

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:	7 th 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.	<ol style="list-style-type: none"> National Stock Exchange of India Ltd. <ul style="list-style-type: none"> Exchange Plaza, Bandra-Kurla Complex, Bandra East, MUMBAI - 400 051 Scrip Code: NATIONALUM BSE Limited <ul style="list-style-type: none"> Phiroze Jeejeebhoy Towers, Dalal Street, MUMBAI - 400 001 Scrip Code: 532234
11	Paid-up Capital:	<ul style="list-style-type: none"> ₹ 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;

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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	

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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 or opportunity (Indicated Positive or negative implications)
1	Handling of <ul style="list-style-type: none"> Red mud Fly Ash 	R	Government Regulations, Environmental & Societal Concerns; Business Continuity	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> SPL Aluminium Dross 	Both R & O	Government Regulations, Environmental & Societal Concerns	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Operating the existing 198 MW Wind Power Plants and 800 KWp Rooftop Solar installations. Additional roof-top solar capacity of 50 Kw 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	SA 8000	-	SA 8000	ISO 14001	-	-	ISO 9001
			ISO 14001	45001			ISO 50001			ISO 27001
			ISO 45001							
			ISO 50001							
5	Specific commitments, goals and targets set by the entity with defined timelines, if any.	<ul style="list-style-type: none">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.	<ul style="list-style-type: none">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																		

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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%	<ul style="list-style-type: none"> • 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%	<ul style="list-style-type: none"> • 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.

Business Responsibility and Sustainability Report**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**

% Of employees covered by											
Category	Total (A)	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:

% Of Workers covered by											
Category	Total (A)	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)	<ul style="list-style-type: none"> 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) part of association(s) or Union (B)	No. of employees / workers in respective category, who are	% (B/A)	Total employees / workers in respective category (C) part of association(s) or Union (D)	No. of employees / workers in respective category, who are	% (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.

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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	<ul style="list-style-type: none"> • Annual General Meetings • Complaints & grievances
Government/Regulatory Bodies	<ul style="list-style-type: none"> • Meetings with different Central and State Government Bodies • Notifications, Circulars, Submissions of various returns & compliances
Communities	<ul style="list-style-type: none"> • RPDAC meetings • Informal meetings and interactions
Customers	<ul style="list-style-type: none"> • Tenders and Enquiries • Customer meets. • Feedback, satisfaction surveys and grievance resolution
Suppliers, Contractors, Transporters	<ul style="list-style-type: none"> • Tenders & contracts • Vendor and supplier meets

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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.

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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	mg/Nm3		
• Smelter FTP/FTC stacks avg.		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	mg/Nm3		
• Smelter FTP/FTC stacks avg.		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	mg/Nm3		
• Smelter FTP/FTC stacks avg.		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, CO₂ 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

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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 reproducers/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.

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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	<p>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.</p> <p>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.</p> <p>Further, roof-top rainwater harvesting systems have been installed at the CW pump house and RCPH.</p>	Water withdrawal from source reduced
9	Surface run-off and waste-water management at Smelter	<p>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.</p> <p>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.</p>	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

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

- 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.

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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 Hambli, 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 distressed school students in Sirsa, Haryana.	800	100%
23	Providing Water Cooler at Dakshin 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.

