha Biswal, a former track and field athlete specializing in the 100 meter hurdles, has brought glory to the nation. With a Bronze in the 2000 Asian Championship and a Gold in the 2006 South Asian Games, she has made a mark in the sporting arena. Currently, Ms. Biswal represents as the National Coordinator in Athletics for the All India Public Sector Sports Control Board (AIPSSCB). Additionally, she imparts fitness training to aspiring young sports talents at the Kalinga Stadium in Bhubaneswar.

d) Ms. Sradhanjali Samantaray - A Trailblazer in Women's Football:

Ms. Sradhanjali Samantaray, former captain of the Indian National Women's Football Team, has made significant contributions to women's football. Her appointment as the head coach of the Odisha Police Team in the Indian Women's League and as a National selector for the Hero U-17 Women's National Football Championship showcases her leadership and expertise. Her coaching roles and achievements have significantly elevated the standard of women's football in India.

e) Ms. Ranjita Mohanty - Goalkeeping Coach Extraordinaire:

Ms. Ranjita Mohanty, a former national goalkeeper, has embraced the role of a goalkeeping coach for the U-17 Indian Women's Team. Her coaching expertise and experience have contributed to the development of promising young goalkeepers. Through her guidance and mentorship, she plays a crucial role in shaping the future of women's football in India.

f) Ms. Aparajita Gochhikar - An Inspiring Chess Mentor:

Ms. Aparajita Gochhikar, an international chess player, has been an exemplary representative of your Company. Her recent achievements as coach of the Indian team in the World Cadets Chess Championship 2022, where India secured two gold medals and one bronze medal, are a testament to her exceptional coaching abilities. We are also proud of Ms. Gochhikar's appointment by the World Chess Federation to the Fair Play Panel in the 44th FIDE Chess Olympiad 2022, where she received the prestigious IA title. Her dedication to the game and commitment to fair play have brought honor to NALCO and the Indian chess community.

g) Ms. Sunita Lakra - A Hockey Champion:

Ms. Sunita Lakra, a former captain of the Indian Women's Hockey Team, continues to excel in her sporting endeavors. She represented Odisha in various national championships including the 12th Senior Women National Championship 2022, where she won a gold medal. Her consistent performance and dedication have made her a valuable asset to Indian hockey.

h) Ms. Namita Kabata - Assisting Promising Athletes:

Ms. Namita Kabata, a former sprinter, has made significant contributions as an Assistant Coach, assisting promising athlete Ms. Srabani Nanda in training camps in Jamaica. Her mentorship and expertise have helped nurture talent and enhance performance.

18.3 Your Company always remains committed to empowering sports and fostering excellence in athletics. Your association with renowned sports personalities like Shri Debasis Mohanty, Shri Shiv Sundar Das, Ms. Anuradha Biswal, Ms. Sradhanjali Samantaray, Ms. Ranjita Mohanty, Ms. Namita Kabata, Ms. Aprajita Gochhikar, and Ms. Sunita Lakra has been a source of immense



Unveiling of quarterly in-house Hindi journal 'Aksar'

pride and inspiration. NALCO continues to support and nurture young talents, preparing them for national and international competitions through dedication to sports and aims for contributing towards growth and development of sports in the country.

19.0 VIGILANCE:

Broad details of the vigil mechanism, established in your Company are given below:

i) Your Company has a well-established Vigilance Department headed by a Chief Vigilance Officer (CVO) who is appointed on deputation from Government of India. Other vigilance officers who assist the CVO are selected on deputation basis in consultation with and concurrence of CVO. Your Company has its vigilance set up at three locations, i.e. Corporate Office at Bhubaneswar, S&P Complex at Angul and M&R Complex at Damanjodi.

(ii) The vigilance functions are generally, in the nature of preventive, punitive, surveillance & detection.

19.1 FUNCTIONS OF CVO:

The functions of CVO are as follows:

(i) Overall Vigilance Administration of the Company.

(ii) Maintaining a good link with CVC and CBI besides organizing structured review meetings with CMD, assisting & advising CMD on the matter of vigilance.

(iii) Furnishing of various returns/reports to Ministry/CVC/CBI.

(iv) Assisting CVC in selection of Independent External Monitors (IEMs) for I.P (Integrity Pact).

(v) Assisting management in formulation/ updation of anti-corruption policies/ measure.

(vi) Assisting management in development of Integrity Index & ascertaining the fairness, transparency & equity in various domain functions and overall management.

(vii) Organizing training on Vigilance Awareness, Vigilance Administration, case studies etc.

19.2 WHISTLE BLOWER POLICY:

Your Company believes in the conduct of the affairs of its constituents in a fair and transparent manner by adopting highest standards of professionalism, honesty, integrity and ethical behaviour.

The purpose of this policy is to provide a framework to promote responsible and secure whistle blowing culture. It protects employees wishing to raise a concern about serious irregularities within the Company. Details of the policy are available in the Company's website www.nalcoindia.com.

19.3 CORRUPTION RISK MANAGEMENT POLICY:

Corruption is a special category of risk. Corruption Risk Management policy of your Company has been implemented to determine the key principles and requirement aimed at preventing corruption and compliance of anti-corruption law of India.

The policy reflects commitment of your Company and management to high ethical standards at carrying on business in an open, transparent and honest manner, aimed at improving corporate culture, compliance with the best practices in corporate governance and maintaining the business reputation in your Company.

19.4 FRAUD REPORTING:

During the year, no fraud by the Company or any material fraud on the Company by its officers or employees has been reported by the Auditors in their report under section 143(12) of the Companies Act, 2013.

Your Company has a Board approved Fraud Prevention Policy and the same is placed in the Company's website www.nalcoindia.com.

19.5 ONLINE DATA UPDATION ON DoPT PORTAL:

In line with CVC and DoPT directives, your Company responded actively in regularly updating the data of the executives at DGM (E-6) and above, on the web portal "https://doptapp.nic.in/solve/".

19.6 OUTREACH ACTIVITY:

Your Company has conducted Outreach Activity and Integrity Pledge Drive at various schools and colleges in and around the Company's head office

(at Bhubaneswar) and plant complexes (at Angul and Damanjodi) wherein approx. 2,500 citizens have been undertaken online/offline Integrity Pledge and awareness.

19.7 ONLINE VIGILANCE PORTAL:

This portal has been developed to provide information about vigilance structure at NALCO, its different activities, practices or initiatives undertaken by the Vigilance Department and also to provide scope to lodge the complaint and to check status of the complaint in online mode.

20.0 RIGHT TO INFORMATION:

In order to address the provisions of Right to Information Act (RTI), one Appellate Authority, one Public Information Officer and nine Assistant public information officers responsible for providing information sought by stakeholders, have been nominated.

The following are the details of the RTI applications and appeals during 2022-23:

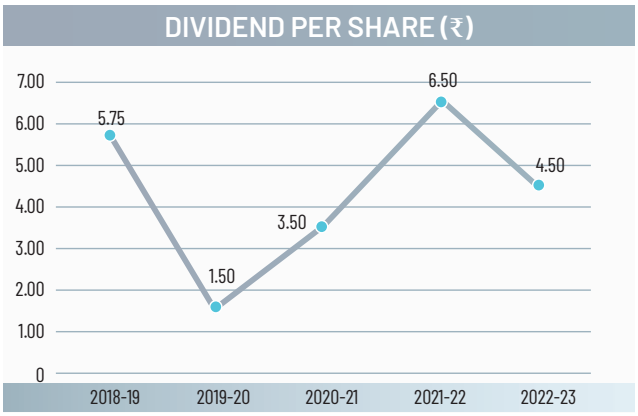
	Under Process as on 01.04.2022	Received during the year (including cases transferred from other Public Authority)	No. of cases transferred to other Public Authorities	Decisions where requests/ appeals rejected	Decisions where requests/ appeals accepted and settled	Under Process as on 31.03.2023
Requests	7	424	2	81	333	15
First Appeals	0	62	0	1	58	3

Third party Transparency Audit for the year 2021-22 of your Company has been carried out by M/s. National productivity Council, New Delhi with satisfactory remarks.

The RTI requests and appeals are received and replied through both physical and online mode. Your Company is aligned with online RTI portal of Department of Personal and Training (www.rtionline.gov.in) with effect from January, 2017.

21.0 LISTING IN STOCK EXCHANGES & PAYMENT OF LISTING FEES:

The equity shares of your Company continued to be listed on BSE Limited and National Stock Exchange of India Ltd, the premier stock exchanges of the country, having nationwide trading terminals. The listing fees for the financial year 2023-24 have been paid on time to the Stock Exchanges.



22.0 PAYMENT OF ANNUAL CUSTODY/ ISSUER FEES TO DEPOSITORIES:

Annual connectivity fees and custody fees/issuer fees for the financial year 2023-24 have been paid on time to both M/s. National Securities Depository Ltd. and M/s. Central Depository Services (India) Ltd.

23.0 SERVICE TO SHAREHOLDERS:

All matters relating to transmission of shares, issue of duplicate share certificates, payment of dividend, de-materialization and re-materialization of shares and redressal of investors grievances are carried out by the Company's RTA i.e. M/s. KFin Technologies Limited (Formerly KFin Technologies Private Limited), Hyderabad.

24.0 BUSINESS RESPONSIBILITY AND SUSTAINABILITY REPORT:

In line with SEBI circular no. SEBI/HO/CFD/CMD-2/P/CIR/2021/562 dated 10.05.2021, a Business Responsibility & Sustainability Report (BRSR) for 2022-23 describing various initiatives taken by the Company on social, environmental and governance perspective, is attached as **Annexure-III** which forms part of this Annual Report.

24.1 Reports on Sustainable Development:

(a) The mandatory report on sustainability i.e. the Business Responsibility & Sustainability Report (BRSR) addressing the environmental, social & governance aspects as required by SEBI, is completed and published.

(b) In addition to above report, a standalone report is prepared on voluntary basis, in accordance with Global Reporting Initiative (GRI) Universal Standards.



Shri Sridhar Patra, CMD, addressing the employees on the occasion of Republic Day Celebration, during his visit to Mines & Refinery Complex, Damanjodi, Koraput

25.0 CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO:

25.1 Research & Development:

(a) 42 patents have been filed since inception, out of which 28 have been granted, 8 have been commercialized and 05 patents were granted in financial 2022-23. Three technical papers were published in international conference proceedings during the year.

(b) Research Advisory Committee (RAC) meetings are being held periodically to review the R&D activities of the Company.

(c) MOU renewed with BARC & NALCO on 'Development of Chemical Methods and Technologies for Value Added Processes and Products in Aluminium Industry'. Project on "Development of sacrificial bricks from red mud for core catcher of nuclear thermal power plants" has been started.

(d) Under the umbrella MOU with BARC, Bauxite certified reference material, CRM BARC - B1201 has been developed successfully and the same was officially released on 24th March, 2023 at NRTC, Bhubaneswar.

(e) Twenty numbers of collaborative projects are in progress with various reputed institutes like IIT Bhubaneswar, IIT Kharagpur, CSIR-IMMT, JNARDDC, CSIR-CECRI etc. Seven collaborative projects awarded during the year.

(f) Project on "Development of process and suitable medium for selective extraction of Gallium from Plant liquor and setting up a demonstration plant in Refinery" with BARC is in progress.

(g) Project activity is in progress on 'Technology development for holistic utilization of red mud among three companies viz. NALCO, HINDALCO and VEDANTA and three research institutes NML, IMMT and JNARDDC. Demonstration trials were

conducted at all three institutes and project is being monitored and reviewed on a regular basis.

(h) Development of a process for Spent Pot line Carbon (hazardous waste) treatment and recovery of valuables is in progress with JNARDDC and IMMT.

(i) A project on aluminium air battery development is in progress with CSIR-CECRI.

(j) Investment decision for setting up of Pilot Aluminium Alloy Casting plant at NRTC has been obtained.

(k) Total 3,500 no of samples of bauxite, aluminium metal, alumina, coal etc. were tested in NRTC Laboratory.

(l) Research Development & Innovation RDI road map 2022-2027 has been approved.

(m) In-house R&D trial taken up for production of grain refined EC grade Al wire rods and production of high thermal conductivity Al-Si alloy at Cast House of Smelter.

(n) MoU signed with Bhubaneswar City Knowledge Innovation Cluster Foundation (BCKICF) to create a strong Science and Technology ecosystem using industry-academia partnership.

(o) Benefits Derived as a result of the R&D projects (In-House & Collaborative completed in 2022-23):

i) Certified Reference Material (CRM) of Bauxite, first of its kind developed indigenously, which can be made available to Indian users at a much lower price compared to imported materials.

ii) A new process developed in laboratory scale for production of high purity aluminium metal by low temperature electrolysis.

iii) A new process developed for light weight Al-Mg-Si automotive components using additive manufacturing and powder metallurgy processes.

25.2 The particulars relating to Conservation of Energy, Technology Absorption, Foreign Exchange Earnings and Outgo, as required to be disclosed under the Companies Act, 2013 are given in the **Annexure-IV** to this report.



Yoga session during the observance of International Yoga Day

26.0 DIRECTORS' RESPONSIBILITY STATEMENT:

Pursuant to the provisions of Section 134(3)(c) and 134(5) of the Companies Act, 2013, your Directors hereby confirm that:

(a) In the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;

(b) The Directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit and loss of the Company for that period;

(c) The Directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;

(d) The Directors had prepared the annual accounts on a going concern basis;

(e) The Directors had laid down internal financial controls to be followed by the Company and that such internal financial controls are adequate and were operating effectively; and

(f) The Directors had devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

27.0 CORPORATE GOVERNANCE:

A report on Corporate Governance in line with Regulation 34 read with Schedule-V of SEBI (LODR) Regulations, 2015 and DPE guidelines is prepared and placed at **Annexure-V** to this report.

The Statutory Auditors of the Company have issued a certificate on Corporate Governance which is appended to the Corporate Governance Report.

28.0 CONTRACTS AND ARRANGEMENTS WITH RELATED PARTIES:

The Policy on Related Party Transactions has been approved by the Board and placed in your Company's website which can be accessed at www.nalcoindia.com.

Your Directors draw the attention of the members to note number 40 of the financial statements which sets out related party disclosures.

A related party transaction was entered with M/s. GACL-NALCO Alkalies and Chemicals Private Limited (A JV Company of National Aluminium Company Limited and Gujarat Alkalies and Chemicals Limited) at arm's length basis for procurement of Caustic soda lye as per Caustic soda supply agreement during the year under report. A report in Form AOC-2 is attached at **Annexure-VI** to this report.

29.0 DIRECTORS AND KEY MANAGERIAL PERSONNEL:

29.1 Directors:

The following changes took place in the Board of Directors of your Company since the last report:

29.1.1 Appointment:

Shri Pankaj Kumar Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

29.1.2 Cessation:

(a) Tenure of Shri Bijay Kumar Das as Director (Production) ended on 31.01.2023.

(b) Tenure of Shri Manasa Prasad Mishra as Director (P&T) ended on 31.07.2023.

29.1.3 Key Managerial Personnel:

In accordance of the provisions of the Act, the following are the Key Managerial Personnel of your Company:

(a) Shri S. Patra, Chairman-cum-Managing Director

(b) Shri R. S. Mahapatro, Director (HR)

(c) Shri R. C. Joshi, Director (Finance)

(d) Shri S. Samantaray, Director (Commercial)

(e) Shri P. K. Sharma, Director (Production) & Director (P&T) - Addl. Charge

(f) Shri N. K. Mohanty, Group General Manager and Company Secretary

29.1.4 Declaration of Independence by Independent Directors:

Your Company has received declaration from the Independent Directors of the Company confirming that they meet the criteria of independence as prescribed both under the Companies Act, 2013 and SEBI (LODR) Regulations, 2015.

29.1.5 Meetings of the Board:

During the year, 8 (Eight) Board meetings were held. Details of the meetings are available in the report on Corporate Governance (**Annexure–V**) placed in this Annual Report.

29.1.6 Various Sub-committees of the Board:

The details of various Sub-committees of the Board including Audit Committee, their composition, terms of reference, details of meetings held are given in the Corporate Governance Report (**Annexure–V**) placed in this report.

29.1.7 Postal Ballot process for appointment of Directors:

Shareholders of your Company have approved appointment of Shri S. Samantaray, Director (Commercial) and Shri S. R. Patel, Part-time Non-official (Independent) Director through Postal Ballot process dated 28.04.2022 in compliance with the amended Regulations 17(1C) and 25(2A) of the SEBI (LODR) Regulations, 2015 with required ordinary/special resolutions.

30.0 ANNUAL RETURN:

In accordance with the Companies Act, 2013, the Annual Return for the financial year 2022-23 in the prescribed format is available in your Company's website at https://d2ah634u9nypif.cloudfront.net/wp-content/uploads/2023/08/Draft-Annual-Return_2022-23.pdf

31.0 GENERAL:

Your Directors state that no disclosure or reporting is required in respect of the following items as there were no transactions on these items during the year under report:

(a) Details relating to deposits covered under Chapter-V of the Act.

(b) Issue of equity shares with differential rights as to dividend, voting or otherwise.

(c) Issue of shares, sweat equity shares and ESOS to employees of the Company.

(d) Neither Chairman-cum-Managing Director nor the Whole-time Directors of the Company received any commission from the Company.

(e) No significant or material orders were passed by the





Regulators or Courts or Tribunals which impact the going concern status and Company's operations in future.

Your Directors also state that no disclosure or reporting is required in respect of the following areas as they are exempted for Government Companies by Ministry of Corporate Affairs vide notification dated 5th June, 2015 and notification dated 5th July, 2017.

(i) Company's policy on Director's appointment and remuneration including criteria for determining qualification, attributes, independence, etc. as per Section 134(3)(e) and Section 178(2), (3) & (4) of the Companies Act, 2013 ("Act").

(ii) Manner in which formal annual evaluation of performance of Board, its Committees and individual Directors has been carried out as per Section 134(p) read with Rule 8 (4) of Companies (Accounts) Rules of the Act.

(iii) Ratio of remuneration of each Director to the median remuneration of the employee and other prescribed details as per Section 197(12) read with Rule 5 of Companies (Appointment & Remuneration of Managerial Personnel) Rules of the Act.

32.0 SEXUAL HARASSMENT OF WOMEN AT WORKPLACE (PREVENTION, PROHIBITION AND REDRESSAL) ACT, 2013:

Your Company is a model employer to provide equal opportunity and consciously strives to build a healthy work culture that promotes dignity to all employees. In pursuance of Section 4 of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, Internal Complaints Committee have been constituted at the production units and the corporate office of the Company to redress complaints relating to sexual harassment.

Awareness programmes were conducted across the Company to sensitize employees and uphold the dignity of their colleagues at the workplace, particularly with respect to prevention of sexual harassment.

33.0 PARTICULARS OF LOANS, GUARANTEES AND INVESTMENTS:

Details of Loans, Guarantee and Investments covered under the provisions of Section 186 of the Companies Act, 2013 read with Companies (Meetings of Board and its Powers) Rules, 2014 are given in the note numbers 9 and 11 to Standalone Financial Statements 2022-23.

34.0 SUBSIDIARIES, JOINT VENTURE COMPANIES AND ASSOCIATED COMPANIES:

In accordance with the provisions of Section 129 (3) of the Act, read with the Companies (Accounts) Rules, 2014, a report on the performance and financial position of each of the joint venture and associates and their salient features are given in the note no. 42 and 43 of the Consolidated Financial Statements for the year ended 31.03.2023 respectively. Salient features of JV/Associate companies in Form AOC-1 (Note number 43) forms integral part of the consolidated financial statement of the Company.

35.0 AWARDS & ACHIEVEMENTS:

a) CII Exim Bank Award for Business Excellence 2022 to your Company's Alumina Refinery in Platinum category for the 4th consecutive year. Refinery was also accorded special jury award as consistent progressive performer.

b) Your Company's Panchapatmali Bauxite Mines and Captive Power Plant have also been conferred with the prestigious Gold Plus award in recognition to the initiative taken for Business Excellence at the CII Excellence summit 2022 at Bengaluru.

c) Your Company's Panchpatmali Bauxite Mines has received the Greentech Quality & Innovation Awards 2022 for outstanding achievements in Quality Improvement in Processes.

d) Your Company's Alumina Refinery was honored with 5S - Work Place Management Certificate by acclaimed certification agency - Union of Japanese Scientists and Engineers (JUSE) on 30th June, 2022.

e) Your Company's Panchpatmali Bauxite Mine received the prestigious QCFI-JUSE Award in the Par Excellence category along with certificate for the 5S workplace management system on 7th July, 2022.

f) Your Company's Panchpatmali Central & North Bauxite Mines received "Five Star Rating" Award at 6th National Conclave of Mines & Minerals held at New Delhi on 12th July, 2022. The award was presented by Shri Pralhad Joshi, Hon'ble Union Minister of Coal, Mines & Parliamentary Affairs in the presence of Shri Raosaheb Patil Danve, Hon'ble Minister of State of Mines, Coal and Railways, Govt. of India.



36.0 COMMENTS OF COMPTROLLER AND AUDITOR GENERAL OF INDIA ON THE FINANCIAL STATEMENT OF THE COMPANY:

Annual Financial Statements both standalone and consolidated as approved by Board were submitted to the office of Director General of Commercial Audit for their comments. The Comptroller and Auditor General of India has issued 'Nil' comments on both the standalone and consolidated financial statements for the year ended 31.03.2023 vide their letter nos. 377/Co-ordn./01-10 (NALCO)/2023-24 and 375/Co-ordn./01-10 (NALCO-CFS)/2023-24 respectively, both dated 28.07.2023, issued by Office of Director General of Audit (Mines), Kolkata.

37.0 AUDITORS:

37.1 Statutory Auditors:

M/s. GNS & Associates, Chartered Accountants and M/s. A.K. Sabat & Co., Chartered Accountants are appointed as joint statutory auditors of the company by the Comptroller and Auditor General of India for the financial year 2022-23.

The Statutory Auditors report on the Standalone and Consolidated financial statements have already been placed before the Board in its meeting held on 24.05.2023.

37.2 Cost Auditors:

In terms of the provisions of Section 148 of the Act read with the Companies (Cost Records and Audit) Amendment Rules, 2014, Cost Audit is applicable to the Company for the financial year 2022-23.

In compliance with the Companies (Audit and Auditors) Rules, 2014, the Board of Directors of the Company have on the recommendation of the Audit Committee, appointed M/s. Niran & Co., Cost Accountants as the Cost Auditors for the year 2022-23.

Your Company will submit its Cost Audit Report to the Ministry of Corporate Affairs within the stipulated time period.

37.3 Secretarial Auditors:

M/s. SKM & Associates, Practicing Company Secretaries were appointed for undertaking Secretarial Audit job of your Company for 2022-23 in terms of Section 204 of the Companies Act, 2013 and Rules made there under. The report of the Secretarial Auditors is enclosed as **Annexure-VII** to this report.

37.4 Internal Auditors:

Your Company has appointed the following Chartered Accountant firms for carrying out Internal Audit functions of the Company for the financial year 2022-23:

Unit	Name of Internal Auditors
Corporate Office, Bhubaneswar	M/s. Agasti & Associates
M&R Complex, Damanjodi and Port Facility, Visakhapatnam	M/s. B V Rao & Co LLP
CPP, Angul	M/s. Tej Raj & Pal (01.04.2022 to 30.06.2022) M/s. J. B. M. T. Associates (01.07.2022 to 31.03.2023)
Smelter, Angul	M/s. B. N. Mishra & Co. (01.04.2022 to 30.06.2022) M/s. C. K. Prusty & Associates (01.07.2022 to 31.03.2023)
Regional Office - East (Kolkata)	M/s. J. F. Dastoor & Co.
Regional Office - West (Mumbai)	M/s. A. N. P. J. & Co.
Regional Office - North (Delhi)	M/s. Pradeep Gopal & Co.
Regional Office - South (Chennai)	M/s. Manohar Choudhry & Associates

38.0 ACKNOWLEDGEMENT:

Your Directors acknowledge the excellent support extended by the Government of India particularly Ministry of Mines, DIPAM, DPE and other Ministries/ Departments of the Government of India, various Ministries/Departments of the Government of Odisha, various PSUs in Company's value-added chain, all stakeholders and investors and look forward for maintaining such mutually supportive business relationship in the coming years too.

Last but not the least, your Directors also place on record their deep sense of appreciation for the dedication and commitment shown by all employees, contractors, contract workers, trade unions and officers associations during the financial year. The Company's consistent growth was made possible due to belongingness, solidarity, co-operation and support received from all fronts.

For and on behalf of Board of Directors



(Sridhar Patra)
Chairman-cum-Managing Director
DIN : 06500954

Place : Bhubaneswar
Date : 25.08.2023

ANNEXURE-I

ANNUAL REPORT ON CSR ACTIVITIES FOR THE YEAR 2022-23

1. Brief outline on CSR Policy of the Company:

The philosophy of Corporate Social Responsibility (CSR) is embedded in the business process of NALCO. The Company is committed to address the issues related to People, Planet and Profit for sustainable growth of its business as well as inclusive growth of the marginalised sections of the society through its Corporate Social Responsibility (CSR) interventions in its sphere of operation. The CSR Policy of the Company has been formulated as per the provisions of the Companies Act, 2013. The CSR initiatives from conception to their impact assessment is reviewed as per the approved CSR Policy of the Company. It also outlines the budget, expenditure, the geographical and technical scope of the projects for the Company. The monitoring of the projects forms a part of the Company's CSR Policy.

2. Composition of CSR Committee:

The composition of the CSR Committee and attendance of the members held during the financial year is as detailed below.

Sl. No.	Name of Director	Designation / Nature of Directorship	Number of meetings of CSR Committee held during the year	Number of meetings of CSR Committee attended during the year
1	Shri Dushyant Upadhyay	Independent Director, Chairperson	2	2
2	Dr. B. R. Ramakrishna	Independent Director, Member	2	2
3	Ms. (Dr.) Shatorupa	Independent Director, Member	2	2
4	Shri R. S. Mahapatro	Director (HR), Member	2	2
5	Shri B. K. Das	Director (Production), Member	2	2

In addition to the above committee members, Shri S. R. Patel, Independent Director, attended the above two meetings as an Invitee.

3. Provide the web-link where Composition of CSR committee, CSR Policy and CSR projects approved by the Board are disclosed on the website of the company.

   a) Web link for Composition of CSR Committee : http://nalcoindia.com/corporate-social-responsibility/about-csr/csr-team

   b) Web link for CSR Policy : https://nalcoindia.com/wp-content/uploads/2019/04/CSR-Policy-2019.pdf

   c) Web link for CSR projects approved by Board : https://mudira.nalcoindia.co.in:3443/CSR/CSRBudgetandExpenditure

4. Provide the executive summary along with web-link(s) of details of Impact Assessment of CSR Projects carried out in pursuance of sub-rule (3) of rule 8 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, if applicable.: Not Applicable

5. (a) Average net profit of the company as per sub-section (5) of section 135: ₹ 18,32,20,00,000

   (b) Two percent of average net profit of the company as per sub section (5) of section 135: ₹ 36,64,40,000

   (c) Surplus arising out of the CSR projects or programmes or activities of the previous financial years: Nil

   (d) Amount required to be set-off for the financial year, if any: Nil

   (e) Total CSR obligation for the financial year [(b) +(c)-(d)]: ₹ 36,64,40,000

6. (a) Amount spent on CSR projects (both Ongoing Project and other than Ongoing Projects): ₹ 38,35,85,000

   (b) Amount spent in Administrative Overheads: ₹ 1,18,58,778

   (c) Amount spent on Impact Assessment, if applicable. NA

   (d) Total amount spent for the financial year [(a) + (b) +(c)]: ₹ 39,54,43,778

   (e) CSR amount spent or unspent for the Financial Year: ₹ 39,54,43,778 (spent)

Total Amount Spent for the Financial Year (₹ in Lakh)	Amount Unspent (in ₹)				
	Total Amount transferred to Unspent CSR Account as per section 135(6)		Amount transferred to any fund specified under Schedule VII as per second proviso to section 135(5)		
	Amount	Date of transfer	Name of the Fund	Amount	Date of transfer
3,954.44	NA	NA	NA	NA	NA

(f) Excess amount for set off, if any: Nil

Sl. No.	Particular	Amount (in ₹)
(1)	(2)	(3)
(i)	Two percent of average net profit of the company as per sub-section (5) of the section 135	36,64,40,000
(ii)	Total amount spent for the Financial Year	39,54,43,778
(iii)	Excess amount spent for the financial year [(ii)-(i)]	2,90,03,778
(iv)	Surplus arising out of the CSR projects or programmes or activities of the previous financial years, if any	NIL
(v)	Amount available for set off in succeeding financial years [(iii)-(iv)]	NIL

7. Details of Unspent CSR amount for the preceding three financial years: NA

Sl. No.	Preceding Financial Year(s)	Amount transferred to Unspent CSR Account under sub-section (6) of section 135 (in ₹)	Balance Amount in Unspent CSR Account under sub- section (6) of section 135 (in ₹)	Amount spent in the Financial Year (in Rs.)	Amount transferred to a Fund as specified under Schedule VII as second proviso to sub-section (5) per of section 135, if any			Amount remaining to be spent in succeeding financial year (in ₹)	Deficiency, if any
					Amount (in ₹)		Date of transfer		
1	2019-20	NIL	NIL	39,71,35,000	NA	NIL	NA	NIL	NIL
2	2020-21	NIL	NIL	35,00,00,000	NA	NIL	NA	NIL	NIL
3	2021-22	NIL	NIL	36,91,38,000	NA	NIL	NA	NIL	NIL
	Total	NIL	NIL	1,11,62,73,000	NA	NIL	NA	NIL	

8. Whether any capital assets have been created or acquired through Corporate Social Responsibility amount spent in Financial Year:

( ) Yes (✓) No

If yes, enter the number of Capital assets created / acquired. 0

Furnish the details relating to such asset(s) so created or acquired through Corporate Social Responsibility amount spent in Financial Year:

Sl. No.	Short particulars of the property or asset(s) [including complete address and location of the property]	Pin code of the property or asset(s)	Date of Creation	Amount of CSR amount spent	Details of entity / Authority/ beneficiary of the registered owner		
(1)	(2)	(3)	(4)	(5)	(6)		
					CSR Registered Number, if applicable	Name	Registered Address
	NA	NA	NA	0	NA	NA	NA

(All the fields should be captured as appearing in the revenue record, flat no. house no. Municipal Office/ Municipal Corporation/ Gram Panchayat are to be specified and also the area of the immovable property as well as boundaries).

9. Specify the reason(s), if the company has failed to spend two percent of the average net profit as per sub-section (5) of section 135: Not Applicable.

Sd/-
(S. Patra)
Chairman-cum-Managing Director
DIN : 06500954

Sd/-
(S. R. Patel)
Chairman CSR Committee
DIN: 09545270

ANNEXURE-II

MANAGEMENT DISCUSSION & ANALYSIS REPORT

1.0 INDUSTRY STRUCTURE AND DEVELOPMENTS:

1.1 Alumina:

During the year 2022, total world production of Metallurgical Grade Alumina (MGA) was 134.36 MT, registering an increase of about 2.17% compared to 131.51 MT produced during 2021. Global alumina consumption during 2022 was 134.01 MT as against 130.77 MT consumed during 2021, exhibiting a YoY increase of 2.48%. China was the major contributor in both production and consumption, having 57.50% share in production and 58.28% share in consumption of alumina. World MGA demand is expected to be about 133.46 MT in 2023, representing a decrease of 0.41% compared to the previous year. Overall, the global alumina market is expected to balance out in 2023 with an expected production of 133.47 MT.

Total alumina production in India during the financial year 2022-23 was about 7.44 MT, thereby registering a YoY increase of 1.75%. Out of this, your Company's contribution was about 2.12 MT (28.5%). Alumina consumption in India reached its peak during 2022-23.

World bauxite production during 2022 was estimated to be around 377.53 MT, which is 3.24% higher than 365.68 MT produced in 2021. Global bauxite production during 2023 is expected to be around 387.36 MT. During 2022, it is estimated that 125.69 MT of bauxite were imported by China, which was mainly sourced from Guinea (70.48 MT), Australia (34.10 MT), Indonesia (19.07 MT) and Malaysia (0.28 MT). Indonesia has maintained its stance to ban bauxite exports from June, 2023 to support the development of downstream mining industry.

1.2 Primary Aluminium:

World production of aluminium during the year 2022 was about 68.94 MT, registering a rise of 2.27% compared to production figure of 67.41 MT achieved in 2021. At the same time, worldwide consumption of aluminium rose 0.25% from 68.97 MT in 2021 to 69.14 MT in 2022. Thus, the market registered a deficit of around 0.20 MT during 2022. China was the largest producer as well as consumer during the year, contributing 58.23% share (40.15 MT) of the world production and 58.79% (40.65 MT) of the world consumption of aluminium. China registered aluminium production growth of 4.19% during 2022, while the rest of the world exhibited a 0.28% fall in production. As far as aluminium consumption is concerned, China's figures displayed a growth of 1.28% during the year 2022, while the rest of the world registered a fall in growth by 1.17%. During financial year 2022-23, consumption of aluminium in India increased by 14% from 3.90 MT to 4.45 MT. Global aluminium demand has showed largely negative growth in major consuming regions such as Europe, US, China and Japan during financial year 2022-23. While some sectors are now showing signs of improvement, demand is not expected to pick-up substantially unless high consuming sectors such as automotive and construction gain momentum. Besides this, the high level of port stocks, for example, at many Asian ports (notably Japan) and inland warehouses continued to weigh on local demand in the Asian region.

The average LME cash settlement price during the financial year 2022-23 was USD 2,490 per MT, falling by 10.08% against the corresponding figure of USD 2,769 per MT during 2021-22. In financial year 2022-23 monthly average, LME declined to a low of USD 2,230 per MT in September, 2022. However, prices gained during January, 2023 to reach a level of USD 2,489 per MT, following an improvement in the demand situation in China. However, LME price declined again due to the following factors; a) Aluminum prices were pressured down by evidence of growing supply and production restarts in S. E. China and b) LME aluminum inventories, continued to rise across Asia. Falling alumina prices also dented support for aluminum prices.

Average LME cash settlement price during financial year 2023-24 is projected to be about USD 2,187 per MT, which would mark a decline of 12.17% against the corresponding figure of 2022-23. Reasons for the expected drop include (a) Global end-user demand contraction, (b) Rising primary aluminum production as Chinese Smelting restarts are expected to take effect and (c) Fall in world average primary aluminum smelting cash costs.

Estimated global aluminium metal stocks at the end of financial year 2022-23 stood at 10.29 MT, registering a rise of 12.70% against stocks of 9.13 MT at the end of financial year 2021-22.

A market deficit of 0.20 MT was recorded for aluminium metal in 2022, compared to the global market deficit of 1.55 MT in 2021.

2.0 STRENGTHS AND WEAKNESSES:

2.1 Strengths:

Aluminium is the commonest metal in earth's crust, the third most plentiful chemical element on our planet (after oxygen and silicon), and the second most popular metal for making things (after iron and steel). Aluminium is seen and used every day without even thinking about it. Disposable drinks cans are made from it and so is cooking foil. The silvery metal is found in many places from jet engines in airplanes to the hulls of hi-tech warships. Aluminium is soft, lightweight, fire-proof and heat-resistant, easy to work into new shapes and able to conduct electricity. It reflects light and heat very effectively and it doesn't rust. It reacts easily with other chemical elements, especially oxygen and readily forms an outer layer of aluminium oxide, if it is left in the air.

At about 4.10 MT per annum (MTPA), India has the second-largest aluminium production in the world, followed by Russia at 4.0 MTPA, while China has the largest production of 40.563 MT. The industries that require aluminium in the country mostly include power, consumer durables, transportation, construction and packaging etc. aluminium is a strategic metal that propels India's GDP. Al Circle research has estimated that aluminium usage in India is likely to grow at a CAGR of 6.7% annually to reach 4.84 MT by 2026-27. The nation has a huge reservoir of bauxite and it needs to increase bauxite production to nearly 70 MT by the fiscal year of 2030-32 to match the future demand.

Aluminium can be recycled infinite times without losing any of its excellent properties. It has been estimated that converting 1 MT of aluminium scrap into aluminium products results in saving of several tonnes of bauxite, 14,000 Kwh of energy, 6,300 litres of fossil fuels, 7.6 cubic meters of landfill and valuable land for other uses such as forests, housing, industry etc. Hence, India now needs to develop a strong industrial base for recycling aluminium scrap and promote secondary producers. This mandates that the raw material supply chain of aluminium scrap is robust and reliable for the industry to be sustainable.

2.2 Weaknesses:

India can significantly boost its export earnings by expanding its production capacity of downstream aluminium products. Although primary aluminium

production in the country has increased significantly over the last decade, the rate of value addition inside the country remains low. This can be achieved by development of new products/applications through investments in R & D activities, which are presently being carried out at a limited scale. Further, lack of an extensive and reliable logistics network for efficient supply chain management also acts as an impediment towards achieving this goal. Indian aluminium producers also lose out on price competitiveness as compared to their peers situated in the middle east due to dependence on coal for power generation, which entails higher power costs. India also encounters high outflow of precious foreign exchange from the country on account of import of aluminium scrap. In absence of adequate aluminium scrap generation and handling infrastructure within the country, aluminium recyclers are forced to look for suppliers abroad.

3.0 OPPORTUNITIES AND THREATS:

3.1 Opportunities:

Global aluminium demand (primary and secondary) is forecast to grow by 33.3 MT, going from 86.2 MT in 2020 to 119.5 MT in 2030. Around 37% of this growth is expected to come from China, followed by 26% from Asia ex. China, 15% from North America and 14% from Europe.

The highest growth in terms of absolute demand is expected to come from the transportation sector which, driven by decarbonization policies and the shift from vehicles powered by traditional fossil fuels to Electric Vehicles (EVs), is expected to go from consuming about 19.9 MT of aluminium in 2020 to 31.7 MT in 2030.

As countries transit to clean technologies, in response to the urgent need for climate action and sustainable lifestyles, the shift to a 'Net Zero' economy is expected to be metal-intensive and aluminium has been identified as one of the critical metals that will aid this transition, catering to the emerging demand for clean energy solutions, green technologies and sustainable systems. Aluminium is a lightweight material, which is ideal for use in EVs, 'Green Buildings' and power cabling. Based on the International Energy Agency's projections for a sub-two degrees global warming scenario, consistent with the Paris Agreement (Beyond 2°C Scenario or B2DS), demand (including recycled aluminium and scrap) could increase from the present level by 80% to around 170 MT by 2050. It is estimated, in this context that, to cater to this huge spurt in demand, upto 30% increase in global primary aluminium production shall be required (from around 69 MT in 2022 to 90 MT in 2050), while the rest may be met from secondary sources and scrap.

In the electrical sector, the transition towards green energy sources will strengthen the sector's demand for aluminium, which may reach 15.6 MT in 2030 up from 10.4 MT in 2020. Supporting solar power projects through alliances with designers and manufacturers can be key to increase aluminium demand coming from this sector, as solar power requires over four times more Aluminium per installed megawatt than wind power and around 25 times more than coal. In addition to this increase in consumption from renewables, the need for conductor cables for power distribution is expected to increase. Although these conductors have been traditionally made from copper, transitioning to aluminium represents a viable alternative and can be beneficial from a cost perspective.

Construction is expected to show relatively low growth in the next decade as consumption increases from 21.2 MT in 2020 to about 25.8 MT in 2030. Following a slightly different path as compared to other sectors, growth is expected to come mainly from Asia ex. China, as demand remains linked to infrastructure spending and urbanization rather than green trends.

Aluminium consumption from the packaging sector is likely to increase from 7.2 MT in 2020 to 10.5 MT in 2030, driven mainly by the rise in popularity of canned drinks in North America, Europe and China. The surge of demand for canned drinks in recent years and the subsequent demand of aluminium from the packaging sector has been fuelled by the emergence of new products as well as a strong consumer preference for packaging options that are environmentally friendly.

3.2 Threats:

The Russia-Ukraine war triggered a massive shock to the global economy, especially to energy and food markets, squeezing supply and pushing up prices to unprecedented levels. For example, the aluminum price on the London Metal Exchange (3M contract) peaked at an unprecedented $4,000 per MT in early March, 2022, as compared to $3,224 February, 2022 monthly average. This prompted many aluminium producers to restart or ramp up their production capacities, resulting in excess output of aluminium, which carries the risk of causing a glut in the market in the coming months. Abnormal high prices of aluminium metal also adversely impacts demand for the metal, as consumers start looking for substitute materials.

Another threat from the ensuing war to the domestic aluminium industry has been the exponential rise in price of imported coal, which has caused excessive demand for domestic coal in the country and has created coal shortage for aluminium producers. This situation may lead to disruption in power supply to aluminium smelters, thereby forcing production cuts.

Oil price spikes triggered by the Russian military operations had a detrimental effect not only on prices of aluminum but also on all commodities. The Brent Crude Oil Index was marked at around $80 per barrel at the beginning of 2022, but jumped upto about $123 per barrel by 7th March, 2022. Similarly, supply chain disruptions due to the Russian invasion also increased the overall cost of shipping operations. The Clark Sea Daily Rate Charter Index (all shipping markets) showed a dramatic increase in shipping rates from around $30,000 per 40 foot container by the end of January, 2022 to over $40,000 in March, 2022. Any further escalation of geopolitical tensions, like the Russia-Ukraine war or potential US-China conflicts can eventually lead to high volatility in aluminium supplies and prices, cause global inflation and disrupt trade and supply lines.

Many countries are likely to introduce policies addressing industrial emissions. The European Union is in the process of developing a Carbon Border Adjustment Mechanism (CBAM) that will include aluminium. The US is also believed to be considering a similar move. These policies would effectively apply tariffs to imported emission-intensive aluminium goods from countries with weaker/no emissions policy in an effort to limit carbon leakage, while incentivizing stronger emission measures in other countries. The imposition of CBAM and other similar measures may be detrimental to Indian aluminium exporters, since carbon-emission intensity for Indian primary aluminium players remains high, as compared to the world average, at present. This would make Indian aluminium more expensive and therefore, less competitive, as compared to domestic production in those countries, leading in turn, to loss of market and export revenues for Indian aluminium players.

In addition to the above, other perennial threats to the domestic aluminium industry include potential downturns in the economy, fluctuations in global prices/exchange rates and cheaper aluminium imports.

4.0 SEGMENT–WISE PERFORMANCE:

Sl. No.	Particulars	Chemicals (Alumina)		Metal (Aluminium)		Un-allocable		Total
		₹ in crore	Share (%)	₹ in crore	Share (%)	₹ in crore	Share (%)	₹ in crore
1.	Revenue from operation	3,955.10	27.75	10,227.15	71.75	72.61	0.51	14,254.86
2.	PBT (Before exceptional items)	408.02	20.73	1,784.27	90.67	(224.38)	(11.40)	1,967.91
3.	Capital Employed#	2,691.02	27.70	4,095.45	42.16	2,926.88	30.13	9,713.35
4.	ROCE (%) (2/3)		15.16		43.57		(7.67)	20.26
5.	PBIT Margin (%) (2/1)		10.32		17.45		(309.02)	13.81

#Capital employed under "Un-allocable Common" includes cash balance and assets of Wind Power Plant and expansion units.

5.0 OUTLOOK FOR FUTURE:

5.1 International Outlook:

Global aluminium production during April – June, 2023 quarter is expected to be 17.28 MT, while consumption during this period is likely to be 17.54 MT, implying that the market will be in deficit of 0.26 MT in short term.

International commodity prices have been exhibiting high degree of turbulence since the beginning of Russia-Ukraine war in February, 2022. Aluminium prices breached the USD 4,000 per MT mark briefly in March, 2022 before falling in the following weeks. The increase in prices was attributed to the fear of sanctions being imposed on exports of Russian origin aluminium metal by the western world, which could have resulted in global shortage of metal. However, no such sanctions were actually imposed and no production cuts were announced by Russian aluminium producers, which caused aluminium prices to fall. The LME cash price averaged USD 2,826 per MT in May, 2022 and has fallen since then to reach USD 2,290 per MT in March, 2023. Volatility in commodity and energy markets, globally higher inflation rates and monetary tightening policies could continue to create difficulties in global trade.

As per industry reports, world primary aluminium demand is largely in contraction mode, as major end-user segments continued to experience a contraction, except for the automotive and aerospace sectors. Global manufacturing activity remains in contraction mode with China, USA and Europe still deteriorating. World primary aluminium inventories still remain high compared to December, 2022 levels.

Global supplies of low carbon metal have been robust for several years, but dipped in 2022, mainly due to restrictions in southern provinces of top producer China, that rely heavily on hydro power. Now, aluminium makers are set to boost output of low-carbon metal by about 10% in 2023 upto a level of about 18.56 MT, which accounts for an estimated 26% of total world output of aluminium. The increase in more sustainable supplies coincides with the growing efforts by companies to demonstrate their green credentials to consumers, especially in the European automobile sector. While companies have invested heavily in low carbon technologies, global surpluses in output are likely to dampen the spot premiums that producers are able to charge for their low Carbon products, especially in 2023, when overall demand has been hit by recession fears, according to analysts.

LME prices are expected to be under pressure during 2023-24 as:

a) Short, medium and long-term technical indicators remain generally bearish;

b) World demand for aluminium is yet to gain momentum;

c) Primary aluminium smelting costs are continuing to fall further;

d) Tight global monetary conditions are expected to continue;

e) Availability of most types of aluminium units may continue to increase through 2023-24, leading to a global surplus.

5.2 Domestic Outlook:

Indian aluminium demand has so far remained resilient to economic headwinds and performed well in 2023. India's economic indicators send some positive signals while demand from end-users points to a mixed picture in 2023. As per RBI, India's GDP growth outlook may grow by 6.5 % YoY for financial year 2024 as compared to 7% YoY in financial year 2023. Inflation is expected to reduce to 5.2% in financial year 2024 from 6.7% in financial year 2023, as per RBI's projection, which remains within target range (4+/2%). RBI Monetary Policy Committee has decided to keep repo rate unchanged at 6.5%, which is expected to help in ensuring sustainable growth.

The manufacturing Purchasing Managers' Index (PMI) in India, increased from 56.4 in March, 2023 to 57.2 in April, 2023, reflecting the manufacturing sector's continued improvement. This increase has been sparked by strong new business growth, favorable market conditions and better supply-chain conditions.

India has a projection to reduce carbon emissions by 1 billion tonnes by 2030 and also intends to reduce oil import dependency. Hence, Government of India envisages faster adoption and promotion of EVs as a means to achieve these objectives. India is targeting 30% overall (80% in 2W & 3W segments) penetration in EVs by 2030. Aluminium is an essential material in the EV market, playing a vital role in battery technology, body construction and infrastructure and driving sustainability. Substitution of aluminium in EVs would enable manufacturers to build vehicles that are more energy efficient and the lower weight translates into an additional 10-15% increase in range, which in turn, will drive higher EV adoption among consumers. The future of the EV market is bright, and aluminium will continue to play a significant role in driving innovation and sustainability in this exciting and dynamic industry.

The aluminium industry in India faces several daunting challenges including rising imports, decrease in domestic market share and escalating production and logistical costs. The industry's sustainability is also affected by non-competitive energy costs and severe shortage of coal allotted to the non-power sector. Corrective measures such as rationalization of duties, rectification of the inverted duty structure on critical inputs etc. is expected to improve cost competitiveness of the industry, as well as attract fresh new investment. India has sufficient domestic capacity to meet the country's aluminium demand of about 4 million MT. The Indian primary aluminium industry is well resourced to expand further and contribute significantly to the country's economic growth, development and wealth creation.

A snapshot of aluminium production, domestic sales and exports by primary producers along with aluminium consumption in India, is tabulated hereunder:

Description	2022-23	2021-22	Change (%)
Aluminium production ('000 MT)	4,097.55*	4,032.60*	1.61
Aluminium domestic sales ('000 MT)	1,898.50	1,568.00	21.08
Aluminium export sales ('000 MT)	2,198.85*	2,465.00*	-10.80
Aluminium imports ('000 MT)	2,549.70	2,334.40	9.22
Total aluminium consumption ('000 MT)	4,448.20	3,902.40	13.99

* As per revised figures reported by a Primary Aluminium producer.

Source: (a) NALCO's performance data, Primary Producers' data.

(b) CRU Aluminium Monitor.

(c) Ministry of Commerce and Industry, Export Import data bank.

6.0 RISK MANAGEMENT:

Your Company has a Risk Management Policy, which inter-alia incorporates guidelines issued by Government of India from time to time. Risk Management is undertaken as a part of normal business practice and that as separate tasks at set time. The Company has a Risk Management Committee at the Board level. The Committee reviews the exceptional Risk Reports and advice remedial measures from time to time. The risk mitigation measures are periodically reviewed to ensure that executive management controls risk through means of a properly defined framework. A periodical review is made to identify new risk areas along with mitigation plans. For the identified risks, the nominated risk officers maintain risk registers in prescribed format which are also overviewed by Internal Auditors of the Company and at senior management level. Deviations, if any, are reported to the Risk Management Committee.

7.0 INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY:

Your Company has a well-established and adequate system of internal control commensurate with the size and nature of its business. Your Company's Internal Control System has been designed to provide for:

(a) Compliance with applicable statutes, policies & procedures, rules & regulations and delegated authority.

(b) Adherence to applicable Indian Accounting Standards and Significant Accounting Policies.

(c) Proper recording of transactions & timely reporting.

(d) Effective use of resources and efficient operations.

(e) Safeguarding of assets.

As per Section 134(5)(e) of the Companies Act, 2013, the Directors have overall responsibility for ensuring that the Company has implemented system and framework of Internal Financial Controls, which are adequate and operating effectively.

Your Company has well-designed policies, procedures & guidelines in place to ensure control of its different areas of business operations and reporting. This includes delegation of powers, various manuals, rules, policies and guidelines formulated by the Company from time to time. The approved policies, procedures & guidelines are effectively and responsibly being used while executing the business of the Company. The Company has developed & implemented an Internal Financial Control framework duly approved by the Audit Committee which includes internally entity level policies/processes and operating level standard operating procedures primarily aiming at bringing awareness amongst the officials dealing with affairs of the Company to ensure adherence of the policies, procedures, guidelines designed and put in place for effective control. This provides the Directors with reasonable assurance regarding the adequacy and operating effectiveness of controls concerning reporting, operational and compliance risks.

Financial Statements are prepared in compliance with applicable Indian Accounting Standards and based on the Significant Accounting Policies duly approved by the Audit Committee and the Board. These Policies are followed uniformly across the Company. The Accounting Policies supported by standard operating procedures are reviewed and updated from time to time. Your Company uses ERP Systems as a business enabler and also to maintain its Books of Account. The Standard Operating Procedures and transactional controls built into the ERP Systems ensure proper recording, approval mechanisms and maintenance of records. The systems, standard operating procedures and controls are reviewed by management from time to time.

Your Company has incorporated in its Internal Financial Control framework a detailed checklist covering all relevant areas affecting financial reporting to ensure adequate internal control over financial reporting.

Your Company has entrusted its internal audit function to external Chartered Accountants' Firms to carry out audits at all locations and functional areas.

The internal auditors have access to all the information in the organization which has been largely facilitated by implementation of ERP and e-office across the organization. The observations of internal auditors arising out of audits are periodically reviewed at an appropriate level and compliances are ensured.

Material observations of internal auditors are submitted to the Audit Committee for its review, analysis and advice to further strengthen the internal control system. Action Taken Report thereon is submitted to the Audit Committee periodically.

During the year, controls were tested and no reportable material weakness in design and effectiveness was observed as certified by Internal Auditors and as opined by Statutory Auditors in their report. Your Company recognizes that the internal control framework needs to be regularly reviewed and revised to ensure that such systems are reinforced on an ongoing basis in consonance with changing business environment.

8.0 DISCUSSION ON FINANCIAL PERFORMANCE WITH RESPECT TO OPERATIONAL PERFORMANCE:

8.1 Financial Operation:

8.1.1. Revenue from Operation:

₹ in crore

Particulars	FY 2022-23	FY 2021-22	Change %
Export Turnover	4,216.76	6,364.15	(34)
Domestic Turnover	9,954.10	7,694.83	29
Turnover	14,170.86	14,058.98	1
Other Operating Income	84.00	155.60	(46)
Revenue from Operation	**14,254.86**	**14,214.58**	**0**

Note: Consequent to opinion of Expert Advisory Committee of ICAI, regrouping has been made to include the income generated from scrap on its disposal in other operating income.

Despite decrease in average sales realization, increase in sales volume during the current year resulted in an increase in turnover from ₹ 14,058.98 crores to ₹14,170.86 crores as compared to previous financial year.

Average sales realization of Alumina and Aluminium has decreased from ₹ 31,737 per MT to ₹ 30,816 per MT and ₹ 2,20,405 per MT to ₹ 2,19,804 per MT respectively as compared to the previous year. With regard to volume, the sales quantity of Alumina and Aluminium has increased marginally by 1.13% and 1.57% respectively.

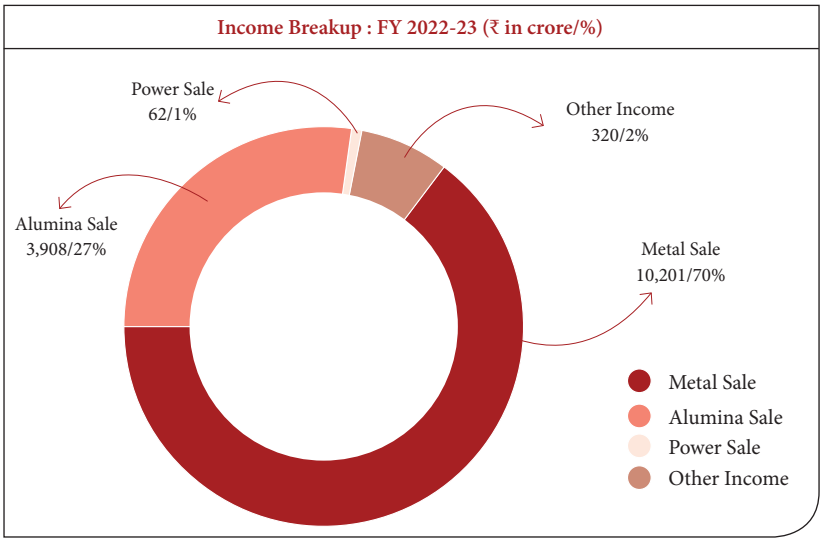
Other Operating Income during the year has decreased from ₹155.60 crore to ₹ 84.00 crore as compared to the previous financial year. This decrease in operating income by 46% is mainly on account of lower export incentive due to decrease in export sales of Aluminium and decrease in scrap income due to change in policy of recognizing scrap income.

8.1.2 Other Income (Non-operating):

₹ in crore

Particulars	FY 2022-23	FY 2021-22	Change %
Other Income	235.63	264.09	(11)

Note: Other non-operating Income is lower as compared to the previous year mainly due to interest on income tax refund received in previous year not repeated in current year. However there is an increase in interest income on investible surplus due to better yield.



Note: Other income includes operating income i.e. export incentive and incentive on the generation of renewable energy, scrap sales and non-operating income i.e. income from investment in FD, Mutual fund and other miscellaneous income.

8.1.3 Expenditure:

₹ in crore

Particulars	FY 2022-23	FY 2021-22	Total Change %
Raw Materials	3,172.12	1,971.13	60.93
Power & Fuel	4,693.69	3,388.48	38.52
Employee Benefit Expenses	1,832.06	2,355.80	(22.23)
Stock Accretion/Depletion	(16.66)	(116.83)	(85.74)
Other Expenses	2,125.57	2,065.50	2.91
Finance Cost	12.92	23.13	(44.14)
Depreciation, Amortisation and Impairment	715.80	836.59	(14.44)
Total	**12,535.50**	**10,523.80**	**19.12**

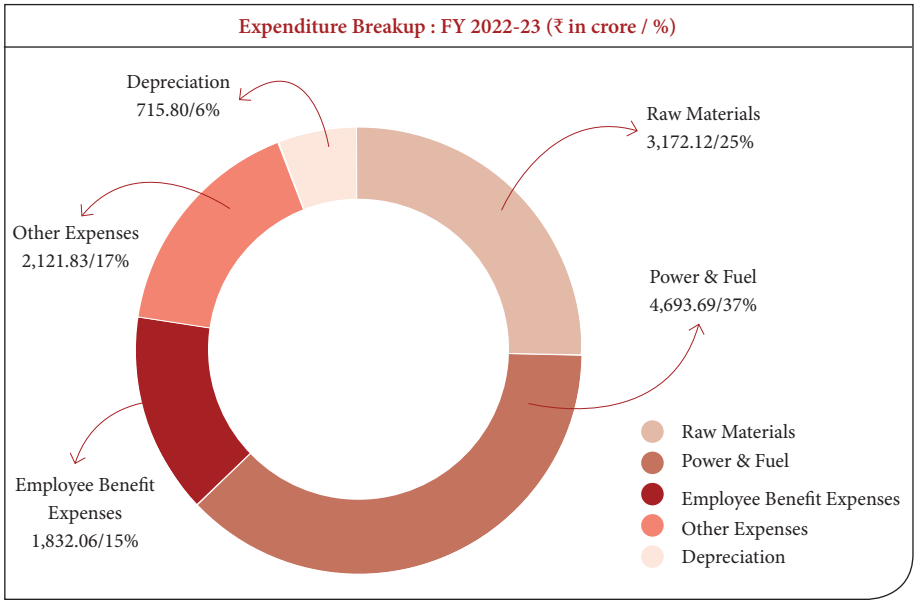
Note:

(a) Increase in raw materials and Power & Fuel expenses compared to the previous year is primarily attributable to increase in the price of C. P. Coke, C. T. Pitch, Caustic Soda, Coal and Fuel oil.

(b) The decrease in employee benefit expenses by ₹ 523.74 crore is mainly attributable to lower provisioning towards performance related pay linked to profit and decrease in long term employees benefit liability based on actuarial valuation.

(c) The other expenses have increased by 2.91% as compared to the previous year mainly due to increase in expenditure on maintenance, price of HSD and other consumables.

(d) Expenditure on depreciation is higher during the current year due to capitalisation of assets. However, decrease in impairment provision on WPPs in the current financial year resulted in overall decrease in expenditure on account of depreciation, amortization and impairment.



Note: Other expenses includes repair & maintainance, consumption of stores and spares, other manufacturing expenses, general administrative expenses, stock accretion and depletion, finance cost and S&D expenses.

8.1.4 Profit After Tax and Earnings Per Share:

₹ in crore

Particulars	FY 2022-23	FY 2021-22
Profit before Tax	1,954.99	3,954.87
Tax Expenses	410.50	1,002.90
Profit After Tax	1,544.49	2,951.97
Earnings Per Share (of ₹ 5/- each)	8.41	16.07

8.1.5 Dividend Particulars:

Particulars	FY 2022-23	FY 2021-22
Interim Dividend (%)	70%	100%
Final Dividend (%) (Previous FY)	30%	20%
Total (%)	100%	120%
Dividend in ₹ /share	5.00	6.00

8.2 Financial Positions:

₹ in crore

Particulars	FY 2022-23	FY 2021-22	Change %
Assets			
Property, Plant & Equipment	6,916.39	7,001.94	(1)
Capital work-in-progress	2,744.95	1,763.42	56
Intangibles	386.44	341.27	13
Intangible assets under development	523.97	471.40	11
Investments	470.83	377.26	25
Inventories	1,840.22	1,645.60	12
Trade Receivables	91.33	75.25	21
Cash & Bank	2,117.50	3,706.07	(43)
Loans	111.37	115.93	(4)
Other Financial Assets	71.13	56.87	25
Income Tax Assets	662.98	375.95	76
Other assets	1,801.58	1,557.87	16
Total	**17,738.69**	**17,488.83**	-
Equity & Liabilities			
Equity share capital	918.32	918.32	-
Reserve & Surplus	12,320.13	11,636.32	6
Deferred Tax Liability	957.77	868.18	10
Trade payable	1,274.32	1,480.71	(14)
Borrowings	47.75	20.67	131
Lease Liabilities	56.86	56.43	1
Other Financial liabilities	800.41	588.92	36
Provisions	247.72	387.93	(36)
Income Tax Liabilities	32.07	211.04	(85)
Other Liabilities	1,083.34	1,320.31	(18)
Total	**17,738.69**	**17,488.83**	-

Notes:

(a) Decrease in the carrying amount of Property, Plant & Equipments is due to impairment of WPPs at Maharashtra, and Rajasthan by ₹1,03.82 crore. However, there is addition in property, plant and equipment due to upgradation in Potlines in Smelter and turbines at CPP, leasehold land of Utkal-E Coal block etc. during the year. Besides, there is an addition in the capital work-in-progress due to upcoming 5th Stream at Refinery and pre-project expenses for Bauxite Mines at Pottangi.

(b) Carrying amount of Intangible assets has been increased due to capitalization at Coal Mines Division for Utkal-E Coal.

(c) Intangible assets under development increased due to payments towards NPV and compensatory afforestation for Pottangi Bauxite Mines.

(d) Investments increased due to increase in investment in Joint Venture M/s. Khanij Bidesh India Limited by ₹12 crore and Mutual fund by ₹ 69.57 crore.

(e) Trade receivables increased due to supplementary bills raised on APSPDCL for revision in rate per unit of wind power which was pending for realization.

(f) The cash and bank balances has decreased due to increase in payment for ongoing expansion and increase in outflow against working capital due to rise in input prices e.g. raw materials and fuel. The cash and bank balance at the reporting date comprises of deposits with the bank as short term investments and interest on amount deposited earlier towards disputed electricity duty.

(g) Inventories has increased due to increase in inventory raw material and finished goods.

(h) Other financial asset have increased due to increase in security deposit and mine closure deposit.

(i) Income tax assets have been increased due to increase in claim receivable from income tax and advance tax paid.

(j) Other assets have been increased due to increase in capital advances and deposit with Govt. authorities.

(k) Reserve & surplus has increased on account of profit generated during the year.

(l) Trade Payable has decreased due to lower provisioning of PRP payable to employees.

(m) Increase in borrowings is due to bills discounted on 31.03.2023.

(n) Increase in other financial liabilities during the year is primarily due to increase in liabilities towards capital procurements.

9.0 MATERIAL DEVELOPMENTS IN HUMAN RESOURCES/INDUSTRIAL RELATIONS FRONT INCLUDING NUMBER OF PEOPLE EMPLOYED:

9.1 Human Resources:

(a) Your Company is on continuous improvement and development mode. Health and safety of its employees has always been on top-most priority and it further got intensified during the recent COVID times. With proactive action and steps taken to ensure health and wellbeing of employees and other stakeholders, your Company could achieve milestones and outstanding performance.

(b) The recent COVID pandemic taught us to think beyond boundaries and introduce new changes as 'New Normal'. Overcoming the Covid situation, your company has again put itself back to track with much more enthusiasm and successfully completed the pipelined recruitments.

(c) Keeping in pace with the changing times and needs, a good number of existing HR policies and procedures are also being revisited for amendment and new ones have made their way in to the system. Many more changes are envisaged focusing on promotion and development of business culture of the Company. Your Company is exploring the avenues for talent acquisition and capability building through term based appointments along with retaining of experienced manpower, aiding transfer of knowledge and expertise, aiming to curtail the rising labour costs.

(d) Manpower strength of the Company as on 31.03.2023 was 5,190 as against 5,520 at the last day of the previous year. The detailed breakup is given below:

Sl. No.	Position*	As on 31.03.2023	As on 31.03.2022
A	Executives	1,588	1,667
B	Supervisory	332	371
C	Skilled/Highly Skilled	3,150	3,004
D	Unskilled/Semi Skilled	120	478
	Total	**5,190**	**5,520**

* Includes GETs/MTs/SOTs/JOTs/TOTs.

9.2 Training & Development:

In order to enhance the functional and behavioral competency of its employees and to align the individual need with the business objective of the organization towards increasing production and productivity as well as to improve business culture in the organization, there has been an unstinting effort by your Company to impart skill and behavioral training to its employees. In its commitment for corporate social accountability and good corporate governance, the company also imparts skill development training to contract workers, apprentices, students from managerial and technical institutes as well as for local populations.

As regards regular employees, the Company has imparted training to 5,129 employees with 15,857 training man-days during the year 2022-23 (upto 31st March, 2023). Further, 404 executives were given virtual as well as external training from MDI(Gurgaon), NHRD, INC-WMC New Delhi,

IIT-Kharagpur, Institute of Directors (IoD) Hyderabad, MGMI, Kolkata, C-DAC Pune, CII, IFTDO, IICA, SP Jain School of Global Management, Mumbai, SCOPE, NPC, DPE, NSE, ICW Group, ICC, IIMM, PRDA, IMI, ISTD, NFSU, IRILM, IIM, Bangalore, Metalogic Projects Managements, Parivartan Rajbhasha Academy, New Delhi, Forensic Science University of Home Affairs, Govt. of India, New Delhi, CVC etc. on management development programme during 2022-23. In-house skill development programmes for Security personnel, contract labours and trainees were also organized with 6,452 persons during 2022-23 across the Company.

There were 1,394 apprentice trainees engaged during the year 2022-23 (upto 31st March, 2023) which is 26.86 % of employees (i.e. employee strength is 5,190 on 31st March, 2023) of the Company and which is 8.20% of total employees including contractual workers engaged by different contractors (i.e. employee strength is 5,190 on 31st March, 2023 and 11,801 contract workers engaged through different contractors in the month of January, 2023 (As per the gazette notification dated 25th September, 2019, Para 4(ii), regarding the engagement of apprentice quote "within a financial year, each establishment shall engage apprentices in a band of 2.5 to 15% of the total strength of establishment including contractual staff" unquoted). The company has engaged more apprentices in ITI, diploma and graduate technical degrees in various disciplines than as stipulated in the act in spite of COVID pandemic scenario.

As a part of corporate responsibility and industry academic interface, 202 students from different technical and management institutes across the country had undergone summer internship programme in various functional disciplines at Corporate Office.

10.0 SIGNIFICANT CHANGES IN KEY FINANCIAL RATIOS:

Particulars	FY 2022-23	FY 2021-22
PAT/ Net worth	11.67%	23.51%
EBIT/ Net sales	13.89%	28.30%
EBIT/ Capital employed*	20.26%	37.84%

*Capital employed = Net Fixed Assets (excluding CWIP) + Working Capital

11.0 CHANGE IN RETURN ON NET WORTH:

Particulars	FY 2022-23	FY 2021-22	Change %
Operating Profit Margin	17.28	32.37	(46.62)
Return on Net Worth	11.67	23.51	(50.36)

Note: Decrease in operating profit margin is due to higher cost of production on account of increase in input prices. This has also impacted lower return on Net Worth.

12.0 SAFETY, OCCUPATIONAL HEALTH & ENVIRONMENT:

Your Company, a Navratna Central PSU is committed for prevention of pollution and protection of environment, protection of health and safety of employee's and workmen's. Company adopts preventive strategies rather than curative strategies in the field of all activities of the Company.

The 4 R Principles (Reduce, Reuse, Recycle and Redesign) is given thrust for minimising the impact to environment on account of the industrial activities by the Company. Priority is given to monitoring of health status, to act proactively for wellbeing of employees in the company.

All production units are certified to international standards on Environmental Management Systems (ISO:14001), Occupational Health and Safety Management System (ISO:45001) affirming commitment to comply proactively with continual improvement in the field of Health, Safety and Environment.

Further to have cleaner and greener surroundings in all its operating units, 5 S principle has been adopted to improve housekeeping in and around the plant.

All its production units including townships at production units are operating with valid "Consent to Operate" under Air & Water Act, valid authorisation under different applicable Laws (Hazardous Waste Authorisation, Biomedical Waste Authorisation etc.), valid licenses under different applicable Laws (Factory Licences, Explosive Licenses etc.) and valid NoC etc.

To minimise water intake from natural sources, all waste water are treated in the treatment plant and are recycled for re-use in the plant. Thus zero discharge has been implemented in all production units of your Company.

Rain water harvesting system [Rainwater Harvesting Ponds and Roof top Rain water harvesting system) are in operation at all production units of your Company.

Massive plantation has been done in and surrounding of all production units of your Company. Around 105 lakh plants have been planted since inception. [CPP - 12.22 lakh, Smelter - 17.65 lakh, Refinery - 36.14 lakh and Bauxite Mines - 39.4 lakh].

Your Company celebrated "Chemical Disaster Prevention day", "Road Safety Week/month", "National Safety Week", "World Environment Day", "National Pollution Prevention Day", "Earth day", "Ozone day", "Electrical Safety week", "Vanamahostav", Odisha Disaster preparedness Day, Fire service week etc. abiding all COVID-19 guidelines for promoting awareness of Safety, Health and Environment amongst the employees, workmen, suppliers etc. during the financial year 2022-23.

Concurrent mining and land reclamation are simultaneously being carried out at Mines using OB & top soil followed by mass scale plantation. This avoids storage of OB.

The unit specific major improvements taken up in the field of Safety, Occupational Health and Environment Management at all production units of your Company during the year are elaborated below:

12.1 BAUXITE MINES:

12.1.1 Safety and Occupational Health:

(a) Safety Gathering/Safety talk are being conducted in every department on monthly basis. Nalco Suraksha Mobile App has been successfully implemented for reporting of online unsafe conditions, unsafe acts, near-miss, fire hazards etc. Safety Training Kiosk has been installed for visitors.

(b) Dump Truck Simulator has been installed for basic safety training and skill up-gradation training for HEMM operators. Behavioural Based Safety training are being conducted for executives of Mines by outside agency.

(c) Nalco Suraksha Chakra, a cross functional team has been constituted to manage safety matters. Quarterly mock drills and Internal Safety Audit have been carried out successfully during the financial year 2022-23.

(d) Regular PME was conducted for 487 employees and 354 contractual workers following COVID-19 guidelines.

12.1.2 Environment:

(a) 1,10,773 numbers of trees were planted in and around Mines against the target of 1,10,000.

(b) Further, 5,000 numbers of fruit bearing seedlings were distributed to local villagers to improve awareness about plantation among the villagers.

(c) 7,000 square meter of grass-turfing was carried out inside the Mines as per the target. 4,000 numbers of bamboo plantation has been done near village Karidiguda to reduce propagation of noise from belt.

(d) A rock garden has been developed at Mines to improve the landscape. A coffee garden was developed to encourage experimental plantation.

(e) Two nos. of fog cannons have been procured to suppress dust near stockpiles. Fixed automatic sprinklers of 3.8 km length have been established in the South Block and Central Block to suppress dust generated from haul roads.

(f) Mines has been established as a water positive mine in the study conducted by M/s. Geoenvitech Services Pvt. Ltd., Bhubaneswar.

(g) 119 employees have been imparted EMS awareness training.

(h) Swachhta pakhwada has been observed during 16-30, November, 2022.

12.1.3 Awards & Accolades:

(a) Panchpatmali Central and North Block Bauxite Mine received the prestigious 5-Star Rating Award for sustainable mining for the year 2021-22 from Indian Bureau of Mines (IBM), Govt. of India during the year.

(b) Panchpatmali Bauxite Mines was awarded 1st Prize in Best Silicosis Awareness by OMMSWC in 2022-23.

(c) Panchpatmali Bauxite Mines was awarded Kalinga Safety Award (Platinum) in Odisha State Safety conclave for the performance year-2021-22, organized by IQEMS in November, 2022.

(d) Panchpatmali Bauxite Mines received Innovation Award for Sustainable Mining of Bauxite by Surface Mining under Mining Innovation Award 2021 category in the Diamond Jubilee celebrations of Indian Mining and Engineering Journal during the year.

(e) Panchpatmali Bauxite Mines received the Kalinga Environment Excellence Award 2021-22 from Kalinga Foundation during the year.

(f) Panchpatmali South Block Bauxite Mine received the 1st prize in reclamation and rehabilitation category and 3rd prize in publicity and propaganda category in the 24th ME&MC Week 2022-23 celebrations being organized under the aegis of IBM, Bhubaneswar. Panchpatmali Central and North Block Bauxite Mines received the 1st prize in reclamation and rehabilitation category.

12.2 ALUMINA REFINERY:

12.2.1 Safety and Occupational Health:

(a) Alumina Refinery of your Company has already taken initiatives for implementations of 10 point actions (Annual Safety Calendar, AAINAA : Advance Action in Industries to Abate Accidents, Safety Buddies, Safety Mobile App, Safety Gathering, Safety Touch, Safety Hot Spots, Use of Technology, Safety Compliance by Contractors, Mock Drill) as per the directives received from Directorate of Factories & Boilers, Govt. of Odisha.

(b) Safety awareness program including simultaneous awareness at all work places (24 locations) of Alumina Refinery including Township Civil & Electrical maintenance office, Hospital, etc. was done every month in financial year 2022-23.

(c) Plant safety observations were also carried out by Suraksha chakra members at various schedules for identification of unsafe act and unsafe conditions.

(d) Installation of CCTVs in vulnerable workplaces for capturing unsafe behaviour/unsafe conditions as regards to prevention of accidents is under process, in addition to existing CCTVs already installed near all gates of plant, all watch towers, central store and some workplaces inside the plant including installation of ANPR camera to capture the unsafe vehicle movement inside the plant.

(e) Periodical road safety checking was done with the help of CISF personnel for checking of the unsafe driving of vehicles including heavy vehicles.

(f) The contractor workers were imparted safety awareness training. Total 1,860 nos. contractor workers have undergone training through CLMS (For financial year 2022-23), 121 employees undergone the classroom safety training. 4,673 numbers of workers have been sensitized in safety gathering for achieving zero reportable accident in Alumina Refinery.

(g) 02 (Two) numbers statutory mock drills were conducted.

(h) Factory license has been renewed for 10 years valid till December, 2032.

(i) Initiatives for Road Safety Survey was done. Approval for making vertigo test structure (for height work) has been obtained.

12.2.2 Environment:

(a) Alumina Refinery has achieved 100.63% fly ash utilization against the utilization target of 100% given by statutory authority for the financial year 2022-23.

(b) Alumina Refinery has planted 16,006 numbers trees against target of 15,000.

(c) Renewal of license for storage and use of Naptha in favour of the Alumina Refinery has been issued by Dist. Collector, Koraput, license validity is upto 31.12.2024. NoC received from DOWR, for re-routing of two numbers of water courses passing through the proposed construction area of 2nd Red Mud Pond (a condition in the CTE) for Alumina Refinery.

(d) E-waste have been channelized to authorised collection centre/Recycler as per E-waste Management & Handling Rule. Hazardous wastes (discarded asbestos and used oils) are channelized through the authorized agency. Plastic wastes (Used filter clothe) are disposed through authorized co-processing cement plant. Empty Chemical containers/Barrels are being disposed through authorized recycler.

(e) For disposal of high concentrated mud, the work for Red Mud Pond-2 has been awarded and in progress, which will be completed in time.

(f) Retrofitting work for Boiler #2, Boiler #4 and Pass-A of Boiler #3 ESP have been completed.

12.2.3 Awards & Accolades:

(a) Apex India Green Leaf Award, 2021 for Environmental Excellence.

(b) Kalinga Environment Excellence Award for 2021.

(c) Greentech Outstanding Achievement Award 2022 for Environment Protection.

(d) Kalinga Safety Award for 2021 in Platinum Category.

(e) CII Eastern Region SHE Excellence Award for 2021.

(f) Apex India SHE Award for 2021 in Gold category.

12.3 SMELTER PLANT:

12.3.1 Safety and Occupational Health:

a) There was no reportable incident in the year 2022-23. There was 20 first aid incidents in the year which is 33% lower than the previous financial year. Total number of near-miss incidents reported was 69 which is 23% higher than the previous financial year which is a good trend, since it helps to prevent future incidents.

b) 904 nos. of safety inspection points were raised through NALCO Suraksha Mobile App. which is 76% higher than the previous financial year.

c) PME of 2,562 employees and 2,983 contract workers was conducted covering 100% employees and contract workers.

d) Load test of 503 nos. of equipments such as Hoists, Lifting Machines, Lifting Tackles, Pressure Vessels & Fork Lifts was completed before due date.

e) Safety Committee meetings, Safety Campaigns, Safety gathering and safety oath taking were held regularly on monthly basis.

f) A high level committee was formed for creating road map to a safe and healthy working environment at Smelter Plant. Committee report with a detailed action plan and timeline was made and bimonthly review is done regularly.

g) Initiatives taken for work at height safety:

i) A survey for fixing rooftop permanent lifeline systems has been carried out by an expert agency M/s. Lifegear. Total Roof area surveyed was 4 lakh Sqm. which covers the entire plant. The agency has designed and recommended permanent lifelines along with proper fall protection measures over all roofs inside plant. 1st phase Implementation of the recommendations are currently in progress at rolling plant which is almost 80% complete.

ii) Vertigo test of 282 workers who are engaged at work at height was carried out.

iii) Procurement of 41 mtr. boom lift to carry out work safely at extreme heights has been tendered.

iv) Site study and survey for work at height and to recommend proper fall protection measures for areas other than roof was completed.

v) Battery-operated portable camera is being used at 'work at height' locations to monitor the live footage on mobile for the purpose of identifying unsafe acts and practices.

vi) To ensure proper vigil and safety during work at height jobs, a cautionary board is displayed at work at height locations to alert people working at height and nearby people.

h) Road Safety initiatives:

i) Road safety audit of the Smelter plant was conducted by the consultant, M/s. Invictus Spot Event Pvt. Ltd. and final report was submitted on December, 2022. Process has been initiated for implementation of recommendations of road safety audit from NH-55 to main gate and main gate to carbon area in phase-1.

ii) Installation and commissioning of 14 nos. Automatic Number-Plate Recognition CCTV Cameras are in progress. This will help to monitor speeding vehicles and traffic rule violation.

i) Emergency preparedness and Fire Safety:

i) Revised onsite emergency plan of Smelter plant prepared by the consultant, M/s. Sun Consultancy and it was submitted to Director of Factories & Boilers, Odisha for scrutiny and acceptance.

ii) 2 numbers of full scale mock drills were held as per schedule involving CISF, District Crisis Group Members and statutory authorities. In addition, every month 2 fire mock drills were also held.

j) As a new practice, monthly safety performance evaluation audit of O&M areas is being conducted every month since May, 2022. This has resulted in improvement of safety performance of all the areas.

k) External Safety Audit of Smelter plant was carried out by Regional Labour Institute, Kolkata as per requirements of Factories Act & Rules and IS 14,489 code of practice in September, 2022.

l) Eye testing camp was organized by Lawrence and Mayo, Bhubaneshwar at OHS on 11th May, 2022. During this camp, 144 numbers of heavy vehicle operators were tested.

m) Safety buddies programme was conducted in October, 2022 at Sakuntala Aluminium Industries (P) Ltd., Angul during which firefighting training & demonstration, interaction on best safety practices and mitigation of emergencies, distribution of safety leaflet and masks were carried out.

n) In the year 2022-23, 52 safety training programmes were held covering 1,262 employees and 265 half day induction safety training programmes were held covering 3,393 contractor workers.

o) In the year 2022-23, 93 numbers of firefighting and fire demonstration were held covering 1,823 of employees and contractor workers.

p) Observation of all important days were held in the year 2022-23.

q) All safety items were timely procured without any safety issue such as firefighting equipment, refills, cartridges, aqueous foam, dry chemical powder, delivery hoses, compressor for refilling of BA set, traffic safety cones, eyewash showers, PPEs for employees etc.

12.3.2 Environment:

(a) Total 13,965.910 MT SPL Carbon portion (HW) disposed to third party M/s. Green Energy, Sambalpur for utilisation of its energy value. Total 58,607 MT Dross (HW) sold to authorised vendors for recycling.

(b) Total 24 nos. of online fugitive fluoride monitoring system installed in Pot line-I, II & III and linked with OSPCB server. Installation and commissioning of surveillance cameras (3 numbers) for monitoring of fugitive emission and stack emission completed.

(c) "No increase in pollution load" for enhancement of aluminium production capacity from 4.6 lakh TPA to 4.8 lakh TPA has been applied online in OSPCB web site on 07.01.2023.

(d) Installation and commissioning work of SO2 Analyse in Bake oven stacks (FTC-1 & 2) completed. ESA-II and Contaminated Site Remediation Study has been carried out by M/s. NEERI, Nagpur successfully. Final Report incorporating all comments and suggestion to be submitted.

(e) Contract has been awarded to M/s. Re-sustainability Ltd. (formerly Ramkey Enviro Engineers Ltd.) for disposal of Carbon Area hazardous waste.

(f) Re-calibration and data validation of PM-CEMS for Star Rating Programme carried out in June, 2022 and February, 2023 for ten major stacks (FTP-1 to 8 attached to Pot line & FTC-1 to 2 attached to Bake Oven) and submitted to OSPCB.

(g) Disposal of induction furnace slag through e auction route to the recyclers started.

12.3.3 Awards & Accolades:

(a) Smelter Plant received Kalinga Safety Excellence Platinum Category award in the year 2022.

(b) Smelter Plant received 1st Prize in technical paper and case study contest in national seminar on the theme "Safety & Energy Conservation as Tools to Care People, Planet and Profit", organised by Society of Power & Energy Professionals, Navi Mumbai.

12.4 CAPTIVE POWER PLANT:

12.4.1 Occupational Health and Safety:

(a) Fire Safety Certificate was issued to CPP, by Government of Odisha on 20.01.2023 which is valid for 02 years.

(b) On-Site Emergency Management Plan (EMP) was accepted by the Directorate of Factories & Boilers, Odisha, Bhubaneswar vide Letter no. 2274 dated 30.07.2022.

(c) Internal Safety Audit was carried out by the Internal Auditors from 05.07.2022 to 08.07.2022.

(d) Quantitative Risk Assessment (QRA) study was carried out by M/s. Jogi Safe Tech. Pvt. Ltd. Vertigo test of contractor workers who are engaged in height work has been carried out by NALCO OHC doctor at the Company's Safety Park. LOTO (Lock Out Tag Out) system has been successfully implemented in CHP area for electrical safety.

(e) Load testing of lifting tools, tackles, lifts and pressure vessels are being carried out by the competent person approved by Directorate of Factories & Boilers, Odisha as per statutory requirement.

(f) Audio-Video training programs were conducted for contractor workers in the safety training hall. In 2022, 115 safety awareness training programmes have been conducted covering 1,622 contractor workers.

(g) PME was carried out for 948 (97%) employees in 2022.

(h) Regular safety inspections are carried out by the safety officers as per the plant inspection schedule to monitor the unsafe acts/conditions in the shop floor.

(i) 02 numbers of full scale on-site mock drill was carried out in co-ordination with District Crisis Group (DCG), Angul and the Mock Drills were witnessed by the District Authority and nearby Industrial representatives.

(j) High Pressure Hydro-jetting Suit for use during high jetting cleaning operation of Boiler & Condenser tubes was procured under CAPEX and put into use.

(k) Circular Rescue Saw which is a Rescue item was procured under CAPEX and issued to CISF Fire Wing for use during rescue operation. 01 Breathing Air (BA) Compressor was procured and installed at CISF Fire Station.

(l) Reflective Signage Boards were displayed at the conspicuous locations of the plant for Safety & Environment awareness. New good quality first aid boxes have been provided to replace the old first aid boxes at 85 locations within the plant. CCTV cameras were installed at various locations inside the plant for safety surveillance. Action has been taken for installation of 08 numbers of ANPR cameras inside the plant for Road Safety Management.

(m) Action has been taken for installation of Lifeline Systems for height work safety based on the recommendations of the height work survey carried out by M/s. Lifegear, Mumbai.

12.4.2 Environment:

(a) Consent to Establish (CTE) has been received from State Pollution Control Board (SPCB) in November, 2022 for construction of 5th phase ash mound by increasing height of Ash Pond-II from 115 to 123 MRL.

(b) Consent to operate for ash filling at Alekha Mahima Temple, Angarabandha was granted by SPCB on 05.01.2023.

(c) Investment approval for implementation of FGD has been initiated after getting FR/DPR at CPP M/s. NTPC consultancy wing. M/s. CSIR-NEERI has been engaged for environment site assessment of ash pond contaminated sites on 05.03.2021. Report has been received.

(d) DFDS (Dry fog dust suppression system) has been installed at CHP-II crusher house on 27.07.2022. Additional settling pit has been constructed at the ash pond of size with a cost of Rs.73 lakh as per the direction of SPCB on April, 2022.

(e) To further reduce the turbidity of ash slurry recycle water from Ash pond and mines void, another clarifloculator of 3,000 m^3/hr capacity has been installed and commissioned on 22.11.2022 inside plant. The recycle water after treatment is being re-used for ash slurry making and other use in plant.

(f) The ash utilization for the year 2022-23 is 121.29%.

(g) CPP of your Company has implemented incentive scheme of Rs.150/MT to brick manufacturer to enhance ash utilization. In the year 2022-23 around 6,34,270 MT of dry ash has been supplied to brick manufacturer under fly ash incentive scheme.

(h) Stack emission is maintained within the specified norm as prescribed by SPCB. To further improve stack emission, revamping of 1st 4 fields of ESPs of

Unit-5 & Unit-6 has been carried out during annual overhauling of the unit.

(i) HDIP camera has been installed at the exit point of plant (towards Gotmara village) and at the outlet of settling tank as ash pond for monitoring of waste water quality.

(j) 2 numbers of effluent monitoring system has been installed i.e. one at the exit point of plant (towards Gotmara village) and another at the outlet of settling tank, as ash pond for monitoring of waste water quality.

(k) One wheel washing system has been installed at the coal corridor for reduction of fugitive emission during coal transportation inside the plant.

(l) Zero discharge has been achieved with respect to industrial effluent, ash pond overflow water and sewerage treatment plant treated water which has been certified by State Pollution Control Board.

(m) During the financial year 2022-23, 20,68,210 cubic meter of ash pond decanted water, 45,33,885 cubic meter of industrial drain water, 2,06,06,976 cubic meter of mine void overflow water, 33,18,120 cubic meter of water from rain water harvesting, 11,24,000 cubic metre of seepage water from ash pond were recycled back to plant and re-used in plant purpose.

(n) CPP of your Company has planted 2,000 numbers of plants in the year 2022-23. The plantation done since its inception is covering around 34.20% of total area.

12.4.3 Awards & Accolades:

(a) CPP bagged the prestigious Environment Excellence award from SPCB, Odisha for the year 2022 on 14.09.2022.

(b) CPP of your Company bagged the "Kalinga Environment Excellence Award 2021", organised by Institute of Quality & Environment Management Service, Bhubaneswar.

13.0 TECHNOLOGICAL CONSERVATION, RENEWABLE ENERGY DEVELOPMENTS AND FOREIGN EXCHANGE CONSERVATION:

The details pertaining to Technological conservation, Renewable energy developments and Foreign exchange conservation for the year 2022-23 are detailed at Annexure-IV of the Directors' Report.

14.0 CORPORATE SOCIAL RESPONSIBILITY:

Initiatives taken by your Company towards Corporate Social Responsibility for the year 2022-23 are detailed at Annexure-I of the Directors' Report.

15.0 COST REDUCTION MEASURES AND EFFORTS TO IMPROVE SPECIFIC CONSUMPTION OF CRITICAL RAW MATERIAL:

The cost of finished products is a critical parameter for sustaining in the competitive world market. Your Company has adopted many cost reduction measures which has contributed to the reduction of product cost and made your company more successful.

The unit wise specific cost reduction measures adopted are indicated below:

15.1Mines:

(a) At HEMM section, 3.640 KL of hydraulic oil were saved by reuse after centrifuging and filtration.

(b) At HEMM section, cost saving was achieved by using indigenous radiator from M/s. Cummins in place of imported radiators supplied by M/s. BEML.

(c) Reconditioning of poly pulley hubs (1,667 nos.) and idlers (3,195 nos.) in crusher and conveyor section and its usage have resulted in savings.

(d) Rebuilding of the crushing segments of SMCP crusher for extension of their life in SMCP resulting in savings.

(e) Reduction in diesel consumption in dumpers by use of fuel additive has resulted in savings of 41.625 KL of HSD with reference to pre-trial period.

(f) Reduction in diesel consumption by parking of vehicles at mining face has resulted in saving of around 128.5 KL of HSD in the current Year.

(g) Reduction in diesel consumption by enhanced usage of backhoe shovels in place of ripper dozers-wheel loader combination has resulted in savings of around 104.9 KL of HSD.

(h) Reduction in diesel consumption by loading of bauxite directly from the pit by small backhoe and tipper combination has resulted in saving of around 187 KL of HSD.

15.2 Alumina Refinery:

(a) Development of new SOP for Coal Mill Changeover without resorting to oil support has resulted reduction in oil consumption.

(b) Reduction of Coal mill outage by logic modification has eliminated tripping of Reducer Oil pump leading to energy savings.

(c) Phasing out wooden sleepers by replacement with PSC Sleepers in old railway network of Alumina Refinery has resulted in savings.

(d) Operational efficiency has increased by implementing remote monitoring of flow and energy data of Ash pond, Water In-take pump house and Red Mud pond.

(e) Replacement of Air break contactor by Vacuum Contactor in 75 KW and above motor feeders has resulted in energy savings.

15.3 Smelter:

(a) Modification of Winch trolley communication control system for ABF-2 & 3 has resulted in less consumption of Electrical energy and HFO.

(b) Installation of 84 nos. of Riser dampers for ABF-1 has enabled in reducing HFO consumption and eliminating fire risks by closing the dampers at the time of fire change.

(c) Revamping of Compressor (130 Nm^3/min) in Utility has resulted in reduction of specific energy consumption by 0.02 Kwh/Nm^3.

(d) Installation of 4 nos. exhaust manifolds in ABF-1 has not only resulted in seamless fire change in ABF-1 without any fresh air ingress but also helped in reduction of HFO consumption.

(e) Anode Slot Cutting Machine for ABF-2 & 3 has reduced DC energy consumption as well as improved process stability.

(f) Graphitization of cathode blocks: Total 897 graphitized pots are in operation, out of which, 44 pots have been graphitized in 2022-23, capable of reducing specific electrical energy consumption in pot line @ 55 Kwh/MT/Pot.

15.4 Captive Power Plant (CPP):

(a) For uninterrupted power supply to Smelter plant during severe coal crisis situations in CPP and to avoid purchase of high cost e-auction coal, import power (1,187.44 MU RTC) have been purchased from Power Exchange through GRIDCO during May, 2022 to January, 2023. Flexible Day Ahead Scheduling of power adopted towards optimization of power import cost for restricting the same within the approved purchase price.

(b) Renovation and Modernization (R&M) of existing Air-Preheater in Unit-5 with advanced profile heating element, double sealing arrangement and VFD drives for improvement of Boiler efficiency and reduction in Auxiliary power consumption has been completed in November, 2022. Boiler efficiency improved by more than 1%. Fan power consumption reduced by more than 400 Kwh.

(c) Installation and commissioning of booster pump was done for ESP internal washing in place of high capacity firefighting pump for effective cleaning. Besides effective cleaning, there is a power savings of 7,013 KW in each overhauling.

(d) Chemical cleaning of condensers in Unit #7 was carried out in August, 2022. Around 6.2% improvement in condenser vacuum has been achieved, thereby resulted reduction in coal consumption.

(e) The old inefficient HPH-6 in Unit-5 has been replaced with new HPH in November, 2022. After replacement, the feed water temperature to boiler has increased by 20°C, which resulted in improvement of unit efficiency.

(f) Unit-7 to 10 underground hydrant & emulsifier (spray) headers were successfully migrated to newly laid "over the ground" headers, thereby reducing the water loss due to underground leakages and enhancing the availability.

16.0 DISCLOSURE OF ACCOUNTING TREATMENT:

The financial statements of your Company have been prepared in accordance with Ind AS and relevant provisions of the Companies Act, 2013.

The financial statements have been prepared on historical basis, except certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below.

All assets and liabilities have been classified as current or non-current as per company's operating cycle and other criteria set out in Schedule-III of the Companies Act, 2013. Based on the nature of business, your Company has ascertained its operating cycle as 12 months for the purpose of current or non-current classification of assets & liabilities.

17.0. CORPORATE PLAN:

The Corporate Plan envisages 3 years action plan, 7 years strategy and 15 years vision to improve both bottom line and top line of the Company. It has identified functional and business initiatives to give the Company a competitive edge in order to overcome the impact of commodity cycle in the long run.

The new business initiative includes growth through expansion in core business, forward integration through value addition, downstream facilities, selective diversification and backward integration for raw material security. The identified functional and business initiatives are under various stages of implementation.

Your Company is currently undertaking brownfield expansion of its Alumina Refinery which will increase its capacity by 1 MT per annum. In aluminium segment, your Company is exploring various power sourcing option for the 0.5 MT brown field expansion of Smelter plant.

For raw material security, the Company is in the process of opening of Mines like Pottangi Bauxite Mines and Utkal-D & E Coal Mines. The Company has set up a Caustic Soda plant at Dahej, Gujarat in JV with GACL which is securing the requirement of the critical raw material.

18.0 BUSINESS DEVELOPMENT:

18.1 Caustic Soda Project in JV with M/s. Gujarat Alkalies and Chemicals Ltd. (GACL):

Your Company has formed a JV company named M/s. GACL-NALCO Alkalies & Chemicals Pvt. Ltd. (GNAL) with 40% equity participation with GACL to set up a 2.7 Lakh TPA Caustic Soda Plant along with 130 MW Captive Power Plant at Dahej in Gujarat to meet the Caustic Soda requirement of Alumina Refinery, as a part of raw material securitisation. NALCO and GNAL executed Caustic Soda Supply Agreement in Sep'2021.

TG-1 of Unit #1 of CPP was synchronized on 23rd May, 2022. TG-2 of Unit #2 of CPP was synchronized on 28th April, 2023. Almost 99% of the project activities have been completed. All 08 electrolysers units of Caustic Soda Plant having capacity to produce 800 TPD caustic soda, were commissioned and put into operation. Your Company has already released ₹ 276 crore towards full equity contribution to the JV Company as promoter.

18.2 Angul Aluminium Park Pvt. Ltd. in JV with M/s. Odisha Industrial Infrastructure Development Corporation (IDCO):

Your Company and IDCO are developing Angul Aluminium Park for promotion of Aluminium downstream industries in Odisha with equity holding of 49% and 51% respectively. Your Company has already released ₹ 16.22 crore towards full equity contribution to the JV Company. Administrative building, Aluminium development centre and internal roads of the Aluminium Park have been completed. Other Infrastructure development works including construction of road from smelter plant to park for metal transfer are in progress. The Project is expected to be completed fully in the financial year 2023-24.

18.3 High End Aluminium Alloy Plant in JV with M/s. Mishra Dhatu Nigam Ltd. (MIDHANI):

Your Company and MIDHANI have formed a JV Company named M/s. Utkarsha Aluminium Dhatu Nigam Limited (UADNL) in August, 2019 for establishment of 60,000 TPA High End Aluminium Alloy Plant for application in Defence, Aerospace and Automobile Sectors as a part of import substitution and diversification with value added products. Your Company has released ₹ 20 crore so far towards its share of equity contribution. The plant is being set up in Nellore district of Andhra Pradesh. The project activities have been started and expected to be commissioned by financial year 2024-25.

18.4 Acquisition of Strategic minerals in overseas in JV with M/s. Hindustan Copper Limited (HCL) and M/s. Mineral Exploration Corporation Limited (MECL):

Your Company has formed a JV Company named M/s. Khanij Bidesh India Limited (KABIL) with HCL and MECL in August, 2019 for acquisition of some strategic minerals in overseas locations to promote "Make in India" initiative of the Government of India. Study on 12 shortlisted minerals completed. At present, KABIL is focusing to source battery minerals like Lithium and Cobalt, which are most critical for country energy transition. Engagement with few companies/projects is underway in Australia, Argentina, and Chile by signing MoUs between KABIL and Govt. Agencies or State owned companies of these countries to explore sourcing of lithium and other critical minerals to India. Your Company has released ₹ 40 crore so far towards its share of equity contribution in KABIL.

19.0 DEVELOPMENT OF MICRO AND SMALL ENTERPRISES (MSEs):

Your Company continued its efforts for development of MSEs. Action taken during the year under review towards development of MSEs are as follows:

a) The procurement of products produced and services rendered by MSEs of Odisha for financial year 2022-23 stands at ₹ 562.98 crore (as against ₹ 430.72 crore of last financial year). The total procurement of products produced and services rendered by MSE units (including those from outside Odisha) stands at ₹ 960.00 crore during financial year 2022-23 (as against ₹ 713.80 crore during financial year 2021-22) and it is 29.88% of the total procurement of Goods and Services made by your Company against Govt. target of minimum 25%. For financial year 2023-24, the target for procurement of products produced and services rendered by MSEs has been set at 25% of the total annual procurement for 2023-24 which is as per the PPP-MSE order.

b) The PLAC (Plant Level Advisory Committee) meeting for the year 2022-23 was held at Corporate Office, Bhubaneswar on 18.01.2023 in association with DIC & MSME Department, Govt. of Odisha.

c) Special efforts have been made for registration of women owned MSEs and SC/ST owned MSEs in association with National SC/ST Hub Office (NSSHO) & NSSHO have been requested to identify probable SC/ST owned MSEs for items required by your Company. In this regard, your Company participated in Vendor Development Program (VDP) for prospective as well as existing entrepreneurs pertaining to MSME sector under National SC/ST Hub Scheme (NSSH), organised by DIC Bhubaneswar on 03.08.2022 at Bhubaneswar.

d) All MSE vendors are being requested to on board in GeM Platform. Also, as your Company is registered with RXIL (TReDS Portal), all MSE vendors are being requested to register in TReDS Portal (RXIL) to avail the benefits extended to MSEs.

e) The Company organized 10 vendor meets for MSEs (including 2 vendor meets for SC/ST owned MSEs) in 2022-23. With the special effort taken by your Company, the number of MSE vendors registered with your company has increased from 1,589 in financial year 2021-22 to 2,060 in financial year 2022-23. The number of women owned MSEs registered with your Company has also increased from 118 in financial year 2021-22 to 192 in financial year 2022-23.

f) Your Company's procurement data from MSEs are being uploaded on a monthly basis in "MSME SAMBANDH" App of MSME Department, GoI.

g) NAMASYA (Nalco Micro & Small Enterprise Yogayog Application) APP has been launched by your Company on 13.07.2018 to facilitate the existing MSEs registered with your Company as well as MSEs not registered. The APP empowers MSEs with information about vendor registration process, items which can be supplied by them with technical specification, vendor development programmes and training programmes of your Company etc.

h) Details of procurements made by your Company from MSEs during the financial year 2022-23 in comparison to previous financial year and details of Nodal Officers:

Sl. No.	Particulars	2022-23	2021-22
I	Total annual procurement (in value) (*) (in ₹ crore)	3,212.99	2,286.37
II	Total value of goods and services procured from MSEs (Including MSEs owned by SC/ST entrepreneurs) (in ₹ crore)	960.00	713.80
III	Total value of goods and services procured from only MSEs owned by SC/ST entrepreneurs (in ₹ crore)	11.50	5.94
IV	Total value of goods and services procured from only MSEs owned by women entrepreneurs (in ₹ crore)	32.01	33.21
V	% of procurement from MSEs (Including MSEs owned by SC/ST & women entrepreneurs) out of total procurement	29.88	31.22
VI	% of procurement from only MSEs owned by SC/ST entrepreneurs out of total procurement	0.36	0.26
VII	% of procurement from only MSEs owned by women entrepreneurs out of total procurement	1.00	1.45
VIII	Total number of vendor development programmes for MSEs	10	07
IX	Whether annual procurement plan for purchases from MSEs are uploaded on the official website	Yes	Yes
X	Whether targets reported in Annual Report	Yes	Yes
* This value excluded procurement of Coal, Fuel oil, Caustic soda, ALF3, Synthetic flocculants, Steel, Cement, Bearings, Lubricants, Grease, Proprietary items, imported items and contracts for professional services/consultancy services/major turnkey contracts/contracts linked to specific technology.			
Details of Nodal Officers of NALCO for procurements to be made from MSEs			
(A)	Name of the Unit: Corporate Office, Bhubaneswar, Odisha Nodal Officer: Shri Bibhu Datta Mohanty, GGM(Materials) NALCO Bhawan, P/1, Nayapalli, Bhubaneswar- 751013 Mobile: 9437561995, e-mail: bibhu.mohanty@nalcoindia.co.in		
(B)	Name of the Unit: Smelter & Power Complex, Angul, Odisha Nodal Officer: Shri Pravat Kumar Biswas, GGM(Materials) Smelter Plant, NALCO Nagar, Angul- 759145 Mobile: 9437083779, e-mail: pravat.biswas@nalcoindia.co.in		
(C)	Name of the Unit: Mines & Refinery Complex, Damanjodi, Odisha Nodal Officer: Shri Swarupananda Mishra, GM(Materials) Alumina Refinery, NALCO, Damanjodi- 763008 Mobile: 9437043184, e-mail: swarupananda.mishra@nalcoindia.co.in		

20.0 CAUTIONARY STATEMENT:

Certain statements made in the Management Discussion and Analysis Report relating to the Company's objectives, projections, outlook, expectations, estimates and others may constitute 'forward looking statements' within the meaning of applicable laws and regulations. Actual results may differ from such expectations whether expressed or implied. Several factors could make significant difference to the Company's operations. These include climatic and economic conditions affecting demand and supply, Government regulations and taxation, natural calamities over which the Company does not have any direct control.

ANNEXURE-III

BUSINESS RESPONSIBILITY AND SUSTAINABILITY REPORT FOR 2022-23

SECTION A: GENERAL DISCLOSURES

I. Details of the listed entity

Sl. No.	Particulars	Company Information
1	Corporate Identity Number (CIN) of the Listed Entity	L27203OR1981GOI000920
2	Name of the Listed Entity	National Aluminium Company Limited
3	Year of incorporation:	7th January 1981
4	Registered office address:	NALCO BHAWAN, Plot No. P/1, Nayapalli, Bhubaneswar -751013, Odisha, India
5	Corporate address:	NALCO BHAWAN, Plot No. P/1, Nayapalli, Bhubaneswar -751013, Odisha, India
6	E-mail:	company_secretary@nalcoindia.co.in
7	Telephone:	(0674) 2301988-2301999
8	Website:	https://nalcoindia.com
9	Financial year for which reporting is being done.	2022-23
10	Name of the Stock Exchange(s) where shares are listed.	1. **National Stock Exchange of India Ltd.** • Exchange Plaza, Bandra-Kurla Complex, Bandra East, MUMBAI - 400 051 • Scrip Code: NATIONALUM 2. **BSE Limited** • Phiroze Jeejeebhoy Towers, Dalal Street, MUMBAI - 400 001 • Scrip Code: 532234
11	Paid-up Capital:	• ₹ 918.32 Crore
12	Name and contact details (telephone, email address) of the person who may be contacted in case of any queries on the BRSR report.	Name: Shri. Pankaj Kumar Sharma, Director (Production) Telephone: 0674-2300660 email id: dirprod@nalcoindia.co.in
13	Reporting boundary - Are the disclosures under this report made on a standalone basis (i.e., only for the entity) or on a consolidated basis (i.e., for the entity and all the entities which form a part of its consolidated financial statements, taken together).	Standalone

II. Products / Services

14. Details of business activities (accounting for 90% of the turnover):

Sl. No.	Description of Main Activity	Description of Business Activity	% of Turnover of the entity
1	Manufacturing	Metal and metal products	99.56%

15. Products/Services sold by the entity (accounting for 90% of the entity's Turnover):

Sl. No.	Product/Service	NIC Code	% of total Turnover contributed
1	Aluminium	24202	71.98%
2	Alumina	20119	27.58%

III. Operations

16. Number of locations where plants and/or operations/offices of the entity are situated:

Location	Number of plants	Number of offices	Total
National	4*	7**	11
International	0	0	0

*Plant site-Bauxite Mines- Damanjodi, Alumina Refinery-Damanjodi, Aluminium Smelter- Angul, Captive power Plant- Angul.

**Corporate Offices – Bhubaneswar, Regional Offices- New Delhi, Mumbai, Chennai, Kolkata, Port offices at Visakhapatnam and Paradip;

17. Markets Served by the entity:

a) Number of locations

Locations	Numbers
National (No. of States)	24
International (No. of Countries)	8

b) What is the contribution of exports as a percentage of the total turnover of the entity?

29.89%

c) A brief on types of customers

Alumina and Aluminium products are sold to domestic customers through Memorandum of Understanding (MoU) agreements and by participating in tenders. Sales to international customers are conducted through online global tenders.

IV. Employees

18. Details as at the end of Financial Year:

a) Employees and workers (including differently abled):

Sl. No.	Particulars	Total	Male		Female	
		(A)	No. (B)	% (B / A)	No. (C)	% (C / A)
	EMPLOYEES (Executives)					
1	Permanent (D)*	1,588	1,502	94.58	86	5.42
2	Other than Permanent (E)	Nil	Nil	Nil	Nil	Nil
3	Total employees (D + E)	1,588	1,502	94.58	86	5.42
	WORKERS					
4	Permanent (F)* (Non-Executives)	3,602	3361	93.31	241	6.69
5	Other than* Permanent (G)	12,882	12,077	93.75	805	6.25
6	Total workers (F + G)	16,484	15,438	93.65	1046	6.35

*For the purpose of complete disclosure, the term "Permanent Employees" refers to the executives in NALCO. "Permanent Workers" refers to the non-executives in NALCO, and "Other than Permanent Workers" refers to workers engaged through contractors.

b) Differently abled Employees and workers:

Sl. No.	Particulars	Total	Male		Female	
		(A)	No. (B)	% (B / A)	No. (C)	% (C / A)
	DIFFERENTLY ABLED EMPLOYEES (Executives)					
1	Permanent (D)	28	24	85.71	4	14.29
2	Other than Permanent (E)	N.A.	N.A.	N.A.	N.A.	N.A.
3	Total differently abled employees (D + E)	28	24	85.71	4	14.29
	DIFFERENTLY ABLED WORKERS					
4	Permanent (F) (Non-Executives)	62	53	85.48	9	14.52
5	Other than permanent (G)	Nil	Nil	Nil	Nil	Nil
6	Total differently abled workers (F + G)	62	53	85.48	9	14.52

19. Participation/Inclusion/Representation of women

	Total	No. and percentage of Females	
	(A)	No. (B)	% (B / A)
Board of Directors	16	2	12.5
Key Management Personnel	7*	0	0
* Six Functional Directors are included in both Board of Directors and KMPs.			

20. Turnover rate for permanent employees and workers (in %). *

(Disclose trends for the past 3 years)

	FY 2022-23			FY 2021-22			FY 2020-21		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Permanent Employees (Executives)	9.27	5.88	9.09	6.98	1.23	6.69	7.01	4.88	6.91
Permanent Workers (Non-Executives)	7.89	5.35	7.73	8.66	7.05	8.56	7.72	4.48	7.5

*Includes all forms of separations i.e. superannuation, resignation and deceased employees & workers.

V. Holding, Subsidiary and Associate Companies (including joint ventures)

21. (a) Names of holding / subsidiary / associate companies / joint venture

Sl. No.	Name of the holding / subsidiary / associate companies / joint ventures (A)	Indicate whether Holding/ Subsidiary/ Associate/ Joint Venture	% of shares held by listed entity	Does the entity indicated at column A, participate in the Business Responsibility initiatives of the listed entity? (Yes/No)
1	Utkarsha Aluminium Dhatu Nigam Limited	Associate	50	No
2	Khanij Bidesh India Limited	Associate	40	No
3	Angul Aluminium Park Private Limited	Associate	49	No
4	GACL-NALCO Alkalies & Chemicals Private Limited	Associate	40	No

VI. CSR Details

22. (i) Whether CSR is applicable as per section 135 of Companies Act, 2013: Yes

(ii) Turnover (in ₹): 14,170.86 crore

(iii) Net worth (in ₹): 13,238.45 crore

VII. Transparency and Disclosures Compliances

23. Complaints / Grievances on any of the principles (Principles 1 to 9) under the National Guidelines on Responsible Business Conduct:

Stakeholder group from whom complaint is received	Grievance Redressal Mechanism in Place (Yes/No) (If yes, then provide web-link for grievance redress policy)	FY 2022-23			FY 2021-22		
		Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Remarks	Number of complaints filed during the year	Number of complaints pending resolution at close of the year	Remarks
Communities	No	0	0		0	0	
Investors (other than shareholders)	N.A.	0	0		0	0	
Shareholders	Yes https://nalcoindia.com/investor-services/contact-us/	949	0		2,253	0	
Employees and workers	Yes	0	0		0	0	
Customers	Yes	6	0		5	0	
Value Chain Partners	Yes https://samadhaan.msme.gov.in https://champions.gov.in	5	0		4	0	

24. Overview of the entity's material responsible business conduct issues.

Please indicate material responsible business conduct and sustainability issues pertaining to environmental and social matters that present a risk or an opportunity to your business, rationale for identifying the same, approach to adapt or mitigate the risk along-with its financial implications, as per the following format.

Sl. No.	Material issue identified	Indicate whether Risk or opportunity (R/O)	Rationale for identifying the risk/ opportunity	In case of risk, Approach to adopt or mitigate	Financial implications of the risk of opportunity (Indicated Positive or negative implications)
1	Handling of • Red mud • Fly Ash	R	Government Regulations, Environmental & Societal Concerns; Business Continuity	• Construction of Red mud expansion Pond-2 • Lean Slurry Ash disposal to abandon mine void • Push for fly ash utilization in brick & cement making etc.	Negative
2	Control of Air Pollution	R	Government Regulations, Environmental & Societal Concerns	• Operating ESPs for boiler stacks of CPP & Refinery and FTPs for Smelter Potlines to control particulate matters and fluoride emissions. • Retrofitting ESPs at the refinery • Implementing on-line Fugitive Fluoride Monitoring systems in Smelter Potlines. • Installing SO2 Analyzers at bake Oven Stacks in the Smelter.	Negative
3	Handling of bulk Hazardous Waste • SPL • Aluminium Dross	Both R & O	Government Regulations, Environmental & Societal Concerns	• SPL carbon portion is disposed of to an external agency authorized by OSPCB for the utilization of its energy value. • Dross is recycled in-house and also sold to authorized recyclers by OSPCB.	Negative
4	Renewable and clean energy	O	RPO obligations; Climate-change concerns	• Operating the existing 198 MW Wind Power Plants and 800 KWp Rooftop Solar installations. Additional roof-top solar capacity of 50 Kwp already installed at Mines. • Project for a new 25.5 MW Wind Power plant at Kayathar, Tamil Nadu. • Initiatives for new rooftop solar installations at Vizag and Damanjodi.	Positive

SECTION B: MANAGEMENT AND PROCESS DISCLOSURES

This section is aimed at helping businesses demonstrate the structures, policies and processes put in place towards adopting the NGRBC Principles and Core Elements.

The National Guidelines for Responsibility Business Conduct (NGRBC) as prescribed by the Ministry of Corporate Affairs advocates nine principles referred as P1-P9 as given below:

PRINCIPLE 1:	PRINCIPLE 2:	PRINCIPLE 3:
Businesses should conduct and govern themselves with integrity, and in a manner that is Ethical, Transparent and Accountable.	Businesses should provide goods and services in a manner that is sustainable and safe. their value chains.	Businesses should respect and promote the well-being of all employees, including those in
PRINCIPLE 4:	**PRINCIPLE 5:**	**PRINCIPLE 6:**
Businesses should respect the interests of and be responsive to all its stakeholders.	Businesses should respect and promote human rights. protect and restore the environment.	Businesses should respect and make efforts to
PRINCIPLE 7:	**PRINCIPLE 8:**	**PRINCIPLE 9:**
Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent.	Businesses should promote inclusive growth and equitable development. manner.	Businesses should engage with and provide value to their consumers in a responsible

Sl. No.	Disclosure Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
	Policy and management processes									
1	a. Whether your entity's policy/ policies cover each principle and its core elements of the NGRBCs. (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	b. Has the policy been approved by the Board? (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	c. Web Link of the Policies, if available	https://nalcoindia.com/company/policies-docs/								
2	Whether the entity has translated the policy into procedures. (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	Do the enlisted policies extend to your value chain partners? (Yes/No)	No	No	No	No	No	Yes	No	Yes	No
4	Name of the national and international codes/ certifications/ labels/ standards (e.g., Forest Stewardship Council, Fairtrade, Rainforest Alliance, Trustea) standards (e.g., SA 8000, OHSAS, ISO, BIS) adopted by your entity and mapped to each principle.	-	ISO 9001 ISO 14001 ISO 45001 ISO 50001	SA 8000 ISO 45001	-	SA 8000	ISO 14001 IS0 50001	-	-	ISO 9001 ISO 27001
5	Specific commitments, goals and targets set by the entity with defined timelines, if any.	• MoU Target - 2% of the company's Profit Before Tax (PBT) towards Research and Development (R&D)/ innovation initiatives. • Annual targets are established at both the Departmental and Unit levels to measure performance in areas such as quality, environment, occupational health and safety (OH&S), and energy.								
6	Performance of the entity against the specific commitments, goals and targets along-with reasons in case the same are not met.	• MoU target performance is assessed by the Ministry of Mines annually. • Performance is assessed against the specific commitments, goals, and targets as part of the Integrated Management System and Energy Management System to monitor and evaluate achievements.								
	Governance, leadership, and oversight									
7	**Statement by director responsible for the business responsibility report, highlighting ESG related challenges, targets, and achievements (listed entity has flexibility regarding the placement of this disclosure)** NALCO is a Schedule 'A' Navratna CPSE (Central Public Sector Enterprise) under the Ministry of Mines, Government of India. It is committed to achieving sustainability in terms of Environment, Social, and Governance (ESG) aspects. NALCO acknowledges its role in mitigating the impact of climate change and prioritizes environmental stewardship. As a responsible corporate organization, NALCO is fully conscious of its societal responsibilities. The company places significant emphasis on corporate governance.									
8	Details of the highest authority responsible for implementation and oversight of the Business Responsibility policy (ies).	Name: Shri Pankaj Kumar Sharma DIN: 10041341 Designation: Director (Production) Contact No.: 0674-2300660 Email Id: dirprod@nalcoindia.co.in								
9	Does the entity have a specified Committee of the Board/ Director responsible for decision making on sustainability related issues? (Yes / No). If yes, provide details.	YES, the Company has Board level Sub-Committee i.e. CSR and Sustainability Development Committee responsible for decision making on sustainability related issues and its composition is as under: 1. Shri Dushyant Upadhyay - Chairman 2. Dr. B. R. Ramakrishna - Member 3. Ms. (Dr.) Shatorupa - Member 4. Director (HR) - Member 5. Director (Production) - Member								

10. Details of Review of NGRBCs by the Company:

Subject for Review	Indicate whether review was undertaken by Director Committee of the Board/Any other Committee									Frequency (Annually/ Half yearly/ Quarterly/ Any other – please specify)								
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P1	P2	P3	P4	P5	P6	P7	P8	P9
Performance against above policies and follow up action	Y	Y	Y	Y	Y	Y	Y	Y	Y	Annually								
Compliance with statutory requirements of relevance to the principles, and rectification of any non-compliances																		

11	Has the entity carried out independent assessment/ evaluation of the working of its policies by an external agency? (Yes(Y)/No (N)). If yes, provide name of the agency.	P1	P2	P3	P4	P5	P6	P7	P8	P9
		N	N	N	N	N	N	N	N	N

12.	If answer to question (1) above is "No" i.e., not all Principles are covered by a policy, reasons to be stated:									
	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
	The entity does not consider the principles material to its business (Yes/No)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	The entity is not at a stage where it is in a position to formulate and implement the policies on specified principles (Yes/No)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	The entity does not have the financial or/human and technical resources available for the task (Yes/No)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	It is planned to be done in the next financial year (Yes/No)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Any other reason (please specify)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

SECTION C: PRINCIPLE WISE PERFORMANCE DISCLOSURE

This section is aimed at helping entities demonstrate their performance in integrating the Principles and Core Elements with key processes and decisions. The information sought is categorized as "Essential" and "Leadership". While the essential indicators are expected to be disclosed by every entity that is mandated to file this report, the leadership indicators may be voluntarily disclosed by entities which aspire to progress to a higher level in their quest to be socially, environmentally, and ethically responsible.

PRINCIPLE-1 : Businesses should conduct and govern themselves with integrity, and in a manner that is Ethical, Transparent and Accountable.

Essential Indicators

1. Percentage coverage by training and awareness programmes on any of the principles during the financial year:

Segment	Total number of training and awareness programmes held	Topics / principles covered under the training and its impact	% Age of persons in respective category covered by the awareness programmes
Board of Directors	2	Principles- 1, 4, 7	50%
Key Managerial Personnel (KMP)	0	N.A.	N.A.
Employee other than BoD and KMPs (Executives)	175	Principles- 1, 3, 5, 6, 9	94.9 %
Workers	Permanent Workers (Non-Executives) and also Non-permanent Workers: 440	Permanent Workers: Principle- 3,5 Non-permanent Workers: Principle- 3	61.1 %

2. Details of fines / penalties /punishment/ award/ compounding fees/ settlement amount paid in proceedings (by the entity or by directors / KMPs) with regulators/ law enforcement agencies/ judicial institutions, in the financial year, in the following format (Note: the entity shall make disclosures on the basis of materiality as specified in Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and as disclosed on the entity's website)

Monetary					
	NGRBC principle	Name of the regulatory/ enforcement agencies/ judicial institutions	Amount (INR)	Brief of the Case	Has an appeal been preferred? (Yes/ No)
Penalty / Fine	Nil	N.A.	N.A.	N.A.	N.A.
Settlement	Nil	N.A.	N.A.	N.A.	N.A.
Compounding fee	Nil	N.A.	N.A.	N.A.	N.A.

Non- Monetary				
	NGRBC principle	Name of the regulatory/ enforcement agencies/ judicial institutions	Brief of the Case	Has an appeal been preferred? (Yes/ No)
Imprisonment	Nil	N.A.	N.A.	
Punishment	Nil	N.A.	N.A.	

3. Of the instances disclosed in Question 2 above, details of the Appeal/ Revision preferred in cases where monetary or non-monetary action has been appealed.

Case Details	Name of the regulatory/ enforcement agencies/ judicial institutions
N.A.	

4. **Does the entity have an anti-corruption or anti-bribery policy? If yes, provide details in brief and if available, provide a web-link to the policy.**

No. The company is continuously making efforts to improve its systems and procedures to ensure transparency and compliance with existing rules and regulations. These efforts are aimed at creating a working atmosphere and conducting transactions with other entities that are relatively free from corruption. The company has formulated its Code of Business Conduct and Ethics for Board Members and Senior Management, Whistle blower Policy, Fraud Prevention policy, Integrity Pact and Vigilance Manual. These initiatives focus on maintaining ethics and preventing bribery and corruption. The company's Code of Business Ethics governs the manner in which it carries out its activities and interacts with stakeholders.

Weblink – https://nalcoindia.com/company/policies-docs/

5. **Number of Directors/KMPs/employees/workers against whom disciplinary action was taken by any law enforcement agency for the charges of bribery/ corruption:**

	FY 2022-23	FY 2021-22
Directors	0	0
KMPs	0	0
Employees (Executives)	1	1
Workers (Non-Executives)	4	0

6. **Details of complaints with regard to conflict of interest**

	FY 2022-23		FY 2021-22	
	Number	Remarks	Number	Remarks
Number of complaints received in relation to issues of Conflict of Interest of the Directors	0	N.A.	0	N.A.
Number of complaints received in relation to issues of Conflict of Interest of the KMPs	0	N.A.	0	N.A.

7. **Provide details of any corrective action taken or underway on issues related to fines / penalties / action taken by regulators/ law enforcement agencies/ judicial institutions, on cases of corruption and conflicts of interest.**

N.A.

PRINCIPLE-2 : Businesses should provide goods and services in a manner that is sustainable and safe.

Essential Indicators

1. **Percentage of R&D and capital expenditure (capex) investments in specific technologies to improve the environmental and social impacts of product and processes to total R&D and capex investments made by the entity, respectively.**

	2022-23	2021-22	Details of improvements in environmental and social impacts
R&D	5.33%	2.42%	• Advancement in technology to transform Smelter plant hazardous waste SPL into valuable products. • Utilization of red mud to extract iron and rare earth elements (REE). • Creation of wear-resistant ceramic tiles using fly ash.
Capex	10.32%	15.02%	• Capital expenditure (CAPEX) projects at the refinery and CPP focus on pollution control, recycling, reuse, and energy conservation including red-mud expansion pond, ESP retrofitting. • Capital expenditure at the smelter is dedicated to preventing land contamination, water recycling, and continuous stack monitoring and also graphitization of cathode blocks for energy saving. • Implemented sprinkler systems along haul roads at Mines to manage ambient air-quality and solar power plants for renewable energy.

2. **a. Does the entity have procedures in place for sustainable sourcing? (Yes/No)**

Yes, NALCO is an Alumina and Aluminium producer, and its principal raw material is Bauxite which is extracted from own mines under laid down procedures and with due compliance of all environment and safety aspects. In recognition of the implemented sustainable practices, NALCO's bauxite Mines has consistently been awarded 5-star ratings by Indian Bureau of Mines. Transportation of bauxite from Mines to Refinery is by a single haul cable belt conveyor, covering the entire flight to prevent dust pollution.

For all purchased materials, ethical, social & environmental considerations are integrated with commercial considerations in the process of selecting suppliers. For maintaining ethics and transparency, NALCO's Purchase Manual have adequate provisions in place. Besides Integrity pact is both a signed document and approach to public contracting which commits a contracting authority and bidders to comply with best practice and ensures maximum transparency. Similarly, the suppliers are required to conform to the Environmental Policy & Social Accountability policy of NALCO.

b. If yes, what percentage of inputs were sourced sustainably? 100%

3. **Describe the processes in place to safely reclaim your products for reusing, recycling, and disposing at the end of life, for (a) Plastics (including packaging) (b) E-waste (c) Hazardous waste and (d) other waste.**

Plastics (including packaging)	The organization is currently in the process of evaluating feasibility of developing a procedure for the reclamation and recycling of plastics i.e. VSI HDPE fabric for packaging of products i.e., Wire rod Coils & Rolled Products.
E-waste	N.A.
Hazardous Waste	N.A.

4. Whether Extended Producer Responsibility (EPR) is applicable to the entity's activities.

No.

Leadership Indicators

3. Percentage of recycled or reused input material to total material (by value) used in production (for manufacturing industry) or providing services (for service industry).

Indicate input Material	Recycled or re-used input material to total material	
	FY 2022-23	FY 2021-22
Aluminium Scrap recycled as % of hot metal produced	2.0055	1.7653
Caustic Soda recycled from red mud as % of total consumption	12.64	11.22

PRINCIPLE-3 : Businesses should respect and promote the well-being of all employees, including those in their value chains.

Essential Indicators

1. a. Details of measures for the well-being of employees

Category	Total (A)	% Of employees covered by									
		Health insurance		Accident insurance		Maternity benefits		Paternity benefits		Day care facilities	
		No. (B)	% (B/A)	No. (C)	% (C/A)	No. (D)	% (D/A)	No. (E)	% (E/A)	No. (F)	% (F/A)
PERMANENT EMPLOYEES (Executives)											
Male	1502	1502	100	1502	100	N.A.	N.A.	1502	100	1502	100
Female	86	86	100	86	100	86	100	N.A.	N.A.	86	100
Total	1588	1588	100	1588	100	86	5%	1502	95	1588	100
OTHER THAN PERMANENT EMPLOYEES											
Male	0	N.A.	0	N.A.	0	N.A.	0	N.A.	0	N.A.	0
Female	0	N.A.	0	N.A.	0	N.A.	0	N.A.	0	N.A.	0
Total	0	N.A.	0	N.A.	0	N.A.	0	N.A.	0	N.A.	0

b. Details of measures for the well-being of workers:

Category	Total (A)	% Of Workers covered by									
		Health insurance		Accident insurance		Maternity benefits		Paternity benefits		Day care facilities	
		No. (B)	% (B/A)	No. (C)	% (C/A)	No. (D)	% (D/A)	No. (E)	% (E/A)	No. (F)	% (F/A)
PERMANENT WORKERS (Non-Executives)											
Male	3361	3361	100	3361	100	N.A.	N.A.	3361	100	3361	100
Female	241	241	100	241	100	241	100	N.A.	N.A.	241	100
Total	3602	3602	100	3602	100	241	7	3361	93	3602	100
OTHER THAN PERMANENT WORKERS											
Male	12077	12077	100	12077	100	N.A.	N.A.	12077	100	12077	100
Female	805	805	100	805	100	805	100	N.A.	N.A.	805	100
Total	12882	12882	100	12882	100	805	6	12077	94	12882	100

2. Details of retirement benefits, for Current FY and Previous Financial Year.

Benefits	FY 2022-23			FY 2021-22		
	No. of employees covered as a % of total employees	No. of workers covered as a % of total workers	Deducted and deposited with the authority (Y/N/N.A.)*	No. of employees covered as a % of total employees	No. of workers covered as a % of total workers	Deducted and deposited with the authority (Y/N/N.A.)
PF	100%	100%	Yes	100%	100%	Yes
Gratuity*	100%	22%	Yes	100%	25%	Yes
ESI**	N.A.	78%	Yes	N.A.	75%	Yes
Others- Retrenchment Benefits etc**	N.A.	78%	N.A.	N.A.	75%	N.A.

*Gratuity is applicable for permanent workers only.

**ESI and Retrenchment Benefits are applicable to Non-Permanent Workers only.

3. **Accessibility of workplaces**

Are the premises/offices of the entity accessible to differently abled employees and workers, as per the requirements of the Rights of Persons with Disabilities Act, 2016? If not, whether any steps are being taken by the entity in this regard.

Yes.

4. **Does the entity have an equal opportunity policy as per the Rights of Persons with Disabilities Act, 2016? If so, provide a web-link to the policy.**

No, but the entity ensures compliance with the Rights of Persons with Disabilities Act, 2016 within its premises.

5. **Return to work and retention rates of permanent employees and workers that took parental leave.**

	Permanent employees (Executives)		Permanent workers (non-Executives)	
Gender	**Return to work rate**	**Retention rate**	**Return to work rate**	**Retention rate**
Male	100%	100%	100%	100%
Female	100%	100%	100%	100%
Total	100%	100%	100%	100%

6. **Is there a mechanism available to receive and redress grievances for the following categories of employees and workers? If yes, give details of the mechanism in brief.**

	Yes/ No (If yes, then give details of the mechanism in brief)
Permanent Workers (Non-Executives)	• The Grievance procedure for Executives and non-executives is available on the intranet of the HR manual under the caption 'CDA rules'. • Furthermore, all units, including the corporate office, have a policy in place to prevent, prohibit, and address sexual harassment of women in the workplace, in accordance with the requirements of the Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act, 2013. Internal Complaints Committees have been established at the production units and corporate office of the company to address complaints related to sexual harassment. • For non-permanent workers grievances of such workers are generally received and managed by the EIC (Contract Engineer-in-charge) or Plant HRD through intervention with their immediate employer, i.e., the contractor.
Other than Permanent Workers	
Permanent Employees (Executives)	
Other than Permanent Employees	N.A.

7. **Membership of employees and worker in association(s) or Unions recognized by the listed entity:**

Category	**FY 2022-23**			**FY 2021-22**		
	Total employees / workers in respective category (A)	**No. of employees / workers in respective category, who are part of association(s) or Union (B)**	**% (B/A)**	**Total employees / workers in respective category (C)**	**No. of employees / workers in respective category, who are part of association(s) or Union (D)**	**% (D/C)**
Total Permanent Employees (Executives)	1588	1588	100	1667	1667	100
Male 1502	1502	100	1580	1580	100	
Female 86	86	100	87	87	100	
Total Permanent Workers (Non-Executives)	3602	3602	100	3853	3853	100
Male 3361	3361	100	3607	3607	100	
Female 241	241	100	246	246	100	

8. **Details of training given to employees and workers:**

Category	**FY 2022-23**					**FY 2021-22**				
	Total (A)	**On health and safety/ wellness measures**		**On skill upgradation**		**Total (D)**	**On health and safety measures/wellness**		**On skill upgradation**	
		No. (B)	**% (B/A)**	**No. (C)**	**% (C/A)**		**No. (E)**	**% (E/D)**	**No. (F)**	**% (F/D)**
EMPLOYEES (Executives)										
Male	1502	434	29	645	43	1580	455	29	669	42
Female	86	26	30	33	38	87	18	21	43	49
Total	1588	460	29	678	43	1667	473	28	712	43
WORKERS (Permanent Workers i.e., non-Executives)										
Male	3361	524	16	659	20	3607	182	5	184	5
Female	241	35	14.5	19	8	246	2	1	15	6
Total	3602	559	15.5	678	19	3853	184	5	199	5

Note: As for Non-permanent Workers, 50% (6,452 out of 12,882) & 48% (5,658 out of 11,775) were imparted training on Safety in FY 2022-23 and FY 2021-22 respectively.

9. **Details of performance and career development reviews of employees and workers:**

Category	FY 2022-23			FY 2021-22		
	Total (A)	No. (B)	% (B/A)	Total (C)	No. (D)	% (D/C)
EMPLOYEES (Executives)						
Male	1502	1502	100	1580	1580	100
Female	86	86	100	87	87	100
Total	1588	1588	100	1667	1667	100
WORKERS (Permanent Workers i.e., Non-Executives)						
Male	3361	3361	100	3607	3607	100
Female	241	241	100	246	246	100
Total	3602	3602	100	3853	3853	100

10. **Health and safety management system:**

a. Whether an occupational health and safety management system has been implemented by the entity? (Yes/ No). If yes, the coverage of such system?

Yes, Occupational health and safety management systems ISO 45001:2018 is implemented in all production units of NALCO including port facilities.

b. What are the processes used to identify work-related hazards and assess risks on a routine and non-routine basis by the entity?

The Following processes are used to identify Work-related Hazards & Assess Risks on a routine and non-routine basis by the Company:

- Hazard Identification and Risk Assessment.
- Safety Inspections / Observations.
- Accident investigation.
- Near miss reporting .
- Interactions with Workers (during toolbox talks).
- Meeting of plant level Safety committees.
- External Safety Audits/Fire Audits.

c. Whether you have processes for workers to report the work-related hazards and to remove themselves from such risks. (Y/N).

Yes.

d. Do the employees/ workers of the entity have access to non-occupational medical and healthcare services? (Yes/ No).

Yes.

11. **Details of safety related incidents, in the following format:**

Safety Incident/Number	Category	FY 2022-23	FY 2021-22
Lost Time Injury Frequency Rate (LTIFR) (per one million-person hours worked)	Employees (Executives)	0	0
	Workers (both permanent & non-permanent)	Refinery- 0.3476 CPP- 0.149 Other Units- 0	Refinery-0.3427 CPP- 0.447 Smelter- 0.0676 Other Units- 0
Total recordable work-related injuries	Employees (Executives)	0	0
	Workers	5	6
No. of fatalities (safety incident)	Employees (Executives)	0	0
	Workers	0	2
High consequence work-related injury or ill-health (excluding fatalities)	Employees (Executives)	0	0
	Workers	1	2

12. **Describe the measures taken by the entity to ensure a safe and healthy workplace.**

NALCO has implemented ISO 45001:2018 Occupational Health and Safety Management Systems.

Major initiatives taken to ensure safe and healthy workplace are as follows:

- Regular safety inspections.
- Safety gatherings/ toolbox talks.
- Near-miss reporting.
- Safety Committee meetings.
- Hazard & Risk assessments.
- Internal/external safety audits.
- Regular PME (Periodic Medical Examinations), Eye Testing Camps.
- NALCO Suraksha Mobile App are for training and reporting unsafe conditions.

- AAINAA: Advance Action in Industries to Abate Accidents.
- Cross-functional NALCO Suraksha Chakra.
- Safety awareness trainings for Contractors' workers.
- Fire Safety Certificates from Fire Officer GoO.
- Safety Signage displayed at conspicuous locations.
- Mock drills for emergency preparedness.
- Traffic management systems for safe vehicle operations.
- Audio-video training programs and safety awareness sessions for employees and contractors.
- A host of initiatives like fall protection systems, dump truck simulator etc.

Contract workers participate in hazard identification and risk assessments, and tool room meetings promote safety behavior.

13. Number of complaints on the following made by employees and workers:

	FY 2022-23			FY 2021-22		
	Filed during the year	Pending resolution at the end of year	Remarks	Filed during the year	Pending resolution at the end of year	Remarks
Working conditions	0	0	N.A.	0	0	N.A.
Health and safety	0	0	N.A.	0	0	N.A.

14. Assessments for the year:

	% Of your plants and offices that were assessed (by entity or statutory authorities or third parties)
Health and safety practices	100%
Working Conditions	100%

15. Provide details of any corrective action taken or underway to address safety-related incidents (if any) and on significant risks / concerns arising from assessments of health & safety practices and working conditions.

NALCO has implemented numerous corrective safety measures across its operations to ensure the well-being of employees and prevent accidents. Safety initiatives such as mock drills, CCTV installations, ANPR camera installations and the NALCO Suraksha App for reporting unsafe conditions have been implemented. The company is actively involved in equipment replacement, implementing Industry 4.0, and conducting surveys for height work and road safety. These measures include creating new safe movement platforms and using fog cannons for dust suppression. Mobile vacuum cleaners and reverse back-up alarms have been implemented for equipment safety. Fire prevention measures include fire retardant polymer coatings and lightning arrestors. Various equipment-specific safety measures have been undertaken, such as alternative solutions for fire prevention. The company is also investing in safety equipment, including fall protection systems, boom lifts, eye wash showers, and fire trauma blankets.

PRINCIPLE-4 : Businesses should respect the interests of and be responsive to all its stakeholders.

Essential Indicators

1. Describe the processes for identifying key stakeholder groups of the entity.

Stakeholder Identification- List of all individuals, groups, and entities affected by the actions of the organisation or having influence over it evaluating against the attributes shown below.

- Dependency Groups or individuals who depend on the operations, activities, products, or services of the organisation or on whom the organisation depends in order to function, either directly or indirectly.
- Responsibility Groups or individuals towards whom the organisation currently has or may in the future have legal, commercial, operational, or moral/ethical obligations for.
- Influence Groups or individuals who may influence the strategic or operational decisions made by an organisation or a stakeholder.

Based on the above the Entity has identified major Stakeholder Groups as Government, Shareholders, Customers, Employees, Communities and the value Chain Partners (Suppliers/ Contractors/ Transporters).

Key modes of identification of stakeholders within these groups apart from Employees is produced below.

Stakeholders	Identification Process
Shareholders	• Annual General Meetings • Complaints & grievances
Government/Regulatory Bodies	• Meetings with different Central and State Government Bodies • Notifications, Circulars, Submissions of various returns & compliances
Communities	• RPDAC meetings • Informal meetings and interactions
Customers	• Tenders and Enquiries • Customer meets. • Feedback, satisfaction surveys and grievance resolution
Suppliers, Contractors, Transporters	• Tenders & contracts • Vendor and supplier meets

2. List stakeholder groups identified as key for your entity and the frequency of engagement with each stakeholder group.

Stakeholder Group	Whether identified as Vulnerable & Marginalized Group (Yes/No)	Channels of communication (Email, SMS, Newspaper, Pamphlets, Advertisement, Community Meetings, Notice Board, Website), Others	Frequency of engagement (Annually/Half yearly/ Quarterly / others – please specify)	Purpose and scope of engagement including key topics and concerns raised during such engagement
Shareholders	No	E mails, Letters, Website, Newspaper, Annual General meetings	Regular & Need based	Company Performance, Dividends, Complaints & grievances
Community	Yes	Request letters- Emails, Community Meetings	Need based	Community needs on infrastructure, employment, education, health, sanitation
Government Authorities / Regulatory Bodies	No	Meetings, Emails, Letters	Regular and need based	Infrastructure development, Company Performance, Labour issues, Corporate Social Responsibilities, Compliance of various rules, acts, regulation, and laws
Customers	No	Website, emails, Letters, Meetings, conference, Surveys	Regular and Need-based	Commercial matters, Policy issues, market conditions, complaints & grievances
Employees	No	Discussion forums with Associations and Unions, Emails, Letters, Surveys,	Regular	benefits and remunerations, Performance rating and recognition, Career growth, Training and skill development, Safe and healthy working condition, welfare measures
Value Chain Partners (Suppliers, Vendors, Contractors)	Partly	Website, Mobile Apps, Email, Letters, vendor Meet	Regular and need based	Special privilege to MSE units, Transparency & anti-corruption practices, Simplified procedure & timely payment, Terms & conditions of purchase, Speedy liquidation of disputes & redressal of grievances.

PRINCIPLE-5 : Businesses should respect and promote human rights.

Essential Indicators

1. Employees and workers who have been provided training on human rights issues and policy (ies) of the entity, in the following format:

Category	FY 2022-23			FY 2021-22		
	Total (A)	No. of employees / workers covered (B)	% (B/A)	Total (C)	No. of employees /workers covered (D)	% (D/C)
EMPLOYEES (Executives)						
Permanent	1588	61	4	1667	0	0.00
Other than permanent	0	N.A.	N.A.	0	N.A.	N.A.
Total Employees	1588	61	4	1667	0	0.00
WORKERS						
Permanent (Non-Executives)	3602	0	0.00	3853	0	0.00
Other than permanent	12882	0	0.00	11828	0	0.00
Total Workers	16484	0	0.00	15681	0	0.00

2. Details of minimum wages paid to employees and workers, in the following format:

Category	FY 2022-23					FY 2021-22				
	Total (A)	Equal to Minimum Wage		More than Minimum Wage		Total (D)	Equal to Minimum Wage		More than Minimum Wage	
		No. (B)	% (B/A)	No. (C)	% (C/A)		No. (E)	% (E/D)	No. (F)	% (F/D)
EMPLOYEES (Executives)										
Permanent	1588	N.A.	N.A.	1588	100	1667	N.A.	N.A.	1667	100
Male	1502	N.A.	N.A.	1502	100	1580	N.A.	N.A.	1580	100
Female	86	N.A.	N.A.	86	100	87	N.A.	N.A.	87	100
Other than Permanent	Nil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Male	Nil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Female	Nil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
WORKERS										
Permanent (Non-Executives)	3602	N.A.	N.A.	3602	100	3853	N.A.	N.A.	3853	100
Male	3361	N.A.	N.A.	3361	100	3607	N.A.	N.A.	3607	100
Female	241	N.A.	N.A.	241	100	246	N.A.	N.A.	246	100
Other than Permanent	12882	N.A.	N.A.	12882	100	11828	N.A.	N.A.	11828	100
Male	12077	N.A.	N.A.	12077	100	11045	N.A.	N.A.	11045	100
Female	805	N.A.	N.A.	805	100	783	N.A.	N.A.	783	100

3. **Details of remuneration/salary/wages, in the following format: (in ₹)**

	Male		Female	
	Number	Median remuneration/ salary/ wages of respective category	Number	Median remuneration/ salary/ wages of respective category
Board of Directors (BoD)	6	7,630,432.17	0	N.A.
Key Managerial Personnel	7	7,402,563	0	N.A.
Employees other than BoD and KMP (Executives)	1502	3,546,713.10	86	2,950,207.40
Workers* (Permanent Workers i.e. non-Executives)	3361	2,639,015.06	241	1,861,066.81

*Non-permanent workers are not paid wages directly by the entity. However, it is ensured that contractors pay more than specified minimum wages without any discrimination.

4. **Do you have a focal point (Individual/ Committee) responsible for addressing human rights impacts or issues caused or contributed to by the business? (Yes/No)**

   Yes

5. **Describe the internal mechanisms in place to redress grievances related to human rights issues.**

   The grievance procedure for executives and non-executives can be found in the intranet of the HR manual under the CDA rules caption. Additionally, there is a policy in place across all units, including the corporate office, regarding the prevention, prohibition, and redressal of sexual harassment of women at the workplace, in compliance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition & Redressal) Act, 2013. Internal Complaints Committees have been established at the production units and corporate office to address complaints related to sexual harassment.

   However, for non-permanent workers, specifically contractors' workers, there is no specifically defined grievance handling procedure. In such cases, grievances are typically received and addressed by the EIC (Contract Engineer-in-charge) or the Plant HRD (Human Resources Department) by intervening with the immediate employer, which is the contractor.

6. **Number of Complaints on the following made by employees and workers:**

	FY 2022-23			FY 2021-22		
	Filed during the year	Pending resolution at the end of the year	Remarks	Filed during the year	Pending resolution at the end of the year	Remarks
Sexual Harassment	0	0	N.A.	1	0	Penalty Imposed
Discrimination at workplace	0	0	N.A.	0	0	N.A.
Child Labor	0	0	N.A.	0	0	N.A.
Forced Labor/ Involuntary Labor	0	0	N.A.	0	0	N.A.
Wages	0	0	N.A.	0	0	N.A.
Other human rights related issues	0	0	N.A.	0	0	N.A.

7. **Mechanisms to prevent adverse consequences to the complainant in discrimination and harassment cases.**

   Each instance involving discrimination or harassment cases is carefully assessed to determine the potential adverse consequences for the complainant. Upon evaluation, appropriate measures are implemented, which may include reorganization, to address the situation effectively.

8. **Do human rights requirements form part of your business agreements and contracts? (Yes/No)**

   Yes

9. **Assessments for the year:**

	% of your plants and offices that were assessed (by entity or statutory authorities or third parties)
Child labor	100%
Forced/involuntary labor	100%
Sexual harassment	100%
Discrimination at workplace	100%
Wages	100%
Others – please specify	N.A.

10. **Provide details of any corrective actions taken or underway to address significant risks / concerns arising from the assessments at Question 9 above.**

    N.A.

Business Responsibility and Sustainability Report

PRINCIPLE-6 : Businesses should respect and make efforts to protect and restore the environment.

Essential Indicators

1. Details of total energy consumption (in Giga Joules) and energy intensity, in the following format:

Parameter	FY 2022-23	FY 2021-22
Total electricity consumption (A)	43,59,616	49,53,024
Total fuel consumption (B)	9,85,80,904	10,02,65,819
Energy consumption through other sources (C) Roof-Top Solar	2,529	2,648
Total energy consumption (A+B+C)	10,29,43,048	10,52,21,491
Energy intensity per rupee of turnover	0.00073	0.00075

Note: Indicate if any independent assessment/ evaluation/assurance has been carried out by an external agency? (Y/N) No. If yes, name of the external agency: N.A.

2. Does the entity have any sites / facilities identified as designated consumers (DCs) under the Performance, Achieve and Trade (PAT) Scheme of the Government of India? (Y/N)

Yes.

If yes, disclose whether targets set under the PAT scheme have been achieved. (Y/N).

Yes.

3. Provide details of the following disclosures related to water, in the following format:

Parameter	FY 2022-23	FY 2021-22
Water withdrawal by source (in kiloliters)		
(i) Surface water	4,43,12,745	4,67,43,192
(ii) Groundwater	2,03,622	1,60,189
(iii) Third party water	4,327	48,324
(iv) Seawater / desalinated water	0	0
(v) Others	0	0
Total volume of water withdrawal (in kiloliters)(i + ii + iii + iv + v)	4,45,20,694	4,69,51,705
Total volume of water consumption (in kiloliters)	4,45,20,694	4,69,51,705
Water intensity per rupee of turnover	0.00031	0.00033

4. Has the entity implemented a mechanism for Zero Liquid Discharge? If yes, provide details of its coverage and implementation.

Yes, all operating units of NALCO including Mines, Smelter, Captive power plant, Refinery have Zero liquid discharge.

5. Please provide details of air emissions (other than GHG emissions) by the entity, in the following format:

Parameter	Please specify unit	FY 2022-23	FY 2021-22
NOx			
• Smelter FTP/FTC stacks avg.	mg/Nm3	31.40	36.08
• CPP Boiler Stacks avg.		257.76	283.96
• Refinery Boiler Stacks avg.		232.00	225.20
• Refinery Calciner Stack		450.00	426.20
SOx			
• Smelter FTP/FTC stacks avg.	mg/Nm3	62.47	62.40
• CPP Boiler Stacks avg.		514.66	533.98
• Refinery Boiler Stacks avg.		461.60	367.50
• Refinery Calciner Stack		319.70	316.50
Parameter	**Please specify unit**	**FY 2022-23**	**FY 2021-22**
Particulate matter			
• Smelter FTP/FTC stacks avg.	mg/Nm3	30.63	25.76
• CPP Boiler Stacks avg.		70.89	70.68
• Refinery Boiler Stacks avg.		79.53	83.58
• Refinery Calciner Stack		22.54	27.84
Persistent organic pollutants (POP)	-	N.A.	N.A.
Volatile organic compounds (VOC)- Smelter Bake Oven Stacks PAH emission	µg/Nm3	< 0.2	< 0.2
Hazardous air pollutants (HAP)	-	N.A.	N.A.
Other (Fluoride & Fugitive Fluoride emission from Smelter Potlines & Bake Ovens)	kg/T	0.4515	0.4118

Note: Indicate if any independent assessment/ evaluation/assurance has been carried out by an external agency? (Y/N) No If yes, name of the external agency: N.A.

6. **Provide details of greenhouse gas emissions (Scope 1 and Scope 2 emissions) & its intensity, in the following format:**

Parameter	Unit	GHG Emissions FY 2022-23	GHG Emissions FY 2021-22
Total Scope 1 emissions	$MTCO_2$ Equivalent	1,01,99,426	1,03,42,032
Total Scope 2 emissions	$MTCO_2$ Equivalent	9,86,969	11,32,426
Total Scope 1 and Scope 2 emissions per rupee of turnover	$MTCO_2$ Eq./ ₹	0.000079	0.000082

Note: Emission factor from central Electricity Authority, CO_2 baseline Database version 18 and IPCC Guidelines for National Greenhouse Gas Inventories has been referred to calculate GHG emissions. For estimating GHG emissions from Smelter Process, Aluminium Sector GHG workbook is used.

Note: Indicate if any independent assessment/ evaluation/assurance has been carried out by an external agency? (Y/N) No
If yes, name of the external agency.: N.A.

7. **Does the entity have any project related to reducing Green House Gas emission? If yes, then provide details.**

The Entity focuses on reducing its greenhouse gas (GHG) emissions through two main strategies:

- Generating renewable energy and
- Improving energy efficiency through process enhancements, equipment modernization, and R&D initiatives.

Operational wind power projects are located in Gandikota, Andhra Pradesh (50.4 MW), Luderva, Rajasthan (47.6 MW), Devikot, Rajasthan (50 MW), and Jath, Maharashtra (50.4 MW).

Additionally, various roof-top solar PV plants are in operation at different locations, while new installations are planned for Damanjodi and Vishakhapatnam.

Several energy efficiency projects have been undertaken, targeting GHG emission reductions, such as cathode block graphitization, use of slotted anodes, installation of dampers and exhaust manifolds, chemical cleaning of Condensers, HSD consumption reduction, VFD installation, and replacing lamps and motors with energy-efficient alternatives. A trial pilot project aimed at developing low-energy cell technology for smelter plants has achieved a significant reduction in specific DC energy consumption.

8. **Provide details related to waste management by the entity, in the following format:**

Parameter	FY 2022-23	FY 2021-22
Total Waste generated (in metric tons)		
Plastic waste (A)	0.00	0.00
E-waste (B)	14.16	14.69
Bio-medical waste (C)	1.78	1.88
Construction and demolition waste (D)	10.00	8.00
Battery waste (E)	27.03	36.43
Radioactive waste (F)	0.00	0.00
Other Hazardous waste. As per Hazardous waste Authorization granted by OSPCB	94,016.60	86,324.3
Other Non-hazardous waste generated (H). Overburden, Red mud. Lime grit, fly ash, ferrous & non-ferrous scrap, refractory bricks, mixed debris	74,01,597.38	75,77,180.15
Total (A+B + C + D + E + F + G + H)	74,95,666.95	76,63,565.44
For each category of waste generated, total waste recovered through recycling, re-using or other recovery operations (in metric tonnes)		
Category of waste (Construction & Demolition waste)		
(i) Recycled	0	0
(ii) Re-used (Road development/other civil works)	10	8
(iii) Other recovery operations	0	0
Total	10	8
Category of waste (Other Hazardous waste)		
(i) Recycled (spent anode, dross, empty chemical containers etc.)	82,804.59	73,775.18
(ii) Re-used	30	0
(iii) Other recovery operations	0	0
Total	82,834.59	73,775.18
Category of waste (Other Non-Hazardous waste)		
(i) Recycled	0	0
(ii) Re-used (Road development/other civil works)	9,45,147	9,69,546
(iii) Other recovery operations	0	0
Total	9,45,147	9,69,546

Parameter	FY 2022-23	FY 2021-22
Total Waste generated (in metric tons)		
For each category of waste generated, total waste disposed by nature of disposal method (in metric tonnes)		
Category of waste (E- waste)		
(i) Incineration	0	0
(ii) Landfilling	0	0
(iii) Other Disposal operations (to authorized recyclers)	5.356	7.53
Total	5.356	7.53
Category of waste (Bio-medical waste)		
(i) Incineration	0	0
(ii) Landfilling	0	0
(iii) Other disposal operations (Own treatment facility)	1.78	1.88
Total	1.78	1.88
Category of waste (Battery waste)		
(i) Incineration	0	0
(ii) Landfilling	0	0
(iii) Other disposal operations (to Authorized Recyclers)	29.29	42.96
Total	29.29	42.96
Category of waste (Other Hazardous waste)		
(i) Incineration	124.589	117.842
(ii) Landfilling (captive landfill)	47.341	31.325
(iii) Other disposal operations (to authorised recyclers, CHWTSDF Sukinda)	28,556.7	41,045.69
Total	28,728.63	41,194.86
Category of waste (Other Non-Hazardous waste)		
(i) Incineration	0	0
(ii) Landfilling	0	0
(iii) Other disposal operations (Red mud pond, Ash disposal, Sold, filling low-lying areas etc.)	69,39,754.87	61,51,119.72
Total	69,39,754.87	61,51,119.72

Note: Indicate if any independent assessment/ evaluation/assurance has been carried out by an external agency? (Y/N) No
If yes, name of the external agency.: N.A.

9. Briefly describe the waste management practices adopted in your establishments.

Operating Units of NALCO have implemented an environmental management system based on ISO 14001. The management of waste materials includes the identification, categorization, and responsibility assignment for their handling, collection, reception, storage, treatment, transportation, and disposal.

- E-waste and battery waste are segregated and disposed of at authorized Collection Centers/Dismantlers/Recyclers.
- Bio-medical waste generated at medical facilities in Angul and Damanjodi is treated at our own biomedical waste treatment plant facility in accordance with the authorization order issued by the State Pollution Control Board.
- Details of other hazardous waste materials are specified, including their category, authorized quantity as per the Hazardous Waste Authorization granted by OSPCB (Odisha State Pollution Control Board), source of generation, method of storage, and method of disposal.
- The carbon portion of Spent Potlining (SPL) is disposed of to authorized recyclers for detoxification of hazardous components and utilization of its energy value in an eco-friendly manner. Refractory and mixed fines of SPL are stored under a covered shed. Permission from OSPCB is awaited to dispose of them in CHWTSDF (Common Hazardous Waste Treatment, Storage, and Disposal Facility).
- Aluminium Dross is cooled, crushed in an Autogenous mill of an additional bath handling system, where the metallic portion is recovered, and the remaining dross portion is mixed with bath and used in POTs for anode covering. Legacy stock of dross is disposed of to authorized recyclers.
- Spent Anode Butts are 100% recycled for anode making. Carbon Area Hazardous waste, which includes floor sweeping waste, shot blasting waste, and rejected lining of furnaces, is disposed of at the common hazardous Waste Landfill (CHWTSDF).
- Used oil generated during various processes and maintenance activities is kept in secured drums or barrels and stored under a covered shed, equipped with a facility for collecting spilled oil. Used oil is auctioned or sold to authorized reprocessors/recyclers approved by the Odisha State Pollution Control Board.

Non-Hazardous waste:

- Overburden generated at bauxite mines is 100% re-used in the reclamation of mined-out areas.
- Red mud and Lime Grit generated at the Alumina Refinery are disposed of in the red mud Pond.
- CPP (Captive Power Plant) ash is disposed of in the abandoned mine void of South Bharatpur OCP (Open Cast Project) through pipelines in lean

slurry mode. Ash Pond-I is kept in an active stage and used for emergency disposal. Fly ash generated at the Alumina Refinery is used for filling low-lying areas and brickmaking, among other purposes.

- CPP Coal mill rejects are stored in a dedicated reject handling yard for further disposal.
- Ferrous scrap is recycled, reused, or sold to outside agencies. Non-ferrous scrap with economic value is also recycled, reused, or sold to outside agencies.
- Used refractory bricks are used for hard surfacing and road construction inside the plant. Mixed debris is disposed of in low-lying areas.
- Food waste, such as canteen waste and horticulture waste, is converted to compost using a solid waste mechanical waste converter.

Describe the strategy adopted by your company to reduce usage of hazardous and toxic chemicals in your products and processes and the practices adopted to manage such wastes.

The use of hazardous and toxic chemicals has been optimized through process control, and standard operating procedures (SOPs) are implemented for their safe handling. Substitution of these chemicals is pursued whenever feasible.

During the process of anode making, several hazardous wastes are recycled back into the process. Aluminium dross, a byproduct, is processed to recover the metallic portion. The remaining portion of the dross is utilized in the bath material used in Potlines, contributing to the overall efficiency and sustainability of the anode making process.

10. If the entity has operations/offices in/around ecologically sensitive areas (such as national parks, wildlife sanctuaries, biosphere reserves, wetlands, biodiversity hotspots, forests, coastal regulation zones etc.) where environmental approvals / clearances are required, please specify details in the following format:

Sl. No.	Location of operations/offices	Type of operations	Whether the conditions of environmental approval / clearance are being complied with? (Y/N) If no, the reasons thereof and corrective action taken, if any.
1	Panchpatmali Bauxite Mine, Damanjodi, Dist - Koraput, Odisha	Mining of bauxite	Yes

11. Details of environmental impact assessments of projects undertaken by the entity based on applicable laws, in the current financial year:

Name and brief details of project	EIA Notification No.	Date	Whether conducted by independent external agency (Yes / No)	Results communicated in public domain (Yes / No)	Relevant Web link
Nil					

12. Is the entity compliant with the applicable environmental law/ regulations/ guidelines in India, such as the Water (Prevention and Control of Pollution) Act, Air (Prevention and Control of Pollution) Act, Environment protection act and rules there under (Y/N).

Yes

Leadership Indicators

6. If the entity has undertaken any specific initiatives or used innovative technology or solutions to improve resource efficiency, or reduce impact due to emission /effluent discharge/ waste generated, please provide details of the same as well as outcome of such initiatives, as per the following format:

Sl. No	Initiative undertaken	Details of the initiative (Web-link, if any, may be provided along-with summary)	Outcome of the initiative
1	Concurrent reclamation and rehabilitation at Mines	The mined-out area is concurrently reclaimed and rehabilitated with overburden waste	No waste dump is required.
2	Addition of additives in diesel to reduce consumption of diesel in HEMMs at Mines	The implementation of special additives in Heavy Earth Moving Machinery (HEMMs) to reduce diesel consumption and enhance fuel efficiency demonstrates a commitment to sustainable practices and the optimization of machinery performance.	About 4-5% reduction in diesel consumption is observed.
3	Recycling of treated wastewater at Mines	The treated wastewater from Mines canteen and vehicle wash area are 100% reused for dust suppression.	Water conservation
4	Promotion of renewable energy from waste at Mines	Biogas plants (3 no's) have been installed to treat organic wastes from canteen	The wastes have been fully treated and clean fuel gas is generated.
5	Red mud wastewater is recycled for process use at Refinery	Red mud generated during the refining process is discharged into the Red Mud Pond. In the pond, the red mud settles, allowing the water to separate and decant. The decanted water is then pumped back to the refinery process area for reutilization.	Reduction of freshwater consumption.
6	Ash Pond wastewater is recycled for dry ash repulping at Refinery	The Ash slurry generated is discharged into the Ash Pond, where the ash particles settle down, and the decanted water is pumped back to the Ash Disposal Pump House in the Refinery plant for ash pulping.	Reduction of freshwater consumption.
7	Lean slurry project of ash disposal from CPP to abandoned allotted mine void of south Bhratpur OCP with recycling of wastewater	NALCO's Captive Power Plant (CPP) successfully implemented a project to dispose of ash using the lean slurry disposal method in abandoned mines to achieve 100% utilization of the ash generated and reuse the treated water. A Clariflocculator with a capacity of 3000 m3/hr has been installed to further reduce turbidity in the recycled water obtained from the Ash Pond and mine void. This treated water is used for reuse in various plant processes, including ash slurry preparation and other plant purposes.	Achieving 100 % fly ash utilization Re-use of Ash water for process requirements.

Sl. No	Initiative undertaken	Details of the initiative (Web-link, if any, may be provided along-with summary)	Outcome of the initiative
8	Rainwater harvesting & Conservation	At Mines, Rainwater harvesting ponds have been constructed for collection of rainwater and use for plantation, etc. with a total storage capacity of appx. 65880 cubic meters. An in-situ peripheral barrier has been constructed all around the mine pit which prevents any rainwater from going down below the valley. The entire runoff from the mining pit percolates into the ground thus recharging the ground water. At Alumina Refinery, four nos. of roof-top rainwater harvesting projects are operational. At the Captive Power Plant (CPP), a Rainwater Harvesting and Recycling system has been implemented. This system includes a pond with a capacity of 50,000 m3 and two pumps with a combined capacity of 500 m3. The harvested and recycled rainwater is utilized for replenishing the Fire hydrant Fore bay of RCPH-1 and for various plant purposes. Further, roof-top rainwater harvesting systems have been installed at the CW pump house and RCPH.	Water withdrawal from source reduced
9	Surface run-off and waste-water management at Smelter	Treated water from the Ion-Exchange De-fluoridation plant is utilized for plantation and cooling of anodes in the Carbon area. Additionally, the treated water from the Emrion Nano De-fluoridation plant serves as makeup water for cooling purposes. Non-fluorinated surface run-off from various areas is collected in a Twin sump (Zero Discharge sump) is then recycled for horticulture use, vehicle washing, and civil construction, preventing any discharge of water. An important initiative has been undertaken to augment the capacity of the Emrion Nano De-Fluoridation Plant from 1.0 MLD (million liters per day) to 2.0 MLD. This initiative is the first of its kind in the world on such a large scale, featuring zero reject and negligible sludge generation.	Water withdrawal from source reduced due to recycling of wastewater.

7. Does the entity have a business continuity and disaster management plan? Give details in 100 words/ web link.

- Bauxite Mines: A Disaster Management Plan (DMP)/On-site Emergency Plan (OSEP) is established to respond to emergencies, including occupational health and safety (OHS) consequences and environmental incidents. Regular testing and mock drills involving relevant parties are conducted quarterly to ensure preparedness.
- Alumina Refinery: An on-site Emergency Response Plan is established, including specific roles for the factory manager and dedicated CISF fire personnel. Regular fire and chemical mock drills are conducted, and there is a well-defined emergency command structure.
- Smelter Plant: A Disaster Management Plan (DMP)/On-site Emergency Plan is in place, addressing emergencies such as pool fires, fireballs in HFO (Heavy Fuel Oil) storage tanks, and incidents in the LPG storage area. The plant is equipped with necessary firefighting and rescue equipment.
- Captive Power Plant: A similar Disaster Management Plan (DMP)/On-site Emergency Plan is established at the Captive Power Plant.

Overall, these facilities have comprehensive emergency plans that are periodically reviewed and updated. Regular drills are conducted to ensure preparedness and familiarize relevant personnel with emergency protocols and procedures.

PRINCIPLE-7 : Businesses, when engaging in influencing public and regulatory policy, should do so in a manner that is responsible and transparent.

Essential Indicators

1. a. Number of affiliations with trade and industry chambers/ associations. 10

b. List the top 10 trade and industry chambers/ associations (determined based on the total members of such body) the entity is a member of/ affiliated to.

S. No.	Name of the trade and industry chambers / associations	Reach of trade and industry chambers/ associations (State/National)
1	Aluminium Association of India	National
2	Confederation of Indian Industry	National
3	Standing Conference of Public Enterprise (SCOPE)	National
4	Chemicals and Allied Products Export Promotion Council (CAPEXIL)	National
5	Federation of Indian Mineral Industries	National
6	Federation of Indian Export Organisations, New Delhi	National
7	National Institute of Personnel Management (NIPM)	National
8	International Chamber of Commerce	National
9	Indian Chamber of Commerce (ICC)	National
10	Indian National Committee- World Mining Congress	National

2. Provide details of corrective action taken or underway on any issues related to anti- competitive conduct by the entity, based on adverse orders from regulatory authorities.

Name of Authority	Brief of Case	Corrective Action taken
Nil		

PRINCIPLE-8 : Businesses should promote inclusive growth and equitable development.

Essential Indicators

1. Details of Social Impact Assessments (SIA) of projects undertaken by the entity based on applicable laws, in the current financial year.

Name and brief details of project	SIA Notification No.	Date of notification	Whether conducted by independent external agency (Yes / No)	Results communicated in public domain (Yes / No)	Relevant Web link
Nil					

2. Provide information on project(s) for which ongoing Rehabilitation and Resettlement (R&R) is being undertaken by your entity, in the following format:

Sl. No.	Name of Project for which R&R is ongoing	State	District	No. of Project Affected Families (PAFs)	% of PAFs covered by R&R	Amounts paid to PAFs in the FY (In INR)
1	Utkal D Coal Mines	Odisha	Angul	No of PDF - 137 No of PAF - 235	100 % PDF*	180.00 Crores deposited with District authority for Disbursal.
2	Utkal E Coal Mines	Odisha	Angul	No of PDF-400 No of PAF-979	100 % PDF	RPDAC for Utkal E Mines completed Proceedings is awaited.

*PAF (Project Affected Families) are entitled only for land compensation which has been paid at the time of land acquisition. PDF (Project Displaced Families) are entitled for R&R package over and above land compensation.

3. Describe the mechanisms to receive and redress grievances of the local community.

The Company undertakes CSR initiatives in collaboration with the local community, considering their needs, priorities, and expectations through a participatory process. While there is no specific mechanism for grievance redressal for the local community, their concerns are addressed through regular interactions and visits to ensure effective communication and resolution of grievances.

4. Percentage of input material (inputs to total inputs by value) sourced from suppliers:

	FY 2022-23	FY 2021-22
Directly sourced from MSEs	29.88%	31.22%
Sourced directly from within the district and neighboring districts	47.02 %	62.62 %

Note: 1) For both rows above, 'Total Inputs' excludes Coal, fuel oil, caustic soda, ALF3, Synthetic Flocculants, Steel, Cement, Bearings, Lubricants, grease, proprietary items, imported items.

2) For second row, all the districts in state of Odisha are considered considering the location of Units & Corporate Office.

Leadership Indicator

2. Provide the following information on CSR projects undertaken by your entity in designated aspirational districts as identified by government bodies.

S. No.	State	Aspirational Districts	Amount spent (in Crores)
1	Odisha	Koraput	5.372

3. (a) Do you have a preferential procurement policy where you give preference to purchase from suppliers comprising marginalized /vulnerable groups? (Yes/No)

Yes

(b) From which marginalized /vulnerable groups do you procure?

- Micro and Small enterprises (MSEs)
- MSEs owned by SC/ST entrepreneurs.
- MSEs owned by women entrepreneurs.

(c) What percentage of total procurement (by value) does it constitute?

29.88% in 2022-23.

6. Details of beneficiaries of CSR Projects (FY 2022-23)

Sl. No.	CSR Project #	No. of persons benefitted from CSR projects *	% Of beneficiaries from vulnerable and marginalized groups
1	Support for District Covid Hospital (DCH) at ESI Hospital, Banarpal, Angul	Around 1000	In-determinate
2	Support for plantation in and around Chandaka Damapara Wildlife Sanctuary	In-determinate	Not applicable
3	Operation of Medical Health Unit (MHU) at peripheral villages of S&P complex, Angul and Utkal D & E Coal Block, M&R Complex, Damanjodi, Pottangi.	163 periphery villages	In-determinate
4	Operation of OPD centre at Angul	39 periphery villages	In-determinate
5	Supply of Drinking Water through tankers in the Peripheral Villages of S & P Complex, Angul during summer	17 periphery villages	In-determinate
6	Supply of drinking water to devotees during Car Festival at Puri	In-determinate	In-determinate
7	a) Supporting residential education to poor backward & tribal children from periphery villages of M & R Complex, Damanjodi & Pottangi.	584	100%
8	Project- " NALCO ra Aliali Jhia" (NALCO ki Ladli): To provide financial support to girl students every year under BPL category from periphery villages of M & R Complex, Damanjodi & S&P Complex Angul	300	100%
9	Contribution towards promotion of traditional arts, music and handicraft	In-determinate	Not applicable
10	Operation of Battery-Operated Vehicles (BOVs) from Jagannath Ballav Matha to Shri Jagannath Temple and Railway Stations of Puri, Bhubaneswar & Cuttack.	In-determinate	In-determinate
11	Providing Clean water post in Various places of Puri.	In-determinate	In-determinate
12	Development and Maintenance work of Gandhi Park at Puri and garden at Biraharekrushnapur.	In-determinate	Not applicable
13	Renovation of pipe drinking water supply to 11 villages at S&P Complex, Angul.	11 periphery villages	In-determinate
14	Promotion of Jackfruit chips making as an alternative livelihood option in Pottangi region	19 periphery villages	100%
15	Construction of road from Durkaguda to Modiguda, Modieguda to Nuagauda and Nuaguda to Ranginiguda village	In-determinate	In-determinate
16	Development of Community Health Centre (CHC), Mathalput, Damanjodi, Koraput.	In-determinate	In-determinate
17	Restoration & development of Kedarnath/ Badrinath.	In-determinate	Not applicable
18	Contribution to National Sports Development Fund (NSDF)	In-determinate	In-determinate
19	Celebration of 8th International Day of Yoga at Hambi, Karnataka	In-determinate	Not applicable
20	Healthcare & nutrition initiatives for pilgrims during Car Festival -2022 at Puri	In-determinate	In-determinate
21	Transportation facility to the students of OAVS Kotia, to supplement quality education.	47	In-determinate
22	School uniform to 800 poor and disstressed school students in Sirsa, Haryana.	800	100%
23	Providing Water Cooler at Dakhin Kali temple	In-determinate	In-determinate
24	Support to AIIMS, New Delhi for EV car Project	In-determinate	In-determinate
25	Financial support for dead body carrying vehicle to Bhubaneswar Municipal Corporation.	In-determinate	In-determinate
26	Financial support to Zilla Mahotsab, Angul	In-determinate	Not applicable
27	Financial support to Institute for Social Development (ISD) in running Madhyam Women Support Center	500	100%

PRINCIPLE-9 : Businesses should engage with and provide value to their consumers in a responsible manner.

Essential Indicators

1. **Describe the mechanisms in place to receive and respond to consumer complaints and feedback.**

   Customer complaints or feedback regarding issues such as payment, late delivery, quality, quantity, or documentation are handled in accordance with NALCO's well-defined Marketing Guidelines and documented procedures of the ISO9001 system. Upon receiving a complaint, NALCO's representatives from Regional Offices and/or competent technical personnel from the plant may visit the customer's premises to examine the complaint and assess the situation on the spot.

   In cases where compensation or a claim is made by the customer, a committee is formed to verify the claim and estimate the loss suffered by the customer. The committee then recommends an appropriate amount of compensation to be paid. This process ensures a fair assessment and resolution of customer complaints.

   NALCO also reviews customer complaints as part of its continuous improvement efforts for processes and products. By analyzing and addressing these complaints, NALCO aims to enhance its operations, rectify any issues, and improve customer satisfaction.

2. **Turnover of products and/ services as a percentage of turnover from all products/service that carry information about:**

	As a percentage to total turnover
Environmental and social parameters relevant to the product	N.A.
Safe and responsible usage	N.A.
Recycling and/or safe disposal	N.A.

Note: Not Applicable as per the nature of products. NALCO products are primary Alumina and Aluminium Metal products sold to secondary processors in the value chain. NALCO products do not go to end users.

The basic information regarding safe usage/recycling etc regarding Alumina and Aluminium Metal is widely available in public domain.

3. **Number of consumer complaints in respect of the following:**

	FY 2022-23			FY 2021-22		
	Received during the year	Pending resolution at end of year	Remarks	Received during the year	Pending resolution at end of year	Remarks
Data privacy	0	0		0	0	
Advertising	0	0		0	0	
Cyber-security	0	0		0	0	
Delivery of essential services	N.A.	N.A.		N.A.	N.A.	
Restrictive Trade Practices	0	0		0	0	
Unfair Trade Practices	0	0		0	0	
Other	6	0		5	0	

4. **Details of instances of product recalls on account of safety issues:**

	Number	Reasons for recall
Voluntary Recall	0	N.A.
Forced Recall	0	N.A.

5. **Does the entity have a framework/ policy on cyber security and risks related to data privacy?**

   Yes, (ISO27001 framework/policy on cyber security and privacy policy are available)

   If available, provide a web-link of the policy.

   - https://d2ah634u9nypif.cloudfront.net/wp-content/uploads/2019/03/IT-SECURITY-POLICY-signed.pdf
   - URL:https://NALCOindia.com/home/privacy-policy/

6. **Provide details of any corrective actions taken or underway on issues relating to advertising, and delivery of essential services; cyber security and data privacy of customers; re-occurrence of instances of product recalls; penalty / action taken by regulatory authorities on safety of products / services.**

   - No issues have been faced regarding cybersecurity and data privacy of customers.
   - However, there was one instance of a ransomware attack on the nalcoindia.com website. The incident was promptly reported to Cert-In (Computer Emergency Response Team - India). To mitigate the issue, immediate actions were taken, including isolating the affected server from the network, restoring the website from backup files, and migrating the server to the AWS cloud platform.

Leadership Indicators

4. **Does the entity display product information on the product over and above what is mandated as per local laws? (Yes/No/Not Applicable) If yes, provide details in brief.**

   N.A.

   Did your entity carry out any survey with regard to consumer satisfaction relating to the major products / services of the entity, significant locations of operation of the entity or the entity as a whole?

   Yes. NALCO has conducted surveys to gauge customer satisfaction regarding our key products and services across the all-customer organizations. In adherence to company policy, we conduct Customer Satisfaction Index (CSI) evaluations every six months. As per last conducted CSI survey, average for Apr 22 - Sep 22 is 0.96 and Sep 22- Mar 23 is 0.97.

ANNEXURE-IV

REPORT ON CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNING AND OUTGO:

1.0 CONSERVATION OF ENERGY:

1.1 The steps taken or impact on Conservation of Energy:

For sustainable operation of production units at a competitive manner, Your Company has adopted many Energy Conservation Measures during 2022-23.

The Unit specific projects details are indicated below:

1.2 Energy conservation measures adopted in different units are as under:

1.2.1 Bauxite Mines:

1.2.1.1 Reduction in diesel consumption in dumpers by use of fuel additive has resulted in savings of around 41.625 KL of HSD.

1.2.1.2 Reduction in diesel consumption by parking of vehicles at mining face has resulted in saving of around 128.5 KL of HSD.

1.2.1.3 Reduction in diesel consumption by increasing usage of backhoe shovels in place of ripper dozers-wheel loader combination has resulted in savings of 104.9 KL of HSD.

1.2.1.4 Reduction in diesel consumption by direct loading of Bauxite to tippers from Mining Pit has resulted in savings of 187 KL of HSD.

1.2.1.5 Commissioning of new 50.76 KWp grid connected roof top solar plant has been completed and shall be hooked up for generation of renewable energy after necessary statutory clearances. This is in addition to existing 130 KWp RTS commissioned in 2021.

1.2.1.6 Modifications carried out in the logic and control circuits of conveyor system VFD and AC cooling system to reduce the idle energy loss.

1.2.2 Alumina Refinery:

1.2.2.1 Energy saving of 4,77,000 KWH was achieved through installation of 5,350 nos. of LED systems in place of conventional light fittings.

1.2.2.2 Replacement of low efficiency ACs & motors by energy efficient versions.

1.2.2.3 Continued use of Fuel-additive in Calciners & Dewatering aid in Drum Filters, leading to reduction in HFO consumption (upto1.5%).

1.2.2.4 Steam traps renovation & steam leakages rectification to avoid steam loss.

1.2.2.5 Control logic development for auto start/stop of PH-3 turbid pump 750 A&B as per requirement, so as to save energy.

1.2.2.6 Operation of Boiler-2 ESPs in charge-ratio mode has resulted in reduction in energy consumption.

1.2. 3 Smelter Plant:

1.2.3.1 Total 897 graphitized Pots are in operation out of that 44 pots have been Graphitised during 2022-23, resulted in reduction of specific electrical Energy consumption in pot line @ 55 KWH/MT.

1.2.3.2 15 no. of pots operating on AP2XN technology as a trial project resulting in saving of Specific DC energy consumption around 150KWH/MT.

1.2.3.3 Replacement of old motors with energy efficient IE3 Motors: A total of 374 nos. of motors (ranging from 0.37 KW to 55KW) were replaced in 2022-23 leading to in energy saving of 10,25,515.34 KWH/annum (1.03 MU).

1.2.3.4 950 nos. of 18W/20W LED tubes against 40W T-12 FTL, 120 Nos. of 150W high bay LED light fittings against 400W HPMV lamps, 40 nos. of LED flood light fittings 400W flood light and 25 Nos. of 120W LED Street lights against 250W HPMV light fittings were replaced resulting in energy saving of 4,88,114.50 KWH/annum.

1.2.3.5 Replacement of 02 nos. of desiccant dryers by Refrigerated dryers.

1.2.3.6 Replacement of one old Reciprocating and one Screw Compressor by centrifugal compressors.

1.2.3.7 Replacement of one screw compressor by centrifugal compressor.

1.2.3.8 Installation of 84 nos. Main Ring Dampers at Anode Baking Furnace (ABF)-I was commissioned to reduce Fuel oil consumption in Baking furnace.

1.2.3.9 The CII team recognized the effort of NALCO, on energy saving and awarded with "1st Runners-up position for Front Runner Group in the 15th CII ENCON Awards 2022" competing amongst 120+ Companies and amongst 56 short listed teams in the Final.

1.2.4 Captive Power Plant:

1.2.4.1 Renovation and Modernization (R&M) of existing Air-Preheater in Unit-5 with advanced profile heating element, double sealing arrangement and VFD drives for improvement of Boiler efficiency and reduction in Auxiliary power consumption has been completed in November, 2022. Boiler efficiency improved by more than 1%. Fan power consumption reduced by more than 400 KWH.

1.2.4.2 Installation and commissioning of booster pump was done for ESP internal washing in place of high capacity firefighting pump for effective cleaning. Besides effective cleaning, there is a power savings of 7,013 KW in each overhauling.

1.2.4.3 Chemical cleaning of condensers in Unit #7 was carried out in August, 2022. Improvement in condenser vacuum from 0.839 kg/cm2 to 0.891 kg/cm2 has been achieved, thereby resulted reduction in coal consumption.

1.2.4.4 The old inefficient HPH-6 in Unit-5 has been replaced with new HPH in November, 2022. After replacement the feed water temperature to boiler has increased from 212°C to 232 °C, which resulted in improvement of unit efficiency.

1.3 Energy conservation projects proposed or in progress during 2022-23:

1.3.1 Bauxite Mines:

1.3.1.1 A Cost Reduction Project on HSD saving by direct loading of Bauxite to tippers from Mining Pit is continuing.

1.3.2 Alumina Refinery:

1.3.2.1 Continued use of Fuel-additive in Calciners & Dewatering aid in Drum Filters, leading to reduction in HFO consumption (up to 1.5% reduction in specific consumption).

1.3.2.2 Renovation of Steam traps & arresting steam leakages to avoid steam loss.

1.3.2.3 Operation of Boiler-2 ESPs in charge-ratio mode.

1.3.3 Smelter Plant:

1.3.3.1 Installation and commissioning of Anode Slot Cutting Machine at Bake Oven-II is complete. Its PG test and final handover for operation will be done shortly, after arrival of Foreign Experts. This will reduce specific DC energy consumption in Pots and to improve process stability.

1.3.3.2 Replacement of 05 nos. of desiccant dryers by 05 nos. of Refrigerated dryers having energy saving potential of 3780000 KWH per annum.

1.3.3.3 Replacement of 03 nos. of oversize hot well pumps of CT-I (EE) by correct size pumps with VFD having saving potential of 129000 KWH per annum.

1.3.3.4 Installation & commissioning was completed in November, 2022 for Furnace-8 Solid metal charging door (SMCD) replacement for enhancement of thermal efficiency in cast House-A.

1.3.3.5 In Furnace-C of Billet Casting Facility, VFD's installation in Combustion and Atomizing air blowers (45 KW & 22 KW) is completed in December, 2022.

1.3.3.6 In cooling Tower -1 & 2 VFD's installation was completed in Pump 9,10,11,17.18 & 19 (75 KW each). This is benefitting by 50% energy saving over previous year energy consumption.

1.3.3.7 Installation & commissioning was completed in Furnace-C & D Solid metal charging door (SMCD) replacement for enhancement of thermal efficiency in Billet Casting Facility of cast House-A.

1.3.3.8 Replacement of 02 nos. of screw compressors by energy efficient centrifugal compressors.

1.3.3.9 Replacement of oversized cold well pumps of CT-1 E by energy efficient pump is in progress which will yield an energy saving of 3,78,000 Kwh per annum.

1.3.4 Captive Power Plant:

1.3.4.1 Renovation & Modernization of two sets of existing Air-Preheater in Unit-2 & 4 with advanced profile heating element and double sealing arrangement. This will increase boiler efficiency due to reduction in air leakage and increased heat transfer.

1.3.4.2 Revamping of one Cooling Tower in Unit-1 to 5:- Condenser vacuum will improve, which will result in reduction of heat rate and coal consumption.

1.4 Steps taken by the company for utilizing alternate sources of energy:

1.4.1 Your Company is commercially operating the following Wind and Solar Generating Units during the FY 2022-23:

1.4.1.1 50.4 MW Capacity Wind Power Plant at Gandikota, Kadapa, Andhra Pradesh.

1.4.1.2 47.6 MW Capacity Wind Power Plant at Ludarva, Jaisalmer, Rajasthan.

1.4.1.3 50.0 MW Capacity Wind Power Plant at Devikot, Jaisalmer, Rajasthan.

1.4.1.4 50.4 MW Capacity Wind Power Plant at, Jath, Sangli, Maharashtra.

1.4.1.5 800 KWp Capacity Rooftop Solar Photo-Voltaic Plant at NALCO Bhawan, NALCO Nagar, NALCO Research & Technology center, Refinery and Panchpatmali Bauxite Mines Office Buildings Buildings

1.4.2 During the FY 2022-23, your Company has generated 288 MU from Wind Power and 0.703 MU from Solar Power.

1.4.3 Action taken towards utilization of alternate sources of energy during 2022-23 & implementation during 2023-24:

1.4.3.1 A 50.76 KWp RT SPV Plant installed at Mines, which had already been commissioned and is awaiting for OREDA Clearance.

1.4.3.2 A 995 KWp RT SPV Plant at Alumina Refinery Buildings is in pipe line.

1.4.3.3 A 100 KWp RT SPV Plant at Port Facilities is in pipe line.

1.4.3.4 A 25.5 MW Wind Project under installation at Kayathar, Tamilnadu.

1.5 The capital investment on energy conservation equipments:

1.5.1 Bauxite Mines:

Sl. No.	Item	Investment (₹ in lakh)
1.	HSD saving by means of fuel additive	9.60

1.5.2 Alumina Refinery:

Sl. No.	Item	Investment (₹ in lakh)
1.	Replacement work of Flue Gas Air Duct-Boiler 1,2,3	340.89
2.	Hydrate dewatering aid addition in Drum Filters.	146.51
3.	Thermal (Fuel Additive) in Calciners.	365.22
4.	Replacement of 5,350 nos. conventional light fittings with LED systems.	56.47
5.	Replacement of old ACs & motors with higher efficiency versions.	33.76
6.	Vapour Absorption machine for Control room AC.	17.45

1.5.3 Smelter Plant:

Sl. No.	Item	Investment (₹ in lakh)
1.	Graphitization of Cathode blocks in 44 pots.	4,000.00
2.	Replacement of 374 nos. of old motors (Ranging from 0.55 KW up to 55 KW) with Energy efficient IE3 Motors.	90.94
3.	Two driers were replaced by Energy efficient driers.	31.80
4.	Screw compressor was replaced with similar capacity centrifugal compressor.	144.78

1.5.4 Captive Power Plant:

Sl. No.	Item	Investment (₹ in lakh)
1.	Renovation & Modernization of existing Air-Preheater in Unit-5.	404.00
2.	Installation and commissioning of booster pump for ESP internal washing in place of high capacity firefighting pump for effective cleaning.	17.03
3.	Chemical cleaning of condensers in Unit # 7	12.90
4.	The old inefficient HPH-6 in Unit-5 has been replaced with new HPH.	204.30

2.0 TECHNOLOGY ABSORPTION, ADAPTATION & INNOVATION:

Technology	Benefits thereof
NIL	Nil

3.0 DETAILS OF TECHNOLOGY IMPORTED/UPGRADED DURING LAST 5 YEARS:

Technology Imported/ Upgraded	Year of import /upgraded	Has Technology been fully absorbed	If not fully absorbed, area where this has not taken place, reasons therefore and future plans of action
Low energy cell technology for Smelter Plant (AP2XN0). – 15 pots trial	2021-2022	No. Implemented in 15 pots.	R&D trial in 15 pots completed, procurement of new design lining materials in progress for scale-up implementation.

4.0 EXPENDITURE ON R&D:

₹ in crore

Nature	2022-23	2021-22
Capital	143.63	37.58
Revenue	17.95	27.64
Total	**161.59**	**65.22**
R&D Expenditure as % of turnover	1.14	0.45

5.0 The foreign exchange earnings for the year 2022-23, ₹ 4,215.69 crore is as against ₹ 6,404.24 crore in 2021-22. The foreign exchange outgo for the year under report was ₹ 248.87 crore as against ₹ 277.41 crore in 2021-22.

ANNEXURE-V

CORPORATE GOVERNANCE REPORT

1.0 PHILOSOPHY ON CODE OF GOVERNANCE:

Corporate Governance is the foundation to achieve organizational goals through systems and processes, policies and laws that steer the operations in the desired direction. It encompasses the principles of transparency, disclosure, responsibility, fairness, accountability and integrity. Corporate Governance is integral to the existence of any company as it boosts corporate performance, optimizes shareholders value and safeguards the interests of all stakeholders.

In NALCO, the objective of corporate governance is good governance where ethical business practices are rooted in the day-to-day activities. A robust system of internal control, timely and continuous flow of material information to stakeholders, regulatory compliances in line with the spirit and intent of the laws of the land have upheld good governance practices in the Company over the years.

1.1 The information as of 31st March, 2023 have been placed in this Report.

2.0 BOARD OF DIRECTORS:

The Board plays a pivotal role in the overall performance and visibility of the Company. An enlightened Board formulates vision, strategy and policy for the Company and reviews them periodically for its implementation in right perspective. The Board believes in the inalienable rights of the shareholders as true owners of the Company and its role as trusteeship to the stakeholders.

2.1 Composition of the Board:

2.1.1 The sanctioned strength of the Board is as follows:

(i) Six Full-time (Executive) Directors including Chairman-cum-Managing Director.

(ii) Two Part-time Official Directors.

(iii) Eight Part-time Non-official (Independent) Directors.

2.1.2 The composition of the Board as on 31st March, 2023, is as detailed below:

Sl. No.	Name of Director	DIN	Date of Appointment
FUNCTIONAL DIRECTORS:			
1.	Shri Sridhar Patra, Chairman-cum-Managing Director	06500954	17.12.2019
2.	Shri Radhashyam Mahapatro, Director(HR)	07248972	01.01.2020
3.	Shri Manasa Prasad Mishra, Director (P&T)	08951624	01.11.2020
4.	Shri Ramesh Chandra Joshi, Director (Finance)	08765394	04.02.2022
5.	Shri Sadashiv Samantaray, Director (Commercial)	08130130	22.03.2022
6.	Shri Pankaj Kumar Sharma, Director (Production)*	10041341	01.02.2023
PART-TIME OFFICIAL DIRECTORS:			
7.	Shri Sanjay Lohiya, IAS	07151125	09.11.2020
8.	Dr. Veena Kumari Dermal, IPoS	08890469	20.01.2022
PART-TIME NON-OFFICIAL (INDEPENDENT) DIRECTORS:			
9.	Shri Ravi Nath Jha	09396382	11.11.2021
10.	Dr. B. R. Ramakrishna	02251602	15.11.2021
11.	Adv. George Kurian	09398434	12.11.2021
12.	Dr. Ajay Narang	00368054	16.11.2021
13.	Shri Y. P. Chillio	09396182	11.11.2021
14.	Ms. (Dr.) Shatorupa	09396503	12.11.2021
15.	Adv. Dushyant Upadhyay	09397101	12.11.2021
16.	Shri Sanjay Ramanlal Patel	09545270	23.03.2022

* Shri Pankaj Kumar Sharma was appointed as Director (Production) w.e.f. 01.02.2023 upon superannuation of Shri B. K. Das as Director (Production) on 31.01.2023.

2.1.3 As on 31.03.2023, Non-executive Directors constitute 62.50% of the total Board strength. Part-time Non-official (Independent) Directors constitute 50% of the total Board strength. Women Directors including Independent Woman Director constitute 12.50% of the total Board strength.

2.1.4 During the financial year 2022-23, the composition of the Board was in compliance with relevant provisions of the Companies Act, 2013 ("Act"), the SEBI (LODR) Regulations, 2015 ("SEBI Regulations") and DPE Guidelines on Corporate Governance.

2.2 Board meetings and attendance of Directors:

2.2.1 The Board meets at regular intervals to discuss and decide the business strategies/policies and reviews the financial performance of the Company. The Board is mandated to review and consider the agenda items on matters set out in Regulation 17 read with Part-A of Schedule II of the SEBI Regulations.

2.2.2 The Board has constituted various Committees out of which some are statutory and some are non-statutory in nature.

2.2.3 Secretarial Standards, issued by the Institute of Company Secretaries of India (ICSI) are followed for convening the Board meetings, Committee meetings and General meetings.

2.2.4 Meetings are convened with approval of Chairman-cum-Managing Director/Chairman of the Committee normally by giving at least 7 day's advance notice. Agendas with detailed agenda notes are also normally circulated at least a week before the scheduled date of meeting for meaningful and informed discussions in the meeting.

2.2.5 The meetings of the Board of Directors and Committee meetings are mostly held at the Registered Office of the Company. During the year, 339th meeting of Board of Directors was held at Puri, Odisha complying with the Office Memorandum of DPE to hold meeting in one of the 30 tourist places, identified by the Govt. of India.

2.2.6 8 (eight) Board meetings took place during the year under review. Meeting dates with attendance of Directors in the meetings are given below:

	No. of Directors Present					
Board Meeting No. & Date	**Board Strength**	**Functional**	**Part-time Official**	**Part-time Non-official (Independent)**	**Total Attendance**	**% of attendance to strength**
334th 28.04.2022	16	6	1	8	15	93.75
335th 25.05.2022	16	5	2	8	15	93.75
336th 08.08.2022	16	6	2	8	16	100.00
337th 21.09.2022	16	6	2	8	16	100.00
338th 09.11.2022	16	6	1	8	15	93.75
339th 17.01.2023	16	5	2	7	14	87.50
340th 10.02.2023	16	6	2	7	15	93.75
341st 13.03.2023	16	6	2	8	16	100.00

Notes:

(a) The maximum time gap between any two meetings was 74 days.

(b) Necessary quorum was always present in all the Board meetings.

2.2.7 The table below shows the individual attendance of Directors in the Board meetings held during 2022-23, their attendance in the last Annual General Meeting, Directorship in other Companies and Membership and Chairmanship in the Committees of other Companies:

Name & Designation	Board Meetings		Attendance at 41st AGM held on 22.09.2022	No. of other Directorships	Membership in the Committees of other companies	
	Held during the tenure	Attended			Membership	Chairmanship
Shri S. Patra Chairman-cum-Managing Director	8	8	Yes	2	Nil	Nil
Shri R. S. Mahapatro Director (HR)	8	8	Yes	Nil	Nil	Nil
Shri M. P. Mishra Director (P&T)	8	8	Yes	1	Nil	Nil
Shri B. K. Das Director (Production)#	6	5	Yes	Nil	Nil	Nil
Shri R. C. Joshi Director (Finance)	8	8	Yes	1	Nil	Nil
Shri S. Samantaray Director (Commercial)	8	7	Yes	Nil	Nil	Nil
Shri P. K. Sharma Director (Production)*	2	2	NA	Nil	Nil	Nil
Shri Sanjay Lohiya, IAS Part-time Official Director	8	6	No	1	Nil	Nil
Dr. V. K. Dermal, IPoS Part-time Official Director	8	8	No	3	1	Nil
Shri Ravi Nath Jha Part-time Non-official (Independent) Director	8	8	Yes	Nil	Nil	Nil
Dr. B. R. Ramakrishna Part-time Non-official (Independent) Director	8	8	Yes	Nil	Nil	Nil
Adv. George Kurian Part-time Non-official (Independent) Director	8	8	Yes	Nil	Nil	Nil
Dr. Ajay Narang Part-time Non-official (Independent) Director	8	8	Yes	3	Nil	Nil
Shri Y. P. Chillio Part-time Non-official (Independent) Director	8	6	Yes	Nil	Nil	Nil
Ms. (Dr.) Shatorupa Part-time Non-official (Independent) Director	8	8	Yes	Nil	Nil	Nil
Adv. Dushyant Upadhyay Part-time Non-official (Independent) Director	8	8	Yes	Nil	Nil	Nil
Shri Sanjay Ramanlal Patel Part-time Non-official (Independent) Director	8	8	Yes	Nil	Nil	Nil

Note: In accordance with Regulation 26 of the SEBI Regulations, Membership(s)/Chairmanship(s) of only Audit Committee and Stakeholders' Relationship Committee in all public limited companies have been considered.

Shri B. K. Das superannuated as Director (Production) on 31.01.2023.

* Shri P. K. Sharma, was appointed as Director (Production) w.e.f. 01.02.2023.

2.2.8 The number of Directorship(s) and Committee Membership(s)/Chairmanship(s) of all Directors is/are within the respective limits prescribed under the Act and the SEBI Regulations.

2.2.9 None of the Directors is related to any other Director on the Board of the Company.

2.3 Non-Executive Directors:

2.3.1 Part-time Official Directors and Part-time Non-official (Independent) Directors are the Non-executive Directors forming part of the Board.

2.3.2 While the Part-time Official Directors are nominated to the Board from the Administrative Ministry, the Part-time Non-official (Independent) Directors are appointed by the President of India.

2.3.3 Based on the disclosures made by the Independent Directors at the beginning of every financial year and in the opinion of the Board, the Independent Directors fulfill the conditions specified under the Act, SEBI Regulations and are independent of the management.

2.3.4 Formal letter of appointment is issued to each Independent Director on appointment as Director on the Board. The appointment letter *inter-alia* contains the role, function, duties and responsibilities of Independent Director in the Company. Appointment letters of Independent Directors are made available in the Company's website as and when any Independent Director is appointed in the

Board. During the financial year 2021-22, the Ministry of Mines, Govt. of India has appointed 8 (eight) Independent Directors and the formal appointment letters were issued to them and copies of the same are available in the website of the Company in the following link: https://nalcoindia.com/investor-services/directors/formal-letter-of-appointment-of-independent-directors/

2.3.5 During the year under review, no Independent Director has resigned from his/her post.

2.3.6 Acclimatization programme is conducted for the Independent Directors on their appointment to the Board. Independent Directors are nominated to attend orientation programmes from time to time, being conducted by ASSOCHAM, CII, SCOPE and DPE to get themselves updated on changes/developments in the domestic/global scenario. The details of such programmes attended by the Independent Directors are available in the following link: https://nalcoindia.com/wp-content/uploads/2022/12/Fam-Programme.pdf

2.3.7 None of the Non-executive Directors hold any share in the Company.

2.3.8 Independent Directors are not entitled for stock option in the Company.

2.3.9 All Directors are covered under Directors and Officers (D&O) Liability Insurance taken by the Company.

2.3.10 No Non-executive Director on the Board is above 75 years.

2.4 Skills/ Expertise/ Competence of the Board:

Your Company is a Government Company under the administrative control of Ministry of Mines, Government of India. All Directors of the Company are appointed by the President of India through the Administrative Ministry. The skills/expertise/competency of the Board as required in the context of the business pertaining to the Company are identified by the Government of India and accordingly selection of Directors on the Board of the Company is made by the Government of India. As such, all the Board members of the Company have expertise and competency as per the industry requirement.

2.5 Performance evaluation of Board members:

2.5.1 In terms of notification dated 05.07.2017 of Ministry of Corporate Affairs, the manner of review of the performance of Non-independent Directors and the Board as a whole and review of the performance of the Chairperson of the Company as required under Scheduled-IV of the Companies Act, 2023, is exempted for Government Companies.

2.5.2 DPE vide its OM dated 20.06.2023, has also provided similar kind of relaxation for review of the performance of the Functional Directors, Government Directors and Chairperson of the Company from the scope of separate meeting of Independent Directors.

2.5.3 In view of the above, since Directors of the Company are evaluated by the Administrative Ministry, no separate review of the performance of Non-independent Directors, Chairperson and the Board as a whole is done by the Independent Directors.

2.5.4 There is no such relaxation/exemption to listed Government Companies under SEBI Regulations.

2.5.5 DPE has introduced a system of performance assessment of Non-official Directors of CPSEs in terms of DPE DO letter dated 08.05.2018. The assessment /evaluation of performance of Independent Directors is done on basis of attendance and contribution during the period.

3.0 REMUNERATION OF DIRECTORS:

3.1 Your Company being a Government Company, the remuneration, benefits and Performance Related Payments (PRP) of Functional Directors are governed as per extant DPE guidelines. MCA has exempted Government Companies from formulating policy relating to remuneration of Directors as required under Section 178 of the Act.

3.2 All Functional Directors are members of New Pension Scheme (NPS).

3.3 Government Nominee Directors are not entitled for any remuneration/sitting fees as per DPE guidelines.

3.4 Independent Directors are paid sitting fees of ₹40,000/- for attending each meeting of the Board of Directors and ₹30,000/- for attending each meeting of Board constituted Committees including separate meeting of Independent Directors as approved in the 336th meeting of Board of Directors held on 08.08.2022. Prior to this, ₹30,000/- was paid for attending each meeting of Board of Directors and ₹ 25,000/- was paid for attending each meeting of Board constituted Committees including separate meeting of Independent Directors. The sitting fee paid is within the statutory limit prescribed under Act.

3.5 Company makes necessary arrangements for the Directors to attend the meetings. Out-of-pocket expenses, if any, incurred by the Independent Directors for attending the meetings are reimbursed.

3.6 Functional Directors including Chairman-cum-Managing Director are appointed by the President of India for a period of 5 years from the date of assuming charge or till date of superannuation or until further orders of the Government of India, whichever is earlier. Part-time Official Directors are nominated by the Administrative Ministry and they continue office till further orders from the Administrative Ministry. Part-time Non-official (Independent) Directors are appointed by the President of India for a tenure of 3 years.

3.7 The Company has not issued any stock option during the year 2022-23.

3.8 There is no provision for payment of severance fees to any Director. Notice period is applicable as per extant DPE guidelines and specified in the appointment letter.

3.9 Details of remuneration of Functional Directors for the FY 2022-23 are given below:

Name	Remuneration for the year 2022-23 (₹)		
	All elements of remuneration	Other benefits	Total
Shri S. Patra Chairman-cum-Managing Director	63,94,819	21,02,657	84,97,486
Shri R. S. Mahapatro Director (HR)	63,98,314	17,66,174	81,64,488
Shri M. P. Mishra Director (P&T)	66,77,356	19,19,340	85,96,696
Shri B. K. Das Director (Production)#	93,77,400	38,35,209	1,32,12,609
Shri R. C. Joshi Director (Finance)	62,10,814	13,31,927	75,42,741
Shri S. Samantaray Director (Commercial)	71,08,418	19,83,985	90,92,403
Shri P. K. Sharma Director (Production)*	9,26,546	55,773	9,82,319

Note: Other benefits includes Gratuity, Performance Related Pay and Medical Benefits, as applicable.

Shri B. K. Das superannuated as Director (Production) on 31.01.2023

* Shri P. K. Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

3.10 Details of sitting fees paid to the Independent Directors during 2022-23 are given below:

Name	Sitting Fees (₹)		
	Board Meetings	Committee Meetings	Total (₹)
Shri R. N. Jha Part-time Non-official (Independent) Director	3,00,000	4,65,000	7,65,000
Dr. B. R. Ramakrishna Part-time Non-official (Independent) Director	3,00,000	5,75,000	8,75,000
Adv. G. Kurian Part-time Non-official (Independent) Director	3,00,000	2,65,000	5,65,000
Dr. A. Narang Part-time Non-official (Independent) Director	3,00,000	7,40,000	10,40,000
Shri Y. P. Chillio Part-time Non-official (Independent) Director	2,20,000	3,45,000	5,65,000
Ms. (Dr.) Shatorupa Part-time Non-official (Independent) Director	3,00,000	4,90,000	7,90,000
Adv. D. Upadhyay Part-time Non-official (Independent) Director	3,00,000	5,15,000	8,15,000
Shri S. R. Patel Part-time Non-official (Independent) Director	3,00,000	3,15,000	6,15,000

Note: Amount was paid as sitting fee after deducting TDS.

4.0 VARIOUS COMMITTEES OF THE BOARD:

4.1 There are ten Board level Committees out of which seven Committees are statutory and three Committees are voluntary in nature.

Further, during the financial year two Board level Committees i.e. Committee on Manpower Scenario and Recruitment Status and Committee on Vedanta Case were constituted by the Board of Directors to look into specific area, as per the Terms of Reference mandated by the Board.

4.2 Secretarial Standards relating to Board meeting are equally applicable to Committee meetings.

4.3 The Terms of Reference of each Committee are in line with the Act and SEBI Regulations and are approved by the Board.

5.0 STATUTORY COMMITTEES:

5.1. Audit Committee:

5.1.1 The Committee comprises of 4 Independent Directors and one Functional Director as members and Director (Finance) as special invitee to the Audit Committee. One of the Independent Director holds Chairmanship of the Committee. The composition of the Committee is in line with the requirements under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance, except that Chairman of the Committee is not having accounting or related financial management expertise.

5.1.2 The Committee met seven times during the year, i.e. on 25.05.2022, 08.08.2022, 21.09.2022, 28.10.2022, 09.11.2022, 09.02.2023 and 10.02.2023.

The maximum gap between any two Audit Committee meetings was 91 days.

5.1.3 The members of the Committee and meetings attended by each member and special invitee as on 31.03.2023 are as follows :

Members of Audit Committee	Category of Director	Position	Meeting	
			held	attended
Dr. A. Narang	Independent	Chairman	7	7
Dr. B. R. Ramakrishna	Independent	Member	7	7
Shri D. Upadhyay	Independent	Member	7	7
Shri Y. P. Chillio	Independent	Member	7	6
Shri B. K. Das# Director (Production)	Functional	Member	5	5
Shri P. K. Sharma* Director (Production)	Functional	Member	2	2
Shri R. C. Joshi Director (Finance)	Functional	Special invitee	7	7

Shri B. K. Das superannuated as Director (Production) on 31.01.2023

* Shri P. K. Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

5.1.4 Head of Internal Audit, representatives of Statutory Auditors and Cost Auditors are invited to the meetings on need basis.

5.1.5 The Company Secretary acts as Secretary to the Audit Committee.

5.1.6 Chairman of the Audit Committee was present during the last Annual General Meeting.

5.17 The Terms of Reference of the Audit Committee are as follows:

5.1.7.1 Powers of the Audit Committee:

(i) To investigate any activity within its Terms of Reference.

(ii) To seek information from any employee.

(iii) To obtain outside legal or other professional advice.

(iv) To secure attendance of outsiders with relevant expertise, if it considers necessary.

5.1.7.2 Role of the Audit Committee *inter-alia*, includes the following:

(i) Oversight of the Company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.

(ii) Recommending to the Board, the appointment, reappointment and if required, the replacement or removal of cost auditors, fixation of audit fees and other terms of appointment.

(iii) Approving payment to statutory auditors, including cost auditors for any other services rendered by them.

(iv) Reviewing with the management, annual financial statements and auditors report thereon before submission to the Board for approval, with particular reference to:

(a) Matters required to be included in the Directors' Responsibility Statement for the Directors' Report in terms of Section 134(5) of the Act.

(b) Changes, if any, in accounting policies and practices and reasons for the same.

(c) Major accounting entries involving estimates based on the exercise of judgment by the management.

(d) Significant adjustments made in financial statements arising out of audit findings.

(e) Compliance with listing and other legal requirements relating to financial statements.

(f) Disclosure of related party transactions.

(g) Qualifications in draft audit report.

(v) Reviewing with the management, the quarterly and annual financial statements before submission to the Board for approval.

(vi) Reviewing with the management, the statement of uses/ application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice and the report submitted by the monitoring agency monitoring the utilization of proceeds of a public or rights issue and making appropriate recommendations to the Board to take up steps in this matter.

(vii) Reviewing and monitoring the auditors' independence and performance and effectiveness of audit process.

(viii) Approval or any subsequent modification of transactions of the Company with related parties.

(ix) Scrutiny of inter-corporate loans and investments, if any.

(x) Valuation of undertakings or assets of the Company, wherever it is necessary.

(xi) Evaluation of internal financial controls and risk management systems.

(xii) Reviewing with the management, the performance of statutory auditors, including cost auditors and internal auditors, adequacy of internal control systems.

(xiii) Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure, coverage and frequency of internal audit.

(xiv) Discussion with internal auditors of any significant findings and follow-up thereon.

(xv) Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board.

(xvi) Discussion with statutory auditors, before the audit commences, about the nature and scope of audit as well as post audit discussion to ascertain any area of concern.

(xvii) To look into the reasons for substantial defaults, if any, in the payment to depositors, debenture holders, shareholders (in case of non-payment of declared dividends) and creditors.

(xviii) To review the functioning of the Whistle Blower mechanism.

(xix) To review compliances with the provisions of the SEBI (Prohibition of Insider Trading) Regulations, 2015 at least once in a financial year and to verify that the system for internal control are adequate and are operating efficiently.

(xx) Reviewing the utilization of loans and/ or advances from/investment by the holding company in the subsidiary exceeding ` 100 crore or 10% of the asset size of the subsidiary, whichever is lower including existing loans / advances / investments existing as on the date of coming into force of this provision.

(xxi) Carrying out such other functions as may be specifically referred to the Committee by the Company's Board of Directors and/or other Committees of Directors.

5.1.7.3 Mandatory review of the following information by Audit Committee:

(i) The Management Discussion and Analysis of financial condition and results of operations;

(ii) Statement of significant related party transactions, submitted by management;

(iii) Management letters/letters of internal control weaknesses issued by the statutory auditors;

(iv) Internal audit reports relating to internal control weaknesses;

(v) The appointment, removal and terms of remuneration of the internal auditors / chief internal auditor, and

(vi) Statement of deviation :

(a) Quarterly statement of deviation(s) including report of monitoring agency, if applicable, submitted to Stock Exchanges in terms of Regulation 32(1).

(b) Annual statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice in terms of Regulation 32(7).

5.1.7.4 The functions of Audit Committee also include:

(i) To check whether cost controls are adequate and commensurate with size of the operations.

(ii) To study the areas where income can be increased and the areas where cost can be reduced.

(iii) Management Information System on each of the above areas and give its recommendations to the Board.

5.2 Nomination and Remuneration Committee:

5.2.1 The Committee comprises of three Independent Directors. Director (HR) and Director (Finance) are invitees to the Committee. One of the Independent Director holds Chairmanship of the Committee. The composition of the Committee is in line with the requirements under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance.

5.2.2 The Terms of Reference of the Committee:

(i) Approval of the annual bonus/variable pay pool and policy for the distribution across the executives and non-unionized supervisors within the prescribed limit.

(ii) Matters as contained in the Act and SEBI Regulations.

5.2.3 MCA vide notification dated 05.07.2017 have exempted Government Companies from certain provisions viz. annual evaluation of the Board and individual directors, formulation of policy for determining qualification, positive attitudes, independence of directors and recommendation to the Board a policy for remuneration of Directors. However, no such exemptions have been provided by SEBI so far under SEBI Regulations.

5.2.4 The Committee met three times during the year, i.e. on 19.04.2022, 21.09.2022 and 10.02.2023.

5.2.5 The members of the Committee and meetings attended by each member and invitees as on 31.03.2023 are as follows:

Members of Nomination and Remuneration Committee	Category of Director	Position	Meeting	
			held	attended
Ms. (Dr.) Shatorupa	Independent	Chairperson	3	3
Shri R. N. Jha	Independent	Member	3	3
Shri Y. P. Chillio	Independent	Member	3	3
Shri R. S. Mahapatro Director (HR)	Functional	Invitee	3	3
Shri R. C. Joshi Director (Finance)	Functional	Invitee	3	3

5.2.6 The Independent Directors not being the members of the Committee were invited to attend the meetings held on 21.09.2022 and 10.02.2023, as invitees.

5.2.7 Chairperson of the Nomination and Remuneration Committee was present during the last Annual General Meeting.

5.3 Stakeholders Relationship Committee:

5.3.1 The Committee comprises of three Independent Directors as members. One of the Independent Director holds Chairmanship of the Committee. The composition of the Committee is in line with the requirements under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance.

5.3.2 The Committee monitors redressal of the investors' grievances pertaining to transfer/transmission of shares, non-receipt of Annual Report, non-receipt of dividends and other related matters.

5.3.3 The Terms of Reference of the Committee:

(i) Resolving the grievances of the security holders of the listed entity including complaints related to transfer/transmission of shares, non-receipt of annual report, non-receipt of declared dividends, issue of new/duplicate certificates, and general meetings etc.

(ii) Review of measures taken for effective exercise of voting rights by shareholders.

(iii) Review of adherence to the service standards adopted by the listed entity in respect of various services being rendered by the Registrar & Share Transfer Agent.

(iv) Review of the various measures and initiatives taken by the listed entity for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/annual reports/statutory notices by the shareholders of the company.

5.3.4 M/s. KFin Technologies Limited (Formerly M/s. KFin Technologies Private Limited) has been appointed as Registrar and Transfer Agents to consider and resolve all grievances of the shareholders received either directly or through SEBI, Stock Exchanges etc. Efforts are always made to ensure that the grievances are redressed to the satisfaction of the investors at the earliest possible time.

5.3.5 Shri N. K. Mohanty, Group General Manager & Company Secretary is designated as the Compliance Officer as required under Regulation 6(1) of the SEBI Regulations.

5.3.6 The Committee met twice during the year i.e. on 28.10.2022 and 23.03.2023.

5.3.7 The members of the Committee and meeting attended by each member as on 31.03.2023 are as follows :

Members of Stakeholders Relationship Committee	Category of Director	Position	Meeting	
			held	attended
Adv. G. Kurian	Independent	Chairman	2	2
Shri R. N. Jha	Independent	Member	2	2
Shri Y. P. Chillio	Independent	Member	2	2

Chairman of the Stakeholders Relationship Committee was present during the last Annual General Meeting.

5.3.8 During the meeting held on 23.03.2023, Ms. (Dr.) Shatorupa, Independent Director was invited to attend the meeting as an invitee.

5.3.8 Details of complaints received and redressed during the year 2022-23 are as follows:

Received From	Opening Balance	Received during the year	Resolved during the year	Closing Balance
SEBI	0	0	0	0
Stock Exchange	0	1	1	0
Individuals	0	948	948	0
TOTAL	**0**	**949**	**949**	**0**

Note: No. of complaints received constitute 0.14% of the total number of shareholders of the Company as on 31.03.2023. All complaints were resolved within reasonable time frame.

5.3.10 Break-up of different types of complaints received and resolved during the year under review are given below:

Type of complaints	No. of complaints
Non-receipt of Securities	38
Non-receipt of Dividend	853
Non-receipt of Annual Report	58
Non-receipt of Redemption Warrant	0
Non-receipt of Interest Warrant	0
Total	**949**

5.3.11 Further, Regulation 40 of the SEBI Regulations has been amended mandating listed companies not to process/effect transfer of physical shares w.e.f. 01.04.2019 except for transmission and transposition cases. Keeping the provisions in view, the Company had advised the shareholders holding shares in physical form to get them converted into demat/electronic form. Further, in terms of circular dated 25.01.2022 of SEBI, 'Letter of confirmation' is sent to the concerned shareholders, requesting them to submit the same with their Depository Participants within 120 days of its issuance for dematerialization of shares in respect of issue of duplicate share certificate, transmission of shares, consolidation of certificates/ folios etc.

5.3.12 In terms of SEBI circular dated 25.05.2022, every listed company shall take special contingency insurance policy from the insurance company towards the risk arising out of the requirements relating to issuance of duplicate securities in order to safeguard and protect the interest of the listed company. Accordingly, your Company has taken such policy from the Oriental Insurance Company Limited.

5.4 Risk Management Committee:

5.4.1 The Committee comprises of three Independent Directors, Director (Finance) and Director (Production) as members. One of the Independent Director holds Chairmanship of the Committee. The composition of the Committee is in line with the requirements under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance.

5.4.2 The Terms of Reference of the Committee is as follows:

(i) Assisting the Board of Directors in overseeing the responsibilities with regard to the identification, evaluation and mitigation of operational, strategic, external environment risks and cyber security.

(ii) Overall responsibility for monitoring and approving the risk policies and associated practices of the Company.

(iii) Reviewing and approving risk disclosure statements in any public documents or disclosures.

5.4.3 The Committee reviews and monitors risk assessment plan, informs the Board periodically about the risk assessed and action required to be taken. Details of risks perceived are also given in the Management Discussion & Analysis Report.

5.4.4 Shri Srimanta Panda, GGM (Finance) has been designated as Chief Risk Officer of the Company w.e.f. 26.10.2022 after Shri S. B. Mohanty, GM (Finance) was relieved from the services of the Company.

5.4.5 The Committee met twice during the year i.e. on 01.09.2022 and 27.02.2023.

5.4.6. The members of the Committee and meetings attended by each member as on 31.03.2023 are as follows :

Members of Risk Management Committee	Category of Director	Position	Meeting	
			held	Attended
Dr. B. R. Ramakrishna	Independent	Chairman	2	2
Adv. G. Kurian	Independent	Member	2	2
Dr. A. Narang	Independent	Member	2	2
Shri B. K. Das# Director (Production)	Functional	Member	1	1
Shri R. C. Joshi Director (Finance)	Functional	Member	2	2
Shri P. K. Sharma* Director (Production)	Functional	Member	1	1

Shri B. K. Das superannuated as Director (Production) on 31.01.2023

* Shri P. K. Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

5.4.7 During the meeting held on 27.02.2023, Ms. (Dr.) Shatorupa, Independent Director was invited to attend the meeting as an invitee.

5.5 CSR & Sustainability Development Committee:

5.5.1 The Committee comprises of three Independent Directors, Director (HR) and Director (Production) as members. One of the Independent Directors hold Chairmanship of the Committee. The composition of the Committee is in line with the requirements under the Companies Act, 2013 and DPE guidelines on Corporate Governance.

5.5.2 The Terms of Reference of the Committee is as follows:

(i) Overseeing peripheral development activities being undertaken by the Company through the respective Rehabilitation and Periphery Development Advisory Committees (RPDAC) and proposed to be taken under MMDR Act.

(ii) NALCO Foundation.

(iii) Environment Protection & Pollution controls.

5.5.3 The Committee met twice during the year i.e. on 24.05.2022 and 07.08.2022.

5.5.4 The members of the Committee and meetings attended by each member as on 31.03.2023 are as follows :

Members of CSR & Sustainability Development Committee	Category of Director	Position	Meeting	
			held	attended
Shri D. Upadhyay	Independent	Chairman	2	2
Dr. B. R. Ramakrishna	Independent	Member	2	2
Ms. (Dr.) Shatorupa	Independent	Member	2	2
Shri R. S. Mahapatro Director (HR)	Functional	Member	2	2
Shri B. K. Das# Director (Production)	Functional	Member	2	2
Shri P. K. Sharma* Director (Production)	Functional	Member	0	NA

Shri B. K. Das superannuated as Director (Production) on 31.01.2023

* Shri P. K. Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

5.5.5 Shri S. R. Patel, Independent Director was invited to attend the meeting as an invitee in the meetings held on 24.05.2022 and 07.08.2022.

5.6 Technology Committee:

5.6.1 The Committee comprises of three Independent Directors, Director (P&T) and Director (Production) as members. One of the Independent Directors hold Chairmanship of the Committee. The Committee is constituted in compliance with the requirements under the DPE guidelines.

5.6.2 The Committee monitors and pays special attention to the assessment of the Company's efforts to develop technology and acquiring and assimilating new technologies necessary to make it competitive and to its own R&D efforts for maintaining a sustained strength in the technological field and review specific consumption norms pertaining to Smelter, Refinery etc.

5.6.3 The Committee met once on 23.03.2023 during the year.

5.6.4 The members of the Committee and meeting attended by each member as on 31.03.2023 are as follows :

Members of Technology Committee	Category of Director	Position	Meeting	
			Held	Attended
Shri Y. P. Chillio	Independent	Chairman	1	1
Adv. George Kurian	Independent	Member	1	1
Dr. Ajay Narang	Independent	Member	1	1
Shri M. P. Mishra Director (P&T)	Functional	Member	1	1
Shri P. K. Sharma* Director (Production)	Functional	Member	1	1

* Shri P. K. Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

5.6.5 During the meeting held on 23.03.2023, Shri R. N. Jha and Ms. (Dr.) Shatorupa, Independent Directors were invited to attend the meeting as invitees.

5.7 Share Transfer Committee:

5.7.1 Cases pertaining to issue of new share certificates in case of torn/ mutilated/defaced/lost/rematerialisation are approved by the Share Transfer Committee, consisting of all Functional Directors except Chairman-cum-Managing Director.

5.7.2 The Committee met ten time during the year i.e. on 27.04.2022, 16.05.2022, 11.07.2022, 10.08.2022, 17.10.2022, 23.11.2022, 28.12.2022, 23.01.2023, 06.02.2023 and 22.03.2023.

5.7.3 The members of the Committee and meetings attended by each member as on 31.03.2023 are as follows:

Members of Share Transfer Committee	Category of Director	Position	Meeting	
			Held	Attended
Shri R. S. Mahapatro Director (HR)	Functional	Chairman	10	9
Shri M. P. Mishra Director (P&T)	Functional	Member	10	10
Shri B. K. Das# Director (Production)	Functional	Member	8	7
Shri R. C. Joshi Director (Finance)	Functional	Member	10	9
Shri S. Samantaray Director (Commercial)	Functional	Member	10	8
Shri P. K. Sharma* Director (Production)	Functional	Member	2	1

Shri B. K. Das superannuated as Director (Production) on 31.01.2023

* Shri P. K. Sharma was appointed as Director (Production) w.e.f. 01.02.2023.

6.0 NON-STATUTORY COMMITTEES OF THE BOARD:

Apart from the statutory committees of the Board as per the Act, SEBI Regulations and DPE Guidelines, the Board also has constituted the following Non-statutory Committees and power has been delegated for smooth operation of the Company:

(i) HR Committee.

(ii) Ethics and Corporate Governance Committee.

(iii) Committee of Directors for Projects & New Ventures.

The meetings of the above Committees are held from time to time, depending upon the requirements of the Company, in line with the Terms of References, as decided by the Board.

7.0 SEPARATE MEETING OF INDEPENDENT DIRECTORS:

7.1 Separate meeting of Independent Directors is a requirement under the Act as well as SEBI Regulations.

7.2 Ministry of Corporate Affairs (MCA) have exempted certain areas viz. review of performance of Chairperson, non-independent directors and the Board as a whole from the scope of the meeting of Independent Directors for Government Companies.

7.3 The Committee assesses the quality, quantity and timeliness of flow of information between the company management and the Board that is necessary for the Board to effectively and reasonably perform their duties.

7.4 During the year, one meeting was held on 16.01.2023. Company Secretary facilitated convening and holding of the meeting on the advice of the Independent Directors.

7.5 The attendance of Independent Directors in the meeting held on 16.01.2023 was as follows:

Name	Category of Director	Position	Meeting	
			Held	Attended
Dr. B. R. Ramakrishna	Independent	Chairman	1	1
Shri R. N. Jha	Independent	Member	1	1
Adv. G. Kurian	Independent	Member	1	1
Dr. A. Narang	Independent	Member	1	1
Shri Y. P. Chillio	Independent	Member	1	0
Ms. (Dr.) Shatorupa	Independent	Member	1	1
Adv. D. Upadhyay	Independent	Member	1	1
Shri S. R. Patel	Independent	Member	1	1

7.6 Minutes of the meeting is placed in the subsequent Board meeting for information of the Board.

8.0 GENERAL BODY MEETINGS:

8.1 Details of last three Annual General Meetings held:

Financial Year	AGM Date	Time	Special Resolution, if any	Venue
2019-20	30.09.2020	11:00 AM	No	Through Video Conferencing ("VC")/ Other Audio Visual means ("OAVM"). Deemed Venue: NALCO Bhawan, P/1, Nayapalli Bhubaneswar- 751 013
2020-21	30.09.2021	11:00 AM	No	
2021-22	22.09.2022	11:00 AM	No	

8.2 No Extra-ordinary General Meeting has taken place during last 3 years.

8.3 Due to the outbreak of COVID-19, the Ministry of Corporate Affairs, Government of India, and the Securities and Exchange Board of India, has also allowed companies to conduct Annual General Meetings through Video Conferencing ("VC") / Other Audio-Visual Means ("OAVM") during the calendar year 2022, without the physical presence of members. Accordingly, the last Annual General Meeting was conducted through VC/OAVM.

8.4 Facility for joining the AGM through VC / OAVM and registration as speaker was provided to the eligible shareholders.

8.5 Remote e-voting facility was provided to the shareholders during the last Annual General Meeting (AGM) held on 22.09.2022. Members were provided with e-voting facility during the AGM, who could not exercise their vote through remote E-voting process.

8.6 Postal Ballot through e-voting:

8.6.1 During the year under review, ordinary/special resolutions for appointment of following Directors were passed by shareholders by requisite majority by way of postal ballot through notice dated 28.04.2022 through e-voting process:

Sl. No.	Description of the Resolution	Resolution
1.	Appointment of Shri Sadashiv Samantaray [DIN: 08130130] as Director (Commercial) as a Director of the Company.	Ordinary
2.	Appointment of Shri Sanjay Ramanlal Patel [DIN: 09545270] as an Independent Director of the Company.	Special

8.6.2 The Board of Directors of your Company appointed Ms. Savita Jyoti (M. No.: F3738, C. P. No.: 1796) of M/s. Savita Jyoti Associates, Practicing Company Secretaries, Hyderabad, as the Scrutinizer for scrutinizing the postal ballot through e-voting.

8.6.3 Despatch of the Postal Ballot Notice dated 28.04.2022, along with explanatory statement, to the eligible shareholders of the Company was completed on 04.05.2022.

8.6.4 E-voting period commenced on Monday, the 09th May, 2022 at 09:00 a.m. (IST) and ended on Tuesday, the 07th June, 2022 at 5.00 p.m. (IST).

8.6.5 Based on the Scrutinizer's Report, the results of the postal ballot process through e-voting were declared on 08.06.2022.

8.6.6 All statutory formalities relating to the above Postal Ballot were completed within the statutory time limit, as required under the provisions of the Act and SEBI Regulations.

9.0 MEANS OF COMMUNICATION:

9.1 The Company believes in sharing of material information and disclosure of results in time, as a measure of good corporate governance practice.

9.2 Unaudited financial results for the first three quarters and audited financial results for the fourth quarter and full year of the Company were announced within scheduled time as per SEBI (LODR) Regulations, 2015.

9.3 The results were disseminated to the Stock Exchanges through NSE Electronic Application Processing System (NEAPS) and BSE Listing Centre within scheduled time from conclusion of the Board meetings where the results were approved by the Board. Simultaneously, the results were uploaded in the Company's website www.nalcoindia.com.

9.4 Extract of the results were published in English and Odia newspapers, as detailed below:

Description of results	Date of meeting	Newspapers	Publication date
1st Qtr.- (Apr-June, 2022)	08.08.2022	Business Line (English) and Dharitri (Odia)	09.08.2022
2nd Qtr.- (July-Sept., 2022)	09.11.2022	Financial Express (English), Sambad (Odia) and Sanmarg (Hindi)	10.11.2022
3rd Qtr.- (Oct- Dec., 2022)	10.02.2022	Business Standard (English), Dharitri (Odia) and Azad Sipahi (Hindi)	11.02.2022
4th Qtr. - (Jan.–March, 2023 and year 2022-23)	24.05.2023	Economic Times (English), Prameya (Odia) and Navabharat (Hindi)	26.05.2023

9.5 The Company has adopted the e-communication practice to communicate to its shareholders. All kinds of letters/intimations/reports are sent to the registered e-mail ids of the shareholders who have registered their e-mail ids in the database. Shareholders who have not registered their e-mail ids are encouraged to register their e-mail ids for instant and better communication.

9.6 The Annual Report and other communique of the Company are hosted in the website in a user-friendly and downloadable form.

9.7 On-line access facilities has been provided in the "Investors' service" page in the website for shareholders to ascertain status of encashment of their dividend as well as other related information from time to time.

10.0 GENERAL SHAREHOLDER INFORMATION:

10.1 Company Registration Details:

Corporate Identity Number (CIN)	:	L27203OR1981GOI000920
Company's PAN	:	AAACN7449M
Company's GST	:	21AAACN7449M1Z9
Date of Registration	:	7th January, 1981
Financial Year	:	1st April - 31st March
Registered Office of the Company	:	NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751 013, Odisha.

10.2 Annual General Meeting for the financial year 2022-23:

MCA vide General Circular No. 10/2022 dated 28.12.2022 have allowed holding Annual General Meeting through Video Conferencing (VC)/Other Audio Visual Means (OAVM) on or before 30th September, 2023. Accordingly, the 42nd Annual General Meeting for this year is proposed to be held on Thursday, the 21st September, 2023 as detailed below:

Day and Date	Thursday, the 21st September, 2023
Time	11:00 AM
Deemed Venue	NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751 013
Mode	Through VC/OAVM

10.3 Financial Calendar for 2023-24:

Events	Tentative Date
Unaudited Financial results for the first three quarters	Within 45 days of closure of respective quarter
Audited Financial results for the year including 4th quarter results	Within 60 days from date of closure of the Financial Year.
Annual General Meeting for the year ending March 31, 2024	By September , 2024

10.4 Dividend Policy:

The Company has formulated a Dividend Distribution Policy and the same is available in the Company's website in the following link:
https://nalcoindia.com/wp-content/uploads/2019/01/Dividend-Policy.pdf

As per the guidelines issued by Department of Investment and Public Asset Management (DIPAM), every CPSE would pay a minimum annual dividend of 30% of PAT or 5% of net-worth whichever is higher subject to maximum dividend permitted under the Companies Act, 2013.

10.5 Payment of Dividend:

10.5.1 During the year the Company has paid interim dividend @ ₹ 3.50 per equity share amounting in total ₹ 642.82 crore in two tranches and final dividend for the FY 2021-22 @ ₹ 1.50 per equity share amounting to ₹ 275.49 crore.

10.5.2 The total dividend payout for the financial year 2022-23 was ₹ 918.32 crore as against ₹ 1,101.98 crore during the previous year. Dividend payout was 59.48% of the PAT against 37.33% of the previous financial year

10.5.3 The Board of Directors have recommended final dividend @ 20 % i.e. ₹ 1 per equity share for approval of the shareholders in the ensuing Annual General Meeting.

10.5.4 Dividend is subject to TDS in the hands of the shareholders w.e.f. 01.04.2020, as per Section 194 of the Income Tax, 1961. After declaration of the dividend, shareholders were advised to submit form 15G/15H, as applicable to ensure that no TDS was deducted from their dividend income. M/s. KFin Technologies Ltd., RTA of the Company also provided the following link to facilitate online submission of the Form 15G / Form 15H by the shareholders: https://ris.kfintech.com/form15/

10.6 Dividend history for past 5 years:

Year	Dividend per share (₹)	Payment date	Total Dividend (₹ in crores)	% of dividend to PAT
2017-18	(I)- ₹ 4.70 (F)- Nil	(I)- 28.02.2018 (F)- Nil	908.47	67.67%
2018-19	(I)- ₹ 4.50 (F)- ₹ 1.00	(I)- 28.03.2019 (F)-24.09.2018	1032.82	59.62%
2019-20	(I)- ₹ 1.50 (F)- ₹ 1.25	(I)-06.03.2020 (F)-14.10.2019	513.04	371.15%
2020-21	1st (I)- ₹ 0.50 2nd(I)- ₹ 2.00 (F)- Nil	1st (I)-16.12.2021 2nd (I)-31.03.2021 (F)- Nil	460.61	35.44%
2021-22	1st (I)- ₹ 2.00 2nd(I)- ₹ 3.00 (F)- ₹ 1.00	1st (I)- 10.12.2021 2nd(I)- 04.03.2022 (F)-25.10.2021	1101.98	37.33%
Interim (I), Final (F)				

10.7 Listing Details:

The listing details of NALCO shares are as follows:

Particulars	Stock Exchanges where shares are listed	
	BSE Limited	National Stock Exchange of India Ltd.
Address	Phiroze Jeejeebhoy Towers, Dalal Street, **MUMBAI - 400 001**	Exchange Plaza, Bandra-Kurla Complex, Bandra East, **MUMBAI - 400 051**
Scrip code	532234	NATIONALUM
Traded from	19.10.1992	28.04.1999
Stock code (ISIN)	INE 139A01034	INE 139A01034
Payment of Listing Fees for 2023-24	Paid on 27.04.2023	Paid on 19.04.2023

Note: Annual Custody/Issuer fee for the year 2023-24 has been paid by the Company to NSDL and CDSL.

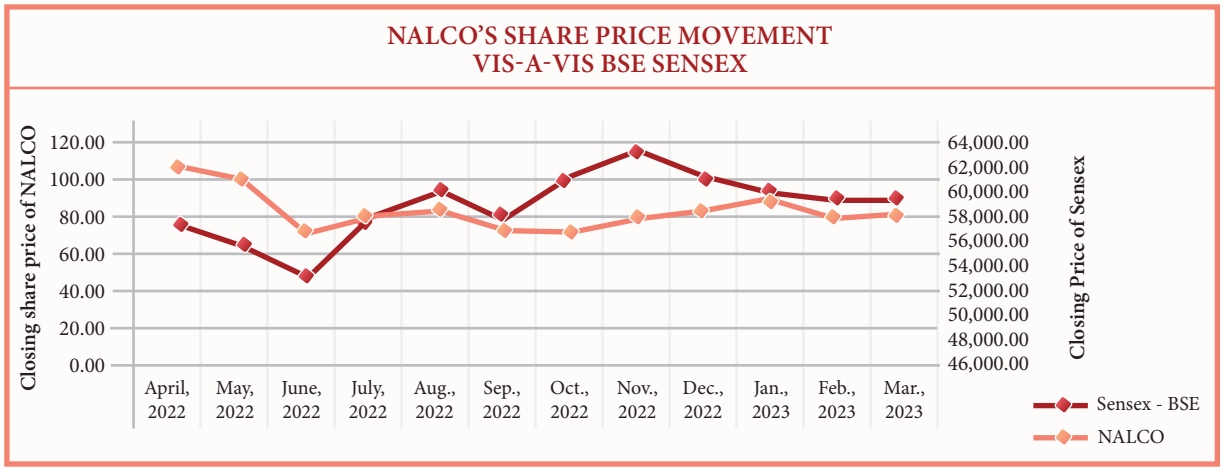
10.8 Market Price Data for Financial year 2022-23:

MONTH	BSE			NSE			MARKET CAPITALISATION (₹ in Crore)	
	SHARE PRICE (BSE) (Amount in ₹)		Avg. Turnover	SHARE PRICE (NSE) (Amount in ₹)		Avg. Turnover		
	H	L	(No. of Shares)	H	L	(No. of Shares)	BSE	NSE
April, 2022	132.45	104.40	10,89,053.26	132.40	104.30	1,70,46,093.89	21,842.15	21,833.78
May	106.75	86.75	13,32,950.76	106.75	86.75	1,71,61,237.05	17,529.31	17,511.67
June	95.35	67.05	10,62,706.82	95.35	67.00	1,64,66,227.66	14,874.13	14,870.37
July	78.55	67.00	9,26,064.10	78.60	66.95	1,74,51,033.71	13,399.49	13,400.24
August	83.40	76.00	9,54,651.60	83.45	75.95	1,33,54,961.95	14,584.41	14,586.71
September	83.75	67.00	12,27,565.68	83.80	66.95	1,37,98,002.50	14,003.75	13,993.72
October	73.60	68.05	10,90,928.11	73.60	68.05	1,13,32,990.95	12,944.57	12,934.43
November	78.80	69.80	10,21,345.29	78.85	70.00	1,21,32,576.43	13,672.76	13,676.17
December	82.45	70.00	11,05,021.86	82.50	69.80	1,28,72,346.32	14,282.95	14,278.56
January, 2023	86.50	80.05	10,37,342.95	86.55	80.05	1,52,85,675.71	15,305.48	15,303.25
February	84.40	75.65	6,74,567.45	84.65	75.65	96,79,013.95	14,578.53	14,577.90
March	85.79	75.73	8,53,813.57	85.80	75.70	1,41,80,549.33	14,800.52	14,797.39

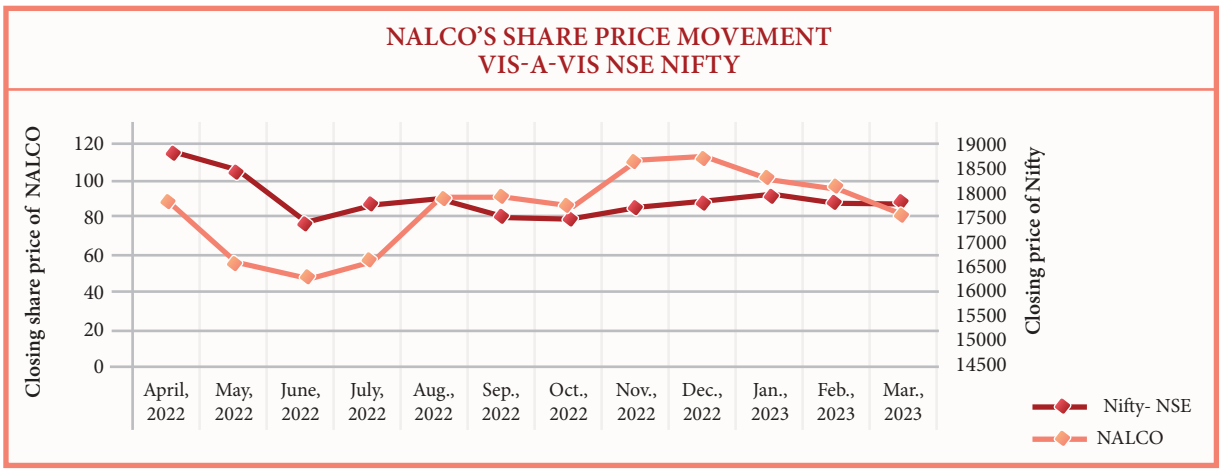
H=Highest, L=Lowest, Source: Websites of BSE & NSE

10.9 Performance in comparison to broad - based Indices:

BSE:



NSE:



10.10 Registrar and Transfer Agents:

There is a steady increase in shareholders base in the Company. To ensure efficient and effective services to the shareholders, the share registry activities were outsourced to M/s. KFin Technologies Limited (Formerly M/s. KFin Technologies Private Limited). M/s. KFin Technologies Limited carries out share related activities like transmission of shares, transposition of shares, issue of duplicate share certificates, deletion of name, change of address, bank particulars, processing and payment of dividend, issue of DDs in lieu of expired dividend warrants, reconciliation of dividend accounts with banks, taking care of IEPF related activities, registration of nominees, dematerialization/rematerialisation of shares etc. and redressal of grievances of the shareholders. The contact details of M/s. KFin Technologies Limited is as follows:

M/s. KFin Technologies Limited (Formerly M/s. KFin Technologies Private Limited).
Unit: National Aluminium Company Limited
Selenium Tower B, Plot 31 & 32, Financial District, Nanakramguda, Serilingampally Mandal,
Hyderabad - 500 032, Telangana.
Toll Free No.: 1800-309-4001, Email: einward.ris@kfintech.com

10.11 Share transfer system:

Company Secretary has been authorized by the Board to approve all requests/cases relating to transfer/ transmission/transposition and dematerialization of shares. However, cases pertaining to issue of new share certificates in case of torn/ mutilated/ defaced/ lost/ rematerialisation are approved by the Share Transfer Committee, consisting of all Functional Directors except Chairman-cum-Managing Director. Transfer of physical shares have been stopped w.e.f. 01.04.2019, in compliance to amended Regulation 40 of SEBI Regulations.

Compliance certificate, as required under Regulation 7(3) of SEBI Regulations, duly signed by the Company Secretary & Compliance Officer and Registrar & Transfer Agents had been submitted to the Stock Exchanges within scheduled time limit. Besides, pursuant to Regulation 40(10) of SEBI Regulations, certificate from M/s. SKM & Associates, Practicing Company Secretary confirming that all certificates had been issued within thirty days of the date of lodgment for transmission/transposition, sub-division, consolidation, renewal, exchange or endorsement of calls/ allotment monies had been submitted to Stock Exchanges within stipulated time.

10.12 Shareholding pattern as on 31.03.2023:

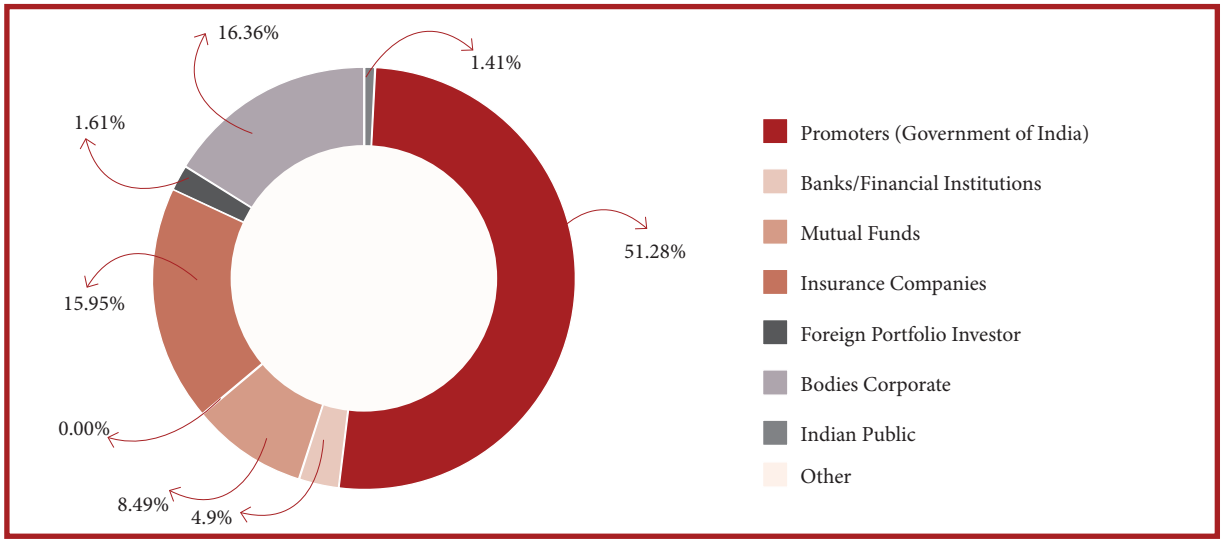
Sl. No.	Category	No. of Shareholders	No. of shares	% of shareholding
1.	Promoters (Government of India)	1	94,17,93,011	51.28
2.	Banks/ Financial Institutions	84	9,02,11,337	4.91
3.	Mutual Funds	60	15,59,07,119	8.49
4.	Insurance Companies	2	1,600	0.00
6.	Foreign Portfolio Investor	258	29,29,11,705	15.95
6.	Bodies Corporate	1,683	2,94,85,825	1.61
7.	Indian Public	6,59,691	30,04,97,135	16.36
8.	Others	15,393	2,58,24,055	1.41
	TOTAL	**6,77,172**	**1,83,66,31,787**	**100.00**

Note: Shares held under multiple folios and/or DP ID & Client ID have been considered separately in total number of shareholders.

10.13 Promoter's holding has changed in the following manner during the year under review:

Name promoter	No. of shares of (Beginning of the Year)	% of holding	Decrease during the year	Date of Change	Mode	Share balance	% of holding
President of India	94,17,93,011	51.28	-	-	-	94,17,93,011	51.28

10.14 Category-wise shareholding as on 31.03.2023:



10.15 Distribution of shareholding as on 31.03.2023:

No. of shares	No. of Shareholders	% of shareholders	No. of shares	% of share capital
1-200	4,93,086	72.82	2,92,01,641	1.59
201-500	92,031	13.59	3,31,32,501	1.80
501-1,000	44,988	6.64	3,62,55,659	1.97
1,001-50,000	46,387	6.85	18,26,63,827	9.95
50,001-1,00,000	276	0.04	2,01,33,014	1.10
1,00,001 and above	404	0.06	1,53,52,45,145	83.59
TOTAL	**6,77,172**	**100.00**	**1,83,66,31,787**	**100.00**

Note: Shares held under multiple folios and/or DP ID & Client ID have been considered separately in total number of shareholders.

10.16 Top 10 equity shareholders besides the promoter of the Company as on 31.03.2023:

Sl. No.	Name of shareholder	No. of shares	% of holding
1.	ICICI Prudential Midcap Fund	6,98,67,448	3.80
2.	LICI Gratuity Plus Balanced Fund	6,20,43,344	3.38
3.	Mirae Asset Large Cap Fund	4,46,05,010	2.43
4.	SBI Contra Fund	1,79,49,636	0.98
5.	The New India Assurance Company Limited	1,44,50,689	0.79
6.	Vanguard Emerging Markets Stock Index Fund, A Seri	1,27,55,446	0.69
7.	Vanguard Total International Stock Index Fund	1,17,96,515	0.64
8.	Acadian Emerging Markets Small Cap Equity Fund LlC	1,11,64,959	0.61
9.	Emerging Markets Core Equity Portfolio	1,08,02,548	0.59
10.	Government Pension Fund Global	1,06,81,138	0.58
	TOTAL	**26,61,16,733**	**14.49**

10.17 Dematerialisation / Rematerialisation of listed shares & liquidity:

10.17.1 The shares of the Company are in compulsory dematerialised segment and are admitted with both the Depositories i.e. National Securities Depository Ltd. (NSDL) and Central Depository Services (India) Limited (CDSL).

10.17.2 Reconciliation of the Share Capital Audit Report obtained from Practicing Company Secretary, has been submitted within statutory time period to the Stock Exchanges on quarterly basis.

10.17.3 Total no. of shares held in physical and in dematerialization mode as on 31.03.2023:

Particulars	No. of Shares	% to total shares	No. of shareholders
Physical	16,76,923	0.09	2,106
Demat (Electronic):			
NSDL	1,66,32,05,763	90.56	1,98,801
CDSL	17,17,49,101	9.35	4,76,265
Total	1,83,66,31,787	100.00	6,77,172

Note: Shares held under multiple folios and/or DP ID & Client ID have been considered separately in total number of shareholders.

10.17.4 During the year, 126 dematerialization requests involving 66,769 shares have been confirmed. No rematerialisation request was received during the year.

10.18 Outstanding GDRs/ADRs/Warrants or any Convertible Instruments, Conversion Date and likely impact on equity:

No GDRs/ADRs/Warrants or any Convertible instruments has been issued by the Company.

10.19 Equity Shares in Suspense Account:

No equity shares are lying in suspense account in terms of Regulation 34(3) and Schedule-V, Part-F of SEBI Regulations.

10.20 Transfer of unpaid/unclaimed dividend to IEPF:

In accordance with the provisions under the Act, ₹14,21,837/- pertaining to unclaimed interim dividend for financial year 2014-15 and an amount of ₹6,74,899/- pertaining to unclaimed final dividend for financial year 2014-15 have been transferred to Investor Education and Protection Fund, during the financial year 2022-23.

Shareholders can retrieve data relating to unpaid/unclaimed dividend from the website in the following link: https://ris.kfintech.com/clientservices/isc/divqry.aspx

10.21 Transfer of shares to IEPF:

10.21.1 In terms of Section 124(6) of the Act and IEPF Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, as amended from time to time, the shares in respect of which the dividend has not been encashed or claimed for a period of seven years or more, are required to be transferred to Investor Education and Protection Fund (IEPF) Authority account.

10.21.2 During the year, 44,248 shares of 172 shareholders were transferred to the demat account of IEPF Authority, opened with NSDL. Till the year ended 31st March, 2023, the Company has transferred 3,37,371 shares of 1,200 shareholders in compliance with the provisions of the Act. The detailed information of the shares transferred to IEPF is available in the link: https://d2ah634u9nypif.cloudfront.net/wp-content/uploads/2023/07/Shares-Transferred-to-IEPF.pdf

10.21.3 Shares and/or dividend transferred to IEPF can be claimed back from IEPF Authority by submitting application in Web Form IEPF-5. The procedure for claiming the shares/dividend from IEPF Authority and Form IEPF-5 is provided in the following link http://www.iepf.gov.in/IEPF/corporates.html

10.22 Commodity price risk or foreign exchange risk and hedging risk:

The Company does not have exposure on commodity hedging and hence the disclosure pursuant to SEBI Circular dated November 15, 2018 is treated as Nil. The report as per prescribed SEBI format is given below:

Commodity Name	Exposure in INR towards the particular commodity	Exposure in Quantity terms towards the particular commodity	% of such exposure hedged through commodity derivatives				
			Domestic Market		International Market		Total
			OTC	Exchange	OTC	Exchange	
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

10.23 List of credit ratings obtained by the entity along with any revision thereto:

Instrument Type	Rating/Outlook
Short-Term Bank Facilities	IND A1+
Long-Term Bank Facilities	IND AAA/Stable

The above ratings have been re-affirmed by the rating agency M/s. India Ratings & Research with their rating action publication of 24.07.2023.

11.0 OTHER DISCLOSURES:

11.1 The Company has formulated a Policy on Related Party Transactions which is available in the following web link: https://nalcoindia.com/wp-content/uploads/2018/12/NEW-RPT-NALCO.pdf. Related parties and related parties transactions are disclosed in note number 40 of both standalone financial statements and consolidated financial statements of the Company for the financial year 2022-23. A related party transaction was entered with M/s. GACL-NALCO Alkalies and Chemicals Private Limited (A JV Company of National Aluminium Company Limited and Gujarat Alkalies and Chemicals Limited) at arm's length basis for procurement of Caustic soda lye as per Caustic soda supply agreement during the year under report. A report in Form AOC-2 forms part of the Directors' Report.

11.2 Earlier, due to non-availability of requisite number of Independent Directors from 08.09.2020 of 2019-20 till 09.11.2021 of 2021-22, pursuant to SEBI Circular SEBI/HO/CFD/CMD/CIR/P/2020/12 dated 22nd January, 2020 (erstwhile circular ref. no. SEBI/HO/CFD/CMD/CIR/P/2018/77 dated 03rd May, 2018), NSE and BSE Limited had levied fines for the non-compliances of various regulations of SEBI (LODR) Regulations, 2015 for different quarters with regard to composition of Board and various statutory committees.

After appointment of requisite number of Independent Directors vide Ministry of Mines letter dated 10.11.2021, necessary communication was sent to NSE and BSE about compliances of various Regulations of SEBI (LODR) Regulations, 2015 w.e.f. quarter ended 31.12.2021.

During the financial year 2022-23, based on your Company's above representation, NSE vide their letter dated 21.09.2022 and BSE vide their e-mails dated 19.04.2021 waived all the penalties imposed by them for non-compliance of various Regulations of SEBI (LODR) Regulations, 2015 for different quarters.

11.3 As a measure of vigil mechanism, the Board had approved 'Whistle Blower Policy' and 'Fraud Prevention Policy' for directors and employees to report to the management concerns about unethical behaviour, actual or suspected fraud or violation of the company's code of conduct or ethics policy. The policy also safeguards against victimization of employees, who avail the mechanism.

It is also affirmed that no personnel of the company had been denied access to the Chairman, Audit Committee. Both the policies are available in Company's website in the following link:https://nalcoindia.com/wp-content/uploads/2018/12/Whistleblowerpolicy_nalco.pdf and https://nalcoindia.com/wp-content/uploads/2018/12/Nalcofraudpreventionpolicy.pdf

11.4 The Company does not have any subsidiary as on date. Hence, the Company has not framed any policy for determining material subsidiary.

11.5 The Company has a Currency Hedging Policy in place at present which is reviewed considering changes in the regulatory provision if any and market dynamics. However, the Company does have any hedging policy on sales.

11.6 The Company has not raised funds through preferential allotment or qualified Institutional placement during the year under review.

11.7 The Company has obtained a Certificate from M/s. SKM & Associates, Practicing Company Secretaries, confirming that none of the Directors on the Board of the Company have been debarred or disqualified from being appointed or continuing as Directors of the Companies either by Securities and Exchange Board of India or the Ministry of Corporate Affairs or any other Statutory Authorities. The said certificate forms part of this report.

11.8 During the year, there is no such instance where the Board has not accepted any recommendation of any Committee which is mandatorily required.

11.9 The Company has paid ₹ 0.94 crore during the year towards fees and expenses for all services rendered by the Statutory Auditors.

11.10 During the year, no case was reported under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. The Company has filed a 'Nil' Report to the District Officer of the state on 29.05.2023 as required under the POSH Act, 2013.

11.11 The web links for different policies have been provided under respective heads.

11.12 Compliance certificate obtained from the Statutory Auditors of the Company regarding compliances of conditions of corporate governance forms part of this report.

11.13 Insider Trading Code:

11.13.1 The Board has laid down a robust Code of Practices and Procedures for Fair Disclosure of Unpublished Price Sensitive Information in line with the requirements under the SEBI (Prohibition of Insider Trading) Regulations, 2015.

11.13.2 The objective of the Code is to ensure that no insider of the Company derives any benefit or assist others to derive any benefit on basis of any unpublished price sensitive information he is possessing, before it is made public.

11.13.3 Company Secretary is the Compliance Officer for this Code.

11.13.4 The Board has also approved Code of Conduct to regulate, monitor and report trading by its employees and other connected persons.

11.13.5 Insiders are entitled to formulate trading plan subject to certain conditions as enumerated in the Insider Trading Code and approval of the Compliance Officer. The trading plan is to be implemented mandatorily.

11.13.6 Designated Persons and their immediate relatives are not allowed to trade in securities when the trading window is closed. Permission of Compliance Officer is required to deal in securities beyond limits specified in the code. All Directors/ Designated Employees are required to disclose their transaction to the Stock Exchanges where Company's shares are listed within stipulated time when value of such transaction exceeds the threshold limit prescribed under the code.

11.13.7 The code is displayed on the Company's website at https://nalcoindia.com/wp-content/uploads/2019/01/AMENDED-COPP.pdf

11.14 Code of Conduct:

11.14.1 The company has devised a Model Code of Business Conduct and Ethics ('the Code'), applicable to all the Board Members and the Senior Management (one level below the Board of Directors) of the Company. The Code is available in Company's website in the link: https://nalcoindia.com/wp-content/uploads/2019/01/CodeofConduct.pdf

11.14.2 All Directors on their induction to the Board are provided with copy of the Code and acknowledge receipt of the same. Further, all the members of the Board and senior management personnel affirm the Code on annual basis at the beginning of the financial year.

11.15 Declaration by the Chairman-cum-Managing Director as required under Schedule V of SEBI Regulations:

DECLARATION

The members of the Board and Senior Management Personnel have affirmed compliance of the Code of Conduct for Board members and senior management personnel for the financial year ended on March 31, 2023.

Sd/-
(S. Patra)
Chairman-cum-Managing Director
DIN : 06500954

11.16 CEO/CFO Certification:

The CEO/CFO certificate under Regulation 17(8) of SEBI (LODR) Regulations, 2015, duly signed by Shri Sridhar Patra, Chairman-cum-Managing Director and Shri R. C. Joshi, Director (Finance) was placed before the meeting of the Board of Directors held on 24.05.2023.

11.17 Disclosure under DPE guidelines:

11.17.1 No expenditure has been debited in the books of accounts not related to business.

11.17.2 No expenditure is incurred which are personal in nature and incurred for the Board of Directors and top management.

11.17.3 Details of administrative expenditure and office expenses as a percentage of total expenses vis-à-vis financial expenses and reasons for increase are as follows:

(₹ in crore)

Particulars	2022-23	2021-22
Administrative and office expenses	118.74	101.88
Total expenses	12,535.50	10,523.80
Administrative and office expenses as a % of total expenses	0.95	0.97
Financial expenses	12.92	23.13

11.17.4 The Company is submitting self-appraisal reports on compliance of the guidelines on Corporate Governance, prescribed by the Dept. of Public Enterprises (DPE) on quarterly basis. The Company is rated 'Excellent' as per the self-appraisal report for the financial year 2022-23. The self-appraisal report for 2022-23 can be accessed in the website at https://d2ah634u9nypif.cloudfront.net/wp-content/uploads/2023/04/Self-appraisal-31.03.2023.pdf

11.17.5 The Company has not received any presidential directives during the year and during last three years.

11.17.6 During the year, after appointment of requisite number of Independent Directors, the Company complied with all the requirements of the DPE Guidelines on Corporate Governance.

11.18 Disclosure under Schedule - V of SEBI (LODR) Regulations, 2015:

SEBI vide its notification dated 14.06.2023 has mandated listed companies to provide particulars of senior management including the changes therein since the close of the previous financial year. Accordingly, the particulars of senior management including the changes therein since the closure of the previous financial year are as under:

Sl. No.	Post	As on 31.03.2022	As on 31.03.2023	Remarks indicating changes, if any, in the post operated from 31.03.2022 to 31.03.2023
1.	ED (Production)	Shri A. K. Swain, ED(Production)	Shri A. K. Swain, ED(Production)	-
2.	ED (M&R)	Shri Rabi Sankar Das, ED(M&R)	Shri Sushil Kumar Padhee, ED(M&R)	After superannuation of Shri Rabi Sankar Das as ED(M&R) on 31.03.2022, Shri Sushil Kumar Padhee, GM (CRG) was re-designated ad ED (M&R) I/c. w.e.f. 01.04.2022. Thereafter, Shri Sushil Kumar Padhee was promoted as ED(M&R) 28.04.2022.
3.	ED (S&P)	Shri Ambika Prasad Panda ED(S&P)I/c	Shri Bhimsen Pradhan, ED(S&P)	Consequent upon selection for the post of Director(P&T) NALCO, Shri Manasa Prasad Mishra ED(S&P) was assumed the charge form 01.11.2021, Shri Ambika Prasad Panda, GGM (CPP) was re-designated ad ED (S&P) I/c. w.e.f. 01.11.2021. Thereafter, Shri A P Panda was promoted as ED(S&P) on 28.04.2022. After superannuation of Shri A P Panda as ED(S&P) on 30.11.2022, Shri Bhimsen Pradhan, GGM(AR) was re-designated as ED(S&P)I/c w.e.f 01.12.2022. Thereafter, Shri Bhimsen Pradhan was promoted as ED(S&P) w.e.f 10.02.2023.
4.	ED (P&T)	Shri Sanjay Krishna Patel, ED(P&T)	Shri Kalikinkar Panda, ED(P&T) on 31.03.2022,	After superannuation of Shri Sanjay Krishna Patel, as ED(P&T) Shri Kalikinkar Panda, ED (P&T)I/c was promoted as ED(P&T) on 28.04.2022.
5.	ED (BD)	Vacant	Shri Subrata Mohanty, ED(BD)	After superannuation of Shri Sudeepta Kishore Dash, as ED(CP&BD) on 31.03.2018, post was vacant till 09.02.2023. Shri Subrata Mohanty, GGM(System) was promoted as ED(BD) on 10.02.2023.
6.	ED (Corporate Affairs)	Vacant	Shri Pradyumna Kumar Pradhan, ED(Corporate Affairs)	After superannuation of Shri Amarjit Singh Ahluwalia, as ED (Corporate Affairs) on 31.10.2017, post was vacant till 09.02.2023. Shri Pradyumna Kumar Pradhan, GGM(Corporate Affairs-Marketing) was promoted as ED(Corporate Affairs) on 10.02.2023.
7.	ED (H&A)	Vacant	Vacant	After superannuation of Shri Sanjay Kumar Mishra, as ED(H&A) on 31.10.2020, post is vacant till date. Shri A. Rath GM(Admin. and PR&CC), Shri H. S. Pradhan GM(H&A), Shri S. K. Patra GM(H&A) are discharging the functions of Administration and HR Departments respectively.
8.	ED (Finance)	Shri Santosh Kumar Dash, GGM(Finance)	Shri Braja Kishore Dash, GGM(Finance)	After superannuation of Shri Saranga Dhar Sahu, as ED(Finance) on 31.05.2020, Shri Santosh Kumar Dash GGM(Finance) was exercising the powers of ED from 01.06.2020. Thereafter Shri Santosh Kumar Dash, GGM (Finance) was promoted as ED(Finance) on 28.04.2022 After superannuation of Shri Santosh Kumar Dash ED(Finance) on 31.07.2022, Shri Braja Kishore Dash, GGM(Finance) is exercising the powers of ED(Finance).
9.	ED (Materials)	Vacant	Shri B. D. Mohanty, GGM (Materials)	Consequent upon selection for the post of Director (Commercial) NALCO, Shri Sadashiv Samantaray ED(Commercial-Materials), assumed the charge from 22.03.2022, Thereafter the post was vacant. Thereafter, Shri B. D. Mohanty, GGM (Material) is exercising the powers of ED (Materials).
10	ED (Marketing)	Shri Rabi Narayan Mohapatra, ED(Marketing)	Shri J. R. Kapoor, GGM (Marketing)	After superannuation of Shri Rabi Narayan Mohapatra, as ED(Marketing) on 28.02.2023, Shri J. R. Kapoor, GGM (Marketing) is exercising the powers of ED(Marketing) from 01.03.2023.
11.	ED (Company Secretary)	Vacant	Vacant	After superannuation of Shri Karanam Nagaraja Ravindra, as ED(Company Secretary) on 31.05.2017, post was vacant till date. Shri Nayan Kumar Mohanty GGM & Company Secretary is discharging the functions of Company Secretary.

12.0 NON–MANDATORY REQUIREMENTS:

The status of compliance with discretionary requirements under Regulation 27(1) read with Part-E of Schedule-II of SEBI Regulations are as under:

(i) The Company has been getting unqualified audit report from Statutory Auditors and C&AG for last several years which indicate a regime of unqualified financial statements.

(ii) The Internal Auditors report to the Chief Internal Auditor of the Company and in turn, the Chief Internal Auditor reports to the Audit Committee.

13.0 REGISTERED OFFICE AND PLANT LOCATIONS OF THE COMPANY:

Registered & Corporate Office NALCO Bhawan, Plot No. P/1, Nayapalli, Bhubaneswar – 751013, (Odisha)	
Smelter Plant Nalco Nagar, Angul - 759 145, (Odisha)	**Mines & Refinery** Mines & Refinery Complex, Damanjodi - 763 008, Dist.-Koraput, (Odisha)
Utkal D&E Coal Mines, Raijharan Village, Chhendipada, Angul-759 130 (Odisha)	**Captive Power Plant** Angul - 759 122, (Odisha)
Port Facilities Opposite Ore Handling Complex, Port Area, Visakhapatna-560035 Andhra Pradesh	**Sangli 50.4 MW Wind Power Plant** National Aluminium Company Ltd., Village-Mendhigiri, Taluk-Jath, Dist.- Sangli, Maharashtra- 416404
Jaisalmer 47.6 MW Wind Power Plant National Aluminium Company Limited, Village - Ludarva, Kahela, Khadero-Ki-Dhani, Tawariya, Chatrel Division/ Taluk/District - Jaisalmer, Rajasthan - 345001	**Gandikota 50.4 MW Wind Power Plant** National Aluminium Company Limited, Village - Gandikota, Division - Prodattur, Taluka - Jammalmadugu, District - Kadapa, Andhra Pradesh
Kayathar 25.5 MW Wind Power Plant National Aluminium Company Limited Village- Onamakulam,Tehsil- Kayathar, District- Tuticorin, Tamil Nadu- 628303	**Jaisalmer 50 MW Wind Power Plant** National Aluminium Company Limited Village –Devikot, Tehsil-Fatehgarh, Division/Taluk/District – Jaisalmer, Rajasthan- 245009
PORT FACILITIES:	
Visakhapatnam Opp. Ore Handling Complex, Port Area, Visakhapatnam - 530 035 Andhra Prades	**Paradip (Port Office)** 'V' Point, Badapadia, Paradip - 751 142
REGIONAL OFFICES:	
Eastern Region 1st Floor, J. K. Millennium Centre, 46-D, Chowringhee Road, Kolkata - 700 071	**Western Region** 215, T.V. Industrial Estate, S.K. Ahire Marg, Worli, Mumbai - 400 030
Northern Region Core - 4, 5th Floor, South Tower, District Centre, Scope Minar, Laxmi Nagar, Delhi - 110 092	**Southern Region** 3E, Century Plaza, 560, Anna Salai, Teynampet, Chennai-600 018
STOCK YARDS:	
Raipur M/s. National Aluminium Company Limited C/o Ekta Enterprises, Monet Road, Mandir Hasaud, Raipur, Chhattisgarh - 492101	**Kolkata** M/s. National Aluminium Company Limited C/o. Balmer Lawrie & Company Limited, WH, 1-Sonapur Road, Kolkata, - 700 088, West Bengal
Jaipur M/s. National Aluminium Company Limited C/o. Om Prakash Agarwal, Khasra 9/2/3, 9/2/4 & 16/12, Gram Nimeda, Near Bindyaka Industrial Area, Sirsi Road, Jaipur - 302012, Rajasthan.	**Visakhapatnam** M/s. National Aluminium Company Limited C/o M/s. Visakhapatnam Port Logistics Park Ltd., (A Unit of M/s. Balmer Lawrie & Co Limited), Sy. No. 1P/2P, Mulagada Village, Beside Mindi Rail Siding, Visakhapatnam -530012
Baddi M/s. National Aluminium Company Limited C/o. NSIC Limited, Village:- Dharampur, P.O. : Baddi, Tehsil : Nalagarh, Dist. : Solan - 173205, Himachal Pradesh	**Chennai** M/s. National Aluminium Company Limited C/o. NSIC Ltd., Plot No. A12, CMDA Truck Terminal, Ponniamanmedu Post, Madhavaram, Chennai - 600 110.
Vadodara M/s. National Aluminium Company Limited C/o. Central Warehousing Corporation, 1B, Central Warehouse, Near Ranoli Flyover, Ranoli, Karachiya, Vadodara, Gujarat - 391350	**New Delhi** M/s. National Aluminium Company Limited C/o. Supreme Road Transport Pvt. Ltd., Khasra 46/15/1, Village Tikri Kalan, Netaji Subash Vihar, New Delhi-110041

14.0 ADDRESS FOR CORRESPONDENCE:

14.1 Compliance Officer:

GGM & Company Secretary
National Aluminium Company Ltd
NALCO Bhawan, P/1, Nayapalli
Bhubaneswar - 751 013
E-mail: company_secretary@nalcoindia.co.in

14.2 Registrar and Transfer Agents:

M/s. KFin Technologies Limited (Formerly M/s. KFin Technologies Private Limited)
Unit: National Aluminium Company Limited
M/s. KFin Technologies Limited
Selenium Tower B, Plot 31 & 32,
Financial District, Nanakramguda, Serilingampally Mandal,
Hyderabad - 500 032, Telangana.
Toll Free No.: 1800 309 4001
Email: einward.ris@kfintech.com

CERTIFICATE OF NON-DISQUALIFICATION OF DIRECTORS

(Pursuant to Regulation 34(3) and Schedule V Para-C clause (10)(i) of the SEBI Listing Obligations and Disclosure Requirements) Regulations, 2015)

To,
The Members,
National Aluminium Company Limited
Nalco Bhawan, Plot No. P/1,
Nayapalli, Bhubaneswar-751013, Odisha

We have examined the relevant registers, records, forms, returns and disclosures received from the Directors of National Aluminium Company Limited having CIN-L27203OR1981GOI000920 and having its Registered Office at NALCO Bhawan, Plot No. P/1, Nayapalli, Bhubaneswar-751013, Odisha(hereinafter referred to as 'the Company'), produced before us by the Company for the purpose of issuing this certificate, in accordance with Regulation 34(3) read with Schedule V Para-C Sub clause 10(i) of the Securities and Exchange Board of India(Listing Obligations and Disclosure Requirements) Regulations,2015.

In our opinion and to the best of our information and according to the verifications (including Director Identification Number (DIN) status at the portal www.mca.gov.in), as considered necessary and explanations furnished to us by the Company and its officers, we hereby certify that none of the Directors on the Board of the Company as stated below for the Financial Year ended 31st March, 2023 have been debarred or disqualified from being appointed or continuing as Directors of the companies by Securities and Exchange Board of India, Ministry of Corporate Affairs or any such other Statutory Authority.

Sr. No.	Name of Director	DIN	Date of appointment in Company
1.	Shri Sridhar Patra	06500954	01.09.2018
2.	Shri Sanjay Lohiya, IAS	07151125	09.11.2020
3.	Dr. Veena Kumari Dermal, IPoS	08890469	20.01.2022
4.	Shri Radhashyam Mahapatro	07248972	01.01.2020
5.	Shri Manasa Prasad Mishra	08951624	01.11.2020
6.	Shri Ramesh Chandra Joshi	08765394	04.02.2022
7.	Shri Sadashiv Samantaray	08130130	22.03.2022
8.	Shri Pankaj Kumar Sharma	10041341	01.02.2023
9.	Shri Ravi Nath Jha	09396382	11.11.2021
10.	Dr. B. R. Ramakrishna	02251602	15.11.2021
11.	Adv. George Kurian	09398434	12.11.2021
12.	Dr. Ajay Narang	00368054	16.11.2021
13.	Shri Y. P. Chillio	09396182	11.11.2021
14.	Ms. (Dr.) Shatorupa	09396503	12.11.2021
15.	Adv. Dushyant Upadhyay	09397101	12.11.2021
16.	Shri Sanjay Ramanlal Patel	09545270	23.03.2022

Ensuring eligibility of every Director on their appointment/continuity on the Board is the responsibility of the management of the Company. Our responsibility is to express an opinion on their appointment/continuity, based on our verification. This certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

For SKM & Associates
Company Secretaries

Sd/-
(CS Sanjay K. Mahapatra)
Senior Partner
CP No.: 6002, FCS No.:3488

Place: Bhubaneswar
Date: 12/05/2023
UDIN: F003488E000294779

INDEPENDENT AUDITORS' CERTIFICATE ON CORPORATE GOVERNANCE

To
The Members
National Aluminium Company Limited
Bhubaneswar

1. This Certificate is issued in view of Engagement Letter dated 10.07.2023.

2. We have examined the compliance of conditions of Corporate Governance by National Aluminium Company Limited ("the Company") for the year ended 31st March, 2023, as stipulated in Regulations 17 to 27, clause (b) to (i) of Regulation 46(2) and paragraphs C and D of Schedule V of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations,2015 ('the Regulations), as amended.

Management's Responsibilities for compliance with the conditions of the Regulations

3. The compliance of conditions of Corporate Governance is the responsibility of the Management. The responsibility includes the design, implementation and maintenance of internal control and procedures to ensure the compliance with the conditions of the Corporate Governance stipulated in the Regulations.

Auditor's Responsibilities

4. Our responsibility is limited to examining the procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of the Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.

5. Pursuant to the requirements of the Regulations and based on the relevant records and documents maintained by the Company for the purpose of compliance of the conditions of corporate governance, it is our responsibility to obtain a reasonable assurance whether the Company has complied with the conditions of Corporate Governance as stipulated in the Regulations for the year ended 31st March, 2023 and issue a certificate thereon.

6. We conducted our examination in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) (the 'Guidance Note') issued by the Institute of Chartered Accountants of India ('ICAI'). The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by ICAI.

7. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

Opinion

8. Based on our examination of the relevant records and in our opinion and to the best of our information and according to the explanations provided to us, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in Regulations 17 to 27, Clause (b) to (i) of Regulation 46(2) and paragraphs C and D of Schedule V of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 as amended, during the year ended March 31, 2023.

9. We further state that such compliance is neither an assurance as to the future viability of the Company nor as to the efficiency of effectiveness with which the Management has conducted the affairs of the Company.

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No: 058221
UDIN: 23058221BGXMBH7765

For A.K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B.R. Mohanty)
Partner
Membership No: 057266
UDIN: 23057266BGSMUJ2756

Place: Bhubaneswar
Date: 21st August, 2023

ANNEXURE-VI

Form No. AOC-2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Companies Act, 2013 and Rule 8(2) of the Companies (Accounts) Rules, 2014)

Form for disclosure of particulars of contracts / arrangements entered into by the company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arm's length transactions under third proviso thereto:

1. Details of contracts or arrangements or transactions not at arm's length basis:

(a) Name(s) of the related party and nature of relationship: NIL.

(b) Nature of contracts/arrangements/transactions: Not Applicable.

(c) Duration of the contracts / arrangements/transactions: Not Applicable.

(d) Salient terms of the contracts or arrangements or transactions including the value, if any: Not Applicable.

(e) Justification for entering into such contracts or arrangements or transactions: Not Applicable.

(f) Date(s) of approval by the Board: Not Applicable.

(g) Amount paid as advances, if any: Not Applicable.

(h) Date on which the special resolution was passed in general meeting as required under first proviso to section 188: Not Applicable.

2. Details of material contracts or arrangement or transactions at arm's length basis:

(a) Name(s) of the related party and nature of relationship: M/s. GACL-NALCO Alkalies and Chemicals Private Limited (GNAL) (A JV Company of National Aluminium Company Limited and Gujarat Alkalies and Chemicals Limited).

(b) Nature of contracts / arrangements / transactions: Procurement of Caustic soda Lye as per Caustic soda Supply Agreement.

(c) Duration of the contracts / arrangements / transactions: Orders are placed against Caustic soda Supply Agreement for supply within financial year 2022-23.

(d) Salient terms of the contracts or arrangements or transactions including the value, if any: The supplies to be made based on tender discovered price against the open tender and total contract value in financial year 2022-23 is ₹102.92 crore.

(e) Date(s) of approval by the Board, if any: Approval was obtained for the aforesaid orders in 132nd Audit Committee meeting held on 09.11.2022.

(f) Amount paid as advances, if any: NIL.

For and on behalf of the Board of Directors

Sd/-
(Sridhar Patra)
Chairman-cum-Managing Director
DIN : 06500954

ANNEXURE-VII

FORM NO. MR-3
SECRETARIAL AUDIT REPORT FOR THE FINANCIAL YEAR 2022-23

[Pursuant to Section 204(1) of the Companies Act, 2013 and Rule 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To,
The Members
National Aluminium Company Limited,
NALCO Bhawan, Plot No.P/1, Nayapalli,
Bhubaneswar, Odisha - 751013

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by National Aluminium Company Limited (hereinafter called the Company). Secretarial Audit was conducted in a manner that provided us reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the company and also the information provided by the company, its officers, agents and authorized representatives during the conduct of secretarial audit, we hereby report that in our opinion, the company has, during the audit period covering the financial year ended on 31st March, 2023 ('Audit Period') complied with the statutory provisions listed hereunder and also that the Company has proper board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the company for the Audit Period under review according to the provisions of:

(i) The Companies Act, 2013(the Act) and the rules made there under;

(ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made thereunder;

(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;

(iv) Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowing;

(v) The following regulations and guidelines prescribed under the securities and Exchange Board of India Act, 1992('SEBI Act') viz.: -

  (a) The Securities and Exchange Board of India(Listing Obligation and Disclosure Requirements) Regulations, 2015 as amended;

  (b) The Securities and Exchange Board of India (Buyback of Securities) Regulations,2018 as amended; (Not applicable for the period under review);

  (c) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeover) Regulations, 2011 as amended; (Not applicable for the period under review);

  (d) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, as amended;

  (e) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations,2018, as amended (Not applicable for the period under review);

  (f) Securities and Exchange Board of India (Share Based Employee Benefits and Sweat Equity) Regulations, 2021, as amended (Not applicable for the period under review);

  (g) The Securities and Exchange Board of India (Issue and Listing of Non-Convertible Securities) Regulations, 2021(Not applicable for the period under review);

  (h) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2021 (Not applicable for the period under review);

  (i) The Securities and Exchange Board of India (Depositories and Participants) Regulations, 2018.

(vi) The other laws as may be applicable specifically to the Company are:

  a) The Mines Act, 1952;

  b) Mines & Minerals (Development & Regulation) Act, 1957, as amended;

  c) The Explosives Act, 1984;

  d) The Environment Protection Act, 1986;

  e) The Forest Conservation Act,1980;

  f) The Water (Prevention & Control of Pollution Act), 1974;

  g) The Air (Prevention and Control of Pollution) Act, 1981;

  h) Indian Boilers Act, 1923.

  i) Motor Vehicle Act, 1988

  j) Public Liability Insurance Act, 1991

  k) National Environmental Tribunal Act, 1995

Secretarial Audit Report

l) National Environment Appellate Authority, 1997

m) Energy Conservation Act, 2001

n) National Green Tribunal Act, 2010

o) Indian Forest Act, 1947

p) Wildlife Protection Act, 1972

q) Orissa Forest Act, 1972

r) Forest (Conservation) Act, 1980

s) Bio-Diversity Conservation Act, 2002

t) Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

u) Factories Act, 1948

v) Indian Electricity Act, 2003

w) National Disaster Management Act, 2005

x) Orissa Industries (Facilitation) Act, 2004

y) Right to Information Act, 2005

z) Panchayats (Extension in Scheduled Areas) Act, 2006

Za) Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 (POSH Act)

We have also examined compliance with the applicable clauses of the Secretarial Standards issued by The Institute of Company Secretaries of India (ICSI).

During the period under review, the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. as mentioned above.

We further report that: -

(A) Composition of Board:

During the period under review, the Board of Director of the Company comprised of the followings Directors:

LIST OF DIRECTORS DURING THE YEAR ENDED 31.03.2023				
Sl. No.	**Name of the Director**	**Position Held**	**Date of Appointment**	**Date of Cessation**
		WHOLE-TIME DIRECTORS		
1.	Shri Sridhar Patra	Chairman-cum-Managing Director	17/12/2019	-
2.	Shri Radhashyam Mahapatro	Director (HR)	01/01/2020	-
3.	Shri Manasa Prasad Mishra	Director (P&T)	01/11/2020	-
4.	Shri Ramesh Chandra Joshi	Director (Finance)	04/02/2022	-
5.	Shri Sadashiv Samantaray	Director (Commercial)	22/03/2022	-
6.	Shri Pankaj Sharma	Director (Production)	01/02/2023	-
7.	Shri Bijay Kumar Das	Director (Production)	01/12/2020	31/01/2023
		PART-TIME OFFICIAL DIRECTORS		
1.	Shri Sanjay Lohiya, IAS	Director	09/11/2020	-
2.	Dr. Veena Kumari Dermal, IPoS	Director	20/01/2022	-
		PART-TIME NON-OFFICIAL (INDEPENDENT) DIRECTORS		
1.	Shri Ravi Nath Jha*	Director	11/11/2021	-
2.	Dr. B. R. Ramakrishna*	Director	15/11/2021	-
3.	Adv. George Kurian*	Director	12/11/2021	-
4.	Dr. Ajay Narang*	Director	16/11/2021	-
5.	Shri Y. P. Chillio*	Director	11/11/2021	-
6.	Ms. (Dr.) Shatorupa*	Director	12/11/2021	-
7.	Adv. Dushyant Upadhyay*	Director	12/11/2021	-
8.	Shri Sanjay Ramanlal Patel#	Director	23/03/2022	-

* Though appointed on various dates after completion of statutory formalities, their three years period is reckoned w.e.f. 10.11.2021 i.e. the date of Government of India Order.

\# Though appointed on 23.03.2022 after completion of statutory formalities, his three years period is reckoned w.e.f. 22.03.2022 i.e. the date of Government of India Order.

As regards to the requirements under SEBI (LODR) Regulations, 2015 and Section 149 of the Companies Act, 2013, the composition of the Board was in compliance with the applicable provisions during the period under review.

(B) Board Meetings:

During the financial year under review, eight meetings of the Board of Directors, i.e., 334th to 341st were held on 28/04/2022, 25/05/2022, 08/08/2022, 21/09/2022, 09/11/2022, 17/01/2023, 10/02/2023 and 13/03/2023 respectively. Necessary quorum was present in all those meeting. The gap between two consecutive Board Meetings was not more than 120 days.

Adequate notices were sent to all the Directors for the Board Meetings. Agenda and detailed notes on agenda were sent at least 7 days in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items placed before the meeting for the meaningful participation at the meeting.

All decisions at the Board Meetings were carried out unanimously and decisions were recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(C) Statutory Committees of the Board:

All Statutory Committees of the Board are in place. The compositions of these Committees are in compliance with the provisions under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE Guidelines on Corporate Governance.

(i) Audit Committee:

The Audit Committee of the Company comprised of the following Directors:

1. Dr. Ajay Narang, Independent Director- Chairman
2. Dr. B.R. Ramakrishna, Independent Director- Member
3. Adv. Dushyant Upadhyay, Independent Director- Member
4. Shri Y.P. Chillio, Independent Director- Member
5. Director (Production) – Member

Director (Finance) is a Special Invitee to the Committee.

The Committee met seven times during the financial year under review, i.e., 128th meeting to 134th meeting, which were held on 25/05/2022, 08/08/2022, 21/09/2022, 28/10/2022, 09/11/2022, 09/02/2023 and 10/02/2023 respectively. Necessary quorum was present in all those meetings. The gap between two consecutive Audit Committee Meetings was not more than 120 days.

Adequate Notices for the Audit Committee Meetings were sent to all the Members of the Committee. Agenda and detailed notes on agenda were sent at least 7 days in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meetings and for meaningful participation at the meeting.

All recommendations/decisions at the Audit Committee Meetings were carried out unanimously and decisions were recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(ii) CSR & Sustainability Development Committee:

The CSR & Sustainability Development Committee of the Company comprised of the following Directors:

1. Adv. Dushyant Upadhyay, Independent Director- Chairman
2. Dr. B.R. Ramakrishna, Independent Director- Member
3. Ms. (Dr.) Shatorupa, Independent Director- Member
4. Director (HR)-Member
5. Director (Production)-Member

The Committee met twice during the financial year under review, i.e. 25th meeting on 24/05/2022 and 26th meeting on 07/08/2022 respectively. Necessary quorum was present in both the meetings.

Adequate Notices for the CSR & Sustainability Development Committee Meetings were sent to all the Members of the Committee. Agenda and detailed notes on agenda were sent at least 7 days in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meetings and for meaningful participation at the meeting.

All recommendations/decisions at the CSR & Sustainability Development Committee Meetings were carried out unanimously and decisions were recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(iii) Nomination and Remuneration Committee:

The Nomination and Remuneration Committee of the Company comprised of the following Directors:

1. Ms. (Dr.) Shatorupa, Independent Director- Chairperson
2. Shri Ravi Nath Jha, Independent Director- Member
3. Shri Y.P. Chillio, Independent Director- Member

Director (HR) and Director (Finance) are invitees to the Committee.

The Committee met three times during the financial year under review, i.e. 6th meeting to 8th meeting which were held on 19/04/2022, 21/09/2022 and 10/02/2023 respectively. Necessary quorum was present in all those meetings.

Adequate Notices for the Nomination and Remuneration Committee Meetings were sent to all the Members of the Committee. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meetings and for meaningful participation at the meeting.

All recommendations/decisions at the Nomination and Remuneration Committee Meetings were carried out unanimously and decisions were recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(iv) Stakeholders Relationship Committee:

The Stakeholders Relationship Committee of the Company comprised of the following Directors:

1. Adv. George Kurian, Independent Director- Chairman
2. Shri Ravi Nath Jha, Independent Director- Member
3. Shri Y.P. Chillio, Independent Director- Member

The Committee met twice during the financial year under review, i.e. 24th meeting on 28/10/2022 and 25th meeting on 23/03/2023 respectively. Necessary quorum was present in all those meetings.

Adequate Notice for the Stakeholders Relationship Committee Meeting was sent to all the Members of the Committee. Agenda and detailed notes on agenda were sent at least 7 days in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

All recommendations/ decisions at the Stakeholders Relationship Committee Meeting were carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(v) Risk Management Committee:

The Risk Management Committee of the Company comprised of the following Directors:

1. Dr. B.R. Ramakrishna, Independent Director- Chairman
2. Adv. George Kurian, Independent Director- Member
3. Dr. Ajay Narang, Independent Director- Member
4. Director (Production)- Member
5. Director (Finance)- Member

The Committee met twice during the financial year under review, i.e. 14th meeting on 01/09/2022 and 15th meeting on 27/02/2023 respectively. Necessary quorum was present in all those meeting. The gap between two consecutive Risk Management Committee Meetings was not more than 180 days.

Adequate Notice for the Risk Management Committee Meeting was sent to all the Members of the Committee. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

All recommendations/ decisions at the Risk Management Committee Meetings were carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(vi) Technology Committee:

The Technology Committee of the Company comprised of the following Directors:

1. Shri Y. P. Chillio, Independent Director- Chairman
2. Adv. George Kurian, Independent Director- Member
3. Dr. Ajay Narang, Independent Director- Member
4. Director (P&T)- Member
5. Director (Production)- Member

During the financial year under review, the committee met once i.e., 34th meeting was held on 23/03/2023. Necessary quorum was present for the said committee meeting.

Adequate Notice for the Technology Committee Meeting was sent to all the Members of the Committee. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

All recommendations/ decisions at the Technology Committee Meetings were carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(D) Other Committees Constituted by the Board-

(i) Human Resource (HR) Committee:

The Human Resource (HR) Committee of the Company comprised of the following Directors:

1. Shri Ravi Nath Jha, Independent Director- Chairman
2. Adv. George Kurian, Independent Director- Member
3. Ms. (Dr.) Shatorupa, Independent Director- Member
4. Director (HR)- Member

The Committee met once during the financial year under review i.e., on 08/08/2022.

Adequate Notice for the Human Resource (HR) Committee Meeting was sent to all the Members of the Committee. Agenda and detailed notes on agenda were sent in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Recommendations/ decisions at the Human Resource (HR) Committee Meeting was carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(ii) Committee of Directors (COD) for Projects & New Ventures:

The Committee of Directors (COD) for Projects and New Ventures of the Company comprised of the following Directors:

1. Chairman-cum-Managing Director- Chairman
2. Joint Secretary, Ministry of Mines- Member
3. Director (P&T)- Member
4. Director (Production)- Member
5. Director (Finance)- Member
6. Director (Commercial)- Member

The Committee met once during the financial year under review i.e., on 28/04/2022.

Adequate Notice for the Committee of Directors (COD) for Projects & New Ventures was sent to all the Members of the Committee. Agenda and detailed notes on agenda were sent in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Recommendations/ decisions at the Committee of Directors (COD) for Projects & New Ventures Meeting was carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(iii) Ethics and Corporate Governance Committee:

The Ethics and Corporate Governance Committee of the Company comprised of the following Directors:

1. Adv. Dushyant Upadhyay, Independent Director- Chairman
2. Shri Ravi Nath Jha, Independent Director- Member
3. Dr. B. R. Ramakrishna, Independent Director- Member
4. Director (Commercial)- Member

The Committee met once during the financial year under review i.e., on 07/08/2022.

Adequate Notice for the Ethics and Corporate Governance Committee was sent to all the Members of the Committee. Agenda and detailed notes on agenda were sent in advance. A system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Recommendations/ decisions at the Ethics and Corporate Governance Committee Meeting was carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(iv) Share Transfer Committee:

The Share Transfer Committee deals with the cases pertaining to issue of new share certificates in lieu of the share certificates, which are torn/ defaced/ mutilated/ lost/ rematerialisation and the new share certificates are issued subject to the approval of the said committee.

The Share Transfer Committee of the Company comprised of the following Directors:

1. Shri Radhashyam Mahapatro, Director (HR)- Chairman
2. Shri Manasa Prasad Mishra, Director (P&T)- Member
3. Shri Ramesh Chandra Joshi, Director (Finance)- Member
4. Shri Sadashiv Samantaray, Director (Commercial)– Member
5. Shri Pankaj Kumar Sharma, Director (Production)- Member

The Committee met Ten times during the financial year under review i.e., during 660th meeting to 676th meeting, which were held on 27/04/2022, 16/05/2022, 11/07/2022, 10/08/2022, 17/10/2022, 23/11/2022, 28/12/2022, 23/01/2023, 06/02/2023 and 22/03/2023 respectively.

Recommendations/ decisions at the Share Transfer Committee Meeting were carried out unanimously and recorded in the minutes book maintained for the purpose as per the provisions of the Act.

(E) Separate Meeting of the Independent Directors:

During the financial year under review the separate meeting of Independent Directors of the Company as per Section 149 of the Companies Act, 2013 read with the Regulation 25(3) of Securities and Exchange Board of India (Listing Obligation and Disclosure Requirements) Regulation, 2015 was held on 16th January, 2023. Except Shri Y.P. Chillio all other Independent Directors were present in the meeting.

(F) Annual General Meeting:

During the financial year under review, the Company had conducted its 41st Annual General Meeting on 22nd September, 2022 at 11:00 A.M. through Video Conferencing ("VC")/ Other Audio-Visual means ("OAVM") in conformity with the regulatory provisions and circulars issued by the Ministry of Corporate Affairs, Government of India.

Annual Report for the year 2021-22 along with Notice convening the 41st AGM was sent to the shareholders through e-mail, 21 clear days prior to date of the AGM as per the Companies Act, 2013 read with the Secretarial Standards.

The Register of Members and Share Transfer Books of the Company remained closed from Saturday, the 17th September, 2022 to Thursday, the 22nd September, 2022 (both days inclusive), for the purpose of final dividend declared at the 41st Annual General Meeting of the Company.

Company had provided remote e-voting facility to the shareholders enabling them to cast their votes electronically. Facility for voting through E-voting (Instapoll) during the AGM was also made available to those who had not cast their vote by Remote E-voting. The Outcome of the meeting was hosted on the website of the company, RTA and the Stock Exchange on the same day i.e., on 22/09/2022.

(G) Postal Ballot:

During the financial year under review, based on the approval of the Board on 28.04.2022, the Company had sent Postal Ballot Notice dated 28.04.2022 to all the members seeking their approval for regularization of appointment of 2 (Two) newly appointed Directors of the Company. The notice was sent to all the members, whose names appeared in the Register of Members / list of Beneficial Owners, as received from National Securities Depository Limited and Central Depository Services (India) Limited as on the Cut-off date i.e. 29.04.2022.

In line with the relaxations specified in the MCA Circulars, the Company sent Notice only in electronic form, to the Members. The Company had provided remote e-voting facility to its members, to enable them to cast their votes electronically instead of submitting the Postal Ballot Form physically. The Company had engaged Registrar and Transfer Agent ('RTA'), KFin Technologies Limited (formerly known as KFin Technologies Private Limited) ('KFINTECH') for the purpose of providing remote e-voting facility to the Members. The voting period had started on 9th May, 2022 and ended on 7th June, 2022. The Company had intimated result of the Postal Ballot to the Stock Exchanges on 08.06.2022 and posted it on its website on the same day

(H) Maintenance of Statutory Records:

All Statutory Registers, Records and other Registers as prescribed under various Provisions of the Companies Act, 2013, the Depositories Act, 1996 and the Rules made there under were kept and maintained properly with all necessary entries made therein. Provisions of these Acts were duly complied with during the period under report.

(I) Filing of Statutory Forms & Returns as per Companies Act, 2013:

All provisions of the Act and other statutes were duly complied with regard to filing of various Forms and Returns with MCA/Registrar of Companies within the prescribed time limit with payment of requisite/prescribed fees.

All documents/intimations under various Statutes/Listing Regulations/ Business Rules were also regularly filed with the Stock Exchanges and Depositories (NSDL and CDSL) within the due dates.

We further report that there was adequate system and processes in the company commensurate with the size and operations of the company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

(J) Registrar and Share Transfer Agent & Redressal of Investors Grievances

KFin Technologies Limited, Hyderabad continues to be the Registrar and Share Transfer Agent (RTA) of the Company.

All complaints/grievances relating to share transmissions, transpositions, demat/remat of shares, issue of duplicate share certificates, payment of dividend, etc. were attended and resolved within statutory time limit.

During the financial year under review, 949 nos. of investor complaints were received by the company and all of those were resolved within the prescribed time limit.

(K) Transmission/Transposition/Issue of Duplicate Shares:

The Company has outsourced its share registry activities to the RTA, KFin Technologies Limited, Hyderabad. Issue of physical Share Certificate against Rematerialisation/lost/mutilated/defaced share certificate, if any, is done with approval of Share Transfer Committee (STC). Request for transmission and transposition of shares are considered with approval of Company Secretary, who has been authorized by the Board of Directors for the same.

As per directive of SEBI, Letter of Confirmation are issued in lieu of the physical share certificate after approval of request for issue of duplicate shares/ transmission/transposition cases. The Shareholder can submit the Letter of Confirmation with its depository participant to get credit of the shares in their demat account maintained with them.

(L) Transfer of unpaid/unclaimed dividend & shares to Investor Education and Protection Fund:

Pursuant to Section 124 of the Companies Act, 2013, read with the Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, any dividend which remains unpaid or unclaimed for a consecutive period of seven years shall be transferred by the Company to Investor Education and Protection Fund (IEPF). Further, shares on which dividend have remained unclaimed or unpaid for 7 (seven) consecutive years are required to be transferred by the Company to the IEPF of the Government of India.

During the financial year under review, an amount of ₹ 14,21,837/- and 19,110 shares pertaining to unclaimed interim dividend for the financial year 2014-15 were transferred to Investor Education and Protection Fund.

Further, an amount of ₹ 6,74,899/- and 25,138 shares pertaining to unclaimed final dividend for the financial year 2014-15 were transferred to Investor Education and Protection Fund.

(M) POSH Act, 2013:

As per Section 4 of the POSH Act, 2013 an Internal Complaint Committee (ICC) is in place in the company and it comprises of following persons as its members:

1. Mrs. Sumita Sahay, GM (Marketing)- Presiding Officer
2. Mr. Ashok Kumar Negi, DGM (Law)- Member
3. Mrs. P. I. Mishra, Manager (HRD)- Member

During the year no complaint were received and hence, no meeting was held. Necessary Report as required under Section 21 of the said Act was submitted to the District Officer of the state on 29.05.2023.

(N) Corporate Social Responsibility:

In terms of the recommendation of the CSR & Sustainability Development Committee at the meeting held on 24.05.2022 and subsequent approval of the Board at its meeting held on 25.05.2022, the company had spent an amount of Rs. 39.54 Crore during the year, 2022-23 towards CSR activities.

(O) Declaration and Payment of Dividend:

During the financial year under review:

The Shareholders in 41st Annual General Meeting held on 22nd September, 2022 had approved Final Dividend @ ₹1.50/- per share (30% on face value of ₹ 5/- each) on the paid-up equity share capital of ₹ 918.32 Crores for the financial year 2021-22. The said dividend was paid to the eligible shareholders on 19.10.2022.

Further, the Board of Directors in their meeting held on 17th January, 2023 had approved payment of 1stInterim Dividend @ ₹ 1/- per share (20% on Face value of ₹ 5/- each) on the paid-up equity share capital of ₹ 918.32 Crores for the financial year 2022-23. The dividend was paid to the eligible shareholders on 14.02.2023.

Further, the Board of Directors in their meeting held on 13th March, 2023 had approved payment of 2nd Interim Dividend @ ₹ 2.5/ per share (50% on face value of ₹ 5/- each) on the paid-up equity share capital of ₹ 918.32 Crores for the financial year 2022-23. Accordingly, dividend was paid to the eligible shareholders on 31.03.2023.

All the provisions of the Companies Act, 2013, Secretarial Standard and the Regulations relating to the declaration and payment of dividend to the shareholders have been complied with, by the Company.

We further report that on the basis of documents and explanations provided by the Management of the Company, adequate systems and processes commensurate with its size and operations exist in the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

For SKM & Associates
Company Secretaries

Sd/-
CS Sanjay K. Mahapatra
Sr. Partner
FCS No: 3488, CP No: 6002
UDIN: F003488E000410114
Peer Review No. 1593/2021

Place: Bhubaneswar
Date: 29.05.2023

(This report is to be read with our letter which is annexed as Annexure A and form an integral part of this report.)

Secretarial Audit Report

Annexure-A

To,
The Members
National Aluminium Company Limited
NALCO Bhawan, Plot No. P/1, Nayapalli,
Bhubaneswar, Odisha-751013

Our report of even date is to be read along with this letter.

1. Maintenance of secretarial records is the responsibility of the management of the Company. Our responsibility is to express an opinion on these secretarial records based on our audit.
2. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the Secretarial records. The verifications were done on test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, followed by the Company provide a reasonable basis for our opinion.
3. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the company.
4. Wherever required, we have obtained the management representation about the compliance of laws, rules and regulations and happening of events etc.
5. The compliance of the provisions of Corporate and other applicable laws, rules, regulations, standards is the responsibility of the management. Our examination was limited to the verification of procedures on test basis.
6. The Secretarial Audit report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

For SKM & Associates
Company Secretaries

Sd/-
CS Sanjay K. Mahapatra
Sr. Partner
FCS No: 3488, CP No: 6002
UDIN: F003488E000410114
Peer Review No. 1593/2021

Place: Bhubaneswar
Date: 29.05.2023

INDEPENDENT AUDITORS' REPORT

To the Members of
National Aluminium Company Limited

Report on the Audit of the Standalone Financial Statements

Opinion

We have audited the Standalone Financial Statements of National Aluminium Company Limited ("the Company"), which comprise the Balance Sheet as at 31st March, 2023, and the Statement of Profit and Loss (including Other Comprehensive Income), Statement of Changes in Equity and Statement of Cash Flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as the "Standalone Financial Statements").

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Standalone Financial Statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view, in conformity with the Indian Accounting Standards (Ind AS) prescribed under Section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015 as amended and accounting principles generally accepted in India, of the State of Affairs of the Company as at 31st March, 2023, and its Profit, Other Comprehensive Income, Changes in Equity and its Cash Flows for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) specified under Section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements Section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the Standalone Financial Statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on the Standalone Financial Statements.

Emphasis of Matter

i. We draw attention to Note No. 7.3 regarding capitalisation of Coal Mines, starting of mining operations from 09.11.2022 and declaration of start of production from 01.04.2023; and

ii. We draw attention to Note No. 14.1 regarding non accounting of capital assets/ expenditure in absence of finalisation of issues arising out of Rehabilitation and Resettlement Policy and option yet to be given by the Project Displaced Families.

Our opinion is not modified in respect of above matters.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Standalone Financial Statements of the current period. These matters were addressed in the context of our audit of the Standalone Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The key audit matters that we have identified in the current year are as follows:

Key Audit Matter	How the matter was addressed in our audit
1. Carrying value of Property, Plant and Equipment, Intangible assets (including Capital work-in-progress and Intangible Assets under Development)	
Property, plant and equipment, capital work-in-progress (CWIP), intangible assets and Intangible assets under development represent significant balances recorded in the statement of financial position. The evaluation of the recoverable amount of these assets requires significant judgement in determining the key assumptions supporting the expected future cash flows of the business and the utilisation of the relevant assets including impairment provisions related to the assets. There are a number of areas where management judgement impacts the carrying value of property, plant and equipment, intangible assets and their respective depreciation profiles. These include the decision to capitalise or expense costs; the asset life review including the impact of changes in the Company's strategy; and the timeliness of capitalisation, determination or the measurement and recognition criteria for assets retired from active use.	Our audit procedures relating to the carrying value of property, plant and equipment including intangible assets and capital work-in-progress included the following: • We evaluated the assumptions made by management in the determination of carrying values and useful lives to ensure that these are consistent with the principles of Indian Accounting Standards (Ind AS) 16 *Property, Plant and Equipment* and Ind AS 38 *Intangible Assets.* • We assessed whether the carrying values and the useful lives were reasonable by challenging management's judgements through comparing the useful lives prescribed in Schedule II to the Companies Act, 2013 and the useful lives of certain assets as per the technical assessment of the management. • We compared the useful lives of each class of asset in the current year to the previous year to determine whether there were any significant changes in the useful lives of assets, and considered the reasonableness of changes based on our knowledge of the business and the industry. • We assessed whether indicators of impairment existed as at 31st March 2023 based on our knowledge of the business and the industry and wherever required the provision of impairment of assets/CWIP were reviewed. • We tested the controls in place over the property, plant and equipment and intangible assets, evaluated the appropriateness of capitalisation policies, performed tests of details on costs capitalised and assessed the timeliness of capitalisation including decapitalisation of assets retired from active use and the application of the asset life. • In performing these substantive procedures, we assessed the judgements made by management including the nature of underlying costs capitalised; the appropriateness of asset lives applied in the calculation of depreciation and amortisation; and in assessing the need for accelerated depreciation/amortisation, if required, in the context of impairment.

Key Audit Matter	How the matter was addressed in our audit
2.Valuation of employees' defined benefit obligations and other long-term benefits	
The Company has recognised long-term employee benefit liabilities and defined benefit obligations (net of plan asset against funded gratuity obligation). The valuation of employee benefit obligations is dependent on market conditions and assumptions made. The key audit matter specifically relates to the following key assumptions like discount rate, inflation expectations and life expectancy assumptions. The setting of these assumptions is complex and requires the exercise of significant Management judgement with the support of third party actuary.	Our audit procedures relating to the valuation of employees, defined benefit obligations and other long-term benefits included the following: • In testing the valuation, we have examined the reports of external actuarial specialists to review the key actuarial assumptions used, both financial and demographic, and considered the methodology utilised to derive these assumptions. • We evaluated the assumptions made by management and the actuary to ensure that these are consistent with the principles of Ind AS 19 Employee Benefits. • Furthermore, we have examined the sensitivity analysis on the key assumptions in valuing the defined benefit obligations.
3. Ascertainment, disclosure and provisioning in respect of contingent liabilities	
The Company disclosed contingent liabilities in the Financial Statements. The Company has material uncertain tax matters, both direct and indirect, under dispute involving material aggregate demand which require significant judgement to determine the possible outcome of these disputes. Additionally, the Company has other on-going legal matters relating to various claims by the Government of Odisha or other agencies constituted by the State Government and by contractors/suppliers which require application of Management judgement in order to determine the likely outcome.	Our audit procedures relating to the ascertainment, disclosure and provisioning in respect of contingent liabilities included the following: We obtained a detailed understanding and evaluated the design and implementation of controls that the Company has established in relation to disclosure and provisioning of contingent liabilities in accordance to Ind AS 37 *Provisions, Contingent Liability and Contingent Assets.* Regarding direct and indirect tax contingent liabilities, we undertook following principal audit procedures: • Assessment of the process and relevant controls implemented to identify tax litigations and pending administrative proceedings. • Assessment of assumptions used in the evaluation of potential tax risks performed by the tax department of the Company considering the legal precedence and other rulings in similar cases. • Discussion with the management regarding the status of the most significant disputes and inspection of the key relevant documentation. • Analysis of opinion received from tax experts where available. • Review of the adequacy of the disclosures in the notes to the financial statements. In assessing the potential exposures of the Company in respect of other contingent liabilities, we have: • assessed the design and implementation of controls in relation to the monitoring of known exposures; • referred Board and other meeting minutes to identify areas subject to Company's consideration; • consulted with the Company's internal legal advisors in understanding on-going and potential legal matters impacting the Company; • reviewed available legal opinions from experts; and • reviewed the proposed accounting and disclosure of actual and potential legal liabilities.
4. Advances and deposits in respect of tax matters under litigation continuing as assets	
The Financial Statements disclose other assets, which includes material recoverable claims of direct and indirect tax deposits (net of provision) including VAT and Cenvat credits which are pending adjustment/ adjudication. Significant judgement is required in assessing the nature of these exposures and their accounting and disclosure requirements.	Our audit procedures relating to the advance and deposits in respect of tax matters under litigation continuing as assets included the following: • We obtained from management the details of completed tax assessments and demands and appeal orders of the appellate authority. • We involved our internal experts to challenge the management's underlying assumptions in estimating the tax liability and the possible outcome of the disputes. • Our internal experts also considered legal precedence and other rulings in evaluating management's position on these uncertain tax positions. • Additionally, we have considered opinions of legal and tax experts, wherever available, to review the nature of the amounts recoverable, the sustainability and the likelihood of recoverability upon final resolution.

Key Audit Matter	How the matter was addressed in our audit
5. Valuation of deferred tax assets and liabilities	
The Company has disclosed deferred tax assets/ liabilities in the Financial Statements. The Company operates in activities which involves application of various provisions in income tax. The assessment of the valuation of deferred tax assets/liability, resulting from temporary differences, and provisions for uncertain tax positions is significant to our audit as the calculations are complex and depend on sensitive and judgemental assumptions. These include, amongst others, long-term future profitability and local fiscal regulations and developments.	Our audit procedures relating to the advance and deposits in respect of tax matters under litigation continuing as assets included the following: • Ascertained the completeness and accuracy of the deferred tax assets/liabilities and recognizing uncertain tax positions. • We challenged and tested the Management's assessment of the recoverability of the deferred tax assets, and the probability of future cash outflows in respect deferred tax liabilities identified by the Company. • We also assessed the applicable local fiscal regulations and developments, in particular those related to changes in the statutory income tax rate and of the statutes of limitation, as these are key assumptions underlying the valuation of the deferred tax assets/liabilities. • We analysed the tax positions and evaluated the assumptions and methodologies used by the Company. • In addition, we also focused on the adequacy of the Company's disclosures as per Ind AS 12 *Income Taxes* on deferred tax assets/liabilities and assumptions used.
6. Extraction of Coal through Mine Developer and Operator (MDO)	
The Company has capitalised the Coal Blocks Utkal D & Utkal E under Mining Right with effect from 25.03.2021 and 20.01.2023 respectively. For extraction of coal, these coal mines have been given to the Mines Developer and Operator (MDO) vide agreement dated 8th March, 2022. As per the terms of the contract, the MDO has the responsibility of executing certain capital works including payment for Mine Closure Liability and revenue works including removal of overburden and extraction of coal including its stacking at the Mines at designated places and transportation of coal to Railway Siding or site of the Captive Power Plant of the Company. On transportation and receipt of coal at the site of the Company, liability with amount at agreed price per tonne, is to be provided. The expenses of overburden, day to day expenditure by the MDO for production of coal and declaration of stock of production thereof at site are required to be done by the MDO and accounting to be done by the Company. The price of coal is dependent on calculation based on wholesale price index relevant on period of despatch. Considering judgements involved in estimating various elements of expenditure, income, assets and liabilities balances and appropriate time at which these are to be accounted, we have determined this to be a key audit matter.	Our audit procedures included the following: • Obtained an understanding of the Company's process and tested internal controls associated with the estimation and accounting of inventory of coal, liability of trade payable to MDO and Mine Closure Liability, cost of coal and other expenses and income. • Discussed with the management to understand their assessment on each qualitative and quantitative factor and reviewed consistency of the Management's explanation with the underlying documentation, rules, and regulations. • Obtained certificate from Management on availability of Inventory at the Mines. • Assessed disclosures made by the Company in accordance with the requirements of Ind AS. • Obtained necessary management representation.
7. Procedure adopted for awarding Contracts for expansion	
The Company has planned to setup the expansion of Alumina Refinery plant of 1 MTPA. For execution of the above volume, multiple contracts for Works, Purchases & Services are required which include high inherent risk (i.e. complex calculations, significant estimation uncertainty, etc.) and control risk (i.e. possibility of human errors, circumvention by collusion, inappropriate management override). The process of award requires multiple stage of appropriate evaluation of bidders which includes their, technical expertise, experience of similar execution, financial stability, human resources mobilisation, etc. Assessment of appropriate evaluation includes management's judgement to ascertain the competencies through large volume of documents submitted by prospective bidders on technical parameters, responding to the queries of bidders, setting the time line for acceptance, execution, completion etc. with the support of appointed Engineering, Procurement, Construction, Management (EPCM). The above also includes assessment of financial parameters, matching the bid value with the estimation, evaluation of requirement of financial guarantee for any uncertainties, multiple level of management concurrences, classification of expenditure into capital or revenue and award of contracts. Further, post award contracts activities like monitoring of progress of contracts, addressing any critical issues that come in between, resolution of local conflicts involve judgement and decision making by the Company. Considering the complex technical & financial assessment and calculation for selection of appropriate bidder(s), we have determined this to be a key audit matter.	Our audit approach was a combination of test of few contracts for assessment of internal controls and substantive procedures which included the following: • Obtained the Expansion budget allocation for various stages of sequential activities • Evaluated the design of contract assessment procedures for technical & financial parameters and the estimation of efforts required to complete the NIT (notice inviting tenders); • Tested the evaluated documents, views of EPCM, complex calculation, allocation of budgets estimation, application of index, application of statutory levies etc. to arrive at documents preparation • Selected a sample of contracts and through the audit efforts, analytical skills and visit to the site of constructions, wherever necessary, to identify significant variations with any subsequent changes in NIT, estimations, terms, etc.; • Discussed with the management, EPCMs on the above significant variations to obtain their judgement or justification that has bearing on possible delays in achieving the milestones as well as cost and time overrun; • Tested few progress report of EPCM to identify the bottlenecks in execution, their suggestions, applying the corrections, milestones achieved, plan for the subsequent periods, etc. • Reviewed the Board/Committee notes for any specific or significant changes in estimates of scope or vendors. • Performed analytical procedures and tested the reasonableness of progress of the contracts that have exceeded the cost or time significantly or requires improvement in control measures.

Information Other than the Standalone Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the other information. The other information comprises the information contained in the Company's Annual Report but does not include the Standalone Financial Statements and our report thereon. These reports are expected to be made available to us after the date of this auditors' report.

Our opinion on the Standalone Financial Statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Standalone Financial Statements, our responsibility is to read the other information mentioned and, in doing so, consider whether the other information is materially inconsistent with the Standalone Financial Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the other information, if we conclude that there is material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate action, if required.

Management's Responsibility for the Standalone Financial Statements

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Act with respect to the preparation and presentation of these Standalone Financial Statements that give a true and fair view of the financial position, financial performance (including other comprehensive income), changes in equity and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards (Ind AS) specified under Section 133 of the Act. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate implementation and maintenance of accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Standalone Financial Statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the Standalone Financial Statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Standalone Financial Statements

Our objectives are to obtain reasonable assurance about whether the Standalone Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Standalone Financial Statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Standalone Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls system in place and the operating effectiveness of such controls;
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management;
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Standalone Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern; and
- Evaluate the overall presentation, structure and content of the Standalone Financial Statements, including the disclosures, and whether the Standalone Financial Statements represent the underlying transactions events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related

safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the Standalone Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2020 ("the Order"), issued by the Central Government of India in terms of Sub-section (11) of Section 143 of the Act, we give in the **Annexure "A"** to this report a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.

2. In compliance to directions of the Comptroller and Auditor General of India under Section 143(5) of the Act, we give in **Annexure "B"** to this report a statement on the matters specified therein.

3. As required by Section 143(3) of the Act, we report that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;

   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;

   (c) The Balance Sheet, the Statement of Profit and Loss (including Other Comprehensive Income), Statement of Changes in Equity and the Cash Flow Statement dealt with by this Report are in agreement with the books of account;

   (d) In our opinion, the aforesaid Standalone Financial Statements comply with the Indian Accounting Standards specified under Section 133 of the Act, read with the Companies (Indian Accounting Standards) Rules, 2015, as amended;

   (e) Section 164(2) of the Act regarding disqualification of directors is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Government of India;

   (f) With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in **Annexure "C"**;

   (g) With respect to the other matters to be included in the Auditors' Report in accordance with the requirements of Section 197(16) of the Act, as amended:

   The provision of Section 197 read with Schedule V of the Act, relating to managerial remuneration is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Govt. of India; and

   (h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

      i. The Company has pending litigations, the liabilities in respect of which is either provided for or disclosed as contingent liabilities – Refer Note 27 to the Standalone Financial Statements;

      ii. The Company has made provision, as required under the applicable law or Indian Accounting Standards, for material foreseeable losses, if any, in respect of long term contracts. As explained to us, there are no derivative contracts entered into by the Company;

      iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company;

      iv. (a) The Management has represented that, to the best of its knowledge and belief, no funds (which are material either individually or in the aggregate) have been advanced or loaned or invested (either from borrowed funds or share premium or any other sources or kind of funds) by the Company to or in any other person or entity, including foreign entity ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

      (b) The Management has represented, that, to the best of its knowledge and belief, no funds (which are material either individually or in the aggregate) have been received by the Company from any person or entity, including foreign entity ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the Company shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

      (c) Based on the audit procedures that have been considered reasonable and appropriate in the circumstances, nothing has come to our notice that has caused us to believe that the representations under sub-clause (i) and (ii) of Rule 11(e), as provided under (a) and (b) above, contain any material misstatement;

      v. As stated in Para 19.3 to the Standalone Financial Statements:

         a. The final dividend proposed in the previous year, declared and paid by the Company during the year is in accordance with Section 123 of the

Act, as applicable; and

b. The interim dividends declared and paid by the Company during the year and until the date of this report is in compliance with Section 123 of the Act; and

vi. As proviso to Rule 3(1) of the Companies (Accounts) Rules, 2014 for maintaining books of accounts using accounting software which has a feature of recording audit trail (edit log) facility is applicable for the Company only w.e.f. 1st April, 2023, reporting under Rule 11(g) of the Companies (Audit and Auditors) Rules, 2014 is not applicable for the financial year ended 31st March, 2023.

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No. : 058221
UDIN: 23058221BGXMBD1808

For A. K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B. R. Mohanty)
Partner
Membership No. : 057266
UDIN: 23057266BGSMTW7954

Place: Bhubaneswar
Date: 24th May, 2023

ANNEXURE "A"

ANNEXURE TO THE INDEPENDENT AUDITORS' REPORT ON STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2023 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred to in paragraph 1 under the heading of "Report on Other Legal and Regulatory Requirements" of our Report of even date)

i. (a) (A) The Company is maintaining proper records showing full particulars including quantitative details and situation of Property, Plant and Equipment including Right of Use Assets;

(B) The Company is maintaining proper records showing full particulars of intangible assets;

(b) Movable Property, Plant and Equipment have been physically verified by the Management every year. Pursuant to the program, movable Property, Plant and Equipment were physically verified during the year and there were no material discrepancies noticed on such verification conducted during the year;

Immovable Property, Plant and Equipment have been physically verified by the Management in phased manner of three years, which in our opinion is reasonable having regard to the size of the Company and nature of its business. No material discrepancies between book records and physical assets have been noticed in respect of Immovable Property, Plant and Equipment verified during the year;

(c) According to the information and explanations given to us and on the basis of our examination of the records of the Company, the title deeds of immovable properties are held in the name of the Company except the following:

Out of 8,262.23 acres of freehold land and 11,320.92 acres of leasehold land owned by the Company, title/lease deeds in respect of 120.17 acres of freehold land and 1,585.11 acres of leasehold land are pending execution of title documents in favour of the Company. However, the Company has been permitted by the concerned authorities to carry on its operations on the said land.

The details are as follows:

Description of Property	Gross Carrying value (₹ crore)	Held in name of	Whether promoter, director or their relative	Period held	Reason for not being held in name of Company	Whether disputed
17.25 Acres of Freehold land at Koraput district of Odisha	0.07	Govt. of Odisha	No	1982-83	Pending Registration	No
46.90 Acres of Freehold land at Angul district of Odisha	0.33	Industrial Development Corporation of Odisha	No	1987-88	Pending Registration	No
56.02 Acres of Freehold land at Angul district of Odisha	0.13	Respective Land Owners	No	1987-88	Land is in the possession of the Company. Transfer of land is in the process.	No
845.94 Acres of Leasehold land at Koraput district of Odisha	0.35	Govt. of Odisha	No	1982-83	Pending Registration	No
656.05 Acres of Leasehold land at Angul district of Odisha	1.38	Industrial Development Corporation of Odisha	No	1987-88	Pending Registration	No
1.69 Acres of Leasehold land at Angul district of Odisha	-	Industrial Development Corporation of Odisha	No	2018-19	Pending Registration	No
16.60 Acres of Leasehold land at Angul district of Odisha	-	Industrial Development Corporation of Odisha	No	2020-21	Pending Registration	No
32.03 Acres of Leasehold land at Angul district of Odisha	-	Industrial Development Corporation of Odisha	No	2022-23	Pending Registration	No
32.12 Acres of Leasehold land at Angul district of Odisha	-	Govt. of India	No	2022-23	Pending Registration	No
0.66 Acres of Leasehold land at Dhenkanal district of Odisha	0.09	Industrial Development Corporation of Odisha	No	1987-88	Pending Registration	No

(d) The Company has not revalued any of its Property, Plant and Equipment (including Right of Use assets) and Intangible Assets during the year;

(e) According to information and explanations given to us, the Company doesn't hold any benami property and therefore there are no proceedings initiated or pending against the Company for holding any benami property under the Benami Transactions (Prohibition) Act, 1988, as amended, and rules made there under;

ii. (a) Inventories, except stocks in-transit, have been physically verified at reasonable intervals by the Management. In our opinion, the coverage and procedure of such verification by the Management is appropriate. No discrepancies of 10% or more in the aggregate for each class of inventory were noticed;

(b) The Company has been sanctioned/renewed working capital limits in excess of rupees five crores, in aggregate, from banks on the basis of security of stocks and receivables. The Company has filed the monthly statements of stocks and receivables with the banks and the same are in agreement with the books of accounts of the Company;

iii. During the year, the Company has not made investments in companies, firms, limited liability partnership or any other parties except in a joint venture company.

(a) According to the information and explanations given to us, the Company has not provided loans or provided advances in the nature of loans or

stood guarantee or provided security, secured or unsecured to companies, firms, limited liability partnership or any other parties during the year. Consequently, clause (iii) (a),(c),(d),(e)and (f) of paragraph 3 of the Order are not applicable;

(b) According to the information and explanations given to us and based on the audit procedures performed by us, the investment made and the terms and conditions of the investments are not prejudicial to the interest of the Company;

iv. According to information and explanations given to us, Section 185 of the Act regarding loans to directors is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Govt. of India. In our opinion and according to the information and explanations given to us, the Company has complied with the provisions of Section 186 of the Act with respect to the loans and investments made;

v. According to information and explanations given to us, the Company has not accepted any deposits from the public within the meaning of the directives issued by the Reserve Bank of India and provisions of Sections 73 to 76 of the Act and the Rules framed thereunder except for deposit taken under Nalco Employees Family Financial Assistance and Rehabilitation Scheme (NEFFARS), wherein the Company retains the terminal benefits as deposit in the event of disablement/death, the Company pays monthly benefit to the employee/nominee/legal heir at their option upto the date of notional retirement (refer note 33.A.3.c);

vi. We have broadly reviewed the books and records maintained by the Company as specified by the Central Government for the maintenance of cost records under Section 148(1) of the Companies Act, 2013 in respect of manufacturing activities and are of the opinion that prima facie, the prescribed accounts and records have been made and maintained. However, we have not made a detailed examination of the records with a view to determine whether they are accurate and complete;

vii. (a) According to the information and explanations given to us and on the basis of our examination of the records of the Company, in our opinion, the Company is generally regular in depositing undisputed statutory dues including Provident Fund, Employees' State Insurance, Income Tax, Goods and Service Tax, Duty of Customs, Cess and other material statutory dues with the appropriate authorities. No undisputed statutory dues are outstanding for a period of more than six months from the date they became payable as at 31st March, 2023;

(b) According to the information and explanations given to us, the disputed statutory dues that have not been deposited for matters under dispute and pending disposal before various authorities are stated below:

Sl. No.	Nature of Statue	Nature of Disputed Statutory dues	Period to which the amount relates to	Forum where the dispute is pending	Gross disputed amount (₹ crore)	Amount deposited under protest/adjusted by authorities (₹ crore)
1	Income Tax Act,1961	Income Tax / TDS / Interest	2019-20	Commissioner of Income Tax (Appeals)	15.43	12.99
2	Central Excise Act, 1944	Central Excise	1999-2000 to 2014-15	Tribunal	404.35	10.37
			2007-08 to 2015-16	Appellate Authority	5.99	0.21
3	Finance Act 1994	Service Tax	2007-08 to 2016-17	Tribunal	7.14	2.12
			2007-08 to 2018-19	Appellate Authority	5.93	0.22
4	Custom Act 1962	Custom Duty	2000-01 to 2012-13	Tribunal	102.67	1.90
5	The Orissa VAT Act 2004	VAT	2005-06 to 2009-10	Tribunal	0.64	0.17
			2016-17 to 2017-18	Appellate Authority	0.05	-
6	The Orissa Sales Tax Act 1947	OST	1995-96 to 2002-03	Orissa High Court	1.63	0.37
			1992-93 to 2004-05	Tribunal	1.00	0.64
			2003-04	Appellate Authority	1.08	-
7	The Orissa Entry Tax Act 1999	ET	1999-2000 to 2010-11	Orissa High Court	8.79	3.56
			1999-2000 to 2013-14	Tribunal	133.43	54.81
			1999-2000 to 2015-16	Appellate Authority	75.04	8.23
8	The Central Sales Tax Act 1956	CST	1992-93 to 2008-09	Tribunal	277.52	77.84
9	Motor Vehicles Act	Road Tax	2008-09 to 2020-21	Orissa High Court	2.65	-
10	Indian Stamp (Odisha Amendment) Act, 2013	Stamp Duty/ Registration	2018-19	Orissa High Court	212.48	-
11	Finance Act, 2010	Clean Energy Cess	2015-16, 2016-17, 2018-19	Orissa High Court	230.50	-
12	Industrial Policy Resolution, 1996, Govt. of Odisha	Land acquisition and interest thereon	1982-83, 2021-22	Orissa High Court	85.55	-
13	MMDR Act, 1957	Royalty	2011-12 to 2015-16	Orissa High Court	136.32	-
14	Water resources Dept, Govt. of Odisha	Water dispute	2014-15	Orissa High Court	119.24	-
	Grand Total				**1,827.46**	**173.44**

viii. According to the information and explanations given to us and on examining the books of accounts, no transactions were recorded in the books of accounts that have been surrendered or disclosed as income during the year in the tax assessments under the Income Tax Act, 1961;

ix. (a) According to the information and explanations given to us, except bills discounting arrangement with banks, the Company does not have any loans or borrowings from any financial institutions, banks, Government or debentures holders. The Company has not defaulted in repayment of the loans obtained under the bill discounting facility;

(b) The Company has not been declared as wilful defaulter by any bank or financial institution or other lender;

(c) The Company has not taken any term loan during the year and hence reporting under clause (ix)(c) of paragraph 3 of the Order is not applicable;

(d) On an overall examination of the standalone financial statements of the Company, the Company has not raised funds on short term basis and hence reporting under clause (ix)(d) of paragraph 3 of the Order is not applicable;

(e) On an overall examination of the standalone financial statements of the Company, the Company has not taken any funds from any entity or person on account of or to meet the obligations of its joint ventures, the Company does not have any subsidiary or associate;

(f) The Company has not raised any loans on the pledge of securities held in its joint ventures during the year, the Company does not have any subsidiary or associate and hence reporting under clause (ix)(f) of paragraph 3 of the Order is not applicable;

x. (a) The Company has not raised any moneys by way of initial public offer, further public offer (including debt instruments) or term loans during the year. Accordingly, clause (x) (a) of paragraph 3 of the Order is not applicable;

(b) The Company has not made any preferential allotment or private placement of shares or convertible debentures (fully, partially or optionally convertible). Accordingly, clause (x) (b) of paragraph 3 of the Order is not applicable;

xi. (a) According to the information and explanations given to us, no fraud by the Company or any fraud on the Company has been noticed or reported during the year;

(b) No report has been filed under Sub-section (12) of Section 143 of the Companies Act by the auditors in Form ADT-4 as prescribed under Rule 13 of Companies (Audit and Auditors) Rules, 2014 with the Central Government during the year and upto the date of this report;

(c) According to the information and explanations given to us, there are no whistle blower complaints received during the year;

xii. In our opinion and according to the information and explanations given to us, the Company is not a Nidhi Company. Accordingly, clause (xii) (a), (b) and (c) of paragraph 3 of the Order is not applicable;

xiii. According to the information and explanations given to us and based on our examination of the records of the Company, transactions with the related parties are in compliance with Sections 177 and 188 of the Companies Act, 2013 where applicable and the details have been disclosed in the financial statements (refer Note 40);

xiv. (a) The Company has an internal audit system commensurate with the size and nature of its business and

(b) We have considered the reports of Internal Auditors for the period under audit, issued to the Company during the year and till the date of this report, in determining the nature, timing and extent of our audit procedure;

xv. According to the information and explanations given to us and based on our examination of the records, the Company has not entered into any non-cash transactions with any director or persons connected with him as specified in Section 192 of the Act;

xvi. (a) In our opinion, the Company is not required to be registered under Section 45-IA of the Reserve Bank of India Act 1934 and hence reporting under clause (xvi) (a) and (b) of paragraph 3 of the Order is not applicable;

(b) According to the information and explanations given to us, the Company is not Core Investment Company (CIC) (as defined in the regulations made by Reserve Bank of India) and there is no CIC within the Group and hence reporting under clause (xvi)(c) and (d) of paragraph 3 of the Order is not applicable;

xvii. The Company has not incurred cash losses in the financial year and in the immediately preceding financial year;

xviii. There has been no resignation of the statutory auditors during the year;

xix. Based on the financial ratios, ageing and expected dates of realisation of financial assets and payment of financial liabilities, other information accompanying the financial statements and our knowledge of the Board of Directors and management plans and based on our examination of the evidence supporting the assumptions, nothing has come to our attention, which causes us to believe that any material uncertainty exists as on the date of the audit report indicating that the Company is not capable of meeting its liabilities existing at the date of balance sheet as and when they fall due within a period of one year from the balance sheet date. We, however, state that this is not an assurance as to the future viability of the Company. We further state that our reporting is based on the facts upto the date of this audit report and we neither give any guarantee nor any assurance that all the liabilities falling due within a period of one year from the balance sheet date, will get discharged by the Company as and when they fall due; and

xx. (a) According to the information and explanations given to us, there is no unspent amount towards Corporate Social Responsibility (CSR) in respect of other than ongoing projects during the year requiring a transfer to a fund specified in Schedule VII to the Act in compliance with second proviso to Sub-section (5) of Section 135 of the Act. Accordingly reporting under clause (xx)(a) of paragraph 3 of the Order is not applicable;

(b) According to the information and explanations given to us, there has been no unspent amount of CSR in respect of ongoing projects during the year requiring transfer to a special account as per Section 135 (6) of the Act.

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No. : 058221
UDIN: 23058221BGXMBD1808

For A. K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B. R. Mohanty)
Partner
Membership No. : 057266
UDIN: 23057266BGSMTW7954

Place: Bhubaneswar
Date: 24th May, 2023

ANNEXURE "B"

ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH, 2023 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred to in paragraph 2 under the heading of "Report on Other Legal and Regulatory Requirements" of our Report of even date)

Report on the directions under Section 143(5) of the Companies Act, 2013 of the Comptroller & Auditor General of India

Sl. No.	Directions u/s 143(5) of the Act	Auditors' reply on action taken on the directions	Impact on Standalone Financial Statements
1	Whether the Company has system in place to process all the accounting transactions through IT system? If yes, the implications of processing of accounting transactions outside IT system on the integrity of the accounts along with the financial implications, if any, may be stated.	As per the information and explanations given to us, the Company has a system in place to process all the accounting transactions through IT system. SAP-ERP has been implemented for all the processes like Financial Accounting (FI), Controlling (CO), Sales and Distribution (SD), Materials Management (MM), etc. Citrix system has been implemented for processing the payroll. Based on the information and explanations given to us and audit procedures carried out, no accounting transactions have been processed or carried outside the IT system. Therefore, there are no implications on the integrity of the accounts.	Nil
2	Whether there is any restructuring of any existing loan or cases of waiver/write off of debts/ loans/ interest etc, made by a lender to the Company due to the Company's inability to repay the loan? If yes, the financial impact may be stated. Whether such cases are properly accounted for? (In case, lender is a Government Company, then this direction is also applicable for statutory auditor of the lender company).	Based on the information and explanations given to us and audit procedures carried out, there are no restructuring of any existing loan or cases of waiver/write off of debts/loans/interest made by a lender to the Company due to the Company's inability to repay the loan.	Nil
3	Whether funds (grants/subsidy etc.) received or receivable for specific schemes from Central/State Government or its agencies were properly accounted for/utilised as per its term and conditions? List the case of deviation.	Based on the information and explanations given to us and audit procedures carried out, no funds (grants/subsidy etc.) has been received/receivable by the Company from Central/State Government or its agencies for any schemes.	Nil

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No. : 058221
UDIN: 23058221BGXMBD1808

For A. K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B. R. Mohanty)
Partner
Membership No. : 057266
UDIN: 23057266BGSMTW7954

Place: Bhubaneswar
Date: 24th May, 2023

ANNEXURE "C"

ANNEXURE TO THE INDEPENDENT AUDITORS' REPORT OF EVEN DATE ON THE STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH, 2023 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred in paragraph 2(f) under the head "Report on Other Legal and Regulatory Requirements" of our report of even date)

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of **NATIONAL ALUMINIUM COMPANY LIMITED** ("the Company") as of 31st March, 2023 in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of Internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial control system over financial reporting and their operating effectiveness.

Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

Meaning of Internal Financial Controls Over Financial Reporting

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at 31st March, 2023, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No. : 058221
UDIN: 23058221BGXMBD1808

For A. K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B. R. Mohanty)
Partner
Membership No. : 057266
UDIN: 23057266BGSMTW7954

Place: Bhubaneswar
Date: 24th May, 2023

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 143(6)(b) OF THE COMPANIES ACT, 2013 ON THE FINANCIAL STATEMENTS OF NATIONAL ALUMINIUM COMPANY LIMITED FOR THE YEAR ENDED 31 MARCH 2023

The preparation of financial statements of National Aluminium Company Limited for the year ended 31 March 2023 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the company. The statutory auditor appointed by the Comptroller and Auditor General of India under Section 139(5) of the Act is responsible for expressing opinion on the financial statements under section 143 of the Act based on independent audit in accordance with the standards on auditing prescribed under Section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 24 May 2023.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit of the financial statements of National Aluminium Company Limited for the year ended 31 March 2023 under Section 143(6)(a) of the Act. This supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records.

On the basis of my supplementary audit, nothing significant has come to my knowledge which would give rise to any comment upon or supplement to statutory auditors' report under section 143(6) (b) of the Act.

For and on the behalf of the
Comptroller & Auditor General of India

Sd/-
(Atul Prakash)
Principal Director of Audit (Mines)
Kolkata

Place: Kolkata
Date: 28.07.2023

Standalone Balance Sheet as at March 31, 2023

Amount in ₹ Crore

Particulars	Notes	As at 31.03.2023	As at 31.03.2022
Assets			
(1) Non-current assets			
(a) Property, plant and equipment	5	6,916.39	7,001.94
(b) Capital work-in-progress	6	2,744.95	1,763.42
(c) Intangible assets	7	386.44	341.27
(d) Intangible assets under development	8	523.97	471.40
(e) Financial assets			
(i) Investments	9		
(a) Investments in joint ventures	9	325.22	313.22
(b) Other Investments	9	0.03	0.03
(ii) Trade receivables	10	-	-
(iii) Loans	11	82.39	87.38
(iv) Other financial assets	12	21.55	9.74
(f) Income tax assets (Net)	13	634.49	320.57
(g) Other non-current assets	14	806.45	699.23
Total non-current assets		**12,441.88**	**11,008.20**
(2) Current assets			
(a) Inventories	15	1,840.22	1,645.60
(b) Financial assets			
(i) Investments	9	145.58	64.01
(ii) Trade receivables	10	91.33	75.25
(iii) Cash and cash equivalents	16	63.29	412.80
(iv) Bank balances other than (iii) above	16	2,054.21	3,293.27
(v) Loans	11	28.98	28.55
(vi) Other financial assets	12	49.58	47.13
(c) Income tax assets (Net)	13	28.49	55.38
(d) Other current assets	14	994.49	858.07
Total current assets		**5,296.17**	**6,480.06**
(3) Non-Current assets held for sale	17	**0.64**	**0.57**
Total assets		**17,738.69**	**17,488.83**
Equity and liabilities			
(1) Equity			
(a) Equity share capital	18	918.32	918.32
(b) Other equity	19	12,320.13	11,636.32
Total equity		**13,238.45**	**12,554.64**
Liabilities			
(2) Non-current liabilities			
(a) Financial liabilities			
(i) Lease liabilities	20	50.99	50.91
(ii) Trade payables			
(a) Dues of micro and small enterprises	22	-	-
(b) Dues of creditors other than micro and small enterprises	22	10.98	23.61
(iii) Other financial liabilities	23	180.00	88.57
(b) Provisions	24	100.83	260.98
(c) Other non-current liabilities	25	314.02	331.76
(d) Deferred tax liabilities (Net)	26	957.77	868.18
Total non-current liabilities		**1,614.59**	**1,624.01**
(3) Current liabilities			
(a) Financial liabilities			
(i) Borrowings	21	47.75	20.67
(ii) Lease liabilities	20	5.87	5.52
(iii) Trade payables			
(a) Dues of micro and small enterprises	22	36.59	31.50
(b) Dues of creditors other than micro and small enterprises	22	1,226.75	1,425.60
(iv) Other financial liabilities	23	620.41	500.35
(b) Other current liabilities	25	769.32	988.55
(c) Provisions	24	146.89	126.95
(d) Income tax liabilities	13	32.07	211.04
Total current liabilities		**2,885.65**	**3,310.18**
Total liabilities		**4,500.24**	**4,934.19**
Total equity and liabilities		**17,738.69**	**17,488.83**

See accompanying notes (1-43) to the financial statements

For and on behalf of Board of Directors

(CS N. K. Mohanty)	(R. C. Joshi)	(CA Sridhar Patra)
Company Secretary	Director (Finance)	Chairman-Cum-Managing Director
	DIN: 08765394	DIN: 06500954

In terms of our attached report of even date.

For GNS & Associates	For A. K. Sabat & Co.
Chartered Accountants	Chartered Accountants
FRN-318171E	FRN-321012E
(CA Rajesh K. Pahadi)	(CA B. R. Mohanty)
Partner	Partner
M. No.: 058221	M. No.: 057266

Place: Bhubaneswar
Date: 24th May, 2023

Standalone statement of Profit and Loss for the year ended March 31, 2023

Amount in ₹ Crore

			Notes	Year ended 31.03.2023	Year ended 31.03.2022
I	Revenue from operations		29	14,254.86	14,214.58
II	Other Income		30	235.63	264.09
III	**Total Income (I + II)**			**14,490.49**	**14,478.67**
IV	EXPENSES				
	(a)	Cost of raw materials consumed	31	3,172.12	1,971.13
	(b)	Cost of power and fuel consumed	31	4,693.69	3,388.48
	(c)	Changes in inventories of finished goods and work-in-progress	32	(16.66)	(116.83)
	(d)	Employee benefits expense	33	1,832.06	2,355.80
	(e)	Finance costs	34	12.92	23.13
	(f)	Depreciation, amortisation and impairment expenses			
		(i) Property Plant and Equipment - Depreciation	5	584.24	567.72
		(ii) Property Plant and Equipment - Impairment	5	100.31	237.62
		(iii) Intangible Assets - Amortisation	7	31.25	31.25
	(g)	Other expenses	35	2,125.57	2,065.50
	Total expenses (IV)			**12,535.50**	**10,523.80**
V	**Profit/(loss) before exceptional items and tax (III - IV)**			**1,954.99**	**3,954.87**
VI	Exceptional Items			-	-
VII	**Profit/(loss) before tax (V - VI)**			**1,954.99**	**3,954.87**
VIII	Tax Expense				
	(a)	Current tax	36	-	-
		(i) Current year		475.47	1,061.63
		(ii) Earlier years		(181.06)	(9.88)
	(b)	Deferred tax	36	116.09	(48.85)
IX	**Profit/(loss) for the year (VII - VIII)**			**1,544.49**	**2,951.97**
X	Other comprehensive income				
		(i) Items that will not be reclassified to profit or loss - Remeasurement gains / (losses) on defined benefit plans		31.15	47.25
		(ii) Income tax relating to items that will not be reclassified to profit or loss	36	26.50	(23.30)
	Other comprehensive income for the year (net of tax) (X)			**57.65**	**23.95**
XI	**Total comprehensive income for the year (IX+X) [comprising profit/(loss) and other comprehensive income for the period]**			**1,602.14**	**2,975.92**
XII	Earnings per equity share:				
	(i)	Basic (in ₹)	38	8.41	16.07
	(ii)	Diluted (in ₹)	38	8.41	16.07

See accompanying notes (1-43) to the financial statements

For and on behalf of Board of Directors

(CS N. K. Mohanty)	(R. C. Joshi)	(CA Sridhar Patra)
Company Secretary	Director (Finance)	Chairman-Cum-Managing Director
	DIN: 08765394	DIN: 06500954

In terms of our attached report of even date.

For GNS & Associates	For A. K. Sabat & Co.
Chartered Accountants	Chartered Accountants
FRN-318171E	FRN-321012E
(CA Rajesh K. Pahadi)	(CA B. R. Mohanty)
Partner	Partner
M. No.: 058221	M. No.: 057266

Place: Bhubaneswar
Date: 24th May, 2023

Standalone statement of changes in equity for the year ended March 31, 2023

Amount in ₹ Crore

A.	Equity share capital	
	Balance as at 31.03.2021	918.32
	Changes during the year	-
	Balance as at 31.03.2022	918.32
	Changes during the year	-
	Balance as at 31.03.2023	**918.32**

B.	Other equity				Amount in ₹ Crore
			Reserves and surplus		
	Other equity	Capital redemption reserve	General reserve	Retained earnings	Total
	Balance as at 31.03.2021	**370.30**	**7,942.86**	**1,449.22**	**9,762.38**
	Profit for the year	-	-	2,951.97	2,951.97
	Other comprehensive income (net of taxes)	-	-	23.95	23.95
	Total comprehensive income for the year	-	-	**2,975.92**	**2,975.92**
	Final dividend for the previous year	-	-	(183.66)	(183.66)
	Interim dividend for the year			(918.32)	(918.32)
	Balance as at 31.03.2022	**370.30**	**7,942.86**	**3,323.16**	**11,636.32**
	Profit for the year	-	-	1,544.49	1,544.49
	Other comprehensive income (net of taxes)	-	-	57.65	57.65
	Total comprehensive income for the year	-	-	**1,602.14**	**1,602.14**
	Final dividend for the previous year	-	-	(275.49)	(275.49)
	Interim dividend for the year	-	-	(642.83)	(642.83)
	Balance as at 31.03.2023	**370.30**	**7,942.86**	**4,006.98**	**12,320.13**

For and on behalf of Board of Directors

(CS N. K. Mohanty)
Company Secretary

(R. C. Joshi)
Director (Finance)
DIN: 08765394

(CA Sridhar Patra)
Chairman-Cum-Managing Director
DIN: 06500954

In terms of our attached report of even date.

For GNS & Associates
Chartered Accountants
FRN-318171E
(CA Rajesh K. Pahadi)
Partner
M. No.: 058221

For A. K. Sabat & Co.
Chartered Accountants
FRN-321012E
(CA B. R. Mohanty)
Partner
M. No.: 057266

Place: Bhubaneswar
Date: 24th May, 2023

Standalone Cash Flow Statement for the year ended March 31, 2023

Amount in ₹ Crore

		Year ended 31.03.2023	Year ended 31.03.2022
A.	**Cash flows from operating activities**		
	Profit for the year	**1,544.49**	**2,951.97**
	Adjustments for:		
	Income tax expense recognised in profit or loss	410.50	1,002.90
	Finance costs recognised in profit or loss	12.92	23.13
	Interest income recognised in profit or loss	(187.18)	(210.36)
	Dividend income recognised in profit or loss	(17.23)	(13.91)
	Net (gain)/loss on disposal of property, plant and equipment	2.56	0.44
	Net (gain)/loss arising on financial assets mandatorily measured at fair value through profit or loss	(0.57)	0.36
	Impairment loss recognised on other assets	36.45	46.03
	Inventories of stores, spares written off	3.26	1.68
	Depreciation, amortisation and impairment of non-current assets	715.80	836.59
	Unrealised foreign exchange (gain)/loss (Net)	16.45	7.77
	Operating profit before working capital changes	**2,537.45**	**4,646.60**
	Movements in working capital:		
	(Increase) / decrease in inventories	(205.04)	(170.96)
	(Increase) / decrease in trade receivables	11.00	46.70
	(Increase) / decrease in loans and other financial asset	109.31	91.91
	(Increase) / decrease in other assets	(218.82)	(372.45)
	Increase / (decrease) in trade payables	(222.84)	495.70
	Increase / (decrease) in other financial liabilities	(29.57)	44.47
	Increase / (decrease) in other liabilities	(222.95)	383.61
	Increase / (decrease) in provisions	(103.61)	(360.46)
	Cash (used in) / generated from operations	**1,654.94**	**4,805.12**
	Income taxes paid	**(746.69)**	**(755.51)**
	Net cash flow from operating activities	**908.24**	**4,049.61**
B.	**Cash flows from investing activities**		
	Payments to acquire financial assets	(81.00)	(52.00)
	Proceeds from sale of financial assets	0.59	236.39
	Payments to acquire equity in joint ventures and associates	(12.00)	-
	(Investment in) / redemption of term deposits with banks	1,211.32	(1,754.37)
	Dividends received from other investments	17.23	13.91
	Interest received from banks and others	54.45	96.14
	Payments for property, plant and equipment (including capital advances)	(1,305.39)	(1,178.22)
	Proceeds from disposal of property, plant and equipment	9.15	8.47
	Payments for other intangible assets	(228.60)	(106.24)
	Net cash flow from investing activities	**(334.25)**	**(2,735.92)**
C.	**Cash flows from financing activities**		
	Payment of lease liability	(3.65)	(4.23)
	Finance cost paid	(1.53)	(8.20)
	Dividends paid on equity shares	(918.32)	(1,101.98)
	Net cash flow from financing activities	**(923.50)**	**(1,114.41)**
Net increase or (decrease) in cash or cash equivalents		**(349.51)**	**199.28**
Cash and cash equivalents at the beginning of the year		**412.80**	**213.52**
Cash and cash equivalents at the end of the year [refer note 16.A]		**63.29**	**412.80**

Note: 1. Figures in the brackets are cash outflow/inflow as the case may be.
2. Statement of Cash Flows is prepared using indirect method as per Indian Accounting Standard-7: Statement of Cash Flows.
3. Figures for previous year have been regrouped wherever necessary for uniformity in presentation.

For and on behalf of Board of Directors

(CS N. K. Mohanty)	**(R. C. Joshi)**	**(CA Sridhar Patra)**
Company Secretary	Director (Finance)	Chairman-Cum-Managing Director
	DIN: 08765394	DIN: 06500954

In terms of our attached report of even date.

	For GNS & Associates	**For A. K. Sabat & Co.**
	Chartered Accountants	Chartered Accountants
	FRN-318171E	FRN-321012E
	(CA Rajesh K. Pahadi)	**(CA B. R. Mohanty)**
Place: Bhubaneswar	Partner	Partner
Date: 24th May, 2023	M. No.: 058221	M. No.: 057266

Notes to the standalone financial statements

Note No. 1: Company Overview

National Aluminium Company Limited (the "Company") is a public limited company domiciled and incorporated in India on 7th January 1981. The Company is a Navaratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Government of India, limited by shares which are listed and traded on National Stock Exchange of India Limited (NSE) and BSE Limited in India. The registered office of the Company is at NALCO Bhawan, Plot No. P/1, Nayapalli, Bhubaneswar – 751013, Odisha.

The Company is engaged in the business of manufacturing and selling of Alumina and Aluminium. The Company is operating a 22.75 lakh MT per annum Alumina Refinery plant located at Damanjodi in Koraput district of Odisha and 4.60 lakh MT per annum Aluminium Smelter located at Angul, Odisha. The Company has a captive bauxite mines adjacent to refinery plant to feed the bauxite requirement of Alumina Refinery and also a 1200 MW captive thermal power plant adjacent to Smelter plant to meet the power requirement of Smelter. The Company has captive coal mines at Angul to meet coal requirement of the power plant. Besides, the Company is also operating four wind power plants with total capacity of 198.40 MW located in the state of Andhra Pradesh (Gandikota), Rajasthan (Ludherva & Devikot) and Maharashtra (Sangli) to harness the renewable energy and to comply with its Renewable Purchase Obligation.

Note No. 2 : Basis of preparation and measurement

2.1 Statement of Compliance:

These financial statements of the Company have been prepared on going concern basis following accrual system of accounting and in accordance with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 read with the Companies (Indian Accounting Standards) Rules, 2015, as amended, and other relevant provisions of the Companies Act, 2013.

These financial statements have been approved for issue by the Board of Directors in its meeting held on 24th May 2023.

2.2 Basis of measurement:

The financial statements have been prepared on historical cost convention except for following financial instruments that are measured at fair values at the end of each reporting period in accordance with the requirements of the relevant Ind AS:

a) certain financial assets and liabilities which are classified at fair value through profit and loss or fair value through other comprehensive income;

b) assets held for sale, at the lower of the carrying amounts and fair value less cost to sell;

c) defined benefit plans and plan assets.

2.3 Functional currency and presentation currency:

These financial statements are presented in Indian Rupees (₹) which is the Company's functional currency and all values presented in (₹) are rounded to the nearest crore (up to two decimals), except when indicated otherwise.

2.4 Current and non-current classification:

All assets and liabilities have been classified as current or non-current as per Company's operating cycle and other criteria set out in Schedule-III of the Companies Act, 2013.

An Asset is classified as current when:

- it is expected to be realized, or intended to be sold or consumed in the normal operating cycle;
- it is held primarily for the purpose of trading;
- it is expected to be realised within 12 months after the reporting period; or
- it is cash or a cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

All other assets are classified as non-current.

A liability is classified as current when :

- it is expected to be settled within the normal operating cycle;
- it is held primarily for the purpose of trading;

- it is due to be settled within 12 months after the reporting period; or
- there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period.

Deferred tax assets/liabilities are classified as non-current.

All other liabilities are classified as non-current.

Based upon the nature of business, the Company has ascertained a 12 month operating cycle for the purpose of current or non-current classification of assets and liabilities.

2.5 Use of estimates :

These financial statements have been prepared using estimates and assumptions, wherever necessary, in conformity with the recognition and measurement principles of Ind AS.

Estimates and underlying assumptions are reviewed on an ongoing basis and revisions, if any, in such estimates are accounted for in the year of revision.

Key sources of estimation uncertainty, which may cause a material adjustment to the carrying amounts of assets and liabilities, are stated in Note No.4.

Note No. 3 : Significant Accounting Policies:

The significant accounting policies applied in preparation of the financial statements are given below.

These policies have been applied consistently to all periods presented in the financial statements.

3.1 Property, Plant and Equipment:

3.1.1 Initial recognition and measurement:

Property, plant and equipment (PPE) are tangible items that are held for use in the production or supply of goods or services, or for rentals to others or for administrative purposes, and are expected to be used during more than one period.

An item of property, plant and equipment is recognised as an asset if, and only if it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can measured reliably.

Items of property, plant and equipment that qualifies for recognition as an asset is initially recognised at cost. The initial cost comprises of purchase price, import duties and non-refundable purchase taxes, other expenditure directly attributable to bringing the assets to its location and condition necessary for it to be capable of operating in the manner intended by the management, borrowing cost, if any, incurred, and the initial estimates of the present value of any asset restoration obligation or obligatory decommissioning and dismantling costs.

Expenditure incurred on development of freehold land is capitalized as part of the cost of the land.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads and directly attributable borrowing costs, if any.

In the case of property plant and equipment put to use, where final settlement of bills is yet to be completed, and capitalization is done on provisional basis subject to necessary adjustment in the year of settlement.

Spare parts having unit value of more than ₹ 5 lakh, held for use in the production and/or supply of goods or services and are expected to be used during more than one period are recognised as Property, Plant and Equipment. Spares of critical nature and irregular in use, which can be identified to a particular equipment and having unit value more than ₹ 1 lakh is also recognised as Property, Plant and Equipment.

Subsequent measurement is carried out at cost less accumulated depreciation/ amortisation and accumulated impairment losses.

3.1.2 Subsequent expenditure :

Subsequent expenditure is recognised in the carrying amount of the asset when it is probable that future economic benefits deriving from the cost incurred will flow to the Company and the cost of the item can be measured reliably.

Expenditure on major inspection/maintenance or repairs including cost of replacing the parts of assets and overhaul costs where it is probable that future economic benefits associated with the expenditure will be available to the Company over a period of more than one year, are capitalised and the carrying amount of the identifiable parts so replaced is derecognised.

3.1.3 Capital work-in-progress :

Assets in the course of construction are included under capital work in progress and are carried at cost, less any recognised impairment loss. Such capital work in progress, on completion, is transferred to the appropriate category of property, plant and equipment.

Expenses for assessment of new potential projects incurred till investment decisions are charged to revenue. Expenditure incurred for projects after investment decisions are accounted for under capital work in progress and capitalized subsequently.

Any costs directly attributable to acquisition/ construction of property, plant and equipment till it is brought to the location and condition necessary for it to be capable of operating in the manner as intended by the management form part of capital work-in-progress.

3.1.4 Depreciation and amortisation :

Depreciation on Property, Plant and Equipment are provided on a straight-line basis over their useful life, either as prescribed under Schedule II of the Companies Act, 2013 or, wherever considered necessary, determined on the basis of technical estimations carried out by the Management not exceeding the prescribed useful life as per Schedule II to the Companies Act, 2013.

Component of an item of Property, Plant and Equipment with a cost that is significant in relation to the total cost of that item, is depreciated separately if its useful life differs from that of the asset. The Company has chosen a benchmark of ₹1 Crore as significant value for identification of a separate component except 'Pot Relining' which is considered as a component of each 'Electrolytic Pot' due to its inherent nature and useful life.

The residual value of plant and machinery, vehicles, mobile equipment, and earth moving equipment, railway facilities, rolling stock, and residential quarters are maintained at 5% of the original cost and for all other assets, the residual value is considered as Nil.

The estimated useful lives and residual values are reviewed at each year end and the effect of any changes in estimates, is accounted for on a prospective basis.

The property, plant and equipment are depreciated over the useful life as mentioned hereunder:

Sl. No.	Particulars of asset category (Property Plant & Equipment)	Range of useful life in years
1	Buildings	03 – 60
2	Plant and machinery	15 – 40
3	Railway siding	15
4	Vehicles	08 - 10
5	Furniture and fixtures	08 - 10
6	Computer & peripherals	03 - 06

The useful lives for following assets are different from the useful lives as prescribed under Part C of Schedule II of the Companies Act, 2013: For the purpose of depreciation of these assets, useful lives of :

(a) immovable property, plant and equipment at bauxite mines and coal mines is the life of the individual asset or the balance lease period of Mines whichever is lower.

(b) captive thermal power generation plant namely Captive Power Plant (CPP) is considered to be 30 years.

(c) Steam Power Plant (SPP) is considered to be 25 years.

(d) Red Mud Ponds and Ash Ponds at alumina Refinery and Ash Ponds are based on their estimated remaining useful lives (holding capacity) evaluated on the basis of technical estimates made periodically.

(e) lean slurry ash disposal system at CPP is considered based on the estimated period over which ash can be disposed in the designated mine void.

(f) assets laid on leasehold land excluding assets of Bauxite mines are considered to be lower of balance lease period or the useful life of the asset.

(g) major spares are based on technical estimation of the said spares.

(h) Major inspection costs which have been capitalized are depreciated over the period until the next scheduled inspection.

Depreciation commences when the PPE are available for use in the location and condition necessary for it to be capable of operating in the manner intended by the management.

Assets laid on land not owned by the Company are depreciated over the useful life from the date on which the asset is capable of operating in the manner intended by the management unless a longer / shorter life can be justified.

Individual Assets costing ₹ 10,000/- or less are depreciated fully in the year in which they are available for use in the location and condition necessary for it to be capable of operating in the manner intended by the management.

3.1.5 De-recognition of assets :

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the use of the asset or its disposal. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

3.1.6 Stripping costs: :

Stripping costs of surface mining is recognised as an asset when they represent significantly improved access to ore, provided all the following conditions are met:

(a) it is probable that the future economic benefit associated with the stripping activity will be realised;

(b) the component of the ore body for which access has been improved can be identified; and

(c) the costs relating to the stripping activity associated with the improved access can be reliably measured.

The stripping cost incurred during the production phase is added to the existing "stripping cost asset" to the extent the current period stripping ratio exceeds the planned stripping ratio.

The "stripping cost asset" is subsequently depreciated on a unit of production basis over the life of the identified component of the ore body that become more accessible as a result of the stripping activity and is then stated at cost less accumulated depreciation and impairment loss, if any.

The stripping ratio of bauxite mines is almost uniform over the entire lease period. Therefore, the stripping cost incurred during the year is charged to expenses and stipping asset is not recognised by the company.

The stripping ratio in case of coal mines is not uniform. However, the company has appointed Mine Developper and Operator (MDO) for development and operation of the coal mines which delivers coal at a consolidated price which includes the cost of stripping activities also. Therefore, the company does not recognise stripping assets in case of coal mines.

3.2 Intangible Assets :

An intangible asset is recognised if :

a) it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and

b) the cost of the asset can be measured reliably.

3.2.1 Intangible assets acquired separately :

Intangible assets acquired are reported at cost less accumulated amortisation and impairment loss, if any. Intangible assets having finite useful life are amortised over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each annual reporting period, and the effect of any changes in estimate is accounted for on a prospective basis.

3.2.2 Internally-generated intangible assets – research and development expenditure :

Expenditure on research activities, except capital expenditure considered as Property, Plant and Equipment, is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development is recognised if and only if all the conditions stipulated in "Ind AS 38 – Intangible Asset" are met.

3.2.3 Mining Rights :

Mining Right is the authorization granted to the company by the respective authorities for mining operation. The cost of mining rights includes amounts paid towards upfront money, Compensatory Afforestation (CA), Wild Life Management (WLF), Net Present Value (NPV) and related payments as determined by the regulatory authorities.

Cost of mining rights are amortised over the total estimated remaining commercial recoverable reserves of mining property and are subject to impairment loss.

3.2.4 Mines Development Expenses :

Expenditure incurred for mines development prior to commercial production i.e., primary development expenditure other than land, buildings, plant and equipment is capitalised until the mining property is capable of commercial production.

3.2.5 User Rights :

Amount of expenditure incurred in a cluster project, having future economic benefits with exclusive use of co-beneficiaries but without physical control on the assets, are capitalised as user rights.

3.2.6 Software :

Software acquired separately, not embedded with original equipment are capitalised as software.

3.2.7 License and Franchise :

Amount of expenditure incurred for obtaining license for use of technology is capitalised under the head "License and Franchise".

3.2.8 De-recognition of intangible assets :

An intangible asset is de-recognised upon disposal or when no future economic benefits are expected to arise from the use of the asset or its disposal. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

3.2.9 Amortisation :

The basis of amortisation of intangible assets is as follows:

(a) Licenses in the nature of technical know-how for processing plants which are available for the useful life of the respective processing plants are amortised over a period of ten years.

(b) Software classified as intangible assets carries a useful life of 3 years and are amortised over that period.

(c) Mining Rights and Mines Development Expenses are amortised over the period of availability of reserves.

(d) User Right for cluster projects is amortised over the useful life of the asset from the date of commissioning.

3.3 Impairment of Non Financial assets :

At the end of each reporting period the carrying amounts of tangible and intangible assets are reviewed to determine whether there is any indication that the assets have suffered an impairment loss. If any such indication exists, the recoverable amount (i.e. higher of the fair value less cost to sell and the value-in-use) of the asset is estimated to determine the extent of impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of the Cash-Generating Unit (CGU) to which the asset belongs is estimated. If the estimated recoverable amount of the CGU is less than its carrying amount, the carrying amount of the CGU is reduced to its recoverable amount and the difference between the carrying amount and recoverable amount is recognised as impairment loss in the statement of profit or loss.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised.

3.4 Non-Current Assets Held for Sale :

Non-current assets and disposal groups are classified as held for sale if their carrying amounts are recovered principally through a sale transaction rather than through continuing use and its sale is highly probable.

The Company considers a sale is highly probable when it is committed to execute the sale within one year from the date of classification as held for sale in its present condition subject to terms that are usual and customary for sale of such assets.

Non-Current Assets held for sale and disposal groups are measured at the lower of their carrying amount and the fair value less cost of disposal.

Non-current assets and disposal groups classified as held for sale are not subject to depreciation or amortization.

3.5 Investment in associates and joint ventures :

An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Investment in associate and joint ventures are measured at historical cost. The investments carried at cost are tested for impairment in accordance with Ind AS 36 Impairment of Assets. The carrying amount of the investment is tested for impairment as a single asset by comparing its recoverable amount with its carrying amount, any impairment loss recognised reduces the carrying amount of the investment.

If the intention of the management is to dispose the investment in near future, it is classified as held for sale and measured at lower of its carrying amount and fair value less costs to sell.

3.6 Foreign currency transaction and translation :

The functional currency of the Company is determined by the currency of the primary economic environment in which it operates. Accordingly, Indian Rupee (₹) is considered as the functional currency of the Company.

In preparing the financial statements, transactions in foreign currencies are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date. Exchange differences on monetary items are recognised in the statement of profit and loss in the period in which they arise.

Non-monetary assets and non-monetary liabilities denominated in a foreign currency and measured at historical cost are translated at the exchange rate prevailing at the date of transaction.

3.7 Provisions and contingencies :

3.7.1 Provisions :

Provisions are recognised when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

Where a provision is measured using the estimated cash outflows to settle the present obligation, its carrying amount is the present value of those cash outflows.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability. Unwinding of the discount is recognised in the statement of profit and loss as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist when a contract under which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received from it.

3.7.2 Restoration, rehabilitation and decommissioning :

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine and other manufacturing facilities. The Company has recognised the obligated restoration, rehabilitation and decommissioning liability as per statutory mandate, except in respect of mines operated through 'Mine Developer and Operator'.

Net present value of such costs are provided for and a corresponding amount is capitalised at the commencement of each project, except in case of coal mines which is operated through 'Mine Developer and Operator'. These costs are charged to the statement of profit or loss over the life of the asset by way of depreciation and unwinding of the discounted liability. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes in lives of operations, new disturbance and revisions of discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as finance and other cost in the statement of profit or loss.

3.7.3 Environmental liabilities :

Environmental liabilities are recognised when the Company becomes obliged, legally or constructively to rectify environmental damage or perform remedial work.

3.7.4 Enterprise Social Commitments :

Enterprise Social Commitment is the amount to be spent on social and economic development of the surrounding area over a period of time where any new project is set up. Such obligation arises out of conditions mentioned in the Environment Clearance Certificate given by the Government for new projects and are generally defined as a percentage of total project cost.

3.7.5 Legal Obligations :

Provision is recognised once it has been established that the Company has a present obligation based on consideration of the information which becomes available up to the date of reporting.

3.7.6 Contingent Liabilities :

Contingent liabilities are possible obligations that arises from past events, the existence of which would be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company or a present obligation but payment is not probable or the amount cannot be measured reliably. Contingent liabilities are disclosed in the financial statements unless the possibility of any outflow in settlement is remote.

3.7.7 Contingent Assets :

Contingent assets are not recognised in the financial statement, but are disclosed where inflow of economic benefits is probable.

3.8 Leases :

Company as a lessee

The Company assesses whether a contract is or contains a lease, at inception of the contract.

At the date of commencement of lease, the company recognizes, "Right Of Use" (ROU) Asset at cost, and the lease liability is measured at the present value of all lease payments that are not paid at that date, except leases with a lease term of 12 months or less that do not contain a purchase option (Short term leases) and leases for which the underlying asset is of low value.

3.8.1 Initial Mearurement :

The "Cost of ROU Asset" includes amount of:

i. Initial measurement of lease liability.

ii. Prepaid lease payments less any lease incentives received.

iii. Initial direct cost incurred by the company as lessee, and

iv. Estimated costs to dismantle remove or, restore the underlying asset.

The lease liability is measured at the present value of lease payments by discounting lease payments at coupon rate of long term govt. bonds.

The "lease payment" includes:

i. Fixed payments (including in-substance fixed payment).

ii. Variable lease payment that depend upon an index or a rate.

iii. Amount payable by the company as residual value guarantee.

iv. The exercise price of purchase option if the company expects with reasonable certainty to exercise the same.

v. Payment of penalties for termination by the company, if the terms of lease contains such option for the company.

The Company applies Ind AS 36- Impairment of Assets to determine whether a ROU assets is impaired and accounts for any identified impairment loss as per its accounting policy on 'property, plant and equipment'. ROU assets are depreciated over the lease term.

3.8.2 Subsequent Measurement:

During subsequent periods, Lease liability is measured at amortised cost using effective interest method. And the ROU asset is measured at cost less accumulated depreciation and accumulated impairment if any.

The lease payments are classified as cash flow from financing activities.

3.8.3 Short-term leases and leases of low-value assets :

The lease payments for leases with a lease term of 12 months or less that do not contain a purchase option and leases for which the underlying asset is of low value, are recognized as expenses on a straight-line basis over the lease term.

Company as a lessor

Leases for which the Company is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as finance lease. All other leases are classified as operating leases.

In case of operating leases, rental income is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

In case of finance leases, amounts due from lessees under finance leases are recorded as receivables at the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

3.9 Inventories :

Inventories of raw materials, stores and spares are valued at the lower of cost net of tax credit and net realisable value. Cost is determined on moving weighted average price.

Stores and spares held but not issued for more than 5 years are valued at 5% of the cost.

Materials and other supplies held for use in the production (other than considered as non-moving) are not written down below cost, if the finished products in which they will be incorporated are expected to be sold at or above cost.

Inventories of finished goods, semi-finished goods, intermediary products and work in process including aluminium process scrap are valued at lower of cost and net realisable value.

Cost includes value of material consumed plus cost of conversion comprising of labour cost and attributable portion of manufacturing overhead.

Net realisable value is the estimated selling price in the ordinary course of business available on the reporting date less estimated cost necessary to make the sale.

3.10 Trade receivable :

Trade receivables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract, *in which cases, it is recognised at fair value. Trade receivables are held with the objective of collecting the contractual cash flows and therefore are subsequently measured at amortised cost less loss allowance.*

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the receivable is expected to be collected within a period 12 months or less from the reporting date, they are classified as current assets otherwise as non-current assets.

3.11 Cash and Cash Equivalent :

Cash and cash equivalents comprise cash at bank and on hand and short-term bank deposits having maturity period of three months or less from the date of acquisition, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above.

3.12 Financial Instruments :

Financial assets and liabilities are recognised when the Company becomes a party to the contractual provisions of the instrument. Except for trade receivables and payables, financial assets and liabilities are initially measured at fair value. Transaction cost that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value measured on initial recognition of financial asset or financial liabilities.

3.12.1 Financial assets :

a. Financial assets at amortised cost:

Financial assets, including trade receivables where it contains significant financing component, are classified as subsequently measured at amortised costs and are measured accordingly using effective interest method if the financial assets are held within a business model whose objective is to hold these assets in order to collect contractual cash flows and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

b. Financial assets at Fair value through Other Comprehensive Income (OCI) :

Financial assets are classified as subsequently measured at fair value through other comprehensive income if these financial assets are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

c. Financial assets at Fair value through Profit or loss :

Financial assets are classified as subsequently measured at fair value through profit or loss unless it is classified as subsequently measured at amortised cost or at fair value through other comprehensive income. Transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognised in the statement of profit or loss.

3.12.2 De-recognition of financial assets :

Financial assets are derecognised only when the contractual rights to the cash flows from the asset expires, or when substantially all the risks and rewards of ownership of the assets are transferred to another entity. The gain or loss on de-recognition of financial assets that is measured at amortised cost is recognised in statement of profit and loss.

3.12.3 Impairment of financial assets

At each reporting date, assessment is made whether the credit risk on a financial instrument has increased significantly or not since initial recognition

If the credit risk on a financial instrument has not increased significantly since initial recognition, the loss allowance is measured for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on that financial instrument has increased significantly since initial recognition, the loss allowance is measured for a financial instrument at an amount equal to the lifetime expected credit losses.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the statement of profit and loss.

3.12.4 Financial liabilities :

Trade payables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

Financial liabilities, including trade payables where it contains significant financing component, are subsequently measured at amortised cost using effective interest method.

3.12.5 De-recognition of financial liability :

Financial liabilities are derecognised when, and only when, the obligations are discharged, cancelled or expired.

In the case of retention for liquidated damages, if on finalization/closure of contract, liquidated damage is leviable, the amount retained is written back and recognized as income except capital contracts where liquidated damage is directly attributable to escalation/increase in the cost of the asset. In such case, the retention amount is adjusted against cost of the asset.

3.12.6 Off-setting financial instruments :

Financial assets and liabilities are offset and the net amount reported in the balance sheet, when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business.

3.12.7 Derivatives :

Derivative instruments such as forward foreign exchange contracts are recognised at fair value at the date the derivative contracts are entered into and are re-measured at the end of each reporting period. The resulting gain or loss is recognised in statement of profit or loss immediately.

3.13 Borrowing cost :

Borrowing cost directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the asset are substantially ready for their intended use.

Qualifying assets are assets that necessarily take a substantial period of time, considered as more than twelve months, to get ready for their intended use or sale. Transaction costs in respect of long-term borrowings are amortised over the tenure of respective loans using effective interest method.

All other borrowing cost is recognised in statement of profit and loss in the period in which they are incurred.

3.14 Accounting for government grants :

Government grants are recognised when there is reasonable assurance that the conditions attached to them will be complied and that the grants will be received.

Government grants related to assets whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognised in the balance sheet by setting up the grant as deferred income and are transferred to profit or loss on a systematic basis over the useful life of the related assets.

Government grants related to income are recognised as income on a systematic basis over the periods necessary to match them with the costs for which they are intended to compensate.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

3.15 Employee Benefits :

3.15.1 Short-term employee benefits :

A liability is recognised for benefits accruing to employees in respect of wages and salaries, short term compensated absences etc. in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid.

3.15.2 Post-employment and long term employee benefits :

3.15.3 Defined contribution plans :

A defined contribution plan is plan under which fixed contributions are paid to a separate entity and the company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay. Contributions to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them for such contributions.

3.15.4 Defined benefit plans :

For defined benefit plans, the cost of providing benefits is determined through actuarial valuation using the Projected Unit Credit Method, carried out at each balance sheet date.

The service cost, net of interest on the net defined benefit liability, is treated as an expense. Past service cost is recognised as an expense when the plan amendment or curtailment occurs or when any related restructuring costs or termination benefits are recognised.

Re-measurement gains and losses of the net defined benefit liability are recognised immediately in other comprehensive income not to be reclassified to statement of profit and loss.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined-benefit obligation as reduced by the fair value of plan assets.

3.15.5 Other long-term employee benefits :

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the statement of profit and loss in the period in which they arise. These obligations are valued annually by independent actuaries.

3.16 Revenue :

3.16.1 Revenue from sale of goods or services :

The Company's revenue is mainly from the sale of products like Alumina, Aluminium and Power. Revenue from contracts with customers is recognised upon satisfaction of a performance obligation for the amount of transaction price under the contract net of variable consideration allocated to that performance obligation. The transaction price of a promised goods or services is the amount net of discounts, excluding the taxes and duties collected on behalf of the government that reflects the consideration to which the Company expects to be entitled in exchange for that goods or services.

Performance obligation is satisfied when customer obtains control of the goods or services promised as per the contract. The control of the goods or services has been transferred to the customer when legal title, physical possession, risk and rewards of ownership pass to the customer and the company has the present right to payment, all of which generally occurs upon shipment or delivery of the goods or services.

Revenue from sale of wind power is recognised on the basis of energy transmitted to DISCOMs/consumer at the price notified by respective authorities subject to Power Purchase Agreement (PPA) with them.

Sale of power from the captive power plant is considered based on quantity injected to state GRID excluding wheeling to Refinery and inadvertent energy injection, subject to Power Purchase Agreement, and scheduling by the State Load Despatch Centre (SLDC).

Revenue from the sale of energy is recognised if :

(a) the amount of revenue can be measured reliably;

(b) it is probable that the economic benefits associated with the transaction will flow to the Company;

(c) recovery of the consideration is assured reasonably.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Company performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on the Company's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognized when the payment is received.

3.16.2 Interest income :

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time proportion basis, by reference to the principal outstanding and effective interest rate.

3.16.3 Dividend :

Dividend income from investments is recognised when the right to receive the dividend is established, it is probable that the economic benefits associated with the dividend will flow to the entity and the amount of the dividend can be measured reliably.

3.16.4 Income from Incentives :

Incentives and subsidies are recognized as other operating revenue when there is reasonable assurance that the Company will comply with the conditions as provided in the relevant statute.

3.16.5 Liquidated Damages :

Claims for liquidated damages are accounted for as and when these are considered recoverable by the Company. These are adjusted to the capital cost or recognised in Statement of Profit and Loss, as the case may be.

3.17 Income Taxes :

Tax expense represents the sum of current tax and deferred tax.

3.17.1 Current taxes :

Current tax expense is based on taxable profit for the year as per the Income Tax Act,1961. Current tax liabilities (assets) for the current and prior period are measured at amounts expected to be paid (or recovered) using the tax rates and tax laws that have been enacted or substantively enacted by the end of reporting period and includes any adjustment to tax payable in respect of previous years.

Current tax assets and tax liabilities are offset where the Company has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

3.17.2 Deferred taxes :

Deferred tax expense or income is recognised on temporary difference between the carrying amount of assets and liabilities in the financial statements using balance sheet method and the corresponding tax base used in computation of taxable profits.

Notes to the standalone financial statements

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. Tax relating to items recognised directly in other comprehensive income forms part of the statement of comprehensive income.

The carrying amount of deferred tax asset is reviewed at the end of each reporting period and adjusted to the extent it has become probable that sufficient taxable profits will be available to allow the asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off when they relate to income taxes levied by the same taxation authority.

3.18 Exceptional items :

Exceptional items are items of income and expenses within profit or loss from ordinary activities but of such size, nature or incidence whose disclosure is felt necessary for better explanation of the financial performance achieved by the Company.

3.19 Restatement of material error / omissions :

Errors and omissions is construed to be material for restating the opening balances of assets and liabilities and equity if the sum total effect of earlier period income/expenses exceeds ₹ 50 crore.

3.20 Recent accounting pronouncements:

Ministry of Corporate Affairs ("MCA") notifies new standards or amendments to the existing standards under Companies (Indian Accounting Standards) Rules as issued from time to time.

On March 31, 2023, MCA amended the Companies (Indian Accounting Standards) Amendment Rules, 2023.

Ind AS 1 : Presentation of Financial Statements - This amendment requires the entities to disclose their material accounting policies rather than their significant accounting policies. The effective date for adoption of this amendment is annual periods beginning on or after April 1, 2023. The Company has evaluated the amendment and the impact of the amendment is insignificant in the standalone financial statements.

Ind AS 8 : Accounting Policies, Changes in Accounting Estimates and Errors - This amendment has introduced a definition of 'accounting estimates' and included amendments to Ind AS 8 to help entities distinguish changes in accounting policies from changes in accounting estimates. The effective date for adoption of this amendment is annual periods beginning on or after April 1, 2023. The Company has evaluated the amendment and there is no impact on its standalone financial statements.

Ind AS 12 : Income Taxes - This amendment has narrowed the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offsetting temporary differences. The effective date for adoption of this amendment is annual periods beginning on or after April 1, 2023. The Company has evaluated the amendment and there is no impact on its standalone financial statement.

Note No. 4 : Critical accounting judgments and key sources of estimation uncertainty :

The preparation of the financial statements requires the management to make complex and/or subjective judgements, estimates and assumptions about matters that are inherently uncertain. These estimates and assumptions affect the reported amounts of assets and liabilities as well as disclosure of contingent liabilities and assets at the date of the financial statements and also revenues and expenses during the reported period.

The estimates and associated assumptions are based on past experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised.

4.1 Critical accounting judgments:

Apart from those involving estimations that the management have made in the process of applying the Company's accounting policies that have the most significant effect on the amounts recognised in the financial statements, management has decided that reporting of Company's financial assets at amortised cost would be appropriate in the light of its business model and have confirmed the Company's positive intention and ability to hold these financial assets to collect contractual cash flows.

4.2 Key sources of estimation uncertainty:

The following are the key assumptions concerning the future, and other key sources of estimation of uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

4.2.1 Impairment :

Investments in Associates and other investments, loans and advances, property, plant and equipment and intangible assets are reviewed for impairment whenever events and changes in circumstances indicate that the carrying value may not be fully recoverable or atleast annually.

Future cash flow estimates of Cash Generating Units which are used to calculate the asset's fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, reserves and resources, operating rehabilitations and restoration costs and capital expenditure.

4.2.2 Useful lives of property, plant and equipment:

The Company reviews the useful life of property, plant and equipment at the end of each reporting period. This reassessment may result in change in depreciation expense in future periods.

4.2.3 Assessment of Mining Reserve:

Changes in the estimation of mineral reserves where useful lives of assets are limited to the life of the project, which in turn is limited to the life of the probable and economic feasibility of reserve, could impact the useful lives of the assets for charging depreciation. Bauxite reserves at Mines is estimated by experts in extraction, geology and reserve determination and based on approved mining plan submitted to Indian Bureau of Mines (IBM).

4.2.4 Obligation for post-employment benefit Liability:

Liability for post-employment benefit and long term employee benefit is based on valuation by the actuary which is in turn based on realistic actuarial assumptions.

4.2.5 Provisions & Contingent Liabilities:

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations is the best estimate of the consideration required to settle the related liability, including any interest charges, taking into account the risks and uncertainties surrounding the obligation. The Company assess its liabilities and contingent liabilities based upon the best information available, relevant tax and other laws, contingencies involved and other appropriate requirements.

4.2.6 Fair value measurement and valuation process:

For financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Notes to the standalone financial statements

5 - Property, plant and equipment

Amount in ₹ Crore

Cost or deemed cost	Freehold land	Leasehold land (Right of Use)	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
Balance as at 31.3.2021	**82.46**	**184.86**	**813.11**	**8,807.63**	**23.53**	**52.47**	**35.30**	**68.69**	**10,068.05**
Additions	0.30	15.68	28.53	431.59	2.76	16.23	3.48	0.28	498.85
Disposals				(29.25)	(0.14)	(0.47)	(0.22)	-	(30.08)
Balance as at 31.3.2022	**82.76**	**200.54**	**841.64**	**9,209.97**	**26.15**	**68.23**	**38.56**	**68.97**	**10,536.82**
Additions	0.07	141.40	21.62	399.88	1.94	21.46	8.04	16.34	610.75
Disposals				(40.17)	(0.10)	(3.63)	(0.14)	-	(44.04)
Balance as at 31.03.2023	**82.83**	**341.94**	**863.26**	**9,569.68**	**27.99**	**86.06**	**46.46**	**85.31**	**11,103.53**
Accumulated depreciation and impairment									
Balance as at 31.3.2021	-	**9.04**	**213.75**	**2,437.28**	**14.24**	**35.70**	**16.37**	**24.34**	**2,750.72**
Depreciation Expense	-	7.77	32.32	509.26	2.21	8.66	3.25	4.30	567.77
Depreciation transfer to "Exp. During Construction"	-	-	-	-	-	0.05	-	-	0.05
Net Depreciation	-	7.77	32.32	509.26	2.21	8.61	3.25	4.30	567.72
Impairment Expense	-	-	-	237.62	-	-	-	-	237.62
Disposals			-	(20.74)	(0.10)	(0.24)	(0.15)	-	(21.23)
Balance as at 31.3.2022	-	**16.81**	**246.07**	**3,163.42**	**16.35**	**44.12**	**19.47**	**28.64**	**3,534.88**
Depreciation Expense	-	8.28	33.43	518.74	2.32	12.74	3.77	5.01	584.29
Depreciation transfer to "Exp. During Construction"	-	-	-	-	0.02	0.03	-	-	0.05
Net Depreciation	-	8.28	33.43	518.74	2.30	12.71	3.77	5.01	584.24
Impairment Expense	-	-	-	100.31	-	-	-	-	100.31
Disposals	-			(29.63)	(0.05)	(2.55)	(0.11)	-	(32.34)
Balance as at 31.03.2023	-	**25.09**	**279.50**	**3,752.84**	**18.62**	**54.31**	**23.13**	**33.65**	**4,187.14**
	Freehold land	**Leasehold land (Right of Use)**	**Buildings**	**Plant and equipment**	**Furniture and fixtures**	**Office equipment**	**Vehicles**	**Railway sidings**	**Total**
Carrying amount Balance as at 31.3.2021	**82.46**	**175.82**	**599.36**	**6,370.35**	**9.29**	**16.77**	**18.93**	**44.35**	**7,317.33**
Additions	0.30	15.68	28.53	431.59	2.76	16.23	3.48	0.28	**498.85**
Disposals	-	-	-	(8.51)	(0.04)	(0.23)	(0.07)	-	**(8.85)**
Depreciation Expense	-	7.77	32.32	509.26	2.21	8.66	3.25	4.30	**567.77**
Impairment Expense	-	-	-	237.62	-	-	-	-	**237.62**
Balance as at 31.3.2022	**82.76**	**183.73**	**595.57**	**6,046.55**	**9.80**	**24.11**	**19.09**	**40.33**	**7,001.94**
Additions	0.07	141.40	21.62	399.88	1.94	21.46	8.04	16.34	**610.75**
Disposals	-	-	-	(10.54)	(0.05)	(1.08)	(0.03)	-	**(11.70)**
Depreciation Expense	-	8.28	33.43	518.74	2.32	12.74	3.77	5.01	**584.29**
Impairment Expense	-	-	-	100.31	-	-	-	-	**100.31**
Balance as at 31.03.2023	**82.83**	**316.85**	**583.76**	**5,816.84**	**9.37**	**31.75**	**23.33**	**51.66**	**6,916.39**

Notes:

5.1 Cost of Freehold land includes cost of 43.75 acre (previous year 43.75 acre) of land handed over to Govt. of Odisha against which the alienation process is yet to be completed.

5.2 The Company incurred ₹ 0.80 crores (previous year ₹ 0.81 crores) for the year ended 31st March, 2023 towards expenses relating to short-term leases and leases of low-value assets. The total cash outflow for leases is ₹ 4.08 crores (previous year ₹ 4.13 crores) for the year ended 31st March, 2023, including cash outflow of short-term leases and leases of low-value assets.

5.3 The Company has two wind power plants (WPP) in the state of Rajasthan and one wind power plant in the state of Maharashtra. Based on the indication from external and internal information to the Company, impairment assessment was carried out for both plants at Rajasthan & Maharashtra.

5.3.1 For the two WPPs at Rajasthan, the Company had a power purchase power agreement (PPA) for 3 years with Jodhpur Vidyut Vitran Nigam Ltd., Rajasthan which could not be extended since 01.04.2019. Since power generation is a continuous process, the Company has been injecting the power to the grid which is recorded by the DISCOM. However, the Rajasthan Renewable Energy Corporation Ltd (RRECL) had offered the Company to accept ₹ 2.44 per unit for both WPP at Ludherva and Devikot and execute the PPA. The Company filed an appeal in the Hon'ble High Court of Rajasthan for extension of PPA which is still pending. In view of non-existence of PPA and continuous generation, impairment assessment was done upto the useful life of the assets.

5.3.2 The Company has a long term (25 years) PPA with NTPC Vidyut Vyapar Nigam Ltd. (NVVNL) for supply of a minimum of 100 MU per month from its WPP at Sangli, Maharashtra with a unit (KWH) rate of ₹ 2.92. Considering the quantum of investment made by the Company and the rate considered for the long term PPA, an impairment assessment has been carried out upto the useful life of the assets.

Notes to the standalone financial statements

Details of wind power plants, investment made, carrying value of the asset (before & after impairment), and impairment provisions made are provided below:

Amount in ₹ Crore

Details of the Wind Power Plants	Cost	Carrying Value after Depreciation & before Impairment	Impairment during the year	Cummulative Impairment	Carrying Value after Depreciation & Impairment
1. 50MW, Devikot, Rajasthan					
FY 2022-23	338.19	244.33	11.09	147.11	97.22
FY 2021-22	338.19	258.54	136.02	136.02	122.52
2. 47.60MW, Ludherva, Rajasthan					
FY 2022-23	280.62	164.19	2.87	107.96	56.23
FY 2021-22	280.62	176.27	105.10	105.10	71.17
3. 50.4 MW, Sangli, Maharashtra					
FY 2022-23	342.71	253.74	89.86	89.86	163.88
FY 2021-22	342.71	268.53	-	-	268.53

Notes to the standalone financial statements

5.A Title deeds of Immovable Property not held in name of the Company

(other than properties where the Company is the lessee and the lease agreements are duly executed in favour of the lessee)

Amount in ₹ Crore

Description of the Property	Freehold/ Leasehold	Gross carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter/ director or employee of promotor/director	Property held since which date	Reason for not being held in the name of Company	Whether disputed
PPE							
Land							
17.25 Acres of Land at Koraput District of Odisha	Freehold	0.07	Govt. of Odisha	No	1982-83	Pending Registration	No
845.94 Acres of Land at Koraput District of Odisha	Leasehold	0.35	Govt. of Odisha	No	1982-83	Execution of Lease Agreement is pending	No
46.90 Acres of Land at Angul district of Odisha	Freehold	0.33	Industrial Development Corporation of Odisha (IDCO)	No	1987-88	Pending Registration	No
56.02 Acres of Land at Angul district of Odisha	Freehold	0.13	Respective Land owners	No	1987-88	Land is in the possession of the Company. Transfer of land in the name of the Compnay is in the process.	No
656.05 Acres of Land at Angul district of Odisha	Leasehold	1.38	Industrial Development Corporation of Odisha (IDCO)	No	1987-88	Execution of Lease Agreement is pending	No
1.69 Acres of Land at Angul district of Odisha	Leasehold	-	Industrial Development Corporation of Odisha (IDCO)	No	2018-19	Communal/ Gochhar Land	No
16.60 Acres of Land at Angul district of Odisha	Leasehold	-	Industrial Development Corporation of Odisha (IDCO)	No	2020-21	Communal/ Gochhar Land	No
32.03 Acres of Land at Angul district of Odisha	Leasehold	-	Industrial Development Corporation of Odisha (IDCO)	No	2022-23	Communal/ Gochhar Land	No
32.12 Acres of Land at Angul district of Odisha	Leasehold	-	Govt. of India	No	2022-23	Stage II clearance from MoEF is pending	No
0.66 Acres of Land at Dhenkanal district of Odisha	Leasehold	0.09	Industrial Development Corporation of Odisha (IDCO)	No	1987-88	Execution of Lease Agreement is pending	No
Building	-	-					
Investment Property							
Land	-	-					
Building	-	-					
Non Current asset held for sale							
Land	-	-					
Building	-	-					
Others							

Notes: 5.A.1 Includes 291.89 acres of surrendered land.

6 Capital work-in-progress (CWIP)

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
Capital Work-in-progress	2,769.92	1,700.54
Construction materials including in transit	64.53	110.99
	2,834.45	**1,811.53**
Less: Provision for impairment	(89.50)	(48.11)
Total Capital Work-in-progress	**2,744.95**	**1,763.42**

Movement in provision for impairment	As at 31.03.2023	As at 31.03.2022
Opening balance	48.11	0.55
Provision made during the year	41.39	47.56
Provision write back during the year	-	-
Closing balance	**89.50**	**48.11**

6.1. The amount of capital work in progress includes directly attributable expenses of ₹ 166.81 crore (previous year ₹ 152.90 crore) for 5th Stream Alumina Refinery expansion.

6.2 The Company on 27.09.2017, had awarded a contract favouring M/s Regen Powertech. Pvt. Ltd. for supply, erection and commissioning of 25.5MW Wind Power Project (WPP) at Kayathar, Tamilnadu for a value of ₹ 163.13 crore. The agency had executed ₹ 119.63 crore worth of work till FY 2018-19. Thereafter, there was no progress in execution due to financial crisis and liquidity issue of the agency.

Insolvency resolution process was initiated against the Company under Insolvency and Bankruptcy Code, 2016. The Hon'ble National Company Law Tribunal (NCLT), Chennai passed the Resolution Plan on 01.02.2022 which was not acceptable to the Company. Aggrieved with the order, the Company preferred an appeal to the Hon'ble National Company Law Appellate Tribunal (NCLAT).

As there was no progress in the project since 2018-19 and the stringent conditions mentioned in the said order, the Company has considered these as indication for impairment assessment of the project and provided for ₹ 79.25 crore as on 31.03.2023 (as on 31.03.2022 ₹ 44.26 crore).

6.A - Capital Work in Progress

6.A.1 Ageing of Capital Work in Progress — Amount in ₹ Crore

Particulars		Amount in CWIP for a period of				
		Less than 1 Year	1-2 Years	2-3 Year	More than 3 Years	Total
Project in progress						
(a) Mines & Refinery	As on 31.03.2023	1,159.23	599.00	271.26	393.31	2,422.80
	As on 31.03.2022	699.01	230.10	311.02	85.53	1,325.66
(b) Smelter & Power	As on 31.03.2023	137.57	68.34	13.77	58.05	277.73
	As on 31.03.2022	127.62	68.73	65.38	96.64	358.37
(c) Others	As on 31.03.2023	12.40	0.14	0.09	119.74	132.37
	As on 31.03.2022	5.83	0.38	0.11	119.63	125.95
Project temporarily suspended						
(a) Mines & Refinery	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
(b) Smelter & Power	As on 31.03.2023	-	-	-	1.55	1.55
	As on 31.03.2022	-	-	-	1.55	1.55
(c) Others	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
	Total as on 31.03.2023	**1,309.20**	**667.48**	**285.12**	**572.65**	**2,834.45**
	Total as on 31.03.2022	**832.46**	**299.21**	**376.51**	**303.35**	**1,811.53**

Notes to the standalone financial statements

6.A.2 Ageing of Capital Work in Progress whose completion is overdue or has exceeded its cost compared to its original plan

Particulars		To be completed in				
		Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
(a) Mines & Refinery	As on 31.03.2023	1,096.33	486.93	-	-	1,583.26
	As on 31.03.2022	154.54	76.78	-	-	231.32
(b) Smelter & Power	As on 31.03.2023	119.87	4.91	-	-	124.78
	As on 31.03.2022	175.38	1.46	10.21	19.41	206.46
(c) Others	As on 31.03.2023	0.10	-	-	-	0.10
	As on 31.03.2022	-	-	0.11	119.63	119.74
	Total as on 31.03.2023	**1,216.30**	**491.84**	-	-	**1,708.14**
	Total as on 31.03.2022	**329.92**	**78.24**	**10.32**	**139.04**	**557.52**

6.A.3 Details of project where activity has been suspended

Sl. Nos	Particulars		Amount	Suspended from	Brief reason of suspension
(a)	Mines & Refinery	As on 31.03.2023	-	-	-
		As on 31.03.2022			
(b)	Smelter & Power (Coal handling plant including railway sidings)	As on 31.03.2023	1.55	01-Apr-20	Due to change in strategy of coal transportation and handing
		As on 31.03.2022	1.55	01-Apr-20	Due to change in strategy of coal transportation and handing
(c)	Others	As on 31.03.2023	-	-	-
		As on 31.03.2022			
		Total as on 31.03.2023	**1.55**		
		Total as on 31.03.2022	**1.55**		

Notes to the standalone financial statements

7. Intangible assets

Amount in ₹ Crore

	User right	Computer software	Mining rights	Licenses	Total intangible assets
Cost or deemed cost					
Balance as at 31.03.2021	**79.79**	**11.37**	**379.75**	**11.55**	**482.46**
Additions	0.39	1.90	27.05	-	29.34
Disposals	-	-	-	-	-
Balance as at 31.3.2022	**80.18**	**13.27**	**406.80**	**11.55**	**511.80**
Additions	-	2.49	73.93	-	76.42
Disposals	-	-	-	-	-
Balance as at 31.03.2023	**80.18**	**15.76**	**480.73**	**11.55**	**588.22**
Accumulated depreciation and impairment					
Balance as at 31.03.2021	**15.28**	**9.46**	**104.05**	**10.49**	**139.28**
Depreciation Expense	4.01	1.35	25.74	0.15	31.25
Impairment Expense	-	-	-	-	-
Disposals	-	-	-	-	-
Balance as at 31.3.2022	**19.29**	**10.81**	**129.79**	**10.64**	**170.53**
Depreciation Expense	4.01	1.79	25.30	0.15	31.25
Impairment Expense	-	-	-	-	-
Disposals	-	-	-	-	-
Balance as at 31.03.2023	**23.30**	**12.60**	**155.09**	**10.79**	**201.78**
	User right	**Computer software**	**Mining rights**	**Licenses**	**Total intangible assets**
Carrying amount					
Balance as at 31.03.2021	**64.51**	**1.91**	**275.70**	**1.06**	**343.18**
Additions/Adjustments	0.39	1.90	27.05	-	29.34
Disposals	-	-	-	-	-
Depreciation Expense	4.01	1.35	25.74	0.15	31.25
Impairment Expense	-	-	-	-	-
Balance as at 31.3.2022	**60.89**	**2.46**	**277.01**	**0.91**	**341.27**
Additions	-	2.49	73.93	-	76.42
Disposals	-	-	-	-	-
Depreciation Expense	4.01	1.79	25.30	0.15	31.25
Impairment Expense	-	-	-	-	-
Balance as at 31.03.2023	**56.88**	**3.16**	**325.64**	**0.76**	**386.44**

Notes: 7.1 User right represent Company's share in jointly owned asset.

7.2 The Company has been granted lease to operate its Bauxite Mines at Panchpatmali, Odisha and Coal Mines at Angul, Odisha by the Government of Odisha. In this connection, the Company has paid Net present value (NPV) for forest land, compensatory afforestation, wild life management and other related payments which are capitalized as intangible assets under Mining Rights and amortized on straight line basis as per the Accounting Policy of the Company.

7.3 Utkal D&E coal blocks were allocated to the Company on 02.05.2016 by the Ministry of Coal, Govt. Of India with total mining reserve of 176.05 MT(Million Tonnes). On execution of mining lease on 25.03.2021 (Utkal D) and 20.01.2023 (Utkal E), the mining rights worth ₹ 54.79 crore in FY 2021-22 and ₹ 73.26 crore during the year have been capitalised.

Commencement of Mining Operation at Utkal-D Coal Mine was started w.e.f. 09.11.2022. Intimation regarding the same was sent to Deputy Director Mines, Talcher on 09.11.2022. Top soil removing, overburden cutting for opening of coal seams have been done during the period of 09.11.2022 to 31.03.2023. Seam was exposed & samples were collected by Coal Controller Organisation (CCO), Ministry of Coal office for annual grade declaration for FY 2023-24. Coal Production has started from 01.04.2023.

8 A. Intangible assets under development

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
(i) Mining right	523.64	469.73
(ii) Software	0.33	1.67
	523.97	**471.40**

Note: 8 A.1 Mining right under development constitutes expenses related to allotment, Net present value (NPV) for forest land, compensatory afforestation and wild life management for mines allocated to the Company. It also includes pre-operating expenses of ₹ 523.64 crores (previous year ₹ 322.78 crore) towards expenditure incurred/payments made to Government of Odisha on various developmental schemes as per commitment to Government of Odisha for allotment of Pottangi Bauxite Mines.

Notes to the standalone financial statements

8B - Intangible assets under development

8.B.1 Ageing of Intangible assets under development — Amount in ₹ Crore

Particulars		Amount in CWIP for a period of				
		Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
Project in progress						
(a) Mines & Refinery	As on 31.03.2023	200.91	72.62	188.10	62.01	523.64
	As on 31.03.2022	72.62	188.10	62.01	-	322.73
(b) Smelter & Power	As on 31.03.2023	-	-			-
	As on 31.03.2022	2.94	10.40	108.23	25.43	147.00
(c) Others	As on 31.03.2023	0.33	-	-	-	0.33
	As on 31.03.2022	1.67	-	-	-	1.67
Project temporarily suspended						
(a) Mines & Refinery	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022					-
(b) Smelter & Power	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
(c) Others	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
	Total as on 31.03.2023	**201.24**	**72.62**	**188.10**	**62.01**	**523.97**
	Total as on 31.03.2022	**77.23**	**198.50**	**170.24**	**25.43**	**471.40**

9. Investments

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
A. Non-current		
A.1 Investments in equity instruments		
A.1.1 Trade Investment in joint ventures at cost		
Unquoted investments		
a) Utkarsha Aluminium Dhatu Nigam Limited (As at 31.03.2023 : 2,00,00,000 shares of ₹ 10 each fully paid up, As at 31.03.2022 : 2,00,00,000 shares of ₹ 10 each fully paid up).	20.00	20.00
Total	**20.00**	**20.00**
b) Khanij Bidesh India Limited (As at 31.03.2023 : 1,30,00,000 shares of ₹10 each fully paid up, As at 31.03.2022 : 10,00,000 shares of ₹10 each fully paid up).	13.00	1.00
Total	**13.00**	**1.00**
c) Angul Aluminium Park Private Limited (As at 31.03.2023 : 1,62,23,900 shares of ₹ 10 each fully paid up, As at 31.03.2022 : 1,62,23,900 shares of ₹ 10 each fully paid up).	16.22	16.22
Total	**16.22**	**16.22**
d) GACL-NALCO Alkalies & Chemicals Private Limited (As at 31.03.2023:27,60,00,000 shares of ₹ 10 each fully paid up, As at 31.03.2022:27,60,00,000 shares of ₹ 10 each fully paid up).	276.00	276.00
Total	**276.00**	**276.00**
Total investment in joint ventures	**325.22**	**313.22**

Details of joint ventures

Details of each of the Company's joint ventures at the end of the reporting period are as follows:

Name of the joint venture	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
		As at 31.03.2023	As at 31.03.2022
(a) Utkarsha Aluminium Dhatu Nigam Limited	Manufacture, market, sell, buy, trade, distribute, import and export of all high end aluminium alloy products including scrap to fulfil the requirement of critical, strategic and other sectors, Hyderabad	50.00%	50.00%
(b) Khanij Bidesh India Limited	Identify, explore, acquire, develop, mine, process, procure and sell strategic minerals outside India	40.00%	40.00%
(c) Angul Aluminium Park Private Limited	Promoting aluminium specific downstream in Odisha, Angul, Odisha.	49.00%	49.00%
(d) GACL-NALCO Alkalies & Chemicals Private Limited	Production of caustic soda, Vadodara, Gujarat.	40.00%	40.00%

A.1.2 Other investment at cost	Amount in ₹ Crore	
Unquoted investments	**As at 31.03.2023**	**As at 31.03.2022**
Odisha Capital Market & Enterprises Limited. (As at 31.03.2023 2,89,000 shares of ₹ 1 each fully paid up) (As at 31.03.2022 2,89,000 shares of ₹ 1 each fully paid up)	0.03	0.03
Total - Investments in other entities	**0.03**	**0.03**
Total - investments in equity instruments	**325.25**	**313.25**
Additional information		
Aggregate carrying amount of unquoted investments	325.25	313.25
Financial assets amortised cost	325.25	313.25

B. Current	As at 31.03.2023			As at 31.03.2022		
Investments in Mutual Funds	**Units in '000**	**Nav in ₹ /unit**	**Amount in ₹ Crore**	**Units in '000**	**Nav in ₹ /unit**	**Amount in ₹ Crore**
Quoted Investments						
Canara Rebeco Liquid Fund	379	1,005.50	38.16	119	1,005.50	12.00
Baroda BNP Paribas Liquid Fund	410	1,002.08	41.11	309	1,002.08	31.01
SBI Liquid Fund	265	1,136.93	30.16	56	1,075.55	6.00
Union Liquid Fund	361	1,000.79	36.15	150	1,000.79	15.00
Total - Other current Investments			**145.58**			**64.01**
Additional Information						
Aggregate cost of quoted investments			145.00			64.00
Aggregate market value of quoted investments			145.58			64.01
Aggregate cost of unquoted investments			-			-
Aggregate amount of impairment in value of investments			-			-
Category-wise classification: Financial assets (quoted investments) mandatorily measured at fair value through profit & loss (FVTPL)			145.58			64.01
		as on 31.03.2023	**145.58**		**As on 31.03.2022**	**64.01**

10 A - Trade receivables		Amount in ₹ Crore	
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Considered good - Secured	-	-
	(b) Considered good - Unsecured	-	-
	(c) Having significant increase in credit risk	-	-
	(d) Credit impaired	36.28	36.90
	Less: Allowance for doubtful debts	36.28	36.90
Non-current trade receivables		-	-
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Considered good - Secured	-	-
	(b) Considered good - Unsecured	91.33	75.25
	(c) Having significant increase in credit risk	13.79	20.24
	Less: Allowance for doubtful debts	13.79	20.24
Current trade receivables		**91.33**	**75.25**

Notes to the standalone financial statements

Notes:

10.A.1 The sale of goods (Alumina and Aluminium) is made against either advances received from customers or letter of credit. The advance received from customer is adjusted against sale. The average credit period for sale of wind power is 30 days from the date of metering which is considered as collection period.

10.A.2 Customers that individually represent more than 5% of the total trade receivables as on 31.03.2023:

Customers	Customer Category	As at 31.03.2023	As at 31.03.2022
a. Andhra Pradesh Southern Power Distribution Company Ltd.	Wind Power	29%	49%
b. Zetwerk Manufacturing Businesses Pvt Ltd	Metal	15%	-
c. NTPC Vidyut Vyapar Nigam Ltd	Wind Power	11%	13%
d. Gloster Cables Limited	Metal	7%	-
e. Gupta Power Infrastructure Ltd	Metal	6%	19%

10.A.3 The Company has used a practical approach for computing expected credit loss allowance for trade receivables based on a case to case basis. Since there is no credit period for sale of alumina and aluminium and the sale is either made against an advance or backed by letter of credit (LC) given by customers, no credit loss is expected against such receivables. For sale of wind power, the Company estimates credit losses based on credit loss experience and forward looking information.

10.A.4 Trade receivables are hypothecated/pledged against cash credit facility from Banks.

10.A.5 No amount of receivable is due from related parties (Key Managerial Personnel).

10.A.6 Movement in allowances for doubtful trade receivables:

Non-Current		
Particulars	2022-23	2021-22
a Opening balance	36.90	36.90
b Add: Additions (expected credit loss for the year)	-	-
c Less: Write off/adjustments	0.62	-
d Closing Balance	36.28	36.90
Current		
Particulars	2022-23	2021-22
a Opening balance	20.24	20.24
b Add: Additions (expected credit loss for the year)	13.79	-
c Less: Write off/adjustments	20.24	-
d Closing Balance	13.79	20.24

10. B. Trade receivables ageing — **Amount in ₹ Crore**

(a) Ageing when due date of payment is specified

Sl. No.	Particulars		Outstanding from the due date of payment: Less than 6 months	6 months - 1 Years	1-2 Years	2-3 Years	More than 3 Years	Total
(i)	Undisputed Trade receivables- considered good	As on 31.03.2023	54.25	16.97	20.11	-	-	91.33
		As on 31.03.2022	45.89	21.07	2.83	5.46	-	75.25
(ii)	Undisputed Trade receivables- significant increase in credit risk	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(iii)	Undisputed Trade receivables- credit impaired	As on 31.03.2023	-	0.55	7.73	1.87	3.64	13.79
		As on 31.03.2022	-	-	0.74	11.6	7.9	20.24
(iv)	Disputed Trade receivables- considered good	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(v)	Disputed Trade receivables- significant increase in credit risk	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(vi)	Disputed Trade receivables- credit impaired	As on 31.03.2023	-	-	-	-	36.28	36.28
		As on 31.03.2022	-	-	-	-	36.90	36.90
		Total as on 31.03.2023	**54.25**	**17.52**	**27.84**	**1.87**	**39.92**	**141.40**
		Total as on 31.03.2022	**45.89**	**21.07**	**3.57**	**17.06**	**44.80**	**132.39**

Notes to the standalone financial statements

11 - Loans			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
(a)	Loans to employees		
	Secured, considered good	63.20	67.64
	Unsecured, considered good	19.05	19.51
(b)	Loans to others		
	Secured, considered good	0.14	0.23
Total non-current loans		**82.39**	**87.38**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
(a)	Loans to employees		
	Considered good-Secured	16.97	17.12
	Considered good-Unsecured	11.60	11.14
(b)	Loans to related parties		
	Considered good-Secured [refer note 11.2]	0.14	0.09
(c)	Loans to others		
	Considered good - Secured	0.36	0.29
	Less: Allowance for bad and doubtful loans	0.09	0.09
Total current loans		**28.98**	**28.55**

Note:

11.1 Loans to employees and others are carried at amortised cost. Deferred employee benefits represents the benefits on account of interest rate on loans being lower than the market rate of interest. The same is amortised on a straight line basis over the remaining period of the loan.

11.2 The amount of loan outstanding from related parties (Directors) is the amount of motor vehicle and House building advance taken from the Company in their capacity as employees. Further information on these loans is set out in note 40-Related party disclosure.

11.3 Loans to the employee are secured against the mortgage of the House property and hypothication of vehicles for which such loan is given as per the policy of the Company.

11.4 Movement in allowances :

Current			
	Particulars	**2022-23**	**2021-22**
	a Opening balance	0.09	0.09
	b Add: Additions	-	-
	c Less: Write off/adjustments	-	-
	d Closing Balance	0.09	0.09

12 - Other financial assets			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	Security deposits	16.72	9.18
	Mines closure deposits [refer note 12.2]	4.83	0.56
	Total other non-current financial assets	**21.55**	**9.74**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Advances to employees	22.84	24.96
	(b) Insurance claims receivables and others	7.22	7.22
	(c) Gratuity(funded)	26.74	22.17
	Gross - other current financial assets	**56.80**	**54.35**
	Less: Allowance for bad and doubtful other current financial assets		
	a) Insurance claims	7.22	7.22
	Total allowance for bad and doubtful - other current assets	**7.22**	**7.22**
	Net other current financial assets	**49.58**	**47.13**
	Classification of other current financial assets:		
	Unsecured, considered good	49.58	47.13
	Unsecured, considered doubtful	7.22	7.22
	Gross other current financial assets	**56.80**	**54.35**

Note:

12.1 Other financial assets are carried at amortised cost.

12.2 Earmarked balance with SBI under an escrow agreement with Coal Controller Organisation (CCO), Ministry of Coal for compliance of mines closure in respect of Utkal D & E coal mines.

12.3 Movement in allowances :

Current			
	Particulars	**2022-23**	**2021-22**
	a Opening balance	7.22	7.22
	b Add: Additions	-	-
	c Less: Write off/adjustments	-	-
	d Closing Balance	7.22	7.22

Notes to the standalone financial statements

13 - Income tax Assets / Liabilities			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	Income Tax Asset net [Refer note 13.1]	634.49	320.57
	Total Non current income tax	**634.49**	**320.57**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	Income Tax Asset net	28.49	55.38
	Income Tax Liabilities net	32.07	211.04
	Total current income tax asset (liabilities)	**(3.58)**	**(155.66)**

13.1 Income tax liability of ₹ 504.18 crore (previous year ₹ 65.04 crore) is netted off.

14 - Other assets			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Capital advances [refer Note 14.1]	552.14	498.02
	(b) Advances other than capital advance:		
	Advance with Govt. authorities		
	(1) Customs, excise, sales tax, port trusts etc.	226.59	179.95
	(2) Other Government authorities	6.04	6.01
	(c) Others		
	Prepaid expenses		
	(1) Deferred employee benefits [refer Note 11.1]	21.93	15.50
	Gross other non-current assets	**806.70**	**699.48**
	Less: Allowance for bad and doubtful for other non-current assets		
	(a) Capital advances	0.01	0.01
	(b) Advances with Excise authority	0.24	0.24
	Total allowance for bad and doubtful for other non-current assets	**0.25**	**0.25**
	Total other non-current assets	**806.45**	**699.23**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	Advances other than capital advances		
	(a) Claims with statutory authorities		
	(1) Export Incentive Claims	42.73	71.42
	(2) Generation Based Incentive on power generated from renewable source and Renewable energy certificates	4.28	5.10
	(3) VAT, CENVAT and GST Credit Recoverable	321.01	295.64
	(4) Claims receivable from customs, excise and railway authorities	7.68	7.68
	(b) Prepaid expenses		
	(1) Deferred employee benefits [refer Note 11.1]	3.55	2.04
	(2) Other prepaid expenses	7.81	9.34
	(c) Stamp in hand	0.02	0.01
	(d) Other receivables	1.23	1.07
	(e) Other advances		
	(1) Advances to employees	3.00	13.26
	(2) Advances to suppliers and service providers	813.18	656.34
	(3) Others	4.91	4.16
	Gross other current assets	**1,209.40**	**1,066.06**
	Less: Allowance for bad and doubtful for other current assets		
	(a) Export Incentive Claims	2.81	0.95
	(b) VAT and CENVAT Credit Recoverable	197.81	197.81
	(c) Claims receivable from customs, excise and railway authorities	5.13	5.13
	(d) Other receivables	0.43	0.36
	(e) Advances to suppliers and service providers	2.59	1.92
	(f) Others	6.14	1.82
	Total allowance for bad and doubtful for other current assets	**214.91**	**207.99**
	Total other current assets	**994.49**	**858.07**
	Classification of other current assets:		
	Secured, considered good		
	Unsecured, considered good	994.49	858.07
	Doubtful	214.91	207.99
	Gross other current assets	**1,209.40**	**1,066.06**

Note:

14.1 The Company has the obligation towards Rehabilitation and Resettlement (R&R) for both Utkal D & E Coal Block. R&R Policy for Utkal D has already been communicated by Govt. of Odisha, in the absence of option by the Project Displaced Families (PDFs) either for cash compensation or Annuity it is not possible to estimate the value of the obligation. R&R policy for Utkal E Coal Block is yet to be finalised by Govt. of Odisha. The Company has deposited ₹180 crore to Collector Angul towards R&R activity for Utkal D&E Coal Block.

In the absence of R&R policy for Utkal E Coal block and want of choice/ option by the beneficiaries, the obligation could not be measured, and therefore not accounted as capital asset/expenditure.

Notes to the standalone financial statements

15 - Inventories		Amount in ₹ Crore	
		As at 31.03.2023	As at 31.03.2022
(a)	Raw materials	306.67	161.03
(b)	Coal and fuel oil	189.76	170.82
(c)	Carbon Anodes (Intermediaries)	160.35	136.67
(d)	Work-in-progress	392.13	319.04
(e)	Finished goods	462.36	542.47
(f)	Stores and spares	328.95	299.23
(g)	Others [refer note 15.4]	-	16.34
Total inventories		**1,840.22**	**1,645.60**
Included above, goods-in-transit:			
(i)	Raw materials	30.74	20.79
(ii)	Coal and fuel oil	16.88	57.79
(iii)	Stores and spares	15.22	6.31
Total goods-in-transit		**62.84**	**84.89**

Note:

15.1 Cost of inventories recognised as expenses during the year is ₹ 7,177.59 crore (previous year : ₹ 4,603.84 crore).

15.2 Cost of inventories recognised as expenses during the year includes ₹ 2.64 crore (previous year: ₹ 1.46 crore) in respect of write-downs of inventory for non moving items.

15.3 Inventories are hypothecated/pledged against cash credit facility availed from Banks.

15.4 Consequent to opinion issued by the Expert Advisory Committee of Institute of Chartered Accountants of India, the Company has changed its accounting policy for recognition of inventory of scraps internally generated. As per the revised policy, the Company recognizes revenue from scrap on its disposal. As on the reporting date 31.03.2023, the change in policy has an impact of reduction in profit in the statement of profit & loss to the tune of ₹ 14.84 crore.

15.5 Mode of valuation of inventories is stated in note 3.9 of Significant Accounting Policies.

16.A-Cash and cash equivalents		Amount in ₹ Crore	
		As at 31.03.2023	As at 31.03.2022
(a)	Balances with banks		
	(1) Balance with scheduled banks		
	(i) In current account	63.29	412.80
Total cash and cash equivalents		**63.29**	**412.80**

16.B- Bank balances (other than Cash and cash equivalents)		Amount in ₹ Crore	
		As at 31.03.2023	As at 31.03.2022
(a)	In deposit account (having original maturity between 3-12 months)	1,992.33	3,217.37
	Principal	1,926.00	3,156.00
	Accrued Interest	66.33	61.37
(b)	Earmarked balance with scheduled banks [refer note 16.B.1]	61.88	75.90
Total other bank balances		**2,054.21**	**3,293.27**

Note:

16.B.1 The earmarked balance of ₹ 61.88 crore (previous year ₹ 75.90 crore) with scheduled banks includes the amount deposited towards unclaimed dividend amounting to ₹ 4.25 crore (previous year ₹ 4.29 crore) and ₹ 11.22 crore as lien for issuance of Bank Guarantee to participate in Bauxite mines bidding. The balance amount of ₹ 46.40 crore (previous year ₹ 71.61 crore) represents deposits with State Bank of India as per direction of the Hon'ble High Court of Odisha with regard to disputed differential electricity duty.

Recently Energy Department, Govt. of Odisha have passed a resolution (Resolution No. -11797, dtd. : 30.11.2022) for One Time Settlement (OTS) of arrear Electricity Duty (ED) and interest of consumers as on dtd. 31.03.2022, who generate energy for captive consumption and not depositing the ED due to court case / litigation etc.

The Company has opted for the OTS scheme and filed necessary papers after the Confederation of Captive Power Plants, Odisha (in which the Company is a member) withdrew the legal case in the Hon'ble High Court, Odisha. As per the condition laid out in the OTS scheme, 10% of the outstanding demand raised by the Authority amounting to ₹ 27.83 crore has been paid during the year from the escrow account created as per order of the Hon'ble High Court. The final settlement under the scheme is yet to be completed.

16.B.2 Amount due for credit to Investor's Education and Protection Fund at the end of the current year ₹ Nil (previous year ₹ Nil).

Notes to the standalone financial statements

17 - Non-Current Assets held for Sale		Amount in ₹ Crore
Particulars	**As at 31.03.2023**	**As at 31.03.2022**
Non Current Assets held for sale		
Gross	7.06	7.09
Less: Impairment provision	6.42	6.52
Total Non-Current assets held for sale	**0.64**	**0.57**

17.1 The above includes old discarded vehicles & plant & machinery.

17.2 The management believes to complete the sales transactions within a period of 12 months from the end of the financial year.

17.3 The fair value less cost to sale approximates carrying cost.

18 - Share Capital		Amount in ₹ Crore
	As at 31.03.2023	**As at 31.03.2022**
Authorised share capital:		
As at 31.03.2023: 6,00,00,00,000 equity shares of ₹ 5 each [As at 31.03.2022: 6,00,00,00,000 equity shares of ₹ 5 each]	3,000.00	3,000.00
	3,000.00	**3,000.00**
Issued, subscribed and paid up capital:		
1,83,66,31,787 fully paid-up equity shares of ₹ 5 each [As at 31.03.2022: 1,83,66,31,787 fully paid-up equity shares of ₹ 5 each]	918.32	918.32
	918.32	**918.32**

18.1 Reconciliation of the number of equity shares		
	Number of shares	**Amount ₹ in Crore**
Balance as at 31.03.2021	**1,83,66,31,787**	**918.32**
Changes during the year	-	-
Balance as at 31.03.2022	**1,83,66,31,787**	**918.32**
Changes during the year	-	-
Balance as at 31.03.2023	**1,83,66,31,787**	**918.32**

(i) The Company has only one class of equity shares having par value of ₹ 5 each. Each holder of equity shares is entitled to one vote per share and carries proportionate right to dividends declared by the Company based on their holdings.

(ii) **Buy back:**

During 2018-19 the Company bought back 6,73,11,386 number of equity shares of ₹ 5 each which led to decrease in equity share capital from ₹ 966.46 crore to ₹ 932.81 crore.

During 2020-21, the Company further bought back 2,89,85,711 numbers of equity shares of ₹ 5 each which led to decrease in the equity share capital from ₹ 932.81 crore to ₹ 918.32 crore.

(iii) **Disinvestment**:

During the year 2018-19, the Government of India divested 8,89,86,323 Nos. of equity shares through Bharat ETF. Consequent to buyback and transfer of shares through ETF by Government of India during 2018-19, the holding of Government of India has come down from 1,16,37,17,107 Nos (60.20%) as on 31.03.2018 to 97,00,81,517 Nos (51.99%) as on 31.03.2019.

During the year 2019-20, Government of India further divested 92,88,506 Nos. of equity shares through Bharat 22 ETF upon which the holding of Government of India has come down from 97,00,81,517 Nos (51.99%) as on 31.03.2019 to 96,07,93,011 Nos. (51.50%) as on 31.03.2020.

During the 2020-21, consequent upon buy-back of equity shares, the holding of Government of India has come down from 96,07,93,011 Nos. (51.5%) as on 31.03.2020 to 94,17,93,011 Nos. (51.28%) as on 31.03.2021.

18.2 Details of shares held by promoters:				Amount in ₹ Crore
	As at 31.03.2023		**As at 31.03.2022**	
Promotor's Name	**Number of shares held**	**% of holding of equity shares**	**Number of shares held**	**% of holding of equity shares**
Government of India	94,17,93,011	51.28%	94,17,93,011	51.28%
Total	**94,17,93,011**	**51.28%**	**94,17,93,011**	**51.28%**

18.3 Details of shareholder holding more than 5% :				Amount in ₹ Crore
	As at 31.03.2023		**As at 31.03.2022**	
Promotor's Name	**Number of shares held**	**% of holding of equity shares**	**Number of shares held**	**% of holding of equity shares**
Government of India	94,17,93,011	51.28%	94,17,93,011	51.28%
Total	**94,17,93,011**	**51.28%**	**94,17,93,011**	**51.28%**

Notes to the standalone financial statements

19 - Other equity		Amount in ₹ Crore
	As at 31.03.2023	As at 31.03.2022
(a) Capital redemption reserves	370.30	370.30
(b) General reserve	7,942.86	7,942.86
(c) Retained earnings	4,006.98	3,323.16
Total	**12,320.14**	**11,636.32**

19.1 Movement in other equity				Amount in ₹ Crore
	Reserves and Surplus			
Other equity	**Capital redemption reserve**	**General reserve**	**Retained earnings**	**Total**
Balance as at 01.04.2021	**370.30**	**7,942.86**	**1,449.22**	**9,762.38**
Profit for the year	-	-	2,951.97	2,951.97
Other comprehensive income (net of taxes)	-	-	23.95	23.95
Total comprehensive income for the year	-	-	**2,975.92**	**2,975.92**
Final dividend for the previous year	-	-	(183.66)	(183.66)
Interim dividend for the year	-	-	(918.32)	(918.32)
Balance as at 31.03.2022	**370.30**	**7,942.86**	**3,323.16**	**11,636.32**
Profit for the year	-	-	1,544.49	1,544.49
Other comprehensive income (net of taxes)	-	-	57.65	57.65
Total comprehensive income for the year	-	-	**1,602.14**	**1,602.14**
Final dividend for the previous year	-	-	(275.49)	(275.49)
Interim dividend for the year	-	-	(642.83)	(642.83)
Balance as at 31.03.2023	**370.30**	**7,942.86**	**4,006.98**	**12,320.13**

19.2 During the year 2018-19, the Company had bought back 6,73,11,386 number of fully paid equity shares of ₹ 5 each on December 4, 2018 at an offer price of ₹ 75 per share. The aggregate consideration paid was ₹ 504.83 crore. Post buyback, the paid up equity share capital of the Company is reduced by ₹ 33.65 crore from ₹ 966.46 crore to ₹ 932.81 crore. The premium amount ₹ 471.18 crore is appropriated from general reserve. The shares were extinguished on December 7, 2018 and in terms of the provisions of Companies Act, 2013, a sum of ₹ 33.65 crore was transferred from general reserve to capital redemption reserve.

During the year 2020-21, the Company bought back 2,89,85,711 number of fully paid equity shares of ₹ 5 each on March 10, 2021 at an offer price of ₹ 57.50 per share. The aggregate consideration paid was ₹ 166.67 crore. Post buyback, the paid up equity share capital of the Company is reduced by ₹ 14.49 crore from ₹ 932.81 crore to ₹ 918.32 crore. The premium amount ₹ 152.18 crore is appropriated from general reserve. The shares were extinguished on March 17, 2021 and in terms of the provisions of Companies Act, 2013, a sum of ₹ 14.49 crore was transferred from general reserve to capital redemption reserve.

19.3 During the year, the Company has paid Final Dividend for FY 2021-22 at ₹ 1.50 per equity share amounting to ₹ 275.49 crore. The Company has paid first tranche of Interim dividend for FY 2022-23 at ₹ 1.00 per equity share amounting to ₹ 183.66 crore on February 14, 2023 and the second tranche of Interim dividend at ₹ 2.50 per equity share amounting to ₹ 459.16 crore was paid on March 31, 2023. With this the total payout is ₹ 642.82 crore. During the preceding year, the Company had paid Final Dividend for FY 2020-21 at ₹ 1 per equity share amounting to ₹ 183.66 crore. The Company had also paid first tranche Interim dividend at ₹ 2 per equity share amounting to ₹ 367.33 crore & second tranche of Interim Dividend at ₹ 3 per equity share amounting to ₹ 550.99 crore for financial year 2021-22.

20 A - Lease Liability		Amount in ₹ Crore
	As at 31.03.2023	As at 31.03.2022
Non-current lease liability	50.99	50.91
Current lease liability	5.87	5.52
Total Lease liabilities	**56.86**	**56.43**

20 B - Movement of Lease Liability		Amount in ₹ Crore
	As at 31.03.2023	As at 31.03.2022
Balance at the beginning	56.43	55.97
Additions during the year	-	0.56
Finance Cost added during the year	4.08	4.13
Payment of lease liability	3.65	4.23
Balance at the end of the year	**56.86**	**56.43**

21 - Borrowings		Amount in ₹ Crore
Current (secured) (at amortised cost)	As at 31.03.2023	As at 31.03.2022
Liabilities towards bills discounted	47.75	20.67
Total	**47.75**	**20.67**

21.1 Secured by hypothecation of inventories and trade receivables.

21.2 Monthly statement of current assets filed with the banks are in agreement with the books of accounts.

Notes to the standalone financial statements

22. A - Trade Payables		Amount in ₹ Crore
A. Non-current	**As at 31.03.2023**	**As at 31.03.2022**
(1) Creditors for supplies and services		
- Dues to micro and small enterprises	-	-
- Others	10.98	23.61
Total non-current trade payables	**10.98**	**23.61**
B. Current		
(1) Creditors for supplies and services		
- Dues to micro and small enterprises	36.59	31.50
- Others	742.92	788.52
Accrued wages and salaries	483.83	637.08
Total current trade payables	**1,263.34**	**1,457.10**

Notes: 22.1 Trade and other payables are subject to confirmation/reconciliation and consequential adjustment, if any.

22.2 Dues payable to Micro and Small Enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 have been determined to the extent such parties have been identified on the basis of information available with the Company. The disclosures pursuant to said Act in respect of such dues included in trade payables (Note-22) and other financial liabilities (Note-23) are as under:

Amount in ₹ Crore

Particulars	As at 31.03.2023	As at 31.03.2022
i) Principal amount due	36.59	31.50
ii) Interest on principal amount due	Nil	Nil
iii) Interest and principal amount paid beyond appointment day	Nil	Nil
iv) The amount of interest due and for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the amount of interest specified under MSME Development Act 2006.	Nil	Nil
v) The amount of interest accrued and remaining unpaid at the end of the year.	Nil	Nil
vi) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest due as above are actually paid to the small enterprise, for the purpose of disallowance as a deductible expenditure under section 23 of MSME Development Act 2006.	Nil	Nil

22. B - Trade Payable ageing								Amount in ₹ Crore
(a) Ageing when due date of payment is specified								
(b) Ageing when due date of payment is not specified								
				Outstanding from the due date of payment				
Sl. No.	Particulars		Not Due	Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
(i) MSME	As on 31.03.2023		62.36	30.27	-	-	-	92.63
	As on 31.03.2022		60.91	13.74	-	-	-	74.65
(ii) Others	As on 31.03.2023		690.79	185.35	-	-	-	876.14
	As on 31.03.2022		820.40	261.17	15.16	6.92	156.62	1,260.27
(iii) Disputed Dues- MSME	As on 31.03.2023		-	-	-	-	-	-
	As on 31.03.2022		-	0.72	-	-	-	0.72
(iv) Disputed Dues- Others	As on 31.03.2023		23.41	-	-	1.81	6.23	31.45
	As on 31.03.2022			0.06	0.12	0.16	74.25	74.59
Total as on 31.03.2023			**776.56**	**215.62**	-	**1.81**	**6.23**	**1,000.22**
Total as on 31.03.2022			**881.31**	**275.69**	**15.28**	**7.08**	**230.87**	**1,410.23**

Notes to the standalone financial statements

(c) Ageing of Unbilled dues — **Amount in ₹ Crore**

Sl. No.	Particulars	Not Due	Outstanding from the due date of payment: Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
(i) MSME	As on 31.03.2023	-	51.66	0.94	0.02	0.21	52.83
	As on 31.03.2022	-	43.91	1.21	0.13	0.14	45.39
(ii) Others	As on 31.03.2023	-	218.57	-	0.94	1.76	221.27
	As on 31.03.2022	-	24.43	0.53	-	0.13	25.09
(iii) Disputed Dues- MSME	As on 31.03.2023	-	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-	-
(iv) Disputed Dues- Others	As on 31.03.2023	-	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-	-
Total as on 31.03.2023		-	**270.23**	**0.94**	**0.96**	**1.97**	**274.10**
Total as on 31.03.2022		-	**68.34**	**1.74**	**0.13**	**0.27**	**70.48**
Total as on 31.03.2023	(a)+(b)+(c)	776.56	**485.85**	**0.94**	**2.77**	**8.20**	**1,274.32**
Total as on 31.03.2022	(a)+(b)+(c)	881.31	**344.03**	**17.02**	**7.21**	**231.14**	**1,480.71**

23 - Other financial liabilities — **Amount in ₹ Crore**

A. Non current	**As at 31.03.2023**	**As at 31.03.2022**
Creditors for capital supplies and services		
- Dues to micro and small enterprises	-	-
- Others	180.00	88.57
Total other non-current financial liabilities	**180.00**	**88.57**
B. Current	**As at 31.03.2023**	**As at 31.03.2022**
(a) Unpaid dividends	4.25	4.29
(b) Creditors for other liabilities		
(1) Creditors for capital supplies and services		
- Dues to micro and small enterprises	-	-
- Others	400.20	316.13
(2) Security deposits from customers	3.49	4.95
(3) Refund due to customers	39.92	34.67
(4) Liabilities for discount on sales to customers	172.44	140.21
(5) Employees' recoveries	0.11	0.10
Total other current financial liabilities	**620.41**	**500.35**

Notes to the standalone financial statements

24 - Provisions

Amount in ₹ Crore

A. Non-current	As at 31.03.2023	As at 31.03.2022
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Post retirement medical benefits scheme (PRMBS) (funded)	-	152.83
(ii) Settling in benefit on retirement	12.59	13.73
(iii) Nalco benevolent fund scheme (NBFS)	2.07	2.15
(iv) Nalco retirement welfare scheme(NRWS)	8.29	8.88
(v) Retirement gift	4.78	5.36
(2) Other long-term employee benefits		
(i) Compensated absences (refer note 24.4)	-	-
(ii) Long service rewards	12.32	11.55
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	16.18	25.51
(b) Other Provisions		
(1) Asset restoration obligations/dismantling	44.22	40.59
(2) Other legal and constructive obligations	0.38	0.38
Total non current provisions	**100.83**	**260.98**
B. Current	**As at 31.03.2023**	**As at 31.03.2022**
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Gratuity (funded)	-	-
(ii) Post retirement medical benefits scheme (PRMBS) (funded)	10.44	9.48
(iii) Settling in benefit on retirement	3.30	3.79
(iv) Nalco benevolent fund scheme (NBFS)	0.43	0.48
(v) Nalco retirement welfare scheme(NRWS)	2.69	2.90
(vi) Retirement gift	1.07	1.17
(2) Other Long-term employee benefits		
(i) Compensated absences (funded)	39.82	18.99
(ii) Long service rewards	0.63	0.93
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	6.83	9.84
(b) Other Provisions		
(1) towards peripheral development expenses	30.05	30.30
(2) towards other legal and constructive obligations	51.63	49.07
Total current provisions	**146.89**	**126.95**

C. Movement of provisions

(1) Movement of retirement benefit obligations [refer note 33]

(2)Movement of employee benefits

Amount in ₹ Crore

	Compensated absences (funded)	Long service rewards	NEFFARS
Balance at 31.03.2021	**430.37**	**13.13**	**31.88**
Additional provisions recognised	121.28	1.49	31.59
Reductions arising from payments	(112.33)	(0.92)	(28.12)
Changes arising from remeasurement	25.62	(1.22)	-
Others [refer note 24.4]	(445.95)	-	-
Balance at 31.03.2022	**18.99**	**12.48**	**35.35**
Additional provisions recognised	84.41	1.49	11.65
Reductions arising from payments	(52.25)	(1.35)	(23.99)
Changes arising from remeasurement	(11.33)	0.33	-
Others [refer note 24.4]	-	-	-
Balance at 31.03.2023	**39.82**	**12.95**	**23.01**

Notes to the standalone financial statements

(3) Movement of other Provisions			Amount in ₹ Crore
	Asset restoration obligation	Legal and Constructive Obligation	Peripheral Development Expenses
Balance at 31.03.2021	**37.42**	**41.72**	**30.47**
Additional provisions recognised	0.11	12.53	-
Reductions arising from payments	-	(4.95)	(0.17)
Unwinding of discount	3.06	0.15	-
Balance at 31.03.2022	**40.59**	**49.45**	**30.30**
Additional provisions recognised	0.30	2.97	-
Reductions arising from payments	0.43	(0.69)	(0.25)
Unwinding of discount	2.90	0.28	-
Other	-	-	-
Balance at 31.03.2023	**44.22**	**52.01**	**30.05**

Note: 24.1 Obligation towards retirement and other long term employee benefits are recognsied on the valuation carried out by the independent actuary considering applicable laws in force and Company's rule.

24.2 Provision for asset restoration obligation and constructive obligation is made based on Management estimation in line with Ind AS 16: Property, Plant and Equipment and Ind AS 37: Provisions, Contingent Liabilities and Contingent Assets.

24.3 Provision for peripheral development expenditure is the unspent development obligation of the Company prior to introduction of the Companies Act 2013.

25 - Other liabilities		Amount in ₹ Crore
A. Non-current	**As at 31.03.2023**	**As at 31.03.2022**
(i) Deposits under NEFFARS	83.52	101.26
(ii) Others [Refer note 25.1]	230.50	230.50
Total other non-current liabilities	**314.02**	**331.76**
B. Current		
(i) Contract Liabilities (Revenue received in advance) [Refer Note 25.3 & 29.2]	101.54	125.57
(ii) Statutory and other dues		
(a) Electricity duty [Refer Note 25.4]	85.40	108.49
(b) Tax deducted and collected at source	32.46	36.05
(c) Contribution to NEPF trust and NPS	30.91	41.07
(d) Dues towards stamp duty	212.78	212.78
(e) Others (Service tax, excise duty, GST, royalty etc) [Refer Note 25.5]	185.17	356.01
(iii) Renewable energy purchase obligation	87.64	68.71
(iv) Deposits under NEFFARS	32.50	38.94
(v) Grants for property, plant and equipment	0.46	0.48
(vi) Other credit balances	0.46	0.45
Total other current liabilities	**769.32**	**988.55**

Note: 25.1 The Hon'ble CESTAT, Kolkata had issued refund order of ₹ 230.50 crore during FY 2020-21 in favour of the Company towards clean energy cess. In view of the various earlier judgements on identical matter where the benefit has not been allowed to the beneficiary, due to involvement of higher degree of uncertainty the Company has preferred to recognise the said amount as a liability till final outcome of the dispute. Moreover, the Department has challenged the order issued by CESTAT, Kolkata in the Hon'ble High Court of Orissa.

25.2 The Company obtains deposits (from the dependent of the employee pursuant to the NEFFAR Scheme who died or suffered disability) for which the Company is in the process of applying to the Ministry of Corporate Affairs, Govt. of India for availing exemption in respect of applicability of Section 73 to 76 of the Companies Act, 2013.

25.3 Reconciliation of Contract Liabilities (Revenue received in advance):

Sl. No	Particulars	2022-23	2021-22
1	**Balance at the beginning of the year**	**125.57**	**97.25**
2	Revenue reocognised during the year against opening contract liabilities	(107.33)	(95.19)
3	Advance reclassified to financial liability during the year against opening liabilities	(17.60)	(1.45)
4	Advance received against which revenue has not been recognised	100.90	124.96
5	**Balance at the end of the year**	**101.54**	**125.57**

Notes to the standalone financial statements

25.4 Recently Energy Department, Govt. of Odisha have passed on a resolution (Resolution No-11797, dtd-30.11.2022) for One Time Settlement (OTS) of arrear Electricity Duty (ED) and interest of consumers as on dt. 31.03.2022, who generate energy for captive consumption and not depositing the ED due to court case/litigation etc.

The Company has opted for the OTS scheme and filed necessary papers after the Confederation of Captive Power Plants, Odisha (in which the Company is a member) withdrew the legal case in the Hon'ble High Court, Odisha. As per the condition laid out in the OTS scheme, 10% of the outstanding demand raised by the Authority amounting to ₹ 27.83 crore has been paid during the year from the escrow account created as per order of the Hon'ble High Court. The final settlement under the scheme is yet to be completed.

25.5 Consequent upon amendment of Mines and Minerals (Development and Regulation) Amendment Act, 2021 with effect from 28th March, 2021, as per Section 8A(8) which provides that the period of mining leases, other than the mining leases granted through auction, shall be extended on payment of such additional amount as specified in the Fifth Schedule. Based on demand raised by IBM through I3MS portal for royalty, the Company has paid DMF and NMET along with additional royalty for Both North & Central Block and South Block of Panchapatmali Bauxite Mines till November 2022.

Ministry of Mines, Govt. of India vide letter dated 31.1.2023 has clarified that additional royalty payment in respect of government companies are applicable in case of extension of lease under 8A(8) of the Act or grant of fresh lease to Govt. Companies where area are reserved after 2015 as per Section 17A(2C) of Mines and Mineral (Development and Regulation) Act , 2015. Panchpatmali (South Block) and Panchpatmali (Central and North block) mining leases of the Company have been deemed to be granted for 50 years i.e. up to 19.07.2029 and 16.11.2032 respectively in accordance with the rule 3(1) of Mineral (Mining by Government Company Rule, 2015 (now Rule 72(1) of M(OAHCEM) CR, 2016. Thus these leases of the Company have not been extended under Section 8A(8) read with Rule 72(2)&(3) of M(OAHCEM)CR, 2016.

Ministry of Mines, Govt. of India has also requested to Govt. of Odisha that no additional royalty may be charged from the Company till the completion of lease period of 50 years for both the Mines and the additional Royalty already paid by the Company so far in respect of these two mining leases may be adjusted in lieu of future Royalty payments.

In the absence of any communication from Govt. of Odisha on the subject of additional Royalty on Bauxite, the Company has continued the existing practice of recognition of liability towards additional Royalty from 01.12.2022 to 31.3.2023.

Notes to the standalone financial statements

26 - Deferred tax liabilities				Amount in ₹ Crore
			As at 31.03.2023	As at 31.03.2022
Deferred tax liabilities			1,064.19	1,090.08
Deferred tax assets			106.42	221.90
			957.77	**868.18**
2021-22	**Opening balance as at 01.04.2021**	**Recognised in profit or loss**	**Recognised in other comprehensive income**	**Closing balance as at 31.03.2022**
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,140.45)	78.82	-	(1,061.63)
Provision for defined benefit obligation (OCI)	(5.15)	-	(23.30)	(28.45)
Deferred tax liabilities	**(1,145.60)**	**78.82**	**(23.30)**	**(1,090.08)**
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	108.32	(103.54)	-	4.78
Provision for defined benefit obligation	66.12	19.35	-	85.47
Provision for doubtful debts / advances	69.01	(0.32)	-	68.69
FVTPL financial assets	4.32	(0.27)	-	4.05
Temporary Difference due to application of section 43B	0.93	54.80	-	55.73
Others	3.18	-	-	3.18
Deferred tax assets	**251.88**	**(29.98)**	**-**	**221.90**
Deferred tax (liabilities) / assets - [net]	**(893.72)**	**48.84**	**(23.30)**	**(868.18)**
2022-23	**Opening balance as at 01.04.2022**	**Recognised in profit or loss**	**Recognised in other comprehensive income**	**Closing balance as at 31.03.2023**
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,061.63)	(0.61)	-	(1,062.24)
Provision for defined benefit obligation (OCI)	(28.45)	-	26.50	(1.95)
Deferred tax liabilities	**(1,090.08)**	**(0.61)**	**26.50**	**(1,064.19)**
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	4.78	(4.78)	-	0.00
Provision for defined benefit obligation	85.47	(64.32)	-	21.15
Provision for doubtful debts / advances	68.69	(0.60)	-	68.09
FVTPL financial assets	4.05	9.04	-	13.09
Temporary Difference due to application of section 43B	55.73	(54.82)	-	0.91
Others	3.18	-	-	3.18
Deferred tax assets	**221.90**	**(115.48)**	**-**	**106.42**
Deferred tax (liabilities) / assets [net]	**(868.18)**	**(116.09)**	**26.50**	**(957.77)**

Note: The applicable rate for the current year is 25.168% (previous year 25.168%).

27. Contingent liabilities (to the extent not provided for)			Amount in ₹ Crore
		As at 31.03.2023	As at 31.03.2022
Claims against the Company not acknowledged as debts			
a.	**Demand from statutory authority**		
	1. Odisha Sales tax	3.71	4.09
	2. Central Sales tax	277.52	280.55
	3. VAT	0.69	12.64
	4. Excise duty	410.44	410.44
	5. Custom duty	102.67	102.77
	6. Service tax	13.08	14.82
	7. Income tax	210.27	223.75
	8. Entry tax	217.28	222.21
	9. Road tax	2.65	2.65
	10. Stamp duty	0.51	0.51
	11. Claim From Govt. (NGT)	-	109.01
	12. Claim From PSUs	423.21	322.92
	13. Land acquisition and interest thereon	85.55	78.07
	14. Dept. of mines Govt. of Odisha	136.32	136.32
	15. Water Resources Deptt. Govt. of Odisha for Water Conservation fund	119.24	119.24
b.	**Claim by contractors/suppliers and others**		
	1. Claims of Contractor's suppliers and others	359.15	338.41
	Total	**2,362.31**	**2,378.40**

Notes to the standalone financial statements

Claims against the Company not acknowledged as debt includes:

i. Demand from various statutory authorities towards income tax, sales tax, excise duty, custom duty, service tax, entry tax and other government levies. The Company is contesting the demands before the respective appellate authorities. It is expected that the ultimate outcome of these proceedings will be in favour of the Company and will not have any material adverse effect on the Company's financial position and results of operation.

ii. Claims of contractors for supply of materials/services pending with arbitration/courts have arisen in the ordinary course of business. The Company reasonably expects that these legal actions will be concluded and determined in favour of the Company and will not have any material adverse effect on the Company's results of operation or financial position.

iii. Claim from PSUs includes the energy compensation charges and the delayed payment surcharge on the same, since 2005, demanded by Odisha Hydro Power Corporation Limited (OHPC) towards loss of power generation by the Corporation due to drawal of water from the reservoir at Upper Kolab, Koraput by NALCO Refinery at M&R Complex.

iv. The claims against the company are mostly due to demands raised by the IT department at assessment stage. These claims are on account of multiple issues of disallowances such as disallowance in respect of additional depreciation under section 32(i)(iia), disallowance of peripheral development expenses, provision for non-moving stores and spares, treatment of short term capital gain and not allowing loss under long term capital gain and treating the same as business income, disallowance u/s 14A etc. These matters are sub-judice and pending before various appellate authorities. The Company, including its tax advisors, expect that its position will likely be upheld on the ultimate resolution in view of the decisions already available in favour of the Company by higher appellate forums being CIT(A) / ITAT (Jurisdictional). Thus it will not have a material adverse effect on the Company's financial position and in the results of operations. Hence, there is no uncertainty in tax treatment which will affect the determination of taxable profit (loss), tax bases, unused tax losses, unused tax credits, and tax rates of the Company.

The Company has reviewed the disputed income tax matters and the demands raised by the Department/ Authorities considering the probable outcome of the dispute and possibilities of outflow of resources and disclosed as on 31.03.2023 accordingly.

27.1 Movement of contingent liabilities — **Amount in ₹ Crore**

		As at 31.03.2022	Reduction during the year	Addition during the year	As at 31.03.2023
a.	**Demand by statutory authority**				
	1. Odisha Sales tax	4.09	(0.38)	-	3.71
	2. Central Sales tax	280.55	(3.49)	0.46	277.52
	3. VAT	12.64	(11.95)	-	0.69
	4. Excise duty	410.44	-	-	410.44
	5. Custom duty	102.77	(0.09)	-	102.67
	6. Service tax	14.82	(1.73)	-	13.08
	7. Income tax	223.75	(15.90)	2.42	210.27
	8. Entry tax	222.21	(4.94)	-	217.28
	9. Road tax	2.65	-	-	2.65
	10. Stamp duty	0.51	-	-	0.51
	11. Claim From Govt (NGT)	109.01	(109.01)	-	-
	12. Claim From PSUs	322.92	-	100.30	423.21
	13. Land acquisition and interest thereon	78.07	-	7.48	85.55
	14. Demand from Dept. of mines Govt. of Odisha	136.32	-	-	136.32
	15. Demand from Water Resources Deptt. Govt. of Odisha for Water Conservation fund	119.24	-	-	119.24
b.	**Claim by contractors/suppliers and others**				
	1. Claims of Contractor's suppliers and others	338.41	(9.55)	30.30	359.15
	Total	**2,378.40**	**(157.04)**	**140.95**	**2,362.31**

28 - Commitments — **Amount in ₹ Crore**

		As at 31.03.2023	As at 31.03.2022
a)	Estimated amount of Contracts remaining to be executed on capital account and not provided for	3,690.17	3,404.69
b)	Other Commitments		
	(1) Amount payable to the Government of India but not yet due for payment for allocation of Utkal D & E coal block.	Nil	Nil
	(2) Export obligation for import of capital goods under Export Promotion Capital Goods Scheme.	244.51	463.94
	(3) Estimated amount of commitment to Govt. of Odisha for allotment of Pottangi Bauxite Mines	Nil	Nil
	(4) Estimated amount of commitment to Govt. of India (MoEFFC) for 5th Stream Refinery project.	Nil	Nil
	(5) Corporate environment responsibility (CER) for capital investments	Nil	6.00
	Total	**3,934.68**	**3,874.63**

Notes to the standalone financial statements

29 - Revenue from operations			Amount in ₹ Crore
		Year ended 31.03.2023	Year ended 31.03.2022
I.	**Revenue from Contract with customers**		
	(a) Sale of products		
	1) Export:		
	i) Chemical	3,642.61	3,664.61
	ii) Aluminium	574.15	2,699.54
	2) Domestic:		
	i) Chemical	265.46	278.47
	ii) Aluminium	9,626.61	7,370.62
	(b) Sale of power		
	i) Wind Power [Refer note no. 29.3]	62.03	45.74
	Total Revenue from Contract with customers	**14,170.86**	**14,058.98**
II.	**Other operating income**		
	(a) Export Incentives		
	i) Chemical	35.90	36.11
	ii) Aluminium	17.03	66.49
	(b) Incentives on Renewable Energy		
	i) Renewable Energy certificates	7.09	8.11
	ii) Generation based incentives	3.49	3.98
	(c) Own manufactured goods internally used /capitalised	10.51	7.14
	(d) Income from internally generated scrap	9.98	33.77
Total Other operating income		**84.00**	**155.60**
Revenue from operations		**14,254.86**	**14,214.58**

Note: 29.1 Majority of sales are against advances or against letter of credit. Where sales are made on credit, the amount of consideration does not contains any significant financing component as the payment term is within a year.

29.2 As per the terms of the contract with its customers, either all performance obligations are to be completed within one year from the date of such contracts or the Company has a right to receive consideration from its customers for all completed performance obligations. Accordingly, the Company has availed the practical expedient available under paragraph 121 of Ind AS 115 and dispensed with the additional disclosures with respect to performance obligations that remained unsatisfied (or partially unsatisfied) at the balance sheet date. Further, the terms of the contracts directly identify the single transaction price for each of the completed performance obligations there are no elements of transaction price which have not been included in the revenue recognised in the financial statements.

29.3 The Company has not recognised the revenue from its two wind power plants located in the State of Rajasthan due to non availability of Power Purchase Agreement (PPA) since 2018-19.

30 - Other income			Amount in ₹ Crore
		Year ended 31.03.2023	Year ended 31.03.2022
(a)	Interest income		
	(i) Interest income earned from financial assets that are not designated as at fair value through profit or loss:		
	- Bank deposits	143.25	103.18
	- Loans to employees	10.17	9.25
	- Other financial assets carried at amortised cost	20.04	13.42
	(ii) Interest income earned from Income tax refund	13.72	84.51
(b)	Dividend income		
	- Dividends from current investments	17.23	13.91
(c)	Net foreign exchange gain/(loss)	(8.90)	(1.59)
(d)	Net gain/(loss) on financial assets designated as at FVTPL	0.57	(0.36)
(e)	Write back of liabilities no longer required [refer note: 30.1]	8.00	23.00
(f)	Net gain/(loss) on sale of Property, Plant & Equipments	2.56	0.44
(g)	Others	28.99	18.33
Total other income		**235.63**	**264.09**

Note: 30.1 Unclaimed liability lying in books for a period of more than 3 years as on the reporting date are written back and recognized as income.

Notes to the standalone financial statements

31- Cost of materials consumed			Amount in ₹ Crore
A.	Raw material	Year ended 31.03.2023	Year ended 31.03.2022
	(1) Caustic soda	1,463.37	873.17
	(2) C. P. coke	1,167.81	693.19
	(3) C. T. pitch	302.72	225.98
	(4) Aluminium fluoride	107.69	87.18
	(5) Lime	74.17	52.24
	(6) Others	56.36	39.37
	Total raw materials consumed	**3,172.12**	**1,971.13**
B.	**Power and Fuel**		
	(1) Coal	2,521.56	1,502.24
	(2) Fuel oil	1,054.24	864.58
	(3) Duty on own generation	376.92	375.05
	(4) Purchase of power	737.92	637.96
	(5) Power transmission charges	3.05	8.65
	Total Power and Fuel consumed	**4,693.69**	**3,388.48**

32. Changes in inventories of finished goods, intermediaries and work-in-process		Amount in ₹ Crore
	Year ended 31.03.2023	Year ended 31.03.2022
Finished goods		
Opening stock		
(1) Bauxite	18.54	4.34
(2) Chemical	253.91	232.28
(3) Aluminium	270.02	227.81
Total opening stock of finished goods	**542.47**	**464.43**
Less: Closing stock		
(1) Bauxite	26.99	18.54
(2) Chemical	198.82	253.91
(3) Aluminium	236.55	270.02
Total Closing stock of finished goods	**462.36**	**542.47**
(Accretion)/Depletion in finished goods	**80.11**	**(78.04)**
Intermediaries		
Opening stock		
Anodes	113.19	100.83
Others	23.48	17.74
Total opening stock of intermediaries	**136.67**	**118.57**
Less: Closing stock		
Anodes	143.00	113.19
Others	17.35	23.48
Total closing stock of intermediaries	**160.35**	**136.67**
(Accretion)/depletion in intermediaries	**(23.68)**	**(18.10)**
Work in process		
Opening stock	319.04	298.35
Less: Closing stock	392.13	319.04
(Accretion)/Depletion (Accretion)/depletion in work in process	**(73.09)**	**(20.69)**
Total (Accretion)/Depletion in inventory	**(16.66)**	**(116.83)**

Notes to the standalone financial statements

33. Employee benefits expense			Amount in ₹ Crore
		Year ended 31.03.2023	Year ended 31.03.2022
(a)	Salaries and wages, including bonus	1,419.98	1,968.69
(b)	Contribution to provident and other funds		
	1) Provident fund	114.77	115.87
	2) Gratuity	35.72	30.01
	3) Post employment pension scheme	103.61	104.00
(c)	Staff welfare expenses	167.91	167.50
	Total employee benefit expense	**1,841.99**	**2,386.07**
	Less: Transferred to Expenditure during construction (EDC)	9.93	30.27
	Net employee benefit expense	**1,832.06**	**2,355.80**

Notes:

33.A. Employee benefit Plans

33.A.1 Defined contribution plans

a) **Pension fund:** The Company pays fixed contribution to the trustee bank of Pension Fund Regulatory and Development Authority (PFRDA), which in turn invests the money with the insurers as specified by the employee concerned. The company's liability is limited only to the extent of fixed contribution.

33.A.2 Defined benefit plans

a) **Provident fund:** The provident fund of the company is managed by an exempted trust under section 17 of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952. Both the employees and the Company make monthly contributions to the provident fund at a specified percentage of employees salary. The Company contributes major part of the fund to the Trust, which invests the funds in permitted securities as per the statute. The remaining part is contributed to the Government administered Pension Fund.

The Company has an obligation to pay minimum rate of return to the members as specified by Government of India. As per the condition of exemption, the Company shall make good for the deficiency, if any, between the return from the investments of the Trust and the notified interest rate by the Government. The contributions made by the Company and the shortfall of interest, if any, are recognised as an expense in profit and loss under employee benefits expense.

Accordingly the company has obtained actuarial valuation in accordance with Ind AS 19 and there is no shortfall in the funds managed by the trust as at 31 March 2023 and 31 March 2022. The present value of obligation, the fair value of the plan assets and other key assumptions are summarized below.

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Fair value of plan assets	4,009.91	4,079.57
Present value of defined benefit obligations	3,835.87	3,920.73
Net liability arising from defined benefit obligation of trust	-	-
Discount Rate	7.17%	7.00%
Guaranteed Rate of Return	8.15%	8.10%
Interest Rate declared by Trust	8.15%	8.10%

b) **Gratuity:** Gratuity payable to employees as per The Payment of Gratuity Act subject to a maximum of ₹ 20,00,000/. The gratuity scheme is funded by the Company and is managed by a separate trust. The liability for gratuity under the scheme is recognised on the basis of actuarial valuation.

c) **Post retirement medical benefit:** The benefit is available to retired employees and their spouses who have opted for the benefit. Medical treatment as an in-patient can be availed from the Company's hospital/Govt. Hospital/ hospitals as per company's rule. They can also avail treatment as out patient subject to maximum ceiling of expenses fixed by the Company. The liability under the scheme is recognised on the basis of actuarial valuation. The scheme is funded by the Company and is managed by a separate trust.

d) **Settling-in-benefit:** On superannuation/retirement/termination of service, if opted for the scheme, the transfer TA is admissible to the employees and / or family from the last head quarters to the hometown or any other place of settlement limited to distance of home town. Transport of personal conveyance shall also be admissible. The liability for the same is recognised on the basis of actuarial valuation.

e) **NALCO Benevolent Fund Scheme :** The objective of the scheme is to provide financial assistance to families of the members of the scheme who die while in employment of the Company. As per the scheme there will be contribution by members @ ₹ 30/- per member per death, in the event of death of a member while in the service of the company and matching contribution is made by the Company. The liability for the same is recognised on the basis of actuarial valuation.

f) **NALCO Retirement Welfare Scheme :** The objective of the scheme is to provide financial assistance as a gesture of goodwill as post retirement support to employees retiring from the services of the company. As per the scheme the recovery from each employee member would be ₹ 10/- per retiring member. The Company would provide equivalent sum as matching contribution. The liability for the same is recognised on the basis of actuarial valuation.

g) **Superannuation gift scheme:** The objective of the scheme is to recognise the employees superannuating or retiring on medical ground from the services of the Company. The scheme includes a gift item worth of ₹ 25000/- per retiring employees to be presented on superannuation/ retirement. The liability for the same is recognised on the basis of actuarial valuation.

33.A.3 Other long term employees benefits

a) **Compensated absences :** The accumulated earned leave, half pay leave & sick leave is payable on separation, subject to maximum permissible limit as prescribed in the leave rules of the Company. During the service period encashment of accumulated leave is also allowed as per the Company's rule. The liability for the same is recognised on the basis of actuarial valuation. The obligation is funded by the Company and is managed by a separate trust.

b) **Long Service Reward :** The employee who completes 25 years of service are entitled for a long service reward which is equal to one month basic pay and DA. The liability for the same is recognised on the basis of actuarial valuation.

c) **NEFFARS :** In the event of disablement/death, on deposit of prescribed amount as stipulated under the scheme, the Company pays monthly benefit to the employee/ nominee at their option upto the date of notional superannuation. The liability for the same is recognised on the basis of actuarial valuation.

The employee benefit plans typically expose the Company to actuarial risks such as actuarial risk, investment risk, interest risk, longetivity risk and salary risk:-

i. Actuarial risk: It is the risk that employee benefits will cost to the Company more than expected. This can arise due to one of the following reasons:
   a. **Adverse Salary Growth Experience:** Salary hikes that are higher than the assumed salary escalation will result into an increase in obligation at a rate that is higher than expected.
   b. **Variability in mortality rates:** If actual mortality rates are higher than assumed mortality rate assumption then the gratuity benefits will be paid earlier than expected. Since there is no condition of vesting on the death benefit, the acceleration of cash flow will lead to an actuarial loss or gain depending on the relative values of the assumed salary growth and discount rate.
   c. **Variability in withdrawal rates:** If actual withdrawal rates are higher than assumed withdrawal rate assumption then the gratuity benefits will be paid earlier than expected. The impact of this will depend on whether the benefits are vested as at the resignation date.

ii. **Investment risk:** For funded plans that rely on insurers for managing the assets, the value of assets certified by the insurer may not be the fair value of instruments backing the liability. In such cases, the present value of the assets is independent of the future discount rate. This can result in wide fluctuations in the net liability or the funded status if there are significant changes in the discount rate during the inter-valuation period.

iii. **Interest risk:** The defined benefit obligation calculated uses a discount rate based on government bonds. If bond yields fall, the defined benefit obligation will tend to increase.

iv. **Longevity risk:** The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

v. **Salary risk:** The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants beyond assumed plan will increase the plan's liability.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	Valuation as at	
	31.03.2023	**31.03.2022**
Discount rate(s)	7.17%	7.00%
Expected rate(s) of salary increase	6.65%	6.65%
Mortality	IALM 2012-2014 ULTIMATE	IALM 2012-2014 ULTIMATE
Attrition Rate	1%	1%

Amounts recognised in statement of profit and loss in respect of these defined benefits plans are as follows:

Amount in ₹ Crore

	Year ended 31.03.2023	**Year ended 31.03.2022**
Service Cost :		
-Current Service cost	(43.29)	(35.10)
-Past Service Cost and (gain)/loss from settlements	42.22	17.36
-Net Interest expense	(9.10)	(10.91)
Components of defined benefit costs recognised in statement of profit & loss	**(10.17)**	**(28.65)**
Remeasurement of the net defined benefit liability:		
Return on the net defined benefit liability	(1.35)	4.68
Actuarial (Gains)/losses arising from changes in financial assumptions	8.71	24.61
Actuarial (Gains)/losses arising from experience assumptions	23.79	17.96
Others		
Adjustments for restrictions on the defined benefit asset		
Components of defined benefit costs recognised in other comprehensive income	**31.15**	**47.25**
Total	**20.98**	**18.60**

Notes to the standalone financial statements

The amount included in the balance sheet arising from the entity's obligation in respect of its defined benefit plans is as follows:

Amount in ₹ Crore

	Post retirement medical benefit (PRMBS-funded)	Settling-in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Superannuation gift scheme	Gratuity (Funded)
March 31, 2022						
Present value of defined benefit obligation	(162.31)	(17.51)	(2.63)	(11.78)	(6.53)	(532.70)
Fair value of plan assets	-					554.86
Net liability arising from defined benefit obligation	**(162.31)**	**(17.51)**	**(2.63)**	**(11.78)**	**(6.53)**	**22.16**
March 31, 2023						
Present value of defined benefit obligation	(171.28)	(15.88)	(2.51)	(10.98)	(5.85)	(483.42)
Fair value of plan assets	160.85					510.14
Net liability arising from defined benefit obligation	**(10.43)**	**(15.88)**	**(2.51)**	**(10.98)**	**(5.85)**	**26.72**
Movements in the present value of the defined benefit obligations are as follows:						
	Post retirement medical benefit (PRMBS)	**Settling-in-benefit**	**NALCO benevolent fund scheme**	**NALCO retirement welfare scheme**	**Superannuation gift scheme**	**Gratuity (Funded)**
Opening defined benefit obligations as at April 01, 2021	**(155.35)**	**(19.58)**	**(2.73)**	**(12.38)**	**(7.16)**	**(595.80)**
Current service cost	-	(2.94)	-	-	-	(32.16)
Interest Cost	(10.46)	(1.17)	(0.16)	(0.79)	(0.47)	(38.82)
Remeasurement (gains)/losses						
Actuarial (Gains)/losses arising from changes in financial assumptions	1.33	0.39	0.05	0.25	0.20	22.39
Actuarial (Gains)/losses arising from experience assumptions	(9.58)	0.04	(0.62)	(1.01)	-	29.13
Benefits paid	11.75	5.75	0.83	2.15	0.90	82.56
Closing defined benefit obligation as at March 31, 2022	**(162.31)**	**(17.51)**	**(2.63)**	**(11.78)**	**(6.53)**	**(532.70)**

Amount in ₹ Crore

	Post retirement medical benefit (PRMBS)	Settling-in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Superannuation gift scheme	Gratuity (Funded)
Current service cost	-	(3.00)	-	-	-	(40.29)
Interest Cost	(11.19)	(1.10)	(0.18)	(0.77)	(0.43)	(35.21)
Remeasurement (gains)/losses						
Actuarial (Gains)/losses arising from changes in financial assumptions	2.93	0.15	0.02	0.11	0.07	5.43
Actuarial (Gains)/losses arising from experience assumptions	(13.19)	1.24	0.03	(0.59)	0.10	36.20
Benefits paid	12.48	4.34	0.25	2.05	0.94	83.15
Closing defined benefit obligation as at March 31, 2023	**(171.28)**	**(15.88)**	**(2.51)**	**(10.98)**	**(5.85)**	**(483.42)**

Notes to the standalone financial statements

33. Employee benefits expense		Amount in ₹ Crore
Movements in the fair value of the plan assets are as follows:		
	PRMBS (Funded)	**Gratuity (Funded)**
Opening fair value of plan assets as at April 01, 2021	-	585.17
Interest income	-	40.96
Remeasurement gains/(losses)	-	-
Return on plan assets (excluding amounts included in net interest income)	-	4.68
Others	-	-
Contribution from the employer	-	6.61
Benefits paid	-	(82.56)
Closing fair value of plan assets as at March 31, 2022	-	**554.86**
Interest income	3.78	39.78
Remeasurement gains/(losses)		
Return on plan assets (excluding amounts included in net interest income)		(1.35)
Contribution from the employer	169.55	-
Benefits paid	(12.48)	(83.15)
Others	-	-
Closing fair value of plan assets as at March 31, 2023	**160.85**	**510.14**

The fair value of the plan assets at the end of the reporting period for each category, are as follows:

	Fair value of plan assets as at			
	PRMBS		**Gratuity**	
	31.03.2023	**31.03.2022**	**31.03.2023**	**31.03.2022**
Investments in Funds:				
1. Insurance Companies	160.85	-	510.14	554.86
Total	**160.85**	-	**510.14**	**554.86**

33.C - Sensitivity analysis of defined benefit plans

Significant actuarial assumption for determination of defined benefit plan are discount rate, expected salary growth, attrition rate and mortality rate. The sensitivity analysis below have been based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period while holding all other assumptions constant.

Sensitivity Analysis						Amount in ₹ Crore
Particulars	**Post retirement medical benefit** (PRMBS-funded)		**Settling-in-benefit**		**NALCO benevolent fund scheme**	
2021-22	**Increase by**	**Decrease by**	**Increase by**	**Decrease by**	**Increase by**	**Decrease by**
Impact on amount due to change in Discount rate (-/+0.5%)	**4.69**	**4.79**	**0.51**	**0.52**	**0.07**	**0.07**
% Change compared to base due to sensitivity [+/(-)%]	2.89%	2.95%	2.89%	2.95%	2.71%	2.76%
Impact on amount due to change in Salary growth (+/-0.5%)	**0.19**	**0.19**	**0.02**	**0.02**	**0.06**	**0.06**
% Change compared to base due to sensitivity [+/(-)%]	0.12%	0.12%	0.12%	0.12%	2.42%	2.37%
Impact on amount due to change in Attrition rate (+/-0.5%)	**0.19**	**0.19**	**0.02**	**0.02**	-	-
% Change compared to base due to sensitivity [+/(-)%]	0.12%	0.12%	0.12%	0.12%	0.15%	0.15%
Impact on amount due to change in Moratlity rate (-/+10%)	**0.75**	**0.75**	**0.08**	**0.08**	**0.01**	**0.01**
% Change compared to base due to sensitivity [+/(-)%]	0.46%	0.46%	0.46%	0.46%	0.26%	0.26%

Notes to the standalone financial statements

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
2021-22	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	**0.32**	**0.33**	**0.18**	**0.18**	**17.57**	**16.45**
% Change compared to base due to sensitivity [+/(-)%]	2.71%	2.76%	2.71%	2.76%	3.30%	3.09%
Impact on amount due to change in Salary growth (+/-0.5%)	**0.29**	**0.28**	**0.16**	**0.15**	**3.90**	**16.45**
% Change compared to base due to sensitivity [+/(-)%]	2.42%	2.37%	2.42%	2.37%	0.73%	3.09%
Impact on amount due to change in Attrition rate (+/-0.5%)	**0.02**	**0.02**	**0.01**	**0.01**	**0.11**	**16.45**
% Change compared to base due to sensitivity [+/(-)%]	0.15%	0.15%	0.15%	0.15%	0.02%	3.09%
Impact on amount due to change in Moratlity rate (-/+10%)	**0.03**	**0.03**	**0.02**	**0.02**	**0.50**	**0.50**
% Change compared to base due to sensitivity [+/(-)%]	0.26%	0.26%	0.26%	0.26%	0.09%	0.09%

Particulars	Post retirement medical benefit (PRMBS-funded)		Settling-in-benefit		NALCO benevolent fund scheme	
2022-23	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	**4.95**	**5.05**	**0.47**	**0.46**	**0.07**	**0.07**
% Change compared to base due to sensitivity [+/(-)%]	2.89%	2.95%	2.95%	2.89%	2.71%	2.76%
Impact on amount due to change in Salary growth (+/-0.5%)	-	-	**0.38**	**0.38**	**0.06**	**0.06**
% Change compared to base due to sensitivity [+/(-)%]	-	-	0.02	0.02	2.42%	2.37%
Impact on amount due to change in Attrition rate (+/-0.5%)	**0.21**	**0.21**	**0.02**	**0.02**	-	-
% Change compared to base due to sensitivity [+/(-)%]	0.12%	0.12%	0.12%	0.12%	0.15%	0.15%
Impact on amount due to change in Moratlity rate (-/+10%)	**0.79**	**0.79**	**0.07**	**0.07**	**0.01**	**0.01**
% Change compared to base due to sensitivity [+/(-)%]	0.46%	0.46%	0.46%	0.46%	0.26%	0.26%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
2022-23	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	**0.30**	**0.30**	**0.16**	**0.16**	**16.34**	**15.30**
% Change compared to base due to sensitivity [+/(-)%]	2.71%	2.76%	2.71%	2.76%	3.38%	3.16%
Impact on amount due to change in Salary growth (+/-0.5%)	**0.27**	**0.26**	**0.14**	**0.14**	**3.28**	**2.91**
% Change compared to base due to sensitivity [+/(-)%]	2.42%	2.37%	2.42%	2.37%	0.68%	0.60%
Impact on amount due to change in Attrition rate (+/-0.5%)	**0.02**	**0.02**	**0.01**	**0.01**	**0.13**	**0.13**
% Change compared to base due to sensitivity [+/(-)%]	0.15%	0.15%	0.15%	0.15%	0.03%	0.03%
Impact on amount due to change in Moratlity rate (-/+10%)	**0.03**	**0.03**	**0.02**	**0.02**	**0.51**	**0.52**
% Change compared to base due to sensitivity [+/(-)%]	0.26%	0.26%	0.26%	0.26%	0.11%	0.11%

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using projected unit credit method at the end of the reporting period, which is same as that applied in calculating the defined benefit obligation liability recognised in the balance sheet.

There is no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

Notes to the standalone financial statements

34 - Finance costs		Amount in ₹ Crore	
		Year ended 31.03.2023	Year ended 31.03.2022
Finance cost			
a.	Interest expenses on lease liabilities	4.08	4.13
b.	Interest on shortfall in payment of advance income tax	(5.05)	7.62
c.	Others	13.89	11.38
Total finance cost		**12.92**	**23.13**

Note: 34.1 Other finance cost includes unwinding interest cost against dismantling liabilities and provision for interest on risk & hardship allowance of CISF deputed at M&R complex, Damanjodi.

35 - Other expenses		Amount in ₹ Crore	
		Year ended 31.03.2023	Year ended 31.03.2022
(a)	Stores and spares consumed	443.69	381.26
(b)	Repair and maintenance to		
	(1) Buildings	68.36	55.43
	(2) Machinery	209.60	170.73
	(3) Others	26.20	25.50
(c)	Other Manufacturing Expenses		
	(1) Water charges	34.55	34.57
	(2) Royalty	414.30	435.51
	(3) Contribution to District Mineral Fund and National Mineral Exploration Trust	66.29	69.68
	(4) Others	126.26	105.60
(d)	Freight and handling charges		
	(1) Incoming materials (Alumina)	123.84	118.96
	(2) Outgoing materials	130.71	172.41
(e)	Auditors remuneration and out-of-pocket expenses		
	(i) As Auditors	0.45	0.45
	(ii) For Taxation matters	0.09	0.08
	(iii) For Other services	0.39	0.36
	(iv) For reimbursement of expenses	0.01	-
(f)	Payment to Cost Auditors	0.05	0.03
(g)	Security and fire fighting expenses	164.31	150.96
(h)	Corporate social responsibility expenses [refer note 35.1]	39.54	36.91
(i)	Administrative and general expenses	118.74	101.88
(j)	Renewable purchase obligation	26.03	51.84
(k)	Selling and distribution expenses	24.36	33.43
(l)	Write off of Inventories, Claims etc.	3.26	1.68
(m)	Write off of Property Plant & Equipments	11.55	8.27
(n)	Bad and doubtful Provisions/(write back)	36.45	46.03
(o)	Others	56.54	63.93
	(1) Rent	0.80	0.79
	(2) Rates and Taxes	3.72	4.01
	(3) Insurance charges	16.94	17.80
	(4) Other miscellaneous expenses	35.08	41.33
	Total other expenses	**2,125.57**	**2,065.50**

Note:

35.1 Expenditure on Corporate Social Responsibility.

a) Gross amount required to be spent by the Company during the year ended March 31, 2023 is ₹ 36.64 crore (March 31, 2022 is ₹ 28.60 crore)

b) Amount spent during the year ended March 31, 2023

i)	Construction/acquisition of assets	₹ Nil crore (previous year ₹ Nil)
ii)	On purpose other than (i) above	₹ 39.54 crore (previous year ₹ 36.91 crore)
	Total	**₹ 39.54 crore (previous year ₹ 36.91 crore)**

36. Income taxes

36.1 Income tax recognised in profit or loss		Amount in ₹ Crore
	Year ended 31.03.2023	Year ended 31.03.2022
Current tax		
In respect of current year	475.47	1061.63
In respect of prior years	(181.06)	(9.88)
	294.41	**1,051.75**
Deferred tax		
In respect of current year	116.09	(48.85)
	116.09	**(48.85)**
Total income tax expense recognised in current year	**410.50**	**1,002.90**

The income tax expense for the year can be reconciled to the accounting profit as follows:

Profit before tax	**1,954.99**	**3,954.87**
Income tax expense thereon @ 25.168%	492.03	995.36
Tax effect of :		
i) disallowable expenses (permanent difference)	20.37	21.26
ii) expenses allowable in excess of expenditure incurred	(63.48)	(16.15)
iii) Adjustment relating to earlier years	(181.06)	(9.88)
iv) others	142.64	12.31
Income tax expense recognised in profit or loss	**410.50**	**1,002.90**

36.2 Income tax recognised in other comprehensive income

	Year ended 31.03.2023	Year ended 31.03.2022
Tax on remeasurement gain or loss of defined benefit obligations		
- Current Tax	-	-
- Deferred Tax	26.50	(23.30)
Total income tax recognised in other comprehensive income	**26.50**	**(23.30)**
Bifurcation of the income tax recognised in other comprehensive income into:		
Items that will be reclassified to profit or loss	-	-
Items that will not be reclassified to profit or loss	**26.50**	**(23.30)**

Note: In pursuance to Section 115BAA of the Income Tax Act, 1961 notified by the Government of India through Taxation Laws (Amendment) Ordinance, 2019, the Company had an irrevocable option of shifting to a lower tax rate foregoing other tax incentives and non applicability of Minimum alternate Tax. The Company exercised the said option for lower rates of taxes and the taxes have been recognised accordingly. The applicable rate for the current year is 25.168% (previous year 25.168%).

37 - Segment information

37.1 Products from which reportable segments derive their revenues

Information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of segment performance focuses on the types of goods delivered. The directors of the company have chosen to organise the Company around differences in products. No reporting segment have been aggregated in arriving at the reportable segments in the Company. Specifically, the Company's reportable segment under Ind AS 108- Operating Segments are as follows:

i) Chemical segment

ii) Aluminium segment

The Company has considered Chemicals and Aluminium as the two primary operating business segments. Chemicals include Calcined Alumina, Alumina Hydrate and other related products. Aluminium includes Aluminium ingots, wire rods, billets, strips, rolled and other related products. Bauxite produced for captive consumption for production of alumina is included under chemicals and power generated for captive consumption for production of Aluminium is included under Aluminium segment. Wind Power Plant commissioned primarily to harness the potential renewable energy sources is included in the unallocated Common segment.

Notes to the standalone financial statements

37.2 Segment revenues and results

The following is an analysis of the Company's revenue and results from operations by reportable segment:

Amount in ₹ Crore

	Segment Revenue	
Operating Segments	**Year ended 31.03.2023**	**Year ended 31.03.2022**
Chemical segment	5,583.72	5,384.87
Aluminium segment	10,245.79	10,183.69
Unallocated	72.61	57.83
Total for operations	**15,902.12**	**15,626.39**
Less: Intersegment revenue	1,647.26	1,411.81
Revenue from operations	**14,254.86**	**14,214.58**

	Segment Results	
Operating Segments	**Year ended 31.03.2023**	**Year ended 31.03.2022**
Chemical segment	383.59	1,127.41
Aluminium segment	1,778.73	3,257.20
Segment result before exceptional items, interest and tax	**2,162.32**	**4,384.61**
Interest & financing charges	12.92	23.13
Interest and dividend income	204.98	223.91
Other unallocated income net of unallocated expenses	(399.39)	(630.52)
Profit before tax	**1,954.99**	**3,954.87**

37.3 Segment assets and liabilities

	Segment Assets		Segment Liabilities	
	As at 31.03.2023	**As at 31.03.2022**	**As at 31.03.2023**	**As at 31.03.2022**
Chemical segment	4,675.42	4,353.60	1,355.43	1,529.51
Aluminium segment	5,820.19	5,667.36	1,595.94	1,679.11
Total segment assets and liabilities	**10,495.61**	**10,020.96**	**2,951.37**	**3,208.62**
Unallocated	7,243.08	7,467.87	1,548.87	1,725.57
Total assets and Liabilities	**17,738.69**	**17,488.83**	**4,500.24**	**4,934.19**

37.4 Other segment information

	Depreciation and amortisation		Additions to non-current assets	
	Year ended 31.03.2023	**Year ended 31.03.2022**	**Year ended 31.03.2023**	**Year ended 31.03.2022**
Chemical segment	228.32	229.08	121.85	51.62
Aluminium segment	312.48	296.95	24.75	26.12
Unallocated	175.00	310.55	1,287.08	310.80
Total for operations	**715.80**	**836.59**	**1,433.68**	**388.54**

	Material non-cash expenditure	
	Year ended 31.03.2023	**Year ended 31.03.2022**
Chemical segment	(78.26)	(244.48)
Aluminium segment	(71.64)	(182.75)
Unallocated	38.29	36.97
	(111.61)	**(390.26)**

37.5 Revenue from major products

The following is an analysis of the Company's revenue from continuing operations from its major products and services:

	Year ended 31.03.2023	**Year ended 31.03.2022**
Chemical segment (Hydrate and Alumina)	3,908.07	3,943.08
Aluminium segment (Aluminium)	10,200.76	10,070.16
	14,108.83	**14,013.24**

37.6 Revenue from major Customer

No single customer has accounted for more than 10% of the Company's revenue for the year ended 31 March 2023. Revenue from one customer amounted to ₹ 2,043.35 crore for the year ended 31 March 2022 arising from sales made in the Chemical segment. No other customer contributed to more than 10% of revenues.

Notes to the standalone financial statements

37.7 Geographical information

The Company operates mainly in principal geographical areas-India (country of domicile) and Outside India:

	Revenue from external customers		Non-current assets	
	Year ended 31.03.2023	Year ended 31.03.2022	As at 31.03.2023	As at 31.03.2022
India	9,892.07	7,649.09	12,441.88	11,008.20
Outside India	4,216.76	6,364.15	-	-
Total	**14,108.83**	**14,013.24**	**12,441.88**	**11,008.20**

38. Earnings per share

	Year ended 31.03.2023	Year ended 31.03.2022
	₹ per share	₹ per share
38.1 Basic Earnings per share (₹)		
From total operations	8.41	16.07
Total Basic earnings per share	**8.41**	**16.07**

38.2 Basic Earnings per Share

The Earnings and weighted average number of equity shares used in the calculation of basic earnings per share are as follows :

Amount in ₹ Crore

	Year ended 31.03.2023	Year ended 31.03.2022
Profit for the year attributable to Owners of the Company	1,544.49	2,951.97
Earnings used in the calculation of basic earnings per share	**1,544.49**	**2,951.97**
	As at 31.03.2023	As at 31.03.2022
Weighted average number of equity shares used in calculation of basic earnings per share	**1,83,66,31,787**	**1,83,66,31,787**

39 - Financial Instruments

39.1 Categories of financial instruments			Amount in ₹ Crore
		As at 31.03.2023	As at 31.03.2022
Financial Assets			
Measured at fair value through profit or loss (FVTPL)			
(a)	Mandatorily measured:		
	(i) Investments in mutual funds	145.58	64.01
	(ii) Forward contract on foreign currency	Nil	Nil
Measured at Amortised cost			
(a)	Cash and bank balances	63.29	412.80
(b)	Other financial assets at amortised cost	2,653.29	3,854.57
		2,862.16	**4,331.38**
Financial Liabilities			
Measured at Amortised cost		**2,179.34**	**2,146.73**

39.2 Financial risk management objectives

In the course of its business, the Company is exposed primarily to fluctuations in foreign currency exchange rates, interest rates, equity prices, liquidity and credit risk, which may adversely impact the fair value of its financial instruments. The Company has a risk management policy which not only covers the foreign exchange risks but also other risks associated with the financial assets and liabilities such as interest rate risks and credit risks.

The objectives of the Company's risk management policy are, inter-alia, to ensure the following:

i) Sustainable business growth with financial stability;

ii) Provide a strategic framework for Company's risk management process in alignment with the strategic objectives including the risk management organisation structure;

iii) That all the material risk exposures of Company, both on and off-balance sheet are identified, assessed, quantified, appropriately mitigated and managed and

iv) Company's compliance with appropriate regulations, wherever applicable, through the voluntary adoption of international best practices, as far as may be appropriate to the nature, size and complexity of the operations.

The risk management policy is approved by the board of directors. The Internal Control Team would be responsible to evaluate the efficacy and implementation of the risk management system. It would present its findings to the Audit Committee every quarter. The Board is responsible for the Company's overall process of risk management. The Board shall, therefore, approve the compliance and risk management policy and any amendments thereto, and ensure its smooth implementation.

39.3 Market risk

Market risk is the risk of any loss in future earnings (spreads), in realizable fair values (economic value) or in future cash flows that may result from a change in the price of a financial instrument. The value of a financial instrument may change as a result of changes in the interest rates, foreign currency exchange

rates, liquidity and other market changes. The Company may also be subjected to liquidity risk arising out of mismatches in the cash flows arising out of sales proceeds and funds raised and loan repayments/prepayments. Future specific market movements cannot be normally predicted with reasonable accuracy.

39.4 Foreign currency risk management

Foreign currency risk emanates from the effect of exchange rate fluctuations on foreign currency transactions. The overall objective of the currency risk management is to protect the Company's income arising from changes in foreign exchange rates. The policy of the Company is to avoid any form of currency speculation. Hedging of currency exposures shall be effected either naturally through offsetting or matching assets and liabilities of similar currency, or in the absence of thereof, through the use of approved derivative instruments transacted with reputable institutions. The Currency risk is measured in terms of the open positions in respective currencies vis-à-vis the Company's operating currency viz. INR. A currency gap statement shall be prepared to find the gap due to currency mismatch.

The fluctuation in foreign currency exchange rates may have impact on the income statement and equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

The Company undertakes transactions denominated in foreign currency; consequently, exposures to exchange rate fluctuations arise. Exchange rate are managed within approved policy parameters utilising forward foreign exchange contracts.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:-

Amount in ₹ Crore

	Liabilities as at		Assets as at	
	31.03.2023	31.03.2022	31.03.2023	31.03.2022
USD	79.13	27.60	13.03	144.72
EURO	30.06	21.36	-	-
Others	0.13	-	-	-

39.4.1 Foreign currency sensitivity analysis

The Company evaluates the impact of foreign exchange rate fluctuations by assessing its exposure to exchange rate risks. It hedges a part of these risks by using derivative financial instruments in accordance with its risk management policies.

The foreign exchange rate sensitivity is calculated for each currency by aggregation of the net foreign exchange rate exposure of a currency and a simultaneous parallel foreign exchange rates shift in the foreign exchange rates of each currency by 10%.

The following analysis is based on the gross exposure as of the relevant balance sheet dates, which could affect the income statement. There is no exposure to the income statement on account of translation of financial statements of consolidated foreign entities.

The following table sets forth information relating to foreign currency exposure as at March 31, 2023 and March 31, 2022:

Amount in ₹ Crore

	USD impact		EURO impact	
	Year ended	Year ended	Year ended	Year ended
	31.03.2023	31.03.2022	31.03.2023	31.03.2022
Impact on profit or loss for the year	(6.6)	11.7	3.01	2.14

39.5 Other price risks

39.5.1 Equity price sensitivity analysis

The Company is not exposed to equity price risk arising from equity instruments as all the equity investments are held for strategic rather than trading purposes.

39.6 Credit risk management

Credit risk is the risk of financial loss arising from counterparty failure to repay or service debt according to the contractual terms or obligations. Credit risk encompasses both the direct risk of default and the risk of deterioration of creditworthiness as well as concentration risks. There is no significant credit exposure as advance collection from customer is made.

Financial instruments that are subject to concentrations of credit risk, principally consist of investments classified as loans and receivables, trade receivables, loans and advances and derivative financial instruments. None of the financial instruments of the Company result in material concentrations of credit risks.

39.7 Liquidity risk refers to the risk that the Company cannot meet its financial obligations. The objective of liquidity risk management is to maintain sufficient liquidity and ensure that funds are available for use as per requirements.

Company has established an appropriate liquidity risk management framework for the management of the Company's short-term, medium-term and long-term funding liquidity management requirements. The Company manages liquidity risk by maintain adequate reserves and banking facilities by continuously monitoring forecast and actual cash flows and by matching the maturity profiles of financial assets and financial liabilities.

Notes to the standalone financial statements

40. Related party disclosures

40.1 Related parties

A. Key Managerial Personnel:

I) Whole time Directors

(a)	Shri Sridhar Patra	Chairman Cum Managing Director
(b)	Shri Radhashyam Mahapatro	Director (HR)
(c)	Shri Manasa Prasad Mishra	Director (Proj & Tech)
(d)	Shri Bijay Kumar Das	Director (Production) [upto 31.01.2023]
(e)	Shri Ramesh Chandra Joshi	Director (Finance)
(f)	Shri Sadashiv Samantaray	Director (Commercial)
(g)	Shri Pankaj Kumar Sharma	Director (Production) [w.e.f. 01.02.2023]

Others

Shri N K Mohanty	GGM & Company Secretary

II) Part time Official Directors: (Nominee of Govt. of India):

(a) Shri Sanjay Lohiya, IAS
(b) Dr. Veena Kumari Dermal, IPoS

(III) Part time non official (Independent) Directors:

(a) Shri Ravi Nath Jha
(b) Dr. B. R. Ramakrishna
(c) Adv. George Kurian
(d) Dr. Ajay Narang
(e) Shri Y.P. Chillio
(f) Ms. (Dr.) Shatorupa
(g) Adv. Dushyant Upadhyay
(h) Shri Sanjay Ramanlal Patel

B. Joint Ventures

(a) Angul Aluminium Park Pvt Ltd.
(b) GACL NALCO Alkalis & Chemicals Pvt. Ltd.
(c) Utkarsha Aluminium Dhatu Nigam Limited
(d) Khanij Bidesh India Limited

C. Post Employment Benefit Plan

(a) Nalco Employees Provident Fund Trust
(b) Nalco Employees Group Gratuity Trust
(c) Nalco Employees' Leave Rule Benefit Trust
(d) Nalco Employees' Post Retirement Medical Benefit Trust

D. Entity controlled by a person identified in (A) as KMP

(a) Nalco Foundation

E. Government that has control or significance influence:

(a) Govt. of India

F. Entities on which Govt of India has control or significant influence (CPSEs)

The Company has business transactions during the year with the following CPSEs/Govt Undertaking.

i) Purchase of Goods and Services

1. Balmer Lawrie & Co Ltd.
2. Banaras Locomotive Works
3. Bharat Earth Movers Ltd.
4. Bharat Heavy Electrical Ltd.
5. Bharat Petroleum Corporation Ltd.
6. Bridge & Roof Co.(India) Ltd.
7. Bharat Sanchar Nigam Ltd.
8. Central Power Research Institute
9. Central Warehousing Corporation
10. Central Industrial Security Force
11. East Central Railway
12. East Coast Railways
13. Engineers India Ltd.
14. Executive Engineer Upper Kolab, Head Works Division, Jeypore
15. Hindustan Petroleum Corporation Ltd.
16. HMT Machine Tools Ltd.
17. Indian Oil Corporation Ltd.
18. Industrial Infrastructure Development Corporation
19. Instrumentation Ltd.
20. Life Insurance Corporation of India
21. Mahanadi Coal Fields Ltd.
22. Mahanagar Telephone Nigam Ltd.
23. Mecon Limited.
24. Mineral Exploration Corporation Ltd.
25. Ministry Of Railways

Notes to the standalone financial statements

26. MSTC Limited
27. National Insurance Company Ltd.
28. National Small Industries Corporation Ltd
29. NLC India Limited
30. Northern Coalfields Limited
31. Numaligarh Refinery Limited
32. Oriental Insurance Co Ltd
33. Post Office
34. Power Grid Corporation of India Ltd.
35. RITES Limited
36. Shipping Corporation of India
37. South Central Railway
38. South Eastern Railways
39. Southern Railway
40. The Singareni Collieries Company Limited
41. Visakhapatnam Port Trust
42. Western Coalfield Limited

ii) Sale of Goods

1. Hindustan Aeronautics Ltd
2. National Small Industries Corp
3. National Thermal Power Corporation
4. Rashtriya Ispat Nigam Ltd
5. Steel Authority Of India Ltd
6. Yantra India Ltd

40.2 Related Party Transactions

I. Key Managerial Personnel

Remuneration to Key Managerial Personnel

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Short-term employee benefits		
- Salaries	5.39	3.54
- Contribution to Provident Fund	0.34	0.23
- Medical Benefits	0.05	0.02
- Other Benefits	0.60	0.01
Post employment benefits #	0.03	0.02
Other long term benefits	0.01	0.01
Total	**6.42**	**3.82**

Since actuarial valuation of employee benefit expenses under post-employement benefits and other long-term benefits are done on an overall basis for all employees, theses expenses for the key managerial persons is considered on a proportionate basis.

Loans / advances due from Key Managerial Personnel

Amount in ₹ Crore

Particulars	As at 31.03.2023	As at 31.03.2022
Outstanding at the end of the year	0.14	0.09
Maximum amount due at any time during the year	0.29	0.11

II. Joint Venture/Associate Companies

During the year the company has made following transaction with the JVs.

Amount in ₹ Crore

Name of JV/Associate	Nature of Transaction	Year ended 31.03.2023	Year ended 31.03.2022
Khanij Bidesh India Limited	Equity Contribution	12.00	-
GACL NALCO Alkalis & Chemicals Limited	Purchase of goods	75.59	-
GACL NALCO Alkalis & Chemicals Limited	Receivable- man power assistance and other expenses	0.77	0.70

Balance at the end of the reporting day

Name of JV/Associate	Nature of Transaction	As at 31.03.2023	As at 31.03.2022
Angul Aluminium Park Pvt Ltd.	Investment in equity	16.22	16.22
GACL NALCO Alkalis & Chemicals Pvt. Ltd.	Investment in equity	276.00	276.00
GACL NALCO Alkalis & Chemicals Pvt. Ltd.	Receivable- Man power assistance	0.77	0.70
GACL NALCO Alkalis & Chemicals Pvt. Ltd.	Payable for Purchase of goods	6.10	0.00
Utkarsha Aluminium Dhatu Nigam Limited	Investment in equity	20.00	20.00
Khanij Bidesh India Limited	Investment in equity	13.00	1.00

Notes to the standalone financial statements

III. **Post Employment Benefit Plan**
Transactions during the year

Amount in ₹ Crore

Name of Trust	Nature of Transaction	Year ended 31.03.2023	Year ended 31.03.2022
NEPF Trust	PF-Contribution	357.15	543.71
NEGG Trust	Funding of shortfall	-	6.61
Nalco Employees' Leave Rule Benefit Trust	Funding of shortfall	385.55	-
Nalco Employees' Post Retirement Medical Benefit Trust	Funding of shortfall	157.08	-

Outstanding balance at the end of the year

Name of Trust	Nature of Transaction	As at 31.03.2023	As at 31.03.2022
NEPF Trust	PF-Contribution payable	19.47	30.34
NEGG Trust	Funding of shortfall payable (Receivable)	(26.74)	(22.18)
Nalco Employees' Leave Rule Benefit Trust	Funding of shortfall payable (Receivable)	39.82	-
Nalco Employees' Post Retirement Medical Benefit Trust	Funding of shortfall payable (Receivable)	10.44	-

IV. **Nalco Foundation**

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Contribution to CSR Trust	26.21	21.00

V. **Govt. of India : Transaction during the year**

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Dividend paid during the year	470.9	565.08

VI. **CPSEs/ Govt Undertakings – Transaction during the year**

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Purchase of goods and services from CPSEs/ Govt. undertakings	4,444.84	3,443.02
Sale of goods to CPSEs and Govt. undertakings	1,480.29	1,695.29

Outstanding balance at the end of the year

Particulars	As at 31.03.2023	As at 31.03.2022
Advance/(Payable) for purchase of goods and services from CPSEs/ Govt. undertakings	93.18	87.74
Receivable/(Advance) for sale of goods to CPSEs and Govt. undertakings	(52.68)	(44.22)

41 - Transaction with Struck-off Company

Amount in ₹ Crore

Sl. Nos.	Nature of transaction with struck-off Company	Balance outstanding as on 31.03.2023	Balance outstanding as on 31.03.2022	Relationship with struck-off Company, if any
1	Investment in securities	-	-	
2	Receivables	-	-	
3	Payables	0.22	0.18	For supply of goods/services
4	Share held by struck off Company	44,827 nos. of shares	44,827 nos. of shares	Total 9 number of Shareholders
5	Other outstanding balance (to be specified)			
Total		**0.22**	**0.18**	

Notes to the standalone financial statements

42 - Analytical Ratio

Sl. Nos.	Ratios	Numerator	Denominator	31.03.2023	31.03.2022	Variance
1	Current Ratio	Current Asset Total	Current Liability Total	2	2	(6%)
2	Debt-Equity Ratio[1]	Total Debt	Shareholders Equity	-	-	-
3	Debt Service Coverage Ratio	Earning available for Debt service	Interest + Installments	-	-	-
4	Return on Equity Ratio[2]	Net profit after tax	Equity Shareholder's fund [Total Equity]	12%	24%	(50%)
5	Inventory turnover ratio[2]	Sales [Sale of Product]	Average Inventory	8	9	(10%)
6	Trade Receivables turnover ratio[3]	Credit Sale [Sale of Power]	Average trade receivable	1.26	0.59	115%
7	Trade payables turnover ratio	Annual credit purchase	Average account payable	5.99	4.36	37%
8	Net capital turnover ratio[2]	Sale [Sale of Product & Power]	Net Asset or Capital employed [PPE+Intangible Asset+ Working Capital]	1.46	1.34	9%
9	Net profit ratio[2]	Net profit [Profit after tax]	Sale [Sale of Product & Power]	11%	21%	(48%)
10	Return on Capital employed[2]	Earning before interest and tax (EBIT)	Capital employed [PPE+Intangible Asset+ Working Capital]	20%	38%	(47%)
11	Return on investment[2]	Net profit [Profit after tax]	Equity fund [Total Equity]	12%	24%	(50%)

1. The Company does not have any borrowings/debt except bill discounting (refer Note 21).
2. The variation in ratios over the previous year are due to changes in the respective factors.
3. The trade receivable turnover ratio has been computed considering the sale and receivable of the Wind Power only.

43. Regrouping of previous year's figures

Previous year's figures have been regrouped/rearranged wherever considered necessary to make them comparable

For and on behalf of Board of Directors

(CS N. K. Mohanty)
Company Secretary

(R.C. Joshi)
Director (Finance)
DIN:08765394

(CA Sridhar Patra)
Chairman-Cum-Managing Director
DIN: 06500954

For GNS & Associates.
Chartered Accountants
FRN-318171E

(CA Rajesh K. Pahadi)
Partner
M. No.: 058221

For A K Sabat & Co.
Chartered Accountants
FRN-321012E

(CA B. R. Mohanty)
Partner
M. No.: 057266

Place: Bhubaneswar
Date: 24th May, 2023

Financial Statements (Standalone)

Status of Compliance to Ind ASs notified by MCA:

Ind As Nos.	Nomenclature	Description
Ind AS 1	Presentation of Financial Statement	- The Financial Statements of the Company have been prepared in accordance with the Indian Accounting Standards and presented in the format prescribed under Schedule III to the Companies Act 2013, following the guidelines set out in Ind AS 1. - The measurement basis used in preparing the financial statements and accounting policies adopted have been disclosed. - Information as required by Ind ASs (also discussed below against respective Ind AS) that are not presented elsewhere in the Financial Statements have been disclosed as Notes to it. The Notes to the Financial Statement also provides the information that is not presented elsewhere in the financial statements, but is relevant to an understanding of any of them.
Ind AS 2	Inventories	- Accounting policy adopted in measuring inventories including the cost formula used is disclosed at para 3.9 of the Significant Accounting Policy placed at Notes 3 of the Financial Statements - Disclosure in respect of classification of inventories and their carrying amounts, amount of inventory recognised as expenses, amount of any write-down of inventories recognised as an expense and inventory pledged has been made at note 15.
Ind AS 7	Statement of Cash Flow	- The cash flow statement using indirect method, whereby the indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows. - The cash flows are segregated into operating, investing and financing activities
Ind AS 8	Accounting Policies, Change in Accounting Estimates & Errors	- Any change in accounting policy is applied retrospectively, unless impracticable, adjusting the opening balance of each affected component of equity for the earliest prior period presented and the other comparative amounts disclosed for each prior period presented. - Any Change in accounting estimate which gives rise to changes in assets and liabilities, or relates to an item of equity, is recognised by adjusting the carrying amount of the related asset, liability or equity item in the period of the change. - On discovery of any prior period error(s) with an impact of ₹ 50 crore during a period, the error is corrected retrospectively as guided by the standard.
Ind AS 10	Events after Reporting Period	- The Company adjusts the amounts recognised in its financial statements to reflect the adjusting events after the reporting period. - Dividends declared after the reporting period are not recognised as a liability at the end of the period. However, suitable disclosure is made to this effect at Note :19.3.
Ind AS 11	Construction Contracts	This standard is applicable in preparing the financial statements of contractors which are into the construction business. Not being a contractor for construction of any asset, Ind AS 11 is not applicable to the Company.
Ind AS 12	Income Taxes	- Relationship between tax expenses and accounting profit is explained through a numerical reconciliation between tax expense and the product of accounting profit multiplied by the applicable tax rate at Note 36. - Current tax and deferred tax relating to items that are recognised in other comprehensive income and directly in equity are recognised in other comprehensive income and equity respectively. Disclosures are made at Note 36.
Ind AS 16	Property, Plant & Equipment	- Measurement basis, useful life and method of depreciation followed for each class of property, plant and equipment has been discussed at Para 3.1 of the significant accounting policy. - A reconciliation between opening carrying value and the closing carrying value stating addition during the period, disposals and depreciation expenses is placed at note 5.
Ind AS 19	Employee Benefits	- Long term employees benefits are categorised into three heads i.e. Defined Contribution Plans, Defined Benefit Plans and Other Long Term Employee Benefits. Company's contribution to pension fund of the employees are recognised as defined contribution plans whereas Company's contribution to provident fund, gratuity on superannuation, post retirement medical benefits, settling-in-benefit, NALCO benevolent fund scheme, NALCO retirement welfare scheme are recognised as defined benefit plans. Payments towards compensated absences, Long service rewards and NEFFARS are recognised as long term employees benefits. - Actuarial valuation of Company's obligation towards defined benefit plans and long term employees benefits have been made and the expenses/ income is recognised accordingly. - A reconciliation between the opening liability and the closing liability against each defined benefit obligations showing service cost, interest expenses/ income, remeasurement gains or loses due to change in demographic and financial assumptions are disclosed at note 33.B. - A sensitivity analysis of the actuarial assumptions showing how the defined benefit obligation would have been affected by changing the relevant actuarial assumptions is disclosed at note 33.C.

Status of Compliance to Ind ASs notified by MCA:

Ind As	Nomenclature	Description
Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance	- Grants received from the Government for assets is presented as deferred income. Accounting policy of in this regard is disclosed at para 3.14.
Ind AS 21	The Effects of Changes in Foreign Exchange Rates	- Accounting policies with regard to transaction in foreign currency has been disclosed at para 3.6 of the Significant Accounting policy.
Ind AS 23	Borrowing Cost	- The Company capitalises borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Disclosure in this regard has been made at para 3.13 of the significant accounting policy.
Ind AS 24	Related Party Disclosure	- Name of related parties, aggregated sales and purchase transaction with them, any outstanding balances against them and benefits paid to and loan outstanding against the key managerial persons has been disclosed at Note 40.
Ind AS 27	Separate Financial Statements	- Investments made in joint ventures and associates are presented at cost in the separate financial statements.
Ind AS 28	Investment in Associates & Joint Venture	- The Company adjusts its' share of profit in the profit or loss of the subsidiaries with the carrying amount of the investments in its consolidated financial statements using equity method.
Ind AS 29	Financial Reporting in Hyperinflationary Economics	- This standard is not applicable to the company as its' functional currency is not a currency of any hyperinflationary economy.
Ind AS 32	Financial Instruments Presentation	- All items of assets and liabilities have been segregated into financial and other assets and liabilities based on the definitions laid down in the standard and are presented as required in Schedule III.
Ind AS 33	Earnings per share	- The Company has not issued any potential equity shares. Thus, both the Basic and Diluted EPS remains same. - Disclosure with regard to the weighted average number of equity shares and earnings for the period used in computation of EPS is made at Note 38.
Ind AS 34	Interim Financial Reporting	- Being a listed entity, the Company prepares its interim financials as required by SEBI(LODR) Regulations,2015 in accordance with the recognition and measurement principles laid down in this standard on a quarterly basis.
Ind AS 36	Impairment of Asset	- Accounting policy relating to impairment of various assets is disclosed at respective paras in the significant accounting policies. - The management reviews the carrying values of assets at each reporting date and assess whether there is any indication that an asset may be impaired in accordance with the standard.
Ind AS 37	Provisions, Contingent Liabilities and Assets	- Accounting policies relating to Provisions, Contingent Liabilities and Assets are stated at para 3.7 of the Significant Accounting Policies. - Provisions are recognised when the company has a present obligation as a result of past events, legal or constructive, which requires out flow of resources to settle the obligation and can reliably be estimated considering the risks and uncertainties surrounding the event. Movement of different types of provisions are disclosed at note 24 (C). - In case of other obligations that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the company contingent liabilities are disclosed at note 27 and in compliance with the requirement of Schedule III. - Contingent assets are not recognised but are disclosed where an inflow of economic benefits is probable.
Ind AS 38	Intangible Assets	- The accounting policy in this regard is mentioned at para 3.2 of the significant accounting policies. - The Company recognises expenditure on R&D activities, payments towards NPV, expenditure on cluster projects and expenditure on softwares, which qualifies the conditions for recognitions laid down in the standard, as intangible assets. - Reconciliation of opening carrying amount and closing carrying amount of intangible assets showing additions, reduction and amortisation is placed at note 8.
Ind AS 40	Investment Property	- The company does not have any investment property, thus the standard is not applicable.
Ind AS 41	Agriculture	- The company does not have any agricultural activity, thus the standard is not applicable.
Ind AS 101	First time Adoption of Indian Accounting Standards	- The Company adopted Ind AS in the year 2016-17 and hence this standard is no longer applicable.
Ind AS 102	Share Based Payments	- There is no such transaction during the year which involves share-based payments, hence the standard is not applicable.

Status of Compliance to Ind ASs notified by MCA:

Ind As	Nomenclature	Description
Ind AS 103	Business Combination	- The standard is not applicable.
Ind AS 104	Insurance Contracts	- The standard is not applicable.
Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations	- The Company has made disclosure in note 17.
Ind AS 106	Exploration for and Evaluation of Mineral Resources	- The Company has not incurred any expenses on exploration and evaluation of mineral resources, hence the standard is not applicable.
Ind AS 107	Financial Instruments Disclosure	- Disclosure as required by the standard with regard to classification of financial instruments, nature and extent of risk arising from the instruments both qualitative and quantitative are made at note 39.
Ind AS 108	Operating Segments	- The Company has classified its operation into two segments i.e. Chemical Segment and Aluminium Segment based on the approach of the Chief Operating Decision Maker (CODM) what it takes while reviewing the performance of the Company. - Segment revenue, results, assets and liabilities, revenue from major products, geographical informations and other segment informations are disclosed at note 37.
Ind AS 109	Financial Instruments	- Except investments in mutual funds and forward contract on foreign currency other Financial assets and liabilities have been measured at amortised cost and same is disclosed at note 39.
Ind AS 110	Consolidated Financial Statements	- Consolidated financial statements are prepared considering the joint ventures and associates of the company following the equity method of consolidation.
Ind AS 111	Joint Arrangements	- The Company follows the principles set out in the standard for financial reporting of its interest in arrangements that are jointly controlled.
Ind AS 112	Disclosure of Interest in Other Entities	- The Company has four joint ventures whose summarised financial informations and its reconciliation with the carrying amount of the interest are disclosed at note 9.
Ind AS 113	Fair Value Measurement	- The Company has adopted the principles of fair value measurement as laid down in the standard while measuring its financial assets and liabilities. - Accounting policy in this regard is disclosed at para 4.2.6. of the Significant Accounting Policy.
Ind AS 114	Regulatory Deferral Accounts	- The Company is not subject to any rate regulation, thus the standard is not applicable.
Ind AS 115	Revenue from contracts with customers	- The Company recognises revenue on completion of all its performance obligation relating to the contract with the customers.
Ind AS 116	Leases	- The company identifies all leases wherever a contract is, or contains, a lease if it conveys the right to control the use of an identified asset (explicitly or implicitly specified in the contract) for a period of time in exchange of consideration, at the inception of the contract. - the company recognizes, "Right Of Use" ROU Asset at cost, and the Lease Liability is measured at the present value of all lease payments

INDEPENDENT AUDITORS' REPORT

To the Members of
National Aluminium Company Limited

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying Consolidated Financial Statements of National Aluminium Company Limited ("the Company") and its joint ventures which comprise the Consolidated Balance Sheet as at 31st March, 2023, and the Consolidated Statement of Profit and Loss (including Other Comprehensive Income), the Consolidated Statement of Changes in Equity and the Consolidated Cash Flow Statement for the year then ended, and notes to the Consolidated Financial Statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as the "Consolidated Financial Statements").

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid Consolidated Financial Statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view, in conformity with the Indian Accounting Standards (Ind AS) prescribed under Section 133 of the Companies Act, 2013 read with the Companies (Indian Accounting Statndards) Rules, 2015 as amended and the accounting principles generally accepted in India, of the Consolidated State of Affairs of the Company and its joint ventures as at 31st March, 2023, of Consolidated Profit, Total Comprehensive Income, Consolidated Changes in Equity and its Consolidated Cash Flows for the year then ended on that date.

Basis for Opinion

We conducted our audit of the Consolidated Financial Statements in accordance with the Standards on Auditing (SAs) specified under Section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements Section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India (ICAI), together with the ethical requirements that are relevant to our audit of the Consolidated Financial Statements under the provisions of the Act and the Rules made thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ICAI'S Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Consolidated Financial Statements.

Emphasis of Matter

In respect of the Company,

i. We draw attention to Note No. 7.3 of the Consolidated Financial Statements regarding capitalisation of Coal Mines, starting of mining operations from 09.11.2022 and declaration of start of production from 1.04.2023; and

ii. We draw attention to Note No. 14.1 of the Consolidated Financial Statements regarding non accounting of capital assets/ expenditure in absence of finalisation of issues arising out of Rehabilitation and Resettlement Policy and option yet to be given by the Project Displaced Families.

Our opinion is not modified in respect of above matters.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Consolidated Financial Statements of the current period. These matters were addressed in the context of our audit of the Consolidated Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The key audit matters that we have identified in the current year are as follows:

In respect of the Company:

Key Audit Matter	How the matter was addressed in our audit
1. Carrying value of Property, Plant and Equipment, Intangible assets (including Capital work-in-progress and Intangible Assets under Development)	
Property, plant and equipment, capital work-in-progress (CWIP), intangible assets and Intangible assets under development represent significant balances recorded in the statement of financial position in the Consolidated Financial Statements. The evaluation of the recoverable amount of these assets requires significant judgement in determining the key assumptions supporting the expected future cash flows of the business and the utilisation of the relevant assets including impairment provisions related to the assets. There are a number of areas where management judgement impacts the carrying value of property, plant and equipment, intangible assets and their respective depreciation profiles. These include the decision to capitalise or expense costs; the asset life review including the impact of changes in the Company's strategy; and the timeliness of capitalisation, determination or the measurement and recognition criteria for assets retired from active use.	Our audit procedures relating to the carrying value of property, plant and equipment including intangible assets and capital work-in-progress included the following: • We evaluated the assumptions made by management in the determination of carrying values and useful lives to ensure that these are consistent with the principles of Indian Accounting Standards (Ind AS) 16 *Property, Plant and Equipment* and Ind AS 38 *Intangible Assets.* • We assessed whether the carrying values and the useful lives were reasonable by challenging management's judgements through comparing the useful lives prescribed in Schedule II to the Companies Act 2013 and the useful lives of certain assets as per the technical assessment of the management. • We compared the useful lives of each class of asset in the current year to the previous year to determine whether there were any significant changes in the useful lives of assets, and considered the reasonableness of changes based on our knowledge of the business and the industry. • We assessed whether indicators of impairment existed as at 31st March 2023 based on our knowledge of the business and the industry and wherever required the provision of impairment of assets/CWIP were reviewed. • We tested the controls in place over the property, plant and equipment and intangible assets, evaluated the appropriateness of capitalisation policies, performed tests of details on costs capitalised and assessed the timeliness of capitalisation including decapitalisation of assets retired from active use and the application of the asset life. • In performing these substantive procedures, we assessed the judgements made by management including the nature of underlying costs capitalised; the appropriateness of asset lives applied in the calculation of depreciation and amortisation; and in assessing the need for accelerated depreciation/amortisation, if required, in the context of impairment.

Key Audit Matter	How the matter was addressed in our audit
2.Valuation of employees' defined benefit obligations and other long-term benefits	
The Company has recognised long-term employee benefit liabilities and defined benefit obligations (net of plan asset against funded gratuity obligation) in the Consolidated Financial Statements. The valuation of employee benefit obligations is dependent on market conditions and assumptions made. The key audit matter specifically relates to the following key assumptions like discount rate, inflation expectations and life expectancy assumptions. The setting of these assumptions is complex and requires the exercise of significant Management judgement with the support of third party actuary.	Our audit procedures relating to the valuation of employees, defined benefit obligations and other long-term benefits included the following: • In testing the valuation, we have examined the reports of external actuarial specialists to review the key actuarial assumptions used, both financial and demographic, and considered the methodology utilised to derive these assumptions. • We evaluated the assumptions made by management and the actuary to ensure that these are consistent with the principles of Ind AS 19 Employee Benefits. • Furthermore, we have examined the sensitivity analysis on the key assumptions in valuing the defined benefit obligations.
3. Ascertainment, disclosure and provisioning in respect of contingent liabilities	
The Company disclosed contingent liabilities in the Consolidated Financial Statements. The Company has material uncertain tax matters, both direct and indirect, under dispute involving material aggregate demand which require significant judgement to determine the possible outcome of these disputes. Additionally, the Company has other on-going legal matters relating to various claims by the Government of Odisha or other agencies constituted by the State Government and by contractors/suppliers which require application of Management judgement in order to determine the likely outcome.	Our audit procedures relating to the ascertainment, disclosure and provisioning in respect of contingent liabilities included the following: We obtained a detailed understanding and evaluated the design and implementation of controls that the Company has established in relation to disclosure and provisioning of contingent liabilities in accordance to Ind AS 37 *Provisions, Contingent Liability and Contingent Assets.* Regarding direct and indirect tax contingent liabilities, we undertook following principal audit procedures: • Assessment of the process and relevant controls implemented to identify tax litigations and pending administrative proceedings. • Assessment of assumptions used in the evaluation of potential tax risks performed by the tax department of the Company considering the legal precedence and other rulings in similar cases. • Discussion with the management regarding the status of the most significant disputes and inspection of the key relevant documentation. • Analysis of opinion received from tax experts where available. • Review of the adequacy of the disclosures in the notes to the financial statements. In assessing the potential exposures of the Company in respect of other contingent liabilities, we have: • assessed the design and implementation of controls in relation to the monitoring of known exposures; • referred Board and other meeting minutes to identify areas subject to Company's consideration; • consulted with the Company's internal legal advisors in understanding on-going and potential legal matters impacting the Company; • reviewed available legal opinions from experts; and • reviewed the proposed accounting and disclosure of actual and potential legal liabilities.
4. Advances and deposits in respect of tax matters under litigation continuing as assets	
The Consolidated Financial Statements disclose other assets, which includes material recoverable claims of direct and indirect tax deposits (net of provision) including VAT and Cenvat credits which are pending adjustment/ adjudication. Significant judgement is required in assessing the nature of these exposures and their accounting and disclosure requirements.	Our audit procedures relating to the advance and deposits in respect of tax matters under litigation continuing as assets included the following: • We obtained from management the details of completed tax assessments and demands and appeal orders of the appellate authority. • We involved our internal experts to challenge the management's underlying assumptions in estimating the tax liability and the possible outcome of the disputes. • Our internal experts also considered legal precedence and other rulings in evaluating management's position on these uncertain tax positions. • Additionally, we have considered opinions of legal and tax experts, wherever available, to review the nature of the amounts recoverable, the sustainability and the likelihood of recoverability upon final resolution.

Key Audit Matter	How the matter was addressed in our audit
5. Valuation of deferred tax assets and liabilities	
The Company has disclosed deferred tax assets/ liabilities in the Consolidated Financial Statements. The Company operates in activities which involves application of various provisions in income tax. The assessment of the valuation of deferred tax assets/liability, resulting from temprory differences, and provisions for uncertain tax positions is significant to our audit as the calculations are complex and depend on sensitive and judgmental assumptions. These include, amongst others, long-term future profitability and local fiscal regulations and developments.	Our audit procedures relating to the advance and deposits in respect of tax matters under litigation continuing as assets included the following: • Ascertained the completeness and accuracy of the deferred tax assets/liabilities and recognizing uncertain tax positions. • We challenged and tested the Management's assessment of the recoverability of the deferred tax assets, and the probability of future cash outflows in respect deferred tax liabilities identified by the Company. • We also assessed the applicable local fiscal regulations and developments, in particular those related to changes in the statutory income tax rate and of the statutes of limitation, as these are key assumptions underlying the valuation of the deferred tax assets/liabilities. • We analysed the tax positions and evaluated the assumptions and methodologies used by the Company. • In addition, we also focused on the adequacy of the Company's disclosures as per Ind AS 12 *Income Taxes* on deferred tax assets/liabilities and assumptions used.
6. Extraction of Coal through Mine Developer and Operator (MDO)	
The Company has capitalised the Coal Blocks Utkal D & Utkal E under Mining Right with effect from 25.03.2021 and 20.01.2023 respectively. For extraction of coal, these coal mines have been given to the Mines Developer and Operator (MDO) vide agreement dated 8th March, 2022. As per the terms of the contract, the MDO has the responsibility of executing certain capital works including payment for Mine Closure Liability and revenue works including removal of overburden and extraction of coal including its stacking at the Mines at designated places and transportation of coal to Railway Siding or site of the Captive Power Plant of the Company. On transportation and receipt of coal at the site of the Company, liability with amount at agreed price per tonne, is to be provided. The expenses of overburden, day to day expenditure by the MDO for production of coal and declaration of stock of production thereof at site are required to be done by the MDO and accounting to be done by the Company. The price of coal is dependent on calculation based on wholesale price index relevant on period of despatch. Considering judgements involved in estimating various elements of expenditure, income, assets and liabilities balances and appropriate time at which these are to be accounted, we have determined this to be a key audit matter.	Our audit procedures included the following: • Obtained an understanding of the Company's process and tested internal controls associated with the estimation and accounting of inventory of coal, liability of trade payable to MDO and Mine Closure Liability, cost of coal and other expenses and income. • Discussed with the management to understand their assessment on each qualitative and quantitative factor and reviewed consistency of the management's explanation with the underlying documentation, rules, and regulations. • Obtained certificate from Management on availability of Inventory at the Mines. • Assessed disclosures made by the Company in accordance with the requirements of Ind AS. • Obtained necessary management representation.
7. Procedure adopted for awarding Contracts for expansion	
The Company has planned to setup the expansion of Alumina Refinery plant of 1 MTPA. For execution of the above volume, multiple contracts for Works, Purchases & Services are required which include high inherent risk (i.e. complex calculations, significant estimation uncertainty, etc) and control risk (i.e. possibility of human errors, circumvention by collusion, inappropriate management override). The process of award requires multiple stage of appropriate evaluation of bidders which includes their, technical expertise, experience of similar execution, financial stability, human resources mobilisation, etc. Assessment of appropriate evaluation includes management's judgement to ascertain the competencies through large volume of documents submitted by prospective bidders on technical parameters, responding to the queries of bidders, setting the time line for acceptance, execution, completion etc with the support of appointed Engineering, Procurement, Construction, Management (EPCM). The above also includes assessment of financial parameters, matching the bid value with the estimation, evaluation of requirement of financial guarantee for any uncertainties, multiple level of management concurrences, classification of expenditure into capital or revenue and award of contracts. Further, post award contracts activities like monitoring of progress of contracts, addressing any critical issues that come in between, resolution of local conflicts involve judgement and decision making by the Company. Considering the complex technical & financial assessment and calculation for selection of appropriate bidder(s), we have determined this to be a key audit matter.	Our audit approach was a combination of test of few contracts for assessment of internal controls and substantive procedures which included the following: • Obtained the Expansion budget allocation for various stages of sequential activities; • Evaluated the design of contract assessment procedures for technical & financial parameters and the estimation of efforts required to complete the NIT (notice inviting tenders); • Tested the evaluated documents, views of EPCM, complex calculation, allocation of budgets estimation, application of index, application of statutory levies etc to arrive at documents preparation; • Selected a sample of contracts and through the audit efforts, analytical skills and visit to the site of constructions, wherever necessary, to identify significant variations with any subsequent changes in NIT, estimations, terms, etc.; • Discussed with the management, EPCMs on the above significant variations to obtain their judgement or justification that has bearing on possible delays in achieving the milestones as well as cost and time overrun; • Tested few progress report of EPCM to identify the bottlenecks in execution, their suggestions, applying the corrections, milestones achieved, plan for the subsequent periods, etc. • Reviewed the Board/Committee notes for any specific or significant changes in estimates of scope or vendors. • Performed analytical procedures and tested the reasonableness of progress of the contracts that have exceeded the cost or time significantly or requires improvement in control measures.

Financial Statements (Consolidated)

Information Other than the Consolidated Financial Statements and Auditor's Report Thereon

The Board of Directors of the Company is responsible for the other information. The other information comprises the information contained in the Company's Annual Report but does not include the Consolidated Financial Statements and our report thereon. These reports are expected to be made available to us after the date of this auditors' report.

Our opinion on the Consolidated Financial Statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Consolidated Financial Statements, our responsibility is to read the other information mentioned and, in doing so, consider whether the other information is materially inconsistent with the Consolidated Financial Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the other information, if we conclude that there is material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate action, if required.

Management's Responsibility for the Consolidated Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation and presentation of these Consolidated Financial Statements in term of the requirements of the Act that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Company including its joint ventures in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards specified under section 133 of the Act. The respective Board of Directors of the Company and the joint ventures are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the respective companies and for preventing and detecting frauds and other irregularities; the selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Consolidated Financial Statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the Consolidated Financial Statements by the Directors of the Company, as aforesaid.

In preparing the Consolidated Financial Statements, the respective Board of Directors of the Company and the joint ventures are responsible for assessing their ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management of the Company or the joint ventures either intends to be liquidated or to cease their operations, or has no realistic alternative but to do so. The respective Board of Directors of the Company and joint ventures are responsible for overseeing the financial reporting process of the Company and of the joint ventures.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the Consolidated Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Consolidated Financial Statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Consolidated Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under Section 143(3)(i) of the Companies Act, 2013, we are also responsible for expressing our opinion on whether the Company and joint venture companies incorporated in India have adequate internal financial controls system in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Company and its joint ventures to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Consolidated Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company and its joint ventures to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Consolidated Financial Statements, including the disclosures, and whether the Consolidated Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the Company and its joint ventures to express an opinion on the Consolidated Financial Statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the Consolidated Financial Statements of which we are the independent auditors. For the other entities included in the consolidated financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.

We communicate with those charged with governance of the Company and such other entities included in the Consolidated Financial Statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the Consolidated Financial Sstatements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Matters

The Consolidated Financial Statements include the Company's share of Total Comprehensive Income/(loss) (comprising of net loss after tax and other comprehensive income) of (₹ 110.33) crore for the year ended 31st March, 2023, in respect of two audited joint ventures, whose financial statements have not been audited by us and the Consolidated Financial Statements include the Company's share of total comprehensive income/ (Loss) (comprising of net profit after tax and other comprehensive income) of ₹ 0.50 crore of two joint ventures which are unaudited and certified by the Management. These financial statements of two audited joint ventures have been audited by other auditors whose reports have been furnished to us by the Management and our opinion on the Consolidated Financial Statements, in so far as it relates to the amounts and disclosures included in respect of these joint ventures, and our report in terms of Sub-sections (3) and (11) of Section 143 of the Act, in so far as it relates to the aforesaid joint ventures, is based solely on the reports of the other auditors.

Our opinion on the Consolidated Financial Statements, and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors.

Report on Other Legal and Regulatory Requirements

1. With respect to the matters specified in paragraphs 3(xxi) and 4 of the Companies (Auditor's Report) Order, 2020 (the "Order") issued by the Central Government in terms of Section 143(11) of the Act, to be included in the Auditor's report, according to the information and explanations given to us, and based on reports on matters specified in the Order, issued by us for the Company and issued by other auditors in respect of its joint ventures, which were audited and included in the Consolidated Financial Statements of the Company, to which reporting under the Order is applicable, we report that there are no qualifications or adverse remarks in reports on matters specified in the Order, except the following:

Sl. No.	Name of the company	Parent Company/ Subsidiary/ Associate/ Joint Venture	Paragraph numbers of the CARO report containing the Qualifications or Adverse Remarks
1	National Aluminium Company Limited	The Company	i (c)
2	National Aluminium Company Limited	The Company	v
3	GACL-NALCO Alkalies & Chemicals Pivate Limited	Joint Venture	ii(b)

2. As required by Section 143(3) of the Act, we report, to the extent applicable, that:

   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid Consolidated Financial Statements;

   (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid Consolidated Financial Statements have been kept so far as it appears from our examination of those books and the reports of the other auditors;

   (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss including Other Comprehensive Income, the Consolidated Cash Flow Statement and Consolidated Statement of Changes in Equity dealt with by this Report are in agreement with the relevant books of account maintained for the purpose of preparation of the Consolidated Financial Statements;

   (d) In our opinion, the aforesaid Consolidated Financial Statements comply with the Indian Accounting Standards specified under Section 133 of the Act;

   (e) Section 164(2) of the Act regarding disqualification of directors is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Govt. of India. On the basis of the reports of the statutory auditors of its joint ventures incorporated in India, none of the directors of these joint ventures is disqualified as on 31st March, 2023 from being appointed as a director in terms of Section 164 (2) of the Act;

   (f) With respect to the adequacy of internal financial controls over financial reporting of the Company and its audited joint ventures incorporated in India and the operating effectiveness of such controls, refer to our separate report in **Annexure "A"** to this report;

   (g) With respect to the other matters to be included in the Auditors' Report in accordance with the requirements of Section 197(16) of the Act, as amended:

   The provision of Section 197 read with Schedule V of the Act, relating to managerial remuneration is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Govt. of India.

   On the basis of the reports of the auditors of the joint ventures incorporated in India, the remuneration paid to their directors during the year are in accordance to the provisions of Section 197 of the Act;

   (h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

      i. The Company and its joint ventures have pending litigations, the liabilities in respect of which, is either provided for or disclosed as contingent liabilities. Refer Note 27 to the Consolidated Financial Statements;

ii. The Company and its joint ventures have made provisions, as required under the applicable law or Indian Accounting Standards, for material foreseeable losses, if any, in respect of long term contracts. As explained to us and as per reports of auditors of the joint ventures, there are no derivative contracts entered into by the Company or its joint ventures;

iii. As explained to us and as per reports of auditors of the joint ventures, there has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company and its joint ventures;

iv. (a) The respective Managements of the Company and joint ventures entities incorporated in India, whose financial statements have been audited under the Act, have represented that, to the best of their knowledge and belief, no funds (which are material either individually or in the aggregate) have been advanced or loaned or invested (either from borrowed funds or share premium or any other sources or kind of funds) by the Company or any of such joint ventures entities, to or in any other person or entity, including foreign entity ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

(b) The respective Managements of the Company and its joint ventures entities incorporated in India, whose financial statements have been audited under the act, have represented, that, to the best of their knowledge and belief, no funds (which are material either individually or in the aggregate) have been received by the Company or any of such jointly controlled entities, from any person or entity, including foreign entity ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the Company or any of such jointly controlled entities, shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

(c) Based on the audit procedures that have been considered reasonable and appropriate in the circumstances and based on reports of the auditors of the joint ventures, nothing has come to our notice that has caused us to believe that the representations under sub-clause (i) and (ii) of Rule 11(e), as provided under (a) and (b) above, contain any material misstatement;

v. As stated in Note 19.3 to the Consolidated Financial Statements

a. The final dividends proposed in the previous year, declared and paid by the Company during the year is in accordance with Section 123 of the Act, as applicable;

b. The interim dividend declared and paid by the Company during the year and until the date of this report is in compliance with Section 123 of the Act; and

vi. As proviso to Rule 3(1) of the Companies (Accounts) Rules, 2014 for maintaining books of accounts using accounting software which has a feature of recording audit trail (edit log) facility is applicable only w.e.f. 1st April, 2023 to the Company and its joint ventures which are incorporated in India, reporting under Rule 11(g) of the Companies (Audit and Auditors) Rules, 2014 is not applicable for the financial year ended 31st March, 2023.

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No. : 058221
UDIN: 23058221BGXMBD1808

For A. K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B. R. Mohanty)
Partner
Membership No. : 057266
UDIN: 23057266BGSMTW7954

Place: Bhubaneswar
Date: 24th May, 2023

ANNEXURE "A"

ANNEXURE TO THE INDEPENDENT AUDITORS' REPORT OF EVEN DATE ON THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH, 2023 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred in paragraph 2(f) under the head "Report on Other Legal and Regulatory Requirements" of our report of even date)

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

In conjunction with our audit of the Consolidated Financial Statements of the Company as of and for the year ended 31st March, 2023, we have audited the internal financial controls over financial reporting of National Aluminium Company Limited ("the Company") and considered the auditors' reports on Internal Financial Controls over financial reporting of its audited joint ventures, which are companies incorporated in India, as of that date.

Management's Responsibility for Internal Financial Controls

The respective Board of Directors of the Company and joint ventures which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company and its joint ventures considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

Auditors' Responsibility for Internal Financial Controls

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, both issued by ICAI and prescribed under Section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness.

Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of Consolidated Financial Statements, whether due to fraud or error.

We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in the other matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls system over financial reporting.

Meaning of Internal Financial Controls Over Financial Reporting

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company and its joint ventures, which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2023, based on the internal control over financial reporting criteria established by the respective companies considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

Other Matter

The financial statements of the joint ventures have been audited by other auditors whose reports have been furnished to us and our opinion on the Consolidated Financial Statements, under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting in so far as it relates to the joint ventures, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies.

Our report is not modified in respect of the above matter.

For GNS & Associates
Chartered Accountants
FRN: 318171E

Sd/-
(CA Rajesh K. Pahadi)
Partner
Membership No. : 058221
UDIN: 23058221BGXMBD1808

For A. K. Sabat & Co.
Chartered Accountants
FRN: 321012E

Sd/-
(CA B. R. Mohanty)
Partner
Membership No. : 057266
UDIN: 23057266BGSMTW7954

Place: Bhubaneswar
Date: 24th May, 2023

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 143(6)(b) READ WITH SECTION 129(4) OF THE COMPANIES ACT, 2013 ON THE CONSOLIDATED FINANCIAL STATEMENTS OF NATIONAL ALUMINIUM COMPANY LIMITED FOR THE YEAR ENDED 31 MARCH 2023

The preparation of consolidated financial statements of National Aluminium Company Limited for the year ended 31 March 2023 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the company. The statutory auditor appointed by the Comptroller and Auditor General of India under section 139(5) read with section 129(4) of the Act is responsible for expressing opinion on these financial statements under section 143 read with section 129(4) of the Act based on independent audit in accordance with the standards on auditing prescribed under section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 24 May 2023.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit of the consolidated financial statements of National Aluminium Company Limited for the year ended 31 March 2023 under section 143(6)(a) read with section 129(4) of the Act. We conducted a supplementary audit of the financial statements of National Aluminium Company Limited and its joint venture company Utkarsha Aluminium Dhatu Nigam Limited but did not conduct supplementary audit of financial statements of its joint venture companies Angul Aluminium Park Private Limited and Khanij Bidesh lndia Limited for the year ended on that date. **Further, section 139(5) and 143(6)(a) of the Act are not applicable to its joint venture company GACL-Nalco Alkalies & Chemicals Private Limited, being private entity, for appointment of their Statutory Auditor and for conduct of supplementary audit. Accordingly, Comptroller and Auditor General of India has neither appointed the Statutory Auditors nor conducted the supplementary audit of this company.** This supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records.

On the basis of my supplementary audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to statutory auditors' report under section 143(6)(b) of the Act.

For and on the behalf of the
Comptroller & Auditor General of India

Sd/-
(Atul Prakash)
Principal Director of Audit (Mines)
Kolkata

Place: Kolkata
Date: 28.07.2023

Consolidated Balance Sheet as at March 31, 2023

Amount in ₹ Crore

Particulars			Notes	As at 31.03.2023	As at 31.03.2022
Assets					
(1)	**Non-current assets**				
	(a)	Property, plant and equipment	5	6,916.39	7,001.94
	(b)	Capital work-in-progress	6	2,744.95	1,763.42
	(c)	Intangible assets	7	386.44	341.27
	(d)	Intangible assets under development	8	523.97	471.40
	(e)	Financial assets			
		(i) Investments	9		
		(a) Investments in joint ventures	9	213.14	310.97
		(b) Other Investments	9	0.03	0.03
		(ii) Trade receivables	10	-	-
		(iii) Loans	11	82.39	87.38
		(iv) Other financial assets	12	21.55	9.74
	(f)	Income tax assets (Net)	13	634.49	320.57
	(g)	Other non-current assets	14	806.45	699.23
	Total non-current assets			**12,329.80**	**11,005.95**
(2)	**Current assets**				
	(a)	Inventories	15	1,840.22	1,645.60
	(b)	Financial assets			
		(i) Investments	9	145.58	64.01
		(ii) Trade receivables	10	91.33	75.25
		(iii) Cash and cash equivalents	16	63.29	412.80
		(iv) Bank balances other than (iii) above	16	2,054.21	3,293.27
		(v) Loans	11	28.98	28.55
		(vi) Other financial assets	12	49.58	47.13
	(c)	Income tax assets (Net)	13	28.49	55.38
	(d)	Other current assets	14	994.49	858.07
	Total current assets			**5,296.17**	**6,480.06**
(3)	**Non-Current assets held for sale**		17	0.64	0.57
Total assets				**17,626.61**	**17,486.58**
	Equity and liabilities				
	(1)	**Equity**			
		(a) Equity share capital	18	918.32	918.32
		(b) Other equity	19	12,208.05	11,634.07
		Total equity		**13,126.37**	**12,552.39**
	Liabilities				
	(2)	**Non-current liabilities**			
		(a) Financial liabilities			
		(i) Lease liabilities	20	50.99	50.91
		(ii) Trade payables			
		(a) Dues of micro and small enterprises	22	-	-
		(b) Dues of creditors other than micro and small enterprises	22	10.98	23.61
		(iii) Other financial liabilities	23	180.00	88.57
		(b) Provisions	24	100.83	260.98
		(c) Other non-current liabilities	25	314.02	331.76
		(d) Deferred tax liabilities (Net)	26	957.77	868.18
		Total non-current liabilities		**1,614.59**	**1,624.01**
	(3)	**Current liabilities**			
		(a) Financial liabilities			
		(i) Borrowings	21	47.75	20.67
		(ii) Lease liabilities	20	5.87	5.52
		(iii) Trade payables			
		(a) Dues of micro and small enterprises	22	36.59	31.50
		(b) Dues of creditors other than micro and small enterprises	22	1,226.75	1,425.60
		(iv) Other financial liabilities	23	620.41	500.35
		(b) Other current liabilities	25	769.32	988.55
		(c) Provisions	24	146.89	126.95
		(d) Income tax liabilities	13	32.07	211.04
		Total current liabilities		**2,885.65**	**3,310.18**
	Total liabilities			**4,500.24**	**4,934.19**
	Total equity and liabilities			**17,626.61**	**17,486.58**

See accompanying notes (1-46) to the financial statements

For and on behalf of Board of Directors

(CS N. K. Mohanty)
Company Secretary

(R. C. Joshi)
Director (Finance)
DIN: 08765394

(CA Sridhar Patra)
Chairman-Cum-Managing Director
DIN: 06500954

In terms of our attached report of even date.

For GNS & Associates
Chartered Accountants
FRN-318171E
(CA Rajesh K. Pahadi)
Partner
M. No.:058221

For A. K. Sabat & Co.
Chartered Accountants
FRN-321012E
(CA B. R. Mohanty)
Partner
M. No.:057266

Place: Bhubaneswar
Date: 24th May, 2023

Consolidated Statement of Profit and Loss for the year ended March 31, 2023

Amount in ₹ Crore

			Notes	Year ended 31.03.2023	Year ended 31.03.2022
I	Revenue from operations		29	14,254.86	14,214.58
II	Other Income		30	235.63	264.09
III	**Total Income (I + II)**			**14,490.49**	**14,478.67**
IV	EXPENSES				
	(a)	Cost of raw materials consumed	31	3,172.12	1,971.13
	(b)	Cost of power and fuel consumed	31	4,693.69	3,388.48
	(c)	Changes in inventories of finished goods and work-in-progress	32	(16.66)	(116.83)
	(d)	Employee benefits expense	33	1,832.06	2,355.80
	(e)	Finance costs	34	12.92	23.13
	(f)	Depreciation, amortisation and impairment expenses			
		(i) Property Plant and Equipment - Depreciation	5	584.24	567.72
		(ii) Property Plant and Equipment - Impairment	5	100.31	237.62
		(iii) Intangible Assets - Amortisation	7	31.25	31.25
	(g)	Other expenses	35	2,125.57	2,065.50
	Total expenses (IV)			**12,535.50**	**10,523.80**
V	**Profit/(loss) before exceptional items and tax (III - IV)**			**1,954.99**	**3,954.87**
VI	Exceptional Items			-	-
VII	**Share of Profit/(loss) of Joint Ventures**			**(109.83)**	**(0.56)**
VIII	**Profit before tax (V - VI + VII)**			**1,845.16**	**3,954.31**
IX	Tax Expense				
	(a)	Current tax	36		
		(i) Current year		475.47	1,061.63
		(ii) Earlier years		(181.06)	(9.88)
	(b)	Deferred tax	36	116.09	(48.85)
X	**Profit for the year (VIII - IX)**			**1,434.66**	**2,951.41**
XI	Other comprehensive income				
	(i)	Items that will not be reclassified to profit or loss - Remeasurement gains / (losses) on defined benefit plans		31.15	47.25
	(ii)	Income tax relating to items that will not be reclassified to profit or loss	36	26.50	(23.30)
	Other comprehensive income for the year (net of tax) (XI)			**57.65**	**23.95**
XII	**Total comprehensive income for the year (X+XI)**				
	[comprising profit and other comprehensive income for the period]			**1,492.31**	**2,975.36**
XIII	Earnings per equity share:				
	(i)	Basic (in ₹)	38	7.81	16.07
	(ii)	Diluted (in ₹)	38	7.81	16.07

See accompanying notes (1-46) to the financial statements

For and on behalf of Board of Directors

(CS N. K. Mohanty)
Company Secretary

(R. C. Joshi)
Director (Finance)
DIN: 08765394

(CA Sridhar Patra)
Chairman-Cum-Managing Director
DIN: 06500954

In terms of our attached report of even date.

For GNS & Associates
Chartered Accountants
FRN-318171E
(CA Rajesh K. Pahadi)
Partner
M. No.: 058221

For A. K. Sabat & Co.
Chartered Accountants
FRN-321012E
(CA B.R. Mohanty)
Partner
M. No.:057266

Place: Bhubaneswar
Date: 24th May, 2023

Consolidated Statement of changes in equity for the year ended March 31, 2023

Amount in ₹ Crore

A.	**Equity share capital**	
	Balance as at 31.03.2021	**918.32**
	Changes during the year	-
	Balance as at 31.03.2022	**918.32**
	Changes during the year	-
	Balance as at 31.03.2023	**918.32**

B. **Other equity** — Amount in ₹ Crore

Other equity	Reserves and surplus: Capital redemption reserve	General reserve	Retained earnings	Total
Balance as at 31.03.2021	**370.30**	**7,942.98**	**1,447.41**	**9,760.69**
Profit for the year	-	-	2,951.41	2,951.41
Other comprehensive income (net of taxes)	-	-	23.95	23.95
Total comprehensive income for the year	-	-	**2,975.36**	**2,975.36**
Final dividend for the previous year	-	-	(183.66)	(183.66)
Interim dividend for the year			(918.32)	(918.32)
Balance as at 31.03.2022	**370.30**	**7,942.98**	**3,320.79**	**11,634.07**
Profit for the year	-	-	1,434.66	1,434.66
Other comprehensive income (net of taxes)	-	-	57.65	57.65
Total comprehensive income for the year	-	-	**1,492.31**	**1,492.31**
Final dividend for the previous year	-	-	(275.49)	(275.49)
Interim dividend for the year	-	-	(642.83)	(642.83)
Balance as at 31.03.2023	**370.30**	**7,942.98**	**3,894.78**	**12,208.05**

For and on behalf of Board of Directors

(CS N. K. Mohanty)
Company Secretary

(R. C. Joshi)
Director (Finance)
DIN: 08765394

(CA Sridhar Patra)
Chairman-Cum-Managing Director
DIN: 06500954

In terms of our attached report of even date.

For GNS & Associates
Chartered Accountants
FRN-318171E
(CA Rajesh K. Pahadi)
Partner
M. No.: 058221

For A. K. Sabat & Co.
Chartered Accountants
FRN-321012E
(CA B. R. Mohanty)
Partner
M. No.: 057266

Place: Bhubaneswar
Date: 24th May, 2023

Consolidated Cash Flow Statement for the year ended March 31, 2022

Amount in ₹ Crore

		Year ended 31.03.2023	Year ended 31.03.2022
A.	**Cash flows from operating activities**		
	Profit for the year	**1,434.66**	**2,951.41**
	Adjustments for:		
	Income tax expense recognised in profit or loss	410.50	1,002.90
	Share of (profit) / loss of Joint Ventures	109.83	0.56
	Finance costs recognised in profit or loss	12.92	23.13
	Interest income recognised in profit or loss	(187.18)	(210.36)
	Dividend income recognised in profit or loss	(17.23)	(13.91)
	Net (gain) / loss on disposal of property, plant and equipment	2.56	0.44
	Net (gain) / loss arising on financial assets mandatorily measured at fair value through profit or loss	(0.57)	0.36
	Impairment loss recognised on other assets	36.45	46.03
	Inventories of stores, spares written off	3.26	1.68
	Depreciation, amortisation and impairment of non-current assets	715.80	836.59
	Unrealised foreign exchange (gain)/loss (Net)	16.45	7.77
	Operating profit before working capital changes	**2,537.45**	**4,646.60**
	Movements in working capital:		
	(Increase) / decrease in inventories	(205.04)	(170.96)
	(Increase) / decrease in trade receivables	11.00	46.70
	(Increase) / decrease in loans and other financial asset	109.31	91.91
	(Increase) / decrease in other assets	(218.82)	(372.45)
	Increase / (decrease) in trade payables	(222.84)	495.70
	Increase / (decrease) in other financial liabilities	(29.57)	44.47
	Increase / (decrease) in other liabilities	(222.95)	383.61
	Increase / (decrease) in provisions	(103.61)	(360.46)
	Cash (used in) / generated from operations	**1,654.94**	**4,805.12**
	Income taxes paid	(746.69)	(755.51)
	Net cash flow from operating activities	**908.24**	**4,049.61**
B.	**Cash flows from investing activities**		
	Payments to acquire financial assets	(81.00)	(52.00)
	Proceeds from sale of financial assets	0.59	236.39
	Payments to acquire equity in joint ventures and associates	(12.00)	-
	(Investment in) / redemption of term deposits with banks	1,211.32	(1,754.37)
	Dividends received from other investments	17.23	13.91
	Interest received from banks and others	54.45	96.14
	Payments for property, plant and equipment (including capital advances)	(1,305.39)	(1,178.22)
	Proceeds from disposal of property, plant and equipment	9.15	8.47
	Payments for other intangible assets	(228.60)	(106.24)
	Net cash flow from investing activities	**(334.25)**	**(2,735.92**
C.	**Cash flows from financing activities**		
	Payment of lease liability	(3.65)	(4.23)
	Finance cost paid	(1.53)	(8.20)
	Dividends paid on equity shares	(918.32)	(1,101.98)
	Net cash flow from financing activities	**(923.50)**	**(1,114.41**
Net increase or (decrease) in cash or cash equivalents		**(349.51)**	**199.28**
Cash and cash equivalents at the beginning of the year		**412.80**	**213.52**
Cash and cash equivalents at the end of the year [refer note 16.A]		**63.29**	**412.80**

Note:

1. Figures in the brackets are cash outflow/inflow as the case may be.
2. Statement of Cash Flows is prepared using indirect method as per Indian Accounting Standard-7: Statement of Cash Flows.
3. Figures for previous year have been regrouped wherever necessary for uniformity in presentation.

For and on behalf of Board of Directors

(CS N. K. Mohanty)	**(R.C. Joshi)**	**(CA Sridhar Patra)**
(Company Secretary)	Director (Finance)	Chairman-Cum-Managing Director
	DIN:08765394	DIN: 06500954

In terms of our attached report of even date.

	For GNS & Associates	**For A. K. Sabat & Co.**
	Chartered Accountants	Chartered Accountants
	FRN: 318171E	FRN: 321012E
	(CA Rajesh K. Pahadi)	**(CA B. R. Mohanty)**
Place: Bhubaneswar	Partner	Partner
Date: 24th May, 2023	M. No.: 058221	M. No.:057266

Notes to the consolidated financial statements

Note No.1: Company Overview

National Aluminium Company Limited (the "Company") is a public limited company domiciled and incorporated in India on 7th January 1981. The Company is a Navaratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Government of India, limited by shares which are listed and traded on National Stock Exchange of India Limited (NSE) and BSE Limited in India. The registered office of the Company is at NALCO Bhawan, Plot No. P/1, Nayapalli, Bhubaneswar – 751013, Odisha.

The Company is engaged in the business of manufacturing and selling of Alumina and Aluminium. The Company is operating a 22.75 lakh MT per annum Alumina Refinery plant located at Damanjodi in Koraput district of Odisha and 4.60 lakh MT per annum Aluminium Smelter located at Angul, Odisha. The Company has a captive bauxite mines adjacent to refinery plant to feed the bauxite requirement of Alumina Refinery and also a 1200 MW captive thermal power plant adjacent to Smelter plant to meet the power requirement of Smelter. The Company has captive coal mines at Angul to meet coal requirement of the power plant. Besides, the Company is also operating four wind power plants with total capacity of 198.40 MW located in the state of Andhra Pradesh (Gandikota), Rajasthan (Ludherva & Devikot) and Maharashtra (Sangli) to harness the renewable energy and to comply with its Renewable Purchase Obligation.

Note No. 2: Basis of preparation and measurement

2.1 Statement of Compliance:

These consolidated financial statements of the Company have been prepared on going concern basis following accrual system of accounting and in accordance with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 read with the Companies (Indian Accounting Standards) Rules, 2015, as amended, and other relevant provisions of the Companies Act, 2013.

These consolidated financial statements have been approved for issue by the Board of Directors in its meeting held on 24th May 2023.

2.2 Basis of measurement:

The consolidated financial statements have been prepared on historical cost convention except for following financial instruments that are measured at fair values at the end of each reporting period in accordance with the requirements of the relevant Ind AS:

a) certain financial assets and liabilities which are classified at fair value through profit and loss or fair value through other comprehensive income;

b) assets held for sale, at the lower of the carrying amounts and fair value less cost to sell;

c) defined benefit plans and plan assets.

2.3 Functional currency and presentation currency:

These consolidated financial statements are presented in Indian Rupees (₹) which is the Company's functional currency and all values presented in (₹) are rounded to the nearest crore (up to two decimals), except when indicated otherwise.

2.4 Current and non-current classification:

All assets and liabilities have been classified as current or non-current as per Company's operating cycle and other criteria set out in Schedule-III of the Companies Act, 2013.

An Asset is classified as current when:

- it is expected to be realized, or intended to be sold or consumed in the normal operating cycle;
- it is held primarily for the purpose of trading;
- it is expected to be realised within 12 months after the reporting period; or
- it is cash or a cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

All other assets are classified as non-current.

A liability is classified as current when

- it is expected to be settled within the normal operating cycle;
- it is held primarily for the purpose of trading;
- it is due to be settled within 12 months after the reporting period; or
- there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period.

Deferred tax assets/liabilities are classified as non-current.

All other liabilities are classified as non-current.

Based upon the nature of business, the Company has ascertained a 12 month operating cycle for the purpose of current or non-current classification of assets and liabilities.

2.5 Use of estimates :

These consolidated financial statements have been prepared using estimates and assumptions, wherever necessary, in conformity with the recognition and measurement principles of Ind AS.

Estimates and underlying assumptions are reviewed on an ongoing basis and revisions, if any, in such estimates are accounted for in the year of revision.

Key sources of estimation uncertainty, which may cause a material adjustment to the carrying amounts of assets and liabilities, are stated in Note No.4.

Note No. 3: Significant Accounting Policies:

The significant accounting policies applied in preparation of the consolidated financial statements are given below. These policies have been applied consistently to all periods presented in the consolidated financial statements.

3.1 Property, Plant and Equipment :

3.1.1 Initial recognition and measurement :

Property, plant and equipment (PPE) are tangible items that are held for use in the production or supply of goods or services, or for rentals to others or for administrative purposes, and are expected to be used during more than one period.

An item of property, plant and equipment is recognised as an asset if, and only if it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can measured reliably.

Items of property, plant and equipment that qualifies for recognition as an asset is initially recognised at cost. The initial cost comprises of purchase price, import duties and non-refundable purchase taxes, other expenditure directly attributable to bringing the assets to its location and condition necessary for it to be capable of operating in the manner intended by the management, borrowing cost, if any, incurred, and the initial estimates of the present value of any asset restoration obligation or obligatory decommissioning and dismantling costs.

Expenditure incurred on development of freehold land is capitalized as part of the cost of the land.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads and directly attributable borrowing costs, if any.

In the case of property plant and equipment put to use, where final settlement of bills is yet to be completed, and capitalization is done on provisional basis subject to necessary adjustment in the year of settlement.

Spare parts having unit value of more than ₹ 5 lakh, held for use in the production and/or supply of goods or services and are expected to be used during more than one period are recognised as Property, Plant and Equipment. Spares of critical nature and irregular in use, which can be identified to a particular equipment and having unit value more than ₹ 1 lakh is also recognised as Property, Plant and Equipment.

Subsequent measurement is carried out at cost less accumulated depreciation/ amortisation and accumulated impairment losses.

3.1.2 Subsequent expenditure :

Subsequent expenditure is recognised in the carrying amount of the asset when it is probable that future economic benefits deriving from the cost incurred will flow to the Company and the cost of the item can be measured reliably.

Expenditure on major inspection/maintenance or repairs including cost of replacing the parts of assets and overhaul costs where it is probable that future economic benefits associated with the expenditure will be available to the Company over a period of more than one year, are capitalised and the carrying amount of the identifiable parts so replaced is derecognised.

3.1.3 Capital work-in-progress :

Assets in the course of construction are included under capital work in progress and are carried at cost, less any recognised impairment loss. Such capital work in progress, on completion, is transferred to the appropriate category of property, plant and equipment.

Expenses for assessment of new potential projects incurred till investment decisions are charged to revenue. Expenditure incurred for projects after investment decisions are accounted for under capital work in progress and capitalized subsequently.

Any costs directly attributable to acquisition/ construction of property, plant and equipment till it is brought to the location and condition necessary for it to be capable of operating in the manner as intended by the management form part of capital work-in-progress.

3.1.4 Depreciation and amortisation :

Depreciation on Property, Plant and Equipment are provided on a straight-line basis over their useful life, either as prescribed under Schedule II of the Companies Act, 2013 or, wherever considered necessary, determined on the basis of technical estimations carried out by the Management not exceeding the prescribed useful life as per Schedule II to the Companies Act, 2013.

Component of an item of Property, Plant and Equipment with a cost that is significant in relation to the total cost of that item, is depreciated separately if its useful life differs from that of the asset. The Company has chosen a benchmark of ₹1 Crore as significant value for identification of a separate component except 'Pot Relining' which is considered as a component of each 'Electrolytic Pot' due to its inherent nature and useful life.

The residual value of plant and machinery, vehicles, mobile equipment, and earth moving equipment, railway facilities, rolling stock, and residential quarters are maintained at 5% of the original cost and for all other assets, the residual value is considered as Nil.

The estimated useful lives and residual values are reviewed at each year end and the effect of any changes in estimates, is accounted for on a prospective basis.

The Property plant and equipment are depreciated over the useful life as mentioned hereunder:

Sl. No.	Particulars of asset category (Property Plant & Equipment)	Range of useful life in years
1	Buildings	03 – 60
2	Plant and machinery	15 – 40
3	Railway siding	15
4	Vehicles	08 - 10
5	Furniture and fixtures	08 - 10
6	Computer & peripherals	03 - 06

The useful lives for following assets are different from the useful lives as prescribed under Part C of Schedule II of the Companies Act 2013: For the purpose of depreciation of these assets, useful lives of :

(a) immovable property, plant and equipment at bauxite mines and coal mines is the life of the individual asset or the balance lease period of Mines whichever is lower.

(b) captive thermal power generation plant namely Captive Power Plant (CPP) is considered to be 30 years.

(c) Steam Power Plant (SPP) is considered to be 25 years.

(d) Red Mud Ponds and Ash Ponds at alumina Refinery and Ash Ponds are based on their estimated remaining useful lives (holding capacity) evaluated on the basis of technical estimates made periodically.

(e) lean slurry ash disposal system at CPP is considered based on the estimated period over which ash can be disposed in the designated mine void.

(f) assets laid on leasehold land excluding assets of Bauxite mines are considered to be lower of balance lease period or the useful life of the asset.

(g) major spares are based on technical estimation of the said spares.

(h) major inspection costs which have been capitalized are depreciated over the period until the next scheduled inspection.

Depreciation commences when the PPE are available for use in the location and condition necessary for it to be capable of operating in the manner intended by the management.

Assets laid on land not owned by the Company are depreciated over the useful life from the date on which the asset is capable of operating in the

manner intended by the management unless a longer / shorter life can be justified.

Individual Assets costing ₹ 10,000/- or less are depreciated fully in the year in which they are available for use in the location and condition necessary for it to be capable of operating in the manner intended by the management.

3.1.5 De-recognition of assets :

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the use of the asset or its disposal. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

3.1.6 Stripping costs:

Stripping costs of surface mining is recognised as an asset when they represent significantly improved access to ore, provided all the following conditions are met:

(a) it is probable that the future economic benefit associated with the stripping activity will be realised;

(b) the component of the ore body for which access has been improved can be identified; and

(c) the costs relating to the stripping activity associated with the improved access can be reliably measured.

The stripping cost incurred during the production phase is added to the existing "stripping cost asset" to the extent the current period stripping ratio exceeds the planned stripping ratio.

The "stripping cost asset" is subsequently depreciated on a unit of production basis over the life of the identified component of the ore body that become more accessible as a result of the stripping activity and is then stated at cost less accumulated depreciation and impairment loss, if any.

The stripping ratio of bauxite mines is almost uniform over the entire lease period. Therefore, the stripping cost incurred during the year is charged to expenses and stipping asset is not recognised by the company.

The stripping ratio in case of coal mines is not uniform. However, the company has appointed Mine Developer and Operator (MDO) for development and operation of the coal mines which delivers coal at a consolidated price which includes the cost of stripping activities also. Therefore, the company does not recognise stripping assets in case of coal mines.

3.2 Intangible Assets :

An intangible asset is recognised if

a) it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and

b) the cost of the asset can be measured reliably.

3.2.1 Intangible assets acquired separately :

Intangible assets acquired are reported at cost less accumulated amortisation and impairment loss, if any. Intangible assets having finite useful life are amortised over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each annual reporting period, and the effect of any changes in estimate is accounted for on a prospective basis.

3.2.2 Internally-generated intangible assets – research and development expenditure :

Expenditure on research activities, except capital expenditure considered as Property, plant and equipment, is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development is recognised if and only if all the conditions stipulated in "Ind AS 38 – Intangible Asset" are met.

3.2.3 Mining Rights :

Mining Right is the authorization granted to the company by the respective authorities for mining operation. The cost of mining rights includes amounts paid towards upfront money, compensatory afforestation (CA), wild life management (WLF), Net Present Value (NPV) and related payments as determined by the regulatory authorities.

Cost of mining rights are amortised over the total estimated remaining commercial recoverable reserves of mining property and are subject to impairment loss.

3.2.4 Mines Development Expenses :

Expenditure incurred for mines development prior to commercial production i.e. primary development expenditure other than land, buildings, plant and equipment is capitalised until the mining property is capable of commercial production.

3.2.5 User Rights :

Amount of expenditure incurred in a cluster project, having future economic benefits with exclusive use of co-beneficiaries but without physical control on the assets, are capitalised as user rights.

3.2.6 Software :

Software acquired separately, not embeded with original equipment are capitalised as software.

3.2.7 License and Franchise :

Amount of expenditure incurred for obtaining license for use of technology is capitalised under the head "License and Franchise".

3.2.8 De-recognition of intangible assets :

An intangible asset is derecognised upon disposal or when no future economic benefits are expected to arise from the use of the asset or its disposal. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

3.2.9 Amortisation :

The basis of amortisation of intangible assets is as follows:

(a) Licenses in the nature of technical know-how for processing plants which are available for the useful life of the respective processing plants are amortised over a period of ten years.

(b) Software classified as intangible assets carries a useful life of 3 years and are amortised over that period.

(c) Mining Rights and Mines Development Expenses are amortised over the period of availability of reserves.

(d) User Right for cluster projects is amortised over the useful life of the asset from the date of commissioning.

3.3 Impairment of Non Financial assets :

At the end of each reporting period the carrying amounts of tangible and intangible assets are reviewed to determine whether there is any indication that the assets have suffered an impairment loss. If any such indication exists, the recoverable amount (i.e. higher of the fair value less cost to sell and the value-in-use) of the asset is estimated to determine the extent of impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of the cash-generating unit (CGU) to which the asset belongs is estimated. If the estimated recoverable amount of the CGU is less than its carrying amount, the carrying amount of the CGU is reduced to its recoverable amount and the difference between the carrying amount and recoverable amount is recognised as impairment loss in the statement of profit or loss.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised.

3.4 Non-Current Assets Held for Sale :

Non-current assets and disposal groups are classified as held for sale if their carrying amounts are recovered principally through a sale transaction rather than through continuing use and its sale is highly probable.

The Company considers a sale is highly probable when it is committed to execute the sale within one year from the date of classification as held for sale in its present condition subject to terms that are usual and customary for sale of such assets.

Non-Current Assets held for sale and disposal groups are measured at the lower of their carrying amount and the fair value less cost of disposal.

Non-current assets and disposal groups classified as held for sale are not subject to depreciation or amortization.

3.5 Investment in associates and joint ventures :

An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results, assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment, or a portion thereof, is classified as held for sale, in which case it is accounted for in accordance with Ind AS 105, measuring at lower of its carrying amount and fair value less costs to sell. Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated balance sheet at cost and adjusted thereafter to recognise the Company's share of the profit or loss and other comprehensive income of the associate or joint venture.

Distributions received from an associate or a joint venture reduces the carrying amount of the investment. When the Company's share of losses of an associate or a joint venture exceeds the Company's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Company's net investment in the associate or joint venture), the Company discontinues recognizing its share of further losses. Additional losses are recognised only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Company's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised directly in equity as capital reserve in the period in which the investment is acquired.

After application of the equity method of accounting, the Company determines whether there is any objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the net investment in an associate or a joint venture and that event (or events) has an impact on the estimated future cash flows from the net investment that can be reliably estimated. If there exists such an objective evidence of impairment, then it is necessary to recognise impairment loss with respect to the Company's investment in an associate or a joint venture.

When necessary, the entire carrying amount of the investment is tested for impairment in accordance with Ind AS 36 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with Ind AS 36 to the extent that the recoverable amount of the investment subsequently increases.

For the purpose of consolidation the use of the equity method is discontinued from the date when the investment ceases to be an associate or a joint venture, or when the investment is classified as held for sale. When the Company retains an interest in the former associate or joint venture and the retained interest is a financial asset, the Company measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition in accordance with Ind AS 109. The difference between the carrying amount of the associate or joint venture at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate or joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Company accounts for all amounts previously recognised in other comprehensive income in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities.

The equity method is continued when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no re-measurement to fair value upon such changes in ownership interests.

When the ownership interest in an associate or a joint venture is reduced but the use of equity method is continued, the proportion of the gain or loss that had previously been recognised in other comprehensive income relating to that reduction in ownership interest is reclassified to profit or loss if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

3.6 Foreign currency transaction and translation :

The functional currency of the Company is determined by the currency of the primary economic environment in which it operates. Accordingly, Indian Rupee (₹) is considered as the functional currency of the Company.

In preparing the consolidated financial statements, transactions in foreign currencies are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date. Exchange differences on monetary items are recognised in the statement of profit and loss in the period in which they arise.

Non-monetary assets and non-monetary liabilities denominated in a foreign currency and measured at historical cost are translated at the exchange rate prevailing at the date of transaction.

3.7 Provisions and contingencies :

3.7.1 Provisions :

Provisions are recognised when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

Where a provision is measured using the estimated cash outflows to settle the present obligation, its carrying amount is the present value of those cash outflows.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability. Unwinding of the discount is recognised in the statement of profit and loss as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist when a contract under which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received from it.

3.7.2 Restoration, rehabilitation and decommissioning :

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine and other manufacturing facilities. The Company has recognised the obligated restoration, rehabilitation and decommissioning liability as per statutory mandate, except in respect of mines operated through 'Mine Developer and Operator'.

Net present value of such costs are provided for and a corresponding amount is capitalised at the commencement of each project, except in case of coal mines which is operated through 'Mine Developer and Operator'. These costs are charged to the statement of profit or loss over the life of the asset by way of depreciation and unwinding of the discounted liability. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes in lives of operations, new disturbance and revisions of discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as finance and other cost in the statement of profit or loss.

3.7.3 Environmental liabilities :

Environmental liabilities are recognised when the Company becomes obliged, legally or constructively to rectify environmental damage or perform remedial work.

3.7.4 Enterprise Social Commitments :

Enterprise Social Commitment is the amount to be spent on social and economic development of the surrounding area over a period of time where any new project is set up. Such obligation arises out of conditions mentioned in the Environment Clearance Certificate given by the Government for new projects and are generally defined as a percentage of total project cost.

3.7.5 Legal Obligations :

Provision is recognised once it has been established that the Company has a present obligation based on consideration of the information which becomes available up to the date of reporting.

3.7.6 Contingent Liabilities :

Contingent liabilities are possible obligations that arises from past events, the existence of which would be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company or a present obligation but payment is not probable

or the amount cannot be measured reliably. Contingent liabilities are disclosed in the consolidated financial statements unless the possibility of any outflow in settlement is remote.

3.7.7 Contingent Assets :

Contingent assets are not recognised in the consolidated financial statement, but are disclosed where inflow of economic benefits is probable.

3.8 Leases :

Company as a lessee :

The Company assesses whether a contract is or contains a lease, at inception of the contract.

At the date of commencement of lease, the company recognizes, "Right Of Use" ROU Asset at cost, and the lease liability is measured at the present value of all lease payments that are not paid at that date, except leases with a lease term of 12 months or less that do not contain a purchase option (Short term leases) and leases for which the underlying asset is of low value.

3.8.1 Initial Measurement:

The "Cost of ROU Asset" includes amount of:

i. Initial measurement of lease liability

ii. Prepaid lease payments less any lease incentives received

iii. Initial direct cost incurred by the company as lessee And

iv. Estimated costs to dismantle remove or, restore the underlying asset.

The lease liability is measured at the present value of lease payments by discounting lease payments at coupon rate of long term govt. bonds.

The "lease payment" includes:

i. Fixed payments (including in-substance fixed payment)

ii. Variable lease payment that depend upon an index or a rate

iii. Amount payable by the company as residual value guarantee

iv. The exercise price of purchase option if the company expects with reasonable certainty to exercise the same.

v. Payment of penalties for termination by the company, if the terms of lease contains such option for the company.

The Company applies Ind AS 36 - Impairment of Assets to determine whether a ROU assets is impaired and accounts for any identified impairment loss as per its accounting policy on 'property, plant and equipment'. ROU assets are depreciated over the lease term.

3.8.2 Subsequent Measurement:

During subsequent periods, Lease liability is measured at amortised cost using effective interest method. And the ROU asset is measured at cost less accumulated depreciation and accumulated impairment if any.

The lease payments are classified as cash flow from financing activities.

3.8.3 Short-term leases and leases of low-value assets :

The lease payments for leases with a lease term of 12 months or less that do not contain a purchase option and leases for which the underlying asset is of low value, are recognized as expenses on a straight-line basis over the lease term.

Company as a lessor :

Leases for which the Company is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as finance lease. All other leases are classified as operating leases.

In case of operating leases, rental income is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

In case of finance leases, amounts due from lessees under finance leases are recorded as receivables at the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

3.9 Inventories :

Inventories of raw materials, stores and spares are valued at the lower of cost net of tax credit and net realisable value. Cost is determined on moving weighted average price.

Stores and spares held but not issued for more than 5 years are valued at 5% of the cost.

Materials and other supplies held for use in the production (other than considered as non-moving) are not written down below cost, if the finished products in which they will be incorporated are expected to be sold at or above cost.

Inventories of finished goods, semi-finished goods, intermediary products and work in process including aluminium process scrap are valued at lower of cost and net realisable value.

Cost includes value of material consumed-plus cost of conversion comprising of labour cost and attributable portion of manufacturing overhead.

Net realisable value is the estimated selling price in the ordinary course of business available on the reporting date less estimated cost necessary to make the sale.

3.10 Trade receivable :

Trade receivables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract, *in which cases, it is recognised at fair value. Trade receivables are held with the objective of collecting the contractual cash flows and therefore are subsequently measured at amortised cost less loss allowance.*

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the receivable is expected to be collected within a period 12 months or less from the reporting date, they are classified as current assets otherwise as non-current assets.

3.11 Cash and Cash Equivalent :

Cash and cash equivalents comprise cash at bank and on hand and short-term bank deposits having maturity period of three months or less from the date of acquisition, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above.

3.12 Financial Instruments :

Financial assets and liabilities are recognised when the Company becomes a party to the contractual provisions of the instrument. Except for trade receivables and payables, financial assets and liabilities are initially measured at fair value. Transaction cost that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value measured on initial recognition of financial asset or financial liabilities.

3.12.1 Financial assets :

a. Financial assets at amortised cost:

Financial assets, including trade receivables where it contains significant financing component, are classified as subsequently measured at amortised costs and are measured accordingly using effective interest method if the financial assets are held within a business model whose objective is to hold these assets in order to collect contractual cash flows and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

b. Financial assets at Fair value through Other Comprehensive Income (OCI) :

Financial assets are classified as subsequently measured at fair value through other comprehensive income if these financial assets are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

c. **Financial assets at Fair value through Profit or loss :**

Financial assets are classified as subsequently measured at fair value through profit or loss unless it is classified as subsequently measured at amortised cost or at fair value through other comprehensive income. Transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognised in the statement of profit or loss.

3.12.2 De-recognition of financial assets :

Financial assets are derecognised only when the contractual rights to the cash flows from the asset expires, or when substantially all the risks and rewards of ownership of the assets are transferred to another entity. The gain or loss on de-recognition of financial assets that is measured at amortised cost is recognised in statement of profit and loss.

3.12.3 Impairment of financial assets :

At each reporting date, assessment is made whether the credit risk on a financial instrument has increased significantly or not since initial recognition.

If the credit risk on a financial instrument has not increased significantly since initial recognition, the loss allowance is measured for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on that financial instrument has increased significantly since initial recognition, the loss allowance is measured for a financial instrument at an amount equal to the lifetime expected credit losses.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the statement of profit and loss.

3.12.4 Financial liabilities :

Trade payables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

Financial liabilities, including trade payables where it contains significant financing component, are subsequently measured at amortised cost using effective interest method.

3.12.5 De-recognition of financial liability :

Financial liabilities are derecognised when, and only when, the obligations are discharged, cancelled or expired.

In the case of retention for liquidated damages, if on finalization/closure of contract, liquidated damage is leviable, the amount retained is written back and recognized as income except capital contracts where liquidated damage is directly attributable to escalation/increase in the cost of the asset. In such case, the retention amount is adjusted against cost of the asset.

3.12.6 Off-setting financial instruments :

Financial assets and liabilities are offset and the net amount reported in the balance sheet, when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business.

3.12.7 Derivatives :

Derivative instruments such as forward foreign exchange contracts are recognised at fair value at the date the derivative contracts are entered into and are re-measured at the end of each reporting period. The resulting gain or loss is recognised in statement of profit or loss immediately.

3.13 Borrowing cost :

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use.

Qualifying assets are assets that necessarily take a substantial period of time, considered as more than twelve months, to get ready for their intended use or sale. Transaction costs in respect of long-term borrowings are amortised over the tenure of respective loans using effective interest method.

All other borrowing cost is recognised in statement of profit and loss in the period in which they are incurred.

3.14 Accounting for government grants :

Government grants are recognised when there is reasonable assurance that the conditions attached to them will be complied and that the grants will be received.

Government grants related to assets whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognised in the balance sheet by setting up the grant as deferred income and are transferred to profit or loss on a systematic basis over the useful life of the related assets.

Government grants related to income are recognised as income on a systematic basis over the periods necessary to match them with the costs for which they are intended to compensate.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

3.15 Employee Benefits :

3.15.1 Short-term employee benefits :

A liability is recognised for benefits accruing to employees in respect of wages and salaries, short-term compensated absences etc. in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid.

3.15.2 Post-employment and long term employee benefits :

3.15.3 Defined contribution plans :

A defined contribution plan is plan under which fixed contributions are paid to a separate entity and the company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay. Contributions to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them for such contributions.

3.15.4 Defined benefit plans :

For defined benefit plans, the cost of providing benefits is determined through actuarial valuation using the Projected Unit Credit Method, carried out at each balance sheet date.

The service cost, net of interest on the net defined benefit liability, is treated as an expense. Past service cost is recognised as an expense when the plan amendment or curtailment occurs or when any related restructuring costs or termination benefits are recognised.

Re-measurement gains and losses of the net defined benefit liability are recognised immediately in other comprehensive income not to be reclassified to statement of profit and loss.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined-benefit obligation as reduced by the fair value of plan assets.

3.15.5 Other long-term employee benefits :

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the statement of profit and loss in the period in which they arise. These obligations are valued annually by independent actuaries.

3.16 Revenue :

3.16.1 Revenue from sale of goods or services :

The Company's revenue is mainly from the sale of products like Alumina, Aluminium and Power. Revenue from contracts with customers is recognised upon satisfaction of a performance obligation for the amount of transaction price under the contract net of variable consideration allocated to that performance obligation. The transaction price of a promised goods or services is the amount net of discounts, excluding the taxes and duties collected on behalf of the government that reflects the consideration to which the Company expects to be entitled in exchange for that goods or services.

Performance obligation is satisfied when customer obtains control of the goods or services promised as per the contract. The control of the goods or services has been transferred to the customer when legal title, physical possession, risk and rewards of ownership pass to the customer and the company has the present right to payment, all of which generally occurs upon shipment or delivery of the goods or services.

Revenue from sale of wind power is recognised on the basis of energy transmitted to DISCOMs / consumer at the price notified by respective authorities

subject to Power Purchase Agreement (PPA) with them.

Sale of power from the captive power plant is considered based on quantity injected to state GRID excluding wheeling to Refinery and inadvertent energy injection, subject to Power Purchase Agreement, and scheduling by the State Load Despatch Centre (SLDC).

Revenue from the sale of energy is recognised if -

(a) the amount of revenue can be measured reliably;

(b) It is probable that the economic benefits associated with the transaction will flow to the Company;

(c) recovery of the consideration is assured reasonably.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Company performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on the Company's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognized when the payment is received.

3.16.2 Interest income :

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time proportion basis, by reference to the principal outstanding and effective interest rate.

3.16.3 Dividend :

Dividend income from investments is recognised when the right to receive the dividend is established, it is probable that the economic benefits associated with the dividend will flow to the entity and the amount of the dividend can be measured reliably.

3.16.4 Income from Incentives :

Incentives and subsidies are recognized as other operating revenue when there is reasonable assurance that the Company will comply with the conditions as provided in the relevant statute.

3.16.5 Liquidated Damages :

Claims for liquidated damages are accounted for as and when these are considered recoverable by the Company. These are adjusted to the capital cost or recognised in Statement of Profit and Loss, as the case may be.

3.17 Income Taxes :

Tax expense represents the sum of current tax and deferred tax.

3.17.1 Current taxes :

Current tax expense is based on taxable profit for the year as per the Income Tax Act,1961. Current tax liabilities (assets) for the current and prior period are measured at amounts expected to be paid (or recovered) using the tax rates and tax laws that have been enacted or substantively enacted by the end of reporting period and includes any adjustment to tax payable in respect of previous years.

Current tax assets and tax liabilities are offset where the Company has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

3.17.2 Deferred taxes :

Deferred tax expense or income is recognised on temporary difference between the carrying amount of assets and liabilities in the consolidated financial statements **using balance sheet method** and the corresponding tax base used in computation of taxable profits.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. Tax relating to items recognised directly in other comprehensive income forms part of the statement of comprehensive income.

The carrying amount of deferred tax asset is reviewed at the end of each reporting period and adjusted to the extent it has become probable that sufficient taxable profits will be available to allow the asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off when they relate to income taxes levied by the same taxation authority.

3.18 Exceptional items :

Exceptional items are items of income and expenses within profit or loss from ordinary activities but of such size, nature or incidence whose disclosure is felt necessary for better explanation of the financial performance achieved by the Company.

3.19 Restatement of material error / omissions :

Errors and omissions is construed to be material for restating the opening balances of assets and liabilities and equity if the sum total effect of earlier period income / expenses exceeds ₹ 50 crore.

3.20 Recent accounting pronouncements :

Ministry of Corporate Affairs (MCA) notifies new standards or amendments to the existing standards under Companies (Indian Accounting Standards) Rules as issued from time to time.

On March 31, 2023, MCA amended the Companies (Indian Accounting Standards) Amendment Rules, 2023.

Ind AS 1 - Presentation of Financial Statements - This amendment requires the entities to disclose their material accounting policies rather than their significant accounting policies. The effective date for adoption of this amendment is annual periods beginning on or after April 1, 2023. The Company has evaluated the amendment and the impact of the amendment is insignificant in the consolidated financial statements.

Ind AS 8 - Accounting Policies, Changes in Accounting Estimates and Errors - This amendment has introduced a definition of 'accounting estimates' and included amendments to Ind AS 8 to help entities distinguish changes in accounting policies from changes in accounting estimates. The effective date for adoption of this amendment is annual periods beginning on or after April 1, 2023. The Company has evaluated the amendment and there is no impact on its consolidated financial statements.

Ind AS 12 - Income Taxes - This amendment has narrowed the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offsetting temporary differences. The effective date for adoption of this amendment is annual periods beginning on or after April 1, 2023. The Company has evaluated the amendment and there is no impact on its consolidated financial statement.

Note No. 4 : Critical accounting judgments and key sources of estimation uncertainty :

The preparation of the consolidated financial statements requires the management to make complex and/or subjective judgements, estimates and assumptions about matters that are inherently uncertain. These estimates and assumptions affect the reported amounts of assets and liabilities as well as disclosure of contingent liabilities and assets at the date of the consolidated financial statements and also revenues and expenses during the reported period.

The estimates and associated assumptions are based on past experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised.

4.1 Critical accounting judgments :

Apart from those involving estimations that the management have made in the process of applying the Company's accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements, management has decided that reporting of Company's financial assets at amortised cost would be appropriate in the light of its business model and have confirmed the Company's positive intention and ability to hold these financial assets to collect contractual cash flows.

4.2 Key sources of estimation uncertainty :

The following are the key assumptions concerning the future, and other key sources of estimation of uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year:

4.2.1 Impairment :

Investments in Associates and other investments, loans and advances, property, plant and equipment and intangible assets are reviewed for impairment whenever events and changes in circumstances indicate that the carrying value may not be fully recoverable or atleast annually.

Future cash flow estimates of Cash Generating Units which are used to calculate the asset's fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, reserves and resources, operating rehabilitations and restoration costs and capital expenditure.

4.2.2 Useful lives of property, plant and equipment :

The Company reviews the useful life of property, plant and equipment at the end of each reporting period. This reassessment may result in change in depreciation expense in future periods.

4.2.3 Assessment of Mining Reserve :

Changes in the estimation of mineral reserves where useful lives of assets are limited to the life of the project, which in turn is limited to the life of the probable and economic feasibility of reserve, could impact the useful lives of the assets for charging depreciation. Bauxite reserves at Mines is estimated by experts in extraction, geology and reserve determination and based on approved mining plan submitted to Indian Bureau of Mines (IBM).

4.2.4 Obligation for post-employment benefit Liability :

Liability for post-employment benefit and long term employee benefit is based on valuation by the actuary which is in turn based on realistic actuarial assumptions.

4.2.5 Provisions & Contingent Liabilities :

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations is the best estimate of the consideration required to settle the related liability, including any interest charges, taking into account the risks and uncertainties surrounding the obligation. The Company assess its liabilities and contingent liabilities based upon the best information available, relevant tax and other laws, contingencies involved and other appropriate requirements.

4.2.6 Fair value measurement and valuation process :

For financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

Notes to the consolidated financial statements

5 - Property, plant and equipment

Amount in ₹ Crore

Cost or deemed cost	Freehold land	Leasehold land (Right of Use)	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
Balance as at 31.03.2021	**82.46**	**184.86**	**813.11**	**8,807.63**	**23.53**	**52.47**	**35.30**	**68.69**	**10,068.05**
Additions	0.30	15.68	28.53	431.59	2.76	16.23	3.48	0.28	498.85
Disposals	-	-	-	(29.25)	(0.14)	(0.47)	(0.22)	-	(30.08)
Balance as at 31.03.2022	**82.76**	**200.54**	**841.64**	**9,209.97**	**26.15**	**68.23**	**38.56**	**68.97**	**10,536.82**
Additions	0.07	141.40	21.62	399.88	1.94	21.46	8.04	16.34	610.75
Disposals	-	-	-	(40.17)	(0.10)	(3.63)	(0.14)	-	(44.04)
Balance as at 31.03.2023	**82.83**	**341.94**	**863.26**	**9,569.68**	**27.99**	**86.06**	**46.46**	**85.31**	**11,103.53**
Accumulated depreciation and impairment									
Balance as at 31.03.2021	-	**9.04**	**213.75**	**2,437.28**	**14.24**	**35.70**	**16.37**	**24.34**	**2,750.72**
Depreciation Expense	-	7.77	32.32	509.26	2.21	8.66	3.25	4.30	567.77
Depreciation transfer to "Exp. During Construction"	-	-	-	-	-	0.05	-	-	0.05
Net Depreciation	-	**7.77**	**32.32**	**509.26**	**2.21**	**8.61**	**3.25**	**4.30**	**567.72**
Impairment Expense	-	-	-	237.62	-	-	-	-	237.62
Disposals	-	-	-	(20.74)	(0.10)	(0.24)	(0.15)	-	(21.23)
Balance as at 31.03.2022	-	**16.81**	**246.07**	**3,163.42**	**16.35**	**44.12**	**19.47**	**28.64**	**3,534.88**
Depreciation Expense	-	8.28	33.43	518.74	2.32	12.74	3.77	5.01	584.29
Depreciation transfer to "Exp. During Construction"	-	-	-	-	0.02	0.03	-	-	0.05
Net Depreciation	-	**8.28**	**33.43**	**518.74**	**2.30**	**12.71**	**3.77**	**5.01**	**584.24**
Impairment Expense	-	-	-	100.31	-	-	-	-	100.31
Disposals	-	-	-	(29.63)	(0.05)	(2.55)	(0.11)	-	(32.34)
Balance as at 31.03.2023	-	**25.09**	**279.50**	**3,752.84**	**18.62**	**54.31**	**23.13**	**33.65**	**4,187.14**

	Freehold land	Leasehold land (Right of Use)	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
Carrying amount									
Balance as at 31.03.2021	**82.46**	**175.82**	**599.36**	**6,370.35**	**9.29**	**16.77**	**18.93**	**44.35**	**7,317.33**
Additions	0.30	15.68	28.53	431.59	2.76	16.23	3.48	0.28	498.85
Disposals	-	-	-	(8.51)	(0.04)	(0.23)	(0.07)	-	(8.85)
Depreciation Expense	-	7.77	32.32	509.26	2.21	8.66	3.25	4.30	567.77
Impairment Expense	-	-	-	237.62	-	-	-	-	237.62
Balance as at 31.03.2022	**82.76**	**183.73**	**595.57**	**6,046.55**	**9.80**	**24.11**	**19.09**	**40.33**	**7,001.94**
Additions	0.07	141.40	21.62	399.88	1.94	21.46	8.04	16.34	610.75
Disposals	-	-	-	(10.54)	(0.05)	(1.08)	(0.03)	-	(11.70)
Depreciation Expense	-	8.28	33.43	518.74	2.32	12.74	3.77	5.01	584.29
Impairment Expense	-	-	-	100.31	-	-	-	-	100.31
Balance as at 31.03.2023	**82.83**	**316.85**	**583.76**	**5,816.84**	**9.37**	**31.75**	**23.33**	**51.66**	**6,916.39**

Notes: 5.1 Cost of Freehold land includes cost of 43.75 acre (previous year 43.75 acre) of land handed over to Govt. of Odisha against which the alienation process is yet to be completed.

5.2 The Company incurred ₹ 0.80 crores (previous year ₹ 0.81 crores) for the year ended 31st March, 2023 towards expenses relating to short-term leases and leases of low-value assets. The total cash outflow for leases is ₹ 4.08 crores (previous year ₹ 4.13 crores) for the year ended 31st March, 2023, including cash outflow of short-term leases and leases of low-value assets.

5.3 The Company has two wind power plants (WPP) in the state of Rajasthan and one wind power plant in the state of Maharashtra. Based on the indication from external and internal information to the Company, impairment assessment was carried out for both plants at Rajasthan & Maharashtra.

5.3.1 For the two WPPs at Rajasthan, the Company had a power purchase power agreement (PPA) for 3 years with Jodhpur Vidyut Vitran Nigam Ltd., Rajasthan which could not be extended since 01.04.2019. Since power generation is a continuous process, the Company has been injecting the power to the grid which is recorded by the DISCOM. However, the Rajasthan Renewable Energy Corporation Ltd (RRECL) had offered the Company to accept ₹ 2.44 per unit for both WPP at Ludherva and Devikot and execute the PPA. The Company filed an appeal in the Hon'ble High Court of Rajasthan for extension of PPA which is still pending. In view of non-existence of PPA and continuous generation, impairment assessment was done upto the useful life of the assets.

5.3.2 The Company has a long term (25 years) PPA with NTPC Vidyut Vyapar Nigam Ltd.(NVVNL) for supply of a minimum of 100 MU per month from its WPP at Sangli, Maharashtra with a unit (KWH) rate of ₹ 2.92. Considering the quantum of investment made by the Company and the rate considered for the long term PPA, an impairment assessment has been carried out upto the useful life of the assets.

Details of wind power plants, investment made, carrying value of the asset (before & after impairment), and impairment provisions made are provided below:

Notes to the consolidated financial statements

Amount in ₹ Crore

Details of the Wind Power Plants	Cost	Carrying Value after Depreciation & before Impairment	Impairment during the year	Cummulative Impairment	Carrying Value after Depreciation & Impairment
1. 50MW, Devikot, Rajasthan					
FY 2022-23	338.19	244.33	11.09	147.11	97.22
FY 2021-22	338.19	258.54	136.02	136.02	122.52
2. 47.60MW, Ludherva, Rajasthan					
FY 2022-23	280.62	164.19	2.87	107.96	56.23
FY 2021-22	280.62	176.27	105.10	105.10	71.17
3. 50.4 MW, Sangli, Maharashtra					
FY 2022-23	342.71	253.74	89.86	89.86	163.88
FY 2021-22	342.71	268.53	-	-	268.53

5.A Title deeds of Immovable Property not held in name of the Company
(other than properties where the Company is the lessee and the lease agreements are duly executed in favour of the lessee)

Amount in ₹ Crore

Description of the Property	Freehold/ Leasehold	Gross carrying value	Title deeds held in the name of	Whether title deed holder is a promoter, director or relative of promoter/ director or employee of promoter/ director	Property held since which date	Reason for not being held in the name of Company	Whether disputed
PPE							
Land							
17.25 Acres of Land at Koraput District of Odisha	Freehold	0.07	Govt. of Odisha	No	1982-83	Pending Registration	No
845.94 Acres of Land at Koraput District of Odisha [refer note 5.A.1]	Leasehold	0.35	Govt. of Odisha	No	1982-83	Execution of Lease Agreement is pending	No
46.90 Acres of Land at Angul district of Odisha	Freehold	0.33	Industrial Development Corporation of Odisha (IDCO)	No	1987-88	Pending Registration	No
56.02 Acres of Land at Angul district of Odisha	Freehold	0.13	Respective Land owners	No	1987-88	Land is in the possession of the Company. Transfer of land in the name of the Compnay is in the process.	No
656.05 Acres of Land at Angul district of Odisha	Leasehold	1.38	Industrial Development Corporation of Odisha (IDCO)	No	1987-88	Execution of Lease Agreement is pending	No
1.69 Acres of Land at Angul district of Odisha	Leasehold	-	Industrial Development Corporation of Odisha (IDCO)	No	2018-19	Communal/ Gochhar Land	No
16.60 Acres of Land at Angul district of Odisha	Leasehold	-	Industrial Development`` Corporation of Odisha (IDCO)	No	2020-21	Communal/ Gochhar Land	No
32.03 Acres of Land at Angul district of Odisha	Leasehold	-	Industrial Development Corporation of Odisha (IDCO)	No	2022-23	Communal/ Gochhar Land	No
32.12 Acres of Land at Angul district of Odisha	Leasehold	-	Govt. of India	No	2022-23	Stage II clearance from MoEF is pending	No
0.66 Acres of Land at Dhenkanal district of Odisha	Leasehold	0.09	Industrial Development Corporation of Odisha (IDCO)	No	1987-88	Execution of Lease Agreement is pending	No
Building	-	-					
Investment Property							
Land	-	-					
Building	-	-					
Non Current asset held for sale							
Land	-	-					
Building	-	-					
Others	-	-					

Notes : 5.A.1 Includes 291.89 acres of surrendered land

Notes to the consolidated financial statements

6 - Capital work-in-progress (CWIP)

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
Capital Work-in-progress	2,769.92	1,700.54
Construction materials including in transit	64.53	110.99
	2,834.45	**1,811.53**
Less: Provision for impairment	(89.50)	(48.11)
Total Capital Work-in-progress	**2,744.95**	**1,763.42**

Amount in ₹ Crore

Movement in provision for impairment	As at 31.03.2023	As at 31.03.2022
Opening balance	48.11	0.55
Provision made during the year	41.39	47.56
Provision write back during the year	-	-
Closing balance	**89.50**	**48.11**

6.1. The amount of capital work in progress includes directly attributable expenses of ₹ 166.81 crore (previous year ₹ 152.90 crore) for 5th Stream Alumina Refinery expansion.

6.2 The Company on 27.09.2017, had awarded a contract favouring M/s Regen Powertech. Pvt. Ltd. for supply, erection and commissioning of 25.5MW Wind Power Project (WPP) at Kayathar, Tamilnadu for a value of ₹ 163.13 crore. The agency had executed ₹ 119.63 crore worth of work till FY 2018-19. Thereafter, there was no progress in execution due to financial crisis and liquidity issue of the agency.

Insolvency resolution process was initiated against the Company under Insolvency and Bankruptcy Code, 2016. The Hon'ble National Company Law Tribunal (NCLT), Chennai passed the Resolution Plan on 01.02.2022 which was not acceptable to the Company. Aggrieved with the order, the Company preferred an appeal to the Hon'ble National Company Law Appellate Tribunal (NCLAT).

As there was no progress in the project since 2018-19 and the stringent conditions mentioned in the said order, the Company has considered these as indication for impairment assessment of the project and provided for ₹ 79.25 crore as on 31.03.2023 (as on 31.03.2022 ₹ 44.26 crore).

Notes to the consolidated financial statements

6.A - Capital Work in Progress

6.A.1 Ageing of Capital Work in Progress

Amount in ₹ Crore

Particulars		Amount in CWIP for a period of				
		Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
Project in progress						
(a) Mines & Refinery	As on 31.03.2023	1,149.94	405.22	417.84	449.81	2,422.81
	As on 31.03.2022	699.01	230.10	311.02	85.53	1,325.66
(b) Smelter & Power	As on 31.03.2023	101.71	80.27	-	95.74	277.72
	As on 31.03.2022	127.62	68.73	65.38	96.64	358.37
(c) Others	As on 31.03.2023	12.40	0.14	0.09	119.74	132.37
	As on 31.03.2022	5.83	0.38	0.11	119.63	125.95
Project temporarily suspended						
(a) Mines & Refinery	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
(b) Smelter & Power	As on 31.03.2023	-	-	-	1.55	1.55
	As on 31.03.2022	-	-	-	1.55	1.55
(c) Others	As on 31.03.2023		-	-	-	-
	As on 31.03.2022	-	-	-	-	-
	Total as on 31.03.2023	**1,264.05**	**485.63**	**417.93**	**666.84**	**2,834.45**
	Total as on 31.03.2022	**832.46**	**299.21**	**376.51**	**303.35**	**1,811.53**

6.A.2 Ageing of Capital Work in Progress whose completion is overdue or has exceeded its cost compared to its original plan

Particulars		To be completed in				
		Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
(a) Mines & Refinery	As on 31.03.2023	1,096.33	486.93	-	-	1,583.26
	As on 31.03.2022	154.54	76.78	-	-	231.32
(b) Smelter & Power	As on 31.03.2023	119.87	4.91	-	-	124.78
	As on 31.03.2022	175.38	1.46	10.21	19.41	206.46
(c) Others	As on 31.03.2023	0.10	-	-	-	0.10
	As on 31.03.2022	-	-	0.11	119.63	119.74
	Total as on 31.03.2023	**1,216.30**	**491.84**	**-**	**-**	**1,708.14**
	Total as on 31.03.2022	**329.92**	**78.24**	**10.32**	**139.04**	**557.52**

6.A.3 Details of project where activity has been suspended

Amount in ₹ Crore

Sl. Nos.	Particulars		Amount	Suspended from	Brief reason of suspension
(a)	Mines & Refinery	As on 31.03.2023	-	-	-
		As on 31.03.2022			
(b)	Smelter & Power (Coal handling plant including railway sidings)	As on 31.03.2023	1.55	01-Apr-20	Due to change in strategy of coal transportation and handing
		As on 31.03.2022	1.55	01-Apr-20	Due to change in strategy of coal transportation and handing
(c)	Others	As on 31.03.2023	-	-	-
		As on 31.03.2022			
		Total as on 31.03.2023	**1.55**		
		Total as on 31.03.2022	**1.55**		

Notes to the consolidated financial statements

7 - Intangible assets

Amount in ₹ Crore

	User right	Computer software	Mining rights	Licenses	Total intangible assets
Cost or deemed cost					
Balance as at 31.03.2021	**79.79**	**11.37**	**379.75**	**11.55**	**482.46**
Additions	0.39	1.90	27.05	-	29.34
Disposals	-	-	-	-	-
Balance as at 31.03.2022	**80.18**	**13.27**	**406.80**	**11.55**	**511.80**
Additions	-	2.49	73.93	-	76.42
Disposals	-	-	-	-	-
Balance as at 31.03.2023	**80.18**	**15.76**	**480.73**	**11.55**	**588.22**
Accumulated depreciation and impairment					
Balance as at 31.03.2021	**15.28**	**9.46**	**104.05**	**10.49**	**139.28**
Depreciation Expense	4.01	1.35	25.74	0.15	31.25
Impairment Expense	-	-	-	-	-
Disposals	-	-	-	-	-
Balance as at 31.03.2022	**19.29**	**10.81**	**129.79**	**10.64**	**170.53**
Depreciation Expense	4.01	1.79	25.30	0.15	31.25
Impairment Expense	-	-	-	-	-
Disposals	-	-	-	-	-
Balance as at 31.03.2023	**23.30**	**12.60**	**155.09**	**10.79**	**201.78**
	User right	**Computer software**	**Mining rights**	**Licenses**	**Total intangible assets**
Carrying amount					
Balance as at 31.03.2021	**64.51**	**1.91**	**275.70**	**1.06**	**343.18**
Additions/Adjustments	0.39	1.90	27.05	-	29.34
Disposals	-	-	-	-	-
Depreciation Expense	4.01	1.35	25.74	0.15	31.25
Impairment Expense	-	-	-	-	-
Balance as at 31.03.2022	**60.89**	**2.46**	**277.01**	**0.91**	**341.27**
Additions	-	2.49	73.93	-	76.42
Disposals	-	-	-	-	-
Depreciation Expense	4.01	1.79	25.30	0.15	31.25
Impairment Expense	-	-	-	-	-
Balance as at 31.03.2023	**56.88**	**3.16**	**325.64**	**0.76**	**386.44**

Notes: 7.1 User right represent Company's share in jointly owned asset.

7.2 The Company has been granted lease to operate its Bauxite Mines at Panchpatmali, Odisha and Coal Mines at Angul, Odisha by the Government of Odisha. In this connection, the Company has paid Net present value (NPV) for forest land, compensatory afforestation, wild life management and other related payments which are capitalized as intangible assets under Mining Rights and amortized on straight line basis as per the Accounting Policy of the Company.

7.3 Utkal D&E coal blocks were allocated to the Company on 02.05.2016 by the Ministry of Coal, Govt. of India with total mining reserve of 176.05 MT(Million Tonnes). On execution of mining lease on 25.03.2021 (Utkal D) and 20.01.2023 (Utkal E), the mining rights worth ₹ 54.79 crore in FY 2021-22 and ₹ 73.26 crore during the year have been capitalised.

Commencement of Mining Operation at Utkal-D Coal Mine was started w.e.f 09.11.2022. Intimation regarding the same was sent to Deputy Director Mines, Talcher on 09.11.2022. Top soil removing, overburden cutting for opening of coal seams have been done during the period of 09.11.2022 to 31.03.2023. Seam was exposed & samples were collected by Coal Controller Organisation (CCO), Ministry of Coal office for annual grade declaration for FY 2023-24. Coal Production has started from 01.04.2023.

8 A- Intangible assets under development

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
(i) Mining right	523.64	469.73
(ii) Software	0.33	1.67
	523.97	**471.40**

Note: 8 A.1 Mining right under development constitutes expenses related to allotment, Net present value (NPV) for forest land, compensatory afforestation and wild life management for mines allocated to the Company. It also includes pre-operating expenses of ₹ 523.64 crores (previous year ₹ 322.78 crore) towards expenditure incurred/payments made to Government of Odisha on various developmental schemes as per commitment to Government of Odisha for allotment of Pottangi Bauxite Mines.

Notes to the consolidated financial statements

8B. Intangible assets under development

8.B.1 Ageing of Intangible assets under development — Amount in ₹ Crore

Particulars		Amount in CWIP for a period of				
		Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
Project in progress						
(a) Mines & Refinery	As on 31.03.2023	200.91	72.62	188.10	62.01	523.64
	As on 31.03.2022	72.62	188.10	62.01	-	322.73
(b) Smelter & Power	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	2.94	10.40	108.23	25.43	147.00
(c) Others	As on 31.03.2023	0.33	-	-	-	0.33
	As on 31.03.2022	1.67	-	-	-	1.67
Project temporarily suspended						
(a) Mines & Refinery	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
(b) Smelter & Power	As on 31.03.2023	-		-	-	
	As on 31.03.2022	-	-	-	-	-
(c) Others	As on 31.03.2023	-	-	-	-	-
	As on 31.03.2022	-	-	-	-	-
	Total as on 31.03.2023	**201.24**	**72.62**	**188.10**	**62.01**	**523.97**
	Total as on 31.03.2022	**77.23**	**198.50**	**170.24**	**25.43**	**471.40**

9. Investments

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
A. Non-current		
A.1 Investments in equity instruments accounted for using Equity Method		
A.1.1 Investment in associates		
A.1.2 Trade Investment in joint ventures at cost		
Unquoted investments		
a) Utkarsha Aluminium Dhatu Nigam Limited (As at 31.03.2023 : 2,00,00,000 shares of ₹ 10 each fully paid up, As at 31.03.2022 : 2,00,00,000 shares of ₹ 10 each fully paid up).	19.20	18.81
Total	**19.20**	**18.81**
b) Khanij Bidesh India Limited (As at 31.03.2023 : 1,30,00,000 shares of ₹10 each fully paid up, As at 31.03.2022 : 10,00,000 shares of ₹10 each fully paid up).	12.75	0.61
Total	**12.75**	**0.61**
c) Angul Aluminium Park Private Limited (As at 31.03.2023 : 1,62,23,900 shares of ₹ 10 each fully paid up, As at 31.03.2022 : 1,62,23,900 shares of ₹ 10 each fully paid up).	19.36	19.00
Total	**19.36**	**19.00**
d) GACL-NALCO Alkalies & Chemicals Private Limited (As at 31.03.2023: 27,60,00,000 shares of ₹ 10 each fully paid up, (As at 31.03.2022: 27,60,00,000 shares of ₹ 10 each fully paid up).	161.83	272.55
Total	**161.83**	**272.55**
Total investment in joint ventures	**213.14**	**310.97**

Notes to the consolidated financial statements

9. Investments (contd.)

Details of joint ventures

Details of each of the Company's joint ventures at the end of the reporting period are as follows :

Name of the joint venture	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
		As at 31.03.2023	As at 31.03.2022
(a) Utkarsha Aluminium Dhatu Nigam Limited	Manufacture, market, sell, buy, trade, distribute, import and export of all high end aluminium alloy products including scrap to fulfil the requirement of critical, strategic and other sectors, Hyderabad	50.00%	50.00%
(b) Khanij Bidesh India Limited	Identify, explore, acquire, develop, mine, process, procure and sell strategic minerals outside India	40.00%	40.00%
(c) Angul Aluminium Park Private Limited	Promoting aluminium specific downstream in Odisha, Angul, Odisha.	49.00%	49.00%
(d) GACL-NALCO Alkalies & Chemicals Private Limited	Production of caustic soda, Vadodara, Gujarat, India	40.00%	40.00%

Financial Information in respect of individually material Joint Ventures

Amount in ₹ Crore

Particulars	UADNL		KABIL		AAPPL		GNAL	
	As at 31.03.2023	As at 31.03.2022	As at 31.03.2023	As at 31.03.2022	As at 31.03.2023	As at 31.03.2022	As at 31.03.2023	As at 31.03.2022
Non- current assets	10.11	9.50	-	0.03	88.65	81.45	1,838.48	2,036.64
Current asset	29.00	28.19	32.15	1.52	21.81	29.99	596.57	290.56
Non- current liabilities	-	-	-	-	-	-	1,514.44	1,529.52
Current liabilities	0.71	0.06	0.31	0.02	1.15	0.94	516.01	116.28
The above amounts of assets and liabilities includes the following:								
Cash and cash equivalents	28.26	27.32	0.20	0.20	20.09	28.44	5.82	244.85
Current financials liabilities (excluding trade payables and provisions)	-	-	-	-	-	-	398.95	114.13
Non- current financials liabilities (excluding trade payables and provisions)	-	-	-	-	33.05	33.05	1,514.44	1,529.52
Revenue	1.50	1.37	-	-	1.03	1.87	282.53	0.62
Profit or loss from continuing operations	0.78	0.62	0.34	(0.07)	0.70	1.32	(276.81)	(3.70)
Other comprehensive income for the year	-	-	-	-	-	-	-	-
Total comprehensive income for the year	0.78	0.62	0.34	(0.07)	0.70	1.32	(276.81)	(3.70)
The above profit / (loss) for the year include the following:								
Depreciation and amortisation	0.10	0.08	-	-	-	-	78.89	0.87
Interest Income	1.50	1.37	-	-	1.03	1.87	10.03	0.19
Interest expenses	-	-	-	-	-	0.02	81.09	-
Income tax expense/(income)	(0.02)	0.03	0.10	0.02	0.27	0.51	-	-
Reconciliation of the above summarised financial information to the carrying amount of the interest in JVs recognised in the consolidated financial statements:								
Net asset of the Joint Venture	38.40	37.63	31.84	1.50	39.50	38.80	404.60	681.41
Proportion of the Group's ownership interest in JV (%)	50%	50%	40%	40%	49%	49%	40%	40%
Proportion of the Group's ownership interest in JV (INR)	19.20	18.81	12.75	0.61	19.36	19.00	161.83	272.55
Add:- additional subscription of share warrant/ advance against equity	-	-	-	-	-	-	-	-
Add:- goodwill on acquisition	-	-	-	-	-	-	-	-
Less:- unrealised profit	-	-	-	-	-	-	-	-
Group's share in the net asset of JV	**19.20**	**18.81**	**12.75**	**0.61**	**19.36**	**19.00**	**161.83**	**272.55**
Carrying amt of the Group's interest in JV	**19.20**	**18.81**	**12.75**	**0.61**	**19.36**	**19.00**	**161.83**	**272.55**

Notes to the consolidated financial statements

A.1.3 Investment in other entities

Amount in ₹ Crore

Unquoted investments	As at 31.03.2023	As at 31.03.2022
Odisha Capital Market & Enterprises Limited. (As at 31.03.2023 : 2,89,000 shares of ₹ 1 each fully paid up) (As at 31.03.2022 : 2,89,000 shares of ₹ 1 each fully paid up)	0.03	0.03
Total - Investments in other entities	**0.03**	**0.03**
Total - investments in equity instruments	**213.17**	**311.00**
Additional information		
Aggregate carrying amount of unquoted investments	213.17	311.00

B. Current

Amount in ₹ Crore

			As at 31.03.2023			As at 31.03.2022
Investments in Mutual Funds	**Units in '000**	**NAV in ₹/ Unit**	**Amount in ₹ Crore**	**Units in '000**	**NAV in ₹/ Unit**	**Amount in ₹ Crore**
Quoted Investments						
Canara Rebeco Liquid Fund	379	1,005.50	38.16	119	1,005.50	12.00
Baroda BNP Paribas Liquid Fund	410	1,002.08	41.11	309	1,002.08	31.01
SBI Liquid Fund	265	1,136.93	30.16	56	1,075.55	6.00
Union Liquid Fund	361	1,000.79	36.15	150	1,000.79	15.00
Total - Other current Investments			**145.58**			**64.01**
Additional Information						
Aggregate cost of quoted investments			145.00			64.00
Aggregate market value of quoted investments			145.58			64.01
Aggregate cost of unquoted investments			-			-
Aggregate amount of impairment in value of investments			-			-
Category-wise classification:			**As at 31.03.2023**			**As at 31.03.2022**
Financial assets (quoted investments) mandatorily measured at fair value through profit & loss (FVTPL)			145.58			64.01
			145.58			**64.01**

10 A - Trade receivables

Amount in ₹ Crore

		As at 31.03.2023	As at 31.03.2022
A.	**Non-Current**		
	(a) Considered good - Secured	-	-
	(b) Considered good - Unsecured	-	-
	(c) Having significant increase in credit risk	-	-
	(d) Credit impaired	36.28	36.90
	Less: Allowance for doubtful debts	36.28	36.90
Non-current trade receivables		-	-
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Considered good - Secured	-	-
	(b) Considered good - Unsecured	91.33	75.25
	(c) Having significant increase in credit risk	13.79	20.24
	Less: Allowance for doubtful debts	13.79	20.24
	Current trade receivables	**91.33**	**75.25**

Notes:

10.A.1 The sale of goods (Alumina and Aluminium) is made against either advances received from customers or letter of credit. The advance received from customer is adjusted against sale. The average credit period for sale of wind power is 30 days from the date of metering which is considered as collection period.

Notes to the consolidated financial statements

10.A.2 Customers that individually represent more than 5% of the total trade receivable as on 31.03.2023:

Customers		Customer Category	As at 31.03.2023	As at 31.03.2022
a.	Andhra Pradesh Southern Power Distribution Company Ltd.	Wind Power	29%	49%
b.	Zetwerk Manufacturing Businesses Pvt Ltd	Metal	15%	-
c.	NTPC Vidyut Vyapar Nigam Ltd	Wind Power	11%	13%
d.	Gloster Cables Limited	Metal	7%	-
e.	Gupta Power Infrastructure Ltd	Metal	6%	19%

10.A.3 The Company has used a practical approach for computing expected credit loss allowance for trade receivables based on a case to case basis. Since there is no credit period for sale of alumina and aluminium and the sale is either made against an advance or backed by letter of credit (LC) given by customers, no credit loss is expected against such receivables. For sale of wind power, the Company estimates credit losses based on credit loss experience and forward looking information.

10.A.4 Trade receivables are hypothecated/pledged against cash credit facility from Banks

10.A.5 No amount of receivable is due from related parties (Key Managerial Personnel).

10.A.6 Movement in allowances for doubtful trade receivables:

Non-Current		
Particulars	**2022-23**	**2021-22**
a Opening balance	**36.90**	**36.90**
b Add: Additions (expected credit loss for the year)	-	-
c Less: Write off/adjustments	0.62	-
d Closing Balance	**36.28**	**36.90**
Current		
Particulars	**2022-23**	**2021-22**
a Opening balance	**20.24**	**20.24**
b Add: Additions (expected credit loss for the year)	13.79	-
c Less: Write off/adjustments	20.24	-
d Closing Balance	**13.79**	**20.24**

10. B - Trade receivables ageing

(a) Ageing when due date of payment is specified — **Amount in ₹ Crore**

Sl. No.	Particulars		Outstanding from the due date of payment: Less than 6 months	6 months - 1 Years	1-2 Years	2-3 Years	More than 3 Years	Total
(i)	Undisputed Trade receivables- considered good	As on 31.03.2023	54.25	16.97	20.11	-	-	**91.33**
		As on 31.03.2022	45.89	21.07	2.83	5.46	-	**75.25**
(ii)	Undisputed Trade receivables- significant increase in credit risk	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(iii)	Undisputed Trade receivables- credit impaired	As on 31.03.2023	-	0.55	7.73	1.87	3.64	**13.79**
		As on 31.03.2022	-	-	0.74	11.6	7.9	**20.24**
(iv)	Disputed Trade receivables- considered good	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(v)	Disputed Trade receivables- significant increase in credit risk	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(vi)	Disputed Trade receivables- credit impaired	As on 31.03.2023	-	-	-	-	36.28	**36.28**
		As on 31.03.2022	-	-	-	-	36.90	**36.90**
		Total as on 31.03.2023	**54.25**	**17.52**	**27.84**	**1.87**	**39.92**	**141.40**
		Total as on 31.03.2022	**45.89**	**21.07**	**3.57**	**17.06**	**44.80**	**132.39**

Notes to the consolidated financial statements

11 - Loans			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Loans to employees		
	Secured, considered good	63.20	67.64
	Unsecured, considered good	19.05	19.51
	(b) Loans to others		
	Secured, considered good	0.14	0.23
	Total non-current loans	**82.39**	**87.38**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Loans to employees		
	Considered good-Secured	16.97	17.12
	Considered good-Unsecured	11.60	11.14
	(b) Loans to related parties		
	Considered good-Secured [refer note 11.2]	0.14	0.09
	(c) Loans to others		
	Considered good - Secured	0.36	0.29
	Less: Allowance for bad and doubtful loans	0.09	0.09
	Total current loans	**28.98**	**28.55**

Notes:

11.1 Loans to employees and others are carried at amortised cost. Deferred employee benefits represents the benefits on account of interest rate on loans being lower than the market rate of interest. The same is amortised on a straight line basis over the remaining period of the loan.

11.2 The amount of loan outstanding from related parties (Directors) is the amount of motor vehicle and House building advance taken from the Company in their capacity as employees. Further information on these loans is set out in note 40-Related party disclosure.

11.3 Loans to the employee are secured against the mortgage of the House property and hypothication of vehicles for which such loan is given as per the policy of the Company.

11.4 Movement in allowances :

Current			
Particulars		**2022-23**	**2021-22**
a	**Opening balance**	0.09	0.09
b	Add: Additions	-	-
c	Less: Write off/adjustments	-	-
d	**Closing Balance**	0.09	0.09

Notes to the consolidated financial statements

12 - Other financial assets			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	Security deposits	16.72	9.18
	Mines closure deposits [refer note 12.2]	4.83	0.56
Total other non-current financial assets		**21.55**	**9.74**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	(a) Advances to employees	22.84	24.96
	(b) Insurance claims receivables and others	7.22	7.22
	(c) Gratuity(funded)	26.74	22.17
	Gross - other current financial assets	**56.80**	**54.35**
	Less: Allowance for bad and doubtful other current financial assets		
	a) Insurance claims	7.22	7.22
	Total allowance for bad and doubtful - other current assets	**7.22**	**7.22**
	Net other current financial assets	**49.58**	**47.13**
	Classification of other current financial assets:		
	Unsecured, considered good	49.58	47.13
	Unsecured, considered doubtful	7.22	7.22
	Gross other current financial assets	**56.80**	**54.35**

Note:

12.1 Other financial assets are carried at amortised cost.

12.2 Earmarked balance with SBI under an escrow agreement with Coal Controller Organisation (CCO), Ministry of Coal for compliance of mines closure in respect of Utkal D & E coal mines.

12.3 Movement in allowances :

Current			
Particulars		**2022-23**	**2021-22**
a	**Opening balance**	**7.22**	**7.22**
b	Add: Additions	-	-
c	Less: Write off/adjustments	-	-
d	**Closing Balance**	**7.22**	**7.22**

13 - Income tax assets/ Liabilities			Amount in ₹ Crore
A.	**Non-current**	**As at 31.03.2023**	**As at 31.03.2022**
	Income Tax Asset net [Refer note 13.1]	634.49	320.57
	Total Non current income tax	**634.49**	**320.57**
B.	**Current**	**As at 31.03.2023**	**As at 31.03.2022**
	Income Tax Asset net	28.49	55.38
	Income Tax Liabilities net	32.07	211.04
	Total current income tax asset (liabilities)	**(3.58)**	**(155.66)**

13.1 Income tax liability of ₹ 504.18 crore (previous year ₹ 65.04 crore) is netted off.

Notes to the consolidated financial statements

14 - Other assets

Amount in ₹ Crore

A.	Non-current	As at 31.03.2023	As at 31.03.2022
	(a) Capital advances [refer Note 14.1]	552.14	498.02
	(b) Advances other than capital advance:		
	Advance with Govt. authorities		
	(1) Customs, excise, sales tax, port trusts etc.	226.59	179.95
	(2) Other Government authorities	6.04	6.01
	(c) Others		
	Prepaid expenses		
	(1) Deferred employee benefits [refer Note 11.1]	21.93	15.50
	Gross other non-current assets	**806.70**	**699.48**
	Less: Allowance for bad and doubtful for other non-current assets		
	(a) Capital advances	0.01	0.01
	(b) Advances with Excise authority	0.24	0.24
	Total allowance for bad and doubtful for other non-current assets	**0.25**	**0.25**
	Total other non-current assets	**806.45**	**699.23**

B.	Current	As at 31.03.2023	As at 31.03.2022
	Advances other than capital advances		
	(a) Claims with statutory authorities		
	(1) Export Incentive Claims	42.73	71.42
	(2) Generation Based Incentive on power generated from renewable source and Renewable energy certificates	4.28	5.10
	(3) VAT, CENVAT and GST Credit Recoverable	321.01	295.64
	(4) Claims receivable from customs, excise and railway authorities	7.68	7.68
	(b) Prepaid expenses		
	(1) Deferred employee benefits [refer Note 11.1]	3.55	2.04
	(2) Other prepaid expenses	7.81	9.34
	(c) Stamp in hand	0.02	0.01
	(d) Other receivables	1.23	1.07
	(e) Other advances		
	(1) Advances to employees	3.00	13.26
	(2) Advances to suppliers and service providers	813.18	656.34
	(3) Others	4.91	4.16
	Gross other current assets	**1,209.40**	**1,066.06**
	Less: Allowance for bad and doubtful for other current assets		
	(a) Export Incentive Claims	2.81	0.95
	(b) VAT and CENVAT Credit Recoverable	197.81	197.81
	(c) Claims receivable from customs, excise and railway authorities	5.13	5.13
	(d) Other receivables	0.43	0.36
	(e) Advances to suppliers and service providers	2.59	1.92
	(f) Others	6.14	1.82
	Total allowance for bad and doubtful for other current assets	**214.91**	**207.99**
	Total other current assets	**994.49**	**858.07**
	Classification of other current assets:		
	Secured, considered good		
	Unsecured, considered good	994.49	858.07
	Doubtful	214.91	207.99
	Gross other current assets	**1,209.40**	**1,066.06**

Note:

14.1 The Company has the obligation towards Rehabilitation and Resettlement (R&R) for both Utkal D & E Coal Block. R&R Policy for Utkal D has already been communicated by Govt. of Odisha, in the absence of option by the Project Displaced Families (PDFs) either for cash compensation or Annuity it is not possible to estimate the value of the obligation. R&R policy for Utkal E Coal Block is yet to be finalised by Govt. of Odisha. The Company has deposited ₹ 180 crore to Collector Angul towards R&R activity for Utkal D&E Coal Block.

In the absence of R&R policy for Utkal E Coal block and want of choice/ option by the beneficiaries, the obligation could not be measured, and therefore not accounted as capital asset/expenditure.

Notes to the consolidated financial statements

15. Inventories			Amount in ₹ Crore
		As at 31.03.2023	As at 31.03.2022
(a)	Raw materials	306.67	161.03
(b)	Coal and fuel oil	189.76	170.82
(c)	Carbon Anodes (Intermediaries)	160.35	136.67
(d)	Work-in-progress	392.13	319.04
(e)	Finished goods	462.36	542.47
(f)	Stores and spares	328.95	299.23
(g)	Others [refer note 15.4]	-	16.34
Total inventories		**1,840.22**	**1,645.60**
Included above, goods-in-transit:			
	(i) Raw materials	30.74	20.79
	(ii) Coal and fuel oil	16.88	57.79
	(iii) Stores and spares	15.22	6.31
Total goods-in-transit		**62.84**	**84.89**

Note:

15.1 Cost of inventories recognised as expenses during the year is ₹ 7,177.59 crore (previous year : ₹ 4,603.84 crore).

15.2 Cost of inventories recognised as expenses during the year includes ₹ 2.64 crore (previous year: ₹ 1.46 crore) in respect of write-downs of inventory for non moving items.

15.3 Inventories are hypothecated/pledged against cash credit facility availed from Banks.

15.4 Consequent to opinion issued by the Expert Advisory Committee of Institute of Chartered Accountants of India, the Company has changed its accounting policy for recognition of inventory of scraps internally generated. As per the revised policy, the Company recognizes revenue from scrap on its disposal. As on the reporting date 31.03.2023, the change in policy has an impact of reduction in profit in the statement of profit & loss to the tune of ₹ 14.84 crore.

15.5 Mode of valuation of inventories is stated in note 3.9 of Significant Accounting Policies.

16.A-Cash and cash equivalents			Amount in ₹ Crore
		As at 31.03.2023	As at 31.03.2022
(a)	**Balances with banks**		
	(1) Balance with scheduled banks		
	(i) In current account	63.29	412.80
Total cash and cash equivalents		**63.29**	**412.80**

16.B- Bank balances (other than Cash and cash equivalents)			
		As at 31.03.2023	As at 31.03.2022
(a)	In deposit account (having original maturity between 3-12 months)	1,992.33	3,217.37
	Principal	1,926.00	3,156.00
	Accrued Interest	66.33	61.37
(b)	Earmarked balance with scheduled banks [refer note 16.B.1]	61.88	75.90
	Total other bank balances	**2,054.21**	**3,293.27**

Note:

16.B.1 The earmarked balance of ₹ 61.88 crore (previous year ₹ 75.90 crore) with scheduled banks includes the amount deposited towards unclaimed dividend amounting to ₹ 4.25 crore (previous year ₹ 4.29 crore) and ₹ 11.22 crore as lien for issuance of Bank Guarantee to participate in Bauxite mines bidding. The balance amount of ₹ 46.40 crore (previous year ₹ 71.61 crore) represents deposits with State Bank of India as per direction of the Hon'ble High Court of Odisha with regard to disputed differential electricity duty.

Recently Energy Department, Govt. of Odisha have passed a resolution (Resolution No-11797, dtd. 30.11.2022) for One Time Settlement (OTS) of arrears Electricity Duty (ED) and interest of consumers as on dt 31.03.2022, who generate energy for captive consumption and not depositing the ED due to court case / litigation etc.

The Company has opted for the OTS scheme and filed necessary papers after the Confederation of Captive Power Plants, Odisha (in which the Company is a member) withdrew the legal case in the Hon'ble High Court, Odisha. As per the condition laid out in the OTS scheme, 10% of the outstanding demand raised by the Authority amounting to ₹ 27.83 crore has been paid during the year from the escrow account created as per order of the Hon'ble High Court. The final settlement under the scheme is yet to be completed.

16.B.2 Amount due for credit to Investor's Education and Protection Fund at the end of the current year ₹ Nil (previous year ₹ Nil).

17. Non Current Assets held for sale		Amount in ₹ Crore
Particulars	**As at 31.03.2023**	**As at 31.03.2022**
Non Current Assets held for sale		
Gross	7.06	7.09
Less: Impairment provision	6.42	6.52
Total Non-Current assets held for sale	**0.64**	**0.57**

17.1 The above includes old discarded vehicles & plant & machinery.

17.2 The management believes to complete the sales transactions within a period of 12 months from the end of the financial year.

17.3 The fair value less cost to sale approximates carrying cost.

18. Share Capital		Amount in ₹ Crore
	As at 31.03.2023	**As at 31.03.2022**
Authorised share capital:		
As at 31.03.2023: 6,00,00,00,000 equity shares of ₹ 5 each [As at 31.03.2022: 6,00,00,00,000 equity shares of ₹ 5 each]	3,000.00	3,000.00
	3,000.00	**3,000.00**
Issued, subscribed and paid up capital:		
1,83,66,31,787 fully paid-up equity shares of ₹ 5 each [As at 31.03.2022: 1,83,66,31,787 fully paid-up equity shares of ₹ 5 each]	918.32	918.32
	918.32	**918.32**

18.1 Reconciliation of the number of equity shares		
18.1 Reconciliation of the number of equity shares		
	Number of shares	**Amount ₹ in Crore**
Balance as at 31.03.2021	**1,83,66,31,787**	**918.32**
Changes during the year	-	-
Balance as at 31.03.2022	**1,83,66,31,787**	**918.32**
Changes during the year	-	-
Balance as at 31.03.2023	**1,83,66,31,787**	**918.32**

(i) The Company has only one class of equity shares having par value of ₹ 5 each. Each holder of equity shares is entitled to one vote per share and carries proportionate right to dividends declared by the Company based on their holdings.

(ii) Buy back:

During 2018-19 the Company bought back 6,73,11,386 number of equity shares of ₹ 5 each which led to decrease in equity share capital from ₹ 966.46 crore to ₹ 932.81 crore.

During 2020-21, the Company further bought back 2,89,85,711 numbers of equity shares of ₹ 5 each which led to decrease in the equity share capital from ₹ 932.81 crore to ₹ 918.32 crore.

(iii) Disinvestment:

During the year 2018-19, the Government of India divested 8,89,86,323 Nos. of equity shares through Bharat ETF. Consequent to buyback and transfer of shares through ETF by Government of India during 2018-19, the holding of Government of India has come down from 1,16,37,17,107 Nos. (60.20%) as on 31.03.2018 to 97,00,81,517 Nos. (51.99%) as on 31.03.2019.

During the year 2019-20, Government of India further divested 92,88,506 Nos. of equity shares through Bharat 22 ETF upon which the holding of Government of India has come down from 97,00,81,517 Nos. (51.99%) as on 31.03.2019 to 96,07,93,011 Nos. (51.50%) as on 31.03.2020.

During the 2020-21, consequent upon buy-back of equity shares, the holding of Government of India has come down from 96,07,93,011 Nos. (51.5%) as on 31.03.2020 to 94,17,93,011 Nos. (51.28%) as on 31.03.2021.

Notes to the consolidated financial statements

18.2 Details of shares held by promoters:			Amount in ₹ Crore	
	As at 31.03.2023		As at 31.03.2022	
Promoter's name	Number of shares held	% of holding of equity shares	Number of shares held	% of holding of equity shares
Government of India	94,17,93,011	51.28%	94,17,93,011	51.28%
Total	**94,17,93,011**	**51.28%**	**94,17,93,011**	**51.28%**

18.3 Details of shareholder holding more than 5% :			Amount in ₹ Crore	
	As at 31.03.2023		As at 31.03.2022	
Promoter's name	Number of shares held	% of holding of equity shares	Number of shares held	% of holding of equity shares
Government of India	94,17,93,011	51.28%	94,17,93,011	51.28%
Total	**94,17,93,011**	**51.28%**	**94,17,93,011**	**51.28%**

19. Other equity		Amount in ₹ Crore
	As at 31.03.2023	As at 31.03.2022
(a) Capital redemption reserves	370.30	370.30
(b) General reserve	7,942.98	7,942.98
(c) Retained earnings	3,894.78	3,320.79
Total	**12,208.06**	**11,634.07**

19.1 Movement in other equity				Amount in ₹ Crore
	Reserves and Surplus			
Other equity	Capital redemption reserve	General reserve	Retained earnings	Total
Balance as at 01.04.2021	**370.30**	**7,942.98**	**1,447.41**	**9,760.69**
Profit for the year	-	-	2,951.41	2,951.41
Other comprehensive income (net of taxes)	-	-	23.95	23.95
Total comprehensive income for the year	-	-	**2,975.36**	**2,975.36**
Final dividend for the previous year	-	-	(183.66)	(183.66)
Interim dividend for the year	-	-	(918.32)	(918.32)
Balance as at 31.03.2022	**370.30**	**7,942.98**	**3,320.79**	**11,634.07**
Profit for the year	-	-	1,434.66	1,434.66
Other comprehensive income (net of taxes)	-	-	57.65	57.65
Total comprehensive income for the year	-	-	**1,492.31**	**1,492.31**
Final dividend for the previous year	-	-	(275.49)	(275.49)
Interim dividend for the year	-	-	(642.83)	(642.83)
Balance as at 31.03.2023	**370.30**	**7,942.98**	**3,894.78**	**12,208.05**

19.2 During the year 2018-19, the Company had bought back 6,73,11,386 number of fully paid equity shares of ₹ 5 each on December 4, 2018 at an offer price of ₹ 75 per share. The aggregate consideration paid was ₹ 504.83 crore. Post buyback, the paid up equity share capital of the Company is reduced by ₹ 33.65 crore from ₹ 966.46 crore to ₹ 932.81 crore. The premium amount ₹ 471.18 crore is appropriated from general reserve. The shares were extinguished on December 7, 2018 and in terms of the provisions of Companies Act, 2013, a sum of ₹ 33.65 crore was transferred from general reserve to capital redemption reserve.

During the year 2020-21, the Company bought back 2,89,85,711 number of fully paid equity shares of ₹ 5 each on March 10, 2021 at an offer price of ₹57.50 per share. The aggregate consideration paid was ₹ 166.67 crore. Post buyback, the paid up equity share capital of the Company is reduced by ₹ 14.49 crore from ₹ 932.81 crore to ₹ 918.32 crore. The premium amount ₹ 152.18 crore is appropriated from general reserve. The shares were extinguished on March 17, 2021 and in terms of the provisions of Companies Act, 2013, a sum of ₹ 14.49 crore was transferred from general reserve to capital redemption reserve.

19.3 During the year, the Company has paid Final Dividend for FY 2021-22 at ₹ 1.50 per equity share amounting to ₹ 275.49 crore. The Company has paid first tranche of Interim dividend for FY 2022-23 at ₹ 1.00 per equity share amounting to ₹ 183.66 crore on February 14, 2023 and the second tranche of Interim dividend at ₹ 2.50 per equity share amounting to ₹ 459.16 crore was paid on March 31, 2023. With this the total payout is ₹ 642.82 crore. During the preceding year, the Company had paid Final Dividend for FY 2020-21 at ₹ 1 per equity share amounting to ₹ 183.66 crore. The Company had also paid first tranche Interim dividend at ₹ 2 per equity share amounting to ₹ 367.33 crore & second tranche of Interim Dividend at ₹ 3 per equity share amounting to ₹ 550.99 crore for financial year 2021-22.

Notes to the consolidated financial statements

20 A - Lease Liability

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
Non-current lease liability	50.99	50.91
Current lease liability	5.87	5.52
Total Lease liabilities	**56.86**	**56.43**

20 B - Movement of Lease Liability

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
Balance at the beginning	56.43	55.97
Additions during the year	-	0.56
Finance Cost added during the year	4.08	4.13
Payment of lease liability	3.65	4.23
Balance at the end of the year	**56.86**	**56.43**

21 - Borrowings

Amount in ₹ Crore

Current (secured) (at amortised cost)	As at 31.03.2023	As at 31.03.2022
Liabilities towards bills discounted	47.75	20.67
Total	**47.75**	**20.67**

21.1 Secured by hypothecation of inventories and trade receivables

21.2 Monthly statement of current assets filed with the banks are in agreement with the books of accounts.

22 A- Trade payables

Amount in ₹ Crore

A. Non-current	As at 31.03.2023	As at 31.03.2022
(1) Creditors for supplies and services		
- Dues to micro and small enterprises	-	-
- Others	10.98	23.61
Total non-current trade payables	**10.98**	**23.61**
B. Current		
(1) Creditors for supplies and services		
- Dues to micro and small enterprises	36.59	31.50
- Others	742.92	788.52
Accrued wages and salaries	483.83	637.08
Total current trade payables	**1,263.34**	**1,457.10**

Notes: 22.1 Trade and other payables are subject to confirmation/reconciliation and consequential adjustment, if any.

22.2 Dues payable to Micro and Small Enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 have been determined to the extent such parties have been identified on the basis of information available with the Company. The disclosures pursuant to said Act in respect of such dues included in trade payables (Note-22) and other financial liabilities (Note-23) are as under:

Particulars	As at 31.03.2023	As at 31.03.2022
i) Principal amount due	36.59	31.50
ii) Interest on principal amount due	Nil	Nil
iii) Interest and principal amount paid beyond appointment day	Nil	Nil
iv) The amount of interest due and for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the amount of interest specified under MSME Development Act 2006.	Nil	Nil
v) The amount of interest accrued and remaining unpaid at the end of the year.	Nil	Nil
vi) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest due as above are actually paid to the small enterprise, for the purpose of disallowance as a deductible expenditure under section 23 of MSME Development Act 2006.	Nil	Nil

Notes to the consolidated financial statements

22. B - Trade Payable ageing

Amount in ₹ Crore

(a)	Ageing when due date of payment is specified							
(b)	Ageing when due date of payment is not specified							
				Outstanding from the due date of transaction				
Sl.No.	Particulars		Not Due	Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
(i)	MSME	As on 31.03.2023	62.36	30.27	-	-	-	92.63
		As on 31.03.2022	60.91	13.74	-	-	-	74.65
(ii)	Others	As on 31.03.2023	690.79	185.35	-	-	-	876.14
		As on 31.03.2022	820.40	261.17	15.16	6.92	156.62	1,260.27
(iii)	Disputed Dues- MSME	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	0.72	-	-	-	0.72
(iv)	Disputed Dues- Others	As on 31.03.2023	23.41	-	-	1.81	6.23	31.45
		As on 31.03.2022		0.06	0.12	0.16	74.25	74.59
		Total as on 31.03.2023	**776.56**	**215.62**	**-**	**1.81**	**6.23**	**1,000.22**
		Total as on 31.03.2022	**881.31**	**275.69**	**15.28**	**7.08**	**230.87**	**1,410.23**

(c) Ageing of Unbilled dues

Amount in ₹ Crore

				Outstanding from the due date of transaction				
Sl. No.	Particulars		Not Due	Less than 1 Year	1-2 Years	2-3 Years	More than 3 Years	Total
(i)	MSME	As on 31.03.2023	-	51.66	0.94	0.02	0.21	52.83
		As on 31.03.2022	-	43.91	1.21	0.13	0.14	45.39
(ii)	Others	As on 31.03.2023	-	218.57	-	0.94	1.76	221.27
		As on 31.03.2022	-	24.43	0.53	-	0.13	25.09
(iii)	Disputed Dues- MSME	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
(iv)	Disputed Dues- Others	As on 31.03.2023	-	-	-	-	-	-
		As on 31.03.2022	-	-	-	-	-	-
		Total as on 31.03.2023	**-**	**270.23**	**0.94**	**0.96**	**1.97**	**274.10**
		Total as on 31.03.2022	**-**	**68.34**	**1.74**	**0.13**	**0.27**	**70.48**
		Total as on 31.03.2023(a)+(b)+(c)	**776.56**	**485.85**	**0.94**	**2.77**	**8.20**	**1,274.32**
		Total as on 31.03.2022(a)+(b)+(c)	**881.31**	**344.03**	**17.02**	**7.21**	**231.14**	**1,480.71**

23 - Other financial liabilities

Amount in ₹ Crore

A. Non current	As at 31.03.2023	As at 31.03.2022
Creditors for capital supplies and services		
- Dues to micro and small enterprises	-	-
- Others	180.00	88.57
Total other non-current financial liabilities	**180.00**	**88.57**
B. Current	**As at 31.03.2023**	**As at 31.03.2022**
(a) Unpaid dividends	4.25	4.29
(b) Creditors for other liabilities		
(1) Creditors for capital supplies and services		
- Dues to micro and small enterprises	-	-
-Others	400.20	316.13
(2) Security deposits from customers	3.49	4.95
(3) Refund due to customers	39.92	34.67
(4) Liabilities for discount on sales to customers	172.44	140.21
(5) Employees' recoveries	0.11	0.10
Total other current financial liabilities	**620.41**	**500.35**

Notes to the consolidated financial statements

24 - Provisions

Amount in ₹ Crore

A. Non current	As at 31.03.2023	As at 31.03.2022
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Post retirement medical benefits scheme (PRMBS) (funded)	-	152.83
(ii) Settling in benefit on retirement	12.59	13.73
(iii) Nalco benevolent fund scheme (NBFS)	2.07	2.15
(iv) Nalco retirement welfare scheme(NRWS)	8.29	8.88
(v) Retirement gift	4.78	5.36
(2) Other long-term employee benefits		
(i) Compensated absences (refer note 24.4)	-	-
(ii) Long service rewards	12.32	11.55
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	16.18	25.51
(b) Other Provisions		
(1) Asset restoration obligations/dismantling	44.22	40.59
(2) Other legal and constructive obligations	0.38	0.38
Total non current provisions	**100.83**	**260.98**
B. Current	**As at 31.03.2023**	**As at 31.03.2022**
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Gratuity (funded)	-	-
(ii) Post retirement medical benefits scheme (PRMBS) (funded)	10.44	9.48
(iii) Settling in benefit on retirement	3.30	3.79
(iv) Nalco benevolent fund scheme (NBFS)	0.43	0.48
(v) Nalco retirement welfare scheme(NRWS)	2.69	2.90
(vi) Retirement gift	1.07	1.17
(2) Other Long-term employee benefits		
(i) Compensated absences (funded)	39.82	18.99
(ii) Long service rewards	0.63	0.93
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	6.83	9.84
(b) Other Provisions		
(1) towards peripheral development expenses	30.05	30.30
(2) towards other legal and constructive obligations	51.63	49.07
Total current provisions	**146.89**	**126.95**

C. Movement of provisions

(1) Movement of retirement benefit obligations [refer note 33]

(2) Movement of employee benefits

Amount in ₹ Crore

	Compensated absences(funded)	Long service rewards	NEFFARS
Balance at 31.03.2021	**430.37**	**13.13**	**31.88**
Additional provisions recognised	121.28	1.49	31.59
Reductions arising from payments	(112.33)	(0.92)	(28.12)
Changes arising from remeasurement	25.62	(1.22)	-
Others [refer note 24.4]	(445.95)	-	-
Balance at 31.03.2022	**18.99**	**12.48**	**35.35**
Additional provisions recognised	84.41	1.49	11.65
Reductions arising from payments	(52.25)	(1.35)	(23.99)
Changes arising from remeasurement	(11.33)	0.33	-
Others [refer note 24.4]	-	-	-
Balance at 31.03.2023	**39.82**	**12.95**	**23.01**

Notes to the consolidated financial statements

Amount in ₹ Crore

(3) Movement of other Provisions			
	Asset restoration obligation	Legal and Constructive Obligation	Peripheral Development Expenses
Balance at 31.03.2021	**37.42**	**41.72**	**30.47**
Additional provisions recognised	0.11	12.53	-
Reductions arising from payments	-	(4.95)	(0.17)
Unwinding of discount	3.06	0.15	-
Balance at 31.03.2022	**40.59**	**49.45**	**30.30**
Additional provisions recognised	0.30	2.97	-
Reductions arising from payments	0.43	(0.69)	(0.25)
Unwinding of discount	2.90	0.28	-
Others	-	-	-
Balance at 31.03.2023	**44.22**	**52.01**	**30.05**

Note: 24.1 Obligation towards retirement and other long term employee benefits are recognsied on the valuation carried out by the independent actuary considering applicable laws in force and Company's rule.

24.2 Provision for asset restoration obligation and constructive obligation is made based on Management estimation in line with Ind AS 16: Property, Plant and Equipment and Ind AS 37: Provisions, Contingent Liabilities and Contingent Assets.

24.3 Provision for peripheral development expenditure is the unspent development obligation of the Company prior to introduction of the Companies Act, 2013.

25. Other liabilities

Amount in ₹ Crore

A. Non-current	As at 31.03.2023	As at 31.03.2022
(i) Deposits under NEFFARS	83.52	101.26
(ii) Others [Refer note 25.1]	230.50	230.50
Total other non-current liabilities	**314.02**	**331.76**
B. Current		
(i) Contract Liabilities (Revenue received in advance) [Refer Note 25.3 & 29.2]	101.54	125.57
(ii) Statutory and other dues		
(a) Electricity duty [Refer Note 25.4]	85.40	108.49
(b) Tax deducted and collected at source	32.46	36.05
(c) Contribution to NEPF trust and NPS	30.91	41.07
(d) Dues towards stamp duty	212.78	212.78
(e) Others (Service tax, excise duty, GST, royalty etc) [Refer Note 25.5]	185.17	356.01
(iii) Renewable energy purchase obligation	87.64	68.71
(iv) Deposits under NEFFARS	32.50	38.94
(v) Grants for property, plant and equipment	0.46	0.48
(vi) Other credit balances	0.46	0.45
Total other current liabilities	**769.32**	**988.55**

Note: 25.1 The Hon'ble CESTAT, Kolkata had issued refund order of ₹ 230.50 crore during FY 2020-21 in favour of the Company towards clean energy cess. In view of the various earlier judgements on identical matter where the benefit has not been allowed to the beneficiary, due to involvement of higher degree of uncertainty the Company has preferred to recognise the said amount as a liability till final outcome of the dispute. Moreover, the Department has challenged the order issued by CESTAT, Kolkata in the Hon'ble High Court of Orissa.

25.2 The Company obtains deposits (from the dependent of the employee pursuant to the NEFFAR Scheme who died or suffered disability) for which the Company is in the process of applying to the Ministry of Corporate Affairs, Govt. of India for availing exemption in respect of applicability of Section 73 to 76 of the Companies Act, 2013.

25.3 Reconciliation of Contract Liabilities (Revenue received in advance):

Sl. No	Particulars	2022-23	2021-22
1	**Balance at the beginning of the year**	**125.57**	**97.25**
2	Revenue reocognised during the year against opening contract liabilities	(107.33)	(95.19)
3	Advance reclassified to financial liability during the year against opening liabilities	(17.60)	(1.45)
4	Advance received against which revenue has not been recognised	100.90	124.96
5	**Balance at the end of the year**	**101.54**	**125.57**

25.4 Recently Energy Department, Govt. of Odisha have passed on a resolution (Resolution No-11797 , dtd-30.11.2022) for One Time Settlement (OTS) of arrear Electricity Duty (ED) and interest of consumers as on dt 31.03.2022, who generate energy for captive consumption and not depositing the ED due to court case / litigation etc.

The Company has opted for the OTS scheme and filed necessary papers after the Confederation of Captive Power Plants, Odisha (in which the Company is a member) withdrew the legal case in the Hon'ble High Court, Odisha. As per the condition laid out in the OTS scheme, 10% of the outstanding demand raised by the Authority amounting to ₹ 27.83 crore has been paid during the year from the escrow account created as per order of the Hon'ble High Court. The final settlement under the scheme is yet to be completed.

25.5 Consequent upon amendment of Mines and Minerals (Development and Regulation) Amendment Act, 2021 with effect from 28th March, 2021, as per Section 8A(8) which provides that the period of mining leases, other than the mining leases granted through auction, shall be extended on payment of such additional amount as specified in the Fifth Schedule. Based on demand raised by IBM through I3MS portal for royalty, the Company has paid DMF and NMET along with additional royalty for Both North & Central Block and South Block of Panchapatmali Bauxite Mines till November 2022.

Ministry of Mines, Govt. of India Vide Letter Dated 31.1.2023 has clarified that additional royalty payment in respect of government companies are applicable in case of extension of lease under 8A(8) of the Act or grant of fresh lease to Govt. Companies where area are reserved after 2015 as per Section 17A(2C) of Mines and Mineral (Development and Regulation) Act, 2015. Panchpatmali (South Block) and Panchpatmali (Central and North block) mining leases of the Company have been deemed to be granted for 50 years i.e. up to 19.07.2029 and 16.11.2032 respectively in accordance with the rule 3(1) of Mineral (Mining by Government Company Rule, 2015(now Rule 72(1) of M(OAHCEM)CR,2016. Thus these leases of the Company have not been extended under Section 8A(8) read with Rule 72(2)&(3) of M(OAHCEM)CR,2016.

Ministry of Mines, Govt. of India has also requested to Govt. of Odisha that no additional royalty may be charged from the Company till the completion of lease period of 50 years for both the Mines and the additional Royalty already paid by the Company so far in respect of these two mining leases may be adjusted in lieu of future Royalty payments.

In the absence of any communication from Govt. of Odisha on the subject of additional Royalty on Bauxite, the Company has continued the existing practice of recognition of liability towards additional Royalty from 01.12.2022 to 31.3.2023.

26. Deferred tax liabilities (net)

Amount in ₹ Crore

	As at 31.03.2023	As at 31.03.2022
Deferred tax liabilities	1,064.19	1,090.08
Deferred tax assets	106.42	221.90
	957.77	**868.18**

2021-22	**Opening balance as at 01.04.2021**	**Recognised in profit or loss**	**Recognised in other comprehensive income**	**Closing balance as at 31.03.2022**
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,140.45)	78.82	-	(1,061.63)
Provision for defined benefit obligation (OCI)	(5.15)	-	(23.30)	(28.45)
Deferred tax liabilities	**(1,145.60)**	**78.82**	**(23.30)**	**(1,090.08)**
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	108.32	(103.54)	-	4.78
Provision for defined benefit obligation	66.12	19.35	-	85.47
Provision for doubtful debts / advances	69.01	(0.32)	-	68.69
FVTPL financial assets	4.32	(0.27)	-	4.05
Temporary Difference due to application of section 43B	0.93	54.80	-	55.73
Others	3.18	-	-	3.18
Deferred tax assets	**251.88**	**(29.98)**	**-**	**221.90**
Deferred tax (liabilities) / assets - [net]	**(893.72)**	**48.84**	**(23.30)**	**(868.18)**

2022-23	**Opening balance as at 01.04.2022**	**Recognised in profit or loss**	**Recognised in other comprehensive income**	**Closing balance as at 31.03.2023**
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,061.63)	(0.61)	-	(1,062.24)
Provision for defined benefit obligation (OCI)	(28.45)	-	26.50	(1.95)
Deferred tax liabilities	**(1,090.08)**	**(0.61)**	**26.50**	**(1,064.19)**
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	4.78	(4.78)	-	0.00
Provision for defined benefit obligation	85.47	(64.32)	-	21.15
Provision for doubtful debts / advances	68.69	(0.60)	-	68.09
FVTPL financial assets	4.05	9.04	-	13.09
Temporary Difference due to application of section 43B	55.73	(54.82)	-	0.91
Others	3.18	-	-	3.18
Deferred tax assets	**221.90**	**(115.48)**	**-**	**106.42**
Deferred tax (liabilities) / assets [net]	**(868.18)**	**(116.09)**	**26.50**	**(957.77)**

Note: The applicable rate for the current year is 25.168% (previous year 25.168%).

Notes to the consolidated financial statements

27 - Contingent liabilities (to the extent not provided for)

Amount in ₹ Crore

		As at 31.03.2023	As at 31.03.2022
	Claims against the Company not acknowledged as debts		
a.	**Demand from statutory authority**		
	1. Odisha Sales tax	3.71	4.09
	2. Central Sales tax	277.52	280.55
	3. VAT	0.69	12.64
	4. Excise duty	410.44	410.44
	5. Custom duty	102.67	102.77
	6. Service tax	13.08	14.82
	7. Income tax	210.27	223.75
	8. Entry tax	217.28	222.21
	9. Road tax	2.65	2.65
	10. Stamp duty	0.51	0.51
	11. Claim From Govt. (NGT)	-	109.01
	12. Claim From PSUs	423.21	322.92
	13. Land acquisition and interest thereon	85.55	78.07
	14. Dept. of mines Govt. of Odisha	136.32	136.32
	15.Water Resources Deptt. Govt. of Odisha for Water Conservation fund	119.24	119.24
b.	**Claim by contractors/suppliers and others**	-	-
	1. Claims of Contractor's suppliers and others	359.15	338.41
Total		**2,362.31**	**2378.40**

Claims against the Company not acknowledged as debt includes:

i. Demand from various statutory authorities towards income tax, sales tax, excise duty, custom duty, service tax, entry tax and other government levies. The Company is contesting the demands before the respective appellate authorities. It is expected that the ultimate outcome of these proceedings will be in favour of the Company and will not have any material adverse effect on the Company's financial position and results of operation.

ii. Claims of contractors for supply of materials/services pending with arbitration/courts have arisen in the ordinary course of business. The Company reasonably expects that these legal actions will be concluded and determined in favour of the Company and will not have any material adverse effect on the Company's results of operation or financial position.

iii. Claim from PSUs includes the energy compensation charges and the delayed payment surcharge on the same, since 2005, demanded by Odisha Hydro Power Corporation Limited (OHPC) towards loss of power generation by the Corporation due to drawal of water from the reservoir at Upper Kolab, Koraput by NALCO Refinery at M&R Complex.

iv. The claims against the company are mostly due to demands raised by the IT department at assessment stage. These claims are on account of multiple issues of disallowances such as disallowance in respect of additional depreciation under section 32(i)(iia), disallowance of peripheral development expenses, provision for non-moving stores and spares, treatment of short term capital gain and not allowing loss under long term capital gain and treating the same as business income, disallowance u/s 14A etc. These matters are sub-judice and pending before various appellate authorities. The Company, including its tax advisors, expect that its position will likely be upheld on the ultimate resolution in view of the decisions already available in favour of the Company by higher appellate forums being CIT(A) / ITAT (Jurisdictional). Thus it will not have a material adverse effect on the Company's financial position and in the results of operations. Hence, there is no uncertainty in tax treatment which will affect the determination of taxable profit (loss), tax bases, unused tax losses, unused tax credits, and tax rates of the Company. The Company has reviewed the disputed income tax matters and the demands raised by the Department/ Authorities considering the probable outcome of the dispute and possibilities of outflow of resources and disclosed as on 31.03.2023 accordingly.

27.1 Movement of contingent liabilities

Amount in ₹ Crore

		As at 31.03.2022	Reduction during the year	Addition during the year	As at 31.03.2023
a.	**Demand by statutory authority**				
	1. Odisha Sales tax	4.09	(0.38)	-	3.71
	2. Central Sales tax	280.55	(3.49)	0.46	277.52
	3. VAT	12.64	(11.95)	-	0.69
	4. Excise duty	410.44	-	-	410.44
	5. Custom duty	102.77	(0.09)	-	102.67
	6. Service tax	14.82	(1.73)	-	13.08
	7. Income tax	223.75	(15.90)	2.42	210.27
	8. Entry tax	222.21	(4.94)	-	217.28
	9. Road tax	2.65	-	-	2.65
	10. Stamp duty	0.51	-	-	0.51
	11. Claim From Govt. (NGT)	109.01	(109.01)	-	-
	12. Claim From PSUs	322.92	-	100.30	423.21
	13. Land acquisition and interest thereon	78.07	-	7.48	85.55
	14. Demand from Dept. of mines Govt. of Odisha	136.32	-	-	136.32
	15. Demand from Water Resources Deptt. Govt. of Odisha for Water Conservation fund	119.24	-	-	119.24
b.	**Claim by contractors/suppliers and others**				
	1. Claims of Contractor's suppliers and others	338.41	(9.55)	30.30	359.15
	Total	**2,378.40**	**(157.04)**	**140.95**	**2,362.31**

Notes to the consolidated financial statements

28 - Commitments

Amount in ₹ Crore

		As at 31.03.2023	As at 31.03.2022
a)	Estimated amount of Contracts remaining to be executed on capital account and not provided for	3,690.17	3,404.69
b)	Other Commitments		
(1)	Amount payable to the Government of India but not yet due for payment for allocation of Utkal D & E coal block.	Nil	Nil
(2)	Export obligation for import of capital goods under Export Promotion Capital Goods Scheme.	244.51	463.94
(3)	Estimated amount of commitment to Govt. of Odisha for allotment of Pottangi Bauxite Mines	Nil	Nil
(4)	Estimated amount of commitment to Govt. of India (MoEFFC) for 5th Stream Refinery project.	Nil	Nil
(5)	Corporate environment responsibility (CER) for capital investments	Nil	6.00
	Total	**3,934.68**	**3,874.63**

29. Revenue from operations

Amount in ₹ Crore

		Year ended 31.03.2023	Year ended 31.03.2022
I.	**Revenue from Contract with customers**		
	(a) Sale of products		
	1) Export:		
	i) Chemical	3,642.61	3,664.61
	ii) Aluminium	574.15	2,699.54
	2) Domestic:		
	i) Chemical	265.46	278.47
	ii) Aluminium	9,626.61	7,370.62
	(b) Sale of power		
	i) Wind Power [Refer note no. 29.3]	62.03	45.74
	Total Revenue from Contract with customers	**14,170.86**	**14,058.98**
II.	**Other operating income**		
	(a) Export Incentives		
	i) Chemical	35.90	36.11
	ii) Aluminium	17.03	66.49
	(b) Incentives on Renewable Energy		
	i) Renewable Energy certificates	7.09	8.11
	ii) Generation based incentives	3.49	3.98
	(c) Own manufactured goods internally used /capitalised	10.51	7.14
	(d) Income from internally generated scrap	9.98	33.77
	Total Other operating income	**84.00**	**155.60**
	Revenue from operations	**14,254.86**	**14,214.58**

Note: 29.1 Majority of sales are against advances or against letter of credit. Where sales are made on credit, the amount of consideration does not contains any significant financing component as the payment term is within a year.

29.2 As per the terms of the contract with its customers, either all performance obligations are to be completed within one year from the date of such contracts or the Company has a right to receive consideration from its customers for all completed performance obligations. Accordingly, the Company has availed the practical expedient available under paragraph 121 of Ind AS 115 and dispensed with the additional disclosures with respect to performance obligations that remained unsatisfied (or partially unsatisfied) at the balance sheet date. Further, the terms of the contracts directly identify the single transaction price for each of the completed performance obligations there are no elements of transaction price which have not been included in the revenue recognised in the financial statements.

29.3 The Company has not recognised the revenue from its two wind power plants located in the State of Rajasthan due to non availability of Power Purchase Agreement (PPA) since 2018-19.

Notes to the consolidated financial statements

30. Other income

Amount in ₹ Crore

		Year ended 31.03.2023	Year ended 31.03.2022
(a)	Interest income		
	(i) Interest income earned from financial assets that are not designated as at fair value through profit or loss:		
	- Bank deposits	143.25	103.18
	- Loans to employees	10.17	9.25
	- Other financial assets carried at amortised cost	20.04	13.42
	(ii) Interest income earned from Income tax refund	13.72	84.51
(b)	Dividend income		
	- Dividends from current investments	17.23	13.91
(c)	Net foreign exchange gain/(loss)	(8.90)	(1.59)
(d)	Net gain/(loss) on financial assets designated as at FVTPL	0.57	(0.36)
(e)	Write back of liabilities no longer required [refer note: 30.1]	8.00	23.00
(f)	Net gain/(loss) on sale of Property, Plant & Equipments	2.56	0.44
(g)	Others	28.99	18.33
	Total other income	**235.63**	**264.09**

Note: 30.1 Unclaimed liability lying in books for a period of more than 3 years as on the reporting date are written back and recognized as income.

31. Cost of materials consumed

Amount in ₹ Crore

A.	**Raw material**	**Year ended 31.03.2023**	**Year ended 31.03.2022**
	(1) Caustic soda	1,463.37	873.17
	(2) C.P. coke	1,167.81	693.19
	(3) C.T. pitch	302.72	225.98
	(4) Aluminium fluoride	107.69	87.18
	(5) Lime	74.17	52.24
	(6) Others	56.36	39.37
Total raw materials consumed		**3,172.12**	**1,971.13**
B.	**Power and Fuel**		
	(1) Coal	2,521.56	1,502.24
	(2) Fuel oil	1,054.24	864.58
	(3) Duty on own generation	376.92	375.05
	(4) Purchase of power	737.92	637.96
	(5) Power transmission charges	3.05	8.65
Total Power and Fuel consumed		**4,693.69**	**3,388.48**

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32. Changes in inventories of finished goods, intermediaries and work-in-process

Amount in ₹ Crore

	Year ended 31.03.2023	Year ended 31.03.2022
Finished goods		
Opening stock		
(1) Bauxite	18.54	4.34
(2) Chemical	253.91	232.28
(3) Aluminium	270.02	227.81
Total opening stock of finished goods	**542.47**	**464.43**
Less:		
Closing stock		
(1) Bauxite	26.99	18.54
(2) Chemical	198.82	253.91
(3) Aluminium	236.55	270.02
Total Closing stock of finished goods	**462.36**	**542.47**
(Accretion)/Depletion in finished goods	**80.11**	**(78.04)**
Intermediaries		
Opening stock		
Anodes	113.19	100.83
Others	23.48	17.74
Total opening stock of intermediaries	**136.67**	**118.57**
Less: Closing stock		
Anodes	143.00	113.19
Others	17.35	23.48
Total closing stock of intermediaries	**160.35**	**136.67**
(Accretion)/depletion in intermediaries	**(23.68)**	**(18.10)**
Work in process		
Opening stock	319.04	298.35
Less: Closing stock	392.13	319.04
(Accretion)/depletion in work in process	**(73.09)**	**(20.69)**
Total (Accretion)/Depletion in inventory	**(16.66)**	**(116.83)**

33. Employee benefits expense

Amount in ₹ Crore

		Year ended 31.03.2023	Year ended 31.03.2022
(a)	Salaries and wages, including bonus	1,419.98	1,968.69
(b)	Contribution to provident and other funds		
	1) Provident fund	114.77	115.87
	2) Gratuity	35.72	30.01
	3) Post employment pension scheme	103.61	104.00
(c)	Staff welfare expenses	167.91	167.50
Total employee benefit expense		**1,841.99**	**2,386.07**
Less: Transferred to Expenditure during construction (EDC)		9.93	30.27
Net employee benefit expense		**1,832.06**	**2,355.80**

Notes:

33.A. Employee benefit Plans

33.A.1 Defined contribution plans

a) **Pension fund:** The Company pays fixed contribution to the trustee bank of Pension Fund Regulatory and Development Authority (PFRDA), which in turn invests the money with the insurers as specified by the employee concerned. The company's liability is limited only to the extent of fixed contribution.

33.A.2 Defined benefit plans

a) **Provident fund:** The provident fund of the company is managed by an exempted trust under section 17 of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952. Both the employees and the Company make monthly contributions to the provident fund at a specified

percentage of employees salary. The Company contributes major part of the fund to the Trust, which invests the funds in permitted securities as per the statute. The remaining part is contributed to the Government administered Pension Fund.

The Company has an obligation to pay minimum rate of return to the members as specified by Government of India. As per the condition of exemption, the Company shall make good for the deficiency, if any, between the return from the investments of the Trust and the notified interest rate by the Government. The contributions made by the Company and the shortfall of interest, if any, are recognised as an expense in profit and loss under employee benefits expense.

Accordingly the company has obtained actuarial valuation in accordance with Ind AS 19 and there is no shortfall in the funds managed by the trust as at 31 March 2023 and 31 March 2022. The present value of obligation, the fair value of the plan assets and other key assumptions are summarized below.

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Fair value of plan asset	4,009.91	4,079.57
Present value of defined benefit obligations	3,835.87	3,920.73
Net liability arising from defined benefit obligation of trust	-	-
Discount Rate	7.17%	7.00%
Guaranteed Rate of Return	8.15%	8.10%
Interest Rate declared by Trust	8.15%	8.10%

b) **Gratuity:** Gratuity payable to employees as per The Payment of Gratuity Act subject to a maximum of ₹ 20,00,000/. The gratuity scheme is funded by the Company and is managed by a separate trust. The liability for gratuity under the scheme is recognised on the basis of actuarial valuation.

c) **Post retirement medical benefit:** The benefit is available to retired employees and their spouses who have opted for the benefit. Medical treatment as an in-patient can be availed from the Company's hospital/Govt. Hospital/ hospitals as per company's rule. They can also avail treatment as out patient subject to maximum ceiling of expenses fixed by the Company. The liability under the scheme is recognised on the basis of actuarial valuation. The scheme is funded by the Company and is managed by a separate trust.

d) **Settling-in-benefit:** On superannuation/retirement/termination of service, if opted for the scheme, the transfer TA is admissible to the employees and / or family from the last head quarters to the hometown or any other place of settlement limited to distance of home town. Transport of personal conveyance shall also be admissible. The liability for the same is recognised on the basis of actuarial valuation.

e) **NALCO Benevolent Fund Scheme :** The objective of the scheme is to provide financial assistance to families of the members of the scheme who die while in employment of the Company. As per the scheme there will be contribution by members @ ₹ 30/- per member per death, in the event of death of a member while in the service of the company and matching contribution is made by the Company. The liability for the same is recognised on the basis of actuarial valuation.

f) **NALCO Retirement Welfare Scheme :** The objective of the scheme is to provide financial assistance as a gesture of goodwill as post retirement support to employees retiring from the services of the company. As per the scheme the recovery from each employee member would be ₹ 10/- per retiring member. The Company would provide equivalent sum as matching contribution. The liability for the same is recognised on the basis of actuarial valuation.

g) **Superannuation gift scheme:** The objective of the scheme is to recognise the employees superannuating or retiring on medical ground from the services of the Company. The scheme includes a gift item worth of ₹ 25000/- per retiring employees to be presented on superannuation/ retirement. The liability for the same is recognised on the basis of actuarial valuation.

33.A.3 Other long term employees benefits

a) **Compensated absences :**The accumulated earned leave, half pay leave & sick leave is payable on separation, subject to maximum permissible limit as prescribed in the leave rules of the Company. During the service period encashment of accumulated leave is also allowed as per the Company's rule. The liability for the same is recognised on the basis of actuarial valuation. The obligation is funded by the Company and is managed by a separate trust.

b) **Long Service Reward :** The employee who completes 25 years of service are entitled for a long service reward which is equal to one month basic pay and DA. The liability for the same is recognised on the basis of actuarial valuation.

c) **NEFFARS :** In the event of disablement/death, on deposit of prescribed amount as stipulated under the scheme, the Company pays monthly benefit to the employee/ nominee at their option upto the date of notional superannuation. The liability for the same is recognised on the basis of actuarial valuation.

The employee benefit plans typically expose the Company to actuarial risks such as actuarial risk, investment risk, interest risk, longetivity risk and salary risk:-

i. **Actuarial risk:** It is the risk that employee benefits will cost to the Company more than expected. This can arise due to one of the following reasons:
   a. **Adverse Salary Growth Experience:** Salary hikes that are higher than the assumed salary escalation will result into an increase in obligation at a rate that is higher than expected.
   b. **Variability in mortality rates:** If actual mortality rates are higher than assumed mortality rate assumption then the gratuity benefits will be paid earlier than expected. Since there is no condition of vesting on the death benefit, the acceleration of cash flow will lead to an actuarial loss or gain depending on the relative values of the assumed salary growth and discount rate.
   c. **Variability in withdrawal rates:** If actual withdrawal rates are higher than assumed withdrawal rate assumption then the gratuity benefits will be paid earlier than expected. The impact of this will depend on whether the benefits are vested as at the resignation date.

ii. **Investment risk:** For funded plans that rely on insurers for managing the assets, the value of assets certified by the insurer may not be the fair value of instruments backing the liability. In such cases, the present value of the assets is independent of the future discount rate. This can result in wide fluctuations in the net liability or the funded status if there are significant changes in the discount rate during the inter-valuation period.

iii. **Interest risk:** The defined benefit obligation calculated uses a discount rate based on government bonds. If bond yields fall, the defined benefit obligation will tend to increase.

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iv. **Longevity risk:** The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

v. **Salary risk:** The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants beyond assumed plan will increase the plan's liability.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	Valuation as at	
	31.03.2023	**31.03.2022**
Discount rate(s)	7.17%	7.00%
Expected rate(s) of salary increase	6.65%	6.65%
Mortality	IALM 2012-2014 ULTIMATE	IALM 2012-2014 ULTIMATE
Attrition Rate	1%	1%

Amounts recognised in statement of profit and loss in respect of these defined benefits plans are as follows:-

Amount in ₹ Crore

Service Cost:	**Year ended 31.03.2023**	**Year ended 31.03.2022**
-Current Service cost	(43.29)	(35.10)
-Past Service Cost and (gain)/loss from settlements	42.22	17.36
-Net Interest expense	(9.10)	(10.91)
Components of defined benefit costs recognised in statement of profit & loss	**(10.17)**	**(28.65)**
Remeasurement of the net defined benefit liability:		
Return on the net defined benefit liability	(1.35)	4.68
Actuarial (Gains)/losses arising from changes in financial assumptions	8.71	24.61
Actuarial (Gains)/losses arising from experience assumptions	23.79	17.96
Others		
Adjustments for restrictions on the defined benefit asset		
Components of defined benefit costs recognised in other comprehensive income	**31.15**	**47.25**
Total	**20.98**	**18.60**

The amount included in the balance sheet arising from the entity's obligation in respect of its defined benefit plans is as follows:

Amount in ₹ Crore

	Post retirement medical benefit (PRMBS-funded)	**Settling-in-benefit**	**NALCO benevolent fund scheme**	**NALCO retirement welfare scheme**	**Superannuation gift scheme**	**Gratuity (Funded)**
March 31, 2022						
Present value of defined benefit obligation	(162.31)	(17.51)	(2.63)	(11.78)	(6.53)	(532.70)
Fair value of plan assets	-					554.86
Net liability arising from defined benefit obligation	**(162.31)**	**(17.51)**	**(2.63)**	**(11.78)**	**(6.53)**	**22.16**
March 31, 2023						
Present value of defined benefit obligation	(171.28)	(15.88)	(2.51)	(10.98)	(5.85)	(483.42)
Fair value of plan assets	160.85					510.14
Net liability arising from defined benefit obligation	**(10.43)**	**(15.88)**	**(2.51)**	**(10.98)**	**(5.85)**	**26.72**
Movements in the present value of the defined benefit obligations are as follows:						
	Post retirement medical benefit (PRMBS)	**Settling-in-benefit**	**NALCO benevolent fund scheme**	**NALCO retirement welfare scheme**	**Superannuation gift scheme**	**Gratuity (Funded) Opening**
Opening defined benefit obligations as at April 01, 2021	**(155.35)**	**(19.58)**	**(2.73)**	**(12.38)**	**(7.16)**	**(595.80)**
Current service cost	-	(2.94)	-	-	-	(32.16)
Interest Cost	(10.46)	(1.17)	(0.16)	(0.79)	(0.47)	(38.82)
Remeasurement (gains)/losses						
Actuarial (Gains)/losses arising from changes in financial assumptions	1.33	0.39	0.05	0.25	0.20	22.39
Actuarial (Gains)/losses arising from experience assumptions	(9.58)	0.04	(0.62)	(1.01)	-	29.13
Benefits paid	11.75	5.75	0.83	2.15	0.90	82.56
Closing defined benefit obligation as at March 31, 2022	**(162.31)**	**(17.51)**	**(2.63)**	**(11.78)**	**(6.53)**	**(532.70)**

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Amount in ₹ Crore

	Post retirement medical benefit (PRMBS)	Settling-in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Superannuation gift scheme	Gratuity (Funded)
Current service cost	-	(3.00)	-	-		(40.29
Interest Cost	(11.19)	(1.10)	(0.18)	(0.77)	(0.43)	(35.21
Remeasurement (gains)/losses						
Actuarial (Gains)/losses arising from changes in financial assumptions	2.93	0.15	0.02	0.11	0.07	5.43
Actuarial (Gains)/losses arising from experience assumptions	(13.19)	1.24	0.03	(0.59)	0.10	36.20
Benefits paid	12.48	4.34	0.25	2.05	0.94	83.15
Closing defined benefit obligation as at March 31, 2023	**(171.28)**	**(15.88)**	**(2.51)**	**(10.98)**	**(5.85)**	**(483.42)**

Amount in ₹ Crore

Movements in the fair value of the plan assets are as follows:	**PRMBS (Funded)**	**Gratuity (Funded)**
Opening fair value of plan assets as at April 01, 2021	-	**585.17**
Interest income	-	40.96
Remeasurement gains/(losses)	-	
Return on plan assets (excluding amounts included in net interest income)	-	4.68
Others	-	-
Contribution from the employer	-	6.61
Benefits paid	-	(82.56)
Closing fair value of plan assets as at March 31, 2022	-	**554.86**
Interest income	3.78	39.78
Remeasurement gains/(losses)		
Return on plan assets (excluding amounts included in net interest income)		(1.35)
Contribution from the employer	169.55	-
Benefits paid	(12.48)	(83.15)
Others	-	-
Closing fair value of plan assets as at March 31, 2023	**160.85**	**510.14**

The fair value of the plan assets at the end of the reporting period for each category, are as follows:

	Fair value of plan assets as at			
	PRMBS		**Gratuity**	
	31.03.2023	**31.03.2022**	**31.03.2023**	**31.03.2022**
Investments in Funds:				
1. Insurance Companies	160.85	-	510.14	554.86
Total	**160.85**	-	**510.14**	**554.86**

33.C - Sensitivity analysis of defined benefit plans

Significant actuarial assumption for determination of defined benefit plan are discount rate, expected salary growth, attrition rate and moratlity rate. The sensitivity analysis below have been based on reasonably possible changes of the respective assumptions occuring at the end of the reporting period while holding all other assumptions constant.

Sensitivity Analysis						Amount in ₹ Crore
Particulars	Post retirement medical benefit (PRMBS-funded)		Settling-in-benefit		NALCO benevolent fund scheme	
2021-22	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	4.69	4.79	0.51	0.52	0.07	0.07
% Change compared to base due to sensitivity [+/(-)%]	2.89%	2.95%	2.89%	2.95%	2.71%	2.76%
Impact on amount due to change in Salary growth (+/-0.5%)	0.19	0.19	0.02	0.02	0.06	0.06
% Change compared to base due to sensitivity [+/(-)%]	0.12%	0.12%	0.12%	0.12%	2.42%	2.37%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.19	0.19	0.02	0.02	-	-
% Change compared to base due to sensitivity [+/(-)%]	0.12%	0.12%	0.12%	0.12%	0.15%	0.15%
Impact on amount due to change in Moratlity rate (-/+10%)	0.75	0.75	0.08	0.08	0.01	0.01
% Change compared to base due to sensitivity [+/(-)%]	0.46%	0.46%	0.46%	0.46%	0.26%	0.26%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
2021-22	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	0.32	0.33	0.18	0.18	17.57	16.45
% Change compared to base due to sensitivity [+/(-)%]	2.71%	2.76%	2.71%	2.76%	3.30%	3.09%
Impact on amount due to change in Salary growth (+/-0.5%)	0.29	0.28	0.16	0.15	3.90	16.45
% Change compared to base due to sensitivity [+/(-)%]	2.42%	2.37%	2.42%	2.37%	0.73%	3.09%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.02	0.02	0.01	0.01	0.11	16.45
% Change compared to base due to sensitivity [+/(-)%]	0.15%	0.15%	0.15%	0.15%	0.02%	3.09%
Impact on amount due to change in Moratlity rate (-/+10%)	0.03	0.03	0.02	0.02	0.50	0.50
% Change compared to base due to sensitivity [+/(-)%]	0.26%	0.26%	0.26%	0.26%	0.09%	0.09%

Particulars	Post retirement medical benefit (PRMBS-funded)		Settling-in-benefit fund scheme		NALCO benevolent fund scheme	
2022-23	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	4.95	5.05	0.47	0.46	0.07	0.07
% Change compared to base due to sensitivity [+/(-)%]	2.89%	2.95%	2.95%	2.89%	2.71%	2.76%
Impact on amount due to change in Salary growth (+/-0.5%)	-	-	0.38	0.38	0.06	0.06
% Change compared to base due to sensitivity [+/(-)%]	-	-	0.02	0.02	2.42%	2.37%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.21	0.21	0.02	0.02	-	-
% Change compared to base due to sensitivity [+/(-)%]	0.12%	0.12%	0.12%	0.12%	0.15%	0.15%
Impact on amount due to change in Moratlity rate (-/+10%)	0.79	0.79	0.07	0.07	0.01	0.01
% Change compared to base due to sensitivity [+/(-)%]	0.46%	0.46%	0.46%	0.46%	0.26%	0.26%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
2022-23	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	0.30	0.30	0.16	0.16	16.34	15.30
% Change compared to base due to sensitivity [+/(-)%]	2.71%	2.76%	2.71%	2.76%	3.38%	3.16%
Impact on amount due to change in Salary growth (+/-0.5%)	0.27	0.26	0.14	0.14	3.28	2.91
% Change compared to base due to sensitivity [+/(-)%]	2.42%	2.37%	2.42%	2.37%	0.68%	0.60%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.02	0.02	0.01	0.01	0.13	0.13
% Change compared to base due to sensitivity [+/(-)%]	0.15%	0.15%	0.15%	0.15%	0.03%	0.03%
Impact on amount due to change in Moratlity rate (-/+10%)	0.03	0.03	0.02	0.02	0.51	0.52
% Change compared to base due to sensitivity [+/(-)%]	0.26%	0.26%	0.26%	0.26%	0.11%	0.11%

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

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Furthermore, in presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using projected unit credit method at the end of the reporting period, which is same as that applied in calculating the defined benefit obligation liability recognised in the balance sheet.

There is no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

34 - Finance costs		Amount in ₹ Crore
	Year ended 31.03.2023	Year ended 31.03.2022
Finance cost		
a. Interest expenses on lease liabilities	4.08	4.13
b. Interest on shortfall in payment of advance income tax	(5.05)	7.62
c. Others	13.89	11.38
Total finance cost	**12.92**	**23.13**

Note: 34.1. Other finance cost includes unwinding interest cost against dismantling liabilities and provision for interest on risk & hardship allowance of CISF deputed at M&R complex, Damanjodi.

35. Other expenses		Amount in ₹ Crore	
		Year ended 31.03.2023	Year ended 31.03.2022
(a)	Stores and spares consumed	443.69	381.26
(b)	Repair and maintenance to		
	(1) Buildings	68.36	55.43
	(2) Machinery	209.60	170.73
	(3) Others	26.20	25.50
(c)	Other Manufacturing Expenses		
	(1) Water charges	34.55	34.57
	(2) Royalty	414.30	435.51
	(3) Contribution to District Mineral Fund and National Mineral Exploration Trust	66.29	69.68
	(4) Others	126.26	105.60
(d)	Freight and handling charges		
	(1) Incoming materials (Alumina)	123.84	118.96
	(2) Outgoing materials	130.71	172.41
(e)	Auditors remuneration and out-of-pocket expenses		
	(i) As Auditors	0.45	0.45
	(ii) For Taxation matters	0.09	0.08
	(iii) For Other services	0.39	0.36
	(iv) For reimbursement of expenses	0.01	-
(f)	Payment to Cost Auditors	0.05	0.03
(g)	Security and fire fighting expenses	164.31	150.96
(h)	Corporate social responsibility expenses [refer note 35.1]	39.54	36.91
(i)	Administrative and general expenses	118.74	101.88
(j)	Renewable purchase obligation	26.03	51.84
(k)	Selling and distribution expenses	24.36	33.43
(l)	Write off of Inventories, Claims etc.	3.26	1.68
(m)	Write off of Property Plant & Equipments	11.55	8.27
(n)	Bad and doubtful Provisions/ (write back)	36.45	46.03
(o)	Others	56.54	63.93
	(1) Rent	0.80	0.79
	(2) Rates and Taxes	3.72	4.01
	(3) Insurance charges	16.94	17.80
	(4) Other miscellaneous expenses	35.08	41.33
	Total other expenses	**2,125.57**	**2,065.50**

Notes to the consolidated financial statements

Note:

35.1 Expenditure on Corporate Social Responsibility.

a) Gross amount required to be spent by the Company during the year ended March 31, 2023 is ₹ 36.64 crore (March 31, 2022 is ₹ 28.60 crore)

b) Amount spent during the year ended March 31, 2023

i) Construction/acquisition of assets	₹ Nil crore (previous year ₹ Nil)
ii) On purpose other than (i) above	₹ 39.54 crore (previous year ₹ 36.91 crore)
Total	**₹ 39.54 crore (previous year ₹ 36.91 crore)**

36. Income taxes

36.1 Income tax recognised in profit or loss

Amount in ₹ Crore

	Year ended 31.03.2023	Year ended 31.03.2022
Current tax		
In respect of current year	475.47	1,061.63
In respect of prior years	(181.06)	(9.88)
	294.41	**1,051.75**
Deferred tax		
In respect of current year	116.09	(48.85)
	116.09	**(48.85)**
Total income tax expense recognised in current year	**410.50**	**1,002.90**

The income tax expense for the year can be reconciled to the accounting profit as follows:

Profit before tax	**1,845.16**	**3,954.31**
Less: Profit or (loss) of Joint Ventures	(109.83)	(0.56)
Net Profit before tax	**1,954.99**	**3,954.87**
Income tax expense thereon @ 25.168%	492.03	995.36
Tax effect of -		
i) disallowable expenses (permanent difference)	20.37	21.26
ii) expenses allowable in excess of expenditure incurred	(63.48)	(16.15)
iii) adjustment relating to earlier years	(181.06)	(9.88)
iv) others	142.64	12.31
Income tax expense recognised in profit or loss	**410.50**	**1,002.90**

36.2 Income tax recognised in other comprehensive income

Amount in ₹ Crore

	Year ended 31.03.2023	Year ended 31.03.2022
Tax on remeasurement gain or loss of defined benefit obligations		
- Current Tax	-	-
- Deferred Tax	26.50	(23.30)
Total income tax recognised in other comprehensive income	**26.50**	**(23.30)**
Bifurcation of the income tax recognised in other comprehensive income into:		
Items that will be reclassified to profit or loss	-	-
Items that will not be reclassified to profit or loss	**26.50**	**(23.30)**

Note:

In pursuance to Section 115BAA of the Income Tax Act, 1961 notified by the Government of India through Taxation Laws (Amendment) Ordinance, 2019, the Company had an irrevocable option of shifting to a lower tax rate foregoing other tax incentives and non applicability of Minimum alternate Tax. The Company exercised the said option for lower rates of taxes and the taxes have been recognised accordingly. The applicable rate for the current year is 25.168% (previous year 25.168%).

Notes to the consolidated financial statements

37 - Segment information

37.1 Products from which reportable segments derive their revenues

Information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of segment performance focuses on the types of goods delivered. The directors of the company have chosen to organise the Company around differences in products. No reporting segment have been aggregated in arriving at the reportable segments in the Company. Specifically, the Company's reportable segment under Ind AS 108- Operating Segments are as follows:

i) Chemical segment

ii) Aluminium segment

The Company has considered Chemicals and Aluminium as the two primary operating business segments. Chemicals include Calcined Alumina, Alumina Hydrate and other related products. Aluminium includes Aluminium ingots, wire rods, billets, strips, rolled and other related products. Bauxite produced for captive consumption for production of alumina is included under chemicals and power generated for captive consumption for production of Aluminium is included under Aluminium segment. Wind Power Plant commissioned primarily to harness the potential renewable energy sources is included in the unallocated Common segment.

37.2 Segment revenues and results

The following is an analysis of the Company's revenue and results from operations by reportable segment:

Amount in ₹ Crore

	Segment revenue	
Operating Segments	**Year ended 31.03.2023**	**Year ended 31.03.2022**
Chemical segment	**5,583.72**	**5,384.87**
Aluminium segment	**10,245.79**	**10,183.69**
Unallocated	72.61	57.83
Total for operations	**15,902.12**	**15,626.39**
Less: Intersegment revenue	1,647.26	1,411.81
Revenue from operations	**14,254.86**	**14,214.58**

	Segment results	
Operating Segments	**Year ended 31.03.2023**	**Year ended 31.03.2022**
Chemical segment	383.59	1,127.41
Aluminium segment	1,778.73	3,257.20
Segment result before exceptional items, interest and tax	**2,162.32**	**4,384.61**
Interest & financing charges	12.92	23.13
Interest and dividend income	204.98	223.91
Other unallocated income net of unallocated expenses	(399.39)	(630.52)
Share of Profit/(loss) of Joint Venture	(109.83)	(0.56)
Profit before tax	**1,845.16**	**3,954.31**

37.3 Segment assets and Liabilities

Amount in ₹ Crore

	Segment Assets		Segment Liabilities	
	As at 31.03.2023	As at 31.03.2022	As at 31.03.2023	As at 31.03.2022
Chemical segment	4,675.42	4,353.60	1,355.43	1,529.51
Aluminium segment	5,820.19	5,667.36	1,595.94	1,679.11
Total segment assets and liabilities	**10,495.61**	**10,020.96**	**2,951.37**	**3,208.62**
Unallocated	7,131.00	7,465.62	1,548.87	1,725.57
Total assets and Liabilities	**17,626.61**	**17,486.58**	**4,500.24**	**4,934.19**

37.4 Other segment information

Amount in ₹ Crore

	Depreciation and amortisation		Additions to non-current assets	
	Year ended 31.03.2023	Year ended 31.03.2022	Year ended 31.03.2023	Year ended 31.03.2022
Chemical segment	228.32	229.08	121.85	51.62
Aluminium segment	312.48	296.95	24.75	26.12
Unallocated	175.00	310.55	1,177.25	310.80
Total for operations	**715.80**	**836.59**	**1,323.85**	**388.54**

	Material non-cash expenditure	
	Year ended 31.03.2023	Year ended 31.03.2022
Chemical segment	(78.26)	(244.48)
Aluminium segment	(71.64)	(182.75)
Unallocated	38.29	36.97
	(111.61)	**(390.26)**

37.5 Revenue from major products

The following is an analysis of the Company's revenue from continuing operations from its major products and services:

Amount in ₹ Crore

	Year ended 31.03.2023	Year ended 31.03.2022
Chemical segment (Hydrate and Alumina)	3,908.07	3,943.08
Aluminium segment (Aluminium)	10,200.76	10,070.16
	14,108.83	**14,013.24**

37.6 Revenue from major Customer

No single customer has accounted for more than 10% of the Company's revenue for the year ended 31 March 2023. Revenue from one customer amounted to ` 2,043.35 crore for the year ended 31 March 2022 arising from sales made in the Chemical segment. No other customer contributed to more than 10% of revenues.

37.7 Geographical information

The Company operates mainly in principal geographical areas-India (country of domicile) and Outside India.

Amount in ₹ Crore

	Revenue from external customers		Non-current assets	
	Year ended 31.03.2023	Year ended 31.03.2022	As at 31.03.2023	As at 31.03.2022
India	9,892.07	7,649.09	12,329.80	11,005.95
Outside India	4,216.76	6,364.15	-	-
Total	**14,108.83**	**14,013.24**	**12,329.80**	**11,005.95**

38. Earnings per share

	Year ended 31.03.2023	Year ended 31.03.2022
	₹ per share	₹ per share
38.1 Basic Earnings per share (₹)		
From total operations	7.81	16.07
Total Basic earnings per share	**7.81**	**16.07**

38.2 Basic Earnings per Share

The Earnings and weighted average number of equity shares used in the calculation of basic earnings per share are as follows:

Amount in ₹ Crore

	Year ended 31.03.2023	Year ended 31.03.2022
Profit for the year attributable to Owners of the Company	1,434.66	2,951.41
Earnings used in the calculation of basic earnings per share	**1,434.66**	**2,951.41**
	As at 31.03.2023	As at 31.03.2022
Weighted average number of equity shares used in calculation of basic earnings per share	**1,83,66,31,787**	**1,83,66,31,787**

39. Financial Instruments

39.1 Categories of financial instruments

Amount in ₹ Crore

			As at 31.03.2023	As at 31.03.2022
Financial Assets				
Measured at fair value through profit or loss (FVTPL)				
(a)	Mandatorily measured:			
	(i)	Investments in mutual funds	145.58	64.01
	(ii)	Forward contract on foreign currency	Nil	Nil
Measured at Amortised cost				
(a)	Cash and bank balances		63.29	412.80
(b)	Other financial assets at amortised cost		2,541.21	3,852.32
			2,750.08	**4,329.13**
Financial Liabilities				
Measured at Amortised cost			**2,179.34**	**2,146.73**

39.2 Financial risk management objectives

In the course of its business, the Company is exposed primarily to fluctuations in foreign currency exchange rates, interest rates, equity prices, liquidity and credit risk, which may adversely impact the fair value of its financial instruments. The Company has a risk management policy which not only covers the foreign exchange risks but also other risks associated with the financial assets and liabilities such as interest rate risks and credit risks.

The objectives of the Company's risk management policy are, inter-alia, to ensure the following:

i) Sustainable business growth with financial stability;

ii) Provide a strategic framework for Company's risk management process in alignment with the strategic objectives including the risk management organisation structure;

iii) That all the material risk exposures of Company, both on and off-balance sheet are identified, assessed, quantified, appropriately mitigated and managed and

iv) Company's compliance with appropriate regulations, wherever applicable, through the voluntary adoption of international best practices, as far as may be appropriate to the nature, size and complexity of the operations.

The risk management policy is approved by the board of directors. The Internal Control Team would be responsible to evaluate the efficacy and implementation of the risk management system. It would present its findings to the Audit Committee every quarter. The Board is responsible for the Company's overall process of risk management. The Board shall, therefore, approve the compliance and risk management policy and any amendments thereto, and ensure its smooth implementation.

39.3 Market risk

Market risk is the risk of any loss in future earnings (spreads), in realizable fair values (economic value) or in future cash flows that may result from a change in the price of a financial instrument. The value of a financial instrument may change as a result of changes in the interest rates, foreign currency exchange rates, liquidity and other market changes. The Company may also be subjected to liquidity risk arising out of mismatches in the cash flows arising out of sales proceeds and funds raised and loan repayments/prepayments. Future specific market movements cannot be normally predicted with reasonable accuracy.

39.4 Foreign currency risk management

Foreign currency risk emanates from the effect of exchange rate fluctuations on foreign currency transactions. The overall objective of the currency risk management is to protect the Company's income arising from changes in foreign exchange rates. The policy of the Company is to avoid any form of currency speculation. Hedging of currency exposures shall be effected either naturally through offsetting or matching assets and liabilities of similar currency, or in the absence of thereof, through the use of approved derivative instruments transacted with reputable institutions. The Currency risk is measured in terms of the open positions in respective currencies vis-à-vis the Company's operating currency viz. INR. A currency gap statement shall be prepared to find the gap due to currency mismatch.

The fluctuation in foreign currency exchange rates may have impact on the income statement and equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

The Company undertakes transactions denominated in foreign currency; consequently, exposures to exchange rate fluctuations arise. Exchange rate are managed within approved policy parameters utilising forward foreign exchange contracts.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:-

Amount in ₹ Crore

	Liabilities as at		Assets as at	
	31.03.2023	**31.03.2022**	**31.03.2023**	**31.03.2022**
USD	79.13	27.60	13.03	144.72
EURO	30.06	21.36	-	-
Others	0.13	-	-	-

39.4.1 Foreign currency sensitivity analysis

The Company evaluates the impact of foreign exchange rate fluctuations by assessing its exposure to exchange rate risks. It hedges a part of these risks by using derivative financial instruments in accordance with its risk management policies

The foreign exchange rate sensitivity is calculated for each currency by aggregation of the net foreign exchange rate exposure of a currency and a simultaneous parallel foreign exchange rates shift in the foreign exchange rates of each currency by 10%.

The following analysis is based on the gross exposure as of the relevant balance sheet dates, which could affect the income statement. There is no exposure to the income statement on account of translation of financial statements of consolidated foreign entities.

The following table sets forth information relating to foreign currency exposure as at March 31, 2023 and March 31, 2022:

Amount in ₹ Crore

	USD impact		EURO impact	
	Year ended 31.03.2023	Year ended 31.03.2022	Year ended 31.03.2023	Year ended 31.03.2022
Impact on profit or loss for the year	(6.6)	11.7	3.01	2.14

39.5 Other price risks

39.5.1 Equity price sensitivity analysis

The Company is not exposed to equity price risk arising from equity instruments as all the equity investments are held for strategic rather than trading purposes.

39.6 Credit risk management

Credit risk is the risk of financial loss arising from counterparty failure to repay or service debt according to the contractual terms or obligations. Credit risk encompasses both the direct risk of default and the risk of deterioration of creditworthiness as well as concentration risks. There is no significant credit exposure as advance collection from customer is made.

Financial instruments that are subject to concentrations of credit risk, principally consist of investments classified as loans and receivables, trade receivables, loans and advances and derivative financial instruments. None of the financial instruments of the Company result in material concentrations of credit risks.

39.7 Liquidity risk management

Liquidity risk refers to the risk that the Company cannot meet its financial obligations. The objective of liquidity risk management is to maintain sufficient liquidity and ensure that funds are available for use as per requirements.

Company has established an appropriate liquidity risk management framework for the management of the Company's short-term, medium-term and long-term funding liquidity management requirements. The Company manages liquidity risk by maintain adequate reserves and banking facilities by continuously monitoring forecast and actual cash flows and by matching the maturity profiles of financial assets and financial liabilities.

40 - Related party disclosures

40.1 Related parties

A. Key Managerial Personnel:

I) Whole time Directors

(a)	Shri Sridhar Patra	Chairman Cum Managing Director
(b)	Shri Radhashyam Mahapatro	Director (HR)
(c)	Shri Manasa Prasad Mishra	Director (Proj & Tech)
(d)	Shri Bijay Kumar Das	Director (Production) [upto 31.01.2023]
(e)	Shri Ramesh Chandra Joshi	Director (Finance)
(f)	Shri Sadashiv Samantaray	Director (Commercial)
(g)	Shri Pankaj Kumar Sharma	Director (Production) [w.e.f. 01.02.2023]

Others

Shri N K Mohanty	GGM & Company Secretary

II) Part time Official Directors: (Nominee of Govt. of India):

(a) Shri Sanjay Lohiya, IAS

(b) Dr. Veena Kumari Dermal, IPoS

(III) Part time non official (Independent) Directors:

(a) Shri Ravi Nath Jha

(b) Dr. B. R. Ramakrishna

(c) Adv. George Kurian

(d) Dr. Ajay Narang

(e) Shri Y.P. Chillio

(f) Ms. (Dr.) Shatorupa

(g) Adv. Dushyant Upadhyay

(h) Shri Sanjay Ramanlal Patel

Notes to the consolidated financial statements

B. Joint Ventures

(a) Angul Aluminium Park Pvt Ltd.
(b) GACL NALCO Alkalis & Chemicals Pvt. Ltd.
(c) Utkarsha Aluminium Dhatu Nigam Limited
(d) Khanij Bidesh India Limited

C. Post Employment Benefit Plan

(a) Nalco Employees Provident Fund Trust
(b) Nalco Employees Group Gratuity Trust
(c) Nalco Employees' Leave Rule Benefit Trust
(d) Nalco Employees' Post Retirement Medical Benefit Trust

D. Entity controlled by a person identified in (A) as KMP

(a) Nalco Foundation

E. Government that has control or significance influence:

(a) Govt. of India

F. Entities on which Govt. of India has control or significant influence (CPSEs)

The Company has business transactions during the year with the following CPSEs/Govt. Undertaking.

i) Purchase of Goods and Services

1. Balmer Lawrie & Co Ltd.
2. Banaras Locomotive Works
3. Bharat Earth Movers Ltd.
4. Bharat Heavy Electrical Ltd.
5. Bharat Petroleum Corporation Ltd.
6. Bridge & Roof Co.(India) Ltd.
7. Bharat Sanchar Nigam Ltd.
8. Central Power Research Institute
9. Central Warehousing Corporation
10. Central Industrial Security Force
11. East Central Railway
12. East Coast Railways
13. Engineers India Ltd.
14. Executive Engineer Upper Kolab, Head Works Division, Jeypore
15. Hindustan Petroleum Corporation Ltd.
16. HMT Machine Tools Ltd.
17. Indian Oil Corporation Ltd.
18. Industrial Infrastructure Development Corporation
19. Instrumentation Ltd.
20. Life Insurance Corporation of India
21. Mahanadi Coal Fields Ltd.
22. Mahanagar Telephone Nigam Ltd.
23. Mecon Limited
24. Mineral Exploration Corporation Ltd
25. Ministry Of Railways
26. MSTC Limited
27. National Insurance Company Ltd.
28. National Small Industries Corporation Ltd
29. NLC India Limited
30. Northern Coalfields Limited
31. Numaligarh Refinery Limited
32. Oriental Insurance Co Ltd.
33. Post Office
34. Power Grid Corporation of India Ltd.
35. RITES Limited
36. Shipping Corporation of India
37. South Central Railway
38. South Eastern Railways
39. Southern Railway
40. The Singareni Collieries Company Limited
41. Visakhapatnam Port Trust
42. Western Coalfield Limited

ii) Sale of Goods

1. Hindustan Aeronautics Ltd.
2. National Small Industries Corp
3. National Thermal Power Corporation
4. Rashtriya Ispat Nigam Ltd.
5. Steel Authority of India Ltd.
6. Yantra India Ltd.

Notes to the consolidated financial statements

40.2 Related Party Transactions

I. Key Managerial Personnel

Remuneration to Key Managerial Personnel

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Short-term employee benefits		
- Salaries	5.39	3.54
- Contribution to Provident Fund	0.34	0.23
- Medical Benefits	0.05	0.02
- Other Benefits	0.60	0.01
Post employment benefits #	**0.03**	**0.02**
Other long term benefits	**0.01**	**0.01**
Total	**6.42**	**3.82**

Since actuarial valuation of employee benefit expenses under post-employement benefits and other long-term benefits are done on an overall basis for all employees, theses expenses for the key managerial persons is considered on a proportionate basis.

Loans / advances due from Key Managerial Personnel

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Outstanding at the end of the year	0.14	0.09
Maximum amount due at any time during the year	0.29	0.11

II. Post Employment Benefit Plan

Transactions during the year

Amount in ₹ Crore

Name of Trust	Nature of Transaction	Year ended 31.03.2023	Year ended 31.03.2022
NEPF Trust	PF-Contribution	357.15	543.71
NEGG Trust	Funding of shortfall	-	6.61
Nalco Employees' Leave Rule Benefit Trust	Funding of shortfall	385.55	-
Nalco Employees' Post Retirement Medical Benefit Trust	Funding of shortfall	157.08	-

Outstanding balance at the end of the year

Name of the Trust	Nature of Transaction	As at 31.03.2023	As at 31.03.2022
NEPF Trust	PF-Contribution payable	19.47	30.34
NEGG Trust	Funding of shortfall payable (Receivable)	(26.74)	(22.18)
Nalco Employees' Leave Rule Benefit Trust	Funding of shortfall payable (Receivable)	39.82	-
Nalco Employees' Post Retirement Medical Benefit Trust	Funding of shortfall payable (Receivable)	10.44	-

III. Nalco Foundation

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Contribution to CSR Trust	26.21	21.00

IV. Govt. of India : Transaction during the year

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Dividend paid during the year	470.9	565.08

Notes to the consolidated financial statements

V. CPSEs/ Govt Undertakings – Transaction during the year

Amount in ₹ Crore

Particulars	Year ended 31.03.2023	Year ended 31.03.2022
Purchase of goods and services from CPSEs/ Govt. undertakings	4,444.84	3,443.02
Sale of goods to CPSEs and Govt. undertakings	1,480.29	1,695.29

Outstanding balance at the end of the year

Particulars	As at 31.03.2023	As at 31.03.2022
Advance/(Payable) for purchase of goods and services from CPSEs/ Govt. undertakings	93.18	87.74
Receivable/(Advance) for sale of goods to CPSEs and Govt. undertakings	(52.68)	(44.22)

41. Transaction with Struck-off Company

Amount in ₹ Crore

Sl. No	Nature of transaction with struck-off Company	Balance outstanding as on 31.03.2023	Balance outstanding as on 31.03.2022	Relationship with struck-off Company, if any
1	Investment in securities	-	-	
2	Receivables	-	-	
3	Payables	0.22	0.18	For supply of goods/services
4	Share held by struck off Company	44,827 nos. of shares	44,827 nos. of shares	Total 9 number of Shareholders
5	Other outstanding balance (to be specified)			
Total		**0.22**	**0.18**	

42. Disclosure of additional information :

Amount in ₹ Crore

(a) As at and for the year ended March 31, 2023

Name of the entity in the Group	Net Assets i.e. total assets minus total liabilities		Share in profit and loss		Share in other comprehensive income		Share in total comprehensive income	
	As % of consolidated net assets	Amount	As % of consolidated profit or loss	Amount	As % of consolidated other comprehensive income	Amount	As % of total comprehensive income	Amount
Joint Ventures (Investments as per the Equity method)								
Indian								
Utkarsha Aluminium Dhatu Nigam Limited	0.29%	38.40	0.03%	0.39	-	-	0.03%	0.39
Khanij Bidesh India Limited	0.24%	31.84	0.01%	0.14	-	-	0.01%	0.14
Angul Aluminium Park Private Limited	0.30%	39.50	0.02%	0.34	0.00%	0.00	0.02%	0.34
GACL NALCO Alkalies & Chemicals Private Limited	**3.08%**	**404.60**	**(7.72%)**	**(110.72)**	**0.00%**	**0.00**	**(7.42%)**	**(110.72)**
Total	**3.92%**	**514.34**	**(7.66%)**	**(109.85)**	**0.00%**	-	**(7.36%)**	**(109.85)**

(b) As at and for the year ended March 31, 2022

Name of the entity in the Group	Net Assets i.e. total assets minus total liabilities		Share in profit and loss		Share in other comprehensive income		Share in total comprehensive income	
	As % of consolidated net assets	Amount	As % of consolidated profit or loss	Amount	As % of consolidated other comprehensive income	Amount	As % of total comprehensive income	Amount
Joint Ventures (Investments as per the Equity method)								
Indian								
Utkarsha Aluminium Dhatu Nigam Limited	0.00	37.63	0.00	0.31	-	-	0.00	0.31
Khanij Bidesh India Limited	0.00	1.50	(0.00)	(0.03)	-	-	(0.00)	(0.03)
Angul Aluminium Park Private Limited	0.31%	38.80	0.02%	0.65	-	-	0.02%	0.65
GACL NALCO Alkalies & Chemicals Private Limited	5.43%	681.41	(0.05%)	(1.48)	-	-	(0.05%)	(1.48)
Total	**6.05%**	**759.34**	**(0.02%)**	**(0.55)**	**0.00%**	-	**(0.02%)**	**(0.55)**

43 - Salient features of associates and joint ventures

STATEMENT CONTAINING SALIENT FEATURES OF THE FINANCIAL STATEMENT OF ASSOCIATE COMPANIES / JOINT VENTURES (FORM AOC-1)

Part "B": Associates and Joint Ventures

Statement pursuant to section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

	Description	Joint ventures			
		Utkarsha Aluminium Dhatu Nigam Limited	Khanij Bidesh India Limited	Angul Aluminium Park Pvt. Ltd.	GACL NALCO Alkalies & Chemicals Pvt. Ltd.
1.	**Latest audited Balance Sheet Date**	**31.03.2023**	**31.03.2022**	**31.03.2022**	**31.03.2023**
2.	**Shares of Associate/ Joint Ventures held by the company on the year end**				
	Nos.	2,00,00,000	10,00,000	1,62,23,900	27,60,00,000
	Amount of Investment in Associates / Joint Venture (₹)	20,00,00,000	1,00,00,000	16,22,39,000	2,76,00,00,000
	Extend of Holding %	50.00%	40.00%	49.00%	40.00%
3.	**Description of how there is significant influence**	**[refer note 42.2]**	**[refer note 42.2]**	**[refer note 42.2]**	**[refer note 42.2]**
4.	**Reason why the associate / joint venture is not consolidated**	-	-	-	-
5.	**Networth attributable to share holding as per latest audited Balance sheet (₹)**	19,20,00,000	12,73,60,000	19,35,50,000	1,61,84,00,000
6.	**Profit /(Loss) for the year (₹)**				
	i. Considered in Consolidation	39,00,000	14,00,000	34,00,000	(1,10,72,00,000)
	ii. Not Considered in Consolidation	-	-	-	-

Note:

43.1 None of the joint ventures have commenced operations except GACL NALCO Alkalies & Chemicals Pvt. Ltd.

43.2 Voting power as per the percentage of equity held.

43.3 Out of the four joint venture companies whose financials have been consolidated, financials of two joint venture companies namely M/s. Khanij Bidesh India Limited and M/s. Angul Aluminium Park Company Limited have been consolidated on the basis of financials as certified by the management as on reporting date.

44. Analytical Ratio

Sl. No.	Ratios	Numerator	Denominator	31.03.2023	31.03.2022	Variance
1	Current Ratio	Current Asset Total	Current Liability Total	2	2	(6%)
2	Debt-Equity Ratio[1]	Total Debt	Shareholders Equity	-	-	-
3	Debt Service Coverage Ratio	Earning available for Debt service	Interest + Installments	-	-	-
4	Return on Equity Ratio[2]	Net profit after tax	Equity Shareholder's fund [Total Equity]	11%	24%	(54%)
5	Inventory turnover ratio[2]	Sales [Sale of Product]	Average Inventory	8	9	(10%)
6	Trade Receivables turnover ratio[3]	Credit Sale [Sale of Power]	Average trade receivable	1.26	0.59	115%
7	Trade payables turnover ratio	Annual credit purchase	Average account payable	5.99	4.36	37%
8	Net capital turnover ratio[2]	Sale [Sale of Product & Power]	Net Asset or Capital employed [PPE+Intangible Asset+ Working Capital]	1.46	1.34	9%
9	Net profit ratio[2]	Net profit [Profit after tax]	Sale [Sale of Product & Power]	10%	21%	(52%)
10	Return on Capital employed[2]	Earning before interest and taxes (EBIT)	Capital employed [PPE+Intangible Asset+ Working Capital]	20%	38%	(47%)
11	Return on investment[2]	Net profit [Profit after tax]	Equity fund [Total Equity]	11%	24%	(54%)

1. The Company does not have any borrowings/debt except bill discounting (refer Note 21).
2. The variation in ratios over the previous year are due to changes in the respective factors.
3. The trade receivable turnover ratio has been computed considering the sale and receivable of the Wind Power only.

Notes to the consolidated financial statements

45 - Other disclosure

A Memorandum of Understanding (MoU) dated October 9, 2020 is entered between the Parent Company and the administrative ministry of Government of India, setting various performance parameters for the Parent Company including capital expenditure (Capex) by the group. In this regard, the amount of Capex on major capital projects and creation of additional facilities by the Parent Company and its proportionate share of similar Capex by its Joint Ventures during the financial year 2022-23 are given below:

Amount in ₹ Crore

Name of the Company / Joint Ventures	Total Capex	Company's share in %	Company's share in ₹
National Aluminium Company Ltd.	1,828.78		1,828.78
Angul Aluminium Park Pvt Ltd.	7.20	49%	3.53
GACL NALCO Alkalis & Chemicals Pvt. Ltd.	138.74	40%	55.50
Utkarsha Aluminium Dhatu Nigam Limited	0.70	50%	0.35
Khanij Bidesh India Limited	-	40%	-
Total Capex	**1,975.42**		**1,888.15**

46 - Regrouping of previous year's figures

Previous year's figures have been regrouped/rearranged wherever considered necessary to make them comparable.

For and on behalf of Board of Directors

(CS N. K. Mohanty)
Company Secretary

(R.C. Joshi)
Director (Finance)
DIN:08765394

(CA Sridhar Patra)
Chairman-Cum-Managing Director
DIN: 06500954

For GNS & Associates
Chartered Accountants
FRN-318171E

(CA Rajesh K. Pahadi)
Partner
M. No.: 058221

For A. K. Sabat & Co.
Chartered Accountants
FRN-321012E

(CA B. R. Mohanty)
Partner
M. No.: 057266

Place: Bhubaneswar
Date: 24th May, 2023

Status of Compliance to Ind ASs notified by MCA:

Ind As Nos.	Nomenclature	Description
Ind AS 1	Presentation of Financial Statement	- The Financial Statements of the Company have been prepared in accordance with the Indian Accounting Standards and presented in the format prescribed under Schedule III to the Companies Act 2013, following the guidelines set out in Ind AS 1 - The measurement basis used in preparing the financial statements and accounting policies adopted have been disclosed. - Information as required by Ind ASs (also discussed below against respective Ind AS) that are not presented elsewhere in the Financial Statements have been disclosed as Notes to it. The Notes to the Financial Statement also provides the information that is not presented elsewhere in the financial statements, but is relevant to an understanding of any of them.
Ind AS 2	Inventories	- Accounting policy adopted in measuring inventories including the cost formula used is disclosed at para 3.9 of the Significant Accounting Policy placed at Notes 3 of the Financial Statements. - Disclosure in respect of classification of inventories and their carrying amounts, amount of inventory recognised as expenses, amount of any write-down of inventories recognised as an expense and inventory pledged has been made at note 15.
Ind AS 7	Statement of Cash Flow	- The cash flow statement using indirect method, whereby the indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows. - The cash flows are segregated into operating, investing and financing activities.
Ind AS 8	Accounting Policies, Change in Accounting Estimates & Errors	- Any change in accounting policy is applied retrospectively, unless impracticable, adjusting the opening balance of each affected component of equity for the earliest prior period presented and the other comparative amounts disclosed for each prior period presented. - Any Change in accounting estimate which gives rise to changes in assets and liabilities, or relates to an item of equity, is recognised by adjusting the carrying amount of the related asset, liability or equity item in the period of the change. - On discovery of any prior period error(s) with an impact of ₹. 50 crore during a period, the error is corrected retrospectively as guided by the standard.
Ind AS 10	Events after Reporting Period	- The Company adjusts the amounts recognised in its financial statements to reflect the adjusting events after the reporting period. - Dividends declared after the reporting period are not recognised as a liability at the end of the period. However, suitable disclosure is made to this effect at Note :19.3.
Ind AS 11	Construction Contracts	This standard is applicable in preparing the financial statements of contractors which are into the construction business. Not being a contractor for construction of any asset, Ind AS 11 is not applicable to the Company.
Ind AS 12	Income Taxes	- Relationship between tax expenses and accounting profit is explained through a numerical reconciliation between tax expense and the product of accounting profit multiplied by the applicable tax rate at Note 36. - Current tax and deferred tax relating to items that are recognised in other comprehensive income and directly in equity are recognised in other comprehensive income and equity respectively. Disclosures are made at Note 36.
Ind AS 16	Property, Plant & Equipment	- Measurement basis, useful life and method of depreciation followed for each class of property, plant and equipment has been discussed at Para 3.1 of the significant accounting policy. - A reconciliation between opening carrying value and the closing carrying value stating addition during the period, disposals and depreciation expenses is placed at note 5.
Ind AS 19	Employee Benefits	- Long term employees benefits are categorised into three heads i.e. Defined Contribution Plans, Defined Benefit Plans and Other Long Term Employee Benefits. Company's contribution to pension fund of the employees are recognised as defined contribution plans where as Company's contribution to provident fund, gratuity on superannuation, post retirement medical benefits, settling-in-benefit, NALCO benevolent fund scheme, NALCO retirement welfare scheme are recognised as defined benefit plans. Payments towards compensated absences, Long service rewards and NEFFARS are recognised as long term employees benefits. - Actuarial valuation of Company's obligation towards defined benefit plans and long term employees benefits have been made and the expenses/ income is recognised accordingly. - A reconciliation between the opening liability and the closing liability against each defined benefit obligations showing service cost, interest expenses/ income, remeasurement gains or loses due to change in demographic and financial assumptions are disclosed at note 33.B. - A sensitivity analysis of the actuarial assumptions showing how the defined benefit obligation would have been affected by changing the relevant actuarial assumptions is disclosed at note 33.C.

Ind As Nos.	Nomenclature	Description
Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance	- Grants received from the Government for assets is presented as deferred income. Accounting policy of in this regard is disclosed at para 3.14.
Ind AS 21	The Effects of Changes in Foreign Exchange Rates	- Accounting policies with regard to transaction in foreign currency has been disclosed at para 3.6 of the Significant Accounting policy.
Ind AS 23	Borrowing Cost	- The Company capitalises borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Disclosure in this regard has been made at para 3.13 of the significant accounting policy.
Ind AS 24	Related Party Disclosure	- Name of related parties, aggregated sales and purchase transaction with them, any outstanding balances against them and benefits paid to and loan outstanding against the key managerial persons has been disclosed at Note 40.
Ind AS 27	Separate Financial Statements	- Investments made in joint ventures and associates are presented at cost in the separate financial statements.
Ind AS 28	Investment in Associates & Joint Venture	- The Company adjusts its' share of profit in the profit or loss of the subsidiaries with the carrying amount of the investments in its consolidated financial statements using equity method.
Ind AS 29	Financial Reporting in Hyperinflationary Economics	- This standard is not applicable to the company as its' functional currency is not a currency of any hyperinflationary economy.
Ind AS 32	Financial Instruments Presentation	- All items of assets and liabilities have been segregated into financial and other assets and liabilities based on the definitions laid down in the standard and are presented as required in Schedule III.
Ind AS 33	Earnings per share	- The Company has not issued any potential equity shares. Thus, both the Basic and Diluted EPS remains same. - Disclosure with regard to the weighted average number of equity shares and earnings for the period used in computation of EPS is made at Note 38.
Ind AS 34	Interim Financial Reporting	- Being a listed entity, the Company prepares its interim financials as required by SEBI(LODR) Regulations, 2015 in accordance with the recognition and measurement principles laid down in this standard on a quarterly basis.
Ind AS 36	Impairment of Asset	- Accounting policy relating to impairment of various assets is disclosed at respective paras in the significant accounting policies. - The management reviews the carrying values of assets at each reporting date and assess whether there is any indication that an asset may be impaired in accordance with the standard.
Ind AS 37	Provisions, Contingent Liabilities and Assets	- Accounting policies relating to Provisions, Contingent Liabilities and Assets are stated at para 3.7 of the Significant Accounting Policies. - Provisions are recognised when the company has a present obligation as a result of past events, legal or constructive, which requires out flow of resources to settle the obligation and can reliably be estimated considering the risks and uncertainties surrounding the event. Movement of different types of provisions are disclosed at note 24 (C). - In case of other obligations that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the company contingent liabilities are disclosed at note 27 and in compliance with the requirement of Schedule III. - Contingent assets are not recognised but are disclosed where an inflow of economic benefits is probable.
Ind AS 38	Intangible Assets	- The accounting policy in this regard is mentioned at para 3.2 of the significant accounting policies. - The Company recognises expenditure on R&D activities, payments towards NPV, expenditure on cluster projects and expenditure on softwares, which qualifies the conditions for recognitions laid down in the standard, as intangible assets. - Reconciliation of opening carrying amount and closing carrying amount of intangible assets showing additions, reduction and amortisation is placed at note 8.
Ind AS 40	Investment Property	- The company does not have any investment property, thus the standard is not applicable.
Ind AS 41	Agriculture	- The company does not have any agricultural activity, thus the standard is not applicable.

Ind As Nos.	Nomenclature	Description
Ind AS 101	First time Adoption of Indian Accounting Standards	- The Company adopted Ind AS in the year 2016-17 and hence this standard is no longer applicable.
Ind AS 102	Share Based Payments	- There is no such transaction during the year which involves share-based payments, hence the standard is not applicable.
Ind AS 103	Business Combination	- The standard is not applicable.
Ind AS 104	Insurance Contracts	- The standard is not applicable.
Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations	- The Company has made disclosure in note 17.
Ind AS 106	Exploration for and Evaluation of Mineral Resources	- The Company has not incurred any expenses on exploration and evaluation of mineral resources, hence the standard is not applicable.
Ind AS 107	Financial Instruments Disclosure	- Disclosure as required by the standard with regard to classification of financial instruments, nature and extent of risk arising from the instruments both qualitative and quantitative are made at note 39.
Ind AS 108	Operating Segments	- The Company has classified its operation into two segments i.e. Chemical Segment and Aluminium Segment based on the approach of the Chief Operating Decision Maker (CODM) what it takes while reviewing the performance of the Company. - Segment revenue, results, assets and liabilities, revenue from major products, geographical informations and other segment informations are disclosed at note 37.
Ind AS 109	Financial Instruments	- Except investments in mutual funds and forward contract on foreign currency other Financial assets and liabilities have been measured at amortised cost and same is disclosed at note 39.
Ind AS 110	Consolidated Financial Statements	- Consolidated financial statements are prepared considering the joint ventures and associates of the company following the equity method of consolidation.
Ind AS 111	Joint Arrangements	- The Company follows the principles set out in the standard for financial reporting of its interest in arrangements that are jointly controlled.
Ind AS 112	Disclosure of Interest in Other Entities	- The Company has four joint ventures whose summarised financial informations and its reconciliation with the carrying amount of the interest are disclosed at note 9.
Ind AS 113	Fair Value Measurement	- The Company has adopted the principles of fair value measurement as laid down in the standard while measuring its financial assets and liabilities. - Accounting policy in this regard is disclosed at para 4.2.6. of the Significant Accounting Policy.
Ind AS 114	Regulatory Deferral Accounts	- The Company is not subject to any rate regulation, thus the standard is not applicable.
Ind AS 115	Revenue from contracts with customers	- The Company recognises revenue on completion of all its performance obligation relating to the contract with the customers.
Ind AS 116	Leases	- The company identifies all leases wherever a contract is, or contains, a lease if it conveys the right to control the use of an identified asset (explicitly or implicitly specified in the contract) for a period of time in exchange of consideration, at the inception of the contract. - The company recognizes, "Right Of Use" ROU Asset at cost, and the Lease Liability is measured at the present value of all lease payments.

5 YEARS PERFORMANCE AT A GLANCE - PHYSICAL

Sl. No.	Particulars	Units	2022-23	2021-22	2020-21	2019-20	2018-19
1	**Production:**						
	Bauxite	MT	74,56,776	75,11,075	73,65,001	73,02,245	72,30,546
	Alumina Hydrate	MT	21,23,000	21,22,000	20,85,500	21,60,500	21,52,500
	Aluminium	MT	4,60,000	4,60,000	4,18,522	4,18,373	4,40,242
	Power (net)	MU	5,788	5,711	6,440	6,067	6,256
	Wind Power	MU	280	320	285	312	330
2	**Export Sales:**						
	Alumina	MT	11,82,054	11,54,691	11,84,680	12,40,704	12,44,256
	Aluminium	MT	25,214	1,33,085	1,92,174	56,898	38,463
3	**Domestic Sales:**						
	Alumina, Hydrate and Other Chemicals	MT	64,583	77,995	42,992	63,000	73,377
	Aluminium	MT	4,38,871	3,23,809	2,30,643	3,38,864	4,02,134
	Power (Net)	MU	-	-	-	-	11
	Wind Power	MU	158	170	148	162	330

5 YEARS PERFORMANCE AT A GLANCE - FINANCIAL (₹ IN CRORE)

Sl. No.	Particulars	2022-23	2021-22	2020-21	2019-20	2018-19
A	**Income Statement :**					
1	Exports	4,216.76	6,364.15	5,162.94	3,510.92	4,792.71
2	Domestic Sales	9,954.1	7,694.83	3,706.35	4,914.83	6,593.61
3	Gross Sales (1+2)	14,170.86	14,058.98	8,869.29	8,425.75	11,386.32
4	Less : Excise Duty	-	-	-	-	-
5	Net Sales (3 - 4)	14,170.86	14,058.98	8,869.29	8,425.75	11,386.32
6	Other Income :					
7	Operating	84.00	155.60	86.50	46.09	113.00
8	Non-operating	235.63	264.09	146.60	272.58	325.87
9	Operating expenses	11,806.78	9,664.08	7,172.97	7,982.61	8,606.79
10	Operating Profit (5+7-9)	2,448.08	4,550.50	1,782.82	489.23	2,892.53
11	Exceptional Items	-	-	-	-	-
12	Earning before interest, dep. & taxes (EBIDT)(10+8 -11)	2,683.71	4,814.59	1,929.42	761.81	3,218.40
13	Interest & Financing charges	12.92	23.13	7.08	5.74	2.38
14	Earning before dep. & taxes (EBDT) (12-13)	2,670.79	4,791.46	1,922.34	756.07	3,216.02
15	Depreciation and Amortisation	715.80	836.59	605.82	529.83	476.10
16	Profit before Tax (PBT) (14-15)	1,954.99	3,954.87	1,316.52	226.24	2,739.92
17	Provision for Tax	410.50	1,002.90	16.99	88.01	1,007.52
18	Net Profit (PAT) (16 - 17)	1,544.49	2,951.97	1,299.53	138.23	1,732.40
B	**Balance Sheet :**					
19	Equity Capital	918.32	918.32	918.32	932.81	932.81
20	Reserves & Surplus	12,320.13	11,636.32	9,762.38	9,055.26	9,551.70
21	Networth (19+20)	13,238.45	12,554.64	10,680.70	9,988.07	10,484.51
C	**Ratios :**					
22	Operating Profit Margin (OPM) (%) (10 / 5*100)	17.28	32.37	20.10	5.81	25.40
23	Net Profit Margin (%) (18 / 5 *100)	10.90	21.00	14.65	1.64	15.21
24	Return on Networth (RONW)(%) (18/21*100)	11.67	23.51	12.17	1.38	16.52
D	**Others :**					
25	Book value per share of ₹ 5 each (in ₹)	72.08	68.36	58.15	53.54	56.20
26	Earnings per share (in ₹)	8.41	16.07	6.97	0.74	9.06
27	Dividend per Share (in ₹)	5.00	6.00	2.50	1.50	5.75

Reconciliation of Published Quarterly (Reviewed) Financial Results and Annual (Audited) Financial Results for the year 2022-23

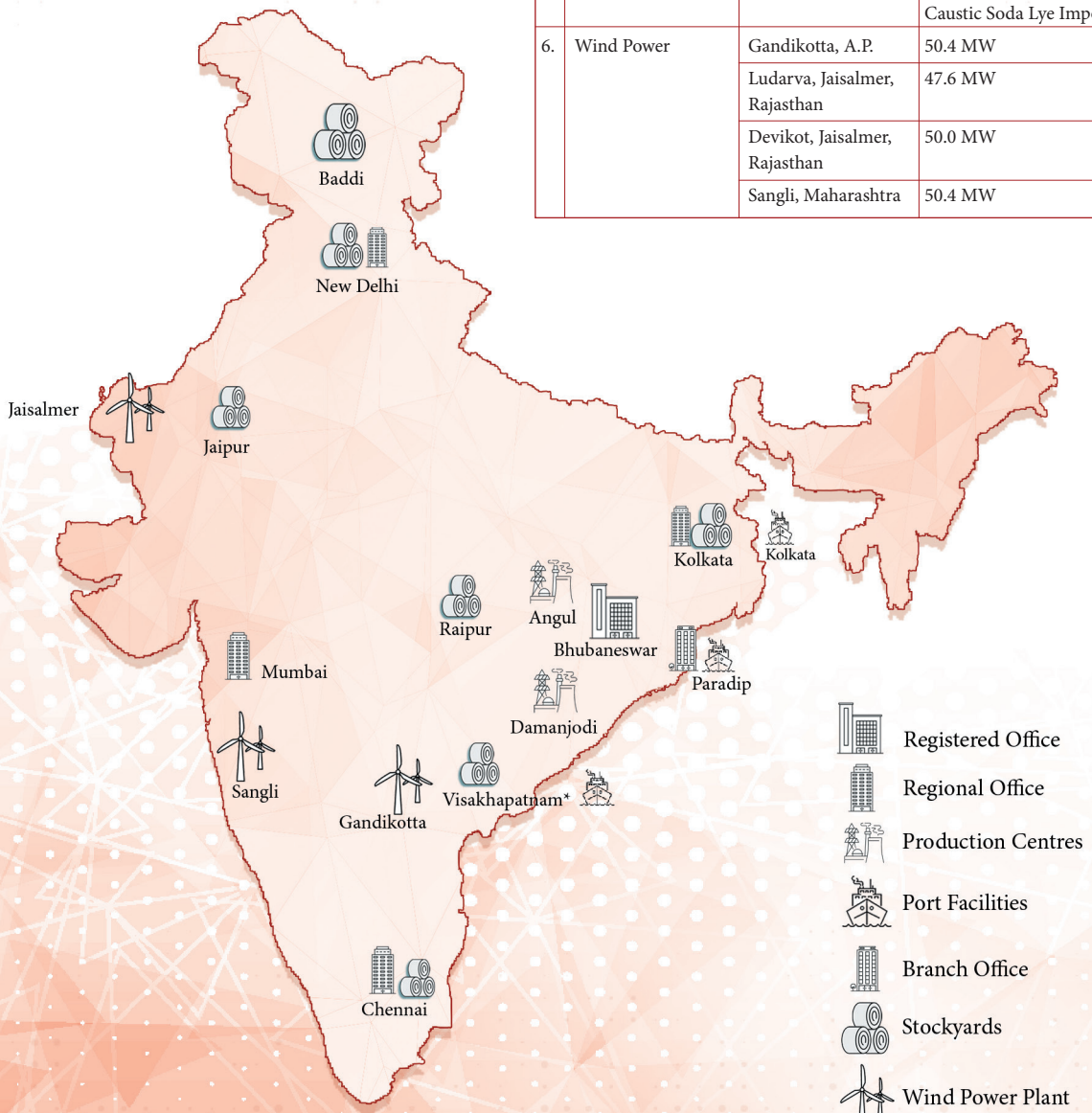
(₹ in crore except sl. no. 11 and 12)

Sl. No.	Particulars	1st Quarter (Reviewed)	2nd Quarter (Reviewed)	3rd Quarter (Reviewed)	4th Quarter (Audited)	Total of four quarters	Full Year (Audited)	Variances*
1	2	3	4	5	6	7	8	9
1	Revenue from Operation	3,783.32	3,489.57	3,289.98	3,670.86	14,233.73	14,254.86	21.13
2	Other Income	62.90	69.26	66.32	55.90	254.38	235.63	(18.75)
3	Total Expenditure Excl. Depreciation	2,918.52	3,159.30	2,834.44	2,905.06	11,817.32	11,819.70	2.38
4	Depreciation & Provision	149.65	153.65	157.06	255.44	715.80	715.80	-
5	Profit Before Tax & Exceptional Items	778.05	245.88	364.80	566.26	1,954.99	1,954.99	(0.00)
6	Exceptional Items	-	-	-	-	-	-	-
7	Profit Before Tax	778.05	245.88	364.80	566.26	1,954.99	1,954.99	(0.00)
8	Provision for Tax	199.41	75.76	90.95	44.38	410.50	410.50	-
9	Net Profit (PAT)	578.64	170.12	273.85	521.88	1,544.49	1,544.49	(0.00)
10	Paid up Equity Share Capital	918.32	918.32	918.32	918.32	918.32	918.32	-
11	Earning per Share (₹) (Not annualised)	3.15	0.93	1.49	2.84	8.41	8.41	-
12	Aggregate of non-promotor Shareholding:							
	Number of Shares	89,48,38,776	89,48,38,776	89,48,38,776	89,48,38,776	-	89,48,38,776	-
	Percentage of Shareholding	48.72	48.72	48.72	48.72	-	48.72	-

* Consequent to opinion of Expert Advisory Committee of ICAI on accounting of general scrap and disposal of assets, necessary regrouping has been made in the corresponding heads.

NALCO'S VARIOUS PRODUCTION UNITS, THEIR LOCATION & INSTALLED CAPACITIES

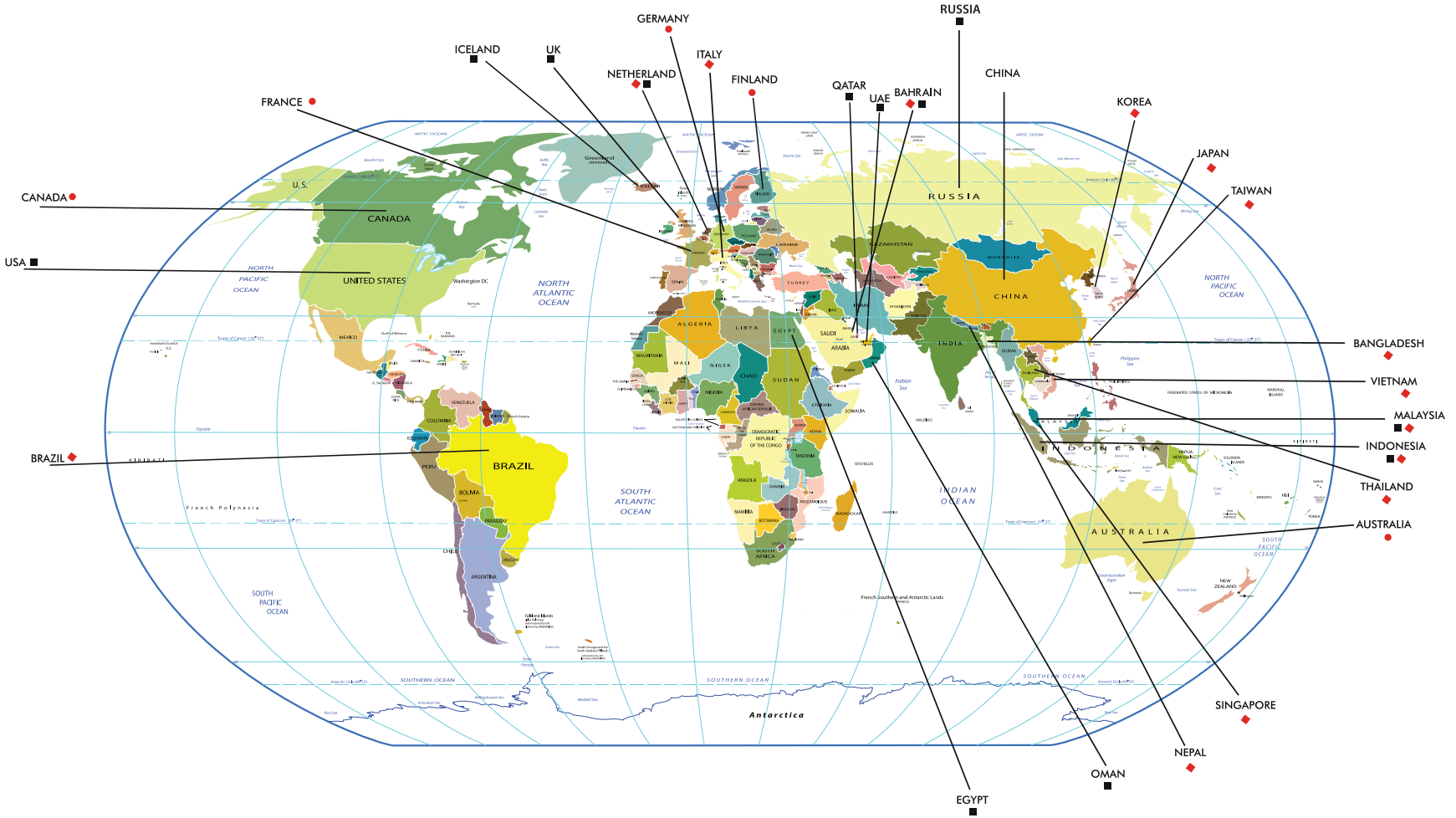
1.	Bauxite Mines	Panchpatmalli	68,25,000 TPY (North & Central Block) 31,50,000 TPY (South Block)
2.	Alumina Refinery	Damanjodi	21,00,000 TPY (Normative Capacity)
3.	Smelter Plant	Angul	4,60,000 TPY
4.	Captive Power Plant	Angul	1,200 MW
5.	Port Facilities	Visakhapatnam	14,00,000 TPY (Alumina Export / Caustic Soda Lye Import)
6.	Wind Power	Gandikotta, A.P.	50.4 MW
		Ludarva, Jaisalmer, Rajasthan	47.6 MW
		Devikot, Jaisalmer, Rajasthan	50.0 MW
		Sangli, Maharashtra	50.4 MW



Notes

Notes

Global Reach



● TECHNOLOGY ASSOCIATES ■ ALUMINA EXPORT ◆ ALUMINIUM EXPORT

नालको NALCO

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(A Govt. of India Enterprise)

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