

# 37<sup>th</sup> Annual Report | 2017-18



**GLOBAL  
BENCHMARKING  
PERFORMANCE  
ENHANCING**




**नालको**  **NALCO**  
National Aluminium Company Limited  
A NAVRATNA CPSE



# *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.*



# The Year at a Glance

PARTICULARS	UNIT	2017-18
<b>PHYSICAL</b>		
Bauxite	MT	70,25,109
Alumina Hydrate	MT	21,05,500
Aluminium	MT	4,25,515
Power (net)	MU	6,547
Wind Power	MU	252
<b>FINANCIAL</b>		
Export Turnover	₹ in crore	4,075
Gross Sales	₹ in crore	9,505
Profit Before Tax	₹ in crore	2,039
Profit After Tax	₹ in crore	1,342
Earning Per Share	₹	6.94
Book Value per Share	₹	54.35
Dividend	₹ per Share	5.70

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**REGISTERED OFFICE & CORPORATE OFFICE  
NATIONAL ALUMINIUM COMPANY LIMITED**

NALCO Bhawan, Plot No. P/1, Nayapalli  
Bhubaneswar - 751 013, Odisha  
Tel. : 0674-2301989-99  
Email: company\_secretary@nalcoindia.co.in  
Website : www.nalcoindia.com

**37<sup>th</sup> Annual General Meeting**

Wednesday, the 29<sup>th</sup> August, 2018 at 11.00 A.M.  
at NALCO Bhawan, P/1, Nayapalli,  
Bhubaneswar - 751 013.



# BOARD OF DIRECTORS



**Dr. Tapan Kumar Chand**  
Chairman-cum-Managing Director

Dr. Tapan Kumar Chand joined the company as Chairman-cum-Managing Director on 27.07.2015. Dr Chand is a highly competent and experienced professional having more than 30 years of rich experience in Mining and Metal Sector, out of which 8 years are at the helm of Affairs as Director in Coal & Steel sector.

An outstanding scholar and gold medalist in his student career, he has undergone training in International Centre for Promotion of Enterprises in Slovenia and Queensland University of Technology, Australia. He received Jawaharlal Nehru Award for outstanding performance as a Professional.

Dr. Chand has recently launched his 2nd edition book, "Aluminium : The Future Metal", which is just like a one-stop-shop providing much information on entire Aluminium Value Chain. His previous book 'Aluminium :The Strategic Metal' was well acclaimed by engineers, entrepreneurs, researchers, educationists & the corporate world.

He has been conferred with "D.Lit", the highest honour of Utkal University in recognition of his outstanding contribution towards Industry, Business Management & Nation Building. Hon'ble Governor of Jharkhand conferred him with highest management award 'Ravi J Matthal National Fellow Award' constituted by Association of Indian Management Schools. Times of India has conferred on him "The Achievers Odisha Award" and National Institute of Personnel Management, the National Fellow Award for his distinct contribution in the field of Human Resource Management. Dr. Chand is the President of Aluminium Association of India, the apex body representing the entire spectrum of Indian Aluminium Industry



**Shri K C Samal**  
Director (Finance)

Shri K.C.Samal is the Director (Finance) of the Company since 03.01.2014.

A Fellow Member of Institute of Cost Accountants of India, Shri Samal has over 3 decades of experience in multifarious finance & accounts functions with significant exposure in the areas of Corporate Accounts, Audits, Treasury & Foreign Exchange Management, Investor Relations, Budgeting and Control. He has played a key role in Capital Restructuring, Project Finance, Foreign Debt Management, Risk Management, Cost Management, Corporate Strategy etc.

Presently he is also spearheading the Corporate Planning and Strategic Management activities of the Company. Under his guidance the Corporate Plan (2017-2032) of the company has been developed envisioning short & long term strategic business initiatives, functional transformation, risk assessment with remedial measures, development of decision support system and change in organization structure at macro level.



**Shri V Balasubramanyam**  
Director (Production)

Shri V. Balasubramanyam joined the Company as Director (Production) w.e.f. 01.01.2015.

Born on 01.12.1960, Shri V Balasubramanyam completed his B.Tech in chemical engineering and joined NALCO as a Graduate Engineer Trainee (GET) in 1984. During his long service association of three decades with NALCO, Shri Balasubramanyam has contributed significantly from Technology adoption to absorption in the field of aluminium technology. With his vast professional experience, which nested from project execution to plant operation at both the production complexes of NALCO, Shri Balasubramanyam held very critical and crucial positions in the organization before taking over as Director (Production).

Shri Balasubramanyam is a life member of Indian Institute of Metals (IIM), Management Committee member of Federation Indian Mineral Industries (FIMI) and also member of Energy Panel in Odisha chapter of the Confederation of Indian Industries (CII).



**Shri Basant Kumar Thakur**  
Director (HR)

Shri Basant Kumar Thakur is the Director (HR) of the Company w.e.f. 04.07.2016.

Born on 19.12.1959, Shri Basant Kumar Thakur has a Diploma in Social Works along with a degree in History from Punjab University. He started his career in SAIL in 1981 and since then he served in various units, including Durgapur Steel Plant, Bokaro Steel Plant, Salem Steel Plant, R&D Centre in Ranchi and Corporate Office in New Delhi, prior to joining NALCO as Director (HR). Shri Thakur is a hands on Human Resources professional with comprehensive experience including recruitment, retention, conflict resolution, change management, labour relation and benefit administration. He has four years of experience in Corporate Communications. In SAIL, he had collaborated with senior management to conduct organizational wide strategic planning in order to support and further the organizational goals. He played a vital role rebuilding Human Resources Department by updating Human Resources System, policies and procedure development, coaching, counseling, planning, direction and management of all HR activities in his three decades long career at SAIL. Shri Thakur is a life member of NIPM.



# BOARD OF DIRECTORS



**Shri Sanjib Kumar Roy**  
Director (P&T)

Shri Sanjib Kumar Roy is the Director (P&T) of the Company w.e.f. 03.02.2017. Shri Roy completed B Sc (Hons in Chemistry) from Ramakrishna Mission Vidyamandir, Belurmath and then B Tech & M. Tech in Chemical Engineering discipline from Calcutta University. He began his career in NALCO as a Graduate Engineer Trainee in 1984. He was posted in the company's Alumina Refinery Complex in Damanjodi since inception of the project, where he held different key positions including two stages of expansion before becoming the General Manager (Refinery). Thereafter in May 2012, he was posted as General Manager (Smelter) at the company's Smelter Plant in Angul before his elevation as Executive Director (S&P). Shri Roy moved to the headquarters in Bhubaneswar as Executive Director (Production) in April 2015. Shri Roy brings to this post his vast experience in the company's plant & operations as well as managing projects from conceptualization to commissioning.



**Shri Pradip Kumar Mishra**  
Director (Commercial)

Shri Pradip Kumar Mishra joined the Company as Director (Commercial) w.e.f. 23.04.2018. Born on 12.02.1961, Shri Pradip Kumar Mishra is a Post Graduate in English literature from Utkal University. He started his professional career as a Management Trainee in SAIL in the year 1983. He brings along rich and varied experiences in the field of marketing management. During his 35 years tenure in SAIL, he served in various positions, including being the Regional Manager in three regions of SAIL. He headed the domestic marketing of flat products of SAIL for over 3 years as Executive Director. Shri Mishra is the recipient of the prestigious Jawahar Award for outstanding contribution in marketing area in SAIL.



**Dr. K. Rajeswara Rao**  
Part-time Official Director

Dr. K. Rajeswara Rao was inducted to the Board as an Additional director w.e.f. 19.02.2018. Born on 1st July, 1962, Dr. K. Rajeswara Rao has degree of Doctor of Philosophy (Ph.D.) in Social Sciences from the University of Jamia Millia Islamia, Delhi. He belongs to 1988 batch of Indian Administrative Service (IAS) from Tripura Cadre. He is currently working as Additional Secretary in the Ministry of Mines, Government of India, New Delhi. Dr. K. Rajeswara Rao has abundant experience of working in Central Ministries, State Governments and Public Sector Companies



**Shri Anil Kumar Nayak**  
Part-time Official Director

Shri Anil Kumar Nayak was inducted to the Board as an Additional director w.e.f. 27.03.2018. Born on 16.05.1962, Shri Anil Kumar Nayak has done his M.A. in Politics from School of International Studies, JNU, New Delhi and M.Phil in Ethnicity and Political development in the Ivory Coast from Delhi University. He joined Indian Ordinance Factory Services (IOFS-1986 Batch) on 15th Feb' 1987. He was Deputy Director General, Ordinance Factory Board, Kolkata looking after Industrial Relations of the entire organization comprising of 41 Ordinance factories before joining as Chief Labour Commissioner in Ministry of Labour in August, 2015. He got wide experience of working in other Government departments viz. Under Secretary to 5th Pay Commission, Deputy Secretary in Ministry of Defence, Regional Provident Fund Commissioner Gr.-I of Bihar and Odisha, Director in Ministry of Mines. He has been appointed as Joint Secretary, Ministry of Mines in March, 2018. He brings with him varied experience in technical as well as administrative fields.



**Shri Dipankar Mahanta**  
Part-time Non-official  
(Independent) Director

Shri Dipankar Mahanta was inducted to the Board as a Part-time Non-official (Independent) Director w.e.f. 21.11.2015. Born on 12th December, 1965, Shri Dipankar Mahanta did his MBA from Guwahati University and started with an entrepreneurial venture named M/s Consort Marketing, with an objective of marketing small scale industries products. Subsequently, he joined and served the Guwahati Stock Exchange in various capacities concerning the Indian Capital Market. He was the promoter director of Economic and Industrial Development Collaborative (India) Pvt. Ltd. a company with an object for imparting quality consultancy services and its implementation in the North East Region (NER). He was a consultant in designing and implementing a Handmade Paper unit for L.B.Agro Private Ltd near Guwahati. He was involved as co-consultant in projects like Diagnostic Study of Industrial Training Institutes (ITTs) of the NER for the NEC, Feasibility Study of a Market Complex Exclusively Selling Handloom and Handicraft Products for NEHHDC, Study of the factors affecting the Process of Language Learning for DPEP, Study on 'Bamboo and Bamboo Products in Assam' for National Bamboo Mission, Study on 'Socio-economic Study of the Brick Field in Assam' for Pollution Control Board, Assam. He served Vivekananda Kendra, a voluntary organization in various capacities and later on he was the Associate Director, Research Council of the Vivekananda Kendra Institute of Culture (VKIC), a specialized project on Cultural Documentation and Research of India's North East. He also had the opportunities to serve CAPART (NEZ) under the Ministry of Rural Development, Government of India. He is presently working in the field of Social Entrepreneurship with various social organizations, prominent amongst them is Vivekananda Kendra and Srimanta Foundation for Culture and Society. He is also a resource person and trainer for sessions on 'Knowledge of Self and its Management'.



# BOARD OF DIRECTORS



**Shri S. Sankararaman**

Part-time Non-Official (Independent) Director

Shri S. Sankararaman was inducted to the Board as a Part-time Non-Official (Independent) Director from 21.11.2015.

Born on 19th May, 1962, Shri S. Sankararaman is a fellow member of the Institute of Chartered Accountant of India (ICAI). Shri S. Sankararaman is affected by muscular dystrophy and a wheelchair user from the age of 12. He is presently the Honorary Secretary of Amar Seva Sangam, an Institution for betterment of the handicapped and under privileged. He started his career in 1985 rendering professional services to various corporates before joining the Amar Seva Sangam in 1992. His mission is to empower the disabled citizen by establishing a "Valley for the Disabled" as a Rehabilitation and Development Centre for the region and developing models for self-help initiatives by integrating the disabled individuals with the society for improved living conditions in the villages.

He is a champion for the rights of the disabled persons and believes that disability is not a constraint but only a condition which can be managed with the right combination of rehabilitation and enablement. He has been instrumental in developing Amar Seva Sangam from scratch to its current position of leadership in the field of disability management with state-of-the-art infrastructure and deliver high quality rehabilitation programs across all age groups and across all disabilities. He is a pioneer in developing innovative models for rehabilitation of persons with disabilities with the involvement of community and has spearheaded a Village Based Rehabilitation Initiative which is acknowledged to be one of the best models in the country. He believes in professionalizing the NGO sector and has computerized all the activities of Amar Seva Sangam with systems and processes. He organized national level seminar on law on handicapped resulting in the enactment of Persons with Disabilities Act by the Indian Parliament in 1996 and many other. He participates in various marathons particularly the Standard Chartered Mumbai Marathon from its inception and has paved way for the inclusion of disabled persons in such sporting events. He has presented papers on the rights of disabled in various forums across the country. He is a trustee and board member of several nonprofits including the Gandhigram Trust (Treasurer), Gandhigram, Dindigul, the Collective action for Basic Rights Foundation (Hon. Vice President), Bangalore, Tamil Nadu Udayikkaram Association for Differently Abled, (Founder Member), Chennai, National Institute for Empowerment of Persons with Multiple Disabilities (Member) and from 5th May 2017 he has been appointed as a Member, Tamil Nadu State Commissionerate for the Differently Able, Chennai, to represent persons with loco-motor disabilities. He was conferred with the Ashoka Fellowship for innovation and received several awards at the State, National and International levels in recognition of his services, which include a State Award from the Chief Minister of Tamil Nadu and National Awards from the President of India twice.



**Shri Pravat Keshari Nayak**

Part-time Non-Official (Independent) Director

Shri Pravat Keshari Nayak was inducted to the Board as a Part-time Non-Official (Independent) Director from 21.11.2015.

Shri Pravat Keshari Nayak, Chartered Accountant by profession is senior partner of leading CA Firm M/s. P. K. Nayak & Co., rendering comprehensive professional services to Government and private sectors. With a career spanning over three decades, his vast repertoire of financial expertise and experience spans across the public and private sectors and several corporates, banks and other financial institutions. He has consulted for Adam Smith International, UK on public sector reforms for restructuring of PSUs in Odisha. He also holds degrees in Laws and diploma in Information System Audit (ICAI).

Besides undertaking audits for government and as Independent auditor in large social sector projects, he has proactively offered guidance to young entrepreneurs and start-ups. He has also been a part of many national seminars and conferences related to Finance, taxation and audits.



**Prof. D. Acharya**

Part-time Non-Official (Independent) Director

Prof. Damodar Acharya was inducted to the Board as an Independent Director on 21.11.2015.

Born on 2nd April, 1949, Prof. Damodar Acharya holds degree in Mechanical Engineering from NIT, Rourkela, Masters and PhD degrees from IIT, Kharagpur. He joined the Industrial Engineering faculty in the same institute in 1976. He has left his indelible mark in all the responsibility that he has taken in the institute, be it as head of the Department, Chairman JEE, DEAN (Sponsored Research and Industrial Consultancy), Executive Director STEP, Chairman of Vinod Gupta School of Management or as the Director of this first and the largest IIT in the Country.

As Founding Vice Chancellor of Biju Patnaik University of Technology, he laid a foundation of a robust Technical University Education system that is being emulated by others. He was the Chairman of All India Council of Technical Education.

He played important role in the establishment of IIT Bhubaneswar and was its first Mentor Director. He remained non official Director in the Central Board of RBI for four years and as an Independent Director in RCF for three years.

Prof. Acharya is a Member of Chhatisgarh State Planning Commission. He is also in the Boards of IDCO and State Pollution Control and Chairman of the Advisory Board of SOA University.



# BOARD OF DIRECTORS



**Shri Maheswar Sahu**

Part-time Non-Official (Independent) Director

Shri Maheswar Sahu was inducted to the Board as a Part-time Non-official (Independent) Director w.e.f. 21.11.2015.

Shri Maheswar Sahu has done B.Sc. (Engg.) in Electrical in 1977 from NIT, Rourkela and M.Sc. from University of Birmingham in 1994. He joined Indian Administrative Service (IAS) in 1980. He has served the Government of India and Govt of Gujarat in various capacities for more than three decades before retiring as Additional chief secretary, Govt. of Gujarat in 2014. His career span includes more than 20 years of service in industry and more than 10 year of active involvement in PSU management. He had worked more than 3 years in United Nations Industrial Development Organization. He was instrumental in organization of four Vibrant Gujarat events.

He served as director in many CPSEs. He was also Chairman/ Director in many State PSUs. He is now associated with a number of companies as Independent Director/Chairman. His area of specialization includes strategic management, public administration, corporate governance etc.



**Ms. Kiran Ghai Sinha**

Part-time Non-Official (Independent) Director

Ms. Kiran Ghai Sinha was inducted to the Board as a Part-time non-official (Independent) director w.e.f. 03.02.2017.

She was senate Member, Patna University for three terms in succession. She is also Chairperson, Scouts and Guides Fellowship, Bihar. She is member (Non Govt.), Hindi Salahkar Samiti, Ministry of Civil Aviation, Govt of India.

Ms. Sinha did her M.A. in Hindi from Patna University. She retired as an Associate Professor, Dept. of Hindi, Patna Women's college, Patna University. Ms. Sinha was also member, Bihar Legislative Council (BLC) for consecutive two terms from 2004-10 and again 2010-16. During her tenure as MLC, she was privileged to chair 3 Committees of the house viz. Urban development Committee, Rajbhasha Committee & Child protection Women empowerment Committee. She was member, Local Board (Eastern Zone), Reserve Bank of India (2001-2004) and was also member, Managing Board, Rajendra Agriculture University, Pusa, Bihar for two terms. She was also a jury member for non feature films category & feature film category in the 48th and 50th National Film awards. She was a member of a state delegation to the World Hindi Conference held at United Nations, USA (2007).



**Shri N N Sharma**

Part-time Non-Official (Independent) Director

Shri N N Sharma was inducted to the Board as a Part-time non-official (Independent) director w.e.f. 06.09.2017.

Born on 12th August, 1950. Shri N N Sharma has done B.Sc in Mechanical Engineering. At present, he is Chairperson, Centre for Corporate Social Responsibility and Sustainability at Birla Institute of Management Technology (BIMTECH), Greater Noida. He is also member of Social Audit Committee of ACC Ltd. Shri Sharma conducted capacity building programme of CSR professionals of corporates like NTPC, NHPC, SAIL and NPCIL. He has more than three decades of experience of working in social development sector. He was managing director of Rajasthan Consultancy Organisation (RAJCON) promoted by IFCI and other development organizations and also first general manager of UP Minorities Financial and Development Corporation.

He has also worked with UNDP and UNIDO and was associated with projects supported by the World Bank and DFID, UK.



**Smt. Achla Sinha**

Part-time Non-Official (Independent) Director

Smt. Achla Sinha was inducted to the Board as a Part-time non-official (Independent) Director w.e.f. 08.09.2017.

Smt. Achla Sinha has done M.A. in English Literature from Patna University, M.Phil in Public Administration from Punjab University, Advance Professional Programme in Public Administration (APPA) from Indian Institute of Public Administration (IIPA), New Delhi.

She is an Indian Railways Traffic Service officer (IRTS) of the 1982 Batch. She started her career from Eastern Railway, Danapur Division as an Assistant Commercial Manager in 1984 and had since worked in various capacities for over three decades in the Ministry of Railways as Director (Tourism), Executive Director (Statistics & Economics) and in the Delhi Division of Northern Railway as Chief Traffic Manager. She also served as Additional Secretary, Central Information Commission prior to her superannuation in October, 2016. She has won the General Manager Eastern Railway Award during the Annual Railway Week for outstanding performance and the Best Woman Participant in the 30th Advance Professional Programme in Public Administration (APPA) from IIPA, New Delhi. She has written a number of concept papers to bring about improvements in Indian Railway's functioning as also in Urban Development Ministry, Government of India. Many of these concepts have since been discussed and implemented.



## EXECUTIVE DIRECTORS



**Shri R. K. Mishra**  
ED (S&P)



**Shri S. Acharya**  
ED (Production)



**Shri B. R. Samal**  
Chief Vigilance Officer



**Shri S. D. Sahu**  
ED (Finance)



**Shri D. K. Mohanty**  
ED (M&R) I/c



**Shri S. Samantaray**  
ED (Marketing) I/c



**Shri N. K. Mohanty**  
Company Secretary



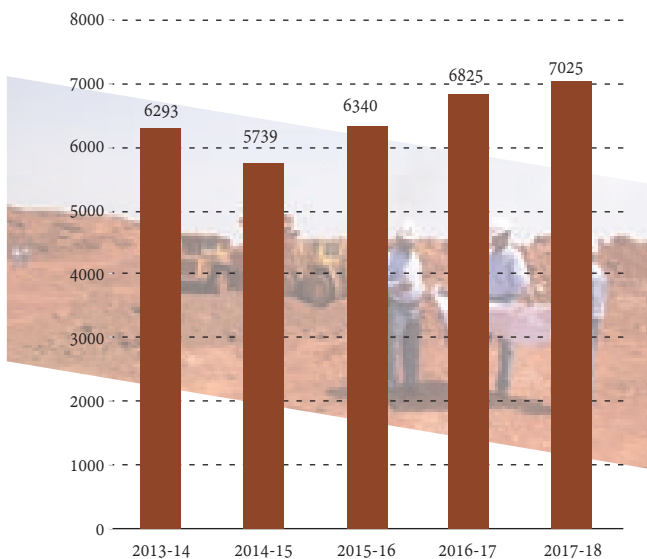
नालको  NALCO  
TEAM NALCO



(L-R) Smt. K.G. Sinha, Shri P.K. Mishra, D(C), Shri S.K. Roy, D(P&T), Shri B.K. Thakur, D(HR), Shri B.R. Samal, IAS, CVO, Smt. Achla Sinha, Shri K.C. Samal, D(F), Shri N.N. Sharma, Dr. K.R. Rao, IAS, Dr. T.K. Chand, CMD, Shri A.K. Nayak, Shri V. Balasubramanyam, D(P), Shri M. Sahu, Shri P.K. Nayak, Prof. D. Acharya, Shri D. Mahanta, Shri S. Sankararaman

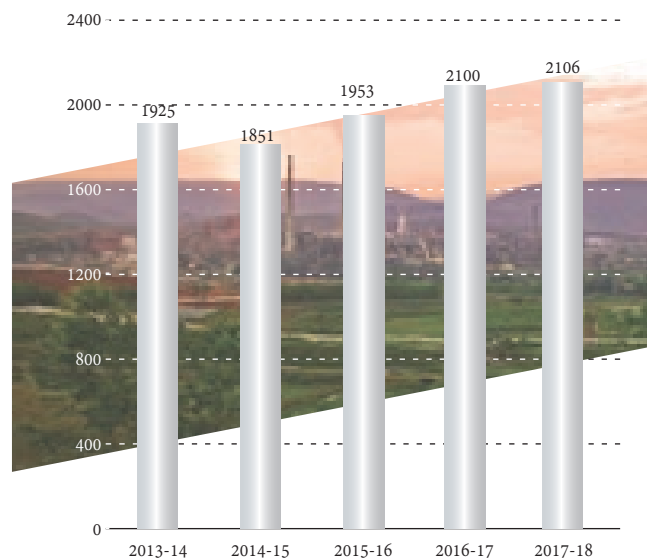


### Bauxite (in '000 MT)



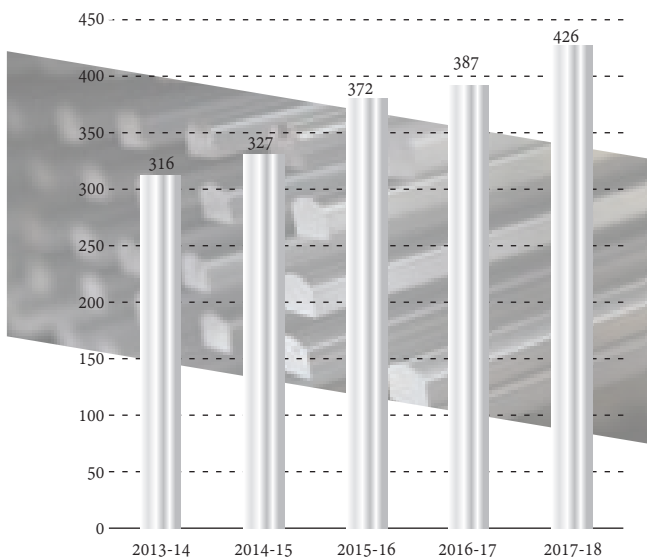
2013-14	2014-15	2015-16	2016-17	2017-18
6293	5739	6340	6825	7025

### Alumina Hydrate (in '000 MT)



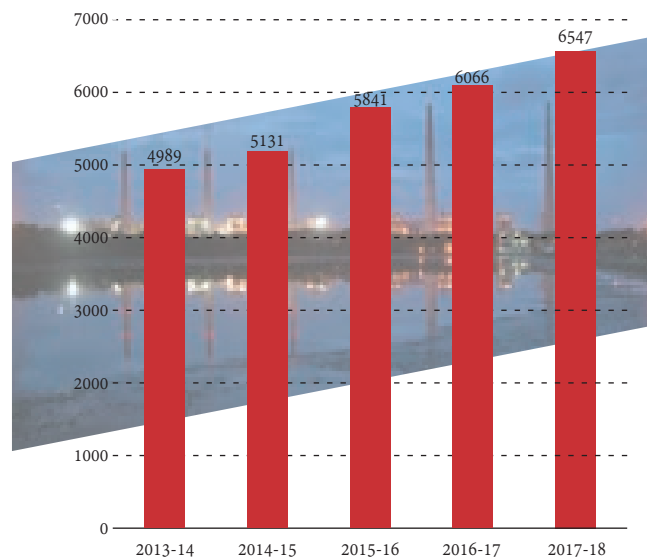
2013-14	2014-15	2015-16	2016-17	2017-18
1925	1851	1953	2100	2106

### Aluminium (in '000 MT)



2013-14	2014-15	2015-16	2016-17	2017-18
316	327	372	387	426

### Power Generation (in Million Unit)



2013-14	2014-15	2015-16	2016-17	2017-18
4989	5131	5841	6066	6547



*Dear Members,  
Your Directors have great pleasure in presenting before you the 37th Annual Report of your Company together with the audited financial statements (standalone and consolidated) and Auditors' Report for the financial year ended 31st March, 2018.*

## PERFORMANCE HIGHLIGHTS

### Physical Performance

Production	Unit	2017-18	2016-17
Bauxite	MT	70,25,109	68,25,000
Alumina Hydrate	MT	21,05,500	21,00,100
Aluminium	MT	4,25,515	3,87,422
Electricity (Net)-CPP	MU	6,547	6,066
Wind Energy (Gross)	MU	252	206

- Bauxite Mines (North-Central Block of Panchpatmali Mines) achieved 100% capacity utilization with transportation of 68.25 lakh MT for second successive year.

The operation of new mine i.e. South Block of Panchpatmali Bauxite Mines started w.e.f. 22.05.2017. Bauxite transportation from the new mine started in the 4th quarter of financial year 2017-18. Transportation from South Block is 2 lakh MT and combined transportation of both the Mines is 70.25 lakh MT, highest ever since inception.

Total Bauxite excavation of 70.84 lakh MT during the year is also highest ever since inception registering a growth of 3.8% over last year.

- Alumina Refinery achieved 100% normative capacity (i.e. 21 lakh MT) with production of 21.06 lakh MT Alumina Hydrate. Calcined Alumina of 21.11 lakh MT during the year is also highest ever since inception registering a growth of 3.9% over last year.
- Steam Generation Plant (SGP) of Alumina Refinery achieved highest ever net power generation of 484 MU registering a growth of 6.9% over last year. The plant also achieved record ash utilization of 103.5% against 100% achieved last year.
- Aluminium Smelter achieved highest cast metal production of 4.26 lakh MT in last 7 years, registering a growth of 9.8% over last year.
- CPP achieved 'Net Power Generation' of 6,547 MU, registering a growth of 7.9% over previous year.
- Wind Power: 4 wind power units at different locations of the Country have generated 252 MU against 206 MU generated last year, registering a growth of 22%.



## SALES PERFORMANCE

### Chemicals

During the financial year 2017-18, your Company registered total Alumina sale of 13,37,416 MT, including export of 12,76,775 MT. This betters the corresponding figures of 12,94,900 MT and 12,43,103 MT respectively achieved during 2016-17.

### Metal

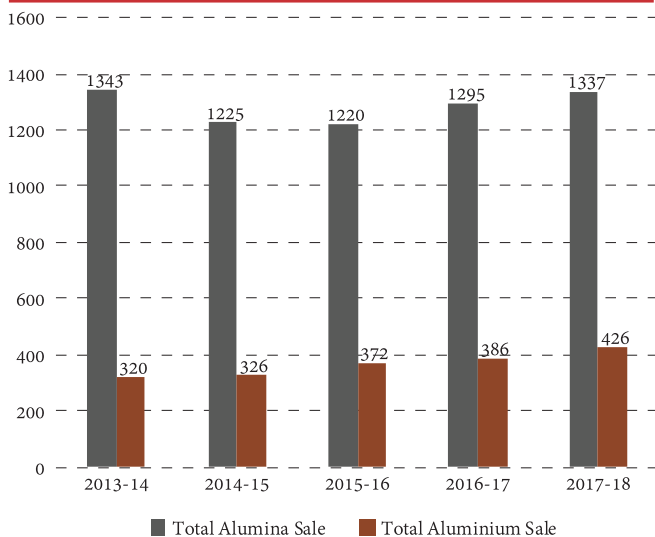
The company achieved Aluminium metal sales of 4,26,316 MT during 2017-18, which is significantly higher than the sales figures of 3,85,518 MT achieved during 2016-17. This comprises of sales of 3,50,469 MT (an all-time record) in the domestic market and 75,847 MT in the overseas market. This resulted in an all-time low inventory of 1,502 MT at the end of Financial Year 2017-18.

A summary of sales achieved during 2017-18 is tabulated hereunder:

Description	Unit	Year ending 31.03.2018	Year ending 31.03.2017
<b>Export</b>			
Alumina	MT	12,76,775	12,43,103
Aluminium	MT	75,847	1,00,591
<b>Domestic</b>			
Alumina and Hydrate	MT	60,641	51,797
Aluminium	MT	3,50,469	2,84,926
Total Metal Sale	MT	4,26,316	3,85,518
Total Chemical Sale	MT	13,37,416	12,94,900

Total domestic metal sales of 3,50,469 MT comprises of 2,73,502 MT effected from Smelter Plant, Angul and 76,967 MT effected from 10 stockyards situated in Baddi, Bangalore, Bhiwandi, Chennai, Delhi, Faridabad, Jaipur, Kolkata, Vadodara and Vizag.

### SALES PERFORMANCE (in '000 MT)



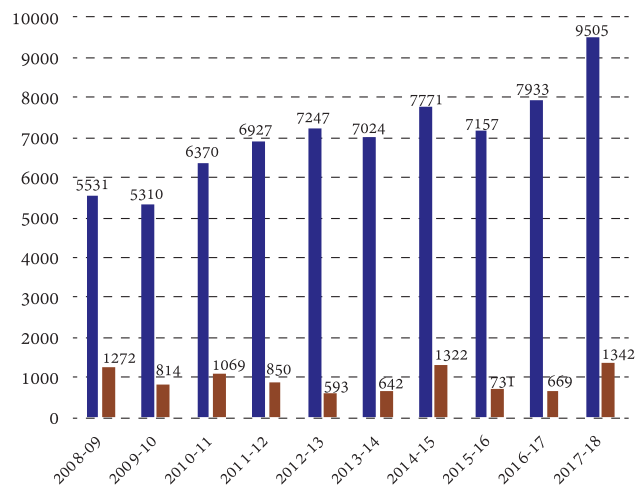
## FINANCIAL PERFORMANCE

The details of financial performance are given below:

₹ in crores

Particulars	2017-18	2016-17
Revenue from Operations (Gross)	9,618	8,050
Other Income	300	408
Total Income	9,918	8,458
Raw materials consumed	1,465	1,182
Power & Fuel including Coal	2,748	2,213
Employee benefits expenses	2,261	1,537
Other expenses	1,749	2,041
Depreciation & amortization expenses	480	480
Total expenses	8,703	7,453
Profit Before Exceptional items	1,215	1,005
Add/(Less):Exceptional items [Income/(Expenditure)]	824	(40)
Profit Before Tax	2,039	965
Tax expenses	697	296
<b>Profit After Tax</b>	<b>1,342</b>	<b>669</b>

### FINANCIAL PERFORMANCE (₹ in Crores)



## FUTURE OUTLOOK

Global Aluminium industry is entering a new era as major economies of the world are looking to impose trade restrictions/barriers on imports to their respective nations, which is likely to result in a surge in regional Aluminium premiums. Global Aluminium consumption has increased by 25% over the last 4 years and the trend is likely to continue in the near future. Measures



taken for pollution control in China seem to have cut down some of its production and the prices of Aluminium have surged over the last year. The prices in the near term are likely to be supported, as the overall market is expected to be in deficit in 2018.

In the Indian context, the demand for Aluminium remains strong in line with the increased economic activity witnessed in various aluminium consuming sectors like automobiles, construction, power etc. As the overall economy registers robust growth, and infrastructure projects across the country gain momentum, prospects of the Aluminium industry remain positive. Support from the Government in countering the threat of Aluminium imports can help the domestic Aluminium industry in consolidating its position and competitiveness in the market.

### Dividend and Appropriations

During the year the Company has paid interim dividend @ ₹ 4.70 per equity share amounting in total ₹ 908.48 crores. The Board has also recommended a final dividend of Re.1.00 per equity share amounting to ₹ 193.29 crores. The total dividend payout for the financial year 2017-18 works out to ₹ 1101.77 crores as against ₹ 541.22 crores during the previous year. Dividend including the applicable dividend distribution tax works out to a payout of 98.78% of the PAT against 97.44% of previous financial year.

### MoU Performance

Based on financial performance and achievement of other parameters laid down, your Company is likely to be rated “Excellent” as per the Memorandum of Understanding (MoU), signed with the Government of India for the financial year 2017-18.

### Raw Material Securitisation

- Mining Lease of Panchapatmali Bauxite Mine (Central &

North Block) has been extended up to 16.11.2032 from existing 31.03.2020 by Government of Odisha.

- All regulatory clearances for opening of South Block, Panchapatmali Bauxite Mines has been obtained and the South Block Mine opened & operated w.e.f 22.05.2017. Mining lease is valid upto 19.07.2029.
- G-8 grade coal linkage (2 lakh MTPA) was booked through Linkage Auction route in the Trench-III auction from M/s. NCL for Refinery Plant, which is valid for a period of 5 years equivalent to 2.73 lakhs MTA of G-12 & G-13 grade coal and can be further extended to another 5 years. Fuel Supply Agreement for the same was signed on 21st July, 2017.
- The Fuel Supply Agreements for Unit 1 to 8, CPP, Angul (47.16 LMT), Alumina Plant, Damanjodi (5.47 LMT), TG-I to III of SPP, Damanjodi (3.26 LMT) were renewed for another 5 years w.e.f 1st May, 2018. The FSA amendments for renewal were signed on 27th April, 2018 with M/s. MCL. This ensures coal security for another 5 years for 55.89 LMT linkage coal from M/s. MCL.
- The existing Fuel Supply Agreement for TG-IV (1.01 LMT) was renewed for another 5 years w.e.f 23rd Dec., 2016. The FSA amendment was signed with M/s. MCL on 17th Dec., 2016 with M/s. MCL.
- Your Company is also going to participate for additional 2 LMT, G12 grade linkage coal in the Linkage Auction of Trench-IV scheduled in July/August, 2018 for SPP, Damanjodi.
- In addition to above, your Company is participating in the e-auction coal notified by the subsidiaries of CIL and SCCL for the shortfall quantity against the requirements.



Interim dividend pay-out for 2017-18



- Further, your Company got allocation of Coal mines Utkal D & E from Govt. of India in the year 2016, with a permission to mine 4 million MT per annum to feed existing 2 units of CPP (Unit - 9 & 10) and 2 new proposed units (Unit - 11 & 12) for brownfield expansion. The reserve of Utkal D & E Coal mines will sustain 40 – 45 years at the rate of 4 million MT per annum.
- Your Company is also planning to participate in the Coal block allotment process of Govt. of India, notified in the month of July, 2018 for expansion of Smelter and Power plant.
- Your Company has been issued terms and conditions for grant of Mining Lease by Govt. of Odisha for Pottangi Bauxite Mines and the same have been accepted.
- For part securitisation of Caustic Soda, your Company has formed a JV Company “GACL-NALCO Alkalies & Chemicals Pvt. Ltd.” with Gujarat Alkalies and Chemicals Ltd. (GACL) to set up a Caustic Soda plant and to get assured supply of 50,000 MT of Caustic Soda per annum.
- Your Company had also signed an MoU to form a JV Company with Neelachal Ispat Nigam Ltd. for production of CT Pitch and to supply to NALCO Smelter. Finalisation of the JV agreement is in process.

## PROJECTS UNDER IMPLEMENTATION

### 5<sup>th</sup> Stream of Alumina Refinery

Your Company is in the process of setting up of 5<sup>th</sup> Stream in its existing Alumina Refinery which shall add 1.0 MTPY to its existing installed capacity of 2.275 MTPY (total capacity 3.275 MTPY), at a projected expenditure of ₹ 5,540 crores, based on improved Medium Pressure Digestion technology of M/s. Rio Tinto Alcan International Limited (RTAIL).

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 the project. M/s. M.N. Dasturco, has been appointed as EPCM consultant for Steam and Power Plant of Alumina Refinery. Basic engineering for the project by M/s. RTAIL has been completed and detailed engineering has progressed to the tune of 12%. Process of awarding of long delivery contracts has started. Site activity comprising of survey and soil investigation started since December, 2017.

### Alternate sourcing of Bauxite for 5<sup>th</sup> Stream

Sourcing of Bauxite for 5<sup>th</sup> 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 5<sup>th</sup> Stream expansion.

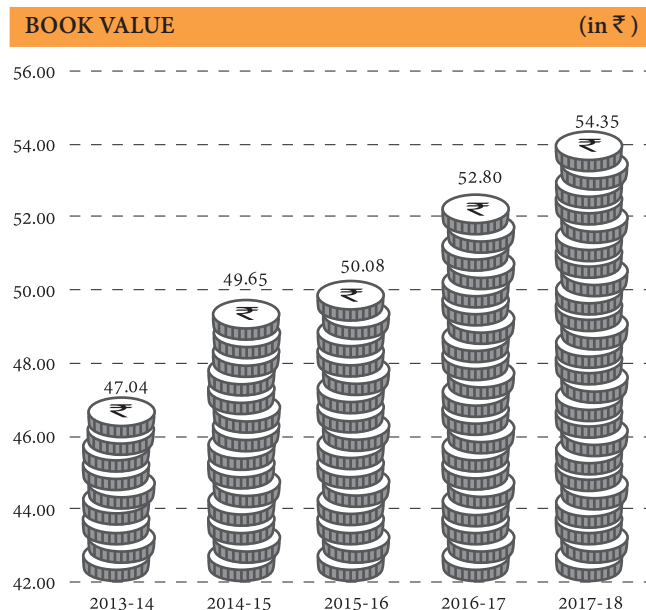
Hence, sourcing of bauxite from South Block of your Company’s

existing Panchpatmali Mines has been planned through setting up of a crushing & conveying system for which a capital expenditure of ₹ 483 crores has been projected.

Process for engagement of EPCM consultant for above project has been initiated.

### Pottangi Bauxite Mines

Pottangi Bauxite Mines (75 Million Tones) has been reserved by Govt. of India in favour of your Company. The status is as follows:



- Ministry of Mines issued Gazette notification on reduced mining lease area (from earlier 1738.04 Ha to 697.979 Ha) on 21.03.2018.
- Govt. of Odisha issued terms and conditions for grant of Mining lease over the reduced area of 697.979 Ha on 14.05.2018 and your Company conveyed acceptance on 15.05.2018.
- EAC considered NALCO’s proposal for issue of ToR for conducting EIA studies for Environmental Clearance in its meeting held on 30.05.2018.
- Authorities are being followed up for conducting the Gramsabha at the earliest for obtaining FRA certificate and compensatory afforestation land for the forest land to be diverted for Pottangi Bauxite mines for issue of Forest Clearance.
- Mining Plan submitted to IBM on 28.05.2018.

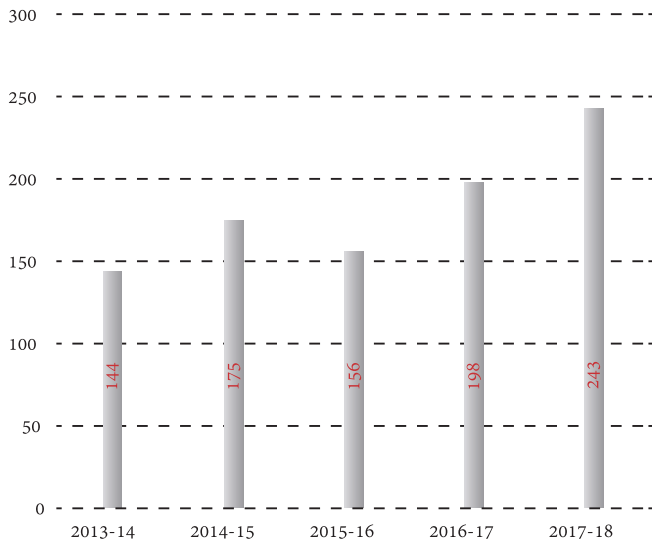
### Utkal D & E Coal Blocks

Utkal-D&E Coal Blocks (200 Million Tones) have been allotted by Govt. of India in favour of your Company in the year 2016. Following activities were undertaken for complying with various



## WIND POWER

(in MU)



conditions to obtain the Mining Lease of Utkal-D & Utkal-E Coal Block combined and mine opening of Utkal-D in 1<sup>st</sup> Phase.

- Terms of Reference (TOR) for mining lease of Utkal-D was issued by Govt. of Odisha on 30.10.2017.
- The process of transfer of land by execution of land deed of Utkal-D has been completed on 04.05.2017.
- Transfer of statutory clearances for Utkal-D from prior allottee in favour of your Company is in process.
- Action are already taken up by M/s. CMPDI for compliance of observation of standing committee of MoC for approval of Mining Plan for Utkal-D&E.
- MECON has been appointed as Transaction Advisor (TA) to engage Mine Developer (MDO), as mining activities of Utkal-D Coal Block is planned in 2019.
- Mining activities for Utkal – D is expected to start in 2nd half of 2019-20.

### 25.5 MW Wind Power Projects

Your Company is in process of augmenting its wind power generation capacity from 198.40 MW to 223.90 MW by adding another wind farm of capacity 25.5 MW at Kayathar, Tamil Nadu at a capital expenditure of ₹ 163 crores. Plant is expected to be commissioned by October, 2018.

### Retrofit Conversion of Flat Bottom Tank to HRD-DCW in Streams #1, 2 & 3 at Alumina Refinery

To improve operational efficiency, your Company is going for retrofit conversion of Flat Bottom settler-washer Tanks to HRD-DCW (High Rate Decanter and Deep Cone washers) in Streams #1, 2 & 3 of its existing Alumina Refinery at an estimated cost of ₹ 355 crores. Following orders have been placed for the project:

- Process Licensing and Basic Engineering Package on M/s. RTAIL.
- Rake Mechanism (Proprietary item) for HRD DCW on M/s. RTAIL.
- EPCM consultancy on M/s. EIL

NIT (Indigenous) has been floated for execution of the project on turnkey basis for balance supply, erection, testing and commissioning of the project.

### BPTG #5 Project

To reduce dependency on power supply from the grid at Refinery, BPTG-5 project was envisaged. The project was commissioned in October, 2017.

### Brownfield Expansion of Smelter and Captive Power Plant

Your Company is planning the brownfield expansion of Smelter at Angul by adding a 5<sup>th</sup> Potline (5 lakh MTPY) and upgradation of pot amperage of existing 4 Potlines from 180 KA to 220 KA (1 lakh MTPY) along with expansion of CPP by addition of 2 units of 660 MW each. M/s. EIL and M/s. DCPL have been engaged for preparation of DPR for Smelter expansion and TEFR for CPP expansion.

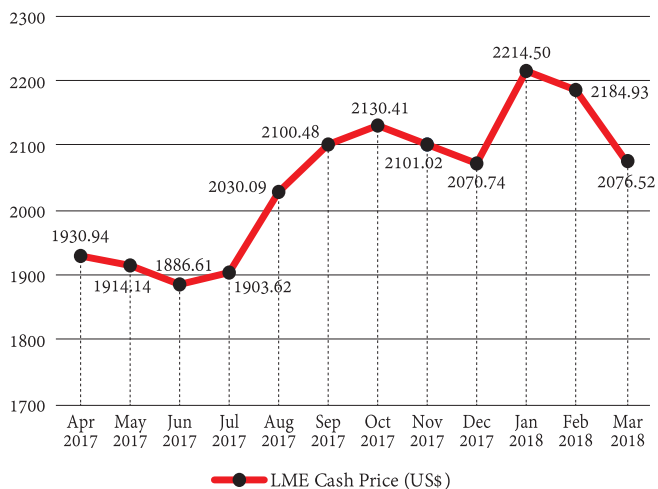
## BUSINESS DEVELOPMENT

- **Caustic Soda Project in JV with Gujarat Alkalies and Chemicals Ltd. (GACL):**  
Your Company has formed a JV Company “GACL-NALCO Alkalies & Chemicals Pvt. Ltd.” with GACL in December, 2015 to set up 2.7 lakh TPA caustic soda plant along with 130 MW (2x65 MW) captive power plant at Dahej in Gujarat.
- **50 (2X25) MW Wind Power Project:**  
Your Company placed order for setting up of first block of 25.5 MW Wind Energy Project at Kayathar in Tuticorin dist., Tamil Nadu in September, 2017. The Company further placed order for setting up of second block of 25.2 MW Wind Energy Project at Viliseri in Tuticorin dist., Tamil Nadu in May, 2018.
- **Coal Tar Pitch Plant in JV with NINL:**  
Your Company has signed an MoU with Neelachal Ispat Nigam Ltd. (NINL) to set up a Coal Tar Distillation plant of 20,000 TPA capacity based on the Coal Tar generated in NINL's Coke Oven Plant for production of liquid CT Pitch and supply to Smelter plant for own consumption.
- **Strategic minerals in overseas:**  
NALCO, HCL and MECL, the three CPSEs under the Ministry of Mines, Government of India have signed an MoU in Sept, 2017 to set up a JV Company to identify, acquire, develop, process and make commercial use of strategic minerals in overseas locations for supply in India and thus boost “Make in India” initiative of Government of India.



## LME CASH PRICE

(in US\$)



- Greenfield Aluminium Smelter in Odisha:**  
 The Company is preparing a Pre-feasibility Report (PFR) for proposed Greenfield Aluminium smelter at Kamakhyanagar or any other suitable location in the State of Odisha along with site selection for proposed Aluminium downstream projects.
- High End Aluminium Alloy Plant:**  
 Your Company has signed an MoU with Mishra Dhatu Nigam Ltd. (MIDHANI) in April, 2017 for establishment of High End Aluminium Alloy Plant in JV mode for Defence, Aerospace & Automobile Sectors.
- Aluminium Downstream Projects:**  
 Your Company is preparing Detailed Project Report (DPR) for establishment of Aluminium Downstream Projects like Alloy Wheel Plant, Extrusion Plant, Value added rolled products Plant and Foil Plant in a suitable location in Odisha.

## CAPITAL EXPENDITURE (CAPEX)

The achievement in CAPEX is ₹ 1080.26 crores in the year 2017-18.

## 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](http://www.nalcoindia.com).

## HUMAN RESOURCES MANAGEMENT

### Presidential Directives on SC/ST reservation

Your Company fully complies with all applicable Presidential Directives and other guidelines in matters of reservation for SC/ST/OBC and other categories like the PWD, Ex-servicemen etc. Out of total manpower strength of 6,776 as on 31.03.2018, there were 1,104 SCs (16.29%), 1,248 STs (18.42%), 828 OBCs (12.22%),

89 PWDs (1.31%) and 14 ESMs (0.21%) on roll. There were a total of 366 lady employees in the Company as on 31.03.2018.

## Industrial Relations

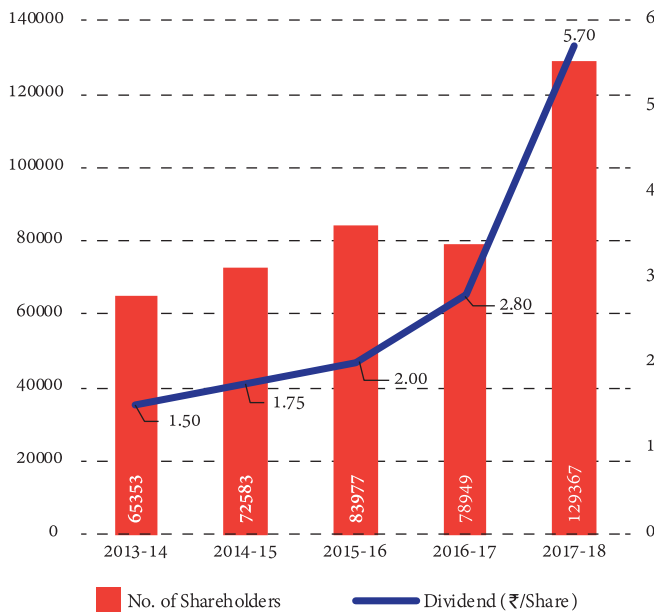
The year 2017-18 witnessed many milestones left behind by outstanding performance by your Company on all fronts in a most conducive industrial relation climate ever. Zero tolerance to indiscipline was the hallmark of IR management. The secret ballot election process for recognition of trade unions was conducted peacefully in all production units of your Company. Issues like poor work culture and work place indiscipline, which used to dampen the work force spirit earlier, were marked by their absence during the year due to various HR interventions. The year was also marked by efforts to enhance employee well-being







## NO. OF SHAREHOLDERS vs DIVIDEND



through providing career growth opportunities to a good number of executives stagnating for long years, resolving long pending employee issues like rationalization of pension contribution for executives, revision of Special Financial Package for non-executive employees of Mines, payment of revised bonus and enhanced wages to contract labour, improvement in quality of health care facilities at your Company's hospitals etc. Pay revision for executives of your Company was implemented in terms of the guidelines issued by the Government. HR interventions like HR Audit, Talent Management and Succession Planning etc. were taken up keeping in view the strategic HR needs of your Company.

### Social Accountability 8000

For creating and maintaining a decent work place, 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 stakeholders including employees, owner, customers, suppliers and other interested parties.

Your Company has successfully completed the transition process from SA 8000:2008 version to SA 8000:2014 version. All the Units including Corporate Office are certified to SA 8000:2014 Standard as on date.

### CORPORATE SOCIAL RESPONSIBILITY (CSR)

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

### VISIT OF PARLIAMENTARY COMMITTEES

The following Parliamentary Committees visited the Company during the year 2017-18:

- Study visit of Parliamentary Committee on Subordinate Legislation, Rajya Sabha between 15.04.2017 to 22.04.2017 at Bhubaneswar.
- Study visit of Parliamentary Committee on Papers Laid on the Table, Rajya Sabha between 17.04.2017 to 19.04.2017 at Puri & Bhubaneswar.
- Study visit of Department related Parliamentary Standing Committee on Commerce between 19.04.2017 to 21.04.2017 at Vijayawada.
- Study visit of Parliamentary Committee on Petitions, Lok Sabha between 21.08.2017 to 25.08.2017 at Thiruvananthapuram, Kerala.
- Study visit of Department related Parliamentary Standing Committee on Science & Technology, Environment & Forests between 22.08.2017 to 24.08.2017 at Bhubaneswar.
- Study visit of Parliamentary Standing Committee on Agriculture on 8th & 9th November, 2017 at Bhubaneswar.

### 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.

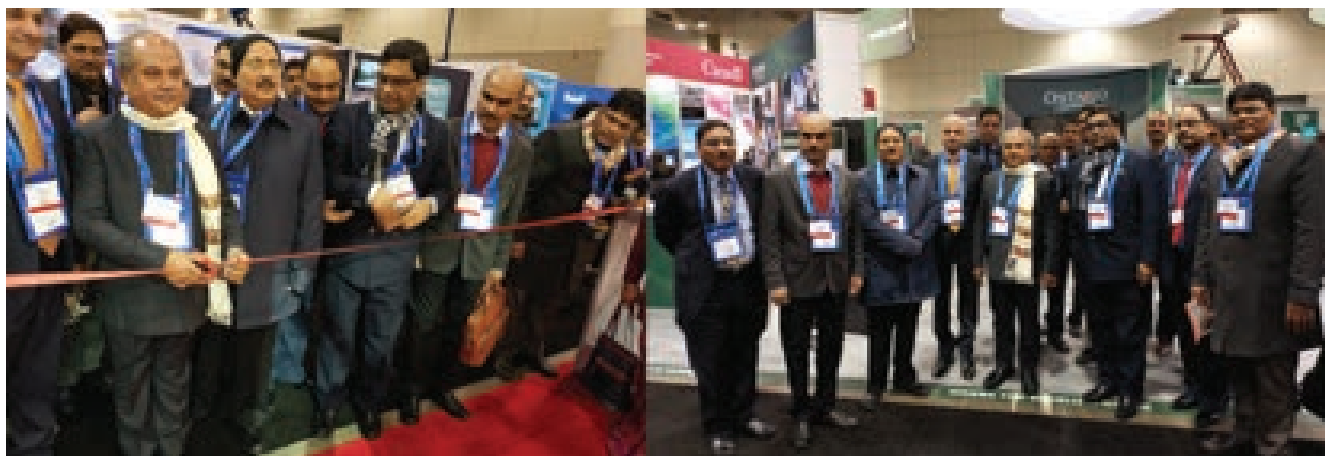
The report also contains:

- various initiatives undertaken to further business development.
- the details in respect of adequacy of internal financial controls with reference to the financial statements and risk management practices.
- various initiatives taken up in the field of environment management at different units of your Company.

### INFORMATION TECHNOLOGY FOR DIGITAL TRANSFORMATION

Your company is leveraging Information Technology (IT) to augment the organization's quest for sustainable growth and continuous improvement in processes and business practices.

Enterprise Resource Planning (ERP) application has been implemented to integrate all the business functions such as Sales and Distribution, Finance & controlling, Materials, Human Resource and Production planning to ensure uniform process, to improve information availability, transparency and decision making. The ERP application was upgraded to implement GST.



*Hon'ble Minister, Mines with senior officials of Ministry and CMD, NALCO at PDAC, Canada*

E-procurement of goods are carried out through SAP SRM and Central Public Procurement Portal. Centralized Non-ERP Applications such as Payroll, Attendance, Perquisites, Advances and Leave systems have been implemented. A centralized Hospital Management System has been implemented for the Company hospitals at Angul and Damanjodi.

For governance and monitoring, online web-based application such as Capital Expenditure, Fund monitoring, Monitoring and Compliance Management systems, Monitoring of Internal Audit observations etc. have been implemented.

Adding a new dimension to the digital initiatives, your Company has launched Mobile Apps and Web-based applications for its stakeholders.

“NISARG” - NALCO Initiatives for Social Awareness and Responsible Growth. A vibrant App for Citizens at large on Nalco CSR activities.

“NAGINAA” - NALCO Grahak Information and Networking App for All – A feature rich App for Domestic Customers providing information such as Account Status, Despatch Plan, history, MOU calculator and product pricing information.

True to its adage “Once a Nalconian always a Nalconian”, your Company has launched an App for its Retired Employees-“Hamesha Nalconian”. The App provides features like Medical Reimbursement information, In-house e-magazine, important circulars & policies.

A Portal for contract labour has been deployed to facilitate contractors to manage contract workers attendance, payments and statutory returns.

On the Infrastructure front, fault tolerant and redundant MPLS based WAN connects all the offices and units. The in-house state-of-the-art Data Center to host the Business critical Applications

with Disaster Recovery center are in place. In an effort towards better communication and collaboration, multichannel video conferencing has been implemented. Virtualized computing facility has been implemented for the ERP landscape resulting in better utilization of computing resources.

The IT roadmap is aligned to partner in your Company's growth. Emphasis is being placed on Analytics and Decision Support system to aid decision making process at various levels of management. Thrust is also being laid on Mobile solutions for stakeholders. In pursuit of an efficient, transparent and secure file processing system, e-office is being implemented.

The IT practices are being aligned to meet the ISO 27001 standards covering the full arena of IT Security for IT infrastructure, Applications and Users. IT infrastructure and application security is ensured with network gateway and endpoint security solutions.

## **TOTAL QUALITY MANAGEMENT**

- **Integrated Management System(IMS):**

Transition Audits of the existing Quality Management Systems and Environment Management Systems operating in all the production units i.e. Smelter, Refinery, Mines and CPP including the Corporate Marketing function were successfully completed during the year. This was necessary in order to comply with the mandatory requirements of the latest 2015 edition of ISO 9001 and ISO 14001 standards. As on 31.03.2018, all the units are operating with valid ISO 9001, ISO 14001 and OHSAS 18001 certificates having international accreditation from UKAS, U.K. & RvA, Netherlands.



- **Energy Management:**

- i) All the three production units CPP, Smelter and Alumina Refinery, included in the Perform, Achieve & Trade (PAT) scheme, are operating with valid ISO 50001 certificates, having accreditation from RvA, Netherlands.
- ii) Comprehensive Energy Audits of the above three units are also completed as per statutory requirements of BEE Regulations, 2010.
- iii) Total 36,119 Energy Saving Certificates issued to your Company by Ministry of Power, Govt. of India for exceeding the PAT Cycle1 targets are banked and incorporated in financial accounting.

- **QCs & Kaizen:**

- 54 active Quality Circles have completed in total 57 projects during the year. In addition to the above 54 QCs, 30 new QCs are also formed during the year, taking the total number of QCs to 84.
- 14 Quality Circles from different units of your Company participated in the National QC Convention, organised by QCFI at Mysuru and out of this, 7 QCs were placed in the highest category of recognition i.e. “Par-Excellence”.
- The NALCO Utkal Gaurav Madhu Sudan Das (NUGMSD) Quality Award was instituted and administered during the year. Out of the total 15 manufacturing units from Odisha who had submitted application documents for the award, the best unit from each category i.e. Large, Medium and Small category, were conferred with the prestigious state level awards.
- The All Odisha QC Convention was also organised for the 22<sup>nd</sup> successive year by your Company during April, 2017 to encourage and recognise top performing Quality Circles & TPM Circles in the state.

- **Business Excellence Initiative:**

Business Excellence initiative, in line with the EFQM framework of Business Excellence, for Operational Excellence was implemented at Smelter. Based on external assessment of the unit the Smelter unit was conferred with “Emerging Leader in Operational Excellence” award in the premier National level Quality Summit organised by CII during November, 2017.

- **5S System Implementation:**

Workplace Management System based on the 5S system pioneered by Japan, is implemented in total 181 zones at Alumina Refinery, Smelter, CPP and Mines.

## IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY

As per the Official Language Act, 1963 and Official Language Rule, 1976, implementation of Hindi has been done in your Company.

- A Special function in Hindi organised on the Occasion of Pandit Deendayal Upadhyaya Birth Centenary on 25th September, 2017. Hindi Essay, Poster and Quiz competitions on his ‘Personality and Contributions’ were organised among the member offices of Town Official Language Implementation Committee (Undertakings), Bhubaneswar operating under chairmanship of your Company and prizes were distributed to the winners in the function. A Hindi exhibition was also organised on the Life and Times of Pandit Deendayal Upadhyaya. One Hindi souvenir was also published on his “Vyaktitwa and Krititwa” in which the special articles written by dignitaries of India was published with the consultancy assistance of Pandit Sudhakar Sharma, Member of Hindi Advisory Committee of Ministry of Mines, GOI, and a reputed Hindi scholar.
- To promote use of Hindi in official work, Hindi fortnight was observed from 01.09.2017 to 14.09.2017 at Corporate Office, Bhubaneswar, at S & P Complex, Angul and M & R Complex, Damanjodi. Several Hindi competitions were organised separately for Hindi speaking and Non-Hindi speaking employees and students. On concluding day function at Damanjodi, Hindi ‘Geet-Sangeet’ program was organised by a troupe of Jagdalpur.
- Hindi Teaching Program was implemented at Corporate Office, S&P Complex and M&R Complex and the employees who do not have working knowledge of Hindi, were nominated for Hindi Training, Hindi Typing and Hindi Computer training. Hindi Workshops were organised to



*Empowering Women through Skill Development by NALCO Foundation*



impart the training for employees in practical sessions for working in Hindi.

- Two Meetings of Town Official Language Implementation Committee (Undertaking) Bhubaneswar and Town Official Language Implementation Committee, Angul, each was held under the chairmanship of your Company.
- Website of Company [www.nalcoindia.com](http://www.nalcoindia.com) is being regularly updated both in Hindi and English languages.
- During the year, your Company has provided faculty assistance on the subject “Unicode and Technical Facilities in Computer and Mobile phones in Hindi & Regional Languages” in the workshops organised by different CPSUs and at Rajbhasha Sammelans.
- Bilingual notings, Help-files for self-learning of Inscript Keyboard for working in Hindi are also uploaded in the Intranet of the Company.

## SPORTS

- Your Company continues to promote sports and sports person in the country. As a part of promotion of sports events, your Company sponsored NALCO Cup State Hockey Championship, NALCO Cup State Open Tennis Tournament, NALCO Cup Golf Tournament, NALCO Cup Basketball Championship, Biju Pattanaik State Cricket Championship, State Badminton Championship and also organised awareness camp for under-17 FIFA World Cup.
- As a matter of policy to encourage young sports persons, your Company felicitates young and aspiring sports persons of the State who are participating and excelling in their field of sports. Ms. Aparajita Gochikar, an eminent International Chess player and Ms. Geeta Bhuyan, an eminent international Baseball player were felicitated by your Company.
- Your Company also offered job to four Indian women hockey players from the state who participated in the Rio Olympics, as a policy to encourage young sports persons. Among them Ms. Sunita Lakra, has already joined the Company. Various activities are also organised at Unit level to promote Sports activities.

## VIGILANCE

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

- 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



*Inauguration of Pandit Deendayal Upadhyay Marg in NALCO Nagar premises*

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, Bhubaneswar, S&P Complex, Angul and M&R Complex, Damanjodi.

- The vigilance functions are generally in the nature of preventive, punitive, surveillance and detection.

### The Vigilance Department functions in brief are;

- Investigating complaints.
- Surprise checks in sensitive areas.
- Study of contract/purchase/sales files and Internal Audit Reports which are good source of information for vigilance cases.
- Suggesting system improvements.
- Circulation of CVC Circulars/ guidelines.
- Giving vigilance clearances to various employees for various purposes, viz. NOC for issue of Passport, Promotion, Resignation/ Superannuation/ Voluntary Retirement, Conferment of Award, Foreign Assignment, Deputation and appointment of officers to Board level etc.
- Scrutiny of Property Returns.
- Advising on rotation of officials in sensitive posts.
- Advising CMD on vigilance matters and matters relating to disciplinary procedures.
- Liasoning with CBI etc.
- Implementation of Integrity Pact.
- Conducting training programmes for awareness among employees and general public as a part of preventive vigilance mechanism.



### Functions of CVO

The functions of CVO are as follows:

- Maintaining a good link with CVC and CBI besides organizing structured review meeting with CBI.
- Furnishing of various return/ report to Ministry/CVC/CBI.
- Assisting CVC in selection of Independent External Monitors (IEMs) for I.P (Integrity Pact).
- Assisting management in formulation/updation of anti-corruption policies/ measure.

### 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 behavior.

The purpose of this policy is to provide a framework to promote responsible and secure whistle blowing to prohibit managerial personnel action. 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](http://www.nalcoindia.com).

### 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 its management to high ethical standards at carrying on business in an open, transparent and honest ways aimed at improving corporate culture, compliance with the best practices in corporate governance and maintaining the business reputation in your Company.

### Fraud Reporting

No fraud has been reported by the Auditors under Section 143(12) of the Companies Act, 2013 during the year under report.

The company has a Board approved Fraud Prevention Policy and the same is placed in the Company's website [www.nalcoindia.com](http://www.nalcoindia.com)

### Integrity Index Development

Integrity has been recognised as the integral part of a Company ensuring accountability, enhancing competency and boosting the ethical values of the personnel resulting in a corruption free environment. Integrity index is the image of a company other than financial parameters. In this regard, a framework was envisaged by CVC in 2017-18 to measure integrity index in Public Organizations for ensuring probity. 25 PSUs, State organizations and Ministry including your Company were selected by CVC for supporting IIM-Ahmedabad in developing the framework.

Performance, integrity perception, enabling systems, process management, compliance are the broad parameters with detail questionnaire to bring out the level of probity, integrity, efficiency, transparency and compliance in the Organizations. The integrity index is to be computed based on these parameters including perceptions of the internal and external stakeholders.

Your Company responded actively by participating in the process in a time bound manner and bridging in the gaps in the processes in many areas during the course of submission in the IID portal, which was finally submitted in February, 2018.

### 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 appointed.

The following are the details of the RTI applications and appeals during 2017-18:

	Under Process as on 01.04.2017	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 31.03.2018
Requests	26	219	Nil	74	153	18
First Appeals	03	46	Nil	Nil	49	Nil

Your Company has been aligned with the Online RTI portal of Department of Personnel and Training ([www.rtionline.gov.in](http://www.rtionline.gov.in)) with effect from 18.01.2017. The RTI requests are received and replied through this online portal also.

### 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 years 2017-18 and 2018-19 have been paid on time to the stock exchanges.

### DISINVESTMENT

#### Bharat 22 ETF:

During 16th November, 2017 to 21st November, 2017, 9,20,78,399 number of equity Shares (4.76% of the paid-up capital) of your Company were transferred to Bharat 22 ETF scheme (a part of Government of India's disinvestment programme) by Govt. of India in two tranches (1st tranche between 16th



November, 2017 & 17th November, 2017 for 8,49,74,665 shares and 2nd tranche between 20th November, 2017 & 21st November, 2017 for 71,03,734 shares).

Further, Govt. of India has divested 6,98,88,827 shares (3.61% of the paid-up capital) of your Company under Bharat 22 ETF scheme during 19th to 22nd June, 2018.

#### Employee Offer – Post offer for Sale:

Govt. of India transferred 76,17,057 numbers of equity shares (0.39% of the paid-up capital) of your Company on 21st November, 2017 to the eligible employees as a part of employee offer subsequent to Offer for Sale which took place on 18th and 19th April, 2017.

After the transfer of shares to Bharat 22 ETF and eligible employees, the shares held by President of India has come down from 65.36% to 56.59% of the total paid-up capital of the Company.



Distribution of “Charkha” by NALCO under Sahyog scheme to SHG.

### SERVICES TO SHAREHOLDERS

All matters relating to transfer/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. Karvy Computershare Pvt. Ltd., Hyderabad.

### PAYMENT OF ANNUAL CUSTODY/ISSUER FEES TO DEPOSITORIES

Annual connectivity fees and custody fees/issuer fees for the years 2017-18 and 2018-19 have been paid on time to both M/s. National Securities Depository Ltd. and M/s. Central Depository Services (India) Ltd.

### BUSINESS RESPONSIBILITY REPORT

In line with Regulation 34(2)(f) of SEBI (LODR) Regulations, 2015, a Business Responsibility Report for 2017-18 describing various initiatives taken by the Company on social, environmental

and governance perspective, is attached at **Annexure III** which forms part of this Annual Report.

#### Reports on Sustainable Development

- The mandatory report on sustainability i.e. the Business Responsibility Report addressing the economic, environmental, social & governance aspects as required by SEBI, was completed and published & web-hosted.
- In addition to above report, a standalone report is prepared on voluntary basis, aligned with GRI G4 guidelines.

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

#### Research & Development

- 150 m<sup>3</sup> per batch Defluoridation Plant with Emrion Nano Technology of ETPL first of its kind in the world is running successfully, meeting the environments norm stipulated by OSPCB at Smelter Plant. Performance Guarantee (PG) test of the Emrion plant has been completed successfully on 19th March, 2018. One MoU was signed with M/s. ETPL, Hyderabad for royalty sharing on the technology commercialized by your Company.
- Filtration trials of Red mud carried out in pilot setups with M/s. Unitop Multitech India Pvt. Ltd. and M/s. FL Smith to establish the efficiency of pressure filtration for Red mud filtration. The data generated will be used for plant scale implementation.
- R&D has developed a process for improvement of oxidation behaviour of anode which has been successfully implemented in the Smelter plant.
- “Extraction of Alumina from Partially Lateritized Khondalite (PLK) at laboratory scale” has been completed and the basic flow sheet for the process has been developed by CSIRO, Australia.
- NALCO & IIT, Bhubaneswar have jointly developed a process for “Synthesis, Characterization and Development of Red mud-Fly ash based Geopolymer concrete” which has a potential for application in civil activities.
- Two patent applications:
  - i) A process for beneficiation of bauxite ore to obtain an upgraded alumina.
  - ii) Partially Lateritized Khondalite based Ceramic Proppants and its preparation were filed.
- Six patent applications, filed earlier have been granted during the year 2017-18.



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.

### **DIRECTORS' RESPONSIBILITY STATEMENT**

Your Directors' pursuant to the provisions of Section 134(3)(c) and 134(5) of the Companies Act, 2013, hereby confirm that;

- in the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;
- 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;
- 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;
- the directors had prepared the annual accounts on a going concern basis;
- 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
- 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.

### **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.

### **CONTRACTS AND ARRANGEMENTS WITH RELATED PARTIES**

The Policy on Related Party Transactions has been approved by the Board and placed in the Company's website which can be accessed at [www.nalcoindia.com](http://www.nalcoindia.com).

Your Directors draw the attention of the members to Note No. 38 of the financial statements which sets out related party disclosures.

No contract has been entered with any related party during the year under report. However, a report in Form AOC-2 is attached at **Annexure-VI** to this report.

### **DIRECTORS AND KEY MANAGERIAL PERSONNEL**

In accordance with the provisions of the Act, the Board of Directors have appointed the following as Key Managerial Personnel:

- Dr. T. K. Chand, Chairman-cum-Managing Director
- Shri K. C. Samal, Director (Finance)
- Shri V. Balasubramanyam, Director (Production)
- Shri Basant Kumar Thakur, Director (HR)
- Shri S. K. Roy, Director (P&T)
- Shri P. K. Mishra, Director (Commercial) w.e.f. 23.04.2018.
- Shri N. K. Mohanty, Company Secretary w.e.f. 01.06.2017.

#### **Declaration of Independence by Independent Directors**

The 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.

#### **Meetings of the Board**

During the year, 7 (Seven) Board meetings were held. Details of the meetings are available in the report on Corporate Governance (**Annexure-V**) placed in this Annual Report.

#### **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 to this report.

### **EXTRACT OF ANNUAL RETURN**

Extract of Annual Return of the Company in the prescribed Form MGT-9 is annexed herewith as **Annexure VII** to this Report.

### **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:

- Details relating to deposits covered under Chapter V of the Act.
- Issue of equity shares with differential rights as to dividend, voting or otherwise.
- Issue of shares, sweat equity shares and ESOS to employees of the Company.



- Neither CMD nor the Whole-time Directors of the Company receive any commission from the Company.
- 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, as amended and notification dated 5th July, 2017.

- 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).
- 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.
- 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.



*Launch of Battery Operated Vehicles for senior citizens, differently-abled passengers and sick people by NALCO Foundation*

#### **Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013**

During the year, no case was reported under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

#### **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 no. 9 and 11 to Financial Statements 2017-18.

#### **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. 40 and 41 of the Consolidated Financial Statements 2017-18 respectively.

Salient features of JV/Associate companies in Form AOC-1 (Note 41) forms integral part of the consolidated financial statement of the Company.

#### **AWARDS & ACHIEVEMENTS**

- Prestigious SCOPE Award for Excellence and Outstanding Contribution to Public Sector Management – Institutional Category I (Maharatna & Navratna PSEs). Also received another award for meritorious performance in CSR. Your Company is one of the top two Navratna/Maharatna companies receiving double prestigious awards.
- Appreciation Award in large mines category at CII Eastern Region Safety Health & Environment Excellence Awards 2016-17 to Panchpatmali bauxite mine.
- EEPC Silver Trophy, in the Large Enterprise category, for its outstanding export performance during the year 2014-15.
- Smelter Plant of your Company has bagged the National Energy Conservation Award in Aluminium Sector for the year 2017.
- Four prizes to Panchpatmali bauxite mine in inter-mines competitions held during the Half-yearly Safety Week Celebration of "Odisha Metalliferous Mines Safety Week Celebration Committee 2017-18".
- Best Exporter Award for the year 2015-16, under metallurgical products category at the State Export Award Ceremony.
- Kalinga Safety Award (Silver) for the year 2016 to Alumina Refinery during Odisha State Safety Conclave-2017.
- Five Star Rated Mines to Panchpatmali Bauxite Mines for exemplary performance in implementation of Sustainable Development Framework during 2016-17.
- Best PSU Award in the 'Brands of Odisha: Pride of India', the Corporate Excellence Awards, instituted by leading Odia daily 'The Sambad'.
- State Safety Award for "Lowest Weighted Frequency Rate of Accidents for the performance Year 2016" to NALCO's Alumina Refinery.





- k) Award to Alumina Refinery for “Efficient Use of Fly Ash” by Mission Energy Foundation in the 7th edition of “Fly Ash Utilization Conference Expo Award - 2018”.
- l) Kalinga CSR Award for the year 2016 during the 2nd National Seminar on ‘CSR Initiatives’.
- m) National Business Leadership Award for CPSE in recognition of the outstanding achievements in Business and Social Service.
- n) Best CEO Award to Dr. Tapan Kumar Chand, CMD for promoting probity, integrity, transparency and inclusive growth during the two-day 17th Annual Geomintech Conference.
- o) Corporate Governance Award to Dr. Tapan Kumar Chand, CMD at 21<sup>st</sup> International Conference on Non-ferrous Minerals & Metals.

## IMPLEMENTATION OF GOODS AND SERVICES TAX (GST)

As per the Govt. of India notification on GST law, the Company has migrated to Goods and Services Tax with effect from 1st July, 2017. With required modification/ developments in ERP, related business solutions in SAP (Materials Management, Sales and Distributions, Finance & Control etc.) have been made GST compliant.

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

You will be pleased to know that your Company has received ‘Nil’ comments from C&AG on the standalone financial statements of the Company. Further, C&AG has also given ‘Nil’ comment on the supplementary audit conducted by them on the consolidated financial statements of the Company. Their comments are placed elsewhere in this Annual Report.

## AUDITORS

### Statutory Auditors

M/s. Guha Nandi & Co., Chartered Accountant and M/s. Patro & Co. Chartered Accountant were appointed as joint auditors of the Company by the Comptroller and Auditor General of India for the financial year 2017-18.

The Statutory Auditors’ reports on the Standalone and Consolidated Financial Statements are enclosed to this report. The observations made in the Auditors’ reports are self-explanatory and therefore do not call for any further comments.

### 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 2017-18.

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. Tanmaya S Pradhan & Co, as the Cost Auditors for the year 2017-18.

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

### Secretarial Auditors

The tenure of M/s. Saroj Ray & Associates, Practicing Company Secretaries was extended for undertaking Secretarial Audit job of your Company for 2017-18 in terms of Section 204 of the Companies Act, 2013 and Rules made there under. The report of the Secretarial Auditors together with the explanations of the management on the qualifying remarks of Secretarial Auditors is enclosed as **Annexure VIII** to this report.

### Internal Auditors

Your Company has appointed the following CA firms for carrying out Internal Audit functions of the Company for the financial year 2017-18:

- M/s. SRB & Associates for Corporate Office, Bhubaneswar.
- M/s. SCM & Associates for Smelter & Power Complex, Angul.
- M/s. Rao & Kumar for Mines & Refinery Complex, Damanjodi & Port Facilities, Visakhapatnam.
- M/s. Bhatia & Bhatia for Northern Regional Office, New Delhi.
- M/s. Prabir Ranjan Datta & Co for Eastern Regional Office, Kolkata.
- M/s. Raghavan & Muralidharan for Southern Regional Office, Chennai.
- M/s. MKPS & Associates for Western Regional Office, Mumbai.

## DIRECTORS

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

### Appointment

- Shri Nagendra Nath Sharma was appointed as Part-time Non-official (Independent) Director w.e.f 06.09.2017.
- Smt. Achla Sinha was appointed as Part-time Non-official (Independent) Director w.e.f 08.09.2017.



- Dr. K. Rajeswara Rao, Additional Secretary, Ministry of Mines was appointed as Part-time Official Director w.e.f. 19.02.2018.
- Shri Anil Kumar Nayak, Joint Secretary, Ministry of Mines was appointed as Part-time Official Director w.e.f. 27.03.2018.
- Shri Pradip Kumar Mishra was appointed as Director (Commercial) of the Company w.e.f. 23.04.2018.

#### Cessation

- Shri Subhash Chandra, Joint Secretary, Ministry of Mines ceased to be Part-time Official Director on the Board of your Company w.e.f 16.02.2018.
- Dr. Niranjana Kumar Singh, Joint Secretary, Ministry of Mines ceased to be Part-time Official Director on the Board of your Company w.e.f 26.03.2018.

Your directors wish to place on record their appreciation for the valuable services rendered by Shri Subhash Chandra and Dr. Niranjana Kumar Singh during their tenure on the Board of your Company.

#### ACKNOWLEDGEMENT

Your Directors wholeheartedly express their appreciation for the continued and unstinted support of Government of India particularly from Ministry of Mines and other Ministries/ Departments of the Government of India, Government of Odisha,

Mahanadi Coalfields Ltd., Indian Railways, Comptroller and Auditor General of India, the Director General of Commercial Audit & Ex-officio Member, Audit Board, Kolkata, Statutory Auditors, Cost Auditors, Secretarial Auditors, Internal Auditors, Bankers, Solicitors, JV Partners, Business Associates, other Government agencies and CPSEs for the co-operation rendered by them during the year.

Your Directors also acknowledge the excellent support extended by the valued and esteemed domestic and international customers, vendors and also 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, commitment, enthusiasm, unstinting efforts and sincere services rendered by the employees at various levels and due to the active support and co-operation received from the Trade Unions & Officers' Associations for sustained improvements. The Company's consistent growth was made possible due to their hard work, solidarity, co-operation and support.

For and on behalf of Board of Directors

(Dr. Tapan Kumar Chand)

Chairman-cum-Managing Director

Place: Bhubaneswar

Date: 25.07.2018



NALCO's Tableau on State-level Republic Day Parade



# ANNUAL REPORT ON CSR ACTIVITIES 2017-18

## Annexure-I

**1. A brief outline of the Company's CSR Policy, including overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programs.**

NALCO 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. As per the mandate of Companies Act 2013, since 2014-15 onwards, the Company has been spending 2% of its average net profit during the three immediately preceding financial years under different heads stipulated under Schedule VII of the Companies Act, 2013.

The detailed Board approved CSR Policy of the Company is placed at Company's website i.e. [www.nalcoindia.com](http://www.nalcoindia.com).

**2. The Composition of the CSR Committee:**

Shri D Mahanta, Independent Director, Chairman  
 Shri S Sankararaman, Independent Director  
 Shri M Sahu, Independent Director  
 Smt. Kiran Ghai Sinha, Independent Director  
 Shri N.N. Sharma, Independent Director  
 Shri K.C.Samal, Director (Finance)  
 Shri V. Balasubramanyam, Director (Production)  
 Shri B. K. Thakur, Director (HR)

**3. Average Profit Before Tax(PBT) of the company for last three financial years:**

₹ 1,39,378.00 lakh.

**4. Prescribed CSR expenditure (two percent of the amount as in item 3 above):**

As per guidelines under Schedule VII of the Companies Act, 2013, the prescribed CSR expenditure for 2017-18 is ₹ 2788.00 lakh.

**5. Details of CSR spent during the financial year:**

**(a) Total amount spent for the financial year:**

₹ 2,901.40 lakh

**(b) Amount unspent, if any**

Nil

**(c) Manner in which the amount spent during the financial year is detailed below.**

(₹ in Lakh)

1	2	3	4	5	6	7	8
Sl. No.	CSR Project or activity identified	Sector in which the Project is covered	Projects or programmes (1) Local areas or other (2) Specify the State and district where projects or programmes was undertaken	Amount outlay (budget) project or program wise	Amount spent on the projects or programs Sub-head : (1) Direct expenditure on projects or programs (2) Overheads	Cumulative expenditure up to the reporting period	Amount spent: Direct or through implementing Agency
01	Health outreach Program- Mobile Medical Units, Diagnostic & awareness building through Information, Education, Communication (IEC) activities.	Point No.(i) of Schedule VII- Promoting preventive health care	Koraput & Angul District of Odisha and Visakhapatnam in Andhra Pradesh	873.99	485.61	723.83	Nalco Foundation & directly by the Company
02	(a) Construction of Toilets under SVA, Construction of House Hold Toilets under ODF initiative, School Toilets, Provision of water supply to toilets constructed under Swachh Vidyalaya Abhiyan.	Point No.(i) of Schedule VII- Promoting preventive health care and sanitation	Koraput & Angul District of Odisha & Visakhapatnam and Kakinada in Andhra Pradesh	1,058.90	628.07	930.08	Nalco Foundation & directly by the Company



(₹ in Lakh)

1	2	3	4	5	6	7	8
Sl. No.	CSR Project or activity identified	Sector in which the Project is covered	Projects or programmes (1) Local areas or other (2) Specify the State and district where projects or programmes was undertaken	Amount outlay (budget) project or program wise	Amount spent on the projects or programs Sub-head : (1) Direct expenditure on projects or programs (2) Overheads	Cumulative expenditure up to the reporting period	Amount spent: Direct or through implementing Agency
	(b) Swachh Iconic City Project-Puri	Point No.(i) of Schedule VII- Promoting preventive health care and sanitation	Puri district of Odisha	1,343.33	641.46	641.46	Nalco Foundation & directly by the Company
03	Providing safe drinking water to periphery villages of plants and during Rathayatra at Puri	Point No.(i) of Schedule VII- Making available safe drinking water.	Angul, Koraput & Puri district of Odisha	263.58	76.76	216.11	Nalco Foundation & directly by the Company
04	Promoting education, sponsoring formal education of tribal children in reputed residential schools	Point No.(ii) of Schedule VII- Promoting education including special education	Koraput, Angul ,Khurdha District of Odisha & Varanasi in Uttar Pradesh	3,494.80	573.34	6,011.42	Nalco Foundation
05	Providing employment enhancing training to unemployed youth	Point No.(ii) of Schedule VII- Employment enhancing vocational skill	Angul, Koraput & Khurda district of Odisha	484.40	82.81	174.81	Directly by the Company
06	Empowering women through distribution of Charkha to women weaver & spinner in villages	Point No.(iii) of Schedule VII- Empowering women	Khurda, Koraput and Puri district of Odisha	23.50	13.50	13.50	Nalco Foundation
07	Ensuring environmental sustainability, ecological balance through plantation, roof top solar power system.	Point No.(iv) of Schedule VII- Ensuring environmental sustainability, ecological balance	Koraput & Khurda district of Odisha	796.75	79.22	399.66	Nalco Foundation & directly by the Company
08	Contribution towards protection of national heritage and culture and development of traditional arts and handicrafts.	Point No.(v) of Schedule VII- Protection of national heritage , art & culture	Koraput & Sambalpur district of Odisha	186.28	61.84	152.87	Directly by the Company
09	Contribution to the Prime Minister's relief Fund/Central Govt. Fund for socio-economic development/welfare of SC/ST/OBC/Minorities/ Women	Point No.(viii) of Schedule VII- Contribution to Prime Minister's Relief Fund or any other fund set up by Central Govt.	PAN India	400.00	—	400.00	Nalco Foundation
10	Rural development activities in periphery villages and other areas.	Point No. (x) of Schedule VII- Rural development projects.	Angul and Koraput district of Odisha, Gwalior and Shivapuri district of Madhya Pradesh & Vizianagaram and Visakhapatnam district in Andhra Pradesh	1,665.55	183.63	697.29	Nalco Foundation & directly by the Company
11	Administrative Expenditure for carrying various CSR Projects/Programme	—	—	206.01	75.16	112.52	Nalco Foundation
			<b>Total:</b>	—	<b>2,901.40</b>	<b>10,473.55</b>	—



- The above CSR expenditure forms part of the audited financial statements for the year 2017-18.
- Nalco Foundation is a Trust under Indian Trust Act exclusively set up to take up CSR activities of the Company.
- Some projects have been executed by Nalco Foundation with the help of appropriate NGO's operating within the operational areas of the Company.

**6. In case the Company has failed to spend the two percent of the average net profit of the last three financial years or any part thereof, the Company shall provide the reasons for not spending the amount in its Board report.**

The Company has spent the two percent of the average net profit of the last three financial years.

**7. Future CSR Strategy**

NALCO will continue to focus its projects in alignment with the flagship programs of Government of India like Iconic Places, ODF etc. under Swachh Bharat Abhiyan; enhancing employability under Skill India; promoting education of girl students under **Beti Bachao Beti Padhao**. The much appreciated program “**Nalco ra Aliali Jhia**” will be scaled up and will be implemented in close collaboration with Kendriya Vidyalaya on PAN India basis. Going a step further to supplement and complement the Government of India's initiative for development of “Aspirational Districts”, the Company will augment the activities in two districts identified by Niti Ayog namely- Koraput and Dhenkanal in the State of Odisha.

**8. The implementation and monitoring of CSR Policy, is in compliance with CSR objectives and policy of the Company.**

Sd/-

(Dr. T.K. Chand)

Chairman-cum-Managing Director

Sd/-

(Dipankar Mahanta)

Independent Director & Chairman  
CSR & Sustainability Development Committee



### Industry Structure and Developments

#### Alumina

During the Year 2017, total world production of metallurgical grade Alumina was 124.02 Million Tonnes, registering a growth of 7.9% against 114.96 Million Tonnes produced during 2016. Alumina consumption during 2017 was 123.89 Million Tonnes as against 115.06 Million Tonnes consumed during 2016, expanding by 7.7% during the year. China was the major contributor in both production and consumption, having 54.9% share in production and 57.5% share in consumption of Alumina.

World Metallurgical Grade Alumina (MGA) demand is expected to reach 129.2 Million Tonnes in 2018, representing a year-on-year increase of 4.3%. Outside China, Alumina demand is expected to rise in 2018 as disrupted capacity in Oman, Australia and Bahrain returns to full output. US restarts are also slated for 2018.

Chinese MGA demand is expected to reach 74.3 Million Tonnes in 2018, up 4.4% year-on-year. Despite China focusing on reducing air pollution, smelter adherence to winter closures has been lax. Only 7,05,000 tpy of operation capacity has been closed in smelters due to winter cuts. Meanwhile, ramp-ups remain ongoing for new capacities. Still, this annual growth is down from the double-digit growth seen in recent years, as China becomes stricter in controlling capacity growth and lifting domestic smelter utilisation rates.

In the Middle East, Emirates Global Aluminium's 2M tpy Shaheen refinery in the UAE is expected to come on stream in Q4 2018 and lessen the company's dependence on third party alumina. Although the project has appeared on schedule, the company is taking additional steps to secure stable operations once the refinery comes on stream.

In India, total Alumina production during the Financial Year 2017-18 was 62 lakh Tonnes, to which your Company's contribution was 21.11 lakh Tonnes (34%).

#### Aluminium

World production of Aluminium during the year 2017 was 63.55 Million Tonnes, registering an increase of 7.8% over production figures of 58.98 Million Tonnes achieved in 2016. At the same time, worldwide consumption of Aluminium increased 5.8% from 60.09 Million Tonnes in 2016 to 63.60 Million Tonnes in 2017. The market, thus, stayed largely balanced during 2017. China was the largest producer as well as consumer during the year, contributing 57% share of the world production (36.34 Million Tonnes) and 54% of the world consumption (34.40 Million Tonnes) of Aluminium. China also happened to drive the production growth during 2017 by registering a 13.4% increase in Aluminium production, while the rest of the world exhibited only 1% growth in production. As far as Aluminium consumption is concerned, China registered a healthy 8% growth during 2017, while the rest of the world registered 3.4% growth.

Aluminium was one of the best performing metals of the year and recorded an impressive 33% rise in prices during 2017. The average LME Cash Settlement Price during the financial year 2017-18 was USD 2,045 per MT, up 21.2% over the corresponding figure of USD 1,688 per MT during 2016-17. The price rise is mainly attributable to smelting capacity closures in China, pollution crackdown by Chinese government forcing winter closures of smelters, increase in smelter operating costs and declines in Aluminium inventory outside of China. The total Aluminium inventory outside of China reduced from 9.31 Million Tonnes during beginning of 2017 to 7.49 Million Tonnes at the end, registering 19.5% decline.

Estimated global Aluminium stocks at the end of Financial Year 2017-18 stood at 12.30 Million Tonnes, registering a decline of 5.86% against stocks of 13.06 Million Tonnes at the end of FY 2016-17.

### Opportunities and Threats

#### Opportunities

Aluminium metal is unique in itself as it has some distinct physical properties like malleability, ductility, conductivity etc. and is a non-toxic, non-corrosive and non-magnetic metal. Although by itself it is not very strong, it makes very strong alloys with silicon, copper and magnesium. These are lightweight alloys and yet have great strength. Aluminium-zinc alloys are some of the strongest alloys available today and are commonly used by the automotive and aerospace industries.

Lightweight, durable and infinitely recyclable, value-added aluminium products can lower energy costs and carbon emissions in dozens of applications. Coated aluminium roofs can reflect up to 95 percent of sunlight, dramatically increasing building energy efficiency. Highly recycled and lightweight aluminium packaging can reduce shipping costs and carbon emissions for beverage makers. Automakers are increasingly turning to aluminium as part of the multi-material mix to increase vehicle fuel efficiency while maintaining strength and safety. Aluminium is highly effective at absorbing crash energy, protecting passengers in the event of an accident. Lighter aluminium vehicles ensure better handling and shorter stopping distances help drivers avoid accidents to begin with.



Indian Aluminium demand is growing at a CAGR of 10% and anticipated to grow more than 4 times by 2030 with the Government's visionary initiatives like Make in India, Smart Cities, 100% rural electrification, indigenous space programmes, domestic defence sector revival etc. which will boost domestic manufacturing and value addition. Aluminium is one of the main components of Electrical Transmission and Distribution (accounts for 38% of total Aluminium consumption in India). Aluminium demand is rising in domestic defence sector as special advanced Aluminium Alloys in aero structures for fighter aircraft and helicopters, warships, submarines and components for aero frames, engines, radars, missiles etc.

### Threats

Potential threats to Aluminium industry include volatility of global Aluminium prices exhibited in recent times. Due to rapid smelter capacity expansions across the world, especially in China, there is abundant availability of Aluminium metal in warehouses, putting pressure on the metal prices.

Further, several major economies have introduced protectionist tariff regimes in order to safeguard their domestic industry, triggering trade wars and thereby increasing the risk of flooding of stocks in other open markets like India and also loss of market for Indian exporters of Aluminium. The slowing economy of China, which is the major consumer of Aluminium, also is a cause of concern for the industry, as it may lead to piling up of Aluminium surplus stocks globally.

Primary Aluminium manufacturers also face competition from scrap imports by secondary aluminium producers, which keep increasing every year and eat into the primary producers' market share.

### Outlook for future

#### International Outlook

The Global outlook for Aluminium remains positive, amongst the protectionist trade policies and trade wars initiated by a few major economies, which is catching up with other nations as a retaliatory measure. Global consumption of Aluminium is likely to reach 66.7 Million Tonnes in 2018, registering a year-on-year growth of 4.7%. Expecting economic slowdown, Aluminium consumption is likely to grow at 5.9% this year in China, which is relatively lesser as compared to the previous few years.

Meanwhile, Global Aluminium production is likely to increase at a modest 3.3% at 65.7 Million Tonnes, with China clocking a net increase of 3.6% at 37.7 Million Tonnes this year. Overall there is likely to be a deficit of 1 Million Tonne, which is expected to be supportive of prices.

In China, the pace of demand growth has accelerated as construction sites are back to normal following a slow Q1 when the winter air pollution controls played a key role. Chinese automakers also experienced a slow start to the years. During the first two months of 2018, the total Chinese automotive output was 4.39 million units, down by 3% year-on-year, a combined result of a high base in 2017 and the purchasing tax rate reverting fully back to 10% from 1st January, 2018. Vehicle output growth is expected to be moderate in 2018. However, continuous light-weighting in cars along with the double-digits growth of new energy vehicle market will support the growth of aluminium consumption in the auto industry.

US primary consumption rose by 1.0% (54,000t) in 2017, and it is expected that consumption will increase by an additional 3.0% (1,62,000t) in 2018. It is also expected that aluminium consumption growth in 2018 will be spread across the industry, with demand reported strong in the building sector as well as in the truck and trailer markets. The only market not expected to increase remains packaging, which will stay flat year on year.

The outlook for 2018 European primary demand remains firm, despite the disappointing economic figures for the eurozone in Q1. Primary aluminium consumption for Europe in 2018 is expected to be at 9.5 Million Tonnes, up 3% year-on-year. Semis consumption will continue to be boosted by good growth in transport sectors in most countries and growth in engineering markets.

The LME Aluminium prices have been highly volatile this year, showing sharp increases and corrections over short period of time. This is mainly due to the imposition of trade tariffs by US and subsequent retaliation by other nations getting impacted by it. Overall, the prices appear to be consolidating and moving upwards gradually. LME Cash prices averaged USD 2,159 per MT during the first quarter of the year 2018, which increased to USD 2,259 during Q2 of 2018.

#### Domestic Outlook

As per forecast by the International Monetary Fund (IMF), India will be the fastest growing major economy in 2018 with a growth rate of 7.4% that rises to 7.8% in 2019 with medium-term prospects remaining positive. The IMF said that India was recovering from the effects of demonetisation and the introduction of the Goods and Services Tax and the recovery is expected to be underpinned by a rebound from transitory shocks as well as robust private consumption.

The total Aluminium Production in India increased by a huge 18.1% during 2017-18 to 3.4 Million Tonnes. During the same period, the Aluminium consumption grew by a healthy 9.8%, of which, Aluminium imports contributed 54.1%. Aluminium exports by Primary producers was 1.72 Million Tonnes, registering a growth of 31.5% year-on-year.

It remains to be seen what kind of impact, direct or indirect, is made by the imposition of trade tariffs by the US on India's exports. However, the domestic market is expected to show robust growth, supported by the increased industrial activity in the country and various Government schemes like Make-in-India and Smart Cities. In anticipation of an increase in demand, the primary producers have been ramping up their production over the last year, which is expected to continue this year as well.



## RISKS & CONCERNS

Volatility in LME prices, fluctuations in foreign exchange rates, fluctuation in global production of aluminium metal, slowdown in the global economy and growing competition from secondary producers in the domestic market for value added products are the regular concerns. Increase in prices of inputs particularly Caustic Soda, C.P. Coke, C.T. Pitch, Aluminum Fluoride and availability of linkage and e-auction coal are some of the major concerns.

## RISK MANAGEMENT

The Company has a Risk Management Policy, which inter-alia incorporates guidelines issued by Government of India from time to time. Risk Management is under taken as a part of normal business practice and that as separate tasks at set time.

The Company has a Risk Management Committee at Board level. The Committee reviews the exceptional Risk Reports and advise 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 frame work. 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 as well as at senior management level. Deviations, if any, are reported to the Risk Management Committee and Board. So far there is no risk prevailing in the Company during the year which may likely threaten the functioning of business of the Company.

## INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY

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

- Compliance with applicable statutes, policies & procedures, rules & regulations and delegated authority.
- Adherence to applicable Accounting Standards and Policies.
- Proper recording of transactions & timely reporting.
- Effective use of resources and efficient operations.
- Safeguarding of assets.

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

The 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 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 so as 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 with regard to reporting, operational and compliance risks.

Financial Statements are prepared in compliance with applicable Accounting Standards & on the basis of the Significant Accounting Policies as adopted by the Company duly approved by the Audit Committee and the Board. These Policies apply uniformly across the Company. The Accounting Policies supported by standard operating procedures are reviewed and updated from time to time. The 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.

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

The 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 ERP implementation across the organizations. The observations of internal auditors arising out of audits are periodically reviewed at appropriate level and compliances ensured. Material observations of internal auditors are submitted to Audit Committee for its review, analysis and advice to further strengthen internal control system. Action Taken Report thereon is submitted to 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. The Company recognizes that the internal control framework needs to be regularly reviewed & revised to ensure that such systems are reinforced on an ongoing basis in consonance with changing business environment.

With effective use of resources and efficient operations, your Company achieved all round improvement in its production parameters. During FY 2017-18, Mines increased Bauxite transportation from 68.25 Lakh MT to 70.25 Lakh MT, Hydrate production in Refinery from 21.00 Lakh MT to 21.06 Lakh





MT and Calcined Hydrate from 20.33 Lakh MT to 21.11 Lakh MT, Metal production in Smelter 3.87 Lakh MT to 4.26 Lakh MT, Power production in CPP from 6,066 MU to 6,547 MU and wind power from 206 MU to 252 MU in 2017-18 in comparison to 2016-17, despite substantial reduction in manpower due to superannuation.

During the financial year 2017-18 the specific consumption of caustic soda at Refinery reduced from 109.83 Kg/T to 100.21 Kg/T, electrical energy in Refinery reduced from 320 to 316 KWH/T and coal consumption from 653 Kg/T to 647 Kg/T. The extraction efficiency also improved to 98.31% compared to 97.51% in 2016-17. Smelter has reduced net specific carbon consumption from 432 to 430 Kg/MT, Furnace Oil from 68 to 65 Ltr/T and improved pot productivity from 1.36T/Pot/Day to 1.367T/Pot/Day. CPP has improved its PLF and SHR (Station Heat Rate) from 65.35% to 70.27% and 2,793 to 2,741 KCAL/KWH respectively.

## DISCUSSION ON FINANCIAL PERFORMANCE WITH RESPECT TO OPERATIONAL PERFORMANCE

### A. Financial Operation

#### I. Revenue from Operation

Particulars	₹ in crores		
	FY 2017-18	FY 2016-17	Change%
Export Turnover	4,075.46	3,624.99	12
Domestic Turnover	5,429.66	4,308.00	26
Gross Turnover	9,505.12	7,932.99	20
Other Operating Income	113.19	117.03	(3)
<b>Total</b>	<b>9,618.31</b>	<b>8,050.02</b>	<b>19</b>

It may be mentioned that consequent upon introduction of GST w.e.f. 1st July, 2017, excise duty on sales which was included in the gross turnover is dispensed with. Hence, gross domestic turnover for the year 2016-17 which includes excise duty on sales for full year and for the year 2017-18 which includes excise duty for 1st quarter only are not comparable.

Net domestic sales turnover during the year is ₹ 9,376 crores as against ₹ 7,438 crores of previous year which registered an increase by about 26%.

The sales turnover during the year has increased over the preceding year due to combined effect of increase in sales realization and volume of sales. During the financial year 2017-18, the Company has achieved Alumina sales of 13.37 lakh MT against 12.95 lakh MT during last year. Sale of Aluminium metal during the financial year 2017-18 was 4.26 lakh MT against 3.86 Lakh MT during last year. Average sales realization of Aluminium Metal and Alumina has increased by about 15% and 21% respectively. Similarly, the sales volume of Aluminium metal and Alumina has increased by about 11% and 3% respectively.

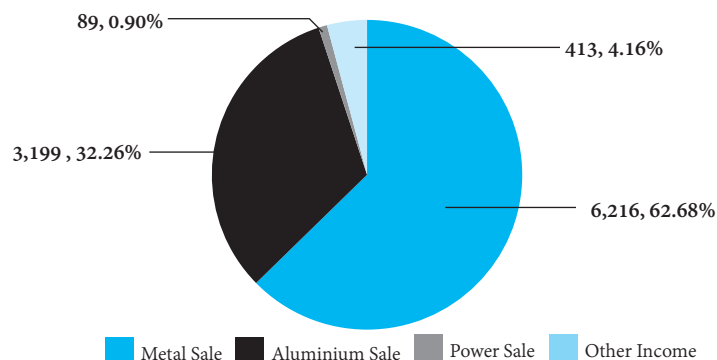
Despite increase in incentives on renewable power generation, other operating income during the year has reduced marginally in comparison to the previous year due to decrease in export incentive primarily attributable to reduction in the rate of duty drawback on Alumina from 1.4% to 1.1% and on Aluminum from 1.9% to 1% w.e.f. 15th November, 2016.

#### II. Other Income (Non-operating)

Particulars	₹ in crore		
	FY 2017-18	FY 2016-17	Change%
Other Income	299.65	408.27	(27)

Other non-operating income is less compared to previous year mainly on account of lower income from investment of surplus fund after reduction of investible surplus consequent upon buyback of shares in September, 2016. Apart from the above, decrease in yield also resulted in lower interest income.

### INCOME BREAKUP: FY 2017-18





**Note:** Other income includes operating income i.e. export incentive and incentive on generation of renewable energy and non-operating income i.e. income from investment of surpluses funds and other miscellaneous income.

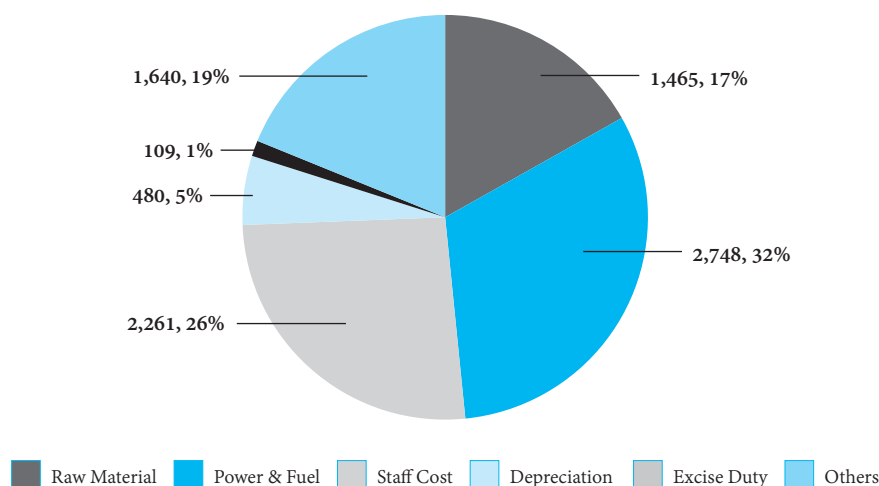
### III. Expenditure

₹ in crores

Particulars	FY 2017-18	FY 2016-17	Change%
Raw Materials Consumed	1,465.31	1,181.79	24
Power & Fuel	2,747.92	2,212.53	24
Employee Benefit Expenses	2,261.20	1,537.44	47
Stock Accretion/Depletion	47.43	(96.59)	(-149)
Other Expenses	1,590.14	1,628.22	(-2)
Finance Cost	1.95	2.69	(-28)
Depreciation	480.40	480.36	0
Excise Duty	108.86	506.98	(-79)
<b>TOTAL</b>	<b>8,703.21</b>	<b>7,453.42</b>	<b>17</b>

- Increase in raw material expenses compared to previous year is primarily attributable to increase in price of raw material like C.P. Coke, C.T. Pitch and Caustic Soda and increase in the volume of Aluminium Metal. However, lower specific consumption of Caustic Soda has reduced the expenditure partially.
- Increase in Power & Fuel cost is primarily attributable to higher effective price of Coal at CPP and Refinery attributable to change in coal mix, increase in the price of HFO and increase in the rate of electricity duty from 30 paise to 55 paise per unit which was effective from 12th May, 2017.
- Increase in Employee benefit expenses is mainly attributable to pay revision of executive employees implemented during January, 2018 and liability provision for non-executive employees for which long term wage settlement is awaited, both effective from 1st January, 2017. Besides, enhanced ceiling limit of gratuity payable to employees consequent upon notification of the Payment of Gratuity (Amendment) Act, 2018 has also led to increase in the employee benefit expenses.
- There is substantial increase in expenses towards Renewable Purchase Obligation due to increase in the percentage of obligation by the Statute. In addition, there is increase in Royalty, contribution to DMF and NMET on Bauxite production due to higher LME and increase in volume. It may be mentioned that despite the increase in above expenses, other expenses during the year have decreased as compared to previous year mainly on account of non-provisioning of interest on disputed water charges consequent to one-time settlement with Govt. of Odisha.

#### EXPENDITURE BREAKUP: FY 2017-18



**Note:** Other expenses includes repair & maintenance, consumption of stores and spares, other manufacturing expenses, general administrative expenses, S&D expenses and excise duty.



#### IV. Exceptional Items

₹ in Crores

Sl. No.	Particulars	FY 2017-18
a.	Write back of provision against disputed interest on water charges	(785.71)
b.	Write back of liability/ Claim for contribution to DMF	(40.69)
c.	Employment benefit expenses net of bad & doubtful provision	2.32
	<b>Total</b>	<b>(824.08)</b>

The exceptional item of ₹ 824.08 crores includes settlement of disputed water charge of ₹ 785.71 crores with Government of Odisha and reversal of District Mineral Foundation liability of ₹ 40.69 crores after Supreme Court judgement.

#### V. Profit After Tax and Earnings Per Share

₹ in Crores

Particulars	FY 2017-18	FY 2016-17
Profit before Tax	2,038.83	964.72
Tax Expenses	696.42	296.19
Profit after Tax	1,342.41	668.53
Earnings per Share (of ₹ 5/- each)	6.94	2.98

#### VI. Dividend Particulars

Particulars	FY 2017-18	FY 2016-17
Interim Dividend (%)	94	56
Final Dividend (%)	20	--
<b>Total (%)</b>	<b>114</b>	<b>56</b>

#### B. Financial Positions

Particulars	FY 2017-18 (₹ in Crores)	FY 2016-17 (₹ in Crores)	Change %
<b>Assets</b>			
Property Plant & Equipment	7,845.21	7,533.28	4
Intangibles	209.47	177.15	18
Investments	710.57	1,260.68	(-44)
Inventories	1,194.08	1,155.93	3
Trade Receivables	258.13	184.25	40
Cash & Bank	2,768.95	2,287.23	21
Loans	104.25	117.30	(-11)
Other Financial Assets	165.69	167.26	(-1)
Current Tax Assets	32.13	34.12	(-6)
Other assets	1,325.32	1,584.45	(-16)
<b>Total</b>	<b>14,613.80</b>	<b>14,501.65</b>	
<b>Equity &amp; Liabilities</b>			
Equity share capital	966.46	966.46	-
Reserve & Surplus	9,538.35	9,239.33	3
Deferred Tax Liability	1,151.45	1,245.58	(-8)
Trade payable	977.37	864.07	13
Borrowings	44.99	51.09	(-12)
Other Financial liabilities	515.72	471.46	9
Provisions	811.97	445.18	82
Other Liabilities	607.49	1,218.48	(-50)
<b>Total</b>	<b>14,613.80</b>	<b>14,501.65</b>	



- Increase in the carrying amount of Property, Plant & Equipments is attributable to capital work-in-progress towards the new wind power plant taken up at Kayathar, Chennai, expenditure on AMR items and expansion projects.
- Investment in Mutual fund has decreased primarily due to maturity of long term investments in mutual funds. However, equity contribution has been made to the JV companies to an extent of ₹ 78.05 crores during the year.
- Trade receivable has increased primarily due to increase in bills remaining unrealized both in Alumina & Aluminium compared to previous year.
- Reserve & surplus has increased primarily on account of the residual profit after appropriation. This will reduce in case final dividend proposed is approved in the Annual General Meeting.
- Trade payables has gone up due to accrued wages and salaries on account of liability provided for impending pay revision of non-executive employees and other employee benefit liabilities.
- Increase in provision is primarily attributable to long term employee benefit liability based on actuarial valuation mainly on account of enhancement of gratuity ceiling limit and revision of PRMBS scheme.
- Decrease in other current liabilities is primarily due to one-time settlement of disputed water charges with the Government of Odisha.

#### C. Key Financial Ratios:

Sl. No	Particulars	2017-18	2016-17
1	PAT/ Net worth	12.78%	6.55 %
2	EBIT/Net sales	12.98%	13.55%
3	EBIT/ Capital Employed	12.32%	10.74%

#### D. Segment wise information

Sl. No.	Particulars	Chemicals (Alumina)		Aluminium		Un-allocable		Total
		₹ in Crores	Share(%)	₹ in Crore	Share(%)	₹ in Crore	Share	₹ in Crore
1	Gross Sales	3,199	33.66	6,220	65.44	86	0.90	9,505
2	PBIT(Before exceptional items)	1,521	125.00	(367)	(30.17)	63	5.17	1,217
3	Capital Employed #	3,000	25.74	3,511	30.12	5,145	44.14	11,656
4	ROCE (%) (2/3)	-	50.69	-	(10.46)	-	1.22	10.44
5	PBIT Margin (%) (2/1)	-	47.54	-	(5.90)	-	-	12.80

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

#### Cost reduction measures and efforts to improve specific consumption of critical raw material.

Enhancement of efficiency and reduction in specific consumption is one of the priority areas and through this reduction of energy, raw materials etc. has resulted in reduction of cost. Many such projects have been taken, out of which benefits are realised from following projects during the FY 2017-18.

- **Smelter:**
  - Total 121 no. of pots graphitized in the FY 2017-18 and energy saving on account of graphitization is 1,26,70,240 KWhr (1089.64 TOE).
- **CPP:**
  - Improved version of Air Preheater having double sealing arrangement with 24 Sectors were retrofitted in place of original single sealing, 12 Sectors APH in Unit#1 with the assistance from M/s. BHEL in January, 2018. This has resulted in increase in boiler efficiency by about 1.14% due to reduction in air leakage and increased heat transfer.
  - Chemical cleaning of Condensers of Unit - 1, 8 & 10 has resulted in reduction of Unit Heat Rate by about 84 Kcal/KWh and saving in coal consumption by 16,371 MT/year per Unit due to improvement in condenser vacuum.
- **Alumina Refinery:**
  - Procurement, installation & commissioning of 50 nos. VFDs in Battery A, B, C & D completed on 30.12.2017 and electrical energy savings of 3,637,000 KWh achieved in last four months.



- Plant scale trial “substitution of Wheat Bran by Synthetic flocculent in all the flat bottom washers” as a major R&D project was successful. Saving is about ₹ 20/- per MT of hydrate production.
- Upgradation of Rake drives system in three washers from 96S2 to 109S2. A new system of supporting the arms of washer rake drive was also developed in-house.
- Development and standardization of control philosophy to reduce support fuel (HFO) during Coal Mill changeovers has been done and saving of 171 KL HFO achieved.
- **Mines:**
  - Reconditioning of 2007 Poly Pulley Hubs for waste reduction and reuse of salvageable items completed.
  - Rebuild of crushing segments of SMCP crusher as a measure for waste reduction and extension of life of Crushing segments completed.

#### Disclosure of Accounting Treatment

The financial statements of the 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 (Ref.: Note no. 3 of the Standalone and Consolidated Financial Statements).

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, the Company has ascertained its operating cycle as 12 months for the purpose of current or non-current classification of assets & liabilities.

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

### Human Resources

Manpower strength of the Company as on 31.03.2018 was 6,776 as against 6,938 at the last day of the previous year. The detailed breakup is given below:

Sl. No.	Position*	As on 31.03.2018	As on 31.03.2017
A	Executives	1,812	1,807
B	Supervisory	680	754
C	Skilled/Highly Skilled	3,691	3,736
D	Unskilled/Semi Skilled	593	641
	<b>Total</b>	<b>6,776</b>	<b>6,938</b>

\*Includes GETs/MTs/SOTs/JOTs

### 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 the Company to impart skill and behavioral training to its employees. In its commitment for 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 local populations.

As regards regular employees, the Company has 16,244.5 training mandays for the year 2017-18. As per the MoU, talent management programme for five days was conducted in-house with the faculty support from XLRI, Jamshedpur and TISS, Mumbai and 139 executives were covered in the said training for the target of 7.5 % of executive’s i.e.136 executives. Further, 17 employees were also sent to IIM, ASCI, IIT & National Institutes of Advanced Studies, Bangalore for five days programme under talent management. 870 apprentice trainees were engaged during the year 2017-18 compared to 789 apprentices engaged during the year 2016-17. As a part of corporate responsibility and industry academic interface, 2,544 students from different technical and management institutes across the country had undergone summer internship programme in various functional disciplines in the units and corporate office during 2017-18 compared to 2,049 students during 2016-17. In-house skill development programmes for security personnel, contract labours, traffic volunteers and trainees were also organized with 4,425.5 mandays during 2017-18 across the company compared to 4,421.5 mandays during the year 2016-17.



In line with skill India campaign of Govt. of India, MOU has been signed with National Skill Development Council (NSDC)/National Skill Development Fund (NSDF) to provide Skill Development Trainings to 1,620 candidates during 2016-17 to 2018-19 with relevant qualification packs (QP) including RPL (Recognition of prior learning) certification training to 420 workmen engaged under various contractors at bauxite mines. Accordingly, skill development training classes for enhancement of employability and income generation in various skills like retail, health care, beauty & wellness and hospitality in three districts i.e. Koraput, Angul & Khurda, started since 12th December, 2016. As on 31st March, 2018, 630 candidates have been trained and 30 candidates are undergoing training in Khurda location. The RPL certification programme was started with first batch of 21 workmen on 27.02.2017 and completed 420 numbers in 21 batches during March, 2018.

Corporate Centre of Excellence for Mining Sector with simulation facility, complying with the requisite guidelines of SCMS/NSDC will be set up at Nalco Research and Technical Center (NRTC) building of NALCO at Gothapatana, Bhubaneswar with an estimated cost of ₹ 20 crores which will be funded out of NALCO's CSR fund. The simulator based training will be imparted in the center and on-the-job training would be provided in the company's open cast mines at Damanjodi. Further, MoU signed with SCMS on 10.10.2017 for the detailed project report to be submitted by SCMS regarding the establishment of Center of Excellence. SCMS organized a workshop on 10.01.2018 at Mines Division of NALCO, Damanjodi with all the stakeholders i.e. representatives from NALCO, Odisha Mining Corporation (OMC), EZMA (Eastern Zone Mining Association) and CSIR- CIMFR, Dhanbad (Central Institute of Mining and Fuel Research) to prepare a comprehensive DPR & facilitating the process within the scheduled timeline and for early establishment of the center.

## CORPORATE PLAN

Your Company has embarked upon a new long term corporate plan to retain its position as a major player in the field of Alumina and Aluminium. The plan envisages 3 years action plan, 7 years strategy and 15 years vision for progressive growth of the Company. Improving functional capabilities through identified road maps & enhancing different functions are some of the key elements of the plan to give the Company a competitive edge. Focused functional initiatives have been devised leveraging the strength of each function to utilize future opportunities.

A new Vision, Mission and Values of the Company have been crafted to move forward in a direction which will ensure steady growth and minimize the adverse impact of commodity cycle on the profitability. 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 securitization, based on an in-depth study of industries and economic outlook, opportunities arising out of emerging business scenario and Company's core capabilities. The new Vision and Mission adopted by the Company is available in the link <http://www.nalcoindia.com>

## BUSINESS DEVELOPMENT

- **Caustic Soda Project in JV with Gujarat Alkalies and Chemicals Ltd. (GACL):** Your Company has formed a JV Company "GACL-NALCO Alkalies & Chemicals Pvt. Ltd." (GNAL) with GACL to set up 2.7 lakh TPA caustic soda plant along with 130 MW captive power plant at Dahej in Gujarat. State Environment Impact Assessment Authority of Gujarat has granted Environmental Clearance for the project. Land for the project has been transferred in the name of GNAL. Three major packages have been awarded. Environmental clearance for the project has been obtained. The process of financial closure is in progress. Project is being executed in full swing.
- **50 (2X25) MW Wind Power Project:**  
Your Company placed work order for setting up of 25.5 MW Wind Power Project at Kayathar in Tuticorin dist., Tamil Nadu in September, 2017. Further, the Company placed work order for setting up of 25.2 MW Wind Power Project at Viliseri in Tuticorin dist., Tamil Nadu in May, 2018. Construction of the first 25 MW at Tamil Nadu is in progress. For the second 25 MW, NFR from TANGEDCO for PPA is awaited.
- **Coal Tar Pitch Plant in JV with NINL:**  
Your Company has signed MoU with Neelachal Ispat Nigam Ltd. (NINL) to set up a Coal Tar Distillation plant of 20,000 TPA capacity based on the Coal Tar generated in NINL's Coke Oven Plant. NALCO Board has approved draft JV Agreement. EOI for technology supplier is finalized and floated. The CT pitch produced by the JV Company will be procured by your Company.
- **Strategic minerals in overseas:**  
NALCO, HCL and MECL have signed MoU to form a JVC to identify, acquire, develop, process and make commercial use of strategic minerals in overseas locations and supply to India. JV agreement has been approved by the respective Boards and proposal for JV formation has been submitted to Ministry for further action. Tendering activities are in progress (at ordering stage) for appointment of Consultant for techno-economic studies and preparation of business model for shortlisted mineral assets.
- **Greenfield Aluminium Smelter in Odisha:**  
The Company is preparing a Pre-feasibility Report (PFR) for proposed Greenfield Aluminium smelter at any suitable location in Odisha along with site selection for proposed aluminium downstream projects.



- **Aluminium Downstream Projects:**

Your Company is preparing Detailed Project Report (DPR) for establishment of Aluminium Downstream Projects in a suitable location in Odisha.

- **High End Aluminium Alloy Plant:**

Your Company has signed an MoU with M/s. Mishra Dhatu Nigam Limited (MIDHANI) in April, 2017 for establishment of High End Aluminium Alloy Plant in JV Mode for Defence, Aerospace and Automobile sectors. Draft JV Agreement has been approved by your Company's Board. Govt. of Andhra Pradesh has allotted 120 acres of land for the project.

## ANCILLARY DEVELOPMENT

Your Company continued its efforts for development of Ancillary Units and MSEs (Micro and Small Enterprises). Action taken during the year under review towards development of Ancillary Units & MSEs are as follows:

1. The procurement of products produced and services rendered by MSEs (Micro and Small Enterprises) of Odisha including Ancillary Units for FY 2017-18 stands at ₹ 296.11 crores (as against ₹ 285.88 crores of last FY). The total procurement of products produced and services rendered by MSE units (including those from outside Odisha) stands at ₹ 400.13 crores during FY 2017-18 (as against ₹ 414.95 crores during FY 2016-17) and it is 26.19% of the total procurement of Goods and Services made by your Company against Govt. target of minimum 20%. For FY 2018-19, the target for procurement of products produced and services rendered by MSEs has been set at ₹ 400.70 crores.
2. Your Company bagged the "Best Display Award" in the Mother Plant category in three day long National Vendor Development Programme-cum- Industrial Exhibition and Buyer-Seller meet programme "MSME Expo Odisha - 2017", organised by MSME Development Institute, Ministry of MSME, Govt. of India from 17th to 19th December, 2017 at Chauliaganj Club field, Cuttack.
3. Your Company was awarded "Certificate of Excellence as best PSU" in Odisha MSME International Trade fair, 2018 organised by MSME Deptt., Government of Odisha from 5th to 10th March, 2018 at Bhubaneswar.
4. Your Company participated in the state level Vendor Development Programme-cum-Buyer Seller Meet with Mother Plants, organized by OASME, in association with MSME Development Institute, Cuttack and MSME Department, Government of Odisha at Jeypore, Koraput on 12th April, 2017.
5. A national level "Vendor Meet" was organized at M&R Complex, Damanjodi on 27.06.2017 in which MSE vendors both inside and outside Odisha participated. The agenda of the meet was GST, Business Excellence and E-procurement requirement of your Company.
6. The Sub-PLAC (Plant Level Advisory Sub-Committee) meeting for the year 2017-18 was conducted at M&R Complex, Damanjodi on 22.09.2017 in association with DIC, Koraput followed by a "MSME Vendor Meet" in association with MSME Development Institute, Rayagada.
7. A "Buyer-Seller Meet for SC-ST Entrepreneurs" was conducted at M&R Complex, Damanjodi on 22.09.2017.
8. An awareness programme on "Zero Defect and Zero Effect (ZED)" with an aim to enhance the quality of MSE products was organized by S&P complex, Angul on 11.10.2017.
9. Udyog Samasya Samadhan Shivir (USSS)-cum-Buyer-Seller meet for MSEs was organized by S&P Complex, Angul on 23.11.2017 at NALCO, S&P training center, Angul.
10. The Sub-PLAC (Plant Level Advisory Sub-Committee) meeting for the year 2017-18 was conducted at S&P Complex, Angul on 22.12.2017.
11. A vendor development programme-cum-Buyer-Seller meet with NALCO, Angul was organized by MSME-Development Institute, Cuttack in association with DIC, Angul on 27.02.2018.
12. Your Company's procurement data from MSEs (Micro and Small Enterprises) are being uploaded on a monthly basis in "MSME SAMBANDH" App of MSME Department, GOI.

Procurement made by Nalco from MSEs

Ministry of Mines/National Aluminium Company Limited - NALCO

- (A) Name of the Unit: Corporate Office, Bhubaneswar, Odisha  
Nodal Officer: Sri Rabi Narayan Mohapatra, GM(Materials)  
NALCO Bhawan, P/1, Nayapalli, Bhubaneswar- 751013  
Mobile: 9437476660, e-mail: rabi.mohapatra@nalcoindia.co.in
- (B) Name of the Unit: Smelter & Power Complex, Angul, Odisha  
Nodal Officer: Sri Pravat Kumar Biswas, GM(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: Sri Prasanta Kumar Sarangi, GM(Materials)  
 Alumina Refinery, Nalco, Damanjodi- 763008  
 Mobile: 9437962248, e-mail: prasanta.sarangi@nalcoindia.co.in

(₹ in Crores)

Sl. No.	Particulars	Year 2016-17	Year 2017-18	Target for 2018-19
I	Total annual procurement (in value) (*).	1,975.30	1,527.70	1,530
II	Total value of goods & services procured from MSEs (Including MSEs owned by SC/ST entrepreneurs).	414.95	400.13	400.70
III	Total value of goods & services procured from only MSEs owned by SC/ST entrepreneurs.	9.36	NA**	61.2
IV	%age of procurement from MSEs (Including MSEs owned by SC/ST entrepreneurs) out of total procurement.	21	26.19	26.19
V	%age of procurement from only MSEs owned by SC/ST entrepreneurs out of total procurement.	0.47	0	4
VI	Total number of Vendor Development programmes for MSEs.	9	9	10
VII	Whether Annual Procurement Plan for purchases from MSEs are uploaded on the official website.	Yes	Yes	Uploaded
VIII	Whether targets reported in Annual Report.	Yes	Yes	To be reported

\* This value excluded procurement of Coal, Fuel Oil, Caustic Soda, ALF3, Synthetic flocculants, Steel, Cement, Bearings, Lubricants, Proprietary items, imported items and Contracts for professional services/consultancy services/major turnkey contracts/contracts linked to specific technology.

\*\* N.A. - Not available.

The identification and registration of MSEs owned by SC/ST Entrepreneurs is being done with support from DIC, Angul, DIC, Koraput and MSME DI, Cuttack, Odisha.

## SAFETY, OCCUPATIONAL HEALTH & ENVIRONMENT

Your Company being a responsible corporate citizen always gives utmost importance to Safety, Occupational Health and Environment and is committed to maintain sustainable work environment across all its production units. All the applicable statutes under Safety, Occupational Health and Environmental regulations are compiled proactively. While adhering to safety norms, your Company strives for continual improvement of personnel safety, health and the working environment with the goal of zero accidents, illness, incidents, waste generation and reduction in emissions. All the units are operating with valid "Consent to Operate" under Air & Water Act for the existing capacities and all 4 operating units have valid Factory Licenses, as applicable.

## MINES

### Environment

1. During the year, 1,00,536 nos. of trees were planted at Mines against the target of 1,00,000 nos. of trees and 19.67 hectares of reclaimed area was rehabilitated with plantation.
2. During the year, 11,100 nos. of fruit bearing seedlings were distributed to villagers to help them improve greenery in the region.
3. Consent to operate (CTO) for Panchpatmali South Block Bauxite Mine for a capacity of 3.15 MTPY was obtained from SPCB, Odisha.
4. A polyhouse (green house) was established at Mines nursery having a floor area of 256 Sq. mtr.
5. A vermi-compost system was developed for treatment and disposal of dried leaves generated at Mines nursery.
6. Panchpatmali Bauxite Mines received the 5-Star Rating Award under Star Rating System of Indian Bureau of Mines for implementation of Sustainable Development Framework for the year 2016-17 at the 3rd National Conclave on Mines and Minerals held at New Delhi by IBM on 20<sup>th</sup> March, 2018.
7. Panchpatmali Bauxite Mines was awarded the second prize of CII Eastern Region SH&E Excellence Awards 2016-17 at a symposium held at Kolkata by CII Eastern Region Office on 8<sup>th</sup> August, 2017.

### Occupational Health and Safety

1. The Half-Yearly Safety Week was successfully hosted & celebrated from 05.06.2017 to 06.06.2017 at Panchpatmali Bauxite Mines.
2. Annual safety week 2017-18 was successfully observed starting from 13.11.2017 in which owners, agents, senior officers and employees of 32 mines under BBSR region of DGMS participated. DGMS & DDMS, BBSR region participated in the said function. Your Company's first-aid team bagged the first prize in the first-aid competition in the mechanized mines category.





3. All scheduled statutory trainings were conducted during the year.
4. PME of all eligible employees was carried out during the year.
5. All statutory returns were filed in time.
6. The Recertification audit of OHSMS to the version of OHSAS 18001:2007 were successfully conducted during the year.
7. Fire audit was conducted for Mines by M/s. MECON, Ranchi.

## ALUMINA REFINERY

### Environment

1. Fly ash utilization is 103.5% during the financial year.
2. The achievement for plantation is 19,000 nos. (Saplings) against the target of 15,000 nos.
3. A training programme on revised “Bio medical waste management rules 2016” was successfully organized at NALCO Hospital premises with the help of officials of OSPCB.
4. Revamping of Boiler-2 ESP was carried out.
5. Award for best utilization of fly ash from M/s. Mission Energy Foundation, New Delhi received.

### Occupational Health and Safety

1. Safety awareness training programs were organized for contractor workers. 1,048 nos. of contract workers were imparted safety awareness training during FY 2017-18.
2. PME for 1,708 nos. of regular employees has been carried out during FY 2017-18. Health checkup for 1,494 nos. of contractor workers have also been carried out.
3. In order to build awareness on Safety, Health, Environment, retro-reflective signages were installed at A-30 (main road) inside the plant.
4. A new nitrogen based fire protection system was commissioned for 3 numbers of transformers for compressors.
5. Comprehensive Fire Audit was carried out in Alumina Refinery by M/s. MECON.
6. PESO (Petroleum and Explosives Safety Organisation) Audit was also carried out at Alumina Refinery at HFO storage and handling area.
7. State Safety Award received for lowest average frequency of accidents for the year 2016 from the Directorate of Factories and Boilers, Odisha.
8. Kalinga Safety Award – 2016 from Odisha State Safety Conclave was also received in 2017-18.
9. Best Safety Officer Award of the State for the year-2016 received from the Directorate of Factories and Boilers, Odisha during the year.

## SMEILTER

### Environment

1. Installation & commissioning of Emrion Nano Technology based deflouridation plant completed before the scheduled time 31<sup>st</sup> May, 2017 as committed to OSPCB.
2. 873.49 MT of carbon portion of SPL has been disposed off to OSPCB / CPCB authorized re-processors.
3. Third party Hazardous Waste Audit has been carried out and report submitted to OSPCB on 3rd September, 2017.
4. 2,600 MT of Carbon area hazardous waste (HW) disposed off to Common Hazardous Waste Landfill (CHWTSDF) at Jajpur.
5. Second oil storage shed construction was completed on 15<sup>th</sup> April, 2017 at Scrap and Salvage Area.
6. 10,040 seedlings were planted against target of 10,000 nos.

### Occupational Health and Safety

1. There was reduction of fire incident by 72% in the year 2017-18 as compared to last year. This could be achieved mainly due to investigation of all fire incidents, finding out root cause and strict compliance to the recommendations.
2. Traffic Management System was introduced at Smelter plant and was communicated to statutory authorities.
3. Standard Operating Practice of zero value scrap management prepared and implemented to prevent any untoward fire incident.
4. Fire audit was conducted for Smelter plant by M/s. MECON, Ranchi.

## CAPTIVE POWER PLANT

### Environment

1. Stack emission has been maintained well within the permissible limit after completion of retrofitting by installing an additional pass and revamping of ESPs (electrostatic precipitator) of existing old ESPs (Unit-1, 2, 3, 4, 5 & 6).
2. Ammonia dosing as per requirement carried out to meet the standard prescribed by MOEF & Consent Condition.



3. Online Continuous emission monitoring systems has been installed in all the Units of CPP and the emission data has been hooked up to OSPCB and CPCB server.
4. Online continuous Monitoring of ambient air quality is being done after installation of 4 nos. of CAAQMS with digital display & transmission of data to OSPCB server. The above said CAAQMS data of all 4 stations has also been hooked up to CPCB server.
5. Online monitoring of effluent quality is being done after installation of online effluent quality monitoring system at the outlet of IDWRS & hooking of the effluent data to the server of SPCB & CPCB.
6. Rain water Harvesting and Recycling system with pond of capacity of 50,000 M<sup>3</sup> and 2 nos. of Pumps (250 M<sup>3</sup>/Hr) is put up in CPP contributing towards improvement of water conservation and reduction in fresh water drawl from river Brahmani. The recycled water is being used as a make up to fire hydrant system in Unit 7 to 10. Piping network has been extended to discharge the recycled water to raw water reservoir also. In the year 2017-18, around 8,58,586 M<sup>3</sup> of water from rain water harvesting system & 2,64,912 M<sup>3</sup> of water from exit point was recycled and re-used.
7. Several steps have been taken up to enhance ash utilization:
  - i) 2nd phase work of Ash mound over Ash pond-II (from 111 MRL to 115 MRL) has been completed.
  - ii) Ash pond-I Dyke raising work has been completed (from 110 MRL to 113 MRL) and is in operation.
  - iii) The lean slurry project of mine void filling with ash is in progress.
  - iv) Your Company has been adopting high concentrated slurry discharge system in Unit-7 to 10 for disposal of fly ash to Ash pond-IV to prevent dust pollution and water conservation.
8. STP (Sewerage Treatment Plant)-I has been upgraded by installing phytoid filter & improved aeration system to meet the recent norms stipulated by CPCB and was put to operation throughout the year. Treated STP water was utilized for horticulture purposes only. In the year 2017-18, around 65,000 M<sup>3</sup> of treated STP water was used for horticulture purpose.
9. Flow meter and web camera has been installed at the outlet of STP-I & at the outlet of Industrial Drain Water Recycling System (IDWRS) for monitoring to comply the statutory requirements in November, 2017.
10. During the year 2017-18 around 3,650 nos. of trees were planted in and around plant premises. So far, your Company has planted around 12.05 lakhs plants since its inception covering around 34.80% of total area of CPP.
11. Ash slurry pipe (Header) corridor: A major modification has been carried out in the ash slurry trench by laying a 80 NB pipe line all along the trench so that the leakage ash from the header can be pumped back to the ash slurry sump thereby avoiding any slippage of ash to the nearby area.

#### Occupational Health and Safety

1. 1,206 nos. of employees & 1,982 nos. of contract workmen have been covered under PME health checkup program.
2. Safety awareness slogans, posters with safety messages have been displayed at different locations inside plant.
3. Traffic Management System has been implemented in CPP to create awareness among vehicle drivers in regards to maintain speed of the vehicle, parking of vehicles, loading / unloading and to obey the traffic rules.
4. Crash helmets were issued to all employees of CPP for use during riding of two wheelers and the effectiveness is 100%.
5. Comprehensive Fire Audit was carried out by M/s. MECON, Ranchi to assess the adequacy measures of fire protection system installed at various areas of CPP.

#### Nursery activities during 2017-18

Your Company is operating total five nurseries i.e. three at S&P Complex and two at M&R Complex including the one at Mines which is a high altitude nursery. The nurseries raise various type of seedling for afforestation, ornamental use and fruit bearing seasonal variety seedlings and potted plants which also being partially meet internal requirement for plantation. 1,00,000 nos. of seedlings have been raised at mines nursery during the year. Free distribution of seedlings is also being done in peripheral areas to help them improve greenery of the region. The nursery at Mines significantly contributes to the crucial afforestation activities of the backfilled mined out areas to preserve the natural topography. During this year, 19.67 hectares of reclaimed area was rehabilitated with plantation.

#### 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**

**Section A: General Information about the Company**

Sl. No.	Particulars	Company Information
1	Corporate Identification Number(CIN) of the Company	L27203OR1981GOI000920
2	Name of the Company	National Aluminium Company Limited
3	Registered Office & Corporate Office	NALCO Bhawan Plot No. P/1, Nayapalli Bhubaneswar -751013, Odisha, India
4	Website	www.nalcoindia.com
5	E-mail ID	investorservice@nalcoindia.co.in
6	Financial year reported	FY 2017-18
7	Sector(s) that the company is engaged in (industrial activity code-wise)	Bauxite Mines : Industrial Group Code 07292 Alumina Refinery : Industrial Group Code 20119 Aluminium Smelter : Industrial Group Code 24202 Electricity Generation : Industrial Group Code 35102
8	List of three key products/ services that the company manufactures/provides	<ol style="list-style-type: none"> <li>1. <b>Alumina</b> <ul style="list-style-type: none"> <li>• Calcined Alumina</li> <li>• Alumina Hydrate</li> <li>• Specialty Alumina &amp; Hydrates</li> </ul> </li> <li>2. <b>Aluminium</b> <ul style="list-style-type: none"> <li>• Standard Ingots</li> <li>• Sow Ingots</li> <li>• T-Ingots</li> <li>• Wire Rods</li> <li>• Billets</li> <li>• Flat Rolled Products (Coils, Sheets &amp; Chequered Sheet)</li> </ul> </li> <li>3. <b>Electricity</b></li> </ol>
9	a) Number of International Locations	NIL
	b) Locations in India	<ol style="list-style-type: none"> <li>a) Registered &amp; Corporate Office , Bhubaneswar – 751013, Odisha</li> <li>b) Mines &amp; Refinery Complex, Damanjodi- 763008, Odisha</li> <li>c) Smelter Plant, Nalco Nagar, 759145, Angul, Odisha</li> <li>d) Captive Power Plant, Angul ,759122, Odisha</li> <li>e) Port Facilities, Port Area, Visakhapatnam– 530035, Andhra Pradesh</li> <li>f) Wind Power Plants                             <ol style="list-style-type: none"> <li>i) Wind Power Plant-I : Gandikota, Andhra Pradesh</li> <li>ii) Wind Power Plant-II : Ludarva, Rajasthan</li> <li>iii) Wind Power Plant-III : Devikot, Rajasthan</li> <li>iv) Wind Power Plant-IV : Jath, Maharashtra</li> </ol> </li> <li>g) No. of Port Offices : 03 (Visakhapatnam, Kolkata, Paradeep)</li> <li>h) No. of Regional Offices : 04 (New Delhi, Mumbai, Chennai, Kolkata)</li> <li>i) Branch Office : 01 (Bengaluru)</li> <li>j) No. of Stockyards : 09 (Jaipur, Faridabad, Baddi, Kolkata, Chennai, Visakhapatnam, Bhiwandi, Vadodara, Delhi )</li> </ol>
10	Markets served by the Company	<p>During the FY 2017-18, the following Aluminium markets were catered to by the company (in addition to India): Bangladesh, Malaysia, Singapore.</p> <p>Calcined Alumina produced in excess of the Company’s own requirement is exported. During FY 2017-18, the following Alumina markets were catered to by the company (in addition to India): China, Egypt, Iran, UAE, Oman, Qatar and Malaysia.</p>



## Section B: Financial Details of the Company

Sl. No	Particulars	Company Information
1	Paid up Capital, as on 31.03.2018	INR 966.46 Crores
2	Total Turnover	Gross Turnover: INR 9,505.12 crores
3	Total Profit after Taxes	INR 1,342.41 crores
4	Total spending on Corporate Social Responsibility (CSR)	a) A sum of ₹ 29.01 crore was spent during the year on CSR activities. The amount required to be spent on CSR during 2017-18 was ₹ 27.88 crore.
	a) in INR :	
	b) As a percentage of average Net Profit during the three immediately preceding financial years (%):	b) The actual expenditure on CSR activities indicated above is 2.08% of average Net Profit for the three previous Financial Years i.e. 2014-15, 2015-16 & 2016-17.
5	List the activities, in which expenditure on CSR as mentioned above, has been incurred	Expenditure incurred on CSR is broadly in the following areas: a) Education b) Safe Drinking Water c) Health Care Services d) Environmental Sustainability e) Skill development f) Sanitation g) Infrastructure Development h) Promoting Sports & Games, Arts & Crafts i) Community Care

## Section C – Other Details

- Does the Company have any Subsidiary Company/ Companies?  
No.
- Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s).  
Not applicable.
- Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate percentage of such entity/entities? [ Less than 30%, 30-60%, More than 60%]  
No other entities i.e. suppliers, contractors etc. are involved in financing any BR initiatives. All the initiatives of Business Responsibility (BR) are totally financed by the organization.

## Section D: Business Responsibility (BR) Information

- Details of Director/Directors responsible for BR as on 31.03.2018:
  - The board level CSR & SD Committee comprising of five Independent Directors & three Functional Directors is responsible for BR as on 31.03.2018. During the reporting period, the Committee held three meetings. The members of the Committee, as on 31.03.2018, are:

Name	Designation	DIN Number
Shri D. Mahanta	Independent Director, Chairman	01583516
Shri S. Sankararaman	Independent Director	07346454
Shri Maheswar Sahu	Independent Director	00034051
Smt. Kiran Ghai Sinha	Independent Director	07726477
Shri N. N. Sharma	Independent Director	02888318
Shri K. C. Samal	Director (Finance)	03618709
Shri V. Balasubramanyam	Director (Production)	06965313
Shri B. K. Thakur	Director (HR)	07557093



b) Detail of the BR head

i) Sustainable Development is spearheaded by Director (Production)

Sl. No.	Particulars	Details
1	DIN Number	06965313
2	Name	Shri V.Balasubramanyam
3	Designation	Director (Production)
4	Telephone Number	0674-2300660
5	e-mail ID	dirprod@nalcoindia.co.in

ii) CSR is spearheaded by Director (HR)

Sl. No.	Particulars	Details
1	DIN Number	07557093
2	Name	Shri B. K. Thakur
3	Designation	Director (HR)
4	Telephone Number	0674-2300430
5	e-mail ID	dirhr@nalcoindia.co.in

2. Principle wise (as per National Voluntary Guidelines) BR Policy/ Policies

The Nine Principles, are mentioned below:

<b>Principle 1(P1)</b>	: Business should conduct and govern themselves with Ethics, Transparency and Accountability.
<b>Principle 2(P2)</b>	: Business should provide goods and services that are safe and contribute to sustainability throughout their life cycle.
<b>Principle 3(P3)</b>	: Business should promote the well-being of all employees.
<b>Principle 4(P4)</b>	: Business should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.
<b>Principle 5(P5)</b>	: Businesses should respect and promote human rights.
<b>Principle 6(P6)</b>	: Business should respect, protect, and make efforts to restore the environment.
<b>Principle 7(P7)</b>	: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.
<b>Principle 8(P8)</b>	: Businesses should support inclusive growth and equitable development.
<b>Principle 9(P9)</b>	: Businesses should engage with and provide value to their customers and consumers in a responsible manner.

(a) Details of Compliance (in Y/N)

The response regarding the above 9 National Voluntary Guidelines (NVG) principles (P1 to P9) is given below:

Sl. No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1.	Do you have a policy/ policies for 9 NVG principles?	Y	Y	Y	Y	Y	Y	Y	Y	Y
2.	Has the policy being formulated in consultation with the relevant stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.	Does the policy conform to any national/ international standards? If yes, specify? (50 words) *	Y	Y	Y	Y	Y	Y	Y	Y	Y
4.	Has the policy been approved by the Board? *	Y	Y	Y	Y	Y	Y	Y	Y	Y
	If yes, has it been signed by MD/owner/CEO/appropriate Board Director?	Y	Y	Y	Y	Y	Y	Y	Y	Y
5.	Does the company have a specified committee of the Board/ Director/ Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	Y	Y	Y
6.	Indicate the link for the policy to be viewed online? **	Y	Y	Y	Y	Y	Y	Y	Y	Y



Sl. No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
7.	Has the policy been formally communicated to all relevant internal and external stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
8.	Does the company have in-house structure to implement the policy/ policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
9.	Does the Company have a grievance redressal mechanism related to the policy/ policies to address stakeholders' grievances related to the policy/ policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
10.	Has the company carried out independent *audit/evaluation of the working of this policy by an internal or external agency?	Y	Y	Y	Y	Y	Y	Y	Y	Y

Y indicates 'Yes'

\* The Sustainable Development (SD) Policy addresses the essence of the nine NVG principles. **The SD Policy is approved by the Board & signed by CMD** and implementation of the same is done by operating Management Systems conforming to International Standards i.e. **ISO 9001, ISO 14001, ISO 50001, OHSAS 18001 & the SA 8000 standard. Vision, Mission and Core Values** statements touch upon the essential elements required to drive sustainability in the organisation. All the five Management Systems are subjected to periodic external audits by independent Certification Bodies besides regular internal audits. Internal audits, statutory audits are also regularly conducted covering finance aspects.

\*\* Link of the SD Policy: [http://www.nalcoindia.com/download/SD\\_Policy.pdf](http://www.nalcoindia.com/download/SD_Policy.pdf)

A few other specific policies, company manuals & documents which reinforce the essence & spirit of the nine NVG principles, are mentioned below:

NVG Principles	Policies, Manuals, Documents
Principle 1: Ethics, transparency & accountability	1. Code of Business Conduct and Ethics for Board Members and Senior Management: <a href="http://www.nalcoindia.com/CodeofConduct.pdf">http://www.nalcoindia.com/CodeofConduct.pdf</a>
	2. Fraud prevention policy: <a href="http://www.nalcoindia.com/NALCOFRAUDPREVENTIONPOLICY.pdf">http://www.nalcoindia.com/NALCOFRAUDPREVENTIONPOLICY.pdf</a>
	3. Whistle blower policy: <a href="http://www.nalcoindia.com/Whistleblowerpolicy_nalco.pdf">http://www.nalcoindia.com/Whistleblowerpolicy_nalco.pdf</a>
	4. Delegation of Power
	5. Vigilance Manual
	6. Marketing Guidelines
	7. Purchase Manual
	8. Contracts Manual : <a href="http://www.nalcoindia.com/download/Contract-Manual-2013.pdf">http://www.nalcoindia.com/download/Contract-Manual-2013.pdf</a>
	9. Stores Manual
	10. Independent External Monitor Policy
Principle 2 : Sustainability in life-cycle of product	Occupational Health & Safety Policy: <a href="http://www.nalcoindia.com/download/OHS_Policy.pdf">http://www.nalcoindia.com/download/OHS_Policy.pdf</a>
Principle 3: Employee well-being	HR Manual
Principle 4: Benefitting Stakeholders	Quality Policy: <a href="http://www.nalcoindia.com/download/QualityPolicy.pdf">http://www.nalcoindia.com/download/QualityPolicy.pdf</a> Core Values "BEST" : <a href="http://www.nalcoindia.com">http://www.nalcoindia.com</a> (Home Page)
Principle 5: Promotion of human rights	Social Accountability Policy: <a href="http://www.nalcoindia.com/download/SA_POLICY_Approved.pdf">http://www.nalcoindia.com/download/SA_POLICY_Approved.pdf</a>
Principle 6: Environmental protection	Environment Policy : <a href="http://www.nalcoindia.com/download/EnvironmentPolicy.pdf">http://www.nalcoindia.com/download/EnvironmentPolicy.pdf</a>
Principle 7: Responsible public policy advocacy	Core Values "BEST" : <a href="http://www.nalcoindia.com">http://www.nalcoindia.com</a> (Home Page)
Principle 8: Inclusive growth	CSR Policy : <a href="http://www.nalcoindia.com/CSR_Policy_new.pdf">http://www.nalcoindia.com/CSR_Policy_new.pdf</a>
Principle 9: Customer value	Quality Policy : <a href="http://www.nalcoindia.com/download/QualityPolicy.pdf">http://www.nalcoindia.com/download/QualityPolicy.pdf</a>



(b) If answer to Sl. No. 1 at 2 (a) against any principle is 'No', please explain why: (Tick up to 2 options)

Sl. No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1.	The company has not understood the Principles									
2.	The company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles									
3.	The company does not have financial or manpower resources available for the task									
4.	It is planned to be done within next 6 months									
5.	It is planned to be done within the next 1 year									
6.	Any other reason (please specify)									

Since answer to the question at Sl.No.1 of 2(a) above is Yes for all the nine NVG principles, the questions at 2 b) are not applicable.

**3. Governance related to Business Responsibility (BR):**

3.1 Indicate the frequency with which the Board of Directors, Committee of the Board or CEO to assess the BR performance of the Company. Within 3 months, 3-6 months, Annually, More than 1 year.

During F.Y. 2017-18, the CSR and SD Committee of the Board met on 21.04.2017, 21.07.2017 and 10.11.2017 in order to review & advise on BR performance i.e. CSR & SD activities of the organization. The draft BR Report of 2016-17, was reviewed in the meeting on 21.07.2017 and recommended for approval of Board. Frequency of meetings, during 2017-18, has been thrice in a year.

3.2 Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

Yes, both Business Responsibility (BR) Report and Sustainable Development Report are prepared annually & available in website.

Business Responsibility (BR) Report which is mandatory as per SEBI requirements, is prepared based on the National Voluntary Guidelines and is published on annual basis as part of Annual Report. The weblink for 2016-17 report is:

[http://www.nalcoindia.com/investor/36th%20Annual%20Report%20\(2016-17\).pdf](http://www.nalcoindia.com/investor/36th%20Annual%20Report%20(2016-17).pdf)

A Sustainable Development (SD) Report is also prepared on annual basis, since 2011-12, as per national/international guidelines and made available in website. For the year 2016-17, the detailed SD Report for the FY 2016-17 prepared in alignment with Global Reporting Initiative Generation 4 (GRI G4) was also completed and web hosted. The weblink is:

[http://www.nalcoindia.com/download/FINAL%20SD%20REPORT%202016-17%20\(PRINTER%20COPY%207\(B\)\).pdf](http://www.nalcoindia.com/download/FINAL%20SD%20REPORT%202016-17%20(PRINTER%20COPY%207(B)).pdf)

**Section E : Principle-wise Performance**

**Principle 1: Business should conduct and govern themselves with Ethics, Transparency and Accountability.**

1.1 Does the policy relating to ethics, bribery and corruption cover only the company?

No.

Does it extend to the Group/Joint Ventures/ Suppliers/Contractors/NGOs/Others?

Yes. Efforts for inculcating ethical behavior at all levels are made starting from policy formulation & implementation followed by strong monitoring and follow-up activities. The Sustainable Development Policy and Core Values, reflect our commitment towards integrity, ethical practices and transparency. Ethical behavior in business practices is also further reinforced by additional guidelines i.e. “The Code of Business Conduct & Ethics for Board Members and Senior Management”, “Fraud Prevention Policy”, “Whistle Blower Policy”, “Code of Conduct for prevention of Insider Trading”, CDA Rules applicable to all executives, Certified Standing Order applicable to all other employees. Any violation, irregularities, alleged fraud etc. whenever noticed in any business transaction are dealt based on Nalco Vigilance Manual & Guidelines and directives circulated by CVC, Chief Technical Examiner of CVC, SEBI etc.

Integrity Pact is also implemented for all contracts of ₹ 50 Lakh and above in order to further bolster the transparency drive. Protection is extended to any outsider complaining under Public Information Disclosure and Protection of Informer (PIDPI) Scheme of Govt. of India.



1.2 How many stakeholder complaints have been received in the past financial year and satisfactorily resolved by the management?

i) 27 vigilance related **stakeholder complaints** were received during the year, while 3 complaints were carried forward from previous year. Out of the total 30 complaints, 20 complaints were closed after analysis, while 10 complaints are under different stages of investigation with necessary actions. Depending on the gravity of irregularity and misdemeanor, appropriate actions as per Nalco Vigilance Manual and CVC Guideline, is taken. As a preventive vigilance measure, suggestions for a few important systemic improvements on contract execution, raw material procurement, sampling and testing, free issue material etc. are given during the year. Certain notable initiatives taken by vigilance department during the year are:

Development of NALCO e-learning portal, Development of Integrity Index in collaboration with CVC & IIMA and creation of web page on vigilance administration in NALCO web site.

ii) **Investor Complaints**

In total, 709 number of **complaints** were received during the F.Y. 2017-18 and all of them have been resolved satisfactorily. The detailed breakup of investor related complaints is given below:

Particulars	Received during the year	Complaints resolved	Complaints pending
SCORES	06	06	Nil
Stock Exchanges	01	01	Nil
Individuals	702	702	Nil
<b>TOTAL :</b>	<b>709</b>	<b>709</b>	<b>Nil</b>

iii) **Right to Information Act (RTI):**

Two officers at Senior Management level, designated as Public Information Officer and Appellate Authority, ensure proper implementation of RTI in the organization. During F.Y. 2017-18, a total of 219 applications were received in addition to the 26 pending ones from previous year. As on 31.03.2018, 153 requests for information were accepted and replies sent, while 74 such requests were rejected. As on 31.03.2018, 18 requests for information are pending.

iv) **No complaints regarding child labour/ forced labour/ involuntary labour; Discriminatory employment; Sexual Harassment** were received during 2017-18 and no complaints regarding above are pending as on 31.03.2018.

**Principle 2: Business should provide goods and services that are safe and contribute to sustainability throughout their life cycle.**

2.1 List up to 3 of your products or services, whose design has incorporated social or environmental concerns, risks and/or opportunities.

The three major products are: **Calcined Alumina, Aluminium, Electricity.**

In the production units and bauxite mines, Comprehensive Environment Impact assessment is carried out during project stages and the applicable plans approved by regulatory authorities i.e. Environment Management plan, Mining Plan, Mines Closure plan etc. are implemented with proactive steps taken at different stages to mitigate any risks on environment or society from products & services. Aspect Impact Study, Hazard Identification & Risk Assessment and Emergency Management Plans are also drawn up with periodic reviews to address environmental and social concerns, risks and opportunities.

The environment concerns, risks, opportunities for our products are addressed as outlined below at Table-A:

TABLE-A				
Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
Alumina Refinery	Calcined Alumina	a. Air Pollution b. Water Pollution c. Land contamination	1. <b>Air Pollution:</b> i) Stack Emission ii) Dust in Calcined Alumina, Bauxite, Coal and Ash handling areas	1. <b>Air Pollution:</b> i) Electro Static Precipitators (ESPs) provided in Boiler for collecting particulate matters from Flue Gas of Boiler. ii) ESP is provided in Calciners for collection of Alumina dust generated in calcinations process. • Bag filters and de-dusting system are provided in Alumina loading and unloading area to prevent dust emission. • Sprinkler and de-dusting system are provided in Lime Grit, Red mud, Ash, Coal and Bauxite handling areas to control fugitive emission.





TABLE-A

Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
			<p><b>2. Water Pollution</b></p> <p>i) Waste effluent</p> <p>ii) Sewage &amp; Waste water</p> <p>iii) Surface Runoff water</p>	<p><b>2. Water Pollution:</b></p> <p>i) Effluents are treated in treatment facilities.</p> <p>ii) The waste water treatment, recycling and reuse is carried out for Ash pond overflow water and Red mud pond over flow water.:</p> <ul style="list-style-type: none"> <li>Recycling of return water from Ash pond is reused for ash slurry making.</li> <li>Red mud pond return water is reused for Red mud slurry making and mud washing thus recycling caustic.</li> <li>Sewage Waste water is treated in Sewage Treatment Plant and the same is recycled and reused for Horticulture purposes.</li> </ul> <p>iii) Surface runoff water is stored in the Sabari Lake and disposed to outside after necessary treatment if required.</p>
			<p><b>3. Land Contamination</b></p> <p>i) Lime grit</p> <p>ii) Red mud</p> <p>iii) Ash</p>	<p><b>3. Land Contamination:</b></p> <p>i) Lime Grit is disposed to recyclers for Brick or other allied product manufacturing.</p> <p>ii) Red mud utilization for extraction of Iron concentrate and Gallium from Red mud is being explored.</p> <p>iii) Higher utilization of fly ash by motivating entrepreneurs for utilization of fly ash in areas such as: Utilisation of fly ash in manufacturing of fly ash bricks, cement, road construction, dyke making, filling up low lying areas etc.</p>
Smelter	Aluminium	<ul style="list-style-type: none"> <li>Air pollution</li> <li>Water pollution</li> <li>Land contamination</li> </ul>	<p><b>1. Air Pollution:</b></p> <p>i) Fluoride &amp; particulate emission from the FTP stacks due to pot operation</p> <p>ii) Generation of PFC during anode effect, detailed below*</p>	<p><b>1. Air Pollution:</b></p> <p>i) Adsorption of Fluoride gases in primary alumina by dry scrubbing method in FTPs. Online Continuous monitoring of emission at FTP stacks is done.</p> <p>ii) The Smelter plant is equipped with ALPSYS pot regulation system, which minimizes anode effect by timely dosing Alumina.</p>
			<p><b>2. Water Pollution:</b></p> <p>i) Generation of fluoride contaminated surface runoffs</p>	<p><b>2. Water Pollution:</b></p> <p>i) Surface runoffs are collected in three HDPE lined holding pools through dedicated drains. The fluorinated surface runoff is treated in Defluoridation plants. (Operated on Ion Exchange technology and latest Emrion Nano Technology). The treated water is then recycled for cooling, horticulture &amp; other plant use.</p>
			<p><b>3. Land Contamination:</b></p> <p>Generation of Hazardous waste like:</p> <p>i) SPL</p> <p>ii) Dross</p> <p>iii) Shot blasting waste etc</p>	<p><b>3. Land Contamination:</b></p> <p>i) SPL is stored in impervious lined secured engineered landfill to prevent land contamination &amp; also in concreted floor sheds. After separation, few quantity of semi-segregated Carbon &amp; refractory portion of SPL are stored separately in concreted floor sheds.</p> <p>ii) Aluminium Dross is recycled into pots. Action is underway to dispose of available dross to authorized recyclers, registered with OSPCB.</p> <p>iii) Shot blasting waste etc. is being disposed off in common Hazardous waste landfill at Sukinda, Jajpur.</p>



TABLE-A

Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
CPP	Electricity	<ul style="list-style-type: none"> <li>Air Pollution</li> <li>Water Pollution</li> <li>Land Contamination</li> </ul>	<p><b>1. Air Pollution</b></p> <ol style="list-style-type: none"> <li>Emission from Boiler</li> <li>Fugitive Dust from Coal and Ash Handling Area</li> <li>Heat emission in flue gas</li> </ol> <p><b>2. Water Pollution</b></p> <ol style="list-style-type: none"> <li>Effluent Waste water</li> <li>Sewage &amp; Waste water</li> <li>Surface runoff water</li> </ol> <p><b>3. Land Contamination</b></p> <ol style="list-style-type: none"> <li>Mill Rejects</li> <li>Ash</li> <li>Scraps (Metallic and Non-metallic scraps)</li> </ol>	<p><b>1. Air Pollution:</b></p> <ol style="list-style-type: none"> <li>ESP is provided in Boiler flue gas emission path for extracting particulate matters.</li> <li>Dust Extraction and Sprinklers system are provided in Coal and Ash Handling areas to control fugitive dust.</li> <li>Heat recovery from Flue gas through Air Pre-heaters and Economiser is carried out for enhancing Boiler efficiency and reducing coal consumption.</li> </ol> <p><b>2. Water Pollution:</b></p> <ol style="list-style-type: none"> <li>Effluent treatment plant is provided for treatment of industrial waste water. The treated water is used for ash slurry making.</li> <li>Decanted water from ash pond is reused for ash slurry making: <ul style="list-style-type: none"> <li>Sewage Treatment Plant is provided for treatment of Sewage Waste water. The sewage waste water after treatment is reused for Horticulture &amp; plantation purposes.</li> </ul> </li> <li>Surface runoff water is used in fire hydrant system for firefighting.</li> </ol> <p><b>3. Land Contamination:</b></p> <ol style="list-style-type: none"> <li>Mill Rejects is stored in demarcated low lying areas for disposal to authorized parties for reuse.</li> <li>The Ash in slurry form is disposed to Ash pond. The project for lean slurry disposal to Mines Void for reclamation of mined out area is in progress. Dry Ash is also used for low lying area filling, Stone quarries void filling, disposed to value added product manufacturer for ash brick making and use in Asbestos, cement etc. under a subsidy scheme.</li> <li>The Scraps are sold to recyclers.</li> </ol>
Mines	Bauxite	<ul style="list-style-type: none"> <li>Air Pollution</li> <li>Water Pollution</li> <li>Noise pollution</li> <li>Solid waste pollution</li> </ul>	<p><b>1. Air pollution</b></p> <ol style="list-style-type: none"> <li>Emission from heavy vehicles.</li> <li>Fugitive Dust emission during Bauxite mining, Handling including crushing in crusher and conveying in conveyor</li> </ol>	<p><b>1. Air pollution:</b></p> <ol style="list-style-type: none"> <li>Proper selection and maintenance of vehicles to minimize emission from vehicles.</li> <li>Water spraying on haul roads and stock pile area with 5 nos of 28 KL mobile sprinkler and fixed sprinklers along haul road: <ul style="list-style-type: none"> <li>Suitable blast design and delayed blasting using NONEL detonators to minimise dust generation.</li> <li>Implementation of dry fog system at Crusher and Conveyor to suppress dust &amp; fully covered conveyor to prevent dust generation.</li> <li>Adoption of vacuum suction/wet drilling in all drill machines.</li> <li>Peripheral barrier of 7.5m width with plantation to retain dust particles.</li> </ul> </li> </ol>



TABLE-A				
Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
			<p><b>2. Water Pollution:</b></p> <p>i) Waste water from Canteen, Vehicle Washing and sewage from toilets</p> <p><b>3. Noise pollution:</b></p> <p>i) Noise during blasting and operation of heavy vehicles</p> <p><b>4. Solid waste pollution:</b></p> <p>i) Overburden material from excavation of minerals</p> <p><b>5. Land Degradation:</b></p> <p>i) Excavation of overburden and ore material by blasting and use of machinery</p>	<p><b>2. Water Pollution:</b></p> <p>i) In-situ peripheral barrier all around active mining area to prevent silt laden rain water to go out:</p> <ul style="list-style-type: none"> <li>• Check dams at strategic points to filter muddy water if any from mining areas.</li> <li>• Collection of rain water in mining area in sumps and percolation of collected water into ground.</li> <li>• Water from toilets treated in septic tanks and disposed in soak pits, canteen waste water treated in biological treatment unit, wash water from vehicle washing area treated in oil water separator. Treated water from canteen and vehicle wash area fully reused for dust suppression and plantation.</li> </ul> <p><b>3. Noise pollution:</b></p> <p>i) Suitable blast design including delayed blasting using NONEL detonators to minimise the generation of noise:</p> <ul style="list-style-type: none"> <li>• Peripheral plantation to prevent propagation of noise.</li> <li>• Selection of suitable equipment generating less noise, provision of noise proof cabins in HEMMs and provision of PPEs to workers.</li> </ul> <p><b>4. Solid Waste Pollution:</b></p> <p>i) 100% reuse of top soil and overburden fully reused for back filling of mined out areas.</p> <p><b>5. Land Degradation:</b></p> <p>i) Concurrent mining and backfilling of mined out areas:</p> <ul style="list-style-type: none"> <li>• Rehabilitation of mined out area with extensive plantation to convert the barren land into a forest.</li> </ul>

\* Perfluorocarbons (PFCs) i.e. tetrafluoromethane (CF<sub>4</sub>) and hexafluoroethane (C<sub>2</sub>F<sub>6</sub>) emissions produced in the primary aluminium reduction process at Smelter, during anode effects is monitored very closely. The Smelter Plant is equipped with the most advanced ALPSYS pot regulation system, which helps in reducing the frequency and duration of anode effect by timely dosing alumina into the pot. For the year 2017-18, the PFC emission from Smelter Potline has been estimated using AP (Aluminium Pechiney) overvoltage method and their values are given below:

Type of PFC	Actual Emission
CF <sub>4</sub> (KG/T Al)	0.0367
C <sub>2</sub> F <sub>6</sub> (KG/T Al)	0.0044

**2.2 For each product, provide the following details in respect of resource use (energy, water, raw material) per unit of product (optional).**

i) Reduction during sourcing/production/ distribution achieved since the previous year throughout the value chain.

The reduction achieved during the last fiscal is depicted in **Table B** below:

TABLE-B				
Specific Consumption per unit of production	Unit of Measurement	Norm	Previous Year (F.Y. 2016-17)	Current Year (F.Y. 2017-18)
Explosive consumption in Bauxite Mines	Gram/MT	160	143	128
Coal for steam generation in SPP of Alumina Refinery	Tonne/Tonne	0.650	0.653	0.647
Electrical energy in Alumina Refinery	KWH/Tonne	335	320.45	316
Aluminium Flouride Consumption	KG/MT	19	21	19
Net carbon consumption for hot metal in Smelter	KG/MT	430±10	432	430
Fuel oil consumption in CPP	ml/KWH	1.0	0.49	0.42



ii) Reduction during usage by consumers (energy, water) has been achieved since the previous year.

Being in the commodity sector, monitoring of energy and water use at consumers end is not feasible. However, enhanced use of aluminium in transport sector provides great opportunity for reduction in fuel / energy consumption.

**2.3 Does the company have procedures in place for sustainable sourcing (including transportation)?**

Yes.

Sustainable sourcing of bauxite, our most important raw material, is ensured by having captive mines and adopting sustainable mining practices. Electricity for smelting is sourced from Captive Power Plant located close to Smelter, ensuring continuous supply of power with minimum transmission loss. Bulk purchase of Coal for our Captive Power Plant (CPP) is sourced from Mines of Mahanadi Coal Fields located a few Kilometer away. Coal availability is ensured through long term Fuel Supply Agreement and Bridge Linkage. Any shortfall in coal supply is made up with procurement of coal through, e-auction route. Other major raw materials like Aluminium Flouride, Caustic, Pitch & C P Coke etc. are procured through multiple vendors. Our own railway siding and port facility complete with fully mechanized loading and unloading system facilitate sourcing of above input materials. Engagement of multiple suppliers for important raw materials ensures availability of critical raw materials at the time of scarcity. Location of bauxite mine and coal mines near our production facility and dedicated transportation systems like cable belt for bauxite and merry go round railway system for coal addresses sustainability issues in transportation.

**2.4 Has the company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve their capacity and capability of local and small vendors?**

Ancillary Development Policy of the organization promotes development of local vendors. The MSME facilitation cells at units implement the policy by providing guidance in Technical, Commercial areas to these vendors to improve their competitiveness. The goods and service which can be offered by MSME units are listed and displayed prominently and web hosted in our website for wider circulation and awareness. Display halls at M&R complex and S&P complex display the products along with technical knowhow for developing the product & information regarding annual requirement and last procurement price etc. are provided to MSME entrepreneurs. Relaxation in tendering process i.e. waiver of EMD and tender fees etc. are extended to such units to encourage them to participate in bidding. Our purchase manual is suitably amended to extend purchase preference to MSME units quoting in the band of 15% of lowest quoted price for the products and service earmarked for them. List of Goods and Services which can be procured from MSEs are available in our website.

The procurement of products produced and services rendered by MSEs (Micro and Small Enterprises) of Odisha including Ancillary Units for FY 2017-18 stands at Rs 296.11 crores (as against Rs 285.88 crores of last FY). The total procurement of products produced and services rendered by MSE units (including those from outside Odisha) stands at ₹ 400.13 crores during FY 2017-18 (as against ₹ 414.95 crores during FY 2016-17 and it is 26.19 % of the total procurement of Goods and Services made by Nalco against Govt. target of minimum 20%. For FY 2018-19, the target for procurement of products produced and services rendered by MSEs has been set at ₹ 400.70 crores.

Nalco bagged the “Best Display Award” in the Mother Plant category in the Three day long National Vendor Development Programme-cum-Industrial Exhibition and Buyer- Seller meet programme “MSME Expo Odisha - 2017” organised by MSME Development Institute, Ministry of MSME, Govt. of India from 17th to 19th Dec, 2017 at Chauliaganj Club field, Cuttack.

Nalco was awarded “Certificate of Excellence as best PSU” in Odisha MSME International Trade fair, 2018 organised by MSME Deptt, Govt. of Odisha from 5th to 10th March, 2018 at Unit-III Exhibition Ground Bhubaneswar.

Nalco participated in the state level Vendor Development Programme-Cum-Buyer Seller Meet organized by OASME, in association with MSME Development Institute, Cuttack and MSME Department, Govt. of Odisha at Jeypore, Koraput on 12th April, 2017.

A national Level “Vendor Meet” was organized at M&R Complex, Damanjodi on 27.06.2017 in which MSE vendors both inside and outside Odisha participated. The agenda of the meet was GST, Business Excellence and E-procurement requirement of Nalco.

The Sub-PLAC (Plant Level Advisory Sub-Committee) meeting for the year 2017-18 was conducted at M&R Complex, Damanjodi on 22.09.2017 in association DIC Koraput followed by a “MSME Vendor Meet” in association with MSME Development Institute, Raygada.

A “Buyer-Seller Meet for SC-ST Entrepreneurs” was conducted at M&R Complex, Damanjodi on 22.09.2017.

An awareness programme on “Zero Defect and Zero Effect (ZED)” with an aim to enhance the quality of MSE products was organized by S&P complex, Angul on 11.10.2017.

Udyog Samasya Samadhan Shivir (USSS) cum Buyer-seller meet for MSEs was organized by S&P Complex, Angul on 23.11.2017 at NALCO, S&P training center, Angul.

The Sub-PLAC (Plant Level Advisory Sub-Committee) meeting for the year 2017-18 was conducted at S&P Complex, Angul on 22.12.2017.

A vendor development programme cum Buyer-Seller meet with NALCO, Angul was organized by MSME-Development Institute, Cuttack in association with DIC, Angul on 27.02.2018.



Nalco's procurement data from MSEs (Micro and Small Enterprises) are being uploaded on a monthly basis in "MSME SAMBANDH" App of MSME Department, GOI.

**2.5 Does the company have a mechanism to recycle products and waste? If yes what is the percentage of recycling of products and waste?**

Yes.

We recycle process waste, metal rejects and waste products, effluent & industrial drain water, decanted water from Ash pond and Red mud Pond to maximum possible extent. We also implement rain water harvesting, ground water charging and sewerage water treatment at our units. In the year 2017-18, 15,258,445 cubic metre water from CPP ash pond; 8,601,715 cubic meter water from Refinery ash pond and 2,792,866 cubic meter water from Refinery Red Mud Pond was recycled. Some of our achievements in this regard is presented in the Table C below:

TABLE C : Recycling/ Reuse of waste		
Unit	Utilisation	Percentage
Bauxite Mines	Overburden utilized for concurrent reclamation of mined out areas	100%
Alumina Refinery	Caustic Soda recycled from waste red mud	6.31%
	Ash utilization	104.8%
	Recycling of Ash pond water	93.96%
Smelter	Recycling of Aluminium scrap	100%
	Aluminium dross recycled as input to process	78.5%
	Recycling of spent anode	100%
CPP	Ash Utilisation	46.77%

**Principle 3: Business should promote the well-being of all employees.**

**3.1 Please indicate the total number of employees:**

As on 31.3.2018, the total strength of employees in regular employment is 6,776.

**3.2 Please indicate the Total number of employees hired on temporary/contractual/casual basis as on 31.03.18 :**

No contractual/temporary/casual employees are engaged by Nalco. Job Contractors working in areas like hospitality, maintenance, sanitation, conservancy and project activities etc. have engaged 10,372 contract labours to discharge their contractual obligations.

**3.3 Please indicate the Number of permanent women employees:**

As on 31.03.2018, total 366 permanent women employees are employed.

**3.4 Please indicate the Number of differently-abled permanent employees:**

Total 89 nos. of differently-abled persons are on regular employment as on 31.03.2018.

**3.5 Do you have an employee association that is recognized by management?**

Total 29 registered unions are in existence in different units and offices. The union having majority membership in any unit is accorded the status of recognized union. At present, only the Smelter plant has Recognized Union. The process of recognition at other units is expected to be over by July, 2018. A few other employee associations i.e. SC&ST Welfare Associations and Officers' Associations are operating at S&P complex, M&R complex and at Corporate office.

**3.6 What percentage of your permanent employees, is members of this recognized employee association?**

About 4,900 employees are members of the Registered Unions. Once the recognition process in all units are completed, majority of workmen will be represented by the recognized unions.

**3.7 Please indicate the number of complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.**

The status is:

Sl. No.	Category	No. of complaints filed during the F.Y. 2017-18	No. of complaints pending as on 31.03.2018
1	Child labour/ forced labour/ involuntary labour	Nil	Nil
2	Sexual harassment	Nil	Nil
3	Discriminatory employment	Nil	Nil
4	Any other grievances	Nil	Nil



**3.8 What percentage of your under mentioned employees were given safety & skill upgradation training in the last year?**

Permanent Employees; Permanent Women Employees; Casual/ Temporary/ Contractual Employees; Employees with disabilities.

The status related to above training is placed below:

Category of employees	Present Strength	Persons undergone Safety and Skill Up-gradation Training	Percentage of persons undergone Safety and Skill Upgradation Training
Permanent Employees(Excluding women & physically challenged employees)	6,321	3,172	46.66
Permanent Women Employees	366	137	37.43
Casual/ Temporary/ Contractual Employees	10,372	4,286	41.32
Employees with Disabilities	89	25	28.08

**Principle 4: Business should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.**

**4.1 Has the company mapped its internal and external stakeholders?**

Yes. Perceptions of internal stakeholders i.e. employees and external stakeholders i.e. Customers, suppliers, investors, Government and their representatives and committees, Local Communities, Regulatory authorities, Service providers & job contract workers are mapped. Stakeholders expectations are solicited through formal or informal channels of engagement and the stakeholders' concerns get addressed by streamlining of processes.

**4.2 Out of the above, has the Company identified the disadvantaged, vulnerable and marginalized stakeholders?**

Yes, Socio-economic base line survey is carried out in periphery areas of our plant and mines to identify the disadvantaged, vulnerable and marginalized stakeholders.

**4.3 Are there any special initiatives taken by the company to engage with the disadvantaged, vulnerable and marginalized stakeholders?**

Development of disadvantaged, vulnerable and marginalized stakeholders and their socio economic nourishment is always high on our agenda. We take up various initiatives which includes long term large-scale developmental projects and short-term issue based interventions based on community demand and result of different surveys and studies. Some of our key initiatives in the reporting year are:

- i. Health Care facilities for peripheral villages through Mobile Health Unit (MHU) and OPD center.
- ii. Residential Education for tribal students of peripheral villages at Damanjodi in collaboration with reputed schools at Koraput, Jeypore and Bhubaneswar.
- iii. **Support for pursuing education to 277 meritorious girl students belonging to Below Poverty Line category from peripheral areas of plant operation under the scheme "Nalco ki ladli".**
- iv. Provision of water facility in peripheral villages.
- v. Skill Development programmes to enhance employability of the local youth and contract workers.

**Principle 5: Businesses should respect and promote human rights.**

**5.1 Does the policy of the company on human rights cover only the company or extend to the Group/Joint Ventures/Suppliers/Contractors/ NGOs/Others?**

*Human Rights principles are not only applicable for all our employees, but these are also extended to service providers of all the outsourced jobs. The Human Rights practices mandated vide applicable statutes i.e. Factories Act, 1948, Industrial Disputes Act, 1947, Mines Act, 1972, Contract Labour (R&A) Act, 1970, Payment of Gratuity Act, 1972 are followed strictly in the Company. Also, in the job contract conditions for Suppliers & Contractors, important human rights issues i.e. Child Labour, Forced and Compulsory Labour, Discrimination, Disciplinary Practices, Wages & Work Schedule are suitably addressed vide SA 8000:2014 requirements to proscribe any violation. SA 8000:2014 standard is implemented in our production units, Mines and Corporate Office.*

**5.2 How many stakeholder complaints have been received in the past financial year and satisfactorily resolved by the management?**

*Status of complaints from stakeholders are outlined at 1.2.*



**Principle 6: Business should respect, protect, and make efforts to restore the environment.**

**6.1 Does the policy related to Principle 6 cover only the company or extends to the Group/Joint Ventures/Suppliers/Contractors/NGOs/others?**  
*The approved environment policy is also applicable to suppliers & contractors. Suitable clauses are included in our NIT and work order to ensure implementation of sound environmental practices by our suppliers and contractors.*

**6.2 Does the company have strategies/ initiatives to address global environmental issues such as climate change, global warming, etc.? Y/N. If yes, please give hyperlink for webpage etc.?**

*Initiatives taken to address global environment issues such as climate change, global warming are highlighted below:*

- *Four Wind Power Projects – i) 50.4 MW at Gandikota, Andhra Pradesh, ii) 47.6 MW at Jaisalmer, Rajasthan, iii) 50 MW at Devikot, Rajasthan and iv) 50.4 MW at Jath, Maharashtra are in commercial operation.*
- *Three Roof-top Solar Photo - Voltaic Plants of capacity 160 KWp, 100 KWp & 50 KWp are operating at Corporate Office, NALCO Township & HRD Centre of Excellence and Nalco Research and Technology Centre (NRTC) at Bhubaneswar. Another 50.7 MW Wind Power Projects in Tamil Nadu and 320 KWp Rooftop Solar Power Project at NRTC are in pipeline.*
- *Work order is placed for installation of 320 KWp roof top solar PV system at NRTC, Bhubaneswar.*
- *Study is being undertaken to assess the feasibility/viability of setting up roof top solar plants at various locations of Nalco at Damanjodi, Angul & Vishakhapatnam.*
- *During the year 1,33,226 numbers of saplings were planted at various locations of production units. At Mines, 1,00,536 saplings were planted and 19.67 hectares of reclaimed area was rehabilitated with plantation.*
- *During the year, 11,100 numbers of fruit bearing seedlings were distributed at Mines to villagers to help them improve greenery in the region.*
- *A Polyhouse (green house) of 256 Sq. Mtr. area was established at Mine nursery.*
- *1,00,000 numbers of seedlings have been raised at mines nursery during the year. The nursery which is a high altitude nursery at Mines significantly contributes to the crucial afforestation activities of the backfilled mined out areas to preserve the natural topography.*

**6.3 Does the company identify and assess potential environmental risks?**

*Yes, Potential environmental risks are identified through Comprehensive Environment Impact assessment, Aspect Impact Studies, Hazard Identification & Risk Assessments and Emergency Management Plans etc. The environment concerns, risks, opportunities for our products are addressed as outlined at para 2.1, Table-A.*

**6.4 Does the company have any project related to Clean Development Mechanism (CDM)? If so, provide details thereof. Also, if yes, whether any environmental compliance report is filed?**

*Yes. The 50.4 MW Wind Power Plant at Gandikota and 47.6 MW Wind Power Plant at Ludarva, Jaisalmer are taken under Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC). Both the projects were accorded Host Country Approval (HCA) from Ministry of Environment, Forest & Climate Change, GoI, the designated National CDM Authority (NCDMA) in India.*

**6.5 Has the company undertaken any other initiatives on – clean technology, energy efficiency, renewable energy? If yes, please give hyperlink for webpage etc.**

*Initiatives undertaken on renewable energy are highlighted below:*

- *Four Wind Power Projects: 50.4 MW at Gandikota, Kadappa, Andhra Pradesh, 47.6 MW at Ludarva, Jaisalmer, Rajasthan, 50 MW at Devikot, Jaisalmer, Rajasthan and 50.4 MW at Jath, Sangli, Maharashtra are in operation.*
- *NALCO has placed order for setting up of Wind Power Projects of 25.5 MW at Kayathar in Tuticorin dist., Tamil Nadu and 25.2 MW at Viliseri in Tuticorin dist., Tamil Nadu.*
- *Three Rooftop Solar Power Plants of capacity 160 kWp, 100 kWp & 50 kWp are in operation at the Nalco Corporate Office, Nalco Township & HRD Centre of Excellence and Nalco Research and Technology Centre (NRTC), Bhubaneswar.*
- *The Company has awarded work order for installation of 320 KWp rooftop solar PV system at NRTC, Bhubaneswar.*
- *Study is being undertaken to assess the feasibility/viability of setting up roof top solar plants at various locations of Nalco at Damanjodi, Angul & Vishakhapatnam.*



**6.6 Are the Emissions/Waste generated by the company within the permissible limits given by CPCB/SPCB for the financial year being reported?**

*All emissions/ waste generated by the operating units of the company are within the permissible limits prescribed by CPCB/ SPCB. The environmental statement containing such information is submitted to regulatory authority every year.*

**6.7 Number of show cause/ legal notices received from CPCB/SPCB which are pending (i.e. not resolved to satisfaction) as on end of Financial Year.**

*Nil*

**Principle 7: Business, when engaged in influencing public and regulatory policy, should do so in a responsible manner.**

**7.1 Is your company a member of any trade and chamber or association? If Yes, Name only those major ones that your business deals with:**

*Yes, the major ones are:*

- 1. Aluminium Association of India*
- 2. Standing Conference of Public Enterprises (SCOPE), New Delhi*
- 3. Federation of Indian Mineral Industries (FIMI), New Delhi.*
- 4. National Safety Council, Mumbai*
- 5. Quality Circle Forum of India, Secunderabad*
- 6. Indian Ceramic Society, Kolkata*
- 7. Confederation of Indian Industry (CII ), New Delhi*
- 8. Utkal Chamber of Commerce & Industries, Bhubaneswar*
- 9. Engineering Export Promotion Council, Kolkata*
- 10. Federation of Indian Export Organisation, New Delhi*
- 11. International Chamber of Commerce, Delhi*
- 12. Chemical and Allied Products Export Promotion Council, Kolkata*

**7.2 Have you advocated/lobbied through above associations for the advancement or improvement of public good? If yes, specify the broad areas (E.g., Governance and Administration, Economic Reforms, Inclusive Development Policies, Energy security, Water, Food Security, Sustainable Business Principles, Others)?**

*Yes. Broad areas taken up for public good are:*

- Fly ash utilization*
- Water recycling and conservation*
- Climate Change imperatives*
- Conservation of Environment*
- CSR and peripheral development*
- Skill Development & Employment Generation*
- Increased use of Aluminium in automobile, Power transmission, construction and packaging sector,*
- Sustainable mining*
- Energy, Water, Mineral conservation*
- Safety, Health and ergonomics at workplace*
- Economic Leadership by betterment of industries.*
- Development of downstream aluminium industries through Make in India scheme of Govt. of India.*

**Principle 8: Businesses should support inclusive growth and equitable development**

**8.1 Does the company have specified programmes/ initiatives/projects in pursuit of the policy related to Principle 8? If yes, details thereof.**

*Yes. A comprehensive CSR policy approved by Board oversees implementation of specific initiatives during 2017-18, in the field of: Healthcare Services, Promotion of Education, Women Empowerment, Improvement in Sanitation, Drinking Water Provision, Support to physically challenged persons, Skill Development, Environment Sustainability, Social Infrastructure Development, Promoting Culture etc.*





**8.2 Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/any other organization?**

*The CSR activities of the Company are undertaken through i) Nalco Foundation, the CSR wing of NALCO ii) directly by Nalco and iii) Rehabilitation and Periphery Development Advisory Committees (RPDACs).*

**8.3 Have you done any impact assessment of your initiative?**

*Social Impact Assessment (SIA) of the CSR projects implemented by Nalco were carried out in 2017 by Utkal University, Bhubaneswar.*

**8.4 What is your company's direct contribution to community development projects- Amount in INR and the details of the projects undertaken?**

*During the financial year 2017-18, a total amount ₹ 29.01 crores has been spent for CSR activities. Some of the major activities are:*

- i) Total 812 students from periphery villages of Damanjodi and Pottangi mines area have been sponsored for formal education in 3 residential schools viz. Kalinga Institute of Social Science (KISS), Bhubaneswar; Adarash Vidyalaya, Jeypore; & Bikash Vidyalaya, Koraput.*
- ii) Complementing the “Beti Bachao Beti Padhao” scheme of Government of India Nalco has sponsored the education of 277 nos. of girl students under the programme “Nalco Ki Ladli” from the periphery villages.*
- iii) Further, Nalco has extended financial assistance for infrastructure development of Sunabeda Deaf School, MANAS (School for the mentally challenged) and financial support to “Desire Society” at Vizag working for HIV affected children..*
- iv) MHU Services: Nalco has successfully addressed the issues of the poorest people in the periphery of plant areas by running Mobile Health Units. Total 3,191 Mobile Health Camps were arranged in M&R complex and in S&P Complex treating 1.38 lakh patients.*
- v) NALCO in collaboration with ALIMCO provide assistive devices to 447 People with disabilities.*
- vi) Nalco has contributed towards installation of 7-axis Robotics machine with in-built CAD/CAM software for manufacturing of sockets & modification of necessary infrastructure at SVNIRTAR (Swami Vivekanand National Institute of Rehabilitation Training and Research), Olatpur, Cuttack under the Ministry of Social Justice and Empowerment, GoI.*
- vii) In 6 periphery villages of M&R Complex 611 IHHL units (Individual House Hold Latrines) are to make the villages Open Defection Free (ODF).*
- viii) In the recent years under the Swachha Vidyalaya Abhijan (SVA) programme, NALCO has constructed 479 toilets. Water supply has been provided to toilets in 128 schools i.e.54 in Angul and 74 in Damanjodi.*
- ix) Under the Swatch Iconic Place Programme of GoI, various steps taken in iconic city Puri are: Beautification and maintenance of Gandhi Park, installation of water posts for clean drinking water, providing Battery Operated Vehicle at railway station for senior citizens and differently-abled persons.*
- x) Mechanised Charkhas have been distributed to women of Puri, Khurda and Koraput district for livelihood generation. Nalco has also promoted tribal women empowerment and facilitated them to be women entrepreneurs through mushroom cultivation, in remote village of Pottangi block of Koraput district.*
- xi) 720 rural unemployed youths were imparted skill development training under “Skill India Initiatives” of Govt. of India through NSDC and Certified Skilling Partners. Recognition of prior learning training has been imparted to 420 contract workers of Bauxite mines.*

**8.5 Have you taken steps to ensure that this community development initiative is successfully adopted by the community?**

*We plan and implement various initiatives in the areas of health, education, livelihood, rural development etc. involving Government bodies, NGOs and other Programme Implementing Agencies (PIA), for maximum effect.*

**Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner.**

**9.1 What percentage of customer complaints/consumer cases are pending as on the end of financial year?**

*Customer complaints received are addressed through a procedure based on ISO 9001 requirements, with provision for adequate review & effective corrective actions. Customer complaints, whenever required, are examined at customer premises by deputing marketing personnel from regional offices or technical personnel from production facilities depending upon nature of complaint. In case of a claim for compensation, the same is thoroughly evaluated by an approved committee and proposal recommending necessary compensation if any, is submitted for approval. The same is paid to the customer, after approval of competent authority.*



Customer Complaints pending as on 31.03.2018 is one only, which is 7.69% of total customer complaints pending as on end of previous financial year & received during this financial year i.e. 13 numbers. Status report on Customer Complaints as on 31.03.2018 is:

Complaints pending as on 31.03.2017	4
Complaints received during FY 2017-18	9
Complaints disposed during FY 2017-18	12
Complaints pending as on 31.3.18	1
Percentage of Customer Complaints Pending on 31.3.18	7.69%

9.2 Does the company display product information on the product label, over and above what is mandated as per local laws?

No.

Only the information mandated by law is provided on product label.

For Aluminium metal, the product grade, stack no., bundle no., net weight is displayed on the product label. In case of Rolled Products, name of the Company & production unit and place, Coil No, Grade, Size (Thickness X Width) in mm, Net Weight (in kgs.), Signature of the inspecting authority, Date of Packaging, No. of sub-stacks and total no. of sheets per packet (for Rolled sheets only) is displayed on the product label.

9.3 Is there any case filed by any stakeholder against the company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last five years and pending as on end of financial year. If so, provide details thereof.

No.

9.4 Did your company carry out any consumer survey/ consumer satisfaction trends?

Yes.

Our Core Value and Quality Policy emphasizes ensuring Customer Satisfaction as an integral aspect of our business philosophy. Apart from informal customer feedbacks obtained during various interactions with customers, a structured customer satisfaction survey is conducted twice a year to objectively evaluate customer perceptions. Customer satisfaction surveys are conducted in September & March every year, ratings by customers regarding various parameters of product & service quality are captured. These ratings are reviewed by senior management and whenever required, initiatives are planned for systemic improvements.



# REPORT ON CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNING AND OUTGO:

## Annexure-IV

### A. CONSERVATION OF ENERGY:

#### (i) The steps taken or impact on Conservation of Energy:

Your Company has always been assigning high importance to the energy conservation and has been utilizing the state-of-the-art technologies for maximizing energy efficiency across all its production units. Your Company is carrying out Technological upgradation and energy conservation measures through Capital Repair Group and Small Group Activities (SGAs) by catching up technological advancements and enhancing the energy efficiency in its different activities and processes.

#### Energy conservation measures adopted in different units are as under:

##### Bauxite Mines:

- 230 nos. old conventional 250 Watt HPSV Lamps, 110 nos. old 250 Watt HPSV fixtures, 300 nos. of 70 Watt well glass HPSV fixtures, 110 nos. of 70 Watt Well glass fixtures, 80 nos. of 250 Watt HPSV Flood light fixtures have been replaced by their corresponding equivalent LED Luminaries.
- 10 nos. of Astronomical timers have been installed in lighting circuits in place of digital timers with a view to conserve energy.

##### Alumina Refinery:

- Procurement, installation & commissioning of 50 nos. VFDs in Battery A, B, C & D completed on 30.12.2017 and electrical energy savings of 3,637,000 KWh achieved in last four months.
- Use of dewatering aid for reduction in moisture of feed hydrate to Calciners for reducing in Fuel oil consumption.
- Modification of Aluminate Liquor pipes to Streams 3 & 4 seed filter chutes to reduce discharge pressure of aluminate pumps for Electrical Energy Saving.
- Indirect heating of Chemical Cleaning Liquor for Streams 1 & 2 precipitator for Steam Energy Saving.
- Replacement of old aluminate liquor pumps with energy efficient pumps to save electrical energy.
- Usage of synthetic flocculent in place of wheat bran for mud washers; reduction of Steam Energy and Electrical energy is achieved.
- Downsizing of blower capacity for three numbers of disc filters for saving electrical energy.
- Modifications carried out in steam ejector lines of evaporators to maintain vacuum to achieve higher steam economy for steam saving.
- Conversion of two numbers of seven stage boiler feed pumps of boilers 1, 2 & 3 to six stages as an electrical energy conservation measure.
- Development and standardization of control philosophy to reduce support fuel (HFO) during Coal Mill changeovers has been done and saving of 171 KL HFO achieved.
- Replacement of tube lights and incandescent bulbs with LED tubes and bulbs at all major roads and public buildings.

##### Smelter Plant:

- Total 121 no. of pots graphitized in the FY 2017-18 and Energy saving on account of graphitization is 1,26,70,240 KWh (1089.64 TOE).
- Other energy conservation projects contributing to the reduction of electrical energy during the year are as under:
  - Replacement of 102 nos. of standard LT motors with high energy efficient IE-2 class motor: 7,46,055 KWh (64.16 TOE).
  - Putting sun film over window & door glass of compressors house 2 and rodding shop control room: 49,990 KWh/annum (4.30 TOE).
  - Replacement of Aluminium blades by FRP blades in cooling tower 1 & 2: 75,346 KWh (6.48 TOE).

##### Captive Power Plant (CPP):

- Improved version of Air Preheater having double sealing arrangement with 24 Sectors were retrofitted in place of original single sealing, 12 Sectors APH in Unit#1 with the assistance from M/s. BHEL in January, 2018. This has resulted in increase in boiler efficiency by about 1.14% due to reduction in air leakage and increased heat transfer.
- Chemical cleaning of Condensers of Unit 1, 7, 8 & 10 has resulted in reduction of Unit Heat Rate by about 84 Kcal/KWh and saving in coal consumption by 16,371 MT/year per Unit due to improvement in condenser vacuum.
- A plant wide Energy Management System comprising of multifunction meters (600 nos.) connected through a large network of Fiber



Optic cables was commissioned for accurate monitoring and measurement of energy in the plant. The monitors are installed at important locations to display energy data on real time basis. Substantial improvement in Auxiliary Power Consumption (APC) of the plant is expected to be achieved by taking up corrective actions in equipments which consume more energy.

4. A Centac compressor was replaced with a new energy efficient Screw Compressor of capacity 43 Nm<sup>3</sup>/min in Unit #7 & #8 Compressor House in September, 2017. This will help in achieving reliability of Compressed air system.
5. Procurement and installation of energy efficient light fittings:
  - a. Electronic Tube light ballast in place of copper ballast: 883 nos.
  - b. Total nos. of LED light fitting installed in place of conventional ones: 1,871 nos.

#### **Energy conservation projects proposed or in progress during 2017-18**

##### **Mines:**

Variable Frequency drives to prevent heavy inrush of current during DOL starting thus removing constraints of no. of start/stop for Stream 2 Crushers. Expected date of installation & commissioning in October, 2018.

##### **Alumina Refinery:**

1. Replacement of Air Preheater (APH) in Boiler no. 1 and 3. Procurement completed. Erection/Installation in Boiler 3 is in progress. Erection/Installation in Boiler 1 will be done in next Year.
2. Replacement of the old vent steam control valves with new and improved design valves has been planned. Procurement action is in progress.
3. Replacement of tube lights with 18 Watts LED tubes and CFL and incandescent bulbs with 07W and 09W LED bulbs. It is planned to replace 50% balance light in plant roads by June, 2018 and 75% balanced lights in plant process areas by March, 2019.
4. Use of Dewatering Aid in Filtration area to reduce fuel requirement in Calciner.

##### **Captive Power Plant (CPP): Nil**

Replacement of new type of Air preheater with sealing arrangement is planned to be carried out in another 5 units.

##### **Smelter:**

1. Reduction in Electrical Energy consumption in pot lines by installation of Anode Slot Cutting Machine at Rodding Shop-II.
2. Reduction in raw Materials consumption by recycling of coke dust generated at Bake oven-1 and slot cutting machine-1 to GAP-1 which will be used for production of green anode at GAP-1.
3. Waste heat recovery by use of Recuperator in Melting furnace-1 of Rolling Plant.
4. Replacement of 5,127 nos. TFL Tubes and 284 nos. HPSV/MH lamps with LED Lamps.
5. Monitoring of pressure & temperature of compressed air network by use of Embedded Technology & GPRS.
6. Development of low energy cell technology for smelter plant (AP2XN) in collaboration with Rio Tinto Alcan (RTA) is in progress so as to reduce Electrical Energy consumption in pot lines.
7. Improvement of Billet Quality with better surface finish through addition of Strontium in 6,000 series, under trial.

##### **(ii) Steps taken by the company for utilizing alternate sources of energy:**

Your Company is commercially operating the following Wind and Solar Power Generation Units:

1. 50.4 MW Wind Power Plant at Gandikota, Kadapa, Andhra Pradesh.
2. 47.6 MW Wind Power Plant at Ludarva, Jaisalmer, Rajasthan.
3. 50 MW Wind Power Plant at Devikot, Jaisalmer, Rajasthan.
4. 50.4 MW Wind Power Plant at Jath, Sangli, Maharashtra.
5. 310 KWp Rooftop Solar Power Plant at NALCO Bhawan, NALCO Nagar and NRTC Buildings

During the year, your Company has generated 252.148 MU from wind power and 0.344 MU from Solar power Plants.

Further, your Company had placed orders for setting up 25.5 MW Wind Power Plant at Kayathar, Tuticorin District of Tamil Nadu in September, 2017 at a project cost of ₹ 163 crores. Supply of equipment and erection work of the project is in progress. Commissioning of the project is scheduled to be achieved by October, 2018.



Your Company had placed orders for setting up 25.2 MW Wind Power Plant at Veliseri, Tuticorin District of Tamil Nadu in May, 2018 at a project cost of ₹ 147 crores. The activities for obtaining NFR (Noted For Record) approval from TANGEDCO (Tamil Nadu Generation & Distribution Corporation Limited) are in progress before start-up of construction works. Commissioning of the project expected by March, 2019.

**(iii) The capital investment on energy conservation equipments:**

**Mines:**

An amount of ₹ 63.5 lakhs has been spent in 2017-18 towards the energy conservation measures at Mines.

**Alumina Refinery:**

1. Variable frequency drives for flow control in place of control valves: ₹ 900.00 lakhs.
2. Modification of Aluminate Liquor pipes to Streams - 3 & 4 seed filter: ₹ 3.00 lakhs.
3. Indirect heating of Chemical Cleaning Liquor for Streams - 1 & 2 precipitator: ₹ 70.00 lakhs.
4. Replacement of old aluminate liquor pumps with energy efficient pumps: ₹ 40.00 lakhs.
5. Downsizing of blower capacity for three numbers of disc filters: ₹ 33.00 lakhs

**Smelter:**

1. Graphitisation of 121 pots in pot lines: ₹ 65.08 crores.
2. Pneumatic conveying & recycling of coke dust in carbon plant: ₹ 1.76 crores.
3. Technical Co-development of AP 2XN Technology: ₹ 1.8 crores.
4. Melting Furnace in Pot line: ₹ 0.75 crores.

**CPP:**

1. Air Preheaters: ₹ 4.95 crores.
2. Screw compressor: ₹ 0.82 crores.
3. LED lights & Electronic tube light ballast: ₹ 0.388 crores.

**B. TECHNOLOGY ABSORPTION, ADAPTATION & INNOVATION:**

Sl. No.	Technology	Benefits thereof
1	Substitution of Natural flocculant Wheat Bran used in washers with Synthetic flocculants implemented in the plant.	- Substitution of Wheat Bran which is a natural fodder material.
		- Can be used for the entire washing circuit.
		- Stability in operation even with poor quality bauxite.
		- Energy saving and saving in material costs.
2	Pressure filtration for dry disposal of Red mud accepted after lab trials and is under implementation in plant.	- Improvement in Red mud slurry solids from present 56% to better than 75%.
		- Minimum 36% reduction in soda lost with mud.
		- Enhancement in the life expectancy of the Red mud pond, will be estimated after further study.
3	Upgradation of Boiler-2 ESP of SPP	To match with latest particulate emission norms
4	Addition of Boric acid in Green Anode Plant (GAP) 2 started.	Improve anode quality
5	The PLC processor system of Carbon Recycle System at Rodding Shop-2 was upgraded to state-of-the-art Control Logix platform from PLC-5 family.	Upgradation of technology due to non-availability of spares & support.
6	The PLC system (comprising of Processor, I/Os, Power Supply & Operator Control Panel) for Plano Milling machine at Central Repair Shop was upgraded to state-of-the-art Siemens S7-1200 system from the obsolete S7-200 system.	Upgradation of technology to take care of technological obsolescence.
7	Upgradation of wireless communication system of Heat regulation system of ABF-3.	Upgradation of technology



8	Induction of vibrated Bulk density (VBD) test facility for CP coke quality evaluation.	Upgradation of technology
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**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, areas where this has not taken place, reasons therefore and future plans of action.
RTDAS (Real Time Data acquisition system) for CH (B) stacks, FTP 7 & 8 stacks for continuous uploading data to the server of OSPCB through GPRS service.	2013-14	YES	—
Online ambient air quality monitoring station at Township commissioned for continuous uploading data to the server of OSPCB through GPRS service.	2013-14	YES	—
New bath by pass system in bath handling system of rodding shop 2 of carbon plant.	2013-14	YES	—
Aluminium Billet casting facility equipped to cast 8", 9" and 10" Billets.	2013-14	YES	—
Anode stub hole depth increased for reduction of DC Energy consumption.	2013-14	YES	—
Introduction of automatic bath breaking m/c in Rodding Shop-1.	2013-14	YES	—
Six numbers online particulate matter (PM) analysers installed & commissioned in FTPs of Potlines.	2014-15	YES	—
Three numbers online ambient air quality monitoring stations commissioned inside Smelter plant.	2014-15	YES	—
Online effluent monitoring station commissioned at the outlet of effluent treatment plant.	2014-15	YES	—
Automated Alumina mixing system for crushed bath plant at rodding shop-1.	2014-15	YES	—
C.P. Coke blending system installed in GAP1.	2014-15	YES	—
RTDAS (Real Time Data acquisition system) for FTP 1-6 stacks, Bake-oven Stacks, 3 Nos. new ambient air monitoring stations and effluent monitoring station for continuous uploading of monitoring data to the server of OSPCB through GPRS service .	2015-16	YES	—
Installation of Fume Treatment Center in Anode Baking Furnace -1.	2015-16	YES	—
Centralized SCADA system commissioned at FTP-5 to monitor the status of 10-different plants (FTP 5 to 8, Silo 5 to 8, HDPS-1 & 2).	2016-17	YES	—
The SCADA & HMI system of Billet casting Machine upgraded from industrial key pad based workstation to latest touch screen based workstation.	2016-17	YES	—
New product, CH-90 grade Billet (High Speed Extrusion Billet) developed and commercialized.	2016-17	YES	—
Smelter effluent water treatment plant based on EMRION Nano technology was set up.	2016-17	YES	—
C.P. Coke blending system installed in GAP-II.	2016-17	YES	—



Technology Imported/Upgraded	Year of import/ upgraded	Has technology been fully absorbed	If not fully absorbed, areas where this has not taken place, reasons therefore and future plans of action.
The PLC processor system of Carbon Recycle System at Rodding Shop-2 was upgraded to state-of-the-art Control Logix platform from PLC-5 family.	2017-18	YES	—
The PLC system (comprising of Processor, I/Os, Power Supply & Operator Control Panel) for Plano Milling machine at Central Repair Shop was upgraded to state-of-the-art Siemens S7-1200 system from the obsolete S7-200 system because of technological obsolescence.	2017-18	YES	
Up-gradation of wireless communication system of Heat regulation system of ABF-3.	2017-18	YES	
Unit #8 has been retrofitted with state of the art METSO system of DCS supplied by BHEL and was successfully commissioned to take care of obsolescence of existing system and to have single platform for Turbine control, Boiler control & balance of plant control. With commissioning of new system, the total control is now on single platform and abnormality analysis can be carried out effectively.	2017-18	No	The retrofitting of DCS in Unit#7 is presently under progress.
With in-house engineering, STP-I was renovated and put to operation by installing phytoid filter & improved aeration system to meet the recent norms stipulated by CPCB and also to comply with CTO condition. The treated STP water is utilized for horticulture purpose.	2017-18	YES	—

#### Expenditure on R&D:

₹ in lakhs

Nature	2017-18	2016-17
Capital	1,886	2,772
Revenue	909	1,980
Total	2,795	4,752
R&D Expenditure as % of turnover	0.30	0.60

- C. The foreign exchange earnings for the year 2017-18 is ₹ 3,573.75 crores as against ₹ 3,277.32 crores in 2016-17. The foreign exchange outgo for the year under report was ₹ 547.67 crores as against ₹ 288.80 crores in the previous year.



## CORPORATE GOVERNANCE REPORT

### Annexure V

#### Philosophy on code of governance

Corporate Governance is a set of principles being practiced by a corporate for creating and enhancing value for its stakeholders legally, ethically and on a sustainable basis. The principles are based on conscience, openness, fairness, professionalism and accountability.

In NALCO, the aim of corporate governance practices is to align the interests of stakeholders from all discipline. This improves the public understanding about the organization, its structure, policies and activities. A robust system of internal control, timely and continuous flow of material information to stakeholders, compliance of statutes have strengthened governance practices in NALCO over the years. Transparency, integrity, accountability and fairness are integral part of the functioning of the Company.

#### I. Board of directors

An enlightened, well informed and independent professional Board is the root for ensuring highest standard of governance practices. The Board is entrusted with ultimate responsibility of the management, general affairs, direction and performance of the Company. The Board derives its power from the Companies Act, 2013, SEBI (LODR) Regulations, 2015, DPE guidelines on the functioning of Navratna Companies and other guidelines issued by the Government from time to time. The Board also gives direction and exercise appropriate control to ensure that the Company meets stakeholders' aspiration and societal expectation.

##### (a) Composition of the Board

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.

Against the sanctioned strength mentioned above, the composition of the Board, category wise, as on 31st March, 2018 is as follows:

Name of Director with DIN	w.e.f	Designation
Dr. Tapan Kumar Chand 01710900	27.07.2015	Chairman-cum-Managing Director
Shri Krushna Chandra Samal 03618709	03.01.2014	Director (Finance)
Shri V. Balasubramanyam 06965313	01.01.2015	Director (Production)
Shri Basant Kumar Thakur 07557093	04.07.2016	Director(HR)
Shri Sanjib Kumar Roy 06756812	03.02.2017	Director (P&T)
Dr. K. Rajeswara Rao 08071005	19.02.2018	Part-time Official Director
Shri Anil Kumar Nayak 08097669	27.03.2018	Part-time Official Director
Shri Dipankar Mahanta 01583516	21.11.2015	Part-time Non-official(Independent) Director
Shri S.Sankaraman 07346454	21.11.2015	Part-time Non-official(Independent) Director
Shri Pravat Keshari Nayak 07346756	21.11.2015	Part-time Non-official(Independent) Director
Prof. Damodar Acharya 06817842	21.11.2015	Part-time Non-official(Independent) Director
Shri Maheswar Sahu 00034051	21.11.2015	Part-time Non-official(Independent) Director
Smt. Kiran Ghai Sinha 07726477	03.02.2017	Part-time Non-official(Independent) Director
Shri Nagendra Nath Sharma 02888318	06.09.2017	Part-time Non-official(Independent) Director
Smt. Achla Sinha 07932932	08.09.2017	Part-time Non-official(Independent) Director





The post of Director (Commercial) which was lying vacant since 1st March, 2017 was filled up on 23.04.2018.

The above composition meets requirement of the provisions under SEBI (LODR) Regulations, 2015.

Although the composition of the Board was in compliance with the requirements under the Companies Act, 2013 at the beginning of the year, but it was not in compliance with the requirements under the SEBI (LODR) Regulations, 2015 and DPE guidelines on corporate governance till 5th September, 2017. On induction of two more Independent Directors on the Board w.e.f. 06.09.2017 and 08.09.2017 respectively, the composition of the Board was in line with requirements under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE guidelines on corporate governance w.e.f.06.09.2017.

**(b) Board meetings and attendance of Directors**

- Secretarial Standards issued by the Institute of Company Secretaries of India (ICSI) is followed for convening the Board meetings and General meetings.
- Board meetings are convened by giving minimum 7 days' advance notice. In case of business exigencies, the Board's approval is taken through circular resolutions, if permitted under statute.
- Agendas with detailed agenda notes are normally circulated at least a week before the scheduled date of meeting for meaningful and informed discussion in the meeting. However, during the year under review, some of the agenda notes were sent in less than seven days' time.
- Sometimes when it is not possible to circulate the agenda in advance, the same is placed on table during the meeting with the permission of CMD and consent of majority of Directors present in the meeting including at least one Independent Director.
- The meetings of the Board of Directors and other committee meetings are held in the registered office of the Company.
- The Company places information as set out in Reg. 17 read with part A of Schedule II of the Listing Regulation, before the Board for their consideration.

**(c) Details of Board meetings and presence of directors in the meeting are as follows:**

Board Meeting No. & Date	Board Strength	No. of Directors Present				Total Attendance	% of attendance to strength
		Functional	Part-time official	Part-time non official (Independent)			
299/10.05.2017	13	5	2	4	11	85	
300/27.05.2017	13	5	2	5	12	92	
301/22.07.2017	13	5	1	5	11	85	
302/09.08.2017	13	5	1	5	11	85	
303/22.09.2017	15	5	1	6	12	80	
304/11.11.2017	15	5	1	5	11	73	
305/09.02.2018	15	4	0	8	12	80	

- The minimum time gap between any two Board meetings was 16 days and maximum time gap between any two Board meetings was 89 days.
- Necessary quorum was present for all the Board meetings held during the year.

The table below shows the attendance of Directors in the Board meeting held during 2017-18 and their attendance in the last Annual General Meeting:

Name & Designation	Board Meetings		Attendance at 36th AGM held on 23.09.2017	No. of other directorships	Membership in the Committees of other Companies	
	Held during the tenure	Attended			Membership	Chairmanship
Dr. T. K. Chand CMD	7	7	Y	Nil	Nil	Nil
Shri K. C. Samal Director (Finance)	7	7	Y	Nil	Nil	Nil
Shri V. Balasubramanyam Director (Production)	7	7	Y	Nil	Nil	Nil
Shri B. K. Thakur Director (HR)	7	7	Y	Nil	Nil	Nil
Shri S. K. Roy Director(P&T)	7	6	Y	Nil	Nil	Nil



Name & Designation	Board Meetings		Attendance at 36th AGM held on 23.09.2017	No. of other directorships	Membership in the Committees of other Companies	
	Held during the tenure	Attended			Membership	Chairmanship
Dr. K. Rajeswara Rao (1) Part-time Official Director	Nil	NA	NA	Nil	Nil	Nil
Shri A.K. Nayak (2) Part-time Official Director	Nil	NA	NA	01	Nil	Nil
Shri Dipankar Mahanta Independent Director	7	6	N	01	Nil	Nil
Shri S.Sankararaman Independent Director	7	5	N	Nil	Nil	Nil
Shri P. K. Nayak Independent Director	7	7	Y	Nil	Nil	Nil
Prof. Damodar Acharya Independent Director	7	7	Y	Nil	Nil	Nil
Shri Maheswar Sahu Independent Director	7	4	N	5	1	1
Smt. Kiran Ghai Sinha Independent Director	7	4	Y	Nil	Nil	Nil
Shri N. N. Sharma (3) Independent Director	3	3	Y	Nil	Nil	Nil
Smt. Achla Sinha (4) Independent Director	3	2	Y	Nil	Nil	Nil
Shri Subhash Chandra (5) Part-time Official Director	7	6	N	2	Nil	Nil
Dr. N K Singh (6) Part-time Official Director	7	2	N	3	1	Nil

(1) w.e.f. 19.02.2018

(2) w.e.f. 27.03.2018

(3) w.e.f. 06.09.2017

(4) w.e.f. 08.09.2017

(5) upto 16.02.2018

(6) upto 26.03.2018

- None of the Directors are members of more than ten Board level committees or chairman of more than five committees in which they are members.
- None of the Directors serve as Independent Director in more than seven listed companies.
- Other directorships do not include directorships of private limited companies, foreign companies and Section 8 companies.
- The Chairmanship/Membership of Board Committees include only Audit Committee and Stakeholders Relationship Committee.
- None of the Directors are related to each other in the Company.

**(d) Non-Executive Directors**

- i) Part-time Official Directors and Part-time Non-official (Independent) Directors are the Non-executive Directors forming part of the Board.
- ii) Non-executive Directors constitute 66.67% of the total strength of the Board as on 31st March, 2018.
- iii) The Part-time Non-official (Independent) Directors are appointed by the President of India and the terms and conditions are fixed by the Administrative Ministry. They are appointed for a tenure of 3 years.
- iv) The Independent Directors constitute 53.33% of the total strength of the Board as on 31st March, 2018 which is in compliance with the Act.
- v) All the Independent Directors give declaration of independence at the beginning of the financial year which is placed in the first meeting of the Board in that financial year.
- vi) Formal letter of appointment is issued to the Independent Directors on their 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 of Independent Directors are available in the Company's website [http://www.nalcoindia.com/investor/appt\\_letters.pdf](http://www.nalcoindia.com/investor/appt_letters.pdf).
- vii) Acclimatization programme is conducted for the Independent Directors on their appointment on the Board. They are also nominated to attend various orientation programmes being conducted by ASSOCHAM, CII, SCOPE, DPE in this regard. The details of such programmes



attended by the Independent Directors are available in the following link;

<http://www.nalcoindia.com/investor/Familiarisation-Programme-for-Directors.pdf>

- viii) None of the Non-executive Directors hold any shares in the Company.
- ix) Independent Directors are not entitled for stock option in the Company.

(e) **Performance evaluation of Board members**

- The requirement relating to performance evaluation of Board members under Section 178(2) of the Companies Act, 2013 is exempted for Government Companies vide circular dated 05.06.2015 issued by the Ministry of Corporate Affairs (MCA).
- The provisions of Section 134(3)(p) which requires mentioning the manner of formal evaluation of the Board, committees and individual Directors, in the Board Report is also exempted for Government Companies, if Directors are evaluated by the Administrative Ministry.
- DPE vide OM dated 20.06.2013 have withdrawn review of the performance of the Chairperson of the company after taking into account the views of all the Directors, from the purview of separate meeting of Independent Directors.
- MCA vide circular dated 05.07.2017 have also exempted evaluation mechanism of non-Independent Directors and chairperson of Government Companies as specified in Schedule IV to the Companies Act, 2013.
- However, SEBI has not granted any exemption to the listed Government Companies under SEBI (LODR) Regulations, 2015. Rather, SEBI had come out with a circular dated 05.01.2017 on guidance note on Board Evaluations applicable to all listed Companies without giving any relaxation/exemptions on Board Evaluation to the listed Government Companies.

**II Remuneration to Directors**

- No remuneration/sitting fees is paid to the Government nominee Directors.
- Independent Directors are paid sitting fees of ₹ 20,000/- which is within the statutory limit prescribed under Companies Act, 2013, for each meeting of Board/committee attended by them.
- Out-of-pocket expenses incurred by the Independent Directors for attending the meetings are reimbursed.
- MCA vide notification dated 05.06.2015 has exempted Government Companies from formulating policy relating to remuneration of Directors, required under Section 178 of the Companies Act, 2013.
- Remuneration paid to Functional Directors including Chairman-cum-Managing Director comprises salary, benefits and performance related payments (PRP) as per extant DPE guidelines.
- All Functional Directors including Chairman-cum-Managing Director are appointed by the President of India for a period of 5 years from the date of taking over the charge or attaining the age of superannuation or till further order of the Government of India, whichever occurs first.
- All Functional Directors are members of New Pension Scheme (NPS).
- The Company has not issued any stock option during the year 2017-18.
- There is no provision for payment of severance fees to any Director.

Details of remuneration of Functional Directors for the FY 2017-18 are given below:

Name	Remuneration for the year 2017-18 (₹)		
	All elements of remuneration	Other benefits	Total
Dr. T. K. Chand Chairman cum Managing Director	46,72,530	—	46,72,530
Shri K.C. Samal, Director (Finance)	53,45,378	—	53,45,378
Shri V. Balasubramanyam Director (Production)	48,15,478	3,15,267	51,30,745
Shri B. K. Thakur Director(HR)	42,54,081	1,05,192	43,59,273
Shri S. K. Roy Director(P&T)	56,13,390	—	56,13,390

Details of sitting fees paid to the Independent Directors during 2017-18 are given below:



Name	Sitting Fees (₹)*		Total (₹)
	Board Meetings	Committee Meetings	
Shri Dipankar Mahanta	1,20,000	4,00,000	5,20,000
Shri S. Sankararaman	1,00,000	3,20,000	4,20,000
Shri P.K. Nayak	1,40,000	3,40,000	4,80,000
Prof. Damodar Acharya	1,40,000	3,40,000	4,80,000
Shri Maheswar Sahu	80,000	2,40,000	3,20,000
Smt. Kiran Ghai Sinha	80,000	2,20,000	3,00,000
Shri N. N. Sharma	60,000	-	60,000
Smt. Achla Sinha	40,000	-	40,000

\*TDS was deducted from the amount paid as sitting fees.

### III. Various Committees of the Board

- Committees are constituted to keep focus on specific issues and to have effective decision making process.
- While some committees are mandated under different statutes, some other committees are constituted voluntarily without any such legal requirements.
- The composition of the statutory committees complies the requirements under the statutes. Voluntary committees comprise judicious mix of executive and non-executive directors.
- Secretarial Standards relating to Board meeting are equally applicable to committee meetings.
- The terms of reference of each committee are approved by the Board.
- There are 9 Board level committees out of which 6 committees are statutory and 3 committees are voluntary in nature.
- Besides, there are 4 more committees where only the Functional Directors are members and these committees take care of certain functional activities with the terms of reference approved by the Board.

#### A. Audit committee

- i) It is a statutory committee constituted under provisions of the Companies Act, 2013 and SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance.
- ii) Eight meetings of the Audit Committee were held during the year on 10.05.2017, 26.05.2017, 21.07.2017, 09.08.2017, 11.11.2017, 25.11.2017, 09.02.2018 and 28.03.2018. The maximum gap between any two Audit Committee meetings was 93 days.
- iii) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows :

Member of Audit Committee	Category	Position	Meeting	
			held	attended
Shri P.K.Nayak	Independent	Chairman	8	8
Shri D.Mahanta	Independent	Member	8	8
Shri S.Sankararaman	Independent	Member	8	6
Prof. D.Acharya	Independent	Member	8	8
Director(Production)	Functional	Member	8	8
Director (P&T)	Functional	Member	8	7

Director (Finance) is always an invitee to the Committee.

- iv) The Audit Committee invites the head of Internal Audit, representatives of Statutory Auditors and Cost Auditors to be present in the meetings as and when required. The Company Secretary acts as Secretary to the Audit Committee.
- v) Chairman of the Audit committee was present during the 36<sup>th</sup> Annual General Meeting to answer queries of shareholders.
- vi) The terms of reference of the Audit Committee are broadly as follows:



#### **Powers of the Audit Committee**

- To investigate any activity within its terms of reference.
- To seek information from any employee.
- To obtain outside legal or other professional advice.
- To secure attendance of outsiders with relevant expertise, if it considers necessary.

#### **Role of the Audit Committee inter alia, includes the following:**

- 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.
- Recommending to the Board, the appointment, re-appointment and, if required, the replacement or removal of cost auditors, fixation of audit fees and other terms of appointment.
- Approving payment to statutory auditors, including cost auditors for any other services rendered by them.
- Reviewing with the management, annual financial statements and auditors report thereon before submission to the Board for approval, with particular reference to:
  - Matters required to be included in the Directors' Responsibility Statement to be included in the Directors' Report in terms of Section 134(5) of the Companies Act, 2013.
  - Changes, if any, in accounting policies and practices and reasons for the same.
  - Major accounting entries involving estimates based on the exercise of judgment by the management.
  - Significant adjustments made in financial statements arising out of audit findings.
  - Compliance with listing and other legal requirements relating to financial statements.
  - Disclosure of related party transactions.
  - Qualifications in draft audit report.
- Reviewing with the management, the quarterly and annual financial statements before submission to the Board for approval.
- 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.
- Reviewing and monitoring the auditors' independence and performance and effectiveness of audit process.
- Approval or any subsequent modification of transactions of the Company with related parties.
- Scrutiny of inter-corporate loans and investments, if any.
- Valuation of undertakings or assets of the Company, wherever it is necessary.
- Evaluation of internal financial controls and risk management systems.
- Reviewing with the management, the performance of statutory auditors, including cost auditors and internal auditors, adequacy of internal control systems.
- 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.
- Discussion with internal auditors of any significant findings and follow-up thereon.
- 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.
- 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.
- 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.
- To review the functioning of the Whistle Blower mechanism.
- 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.

**Mandatory review of the following information by Audit Committee:**

- The Management Discussion and Analysis of financial condition and results of operations;
- Statement of significant related party transactions, submitted by management;
- Management letters/letters of internal control weaknesses issued by the statutory auditors;
- Internal audit reports relating to internal control weaknesses; and
- The appointment, removal and terms of remuneration of the internal auditors / chief internal auditor.
- 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) of SEBI (LODR) Regulations, 2015.
  - b) Annual statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice in terms of Regulation 32(7) of SEBI (LODR) Regulations, 2015.

**The functions of Audit Committee also include;**

- a) To check whether cost controls are adequate and commensurate with size of the operations.
- b) To study the areas where income can be increased and the areas where cost can be reduced.
- c) Management Information System on each of the above areas and give its recommendations to the Board.

**B. Nomination and Remuneration Committee**

- i) It is a statutory committee constituted under Section 178 of the Companies Act, 2013 and Regulation 19 of SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance.
- ii) The terms of reference of the committee is as per the provisions contained in the Companies Act, 2013 and SEBI (LODR) Regulations, 2015.
- iii) MCA vide notification dated 05.06.2015 and 05.07.2017, have exempted Government Companies from certain provisions viz. annual evaluation of the Board and of the 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 (LODR) Regulations, 2015.
- iv) One meeting took place on 22.09.2017.
- v) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows :

Name	Category	Position	Meeting	
			held	attended
Shri Maheswar Sahu	Independent	Chairman	1	1
Shri P. K. Nayak	Independent	Member	1	1
Shri S. Sankararaman	Independent	Member	1	Nil
Prof. Damodar Acharya	Independent	Member	1	1
Smt. Kiran Ghai Sinha	Independent	Member	1	1

Director (HR) and Director (Finance) are the invitees to the Committee.

- vi) Shri Maheswar Sahu, Chairman of Nomination and Remuneration Committee could not attend the 36th Annual General Meeting (AGM) due to some prior engagements and had authorized Shri P. K. Nayak, Independent Director and member of Nomination and Remuneration Committee as his representative to attend the meeting.

**C. Stakeholders Relationship Committee**

- i) It is a statutory committee constituted under Section 178 of the Companies Act, 2013 and Regulation 20 of SEBI (LODR) Regulations, 2015
- ii) The committee addresses investors' grievances pertaining to transfer/transmission of shares, non-receipt of Annual Report, non-receipt of dividends and other related matters.
- iii) M/s. Karvy Computershare Private Ltd. has been appointed as Registrar and Share Transfer agent to consider and resolve all grievances of the shareholders received either directly or through SEBI, Stock Exchanges etc. Efforts are made to ensure that the grievances are redressed to the satisfaction of the investors at the earliest possible time.
- iv) Four meetings took place on 27.05.2017, 09.08.2017, 11.11.2017 and 09.02.2018 during the year.



- v) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Shri S. Sankararaman	Independent	Chairman	4	4
Shri Dipankar Mahanta	Independent	Member	4	4
Shri P. K. Nayak	Independent	Member	4	4
Smt. Kiran Ghai Sinha	Independent	Member	4	3
Shri N.N.Sharma (w.e.f. 22.03.2018)	Independent	Member	Nil	Nil
Smt. Achla Sinha (w.e.f. 22.03.2018)	Independent	Member	Nil	Nil
Director (HR)	Functional	Member	4	4
Director (Commercial)*	Functional	Member	—	—

\*The post was lying vacant w.e.f. 01.03.2017 and remained vacant till 31.03.2018.

- vi) Shri S. Sankararaman, Chairman of Stakeholders Relationship Committee could not attend the 36<sup>th</sup> Annual General Meeting (AGM) due to some prior engagements and had authorized Shri P. K. Nayak, Independent Director and member of Stakeholders Relationship Committee as his representative.
- vii) Details of complaints received and redressed during the year 2017-18 are as follows:

	Opening Balance	Received during the year	Resolved during the year	Closing Balance
SEBI	Nil	6	6	Nil
Stock Exchange	Nil	1	1	Nil
Individual	Nil	702	702	Nil
<b>TOTAL</b>	<b>Nil</b>	<b>709</b>	<b>709</b>	<b>Nil</b>

- viii) Break-up of different types of complaints received and resolved to the satisfaction of investors are given below:

Types of complaints	No. of complaints
Non-receipt of securities	41
Non-receipt of dividend	603
Non-receipt of Annual Report	65
<b>TOTAL</b>	<b>709</b>

#### D. Risk Management Committee

- i) It is a statutory committee constituted in terms of Regulation 21 of SEBI (LODR) Regulations. The terms of reference of the committee is as follows:
- Assisting the Board of Directors in overseeing the responsibilities with regard to the identification, evaluation and mitigation of operational, strategic and external environment risks.
  - Overall responsibility for monitoring and approving the risk policies and associated practices of the Company.
  - Reviewing and approving risk disclosure statements in any public documents or disclosures.
- ii) The committee reviews and monitors risk assessment plan, informs the Board periodically about the risk assessed and action required to be taken. Details of risk perceived are also given in the Management Discussion & Analysis Report.



- iii) The committee met thrice on 27.05.2017, 09.08.2017 and 25.11.2017 during the year.
- iv) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Prof. Damodar Acharya	Independent	Chairman	3	3
Shri S. Sankararaman	Independent	Member	3	3
Smt. Kiran Ghai Sinha	Independent	Member	3	3
Director (Finance)	Functional	Member	3	3
Director(Production)	Functional	Member	3	3
Director (Commercial)*	Functional	Member	—	—

\*The post was lying vacant w.e.f. 01.03.2017 and remained vacant till 31.03.2018.

#### E. CSR & Sustainability Development Committee

- i) Section 135 of the Companies Act, 2013 mandates constitution of Corporate Social Responsibility Committee. Regulation 34(2)(f) of the SEBI (LODR) Regulations, 2015 mandates for Business Responsibility Report by top 500 listed Companies describing the initiatives taken by them from environmental, social and governance perspective.

Keeping the requirements in view, a CSR & Sustainability Development Committee has been constituted to look into matters related to CSR activities and sustainability development programmes of the Company.

- ii) The terms of reference of the committee is as follows:
- Overseeing peripheral development activities being under taken by the Company through the respective Rehabilitation and Periphery Development Advisory Committees (RPDAC) and proposed to be taken under MMDR Act.
  - Nalco Foundation.
  - Environment Protection & Pollution controls.

- iii) The Committee met thrice on 21.04.2017, 21.07.2017 and 10.11.2017 during the year.

- iv) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Shri D. Mahanta	Independent	Chairman		
Shri S. Sankararaman	Independent	Member	3	3
Shri Maheswar Sahu	Independent	Member	3	3
Smt. Kiran Ghai Sinha	Independent	Member	3	1
Shri N. N. Sharma (w.e.f. 22.03.2018)	Independent	Member	Nil	Nil
Director (Finance)	Functional	Member	3	3
Director (Production)	Functional	Member	3	3
Director (HR)	Functional	Member	3	3

#### F. Technology Committee

- i) Technology Committee was constituted in compliance with the requirements under the DPE guidelines.
- ii) 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.
- iii) The Committee met twice on 21.07.2017 and 25.11.2017 during the year.





iv) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Prof. D. Acharya	Independent	Chairman	2	2
Shri Maheswar Sahu	Independent	Member	2	1
Director (Finance)	Functional	Member	2	2
Director (Production)	Functional	Member	2	2
Director (P&T)	Functional	Member	2	2
Director(Commercial)*	Functional	Member	—	—

\*The post was lying vacant w.e.f. 01.03.2017 and remained vacant till 31.03.2018.

#### G. Human Resources Committee

- i) It is a non-statutory committee constituted to look into the human resource aspect of the Company.
- ii) The terms of reference of the committee is to study and recommend to the Board for approval, proposals in the following areas:
  - a. Framing of rules and regulations and changes therein relating to recruitment, transfer, promotion, deputation and other conditions of service in respect of below Board level employees.
  - b. Wage structure and scales of pay of the non-executives and any changes therein.
  - c. Organization chart including manpower planning.
  - d. Any other reference made by the Board from time to time.
- iii) The Committee met five times on 21.04.2017, 21.07.2017, 22.09.2017, 10.11.2017 and 29.01.2018 during the year.
- iv) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Shri Maheswar Sahu	Independent	Chairman	5	5
Shri D. Mahanta	Independent	Member	5	4
Smt. Kiran Ghai Sinha	Independent	Member	5	3
Director (Finance)	Functional	Member	5	5
Director (HR)	Functional	Member	5	5
Director (P&T)	Functional	Member	5	5

#### H. Ethics & Corporate Governance Committee

- i. It is a non-statutory committee constituted to look into the ethical standard and good governance being practiced in the Company.
- ii. The terms of reference of the Committee include:
  - a. Practices of Corporate Governance at all levels and to suggest remedial measures wherever necessary.
  - b. Provision of correct inputs to the media so as to preserve and protect the Company's image and standing.
  - c. Dissemination of factually correct information to the investors, institutions and public at large.
  - d. Interaction with existing and prospective FIIs and rating agencies etc.
  - e. Establishing oversight on important corporate communication on behalf of the Company with the assistance of consultants / advisors, if necessary.
  - f. Institution of standardized channels of internal communications across the Company to facilitate a high level of disciplined participation.
  - g. Compliance of the following, formulated in terms of SEBI & DPE guidelines:
    - Code of Conduct for Senior Management
    - Insider Trading Regulations
    - Related Party transactions
    - Vigilance Related issues
    - Whistle Blower Policy



- iii. The Committee met once on 21.07.2017 during the year.
- iv. The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Shri Dipankar Mahanta	Independent	Chairman	1	1
Shri P.K. Nayak	Independent	Member	1	1
Smt. Kiran Ghai Sinha	Independent	Member	1	1
Smt. Achla Sinha (w.e.f. 22.03.2018)	Independent	Member	Nil	Nil
Director (HR)	Functional	Member	1	1
Director (P&T )	Functional	Member	1	1
Director(Commercial)*	Functional	Member	-	-

\*The post was lying vacant w.e.f. 01.03.2017 and remained vacant till 31.03.2018.

#### I. Committee of Directors for Projects and New Ventures

- i) It is a non-statutory committee constituted to look into the project related activities and to recommend investment in new projects.
- ii) The terms of reference of the committee is to examine and make recommendation to the Board on new projects/capital expenditure on Joint ventures:
- Appraisal and approval of the procedures and formalities in respect of various stages of new projects including preparation of DPR.
  - To study and recommend to the Board, proposals for investment in new projects, in India and abroad, exceeding ₹ 10 crore each.
  - Review the status of capital projects, costing over ₹ 100 crore each.
- iii) The Committee met thrice on 10.05.2017, 22.09.2017 and 11.11.2017 during the year.
- iv) The composition of the Committee and meeting(s) attended by each member as on 31.03.2018 were as follows:

Name	Category	Position	Meeting	
			held	attended
Dr. Tapan Kumar Chand	Functional	Chairman	3	3
Shri P.K.Nayak	Independent	Member	3	3
Prof. D. Acharya	Independent	Member	3	3
Shri M. Sahu	Independent	Member	3	2
Shri A.K.Nayak (w.e.f 27.03.2018)	Government Nominee	Member	Nil	Nil
Director (Finance)	Functional	Member	3	3
Director (Production)	Functional	Member	3	3
Director (HR)	Functional	Member	3	3
Director (P&T )	Functional	Member	3	3
Director(Commercial) *	Functional	Memeber	—	—

\*The post was lying vacant w.e.f. 01.03.2017 and remained vacant till 31.03.2018.



#### J. Other Committees

The following committees have been constituted with only Functional Directors to take care of certain regular activities with the terms of reference approved by the Board:

- a. Investment Committee
- b. Committee of Directors for Sales
- c. Committee of Directors for Procurements
- d. Share Transfer Committee

#### K. Separate meeting of Independent Directors

A separate meeting of the Independent Directors was held on 28th March, 2018 in line with the requirements under Schedule IV to the Companies Act, 2013 and Reg. 25 of the SEBI (LODR) Regulations, 2015 to assess 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. All eight Independent Directors attended the meeting.

The Company Secretary facilitated convening and holding of such meeting on directive from the Independent Directors.

Minutes of the meeting was placed in the subsequent Board meeting for information of the Board and necessary action on the observations of the Independent Directors in the separate meeting.

#### IV. Familiarization Programme for Directors

On induction of new Directors on the Board, acclimatization/familiarization programmes are conducted to keep the Director abreast with the organisation structure, business plan, new projects, product profiles, Joint Ventures etc.

Besides, the Directors and specially the Independent Directors are nominated for various orientation programmes, organised by Institutions viz. DPE, IICA, ASSOCHAM etc. The different familiarization programmes attended by Independent Directors is available in the website at

<http://www.nalcoindia.com/investor/Familiarisation-Programme-for-Directors.pdf>.

#### V. General Body Meetings

##### i) Details of last three Annual General Meetings held :

Financial Year	AGM Date	Time	Special Resolution, if any	Venue
2014-15	26.09.2015	11.00 AM	No	NALCO Bhawan, P/1, Nayapalli, Bhubaneswar- 751 013
2015-16	30.09.2016	11.00 AM	No	
2016-17	23.09.2017	11.00 AM	No	

- ii) No resolution was passed through Postal Ballot during the year under review.
- iii) E-voting facility was provided to the Shareholders during the last Annual General Meeting (AGM) held on 23rd September, 2017. Members were provided with Insta-poll facility at the venue of the AGM, who could not exercise their vote through e-voting process.
- iv) The Company had obtained approval of shareholders through postal ballot on 14th July, 2016 for buy back of shares. Special resolutions relating to amendment of the articles of association of the company and for buy back of equity shares not exceeding 25% of the total number of equity shares in the paid up share capital of the company were proposed through the postal ballot.
- v) CS Savita Jyoti, Practicing Company Secretary (FCS: 3738, CP: 1796) and partner of M/s. Savita Jyoti Associates, Company Secretaries was appointed as the Scrutinizer for the Postal Ballot process.



vi) Details of voting pattern was as follows:

Category	Mode of voting	Item 1: Amendment of the articles of association of the company		Item 2: Buy back of equity shares not exceeding 25% of the total number of equity shares in the paid-up share capital of the company	
		% of votes in favour	% of votes against	% of votes in favour	% of votes against
Promoters	E-Voting	100	0	100	0
Public institutional holders	E-voting	100	0	99.9987	0.0012
Public non institutions	E-voting & postal ballot	99.9678	0.0322	99.9532	0.0468

## VI. Means of communication.

- i) The Company communicates with its shareholders through its Annual Report, periodical dissemination of information to Stock Exchanges, General Meetings and various disclosures through its Website.
- ii) Institutional shareholders are communicated through analysts briefing, individual discussions, concall and also participation in investor conferences from time to time.  
The presentation made to Institutional Investors/Analyst are sent to the Stock Exchanges and uploaded on Company's website [www.nalcoindia.com](http://www.nalcoindia.com)  
Shareholders' related Information, latest updates and announcements regarding the Company are regularly updated in the investors' page in company's website: [www.nalcoindia.com](http://www.nalcoindia.com)
- iii) The Quarterly, Half yearly and Annual Results of the Company are uploaded electronically on NEAPS of NSE and Listing Centre of BSE within the scheduled time. The results are also immediately uploaded on the Company's website [www.nalcoindia.com](http://www.nalcoindia.com). Besides, the results are published in leading newspapers. Details of publication of quarterly results during 2017-18 are given below:

Quarter	Meeting held	Newspapers	Date of publication
Q1	09.08.2017	The Samaj(Odia), Business Line (English)	10.08.2017
Q2	11.11.2017	Prameya (Odia), Business Standard (Hindi & English)	13.11.2017
Q3	09.02.2018	Dharitri (Odia), Financial Express (English)	10.02.2018

- iv) 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. The Annual Report of the Company is also available on the website in a user-friendly and downloadable form. Shareholders who have not registered their e-mail id are encouraged to do so for receipt of all such documents/intimations through e-mail.
- v) Printed copy of the Chairman's Speech is distributed to the shareholders at the Annual General Meetings. The same can also be accessed on the website of the Company.
- vi) Reminders through E-mail/Post are sent to the shareholders who have not claimed / encashed their dividend so far. The unpaid/unclaimed status of dividend, year-wise can also be accessed in the 'Investor Services' page in the Company's website by entering Folio No./DP Id & Client Id.

## VII. General Shareholder Information

### i) Company Registration Details

Corporate Identity Number (CIN) : L27203OR1981GOI000920  
 Date of Registration : 7th January, 1981  
 Registered office of the Company : NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751 013, Odisha.

### ii) Annual General Meeting for the financial year 2017-18.

Day and Date	Wednesday, the 29th August, 2018
Time	11.00 A.M.
Venue	NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751 013



iii) **Financial Calendar for 2018-19:**

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, 2019	By September , 2019

iv) **Dividend Policy**

The Company has formulated a Dividend Distribution Policy and the same is available in the Company's website in the following link:

<http://www.nalcoindia.com/download/Dividend%20Policy.pdf>

As per the recent 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 extant legal provisions.

v) **Payment of Dividend**

- Interim dividend for FY 2017-18 @ 4.70 per equity share (94% on face value of ₹ 5 each) declared by the Board of Directors on 09.02.2018 was paid to all shareholders on 28.02.2018.
- Final dividend for FY 2017-18 @ Re.1/- per equity share (20% on face value of ₹ 5 each) recommended by the Board of Directors in their meeting held on 26.05.2018 subject to the approval of shareholders in the ensuing Annual General Meeting, will be paid to all shareholders within 30 days of the meeting.
- The total dividend pay-out for the year 2017-18 considering the final dividend works out to ₹ 1101.77 crore against ₹ 541.22 crore paid for 2016-17.
- The total dividend pay-out including the proposed final dividend for the financial year 2017-18 works out to 82.07% of the Profit after Tax (PAT) and 10.49% of the net worth. This excludes the Dividend Distribution Tax.
- The total dividend pay-out including proposed final dividend and Dividend Distribution Tax for 2017-18 works out to ₹ 1326.06 crore.
- This is the highest ever dividend declared by the Company so far.

vi) **Dividend History for past 5 years**

Year	Dividend per share (₹)	Payment date	Total Dividend (₹ in crores)	% of dividend to PAT
2012-13	(I)- ₹ 0.75 (F)- ₹ 0.50	(I)- 30.03.2013 (F)-23.10.2013	322.15	54.34
2013-14	(I)- ₹ 1.10 (F)- ₹ 0.40	(I)-25.03.2014 (F)-15.10.2014	386.59	60.18
2014-15	(I)- ₹ 0.50 (F)- ₹ 1.25	(I)-30.03.2015 (F)-19.10.2015	451.02	34.12
2015-16	(I)- ₹ 1.25 (F)- ₹ 0.75	(I)-31.03.2016 (F)-25.10.2016	467.13	63.90
2016-17	(I)- ₹ 2.80 (F)- Nil	(I)-23.03.2017	541.22	80.96

- Interim (I), Final (F)



## vii) 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 2018-19	21.04.2018	21.04.2018

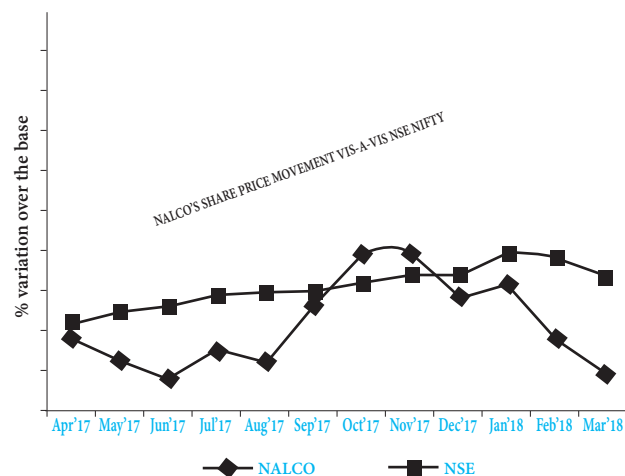
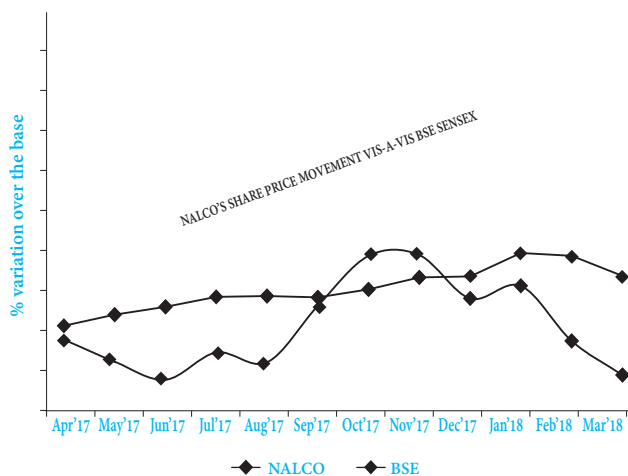
Annual Custody/Issuer fee for the year 2018-19 has been paid by the Company to NSDL and CDSL.

## viii) Market Price Data for Financial year 2017-18

MONTH	SHARE PRICE (BSE) (Amount in ₹)			SHARE PRICE (NSE) (Amount in ₹)			MARKET CAPITALISATION (₹ in Crore)	
	H	L	Avg. Turnover	H	L	Avg. Turnover	NSE	BSE
April, 2017	77.35	66.65	5,53,041	77.40	66.65	41,79,922	13,787.58	13,794.04
May	71.40	64.50	2,80,956	71.40	64.60	24,46,222	13,008.00	13,002.54
June	67.90	61.30	1,69,534	67.90	61.35	13,76,230	12,519.76	12,518.81
July	74.80	64.50	4,43,441	74.70	64.20	35,57,447	13,405.23	13,388.79
August	73.25	62.35	4,22,114	73.30	62.15	31,38,987	13,346.51	13,343.66
September	85.40	71.10	11,28,910	85.40	71.05	67,04,324	15,237.83	15,226.80
October	96.85	78.30	11,78,520	96.70	78.15	86,61,209	16,545.58	16,536.41
November	97.65	77.80	8,54,423	97.60	77.65	73,38,800	16,639.71	16,636.84
December	87.75	72.50	6,07,850	87.75	71.50	68,51,416	15,460.14	15,452.50
January, 2018	89.45	74.45	8,80,966	89.80	74.10	80,80,745	15,799.06	15,787.02
February	78.95	64.55	12,09,655	78.90	64.60	72,18,865	13,653.40	13,649.73
March	70.20	60.75	8,52,247	70.25	60.70	84,81,934	12,603.92	12,607.20

H=Highest, L=Lowest Source: Web-sites of BSE &NSE

## ix) Performance in comparison to broad - based Indices





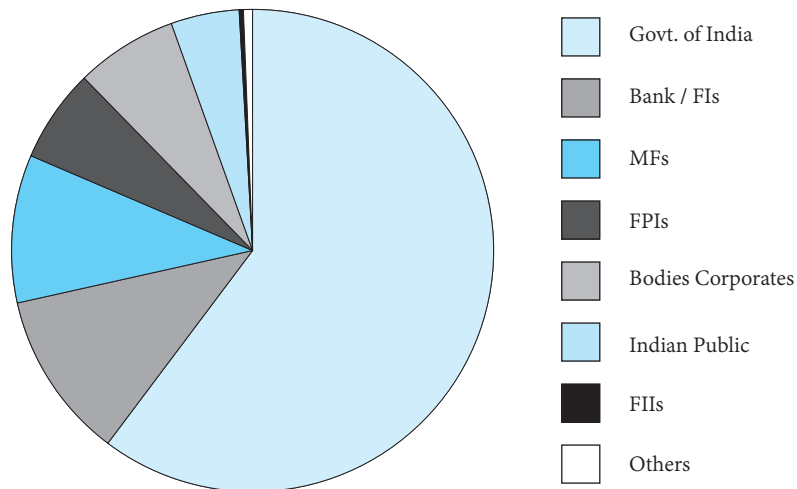
x) Registrar and Transfer Agents

- a) M/s. Karvy Computershare Private Limited is the Company's Registrar and Share Transfer Agent (RTA) for carrying out share related activities like transfer of shares, transmission of shares, transposition of shares, issue of duplicate share certificates, deletion of name, change of address, bank particulars, issue of DD 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. The details of the RTA is available in the link: <http://www.nalcoindia.com/invdefault.aspx>
- b) Company Secretary has been authorized by the Board to approve all requests/cases relating to transfer/ transmission 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.

xi) Shareholding pattern as on 31.03.2018

Sl. No.	Category	No. of Shareholders	No. of shares	%age of share-holding
1.	Promoter (Government of India)	1	1163717107	60.2
2.	Mutual Funds	83	189959452	9.83
3.	Banks / Financial Institutions	22	220071816	11.39
4.	Insurance Companies	2	1600	0.00
5.	FII's	24	612252	0.03
6.	Foreign Portfolio Investor	142	123261362	6.38
6.	Bodies Corporate	1419	126685292	6.55
7.	Indian Public	124598	94214280	4.87
8.	Others	5858	14405723	0.75
	<b>TOTAL</b>	<b>1,32,149</b>	<b>1932928884</b>	<b>100</b>

Category-wise shareholding



Distribution of shareholding as on 31.03.2018

Number of shares	No. of Shareholders	% of shareholders	No. of shares	%of share capital
1-200	74597	56.45	6833807	0.35
201-500	26973	20.41	10255850	0.53
501-1000	13665	10.34	11337240	0.59
1001-50000	16526	12.51	66355408	3.43
50001-100000	116	0.09	7993807	0.41
100001 and above	272	0.20	1830152772	94.69
<b>TOTAL</b>	<b>132149</b>	<b>100</b>	<b>1932928884</b>	<b>100</b>



#### Top 10 equity shareholders of the Company as on 31.03.2018

Srl. No.	Name of shareholder	No. of shares	% of holding
1.	Life Insurance Corporation of India	158431120	8.20
2.	Bharat 22 ETF	47768312	2.47
3.	Government Pension fund Global	28529841	1.48
4.	Reliance Capital Trustee Company Ltd	21084563	1.09
5.	Hindalco Industries Ltd	18385327	0.95
6.	UTI-MID Cap Fund	16464258	0.85
7.	Renuka Investments & Finance Limited	16418964	0.85
8.	HDFC Standard Life Insurance Company Limited	14636302	0.76
9.	Bajaj Allianz Life Insurance Company Limited	14350874	0.74
10.	Renukeswar Investments & Finance Limited	12814264	0.66
	<b>TOTAL</b>	<b>348883825</b>	<b>18.05</b>

#### xii) Dematerialisation / Rematerialisation of Listed Shares & Liquidity

NALCO shares are in compulsory dematerialized segment for trading. 99.88% of the Company's share capital stands dematerialized as on 31st March, 2018.

Total no. of shares held in physical and in dematerialization mode as on 31.03.2018:

	No. of Shares	% to total shares	No. of shareholders
Demat shares with NSDL	1,854,609,178	95.95	77,313
Demat shares with CDSL	76,072,648	3.93	51,414
Shares in physical mode	2,247,058	0.12	3,422
<b>Total</b>	<b>193,29,28,884</b>	<b>100</b>	<b>1,32,149</b>

During the year, the Company has confirmed 165 dematerialization requests involving 73,164 shares. The Company has also confirmed one rematerialisation request for 200 shares during the year and the physical share certificate was dispatched to the shareholders within stipulated time.

#### xiii) 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.

#### xiv) 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 Listing Regulations.

#### xv) Transfer of unpaid/unclaimed dividend to IEPF

In accordance with the provisions under the Companies Act, 2013, an amount of ₹ 3,87,504/- pertaining to unclaimed interim dividend for financial year 2009-10, an amount of ₹ 2,97,980/- pertaining to unclaimed final dividend for financial year 2009-10 and an amount of ₹ 5,37,968/- pertaining to unclaimed interim dividend for the financial year 2010-11 have been transferred to Investor Education and Protection Fund, during the financial year 2017-18.

Shareholders can retrieve data relating to unpaid/unclaimed dividend from the website in the following link:

<https://kosmic.karvy.com/IEPF/IEPFInfo.aspx>





xvi) **Transfer of shares to IEPF**

Pursuant to Section 124(6) of the Act read with Rule 6 of IEPF Rules, the Company is required to transfer shares in respect of which dividend has not been paid/claimed for 7 (seven) consecutive years or more to the Demat Account of IEPF Authority.

During the year, the Company sent individual notices and advertised in the newspapers intimating shareholders who had not claimed/encashed their dividend for seven consecutive years or more. Thereafter, the Company transferred unpaid dividends pertaining to the following period and corresponding shares to the demat account of the IEPF authority:

Particulars	Dividend (₹)	No. of Shares	No. of Shareholders	Date of transfer
Final dividend for financial year 2009-10	2,97,980/-	1,48,267	474	18.12.2017
Interim dividend for financial year 2010-11	5,37,968/-	1,012	23	08.03.2018

The relevant information relating to the shares transferred to IEPF is available in the link <http://www.nalcoindia.com/investor/Logo.pdf>  
Any person whose shares and/or dividend has been transferred to IEPF, may claim the shares under Section 124(6) of the Act or apply for refund under Section 125(3), as the case may be by submitting the application in Form IEPF-5 along with fee specified by the IEPF Authority. The access link for downloading Form IEPF-5 from the website of IEPF Authority is provided in the link <http://www.nalcoindia.com/IEPF/3.IEPF-Information.pdf>

xvii) **Reconciliation of Share Capital**

The Reconciliation of Share Capital audit was carried out through the Secretarial auditor of the Company on quarterly basis. The report confirms that the total issued/paid-up capital is in agreement with the total no. of shares in physical form and no. of shares in demat form with NSDL and CDSL. The reports were filed with BSE and NSE as mandated by SEBI.

Further, half-yearly certificates on compliance of share transfer formalities obtained from the Secretarial Auditor were also submitted to Stock Exchanges in time pursuant to Reg. 40(10) of the SEBI Listing Regulations.

**VIII. Other Disclosures**

- a) The Company has formulated a Policy on Related Party Transactions which is available in the following web link:

<http://www.nalcoindia.com/download/NEW-RPT-NALCO.pdf>

Related parties and related party transactions are disclosed in note no.38 of both standalone financial statements and consolidated financial statements of the Company for the financial year 2017-18. There were no material transactions with any related party during the financial year. The related party transactions in the prescribed Form AOC -2 forms part of the Directors' Report.

- b) The Company has not received any stricture and no penalty was imposed either by SEBI or the Stock Exchanges or any other statutory authority for non-compliance of any matter related to the capital markets during last three years.
- c) The Company has Board approved 'Whistle Blower Policy' and 'Fraud Prevention Policy' for directors and employees to report to the management concerns about unethical behavior, 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 of 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:

[http://www.nalcoindia.com/Whistleblowerpolicy\\_nalco.pdf](http://www.nalcoindia.com/Whistleblowerpolicy_nalco.pdf), and

<http://www.nalcoindia.com/NALCOFRAUDPREVENTIONPOLICY.pdf>

- d) The company has complied with Regulations 17 to 27 of SEBI (LODR) Regulations, 2015 except composition of the Board (Reg.17 (1)(b)) from 01.04.2017 to 05.09.2017.
- e) The Company does not have any subsidiary as on date. Hence the Company has not framed any policy for determining material subsidiary.
- f) 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 not have any hedging policy on sales.

The matter is dealt separately under Management Discussion and Analysis report.

- g) The web links for different policies have been provided under respective heads.



#### h) Insider Trading Code

The Board has laid down Code of Practices and Procedures for Fair Disclosure of Unpublished Price Sensitive Information with an objective that no insiders of the Company derive any benefit or assist others to derive any benefit from the access to and possession of unpublished price sensitive information before it is made public. Company Secretary is the Compliance Officer for this code.

Similarly, another Board approved code of Conduct is laid down to regulate, monitor and report trading by its employees and other connected persons.

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.

Designated Persons and their immediate relatives are not allowed to trade in securities when the Trading Window is closed. To deal in Securities beyond limits specified, permission of Compliance Officer is required. All Directors/ Designated Employees are also required to disclose related information periodically as defined in the Code.

The code is displayed on the Company's website at [http://www.nalcoindia.com/download/NALCO\\_Code\\_of\\_Conduct\\_new.pdf](http://www.nalcoindia.com/download/NALCO_Code_of_Conduct_new.pdf)

#### i) Disclosure under DPE guidelines

- No expenditure has been debited in the books of accounts not related to business.
- No expenditure is incurred which are personal in nature and incurred for the Board of directors and top management.
- 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	2017-18	2016-17
Administrative and office expenses	109.90	97.74
Total expenses	8703.21	7453.42
Administrative and office expenses as a % of total expenses	1.26	1.31
Financial expenses	1.95	2.69

- 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 2017-18. The self-appraisal report for 2017-18 can be accessed in the website at

<http://www.nalcoindia.com/investor/Guidelines%20of%20C.G.%20for%20CPSEs.pdf>

- The Company has complied with the presidential directives issued during the year and during last three years.

#### IX. Plant locations of the Company

<b><u>Registered &amp; Corporate Office :</u></b> NALCO Bhawan Plot No. P/1, Nayapalli, Bhubaneswar – 751 013 (Odisha)	<b><u>Smelter Plant</u></b> Nalco Nagar Angul – 759 145 (Odisha)
<b><u>Mines &amp; Refinery</u></b> Mines & Refinery Complex Damanjodi – 763 008, Dist. – Koraput (Odisha)	<b><u>Captive Power Plant</u></b> Angul – 759 122, (Odisha)
<b><u>Port Facilities</u></b> Opposite Ore Handling Complex Port Area, Visakhapatnam – 530 035, Andhra Pradesh	<b><u>Jaisalmer 47.6 MW Wind Power Plant</u></b> National Aluminium Company Limited Village – Ludarva, Kahela, Khadero-Ki-Dhani, Tawariya, Chatrel Division/Taluk/District – Jaisalmer, Rajasthan – 345001
<b><u>Gandikota 50.4 MW Wind Power Plant</u></b> National Aluminium Company Limited Village – Gandikota, Division - Prodattur Taluka – Jammalmadugu District – Kadapa, Andhra Pradesh	<b><u>Sangli 50.4 MW Wind Power Plant</u></b> National Aluminium Company Ltd. Village – Mendhigiri, Taluk-Jath District – Sangli, Maharashtra- 416404



**X. Address for correspondence**

**Compliance Officer**

Company Secretary

National Aluminium Company Ltd

NALCO Bhawan, P/1, Nayapalli

Bhubaneswar- 751 013

E-mail: [company\\_secretary@nalcoindia.co.in](mailto:company_secretary@nalcoindia.co.in)

**Registrar and Share Transfer Agent**

M/s. Karvy Computershare Private Limited.

Unit: National Aluminium Company Limited

Karvy Selenium Tower B, Plot No.31-32,

Gachibowli, Financial District, Nanakramguda,

Hyderabad-500032. Telangana

Tel. No. 040-67161500, Toll Free No.18003454001,

Email: [einward.ris@karvy.com](mailto:einward.ris@karvy.com)

**XI. Non-mandatory Requirements**

The status of compliance with discretionary requirements under Regulation 27(1) read with part E of Schedule II of SEBI (LODR) Regulations, 2015 are as under:

- a. The Company is headed by an Executive Chairman.
- b. 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.
- c. The Company has an Executive Chairman & Managing Director, who is also the CEO of the Company.
- d. The Internal Auditors report to the chief of internal audit and in turn the chief of internal audit reports to the Audit Committee of the Board.

**XII. Code of Conduct**

The company has adopted 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 following link: <http://www.nalcoindia.com/CodeofConduct.pdf>

All Directors on their induction to the Board are provided with copy of the Code which they 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.

**Declaration by the Chairman-cum-Managing Director as required under Schedule V of SEBI (LODR) Regulations, 2015**

**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, 2018.

Sd/-

(Dr. T. K. Chand)

Chairman-cum-Managing Director

**XIII. CEO/CFO Certification**

The CEO/CFO certificate under Regulation 17(8) of SEBI (LODR) Regulations, 2015 duly signed by Dr. Tapan Kumar Chand, Chairman-Cum-Managing Director and Shri K.C. Samal, Director (Finance) was placed before the meeting of the Board of Directors held on 26.05.2018.



## AUDITORS' CERTIFICATE ON COMPLIANCE OF CONDITIONS OF CORPORATE GOVERNANCE

To  
The Members  
National Aluminium Company Limited,  
Bhubaneswar

We have examined the compliance of the conditions of Corporate Governance by National Aluminium Company Limited ("the Company") for the year ended on 31st March, 2018 as stipulated in regulations 17 to 27, clauses (b) to (i) of Sub-regulation (2) of Regulation 46 and paragraphs C, D and E of Schedule V of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 ("Listing the Regulation") and in the Guidelines on Corporate Governance for Central Public Sector Enterprises issued by the Department of Public Enterprises, Government of India, to the extent applicable during the year.

The compliance of conditions of Corporate Governance is the responsibility of the management. Our examination was carried out in accordance with the Guidance Note on Certification of Corporate Governance issued by the Institute of Chartered Accountants of India and was limited to a review of the procedures and implementation thereof, adopted by the company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the company.

In our opinion and to the best of our information and according to the explanations given to us, subject to the followings:

**The company has not complied with the requirements of minimum number of Independent directors in the composition of the Board of Directors from 1st April, 2017 to 5th September, 2017 in the financial year ended on 31st March, 2018.**

We certify that the Company has complied with the other conditions of Corporate Governance.

We further state that such compliance is neither an assurance as to the future viability of the company nor the efficiency or effectiveness with which the Management has conducted the affairs of the Company.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No. 054894

Place : Bhubaneswar  
Date : 12th July, 2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423

Annexure-VI

(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: **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) Date(s) of approval by the Board, if any: **Not Applicable.**
  - (f) Amount paid as advances, if any: **Not Applicable.**

For and on behalf of the Board of Directors

Sd/-

(Dr. TAPAN KUMAR CHAND)

CHAIRMAN-CUM-MANAGING DIRECTOR



## FORM NO. MGT-9

### ANNEXURE-VII

#### EXTRACT OF ANNUAL RETURN

as on the financial year ended on 31.03.2018

[Pursuant to Section 92(3) of the Companies Act, 2013 and Rule 12(1) of the Companies (Management and Administration) Rules, 2014]

#### I. REGISTRATION AND OTHER DETAILS:

- i) CIN:- L27203OR1981GOI000920
- ii) Registration Date: 7th January 1981
- iii) Name of the Company: NATIONAL ALUMINIUM COMPANY LTD
- iv) Category / Sub-Category of the Company: Public Sector Company Limited by Shares
- v) Address of the Registered office and contact details: NALCO BHAWAN, PLOT NO P/1, NAYAPALLI, BHUBANESWAR-751013, ODISHA, INDIA
- vi) Whether listed company: Yes
- vii) Name, Address and Contact details of Registrar and Transfer Agent, if any:  
M/s. Karvy Computershare Private Limited. , Karvy Selenium Tower B, Plot No.31-32, Gachibowli, Financial District, Nanakramguda, Hyderabad-500032. Telangana , Tel. No. 040-67161500, Fax No. 040-23420814, Email: einward.ris@karvy.com

#### II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10 % or more of the total turnover of the company shall be stated:-

Sl. No.	Name and Description of main products/services	NIC Code of the Product/ service	% to total turnover of the company
1	Alumina	201	32.26
2	Aluminium	242	62.68
3	Power	351	0.90

#### III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sl. No.	NAME AND ADDRESS OF THE COMPANY	CIN/GLN	HOLDING/ SUBSIDIARY/ ASSOCIATE	% of shares held	Applicable Section
1	NPCIL-NALCO Power Company Ltd. 16th floor, Centre-1, Cuffe Parade, Colaba, Mumbai-400005	U40300MH2012GOI227632	Associate	26	2(6)
2	Angul Aluminium Park Pvt Ltd. IDCO Tower, Janpath. Bhubaneswar-751022	U27203OR2010PTC012284	Associate	49	2(6)
3	GACL-NALCO Alkalies & Chemicals Pvt. Ltd. GACL Corporate Building, P.O. Petrochemicals, Vadodara, Gujarat-391346	U24100GJ2015PTC085247	Associate	40	2(6)

#### IV. SHARE HOLDING PATTERN (Equity Share Capital Breakup as percentage of Total Equity)

##### i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year (As on 31st March 2017)				No. of Shares held at the end of the year (As on 31st March 2018)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
<b>A. Promoters</b>									
(1) Indian									
a) Individual/ HUF									
b) Central Govt	1,44,14,82,490	—	1,44,14,82,490	74.58	1,16,37,17,107	—	1,16,37,17,107	60.20	(14.38)
c) State Govt (s)	—	—	—	—	—	—	—	—	—



Category of Shareholders	No. of Shares held at the beginning of the year (As on 31st March 2017)				No. of Shares held at the end of the year (As on 31st March 2018)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
d) Bodies Corp.	—	—	—	—	—	—	—	—	—
e) Banks/FI	—	—	—	—	—	—	—	—	—
f) Any Other..	—	—	—	—	—	—	—	—	—
<b>Sub-total (A) (1):-</b>	<b>1,44,14,82,490</b>	<b>—</b>	<b>1,44,14,82,490</b>	<b>74.58</b>	<b>1,16,37,17,107</b>	<b>—</b>	<b>1,16,37,17,107</b>	<b>60.20</b>	<b>(14.38)</b>
(2) Foreign	—	—	—	—	—	—	—	—	—
a) NRIs - Individuals	—	—	—	—	—	—	—	—	—
b) Other -Individuals	—	—	—	—	—	—	—	—	—
c) Bodies Corp.	—	—	—	—	—	—	—	—	—
d) Banks / FI	—	—	—	—	—	—	—	—	—
e) Any Other...	—	—	—	—	—	—	—	—	—
<b>Sub-total (A) (2):-</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total shareholding of Promoter (A) = (A)(1)+(A)(2)</b>	<b>1,44,14,82,490</b>	<b>—</b>	<b>1,44,14,82,490</b>	<b>74.58</b>	<b>1,16,37,17,107</b>	<b>—</b>	<b>1,16,37,17,107</b>	<b>60.20</b>	<b>(14.38)</b>
<b>B. Public Shareholding</b>									
1. Institutions									
a) Mutual Funds	2,26,69,470	88,600	2,27,58,070	1.18	18,99,07,852	88,600	18,99,96,452	9.83	8.65
b) Banks/FI	23,16,09,087	—	23,16,09,087	11.98	22,00,71,816	—	22,00,71,816	11.39	(0.59)
c) Central Govt									
d) State Govt(s)									
e) Venture Capital Funds									
f) Insurance Companies	—	1,600	1,600	—	—	1,600	1,600	—	—
g) FIIs	7,72,46,858	30,200	7,72,77,058	4	12,38,46,814	26,800	12,38,73,614	6.41	2.41
h) Foreign Venture Capital Funds									
i) Others (specify)									
<b>Sub-total (B)(1):</b>	<b>33,15,25,415</b>	<b>1,20,400</b>	<b>33,16,45,815</b>	<b>17.16</b>	<b>53,38,26,482</b>	<b>1,17,000</b>	<b>53,39,43,482</b>	<b>27.62</b>	<b>10.47</b>
2. Non-Institutions									
a) Bodies Corp.									
i) Indian	10,23,63,062	17,200	10,23,80,262	5.30	12,66,71,092	14,200	12,66,85,292	6.55	1.25
ii) Overseas	—	—	—	—	—	—	—	—	—
b) Individuals									
i) Individual Shareholders holding nominal share capital upto ₹ 1 lakh	3,85,64,017	15,30,930	4,00,94,947	2.07	7,41,45,598	13,30,858	7,54,76,456	3.90	1.83
ii) Individual Shareholders holding nominal share capital in excess of ₹ 1 lakh	1,12,58,013	—	1,12,58,013	0.58	2,38,02,771	—	2,38,02,771	1.23	0.65
c) Others (specify)	52,80,957	7,86,400	60,67,357	0.31	85,18,776	7,85,000	93,03,776	0.48	0.17
<b>Sub-total (B)(2):-</b>	<b>15,74,66,049</b>	<b>23,34,530</b>	<b>15,98,00,579</b>	<b>8.27</b>	<b>23,31,38,237</b>	<b>21,30,058</b>	<b>23,52,68,295</b>	<b>12.17</b>	<b>3.90</b>
<b>Total Public Shareholding (B) = (B)(1) + (B)(2)</b>	<b>48,89,91,464</b>	<b>24,54,930</b>	<b>49,14,46,394</b>	<b>25.42</b>	<b>76,69,64,719</b>	<b>22,47,058</b>	<b>76,92,11,777</b>	<b>39.80</b>	<b>14.38</b>
<b>C. Shares held by Custodian for GDRs &amp; ADRs</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Grand Total (A+B+C)</b>	<b>1,93,04,73,954</b>	<b>24,54,930</b>	<b>1,93,29,28,884</b>	<b>100</b>	<b>1,93,06,81,826</b>	<b>22,47,058</b>	<b>1,93,29,28,884</b>	<b>100</b>	<b>—</b>



(ii) Shareholding of Promoters

Sl. No.	Shareholder's Name	Shareholding at the beginning of the year			Share holding at the end of the year			% change in share holding during the year
		No. of Shares	% of total Shares of the company	% of Shares Pledged/ encumbered to total shares	No. of Shares	% of total Shares of the company	% of Shares Pledged/ encumbered to total shares	
1	The President of India	1,44,14,82,490	74.58	—	1,16,37,17,107	60.20	—	(14.38)
	Total	1,44,14,82,490	74.58	—	1,16,37,17,107	60.20	—	(14.38)

(iii) Change in Promoters' Shareholding ( please specify, if there is no change)

Sl. No.		Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
	At the beginning of the year	1,44,14,82,490	74.58		
1	19.04.2017 – Offer for Sale	14,24,55,941	7.37	1,29,90,26,549	67.21
2	20.04.2017 – Offer for Sale	3,56,13,986	1.85	1,26,34,12,563	65.36
3	21.11.2017 – Employee Offer	76,17,057	0.40	1,25,57,95,506	64.96
4	21.11.2017 – Bharat 22 ETF	9,20,78,399	4.76	1,16,37,17,107	60.20
5	At the End of the year			1,163,7,17,107	60.20

(iv) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs):

Sl. No.	For Each of the Top 10 Shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	Life Insurance Corporation of India.	17,71,23,674	9.16	15,84,31,120	8.2
2	Bharat 22 ETF	—	—	4,77,68,312	2.47
3	Government Pension Global Fund	1,18,51,369	0.61	2,85,29,841	1.48
4	Reliance Capital Trustee Company Limited A/C Reliance Growth Fund	—	—	21084563	1.09
5	Hindalco Industries Limited	2,83,84,938	1.47	1,83,85,327	0.95
6	UTI-MID CAP Fund	—	—	1,64,64,258	0.85
7	Renuka Investments & Finance Limited.	—	—	1,64,18,964	0.85
8	HDFC Standard Life Insurance Company Limited	62,48,500	0.32	1,46,36,302	0.76
9	Bajaj Allianz Life Insurance Company Limited	2,92,18,221	1.51	1,43,50,874	0.74
10	Renukeswar Investment and Finance Ltd.	—	—	1,28,14,264	0.66
11	General Insurance Corporation of India	1,00,00,000	0.52	1,14,00,000	0.58
12	LIC of India Market Plus I Growth Fund	99,87,308	0.52	99,87,308	0.51
13	LIC of India Profit Plus Growth Fund	93,24,184	0.48	77,46,544	0.40
14	Vanguard Emerging Market Stock Index Fund, Aseries of Vanguard International Equity Fund	62,21,247	0.32	76,07,445	0.39
15	The New India Assurance Company Limited	60,39,876	0.31	1,18,39,876	0.61

The shares of the Company are traded on a daily basis and hence the date wise increase / decrease in shareholding is not indicated.





(v) Shareholding of Directors and Key Managerial Personnel:

Sl. No.	For Each of the Directors and KMP	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	Dr. T. K. Chand, CMD	—	—	—	—
2	Shri K.C. Samal, D(F)	400	—	400	—
3	Shri V. Balasubramanyam, D(P)	—	—	3016	—
4	Shri B.K.Thakur, D(HR)	—	—	—	—
5	Shri S.K. Roy, D(P&T)	5659	—	8275	—
6	Shri P.K. Mishra, D(C )	—	—	—	—
7	Shri N.K. Mohanty, Company Secretary	—	—	3016	—

V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	NIL	NIL	NIL	NIL
ii) Interest due but not paid				
iii) Interest accrued but not due				
<b>Total (i+ii+iii)</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>
Change in Indebtedness during the financial year				
• Addition	NIL	NIL	NIL	NIL
• Reduction				
Net Change	NIL	NIL	NIL	NIL
Indebtedness at the end of the financial year				
i) Principal Amount	NIL	NIL	NIL	NIL
ii) Interest due but not paid				
iii) Interest accrued but not due				
<b>Total (i+ii+iii)</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and/or Manager:

Sl. No.	Particulars of Remuneration	Name of MD/WTD/ Manager					Total Amount (₹)
		Dr. Tapan Kumar Chand	Shri K C Samal	Shri V Balasubramanyam	Shri B K Thakur	Shri S K Roy	
		CMD	Director (Finance)	Director (Production)	Director (HR)	Director (P & T)	
1.	Gross salary	46,72,530	53,45,378	48,15,478	42,54,081	56,13,390	24,700,857
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	—	—	3,15,267	1,05,192	—	4,20,459
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	—	—	—	—	—	—
	(c) Profits in lieu of salary under section 17(3) Income- tax Act, 1961	—	—	—	—	—	—



Sl. No.	Particulars of Remuneration	Name of MD/WTD/ Manager					Total Amount (₹)
		Dr. Tapan Kumar Chand	Shri K C Samal	Shri V Balasubramanyam	Shri B K Thakur	Shri S K Roy	
	DESIGNATION	CMD	Director (Finance)	Director (Production)	Director (HR)	Director (P & T)	
2.	Stock Option	—	—	—	—	—	—
3.	Sweat Equity	—	—	—	—	—	—
4.	Commission - as % of profit - others, specify...	—	—	—	—	—	—
5.	Others, please specify	—	—	—	—	—	—
	<b>Total (A)</b>	<b>46,72,530</b>	<b>53,45,378</b>	<b>51,30,745</b>	<b>43,59,273</b>	<b>56,13,390</b>	<b>2,51,21,316</b>
	Ceiling as per the Act						

**B. Remuneration to other directors:**

Sl. No.	Particulars of Remuneration	Name of Directors								Total Amount (₹)
		Shri Dipankar Mahanta	Shri S. Sankararaman	Shri P. K. Nayak	Prof. D. Acharya	Shri Maheswar Sahu	Smt. Kiran Ghai Sinha	Shri N N Sharma	Smt. Achla Sinha	
1.	Independent Directors									
	• Fee for attending board committee meetings	5,20,000	4,20,000	4,80,000	4,80,000	3,20,000	3,00,000	60,000	40,000	26,20,000
	• Commission	—	—	—	—	—	—	—	—	—
	• Others, please specify	—	—	—	—	—	—	—	—	—
	<b>Total (1)</b>	<b>5,20,000</b>	<b>4,20,000</b>	<b>4,80,000</b>	<b>4,80,000</b>	<b>3,20,000</b>	<b>3,00,000</b>	<b>60,000</b>	<b>40,000</b>	<b>26,20,000</b>
2.	Other Non-Executive Directors									
	• Fee for attending board committee meetings	—	—	—	—	—	—	—	—	—
	• Commission	—	—	—	—	—	—	—	—	—
	• Others, please specify	—	—	—	—	—	—	—	—	—
	<b>Total (2)</b>									
	<b>Total (B) = (1 + 2)</b>	<b>5,20,000</b>	<b>4,20,000</b>	<b>4,80,000</b>	<b>4,80,000</b>	<b>3,20,000</b>	<b>3,00,000</b>	<b>60,000</b>	<b>40,000</b>	<b>26,20,000</b>
	Total Managerial Remuneration									
	Overall Ceiling as per the Act									

**C. Remuneration to key managerial personnel other than MD/Manager/WTD**

Sl. No.	Particulars of Remuneration	Key Managerial Personnel				Total (₹)
		CEO	Company Secretary		CFO	
			Shri K. N. Ravindra (up to 31-05-2017)	Shri N. K. Mohanty (w.e.f 01-06-2017)		
1.	Gross salary					
(a)	Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	—	15,90,584	40,39,697	—	56,30,281
(b)	Value of perquisites u/s 17(2) Income-tax Act, 1961	—	1,03,026	70,510	—	1,73,536
(c)	Profits in lieu of salary under section 17(3) Income-tax Act, 1961	—	—	—	—	—



Sl. No.	Particulars of Remuneration	Key Managerial Personnel				Total (₹)
		CEO	Company Secretary		CFO	
			Shri K. N. Ravindra (up to 31-05-2017)	Shri N. K. Mohanty (w.e.f 01-06-2017)		
2.	Stock Option	—	—	—	—	—
3.	Sweat Equity	—	—	—	—	—
4.	Commission					
	as % of profit		—	—	—	—
	others, specify...					
5.	Others, please specify	—	—	—	—	—
	Total	—	16,93,610	41,10,207	—	58,03,817

#### VII. PENALTIES/PUNISHMENT/COMPOUNDING OF OFFENCES

Type	Section of the Companies Act	Brief Description	Details of Penalty/ Punishment/ Compounding fees imposed	Authority [RD/NCLT/ COURT]	Appeal made, if any (give Details)
<b>A. COMPANY</b>					
Penalty			NIL		
Punishment					
Compounding					
<b>B. DIRECTORS</b>					
Penalty			NIL		
Punishment					
Compounding					
<b>C. OTHER OFFICERS IN DEFAULT</b>					
Penalty			NIL		
Punishment					
Compounding					



**FORM NO. MR-3**  
**SECRETARIAL AUDIT REPORT**  
**FOR THE FINANCIAL YEAR 2017-18**

**Annexure VIII**

[Pursuant to section 204(1) of the Companies Act, 2013 and Rule No.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 – 751013 (Odisha)

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by M/s. National Aluminium Company Limited (hereinafter called 'the Company') for the financial year ended 31<sup>st</sup> March, 2018. Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conduct/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 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 31<sup>st</sup> March, 2018, 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 financial year ended on 31<sup>st</sup> March, 2018, according to the provisions of:

- (i) The Companies Act, 2013 (the Act), and Rules made there under;
- (ii) The Companies Act, 1956 and Rules made there under, to the extent for specified sections in the Act, not yet notified.
- (iii) The Securities Contracts(Regulation) Act, 1956 ('SCRA') and the Rules made there under;
- (iv) The Depositories Act, 1996 and the Regulations and Bye-laws framed there under;
- (v) Foreign Exchange Management Act, 1999 and the rules and regulations made there under to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;
- (vi) The following Agreement, Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992('SEBI Act'):-
  - a. The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015;
  - b. The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
  - c. The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;
  - d. The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009; **(Not applicable to the Company during the Audit Period)**
  - e. The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014; **(Not applicable to the Company during the Audit Period)**
  - f. The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008; **(Not applicable to the Company during the Audit Period)**
  - g. The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009; **(Not applicable to the Company during the Audit Period)**
  - h. The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998.
- (vii) The other laws as may be applicable specifically to the Company are:
  - a. The Mines Act, 1952;
  - b. Mines & Minerals (Development & Regulation) Act, 1957;
  - 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.

We have also examined compliance with the applicable clauses of the following:

- (i) Secretarial Standards issued by The Institute of Company Secretaries of India (ICSI).
- (ii) The Uniform Listing Agreements entered into by the Company with the National Stock Exchange of India Limited and BSE Limited.

During the period under review, the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. as mentioned above.

### **BOARD COMPOSITION:**

During the financial year under review, the Board of Directors of the Company consisted of the following Directors:

#### **LIST OF DIRECTORS DURING THE FINANCIAL YEAR**

Sl. No.	Name of the Directors	Positions Held	Date of Appointment	Date of Cessation
<b>WHOLE-TIME DIRECTORS</b>				
1.	Dr. Tapan Kumar Chand	Chairman-cum-Managing Director	27.07.2015	—
2.	Shri K.C. Samal	Director (Finance)	03.01.2014	—
3.	Shri V. Balasubramanyam	Director (Production)	01.01.2015	—
4.	Shri. B. K. Thakur	Director (HR)	04.07.2016	—
5.	Shri. S. K. Roy	Director (P & T)	03.02.2017	—
<b>PART-TIME OFFICIAL DIRECTORS</b>				
1.	Shri Subhash Chandra	Director	20.10.2016	16.02.2018
2.	Dr. K. Rajeswara Rao	Director	19.02.2018	—
3.	Shri. N. K. Singh	Director	15.03.2017	26.03.2018
4.	Shri Anil Kumar Nayak	Director	27.03.2018	—
<b>PART-TIME NON-OFFICIAL (INDEPENDENT) DIRECTORS</b>				
1.	Shri Dipankar Mahanta	Director	21.11.2015	—
2.	Shri S. Sankararaman	Director	21.11.2015	—
3.	Shri Pravat Keshari Nayak	Director	21.11.2015	—
4.	Prof. Damodar Acharya	Director	21.11.2015	—
5.	Shri Maheswar Sahu	Director	21.11.2015	—
6.	Ms. Kiran Ghai Sinha	Director	03.02.2017	—
7.	Shri Nagendra Nath Sharma	Director	06.09.2017	—
8.	Ms. Achla Sinha	Director	08.09.2017	—

At the beginning of the year, there were five (5) Whole time Directors (Executive Directors), two (2) Part-time official Directors and Six (6) Part – time Non-official (Independent) Directors on the Board of the Company.

The term of two Part-time official directors, namely Shri Subhash Chandra & Shri N. K. Singh ended on 16.02.2018 & 26.03.2018 respectively and in their place Dr. K. Rajeswara Rao & Shri Anil Kumar Nayak were appointed on 19.02.2018 and 27.03.2018 respectively.

Shri Nagendra Nath Sharma and Ms. Achla Sinha were appointed as Part-time Non-official (Independent) Directors on 06.09.2017 & 08.09.2017



respectively. Hence, the Company had five (5) Whole- time Directors, two (2) Part-time Official Directors and eight (8) Part-time Non-official (Independent) Directors on the Board as on 31st March, 2018.

At the end of the year, the Composition of the Board was in compliance with the provisions of Section 149(4) of the Companies Act, 2013 and Regulation 17(1) (b) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015. Although at the beginning of the year, the Composition of the Board was in Compliance with the provisions of Section 149(4) of the Companies Act, 2013 but it was not in compliance with the Regulation 17(1) (b) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 till 5th September, 2017.

### **Non Compliances:**

1. As per the provisions of Regulation 17(1)(b) of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (“Listing Regulations”), where the Chairperson of the Board of directors is a Non-Executive Director, at least one-third of the Board of Directors shall comprise of Independent Directors and where the listed entity does not have a regular Non-Executive Chairperson, at least half of the Board of directors shall comprise of Independent Directors. DPE guidelines on Corporate Governance also contain similar provisions as regards to the composition of Directors.

Since, the Chairman of the Company is an Executive Director, half of the Board is required to be comprised of Independent Directors.

The Company was having 5 (five) Executive Directors, 2 (two) Part-time Official Directors and 6 (six) Independent Directors at the beginning of the Financial Year. Further, as on 31st March, 2018, there were 5 (five) Executive Directors, 2 (two) Part-time Official Directors and 8 (eight) Part-time Non-official Directors.

**The composition of the Board was not in compliance with the requirements under Regulation 17(1)(b) of the Listing Regulations and DPE Guidelines at the beginning of the year.**

### **BOARD MEETING:**

During the financial year under review, Seven (7) meetings of the Board of Directors i.e. from 299th to 305th were held on 10.05.2017, 27.05.2017, 22.07.2017, 09.08.2017, 22.09.2017, 11.11.2017 & 09.02.2018 respectively. For all the Board meetings, adequate notice was given to all Directors. Agenda and detailed notes on agenda were sent to all the Directors and the Company has a system existing, for seeking and obtaining further information and clarifications on the agenda items placed before the meetings for the meaningful participation at the meetings.

All decisions at the Board Meetings were carried out unanimously and recorded in the minutes book of the meeting.

### **SEPARATE MEETING OF THE INDEPENDENT DIRECTORS:**

As per the provisions of Section 149(8) read with Clause VII of Schedule IV of the Companies Act, 2013, a separate meeting of Independent Directors of the Company was held on 28.03.2018.

### **STATUTORY COMMITTEES OF THE BOARD:**

#### **(i) Audit Committee:**

The Audit Committee of the Board of Directors of the Company consists of the following members:

- Shri Pravat Keshari Nayak, Independent Director -Chairman
- Shri Dipankar Mahanta, Independent Director -Member
- Shri S. Sankararaman, Independent Director -Member
- Prof. Damodar Acharya, Independent Director –Member
- Shri V. Balasubramanyam, Director (Production) - Member
- Shri S. K. Roy, Director (P&T) -Member

Director (Finance) is a permanent invitee to the Committee.

During the financial year, eight (8) meetings of the Audit Committee i.e. from 106th to 113th were held on 10.05.2017, 26.05.2017, 21.07.2017, 09.08.2017, 11.11.2017, 25.11.2017, 09.02.2018 & 28.03.2018.

#### **(ii) Nomination and Remuneration Committee:**

The Nomination and Remuneration Committee of the Board of Directors of the Company consists of the following members:

- Shri Maheswar Sahu, Independent Director – Chairman
- Shri S. Sankararaman, Independent Director - Member
- Shri Pravat Keshari Nayak, Independent Director - Member



- Prof. Damodar Acharya, Independent Director – Member
- Ms. Kiran Ghai Sinha, Independent Director – Member

Director (Finance) and Director (HR) are invitees to the meetings.

During the financial year, one (1) meeting of the Nomination and Remuneration Committee i.e. 2nd was held on 22.09.2017.

**(iii) Stakeholders Relationship Committee:**

The Stakeholders Relationship Committee of the Board of Directors of the Company consists of the following members:

- Shri S. Sankararaman, Independent Director - Chairman
- Shri Dipankar Mahanta, Independent Director – Member
- Shri Pravat Keshari Nayak, Independent Director – Member
- Ms. Kiran Ghai Sinha, Independent Director – Member
- Shri Nagendra Nath Sharma, Independent Director – Member
- Ms. Achla Sinha, Independent Director – Member
- Shri B. K. Thakur Director (HR) –Member
- Director(Commercial) – Member – post lying vacant during the period

Shri Nagendra Nath Sharma and Ms. Achla Sinha were inducted as members of the Committee w.e.f. 22.03.2018.

During the financial year, four (4) Meetings of the Stakeholders Relationship Committee i.e. from 10th to 13th were held on 27.05.2017, 09.08.2017, 11.11.2017 & 09.02.2018.

**(iv) CSR & Sustainability Development Committee:**

The CSR & Sustainability Development Committee of the Board of Directors of the Company consists of the following members:

- Shri Dipankar Mahanta, Independent Director- Chairman
- Shri S. Sankararaman, Independent Director- Member
- Shri Maheswar Sahu, Independent Director- Member
- Ms. Kiran Ghai Sinha, Independent Director – Member
- Shri Nagendra Nath Sharma, Independent Director – Member
- Shri K. C. Samal, Director (Finance) -Member
- Shri V. Balasubramanyam, Director (Production) - Member
- Shri. B. K. Thakur, Director (HR) –Member

Shri Nagendra Nath Sharma was inducted as a member of the Committee w.e.f. 22.03.2018.

During the financial year, three (3) meetings of the CSR & Sustainability Development Committee i.e. from 10th to 12th were held on 21.04.2017, 21.07.2017 & 10.11.2017.

**(v) Risk Management Committee:**

The Risk Management Committee of the Board of Directors of the Company consists of the following members:

- Prof. Damodar Acharya, Independent Director- Chairman
- Shri S. Sankararaman, Independent Director –Member
- Ms. Kiran Ghai Sinha, Independent Director - Member
- Shri K.C. Samal, Director (Finance) -Member
- Shri V. Balasubramanyan, Director (Production) – Member
- Director(Commercial) – Member – post lying vacant during the period

During the financial year, three (3) meetings of the Risk Management Committee i.e. from 7th to 9th were held on 27.05.2017, 09.08.2017 & 25.11.2017.



## OTHER COMMITTEES CONSTITUTED UNDER DPE GUIDELINES:

### (i) Technology Committee:

The Technology Committee of the Company comprised of the following Directors:

1. Prof. Damodar Acharya, Independent Director – Chairman
2. Shri Maheswar Sahu, Independent Director – Member
3. Shri K.C. Samal, Director (Finance) –Member
4. Shri V. Balasubramanyam, Director (Production) –Member
5. Shri S.K. Roy, Director (P & T) –Member
6. Director(Commercial) – Member – post lying vacant during the period

During the financial year, two (2) meetings of the Technology Committee i.e. 29th & 30th were held on 21.07.2017 & 25.11.2017.

### (ii) Human Resource (HR) Committee:

The Human Resource (HR) Committee of the Company comprised of the following Directors:

1. Shri Maheswar Sahu, Independent Director – Chairman
2. Shri Dipankar Mahanta, Independent Director – Member
3. Ms. Kiran Ghai Sinha, Independent Director – Member
4. Shri K.C. Samal, Director (Finance) –Member
5. Shri. B. K. Thakur, Director (HR) –Member
6. Shri S.K. Roy, Director (P & T) –Member

During the financial year, five (5) meetings of the Human Resource (HR) Committee i.e. from 34th to 38th were held on 21.04.2017, 21.07.2017, 22.09.2017, 10.11.2017 & 29.01.2018.

### (iii) Committee of Directors (COD) for Projects & New Ventures:

The COD for Projects and New Ventures Committee of the Company comprised of the following Directors:

1. Dr. Tapan Kumar Chand, CMD–Chairman
2. Shri Pravat Keshari Nayak, Independent Director –Member
3. Prof. Damodar Acharya, Independent Director – Member
4. Shri Maheswar Sahu, Independent Director – Member
5. Shri Anil Kumar Nayak, Joint Secretary – Member
6. Shri K.C. Samal, Director (Finance) –Member
7. Shri V. Balasubramanyam, Director (Production) –Member
8. Shri. B. K. Thakur, Director (HR) –Member
9. Shri S. K. Roy, Director (P & T) –Member
10. Director (Commercial) – Member – post lying vacant during the period

Shri Anil Kumar Nayak became a member of the Committee w.e.f. 27.03.2018, after his appointment as a Director.

During the financial year, three (3) Committee meetings of Director for Projects & New Ventures i.e. from 15th to 17th were held on 10.05.2017, 22.09.2017 & 11.11.2017.

### (iv) Ethics and Corporate Governance Committee:

The Ethics and Corporate Governance Committee of the Company comprised of the following Directors:

1. Shri Dipankar Mahanta, Independent Director –Chairman
2. Shri Pravat Keshari Nayak, Independent Director –Member
3. Ms. Kiran Ghai Sinha, Independent Director –Member
4. Ms. Achla Sinha, Independent Director –Member
5. Shri. B. K. Thakur, Director (HR) –Member
6. Shri S.K. Roy, Director (P & T) –Member
7. Director(Commercial) – Member – post lying vacant during the period





Ms. Achla Sinha was inducted as a member of the Committee w.e.f. 22.03.2018.

During the financial year, one (1) meeting of the Ethics and Corporate Governance Committee i.e. 9th was held on 21.07.2017.

Adequate notice was given to all Members for all Committee Meetings. Agenda and detailed notes on agenda were sent in advance. All decisions at the Committee Meetings were carried out unanimously and recorded in the minutes book of the respective Committee Meetings.

**Registrar and Share Transfer Agent:**

M/s. Karvy Computershare Private Limited, Hyderabad is the Registrar and Share Transfer Agent (RTA) of the Company.

We further report that there are adequate systems 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.

**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 by the Company properly with all necessary entries made therein.

**Filing of Statutory Returns:**

All provisions of the Act and other statutes were duly complied with regard to filing of various e-forms and returns with the 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 prescribed due dates.

**Redressal of Investors Grievances:**

All complaints/grievances relating to share transfers, transmissions, dematerialisation, rematerialisation of shares, issue of duplicate shares certificates, payment of dividend etc. were attended and resolved within the prescribed time limit.

During the financial year under review, 709 complaints were received by the Company and all of them were resolved within the prescribed time limit.

**Payment of Dividend:**

The Board of Directors in its 305th Board Meeting declared the payment of Interim Dividend for the Financial Year 2017-18 @ Rs. 4.70 per share i.e. 94 % of paid-up equity share capital of the Company.

The Board has further recommended final dividend @Re.1 per share i.e. 20% of paid-up equity share capital of the Company subject to approval of the shareholders in the ensuing 37th Annual General Meeting.

All the provisions of the Companies Act, 2013 relating to the declaration and payment of dividend to the shareholders have been complied with, by the Company.

**Transfer of unpaid/unclaimed dividend to IEPF:**

In accordance with the provisions under the Companies Act, 2013, the following dividends have been transferred to the Investor Education & Protection Fund (IEPF) during the year under review:

YEAR	DATE OF TRANSFER	AMOUNT (RS.)
2009-10 (Interim)	22.04.2017	387504/-
2009-10 (Final)	04.11.2017	297980/-
2010-11 (Interim)	08.03.2018	537968/-

**Transfer of shares to IEPF:**

Pursuant to Section 124(6) of the Act read with Rule 6 of IEPF Rules, the Company is required to transfer shares in respect of which dividend has not been paid/claimed for 7 (seven) consecutive years or more to the Demat Account of IEPF Authority.

During the year, the Company sent individual notices and advertised in the newspapers intimating shareholders who had not claimed/ encashed their dividend for seven consecutive years or more. Thereafter, the Company transferred unpaid dividends pertaining to the following period and corresponding shares to the demat account of the IEPF authority:

Particulars	Dividend (Rs.)	No. of Shares	Date of transfer
Final dividend for financial year 2009-10	Rs. 2,97,980/-	1,48,267	18.12.2017
Interim dividend for financial year 2010-11	Rs.5,37,968/-	1,012	08.03.2018



We further report that;

**During the financial year under review, the following events took place which have a major bearing on the affairs of the Company:**

- 1) The Govt. of India disposed of 14,24,55,941 equity shares to non-retail investors & 3,56,13,986 equity shares to retail investors through OFS on stock exchange mechanism on 19.04.2017 and 20.04.2017 respectively. Subsequent to the OFS, the shareholding of the Govt. of India reduced to 65.36%.
- 2) Further, the Govt. of India transferred 9,20,78,399 equity shares to Bharat-22 ETF scheme in two tranches between 16.11.2017 and 21.11.2017. The Govt. of India also transferred 76, 17, 057 equity shares in favour of the eligible and willing employees of the Company on 21.11.2017 as part of OFS, that took place in April, 2017.

As on the end of the year under review, the Govt. of India holds 1,163,717,107 no. of equity shares which is 60.20% of the total paid-up equity share capital of 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 Saroj Ray & Associates  
Company Secretaries

CS Saroj Kumar Ray, FCS  
Sr. Partner  
CP: 3770, FCS: 5098

Place: Bhubaneswar

Date: 28.05.2018

(This report is to be read with our letter of even date which is annexed as Annexure A and forms an integral part of this report)

**Annexure A**

To  
The Members,  
National Aluminium Company Limited  
NALCO Bhawan, Plot No. P/1, Nayapalli  
Bhubaneswar – 751013 (Odisha)

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 Saroj Ray & Associates  
Company Secretaries

CS Saroj Kumar Ray, FCS  
Sr. Partner  
CP: 3770, FCS: 5098

Place: Bhubaneswar

Date: 28.05.2018



## Management's explanation on the qualifying remarks of Secretarial Auditor.

The qualifying remarks, reported by the Secretarial Auditor in their report for the Financial Year ended 31<sup>st</sup> March, 2018 and the explanations of the management are tabulated below:

Sl. No.	Qualifying remarks of Secretarial Auditor	Management's explanation
01.	<p>The Company was having 5 (five) Executive Directors, 2 (two) Part-time Official Directors and 6 (six) Independent Directors at the beginning of the Financial Year. Further, as on 31st March, 2018, there were 5 (five) Executive Directors, 2 (two) Part-time Official Directors and 8 (eight) Part-time Non-Official Directors.</p> <p>The composition of the Board was not in compliance with the requirements under Regulation 17(1)(b) of the Listing regulations and DPE guidelines at the beginning of the year.</p>	<p>President of India is the appointing authority for the Directors as per the Articles of Association of the Company.</p> <p>The composition at the beginning of the financial year was in line with the requirements under Section 149(4) of the Companies Act, 2013 but not in compliance with Regulation 17(1) (b) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 till 05.09.2017. Two Independent Directors were appointed to the Board of the Company w.e.f. 06.09.2017 and 08.09.2017 respectively.</p> <p>Accordingly, the composition of the Board was in compliance with Regulation 17(1) (b) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 with effect from 06.09.2017.</p>

For National Aluminium Company Limited

Sd/-

(Dr. T. K. Chand)  
Chairman-cum-Managing Director



# INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF NATIONAL ALUMINIUM COMPANY LIMITED

## Report on the Standalone Financial Statements

We have audited the accompanying standalone financial statements of **National Aluminium Company Limited** ("the Company"), which comprises the Balance Sheet as at 31<sup>st</sup> March 2018, and the Statement of Profit and Loss (including Other Comprehensive Income), the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and a summary of significant accounting policies and other explanatory information.

### Management's Responsibility for the Financial Statements

The Company's board of directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) prescribed under Section 133 of the Act read with relevant rules issued thereunder.

This responsibility also includes the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate 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 financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit.

We have taken into account the provisions of the Act, the accounting and auditing standards and matters, which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

We conducted our audit of the financial statements in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the company's preparation of financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by company's directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

### Opinion

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 Act in the manner so required and give a true and fair view, in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at 31<sup>st</sup> March, 2018, and its profit including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

### Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government of India in terms of Section 143(11) of the Act, we give in Annexure "A" to this report, a statement on the matters specified in paragraphs 3 and 4 of the Order.
2. In compliance to directions of the Comptroller and Auditor General of India u/s.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 purpose 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, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account.
  - d. In our opinion, the aforesaid financial statements comply with the Indian Accounting Standards prescribed under Section 133 of the Act read with relevant rules made thereunder.
  - 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.
  - 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 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 disclosed pending litigations in its financial statements – Refer Note 25 to the standalone financial statements, the impact of which on its financial position is not ascertainable as the matters are sub-judice;
    - ii. the Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;
    - iii. there has been no delay in transferring amounts, required to be transferred to the Investor Education and Protection Fund by the Company.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No.054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423



**ANNEXURE TO THE INDEPENDENT AUDITORS' REPORT ON  
STANDALONE IND AS FINANCIAL STATEMENTS FOR THE YEAR ENDED  
31<sup>ST</sup> MARCH 2018 OF NATIONAL ALUMINIUM COMPANY LIMITED**

ANNEXURE – A

(Referred to in paragraph 1 under the heading of  
“Report on Other Legal and Regulatory Requirements” of our Report of even date)

- i) (a) The Company is maintaining proper records showing full particulars, including quantitative details and situation of its property, plant and equipment including intangible assets.
- (b) All movable assets of the Company are physically verified by the management every year. The frequency of verification, in our opinion, is reasonable. No material discrepancies were noticed on such verification conducted during the year;
- Non-movable assets have been physically verified by the management at an interval of three years, which, in our opinion, is reasonable having regard to the size and nature of assets of the Company;
- No material discrepancies between book records and physical assets have been noticed;
- (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. Out of 8022.63 acres of freehold land and 9878.52 acres of leasehold land held by the Company, title/lease deeds are not yet executed in respect of 66.92 acres of freehold and 2244.55 acres of leasehold land respectively. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land. Registration formalities in respect of office space for 6459 sft. in Kolkata is also not completed.
- ii) Inventories, except stocks relating to expansion project, stocks lying with third parties and stocks-in-transit, have been physically verified during the year by firms of Chartered Accountants appointed by the management for this purpose. The frequency of verification is reasonable. The discrepancies noticed on physical verification between physical stocks and book records in case of shortages have been properly dealt with in the books of accounts while excesses have been ignored;
- iii) The Company has not granted any loans, secured or unsecured, to companies, firms, limited liability partnerships or other parties covered in the register maintained under Section 189 of the Companies Act, 2013. Consequently, clauses (iii) (a), (b) & (c) of paragraph 3 of the Order are not applicable;
- iv) 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) The Company has not accepted any deposits from the public.
- 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. We have, however, 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, sales tax, service tax, duty of customs, duty of excise, value added tax, cess, electricity duty and other material statutory dues with the appropriate authorities and there are no undisputed statutory dues as at 31<sup>st</sup> March, 2018 outstanding for a period of more than six months from the date they became payable.
- (b) According to the information and explanations given to us, following statutory dues have not been deposited by the Company on account of disputes:

(₹ in crore)

Name of the Statute	Nature of Dues	Amount disputed	Amount deposited	Forum where disputes are pending
Sales Tax	Sales Tax	122.80	24.20	Commissioner
		162.23	55.52	Tribunal
		81.13	4.02	High Court
		<b>366.16</b>	<b>83.75</b>	



(₹ in crore)

Name of the Statute	Nature of Dues	Amount disputed	Amount deposited	Forum where disputes are pending
Entry Tax	Entry Tax	36.05	8.17	Commissioner
		133.02	55.55	Tribunal
		60.55	9.38	High Court
		229.62	73.11	
Central Excise Act, 1944	Excise Duty	2.96	0.11	Commissioner
		96.94	0.57	Tribunal
		0.79	0.59	High Court
		100.69	1.27	
Service Tax	Service tax	2.91	1.84	Commissioner
		15.17	1.13	Tribunal
		18.08	2.97	
Customs Act, 1962	Custom Duty	1.44	0.18	Commissioner
		101.33	1.66	Tribunal
		102.77	1.84	
Income Tax Act, 1961	Income Tax	81.70	229.39	Commissioner
		592.78	315.61	Tribunal
		31.92	52.14	High Court
		706.40	597.14	
Odisha Stamps Act	Stamp duty	204.53	0.00	High Court
Road Tax	Road Tax	2.65	0.00	Commissioner
		2.65	0.00	
	Total:	1,730.89	760.08	

- viii) Except bill discounting arrangement with banks, the Company does not have any loans or borrowings from any financial institution, banks, government or debenture holders. The Company has not defaulted in repayment of the loans obtained under the bill discounting facility.
- ix) The Company did not raise any money by way of initial public offer or further public offer (including debt instruments) and term loans during the year.
- x) According to the information and explanations given to us, no fraud by the Company or any material fraud on the Company by its officers or employees has been noticed or reported during the year.
- xi) Section 197 of the Act regarding 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.
- xii) In our opinion and according to the information and explanations given to us, the Company is not a nidhi company.
- 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 details of such transactions have been disclosed in the financial statements as required by the applicable accounting standards.
- xiv) According to the information and explanations given to us and based on our examination of the records, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year.
- 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.
- xvi) The Company is not required to be registered under Section 45-IA of the Reserve Bank of India Act, 1934.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No.054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423



**ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT ON THE  
STANDALONE IND AS FINANCIAL STATEMENTS FOR THE YEAR ENDED  
31<sup>ST</sup> MARCH, 2018 OF NATIONAL ALUMINIUM COMPANY LIMITED**

ANNEXURE "B"

(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 by the Comptroller & Auditor General of India

According to the information and explanations given to us by the management and on the basis of our examination of books and records of the Company, we report that:

1. The Company has clear title/lease deeds for freehold and leasehold land respectively wherever the title/lease deeds are executed. There are 66.92 acres of freehold and 2244.55 acres of leasehold land out of 8022.63 acres of freehold and 9878.52 acres of lease hold land in respect of which the title/lease deeds are not yet executed. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land.
2. There are 7 cases of write-off of advances, debtors and claims amounting to Rs.31.98 lacs as detailed below. The reason of write-off, as explained to us, is that these are old balances lying unadjusted/unrealized for a long time, have become time-barred and chances of recovery / adjustments are remote.

Types of write-off / waiver	No. of cases	Amount in Rs. Lacs
Advances	1	0.22
Claims	6	31.76
<b>Total</b>	<b>7</b>	<b>31.98</b>

3. (a) Proper records are maintained for inventories lying with third parties.  
(b) The Company has not received any asset as gift/grant(s) from Government or other authorities during the year.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No.054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423





### 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 March 31, 2018 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 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 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 March 31, 2018, 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 Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No.054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423



**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 2018**

The preparation of financial statements of National Aluminium Company Limited for the year ended 31 March 2018 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 auditors appointed by the Comptroller and Auditor General of India under Section 139(5) of the Act are responsible for expressing opinion on the financial statements under Section 143 of the Act based, on independent audit in accordance with 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 26 May, 2018.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 143(6)(a) of the Act of the financial statements of National Aluminium Company Limited for the year ended 31 March, 2018. 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 audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditors' Report.

**For and on the behalf of the  
Comptroller & Auditor General of India**

**(Suparna Deb)**

**Director General of Commercial Audit  
& Ex-officio Member, Audit Board–I, Kolkata**

**Place : Kolkata**

**Date : 29 June 2018**



## BALANCE SHEET AS AT MARCH 31, 2018

Particulars	Notes	Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>Assets</b>			
<b>(1) Non-current assets</b>			
(a) Property, plant and equipment	5	7,019.38	7,018.63
(b) Capital work-in-progress	6	825.83	514.65
(c) Intangible assets	7	120.08	125.80
(d) Intangible assets under development	8	89.39	51.35
(e) Financial assets			
(i) Investments	9	117.61	39.55
(ii) Trade receivables	10	-	-
(iii) Loans	11	74.96	80.60
(iv) Other financial assets	12	13.14	10.77
(f) Other non-current assets	14	739.51	1,004.51
<b>Total non-current assets</b>		<b>8,999.90</b>	<b>8,845.86</b>
<b>(2) Current assets</b>			
(a) Inventories	15	1,194.08	1,155.93
(b) Financial assets			
(i) Investments	9	592.96	1,221.13
(ii) Trade receivables	10	258.13	184.25
(iii) Cash and cash equivalents	16	25.35	24.83
(iv) Bank balances other than (iii) above	16	2,743.60	2,262.40
(v) Loans	11	29.29	36.70
(vi) Other financial assets	12	152.55	156.49
(c) Current tax assets (Net)	13	32.13	34.12
(d) Other current assets	14	585.81	579.94
<b>Total current assets</b>		<b>5,613.90</b>	<b>5,655.79</b>
<b>Total assets</b>		<b>14,613.80</b>	<b>14,501.65</b>
<b>Equity and liabilities</b>			
<b>(1) Equity</b>			
(a) Equity share capital	17	966.46	966.46
(b) Other equity	18	9,538.35	9,239.33
<b>Total equity</b>		<b>10,504.81</b>	<b>10,205.79</b>
<b>Liabilities</b>			
<b>(2) Non-current liabilities</b>			
(a) Financial liabilities			
(i) Trade payables	20	15.63	19.61
(ii) Other financial liabilities	21	2.85	2.36
(b) Provisions	22	436.09	328.11
(c) Deferred tax liabilities (Net)	23	1,151.45	1,245.58
(d) Other non-current liabilities	24	62.04	48.27
<b>Total non-current liabilities</b>		<b>1,668.06</b>	<b>1,643.93</b>
<b>(3) Current liabilities</b>			
(a) Financial liabilities			
(i) Borrowings	19	44.99	51.09
(ii) Trade payables	20	961.74	844.46
(iii) Other financial liabilities	21	512.87	469.10
(b) Other current liabilities	24	545.45	1,170.21
(c) Provisions	22	375.88	117.07
<b>Total current liabilities</b>		<b>2,440.93</b>	<b>2,651.93</b>
<b>Total liabilities</b>		<b>4,108.99</b>	<b>4,295.86</b>
<b>Total equity and liabilities</b>		<b>14,613.80</b>	<b>14,501.65</b>

See accompanying notes (1-39) to the financial statements

For and on behalf of Board of Directors

(CS. N K Mohanty)  
(Company Secretary)

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.:054894)

Place : Bhubaneswar  
Date : May 26, 2018

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.:019423)



## STATEMENT OF PROFIT AND LOSS FOR THE PERIOD ENDED MARCH 31, 2018

	Notes	Amount in Rs. Crore	
		Year ended 31.03.2018	Year ended 31.03.2017
I Revenue from operations	27	9,618.31	8,050.02
II Other Income	28	299.65	408.27
<b>III Total Income (I + II)</b>		<b>9,917.96</b>	<b>8,458.29</b>
<b>IV EXPENSES</b>			
(a) Cost of raw materials consumed	29	1,465.31	1,181.79
(b) Cost of power and fuel consumed	29	2,747.92	2,212.53
(c) Changes in inventories of finished goods and work-in-progress	30	47.43	(96.59)
(d) Employee benefits expenses	31	2,261.20	1,537.44
(e) Finance costs		1.95	2.69
(f) Depreciation and amortisation expenses	5 & 7	480.40	480.36
(g) Excise duty		108.86	506.98
(h) Other expenses	32	1,590.14	1,628.22
<b>Total expenses (IV)</b>		<b>8,703.21</b>	<b>7,453.42</b>
<b>V Profit/(loss) before exceptional items and tax (III - IV)</b>		<b>1,214.75</b>	<b>1,004.87</b>
VI Exceptional Items	33	(824.08)	40.15
<b>VII Profit/(loss) before tax (V - VI)</b>		<b>2,038.83</b>	<b>964.72</b>
<b>VIII Tax Expense</b>			
(1) Current tax	34	793.18	219.52
(2) Deferred tax	34	(96.76)	76.67
<b>IX Profit/(loss) for the period (VII - VIII)</b>		<b>1,342.41</b>	<b>668.53</b>
<b>X Other comprehensive income</b>			
(i) Items that will not be reclassified to profit or loss			
- Remeasurement gains / (losses) on defined benefit plans		52.66	13.88
(ii) Income tax relating to items that will not be reclassified to profit or loss	34	2.63	4.80
<b>Other comprehensive income for the period (net of tax) (X)</b>		<b>50.03</b>	<b>9.08</b>
<b>XI Total comprehensive income for the period (IX+X) (comprising profit/(loss) and other comprehensive income for the period)</b>		<b>1,392.44</b>	<b>677.61</b>
<b>XII Earnings per equity share:</b>			
(1) Basic (in Rs.)	36	6.94	2.98
(2) Diluted (in Rs.)	36	6.94	2.98

See accompanying notes (1-39) to the financial statements

For and on behalf of Board of Directors

(CS. N K Mohanty)  
(Company Secretary)

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.:054894)

Place : Bhubaneswar  
Date : May 26, 2018

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.:019423)



## STATEMENT OF CHANGES IN EQUITY FOR THE PERIOD ENDED MARCH 31, 2018

Amount in Rs. Crore

### A. Equity share capital

Balance as at 31.03.2016	1,288.62
Changes in equity share capital during the year	
Buy-back of equity shares	(322.16)
<b>Balance as at 31.03.2017</b>	<b>966.46</b>
Changes in equity share capital during the year	—
<b>Balance as at 31.03.2018</b>	<b>966.46</b>

### B. Other equity

Amount in Rs. Crore

	Reserves and surplus			Total
	Capital redemption reserve	General reserve	Retained earnings	
<b>Other equity</b>				
<b>Balance as at 31.03.2016</b>	—	11,461.10	445.03	11,906.13
Profit for the year	—	—	668.53	668.53
Other comprehensive income (net of taxes)	—	—	9.08	9.08
<b>Total comprehensive income for the year</b>	—	—	<b>677.61</b>	<b>677.61</b>
Premium on Buy-back of equity shares		(2,512.81)	—	(2,512.81)
Expenses on Buy-back of equity shares		(5.72)	—	(5.72)
Transfer of general reserve to Capital redemption reserve	322.16	(322.16)	—	—
Final dividend for previous year	—	—	(144.97)	(144.97)
Tax on final dividend for previous year			(29.51)	(29.51)
Interim dividend for the year			(541.22)	(541.22)
Tax on interim dividend for the year			(110.18)	(110.18)
<b>Balance as at 31.03.2017</b>	<b>322.16</b>	<b>8,620.41</b>	<b>296.76</b>	<b>9,239.33</b>
Profit for the year	—	—	1,342.41	1,342.41
Other comprehensive income (net of taxes)	—	—	50.03	50.03
<b>Total comprehensive income for the year</b>	—	—	<b>1,392.44</b>	<b>1,392.44</b>
Interim dividend for the year			(908.48)	(908.48)
Tax on interim dividend for the year			(184.94)	(184.94)
<b>Balance as at 31.03.2018</b>	<b>322.16</b>	<b>8,620.41</b>	<b>595.78</b>	<b>9,538.35</b>

For and on behalf of Board of Directors

(CS. N K Mohanty)  
(Company Secretary)

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.:054894)

Place : Bhubaneswar  
Date : May 26, 2018

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.:019423)



## CASH FLOW STATEMENT FOR THE YEAR ENDED MARCH 31, 2018

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>A. Cash flows from operating activities</b>		
Profit for the period	1,342.41	668.53
Adjustments for:		
Income tax expense recognised in profit or loss	696.42	296.19
Finance costs recognised in profit or loss	1.95	2.69
Interest income recognised in profit or loss	(184.79)	(292.64)
Dividend income recognised in profit or loss	(33.65)	(8.78)
Net (gain) / loss on sale of non-current investments	(13.91)	-
Net (gain) / loss on disposal of property, plant and equipment	(0.44)	(0.10)
Net (gain) / loss arising on financial assets mandatorily measured at fair value through profit or loss	(2.96)	(77.81)
Impairment loss recognised on other assets	13.43	56.93
Inventories of stores, spares written off	15.98	27.96
Depreciation and amortisation of non-current assets	480.40	480.36
Net foreign exchange (gain)/loss	2.55	7.90
<b>Operating profit before working capital changes</b>	<b>2,317.39</b>	<b>1,161.23</b>
Movements in working capital:		
(Increase) / decrease in inventories	(54.62)	(129.56)
(Increase) / decrease in trade receivables	(73.88)	50.96
(Increase) / decrease in loans and other financial asset	14.62	17.75
(Increase) / decrease in other assets	(23.02)	(49.52)
Increase / (decrease) in trade payables	110.75	200.31
Increase / (decrease) in other financial liabilities	6.25	21.25
Increase / (decrease) in other liabilities	(766.01)	315.21
Increase / (decrease) in provisions	417.56	66.74
<b>Cash (used in) / generated from operations</b>	<b>1,949.04</b>	<b>1,654.37</b>
Income taxes paid	(482.49)	(218.43)
<b>Net cash flow from operating activities</b>	<b>1,466.55</b>	<b>1,435.94</b>
<b>B. Cash flows from investing activities</b>		
Payments to acquire financial assets	(420.00)	(184.00)
Proceeds from sale of financial assets	1,065.03	49.96
Payments to acquire equity in joint ventures and associates	(78.05)	(38.47)
Investment in term deposits with banks	(326.27)	2,183.02
Dividends received from other investments	33.65	8.78
Interest received from banks and others	184.79	292.64
Payments for property, plant and equipment (including capital advances)	(790.78)	(757.98)
Proceeds from disposal of property, plant and equipment	11.82	16.53
Payments for other intangible assets	(46.57)	(20.14)
<b>Net cash flow from investing activities</b>	<b>(366.38)</b>	<b>1,550.34</b>
<b>C. Cash flows from financing activities</b>		
Payments for buy-back of equity shares	-	(2,834.97)
Payments for share buy-back costs	-	(5.72)
Proceeds from short term borrowings	(6.10)	51.09
Finance cost paid	(0.13)	(0.39)
Dividends paid on equity shares	(908.48)	(686.19)
Tax on dividends paid on equity shares	(184.94)	(139.69)
<b>Net cash flow from financing activities</b>	<b>(1,099.65)</b>	<b>(3,615.87)</b>
<b>Net increase or (decrease) in cash or cash equivalents</b>	<b>0.52</b>	<b>(629.59)</b>
<b>Cash and cash equivalents at the beginning of the year</b>	<b>24.83</b>	<b>654.42</b>
<b>Cash and cash equivalents at the end of the year [refer note 16.A]</b>	<b>25.35</b>	<b>24.83</b>

Note: Figures in the brackets are cash outflow/income as the case may be.

For and on behalf of Board of Directors

(CS. N K Mohanty)  
Company Secretary

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.:054894)

Place : Bhubaneswar  
Date : May 26, 2018

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.:019423)



## NOTES TO THE FINANCIAL STATEMENTS

### Note No. 1. Corporate Background

National Aluminium Company Limited is a Navratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Government of India, incorporated under the relevant provisions of the Companies Act and is listed in the stock exchanges in India. The Company is engaged in the business of manufacturing and selling of Alumina and Aluminium. The Company is operating a 22.75 lakh TPA Alumina Refinery plant located at Damanjodi in Koraput district of Odisha and 4.60 lakh TPA Aluminum 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. 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 (Jaisalmer & Devikot) and Maharashtra (Sangli) to harness the renewable energy and to comply with its Renewable Purchase Obligation.

The company has made strategic investments in one associates and two joint venture company also.

### Note No.2. Statement of Compliance:

All the Indian Accounting Standards issued and notified by the Ministry of Corporate Affairs under the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and are applicable for the year and relevant to the Company have been taken into consideration and complied with without any exception while preparing the standalone financial statements of the Company.

### Note No.3. Significant Accounting Policies:

#### 3.1 Basis of preparation

The financial statements of the 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 cost basis, except for 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 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.

#### 3.2 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.

#### 3.3 Investments 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 cost in accordance with Ind AS 109 – Financial Instruments.

Investment in associate and joint ventures are subject to impairment wherever there is indication of negative reserve in the accounts of JV Companies. However, such impairment is limited to the value of investment.

#### 3.4 Property, Plant and Equipment

Property, plant and equipment, other than freehold lands, held for use in the production and/or supply of goods or services, or for administrative purposes, are stated at cost, less accumulated depreciation and accumulated impairment losses. Freehold lands, unless impaired, are stated at cost.





## NOTES TO THE FINANCIAL STATEMENTS

### 3.4.1 Initial Measurement

The initial cost comprises purchase price, 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.

Spare parts having unit value of more than Rs.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 Rs.1 lakh is also recognised as Property, Plant and Equipment.

### 3.4.2 Subsequent expenditure

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.

### 3.4.3 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.

### 3.4.4 Depreciation and amortisation

Depreciation on assets 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.

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 Rs.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 are reviewed at each year end and the effect of change, if any, is accounted for prospectively.

For the purpose of depreciation of assets, useful lives of -

- Immovable property, plant and equipment at bauxite mines is up to the lease period of the mines.
- Captive thermal power generation plant namely Captive Power Plant (CPP) is considered to be 30 years;
- Steam Power Plant (SPP) is considered to be 25 years.
- Red Mud Ponds and Ash Ponds at Alumina Refinery and Ash Ponds at CPP are based on their estimated remaining useful lives evaluated on the basis of technical estimates made periodically.
- 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.

Assets laid on land not owned by the Company are depreciated over a period of five years 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 Rs.10,000/- or less are depreciated fully in the year in which they are put to use.

Property, Plant and Equipment other than mentioned above are subject to the following useful lives.

Sl. No.	Particulars of asset category (Property, Plant & Equipment)	Range of useful life in years
1	Buildings	30 - 60
2	Plant and machinery	15 - 40
3	Vehicles	08 - 10
4	Furniture and fixtures	08 - 10
5	Computer equipment	06

### 3.4.5 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. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.



## NOTES TO THE FINANCIAL STATEMENTS

### 3.4.6 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.

### 3.5 Intangible Assets

#### 3.5.1 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.

#### 3.5.2 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.

#### 3.5.3 Mining Rights

The costs of mining rights include amounts paid towards Net Present Value (NPV) and upfront money as determined by the regulatory authorities.

Cost of mining rights are amortised over the total estimated remaining commercial reserves of mining property and are subject to impairment loss.

#### 3.5.4 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.

#### 3.5.5 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.

#### 3.5.6 Software

Operating software acquired separately (RDBMS, Sybase, ERP/SAP) are capitalised as software.

#### 3.5.7 License and Franchise

Amount of expenditure incurred for obtaining license for use of technology is capitalised under the head “License and Franchise”.

#### 3.5.8 De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from its use. Gains or losses arising from disposal/de-recognition are recognised in the statement of profit and loss.

#### 3.5.9 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 a period of 10 years from the date of commissioning.

### 3.6 Impairment of tangible and intangible 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.

### 3.7 Functional & Foreign Currencies

Items included in the financial statements are measured using the currency of the primary economic environment i.e. Indian Rupee in which the Company operates.

In preparing the financial statements, transactions in foreign currencies i.e. currencies other than the entity's functional currency 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.

### 3.8 Provisions and contingencies

#### 3.8.1 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.

#### 3.8.2 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.

Net present value of such costs are provided for and a corresponding amount is capitalised at the commencement of each project. 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.

#### 3.8.3 Environmental liabilities

Environmental liabilities are recognised when the Company becomes obliged, legally or constructively to rectify environmental damage or perform remedial work.

#### 3.8.4 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.

#### 3.8.5 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.

#### 3.8.6 Contingent Assets

Contingent assets are not recognised in the financial statement, but are disclosed where inflow of economic benefits is probable.

### 3.9 Leases

At the inception of a lease, the lease arrangement is classified as either a finance lease or an operating lease, based on the substance of the lease arrangement.

#### 3.9.1 Assets taken on finance lease

Financial leases are those that transfer substantially all the risks and rewards incidental to ownership of the asset to the lessee.

Finance leases are capitalised at the commencement of lease, at the lower of the fair value of the property or the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income over the period of the lease.



## NOTES TO THE FINANCIAL STATEMENTS

### 3.9.2 Assets taken on operating lease

Leases other than finance leases are operating leases, and the leased assets are not recognised in the Company's balance sheet. Upfront lease payments, if any, made under operating leases are apportioned and recognised in the statement of profit and loss over the term of the lease. Rent and maintenance charges paid for assets/facilities taken on operating leases are charged to revenue in the period in which they arise.

### 3.10 Inventories

Inventory of raw material, including bulk material such as coal and fuel oil are valued at the lower of cost net of tax credit wherever applicable and net realisable value.

Stores and spares other than those meeting the criteria for recognition as Property, Plant and Equipment are valued at cost net of tax credit wherever applicable.

Stores and spares (other than major spares considered as Property, Plant and Equipment) 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.

Cost of raw materials, stores and spares as stated above are determined on moving weighted average price.

Inventories of finished goods, semi-finished goods, intermediary products and work-in-process including process scrap are valued at lower of cost and net realisable value. Cost is generally determined at moving weighted average price of materials, appropriate share of labour and related overheads. 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.

Inventory of scraps internally generated are valued at net realisable value.

### 3.11 Trade receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the outstanding is due for payment within a period 12 months or less from the reporting date, they are classified as current assets otherwise as non-current assets.

Trade receivables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

### 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. Cash or Cash Equivalent:

The Company considers all short-term bank deposits having a maturity period of three months or less as cash & cash equivalent. Term deposits in Bank with a maturity period of more than 3 months are considered as other Bank Balance.

##### b. 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.

##### c. 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.

##### d. 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 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.



## NOTES TO THE FINANCIAL STATEMENTS

### 3.12.3 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.

### 3.12.4 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.

### 3.12.5 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.

### 3.13 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.

### 3.14 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. All other borrowing cost is recognised in profit or loss in the period in which they are incurred.

### 3.15 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.

### 3.16 Employee Benefits

#### 3.16.1 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.

#### 3.16.2 Post-employment and long term employee benefits

#### 3.16.3 Defined contribution plans

A defined contribution plan is plan under which fixed contributions are paid to a separate entity. Contributions to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them for such contributions.

#### 3.16.4 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. Re-measurement gains and losses of the net defined benefit liability are recognised immediately in other comprehensive income. 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,

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.

#### 3.16.5 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



## NOTES TO THE FINANCIAL STATEMENTS

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.

### 3.17 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenues are reduced by the estimated rebates and other similar allowances.

#### 3.17.1 Sales of Goods

Revenue is recognised when all the following criteria are satisfied:

- (a) significant risks and rewards of ownership has been transferred to the customer;
- (b) there is no continuing management involvement with the goods usually associated with ownership, nor effective control over the goods sold has been retained;
- (c) the amount of revenue can be measured reliably; and
- (d) it is probable that the economic benefits associated with the transaction will flow to the Company.

#### 3.17.2 Sale of Energy

Sale of wind power is recognised on the basis of energy transmitted to DISCOMs at the price notified by respective authorities.

Sale of power from captive power plant is considered on the basis of quantity injected to state GRID excluding wheeling to Refinery but including inadvertent energy injection, at the price notified by appropriate authority.

Revenue from 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; and
- (c) recovery of the consideration is assured reasonably.

#### 3.17.3 Income from dividend and interest

##### 3.17.3.1 Dividend

Dividend income from investments is recognised when the right to receive the dividend is established.

##### 3.17.3.2 Interest

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.

#### 3.17.4 Income from Incentives from Government Agencies

Incentives from government agencies in the nature of duty draw back and Merchandise Export from India Scheme (MEIS) on exports and incentives on generation of renewable sources of energy are recognised as per the relevant statute on compliance of the conditions provided thereunder.

### 3.18 Income Taxes

Tax expense represents the sum of current tax and deferred tax.

#### 3.18.1 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.

#### 3.18.2 Deferred taxes

Deferred tax expense or income is recognised on temporary difference between the carrying amount of assets and liabilities in the financial statements 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

### 3.19 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.

### 3.20 Cash flow statement

Cash flow statement is prepared in accordance with indirect method prescribed in Ind AS 7 'Statement of Cash Flows'.



## NOTES TO THE FINANCIAL STATEMENTS

### 3.21 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 Rs.50 crore.

### 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 measurements and valuation processes

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 FINANCIAL STATEMENTS

### 5. Property, plant and equipment

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>Carrying amount of:</b>		
Freehold land	84.33	84.33
Buildings	591.68	564.63
Plant and equipment	6,245.74	6,300.69
Furniture and fixtures	8.91	7.65
Office equipments	23.64	7.32
Vehicles	13.06	8.93
Railway sidings	52.02	45.08
	<b>7,019.38</b>	<b>7,018.63</b>

	Freehold land	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
<b>Cost or deemed cost</b>								
Balance as at 31.03.2016	71.33	597.24	6,113.86	9.47	11.45	12.73	53.68	6,869.76
Additions	13.03	41.27	982.44	2.62	4.18	1.81	—	1,045.35
Disposals	(0.03)	—	(17.38)	(0.06)	(0.12)	(0.10)	—	(17.69)
Balance as at 31.03.2017	84.33	638.51	7,078.92	12.03	15.51	14.44	53.68	7,897.42
Additions	—	63.78	372.57	3.97	20.54	6.75	10.67	478.28
Disposals	—	(0.03)	(33.06)	—	(0.04)	(0.03)	—	(33.16)
Balance as at 31.3.2018	84.33	702.26	7,418.43	16.00	36.01	21.16	64.35	8,342.54
<b>Accumulated depreciation and impairment</b>								
Balance as at 31.03.2016	—	36.76	361.91	2.04	4.48	2.97	4.53	412.69
Depreciation Expense	—	37.12	417.45	2.38	3.79	2.55	4.07	467.36
Disposals	—	—	(1.13)	(0.04)	(0.08)	(0.01)	—	(1.26)
Balance as at 31.03.2017	—	73.88	778.23	4.38	8.19	5.51	8.60	878.79
Depreciation Expense	—	36.73	416.18	2.71	4.21	2.59	3.73	466.15
Disposals	—	(0.03)	(21.72)	—	(0.03)	—	—	(21.78)
Balance as at 31.3.2018	—	110.58	1,172.69	7.09	12.37	8.10	12.33	1,323.16

#### Notes:

- Title deeds have been executed for freehold land acquired through Govt. of Odisha, except for land measuring 66.92 acres. The Company is in the process of conversion of freehold land for Industrial use and has taken-up matter with Revenue Authorities.
- Registration formalities in respect of office space of 6,459 Sq.ft at Kolkata purchased from Kolkata Municipal Development Authority with a carrying amount of Rs.5.50 crore is under progress.
- During the year the Company has acquired leasehold land of 715.89 acre at a cost of Rs. 105.95 crore for its Coal Mines Division. Being an operating lease, the cost of such acquisition has been recognised as prepaid expenses to be amortised over the period of lease. Besides an amount of Rs. 17.12 crore has been paid towards stamp duty and registration fees for leasehold land for Bauxite mines.

### 6 . Capital work-in-progress (CWIP)

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
Capital Work-in-progress	702.91	473.33
Construction materials including in transit	124.16	42.10
	<b>827.07</b>	<b>515.43</b>
Less: Provision for impairment	(1.24)	(0.78)
<b>Total Capital Work-in-progress</b>	<b>825.83</b>	<b>514.65</b>

- The amount of capital work-in-progress includes an amount of Rs.43.98 crore (previous year Rs.41.40 crore) towards infrastructural development expenditure directly attributable to Coal Mines Division.





## NOTES TO THE FINANCIAL STATEMENTS

### 7. Intangible assets

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
<b>Carrying amount of:</b>		
User right	9.99	11.81
Computer software	2.08	1.68
Mining rights [refer note 8.1]	103.58	105.94
Licenses	4.43	6.37
	<b>120.08</b>	<b>125.80</b>

	Amount in Rs. Crore				
	User right	Computer software	Mining rights	Licenses	Total intangible assets
<b>Cost or deemed cost</b>					
Balance as at 31.03.2016	15.43	4.47	121.11	10.25	151.26
Additions	—	0.19	—	—	0.19
Disposals	—	—	—	—	—
Balance as at 31.03.2017	15.43	4.66	121.11	10.25	151.45
Additions	—	2.32	6.21	—	8.53
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.3.2018	15.43	6.98	126.97	10.25	159.63
<b>Accumulated depreciation and impairment</b>					
Balance as at 31.03.2016	1.81	1.56	7.34	1.94	12.65
Depreciation Expense	1.81	1.42	7.83	1.94	13.00
Disposals	—	—	—	—	—
Balance as at 31.03.2017	3.62	2.98	15.17	3.88	25.65
Depreciation Expense	1.82	1.92	8.57	1.94	14.25
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.3.2018	5.44	4.90	23.39	5.82	39.55

#### Notes:

- 7.1 The Company is operating its mining activities at Panchpatmali bauxite mines based on lease granted by Government of Odisha. In connection with lease renewal, the Company has paid NPV and related payments which is capitalized as intangible assets under Mining Rights and amortized on straight line basis as per the Accounting Policy of the Company.
- 7.2 User right includes proportionate value of a cluster project i.e 220 KV substation at Laxmipur, Koraput with equal participation of two more beneficiary companies sharing equal rights to use the facility.

### 8. Intangible assets under development

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
Mining right	39.49	26.34
User rights	49.90	25.01
	<b>89.39</b>	<b>51.35</b>

#### Note:

- 8.1 Mining right under development constitutes amount paid for allotment of coal blocks.
- 8.2 User right under development constitutes amount spent for 220 KV transmission line from Refinery plant to 220 KV switching station at Laxmipur, Koraput.



## NOTES TO THE FINANCIAL STATEMENTS

### 9. Investments

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>		
<b>A.1 Investments in equity instruments</b>		
<b>A.1.1 Investment in associates</b>		
Unquoted investments		
NPCIL-NALCO Power Company Limited (26,000 shares of Rs. 10 each fully paid up)	0.03	0.02
<b>Total investment in associates</b>	<b>0.03</b>	<b>0.02</b>
<b>Details of associates</b>		
Details of each of the Company's associates at the end of the period are as follows:		
<b>Name of the associate</b>	<b>Principal Activity and place of business</b>	<b>Proportion of ownership interest / voting rights held by the Company</b>
NPCIL-NALCO Power Company Limited	Development of nuclear power, Kakrapara, Gujarat	26% 26%
Note: The Board of Nuclear Power Corporation of India Limited (NPCIL) and the Board of National Aluminium Company Limited (NALCO) have passed a board resolution in their respective meeting held on March 20, 2017 and March 2, 2017 to liquidate the associate Company. The financial impact of the associate company no longer continuing as a going concern is insignificant.		
<b>A.1.2 Investment in joint ventures</b>		
<b>Unquoted investments</b>		
Angul Aluminium Park Private Limited (As at 31.03.2018 : 1,62,23,900 shares of Rs. 10 each fully paid up, as at 31.03.2017: 9,90,000 shares of Rs. 10 each fully paid up).	16.22	0.99
Share application money for 1,37,10,000 shares of Rs.10 each fully paid.	—	13.71
<b>Total</b>	<b>16.22</b>	<b>14.70</b>
During the year Angul Aluminium Park Private Limited has issued 1,52,33,900 nos. of fully paid equity shares of Rs. 10/- each to the Company.		
GACL-NALCO Alkalies & Chemicals Private Limited (As at 31.03.2018: 10,13,30,934 shares of Rs. 10 each fully paid up, as at 31.03.2017: 20,00,000 shares of Rs. 10 each fully paid up).	101.33	2.00
Share application money for 2,28,00,000 shares of Rs.10 each fully paid.	-	22.80
<b>Total</b>	<b>101.33</b>	<b>24.80</b>
During the year GACL-NALCO Alkalies & Chemicals Private Limited has issued 9,93,30,934 nos. of fully paid equity shares of Rs. 10/- each to the Company.		
<b>Total investment in joint ventures</b>	<b>117.55</b>	<b>39.50</b>
<b>Details of joint ventures</b>		
Details of each of the Company's joint ventures at the end of the reporting period are as follows:		
<b>Name of the joint venture</b>	<b>Principal Activity and place of business</b>	<b>Proportion of ownership interest / voting rights held by the Company</b>
(a) Angul Aluminium Park Private Limited	Promoting aluminium specific downstream in Odisha, Bhubaneswar, Odisha.	49.00% 49.50%
(b) GACL-NALCO Alkalies & Chemicals Private Limited	Production of caustic soda, Vadodara, Gujarat.	40.00% 40.00%
<b>A.1.3 Investment in other entities</b>		
<b>Unquoted investments</b>		
Odisha Capital Market & Enterprises Limited. (2,89,000 shares of Rs. 1 each fully paid up)	0.03	0.03
<b>Total - Investments in other entities</b>	<b>0.03</b>	<b>0.03</b>
<b>Total - investments in equity instruments</b>	<b>117.61</b>	<b>39.55</b>
<b>Total non-current investments</b>	<b>117.61</b>	<b>39.55</b>
<b>Additional information</b>		
Aggregate book value of quoted investments and market value thereof	—	—
Aggregate carrying amount of unquoted investments	117.61	39.55
Aggregate amount of impairment in value of investments	—	—



## NOTES TO THE FINANCIAL STATEMENTS

### 9. Investments

Amount in Rs. Crore

B. Current		As at 31.03.2018		As at 31.03.2017
Investments in Mutual Funds	Units in '000	Amount in Rs. Crore	Units in '000	Amount in Rs. Crore
<b>Quoted Investments</b>	—	—	—	—
UTI FTIF SERIES XVIII – X	—	—	20,000	25.44
UTI FTIF SERIES XVIII – XII	—	—	40,000	50.81
UTI FTIF SERIES XVIII – XIII	—	—	40,000	50.74
UTI FTIF SERIES XIX – I	—	—	25,000	31.64
UTI FTIF SERIES XIX – III	—	—	75,000	94.65
UTI FTIF SERIES XIX – IV	—	—	25,000	31.53
UTI FTIF SERIES XIX – VI	—	—	50,000	62.87
UTI FTIF SERIES XIX – VIII	—	—	35,000	43.96
UTI FTIF SERIES XIX – IX	—	—	100,000	125.58
UTI FTIF SERIES XIX – X	—	—	10,000	12.54
UTI FTIF SERIES XIX – XI	—	—	60,000	75.18
SBI SDFS-366 Days-Series-A-22	—	—	50,000	63.58
SBI SDFS-366 Days-Series-A-24	—	—	50,000	63.56
SBI SDFS-366 Days-Series-A-27	—	—	30,000	37.87
SBI SDFS-366 Days-Series-A-28	—	—	50,000	63.04
SBI SDFS-366 Days-Series-A-31	—	—	40,000	50.22
SBI SDFS-366 Days-Series-A-32	—	—	35,000	43.88
SBI SDFS-366 Days-Series-A-34	—	—	25,000	31.31
SBI SDFS-366 Days-Series-A-35	—	—	50,000	62.69
BOI AXA Liquid Fund	899	90.09	499	50.01
BOI AXA TA Fund	2,012	202.61	—	—
Canara Robeco Liquid	747	75.08	298	30.00
IDBI Liquid Fund	998	100.06	299	30.01
SBI Premier Liquid Fund	—	—	299	30.01
Union KBC Liquid	450	45.05	300	30.00
UTI Money Market Fund	798	80.07	299	30.01
<b>Total - Other current Investments</b>		<b>592.96</b>		<b>1,221.13</b>
<b>Additional Information</b>				
Aggregate book value of quoted investments and market value thereof	—	592.96	—	1,221.13
Aggregate carrying amount of unquoted investments	—	—	—	—
Aggregate amount of impairment in value of investments	—	—	—	—

#### Category-wise classification:

	As at 31.03.2018	As at 31.03.2017
Financial assets (quoted investments) mandatorily measured at fair value through profit or loss (FVTPL)	592.96	1,221.13
	<b>592.96</b>	<b>1,221.13</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 10 . Trade receivables

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>A.</b>	<b>Non-current</b>		
(a)	Unsecured, considered good	—	—
(b)	Unsecured, considered doubtful	37.11	37.11
	Less: Allowance for doubtful debts (expected credit loss allowance)	37.11	37.11
	<b>Net non-current trade receivables</b>	<b>—</b>	<b>—</b>
<b>B.</b>	<b>Current</b>		
(a)	Unsecured, considered good	258.13	184.25
(b)	Unsecured, considered doubtful	—	—
	Less: Allowance for doubtful debts	—	—
	<b>Net current trade receivables</b>	<b>258.13</b>	<b>184.25</b>

#### Notes:

- 10.1 The sale of goods (Alumina and Aluminium) is made against either advances received from customer or letter of credit. The advance received from customer is adjusted on supply of material. The average credit period for sale of wind power is 30 days from the date of metering which is considered as collection period. There is no commercial arrangement for sale of inadvertent thermal power generated at captive power plant. It is linked to the wheeling arrangement in view of the plant requirement. The amount receivable on account of such power sale takes a longer period for settlement. There is no receivable for such sale as the cost of purchase for power drawn from the grid to meet production shortfall is substantially higher compared to such sale.
- 10.2 Customers that individually represent more than 5% of the total trade receivable as on 31.03.2018:

Customers	% of trade receivables	Customer Category
a. HYDRO ALUMINIUM INTERNATIONAL SA	60%	Alumina
b. G-STEELMET PTE LTD	7%	Aluminium
c. RDPPC, DEVIKOT, RAJASTHAN	5%	Wind Power

- 10.3 The company has used a practical approach by computing the expected credit loss allowance for trade receivable based on a case to case basis. Since there is no credit period for sale of alumina and aluminum and the sale is either made against an advance or backed by letter of credit (LC) given by customers, no provision is made against such receivables. For sale of wind power, although there is no credit arrangement, the Company makes provision for allowances based on credit loss experience and forward looking information.

#### 10.4 Age of receivables

	As at 31.03.2018	As at 31.03.2017
<b>Alumina and Aluminium</b>		
0-30 days	225.30	144.13
More than 30 days	37.11	37.11
	<b>262.41</b>	<b>181.24</b>
<b>Wind Power</b>		
Within the credit period	13.05	6.79
1-30 days past due	2.55	4.84
More than 30 days past due	17.23	28.49
	<b>32.83</b>	<b>40.12</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 11. Loans

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>			
(a)	Loans to employees		
	Secured, considered good	64.44	68.62
	Unsecured, considered good	10.12	11.69
(b)	Loans to others		
	Secured, considered good	0.40	0.29
	<b>Total non-current loans</b>	<b>74.96</b>	<b>80.60</b>
<b>B. Current</b>			
(a)	Loans to employees		
	Secured, considered good	18.74	20.57
	Unsecured, considered good	10.27	15.58
(b)	Loans to related parties		
	Secured, considered good [refer note 11.2]	0.01	0.04
(c)	Loans to others		
	Secured, considered good	0.27	0.51
	<b>Total current loans</b>	<b>29.29</b>	<b>36.70</b>

#### Note:

11.1 Loans to employees and others are carried at amortised cost.

11.2 The amount of loan outstanding from the related parties is the amount of house building loan taken by the directors of the Company in the capacity of employee prior to their directorship. Further information on these loans is set out in note 38-related party disclosure.

### 12. Other financial assets

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>A. Non current</b>			
	Security deposits	13.14	10.77
	<b>Total other non-current financial assets</b>	<b>13.14</b>	<b>10.77</b>
<b>B. Current</b>			
(a)	Security deposits [refer note 12.2]	151.00	151.00
(b)	Advances to employees [refer note: 33.2]	—	44.35
(c)	Insurance claims receivables and others	10.00	12.66
	<b>Gross - other current financial assets</b>	<b>161.00</b>	<b>208.01</b>
	<b>Less: Allowance for bad and doubtful other current financial assets</b>		
(a)	Advances to employees [refer note: 33.2]	—	44.35
(b)	Insurance claims	8.45	7.17
	<b>Total allowance for bad and doubtful - other current assets</b>	<b>8.45</b>	<b>51.52</b>
	<b>Total other current financial assets</b>	<b>152.55</b>	<b>156.49</b>

#### Note:

12.1 Other financial assets are carried at amortised cost.

12.2 An amount of Rs. 151 crore deposited with Gujarat Mineral Development Corporation (GMDC) since 2011-12 is due for refund as GMDC has cancelled the plan to set up alumina refinery at Gujarat jointly with the Company. The refund process is initiated by GMDC and is awaiting approval from the Government of Gujarat. No interest claim on the deposit is recognised till it becomes certain that the interest will be realised.



## NOTES TO THE FINANCIAL STATEMENTS

### 13. Current tax assets

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
Income tax	32.13	34.12
<b>Total current tax assets</b>	<b>32.13</b>	<b>34.12</b>

### 14. Other assets

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>		
(a) Capital advances	153.83	114.88
(b) Advances other than capital advance:		
Advance with public bodies		
(1) Customs, excise, sales tax, port trusts etc.	230.68	250.27
(2) Deposits with Income Tax Authority	294.80	603.50
(3) Other Government authorities	4.59	4.01
(c) Others		
Prepaid expenses		
(1) Lease-hold land premiums	30.22	5.26
(2) Deferred employee benefits	25.66	26.86
<b>Gross other non-current assets</b>	<b>739.78</b>	<b>1,004.78</b>
<b>Less: Allowance for bad and doubtful for other non-current assets</b>		
(a) Capital advances	0.27	0.27
<b>Total allowance for bad and doubtful other non-current assets</b>	<b>0.27</b>	<b>0.27</b>
<b>Total other non-current assets</b>	<b>739.51</b>	<b>1,004.51</b>
<b>B. Current</b>		
Advances other than capital advances		
(a) Claims with statutory authorities		
(1) Export Incentive Claims	34.23	27.16
(2) Generation Based Incentive on power generated from renewable source and Renewable energy certificates	7.27	4.09
(3) VAT, CENVAT and GST Credit Recoverable	258.27	266.81
(4) Claims receivable from customs, excise and railway authorities	33.62	10.29
(b) Prepaid expenses		
(1) Lease-hold land premiums	113.63	17.39
(2) Deferred employee benefits	4.57	5.37
(3) Other prepaid expenses	4.12	4.43
(c) Gold medallion and stamp in hand	0.07	0.08
(d) Other receivables	1.90	1.70
(e) Other advances		
(i) Advances to employees	23.91	23.06
(ii) Advances to suppliers and service providers	312.51	391.49
(iii) Others	5.72	30.13
<b>Gross other current assets</b>	<b>799.82</b>	<b>782.00</b>
<b>Less: Allowance for bad and doubtful other current assets</b>		
(a) VAT and CENVAT Credit Recoverable	200.27	188.83
(b) Claims receivable from customs, excise and railway authorities	7.74	7.74
(c) Other receivables	0.98	0.38
(d) Advances to suppliers and service providers	2.38	2.45
(e) Others	2.64	2.66
<b>Total allowance for bad and doubtful other current assets</b>	<b>214.01</b>	<b>202.06</b>
<b>Total other current assets</b>	<b>585.81</b>	<b>579.94</b>



## NOTES TO THE FINANCIAL STATEMENTS

### Note:

14.1 The position of prepaid lease premiums on account of acquisition of leasehold land is as below:

	Opening un amortised amount	Lease premium paid during the year	Amortisation during the year	Closing un amortised amount carried forward
Corporate office	1.58	—	0.02	1.56
Bauxite Mines	3.87	17.12	1.29	19.70
Refinery	1.48	—	0.02	1.46
Smelter	1.24	—	0.02	1.22
Coal Mines	—	105.95	—	105.95
WPP	14.48	—	0.52	13.96
	<b>22.65</b>	<b>123.07</b>	<b>1.87</b>	<b>143.85</b>

14.2 The Company has 2245.55 acres of leasehold land in respect of which lease deeds are yet to be executed. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land.

14.3 Consequent to introduction of Goods and Services Tax Law w.e.f. 01.07.2017, the undisputed amount of indirect tax credit (Cenvat, Service Tax, CVD, OVAT) amounting to Rs. 95.78 crore as on the transition date has been adjusted with the GST liability. The disputed amount of tax credit of pre GST regime aggregating to Rs.209.99 crore is continuing in the books as current assets out of which an amount of Rs. 200.27 crore being doubtful of realisation has been provided for.

### 15. Inventories

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
(a) Raw materials	161.07	75.69
(b) Work-in-progress	284.33	236.37
(c) Carbon Anodes	77.76	93.62
(d) Finished goods	143.21	222.72
(e) Coal and fuel oil	188.64	186.71
(f) Stores and spares	319.48	328.60
(g) Scrap and disposables	19.59	12.22
<b>Total inventories</b>	<b>1,194.08</b>	<b>1,155.93</b>
Included above, goods-in-transit:		
(i) Raw materials	17.23	9.80
(ii) Coal and fuel oil	8.47	32.44
(iii) Stores and spares	12.88	15.81
<b>Total goods-in-transit</b>	<b>38.58</b>	<b>58.05</b>

### Note:

15.1 Cost of inventories recognised as expenses during the year is Rs. 4,143.52 crore (previous year : Rs. 3,403.89 crore).

15.2 Cost of inventories recognised as expenses includes Rs. 5.47 crore (previous year: Rs. 13.02 crore) in respect of write-downs of inventory for non moving items.

15.3 Inventories are hypothecated/pledged against cash credit facility.

15.4 Method of valuation of inventories is stated in note 3.10 of Significant Accounting Policies.



## NOTES TO THE FINANCIAL STATEMENTS

### 16.A-Cash and cash equivalents

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
(a)	Balances with banks		
	(1) Balance with scheduled banks		
	(i) In current account	25.35	24.83
<b>Total cash and cash equivalents</b>		<b>25.35</b>	<b>24.83</b>

### 16.B-Bank balances (other than Cash and cash equivalents)

		As at 31.03.2018	As at 31.03.2017
(a)	In deposit account (having original maturity between 3-12 months)	2,586.88	2,260.61
(b)	Earmarked balance with scheduled banks	156.72	1.79
<b>Total other bank balances</b>		<b>2,743.60</b>	<b>2,262.40</b>

#### Note:

16.B.1 Earmarked balance with scheduled banks represents amount deposited towards unclaimed dividend amounting to Rs.1.70 crore and deposit of Rs.155.02 crore (including accrued interest) under court's directive towards disputed electricity duty.

16.B.2 Amount due for credit to Investor's Education and Protection Fund at the end of the current year Rs. Nil. (previous year Rs. Nil)

### 17. Share Capital

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>Authorised share capital:</b>			
6,00,00,00,000 equity shares of Rs. 5 each		3,000.00	3,000.00
		<b>3,000.00</b>	<b>3,000.00</b>
<b>Issued and subscribed capital comprises:</b>			
1,93,29,28,884 fully paid-up equity shares of Rs. 5 each			
(As at 31.03.2017: 1,93,29,28,884 fully paid-up equity shares of Rs. 5 each)		966.46	966.46
		<b>966.46</b>	<b>966.46</b>

#### 17.1 Reconciliation of the number of equity shares

	Number of shares	Amount Rs. in Crore
Balance as at 31.03.2016	2,57,72,38,512	1,288.62
Buy-back of shares	(64,43,09,628.00)	(322.16)
Balance as at 31.03.2017	19,32,928,884	966.46
Changes during the period	—	—
Balance as at 31.03.2018	19,32,928,884	966.46

- The Company has only one class of equity shares having a par value of Rs. 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.
- During 2016-17 Company bought back 64,43,09,628 numbers of equity shares of Rs. 5 each which has led to decrease in the equity share capital from Rs. 1,288.62 crore to Rs. 966.46 crore.
- Government of India has divested 27,77,65,383 Nos. fully paid equity shares (through OFS 17,80,69,927 Nos, through employee offer 76,17,057 Nos and through ETF 9,20,78,399 Nos), consequent to which the holding of Government of India has come down from 1,44,14,82,490 Nos (74.58%) as on 31.03.2017 to 1,16,37,17,107 Nos (60.20%) as on 31.03.2018.





## NOTES TO THE FINANCIAL STATEMENTS

### 17.2 Details of shares held by each shareholder holding more than 5% of shares

Amount in Rs. Crore

	As at 31.03.2018		As at 31.03.2017	
	Number of shares held	% of holding of equity shares	Number of shares held	% of holding of equity shares
<b>Fully paid equity shares</b>				
Government of India	1,16,37,17,107	60.20%	1,44,14,82,490	74.58%
Life Insurance Corporation of India	15,84,31,120	8.20%	20,43,84,512	10.57%

### 18. Other equity

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
(a) Capital redemption reserves	322.16	322.16
(b) General reserve	8,620.41	8,620.41
(c) Retained earnings	595.78	296.76
<b>Total</b>	<b>9,538.35</b>	<b>9,239.33</b>

### 18.1 Movement in other equity

Amount in Rs. Crore

Other equity	Reserves and Surplus			Total
	Capital redemption reserves	General reserve	Retained earnings	
<b>Balance as at 31.03.2016</b>	—	11,461.10	445.03	11,906.13
Profit for the year	—	—	668.53	668.53
Other comprehensive income (net of taxes)	—	—	9.08	9.08
<b>Total comprehensive income for the year</b>	—	—	677.61	677.61
Premium on Buy-back of equity shares	—	(2,512.81)	—	(2,512.81)
Expenses on Buy-back of equity shares	—	(5.72)	—	(5.72)
Transfer of general reserve to Capital redemption reserve	322.16	(322.16)	—	—
Final dividend for previous year	—	—	(144.97)	(144.97)
Tax on final dividend for previous year	—	—	(29.51)	(29.51)
Interim dividend for the year	—	—	(541.22)	(541.22)
Tax on interim dividend for the year	—	—	(110.18)	(110.18)
<b>Balance as at 31.03.2017</b>	<b>322.16</b>	<b>8,620.41</b>	<b>296.76</b>	<b>9,239.33</b>
Profit for the year	—	—	1,342.41	1,342.41
Other comprehensive income (net of taxes)	—	—	50.03	50.03
<b>Total comprehensive income for the year</b>	—	—	1,392.44	1,392.44
Interim dividend for the year	—	—	(908.48)	(908.48)
Tax on interim dividend for the year	—	—	(184.94)	(184.94)
<b>Balance as at 31.03.2018</b>	<b>322.16</b>	<b>8,620.41</b>	<b>595.78</b>	<b>9,538.35</b>

18.2 The Company had bought back its own equity shares on Septmeber 26, 2016 at a premium utilising general reserve amounting to Rs. 2,834.97 crore and consequently a sum equal to the nominal value of the shares so bought back amounting to Rs. 322.16 crore had been transferred to the capital redemption reserve account in terms of section 69 of the Companies Act, 2013.

18.3 During the year the Company has paid interim dividend @ Rs.4.7 per equity share amounting in total Rs. 908.48 crore. During the preceeding year, Company paid interim dividend of Rs. 541.22 crore for financial year 2016-17 and final dividend of Rs. 144.97 crore for financial year 2015-16. Dividend tax of Rs. 184.94 crore, Rs. 110.18 crore and Rs. 29.51 crore on these respective amounts of dividend have been paid by the Company.

18.4 The Board has recommended a final dividend of Re. 1.00 per share (20% on the eaquity shares of Rs. 5 each) amounting to Rs. 193.29 crore for approval of shareholders in the ensuing Annual General Meeting. Considering the applicable dividend distribution tax the amount of dividend payout works out to Rs. 232.64 crore.



## NOTES TO THE FINANCIAL STATEMENTS

### 19. Borrowings

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
Current (secured at amortised cost)		
Liabilities towards bills discounted	44.99	51.09
<b>Total other current financial liabilities</b>	<b>44.99</b>	<b>51.09</b>

### 20. Trade payables

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>		
(1) Creditors for supplies and services		
- Dues to micro and small enterprises	—	—
- Others	15.63	19.61
<b>Total non-current trade payables</b>	<b>15.63</b>	<b>19.61</b>
<b>B. Current</b>		
(1) Creditors for supplies and services		
- Dues to micro and small enterprises	4.53	3.09
- Others	507.50	653.80
(2) Accrued wages and salaries	449.71	187.57
<b>Total current trade payables</b>	<b>961.74</b>	<b>844.46</b>

#### Notes:

- 20.1 Accrued wages and salaries includes liability provision of Rs.279.15 crore towards impending pay revision of non-executive employees effecting from 01.01.2017 besides outstanding dues of Rs.96.68 crore towards performance related pay and Rs. 36.80 crore for settlement of differential gratuity liability to employees superannuated during the period 01.01.2017 to 28.02.2018 arising due to enhancement of gratuity limit from Rs.10 lakh to Rs.20 lakh.
- 20.2 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 disclosure pursuant to said Act in respect of such dues included in trade payables (note-21) and other financial liabilities (note-22) is as under:

Particulars	As at 31.03.2018	As at 31.03.2017
i) Principal amount due	5.82	4.49
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 FINANCIAL STATEMENTS

### 21. Other financial liabilities

Amount in Rs. Crore

A. Non current	As at 31.03.2018	As at 31.03.2017
Creditors for capital supplies and services		
- Dues to micro and small enterprises	—	—
- Others	2.85	2.36
<b>Total other non-current financial liabilities</b>	<b>2.85</b>	<b>2.36</b>
<b>B. Current</b>	<b>As at 31.03.2018</b>	<b>As at 31.03.2017</b>
(a) Unpaid dividends	1.70	1.79
(b) Creditors for other liabilities		
(1) Creditors for capital supplies and services		
- Dues to micro and small enterprises	1.29	1.40
- Others	397.38	359.66
(2) Security deposits from customers	2.24	1.57
(3) Refund due to customers	15.41	14.52
(4) Liabilities for discount on sales to customers	94.69	88.62
(5) Employees' recoveries	0.16	1.54
<b>Total other current financial liabilities</b>	<b>512.87</b>	<b>469.10</b>

### 22. Provisions

Amount in Rs. Crore

A. Non-current	As at 31.03.2018	As at 31.03.2017
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Post retirement medical benefits scheme (PRMBS)	116.35	57.17
(ii) Settling in benefit on retirement	1.82	2.40
(iii) Nalco benevolent fund scheme (NBFS)	2.32	2.51
(iv) Nalco retirement welfare scheme( NRWS)	10.27	10.32
(v) Retirement gift	6.45	6.68
(2) Other long-term employee benefits		
(i) Compensated absences	249.77	210.57
(ii) Long service rewards	9.10	8.88
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	16.06	7.50
(b) Other Provisions		
(1) Asset restoration obligations/dismantling	23.57	21.70
(2) Other legal and constructive obligations	0.38	0.38
<b>Total non current provisions</b>	<b>436.09</b>	<b>328.11</b>



## NOTES TO THE FINANCIAL STATEMENTS

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>B. Current</b>			
<b>(a) Provision for employee benefits</b>			
(1) Retirement benefits obligations			
(i) Gratuity (funded)		271.05	12.08
(ii) Post retirement medical benefits scheme (PRMBS)		10.18	7.14
(iii) Settling in benefit on retirement		0.45	0.01
(iv) Nalco benevolent fund scheme (NBFS)		1.30	1.35
(v) Nalco retirement welfare scheme( NRWS)		3.37	3.52
(vi) Retirement gift		0.63	0.67
(2) Other Long-term employee benefits			
(i) Compensated absences		23.29	20.26
(ii) Long service rewards		0.99	0.62
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)		5.55	20.29
<b>(b) Other Provisions</b>			
(1) towards corporate social responsibility (CSR)		32.64	33.36
(2) towards other legal and constructive obligations		26.43	17.77
<b>Total current provisions</b>		<b>375.88</b>	<b>117.07</b>

		Amount in Rs. Crore		
		Compensated absences	Long service rewards	NEFFARS
<b>C. Movement of provisions</b>				
(1) Movement of retirement benefit obligations [refer note 31]				
(2) Movement of employee benefits				
<b>Balance at 31.03.2016</b>		197.35	8.29	21.21
Additional provisions recognised		70.55	1.13	19.68
Reductions arising from payments		(47.64)	(0.71)	(13.10)
Change arising from remeasurement		10.57	0.79	—
<b>Balance at 31.03.2017</b>		<b>230.83</b>	<b>9.50</b>	<b>27.79</b>
Additional provisions recognised		56.08	1.21	8.17
Reductions arising from payments		(93.54)	(2.47)	(14.35)
Reductions arising from remeasurement		79.69	1.86	—
<b>Balance at 31.03.2018</b>		<b>273.06</b>	<b>10.10</b>	<b>21.61</b>
(3) Movement of other Provisions				
		Asset restoration obligation	Legal and Constructive Obligation	Corporate social responsibility (CSR)
<b>Balance at 31.03.2016</b>		18.37	8.89	37.59
Additional provisions recognised		1.66	8.51	—
Reductions arising from payments		—	—	(4.23)
Unwinding of discount		1.67	0.75	—
<b>Balance at 31.03.2017</b>		<b>21.70</b>	<b>18.15</b>	<b>33.36</b>
Additional provisions recognised		0.09	8.65	—
Reductions arising from payments		—	—	(0.72)
Unwinding of discount		1.78	0.02	—
<b>Balance at 31.03.2018</b>		<b>23.57</b>	<b>26.82</b>	<b>32.64</b>



## NOTES TO THE FINANCIAL STATEMENTS

### Note:

- 22.1 Provision related to retirement and other long term employee benefits are provided, in the case of gratuity as per the Gratuity Act, and for other benefits as per Company rules. Liability for the same is recognised on the basis of actuarial valuation by independent actuary.
- 22.2 Provision for asset restoration obligation and constructive obligation is made based on management estimation in line with Ind AS 16 and Ind AS 37 respectively.
- 22.3 Provision for CSR expenditure is the unspent CSR obligation of the Company prior to introduction of Companies Act, 2013.

### 23. Deferred tax liabilities

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
Deferred tax liabilities	1,501.72	1,505.87
Deferred tax assets	350.27	260.29
	<b>1,151.45</b>	<b>1,245.58</b>

2016-17	Opening balance as at 01.04.2016	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2017
<b>Deferred tax liabilities relating to:</b>				
Property, plant and equipment	(1,365.50)	(98.43)	—	(1,463.93)
FVTPL financial assets	(35.16)	12.23	—	(22.93)
Provision for defined benefit obligation (OCI)	(14.21)	—	(4.80)	(19.01)
<b>Deferred tax liabilities</b>	<b>(1,414.87)</b>	<b>(86.20)</b>	<b>(4.80)</b>	<b>(1,505.87)</b>
<b>Deferred tax assets in relation to:</b>				
Provision for compensated absences and other employee benefits	78.51	14.28	—	92.79
Provision for defined benefit obligation	44.65	12.46	—	57.11
Provision for doubtful debts / advances	57.82	27.04	—	84.86
Temporary Difference due to application of section 43B	2.81	(2.81)	—	—
MAT credit entitlement	—	17.46	—	17.46
Others	66.97	(58.90)	—	8.07
<b>Deferred tax assets</b>	<b>250.76</b>	<b>9.53</b>	<b>—</b>	<b>260.29</b>
<b>Deferred tax (liabilities) / assets (net)</b>	<b>(1,164.11)</b>	<b>(76.67)</b>	<b>(4.80)</b>	<b>(1,245.58)</b>

2017-18	Opening balance as at 01.04.2017	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2018
<b>Deferred tax liabilities relating to:</b>				
Property, plant and equipment	(1,463.93)	(19.00)	—	(1,482.93)
FVTPL financial assets	(22.93)	25.78	—	2.85
Provision for defined benefit obligation (OCI)	(19.01)	—	(2.63)	(21.64)
<b>Deferred tax liabilities</b>	<b>(1,505.87)</b>	<b>6.78</b>	<b>(2.63)</b>	<b>(1,501.72)</b>
<b>Deferred tax assets in relation to:</b>				
Provision for compensated absences and other employee benefits	92.79	1.71	—	94.50
Provision for defined benefit obligation	57.11	31.44	—	88.55
Provision for doubtful debts / advances	84.86	5.36	—	90.22
Temporary Difference due to application of section 43B	—	60.12	—	60.12
MAT credit entitlement	17.46	(4.95)	—	12.51
Others	8.07	(3.70)	—	4.37
<b>Deferred tax assets</b>	<b>260.29</b>	<b>89.98</b>	<b>—</b>	<b>350.27</b>
<b>Deferred tax (liabilities) / assets (net)</b>	<b>(1,245.58)</b>	<b>96.76</b>	<b>(2.63)</b>	<b>(1,151.45)</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 24. Other liabilities

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>		
(i) Deposits under NEFFARS	62.04	48.27
<b>Total other non-current liabilities</b>	<b>62.04</b>	<b>48.27</b>
<b>B. Current</b>		
(i) Revenue received in advance	53.06	73.36
(ii) Statutory and other dues		
(a) Electricity duty [refer note: 24.1]	192.01	22.09
(b) Tax deducted and collected at source	40.91	15.13
(c) Contribution to NEPF trust and NPS	47.40	30.02
(d) Disputed dues towards water charges	-	839.97
(e) Others (Service tax, excise duty etc)	53.53	114.59
(iii) Renewable energy purchase obligation [refer note 24.2]	146.87	60.34
(iv) Deposits under NEFFARS	10.69	13.25
(v) Grants for property, plant and equipment	0.58	0.61
(vi) Other credit balances	0.40	0.85
<b>Total other current liabilities</b>	<b>545.45</b>	<b>1,170.21</b>

#### Note:

- 24.1 The Energy Department of Govt. of Odisha vide its notification dated May 12, 2017 has enhanced the rate of electricity duty from Rs.0.30 paise per unit to Rs.0.55 paise per unit of consumption. Aggrieved by the said notification, Confederation of Captive Power Plants, Odisha of which the Company is a member, has challenged the order in the Hon'ble High Court of Orissa. As an interim measure, the Hon'ble High Court in its order dated 01.06.2017 has directed the petitioner to deposit the differential electricity duty in a separate interest bearing bank account which shall be subject to the result of writ petition. Accordingly, the Company provided for electricity duty expenditure at the enhanced rate and deposited the money into a separate interest bearing bank account as per direction of the Court. Interest earned on such deposits is not recognised as income but treated as liability along with the unpaid enhanced electricity duty. The liability including accrued interest on such deposits as at reporting date is Rs. 155.02 crore. Besides, the amount also includes undisputed liability for the month of Mar-18 to be paid in Apr. 18.
- 24.2 As per the provisions of Odisha Electricity Regulatory Commission (OERC) notification dated 1st August 2015, the Company, being an obligated entity has the obligation to generate power equal to 7.5% (previous year 4.5%) of its total consumption from renewable sources comprising of 3% (previous year 1.50%) from solar renewable source and 4.5% (previous year 3%) from non-solar renewable sources  
Cumulative non-solar obligation as on 31.3.2018 is Rs.16.42 crore (as on 31.03.2017 Rs.3.16 crore) towards 1,09,444 (previous year 21,066) nos. of non-solar Renewable Energy Certificates (REC) valued @ Rs. 1,500 (previous year Rs 1,500) per certificate. During the year 1,49,829 nos. (previous year 1,14,493 nos) of non-solar REC has been retained by the Company as a compliance to Renewable Purchase Obligation.  
Due to non-fulfillment of the obligation to generate required quantum of power from renewable source of solar energy, the Company has provided cumulative liability upto 31.03.2018 for Rs. 130.45 crore (previous year Rs. 57.18 crore) towards 3,72,716 (previous year 1,63,371) nos. of solar REC value at Rs. 3,500 (previous year Rs. 3,500) per certificate.

### 25. Contingent liabilities (to the extent not provided for)

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>Claims against the Company not acknowledged as debts</b>		
<b>a. Demand from statutory authority</b>		
1. Sales Tax	366.17	427.84
2. Excise duty	100.68	165.46
3. Custom duty	102.77	52.00
4. Service tax	18.11	2.31
5. Income tax	706.40	797.94
6. Entry tax and road tax	232.28	253.19
7. Land acquisition and interest thereon	35.49	44.21
8. Stamp duty	204.53	204.53
9. Demand from Dept. of mines Govt. of Odisha	136.32	136.32
10. NPV related demand under Mining lease	93.10	93.10
11. Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	119.24	—



## NOTES TO THE FINANCIAL STATEMENTS

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>b. Claim by contractors/suppliers and others</b>		
1. Claims of Contractor's suppliers and others	436.99	270.96
<b>Total</b>	<b>2,552.08</b>	<b>2,447.86</b>

Claims against the Company not acknowledged as debt includes:

- 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.
- 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.

### 25.1. Movement of contingent liabilities

	As at 31.03.2017	Reduction during the year	Addition during the year	As at 31.03.2018
<b>a. Demand by statutory authority</b>				
1. Sales Tax	427.84	(61.67)	—	366.17
2. Excise duty	165.46	(141.78)	77.00	100.68
3. Custom duty	52.00	(45.71)	96.48	102.77
4. Service tax	2.31	(1.72)	17.52	18.11
5. Income tax	797.94	(91.54)	—	706.40
6. Entry tax and road tax	253.19	(23.86)	2.95	232.28
7. Land acquisition and interest there on	44.21	(9.37)	0.65	35.49
8. Stamp duty	204.53	—	—	204.53
9. Demand from Dept. of mines Govt. of Odisha	136.32	—	—	136.32
10. NPV related demand under Mining lease	93.10	—	—	93.10
11. Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	—	—	119.24	119.24
<b>b. Claim by contractors/suppliers and others</b>				
1. Claims of Contractor's suppliers and others	270.96	(7.37)	173.40	436.99
<b>Total</b>	<b>2,447.86</b>	<b>(383.02)</b>	<b>487.24</b>	<b>2,552.08</b>

### 26. Commitments

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
a) Estimated amount of Contracts remaining to be executed on capital account and not provided for	297.02	201.84
<b>b) Other Commitments</b>		
(1) Amount payable to the Government of India but not yet due for payment for allocation of Utkal D & E coal block.	18.11	18.11
(2) Amount payable to Orissa Mining Corporation, project proponent of Utkal D coal block in terms of reallocation of allotment of the block in favour of the Company.	Nil	95.18
(3) Export obligation for import of capital goods under Export Promotion Capital Goods Scheme.	107.80	117.69
<b>Total</b>	<b>422.93</b>	<b>432.82</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 27. Revenue from operations

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
(a) Sale of products (including excise duty)		
1) Export:		
i) Alumina	3,047.36	2,443.04
ii) Aluminium	1,028.10	1,181.95
2) Domestic:		
i) Alumina	152.01	141.21
ii) Aluminium	5,188.28	4,090.24
(b) Sale of power		
i) Thermal power	3.40	4.75
ii) Wind Power	85.97	71.80
(c) Other operating income		
1) Export Incentives		
i) Alumina	33.06	30.25
ii) Aluminium	30.24	38.98
2) Incentives on Renewable Energy		
i) Renewable Energy certificates	33.84	28.67
ii) Generation based incentives	6.94	8.18
3) Own manufactured goods internally used /capitalised	9.11	10.95
<b>Revenue from operations</b>	<b>9,618.31</b>	<b>8,050.02</b>

#### Note:

27.1 Domestic sale of alumina and aluminium includes excise duty amounting to Rs.4.22 crore and Rs.124.74 crore considered upto 30.06.2017 (previous year Rs.15.88 crore and Rs.478.63 crore respectively for full year). Goods and service taxes collected under Goods and Service Tax Act are not included in sales.

### 28. Other income

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
(a) Interest income		
(i) Interest income earned from financial assets that are not designated as at fair value through profit or loss:		
— Bank deposits	171.89	265.65
— Loans to employees	12.46	14.23
— Other financial assets carried at amortised cost	0.44	0.70
(ii) Interest income earned towards Income tax refund	—	12.06
(b) Dividend income		
— Dividends from current investments	33.65	8.78
(c) Net foreign exchange gain/(loss)	(2.55)	(7.90)
(d) Net gain/(loss) on financial assets designated as at FVTPL	2.96	77.81
(e) Net gain/(loss) on sale of other non-current investments	13.91	—
(f) Write back of liabilities no longer required [refer note: 28.1]	20.56	14.29
(g) Income from internally generated scrap	22.68	9.04
(h) Others	23.65	13.61
<b>Total other income</b>	<b>299.65</b>	<b>408.27</b>

#### Note:

28.1 Unclaimed deposits 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 FINANCIAL STATEMENTS

### 29. Cost of materials consumed

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>A. Raw material</b>		
(1) Caustic soda	795.39	677.30
(2) C.P. coke	403.70	269.47
(3) C.T. pitch	127.80	101.13
(4) Aluminium flouride	62.67	60.05
(5) Lime	45.06	44.45
(6) Others	30.69	29.39
<b>Total raw materials consumed</b>	<b>1,465.31</b>	<b>1,181.79</b>
<b>B. Power and Fuel</b>		
(1) Coal	1,757.22	1,531.39
(2) Fuel oil	523.66	455.71
(3) Duty on own generation [refer note: 24.1]	400.70	214.06
(4) Purchased power	60.36	3.99
(5) Power transmission charges	5.98	7.38
<b>Total Power and Fuel consumed</b>	<b>2,747.92</b>	<b>2,212.53</b>

### 30. Changes in inventories of finished goods, intermediaries and work-in-process

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Finished goods</b>		
Opening stock		
(1) Bauxite	3.07	7.73
(2) Chemical	154.15	93.81
(3) Aluminium	41.52	25.98
<b>Opening stock</b>	<b>198.74</b>	<b>127.52</b>
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	18.22	6.06
(3) Aluminium	5.76	2.79
<b>Excise duty on opening stock</b>	<b>23.98</b>	<b>8.85</b>
<b>Total opening stock of finished goods</b>	<b>222.72</b>	<b>136.37</b>
<b>Less:</b>		
Closing stock		
(1) Bauxite	9.20	3.07
(2) Chemical	114.18	154.15
(3) Aluminium	19.83	41.52
<b>Closing stock</b>	<b>143.21</b>	<b>198.74</b>
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	—	18.22
(3) Aluminium	—	5.76
<b>Excise duty on closing stock</b>	<b>—</b>	<b>23.98</b>
<b>Total Closing stock of finished goods</b>	<b>143.21</b>	<b>222.72</b>
<b>(Accretion)/Depletion in finished goods</b>	<b>79.51</b>	<b>(86.35)</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 30. Changes in inventories of finished goods, intermediaries and work-in-process

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
<b>Intermediaries</b>		
Opening stock		
Anodes	82.97	96.08
Others	10.65	7.17
<b>Total opening stock of intermediaries</b>	<b>93.62</b>	<b>103.25</b>
Less: Closing stock		
Anodes	66.75	82.97
Others	10.99	10.65
<b>Total closing stock of intermediaries</b>	<b>77.74</b>	<b>93.62</b>
<b>(Accretion)/depletion in intermediaries</b>	<b>15.88</b>	<b>9.63</b>
<b>Work in process</b>		
Opening stock	236.37	216.50
Less: Closing stock	284.33	236.37
<b>(Accretion)/depletion in work in process</b>	<b>(47.96)</b>	<b>(19.87)</b>
<b>Total (Accretion)/Depletion in inventory</b>	<b>47.43</b>	<b>(96.59)</b>

### 31. Employee benefit expense

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
(a) Salaries and wages, including bonus	1,659.81	1,240.25
(b) Contribution to provident and other funds		
1) Provident fund	100.89	96.00
2) Gratuity	301.91	29.38
3) Post employment pension scheme	88.07	88.54
(c) Staff welfare expenses	110.52	83.27
<b>Total employee benefit expense</b>	<b>2,261.20</b>	<b>1,537.44</b>

#### Notes:

#### 31.A. Employee benefits

- i) Pay revision of executive employees effective from 01.01.2017 has been implemented in the month of January, 2018. Differential expenditure over and above the liability provided till 31.03.2017 for the period from 01.01.2017 to 31.03.2017 is charged off in the current year.
- ii) Pay revision of non-executive employees is due from 01.01.2017 for which Long Term Wage Settlement is awaited. The Company has provided liability for pay revision for the current year Rs.223.72 crore (Previous year Rs.55.43 crore for the period 01.01.2017 to 31.03.2017).
- iii) Consequent upon the Govt of India notification dated 29.03.2018 in respect of the Payment of Gratuity Act, 1972 for enhancement of ceiling limit of gratuity from Rs. 10.00 lakh to Rs.20 lakh per employee, the Company has considered the enhanced gratuity limit for valuation of gratuity liability of its employees on roll as on 31.03.2018 based on actuarial valuation. In addition an amount of Rs. 36.80 crore has been provided towards differential gratuity to be settled directly by the Company to the employees superannuated during the period from 01.01.2017 to 31.03.2018.
- iv) In terms of approval accorded by the Board of Directors in their 299th meeting held on 10th May, 2017, the Company has revised its Post Retirement Medical Benefit Scheme (PRMBS) w.e.f. 01.04.2017. The benefits as available by the amended scheme has been considered in the valuation of liability by actuary.

#### 31.B. Employee benefit plans

##### 31.B.1 Defined contribution plans

- a) **Provident fund:** The Company pays fixed contribution to Provident Fund at predetermined rates, to a separate trust, which invests the funds in permitted securities. On contributions, the trust is required to pay a minimum rate of interest, to the members, as specified by Govt. of India.
- b) **Pension fund:** The Company pays fixed contribution to the trustee bank of 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.

##### 31.B.2 Defined benefit plans

- a) **Gratuity:** Gratuity payable to employees as per The Payment of Gratuity Act subject to a maximum of Rs.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.



## NOTES TO THE FINANCIAL STATEMENTS

- b) **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 ceiling limit of expenses fixed by the Company. The liability under the scheme is recognised on the basis of actuarial valuation.
- c) **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.
- d) **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 @ Rs.30/- per member per death, in the event of death of a member while in the service of the company and matching contribution by the Company. The liability for the same is recognised on the basis of actuarial valuation.
- e) **NALCO Retirement Welfare Scheme :** The objective of the scheme is to provide financial assistance as a gesture of goodwill for post retirement support to employees retiring from the services of the company. As per the scheme the recovery form each employee member would be Rs. 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.
- f) **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 Rs. 25000/- per retiring employees to be presented on superannuation/ retirement. The liability for the same is recognised on the basis of actuarial valuation.

### 31.B.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 company's rule.The liability for the same is recognised on the basis of actuarial valuation.
- 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, the Company pays monthly benefit to the employee/ nominee at their option and on deposit of prescribed amount as stipulated under the scheme 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, longevity risk and salary risk:-

- i. **Actuarial risk:** It is the risk that benefits will cost more than expected. This can arise due to one of the following reasons: 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.  
 Variability in mortality rates: If actual mortality rates are higher than assumed mortality rate assumption than the gratuity benefits will be paid earlier than expected. Since there is no condition of vesting on the death benefit, the acceleration of cashflow will lead to an actuarial loss or gain depending on the relative values of the assumed salary growth and discount rate.  
 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 will increase the plan's liability.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	Valuation as at	
	31-03-2018	31-03-2017
Discount rate(s)	7.50%	7.25%
Expected rate(s) of salary increase	6%	6%
Mortality	IALM 2006-2008 ULTIMATE	IALM 2006-2008 ULTIMATE
Attrition Rate	1%	1%



## NOTES TO THE FINANCIAL STATEMENTS

### 31. Employee benefit expense

Amount in Rs. Crore

Amounts recognised in statement of profit and loss in respect of these defined benefits plans are as follows:

	Year ended 31.03.2018	Year ended 31.03.2017
Service Cost		
Current Service Cost	(35.47)	(35.34)
Net Interest expense	(28.89)	(22.45)
<b>Components of defined benefit costs recognised in profit or loss</b>	<b>(64.36)</b>	<b>(57.79)</b>
<b>Remeasurement of the net defined benefit liability:</b>		
Return on the net defined benefit liability	(0.88)	9.35
Actuarial (Gains)/losses arising from changes in financial assumptions	71.41	(17.38)
Actuarial (Gains)/losses arising from experience assumptions	(17.89)	21.92
<b>Components of defined benefit costs recognised in other comprehensive income</b>	<b>52.64</b>	<b>(3.49)</b>
<b>Total</b>	<b>(11.72)</b>	<b>(61.28)</b>

The current service cost and the net interest expense for the year are included in the "Employee benefits expense" line item in the consolidated statement of profit and loss.

The remeasurement of the net defined liability is included in other comprehensive income.

The amount included in the balance sheet arising from the entity's obligation in respect of its defined benefit plans is as follows:

	Post retirement medical benefit	Settling- in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
<b>March 31, 2017</b>						
Present value of defined benefit obligation	(64.31)	(2.41)	(3.86)	(13.84)	(7.34)	(314.04)
Fair value of plan assets	—	—	—	—	—	302.10
<b>Net liability arising from defined benefit obligation</b>	<b>(64.31)</b>	<b>(2.41)</b>	<b>(3.86)</b>	<b>(13.84)</b>	<b>(7.34)</b>	<b>(11.94)</b>
<b>March 31, 2018</b>						
Present value of defined benefit obligation	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)
Fair value of plan assets	—	—	—	—	—	302.48
<b>Net liability arising from defined benefit obligation</b>	<b>(126.52)</b>	<b>(2.27)</b>	<b>(3.62)</b>	<b>(13.64)</b>	<b>(7.08)</b>	<b>(271.05)</b>

Movements in the present value of the defined benefit obligations are as follows:

	Post retirement medical benefit	Settling- in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
<b>Opening defined benefit obligations as at April 01, 2016</b>	<b>(61.24)</b>	<b>(2.74)</b>	<b>(3.94)</b>	<b>(13.13)</b>	<b>(6.92)</b>	<b>(298.02)</b>
Current service cost	(4.32)	(0.44)	—	—	—	(30.58)
Interest Cost	—	(0.18)	(0.27)	(0.89)	(0.48)	(20.63)
<b>Remeasurement</b>						
Actuarial (Gains)/losses arising from changes in financial assumptions	(1.12)	(0.11)	(0.12)	(0.56)	(0.39)	(15.08)
Actuarial (Gains)/losses arising from experience assumptions	(0.89)	0.64	(0.03)	(0.92)	(0.16)	23.28
Benefits paid	3.26	0.42	0.50	1.66	0.61	27.00
Others	—	—	—	—	—	—



## NOTES TO THE FINANCIAL STATEMENTS

Amount in Rs. Crore

	Post retirement medical benefit	Settling- in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
<b>Closing defined benefit obligation as at March 31, 2017</b>	(64.31)	(2.41)	(3.86)	(13.84)	(7.34)	(314.03)
Current service cost	—	(0.41)	—	—	—	(35.06)
Interest Cost	(4.66)	(0.16)	(0.26)	(0.97)	(0.54)	(22.30)
<b>Remeasurement</b>						
Actuarial (Gains)/losses arising from changes in financial assumptions	5.76	0.03	0.04	0.18	0.13	65.27
Actuarial (Gains)/losses arising from experience assumptions	16.52	0.23	(0.30)	(0.72)	0.26	(33.88)
Past Service Cost, including losses/(gains) on curtailment	(84.10)	—	—	—	—	(267.07)
Benefits paid	4.27	0.45	0.76	1.71	0.41	33.54
Others (describe)	—	—	—	—	—	—
<b>Closing defined benefit obligation as at March 31, 2018</b>	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)

### 31. Employee benefit expense

Amount in Rs. Crore

Movements in the fair value of the plan assets are as follows:

	Gratuity (Funded)
<b>Opening fair value of plan assets as at April 01, 2016</b>	<b>290.25</b>
Interest income	21.04
<b>Remeasurement</b>	
Return on plan assets (excluding amounts included in net interest income)	9.35
Contribution from the employer	8.46
Benefits paid	(27.00)
<b>Closing fair value of plan assets as at March 31, 2017</b>	<b>302.10</b>
Interest income	22.64
<b>Remeasurement</b>	
Return on plan assets (excluding amounts included in net interest income)	(0.88)
Others (describe)	(0.25)
Contribution from the employer	12.40
Benefits paid	(33.53)
<b>Closing fair value of plan assets as at March 31, 2018</b>	<b>302.48</b>

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	
	31-03-2018	31-03-2017
Investments in Funds:		
1. Insurance Companies	302.48	302.10
<b>Total</b>	<b>302.48</b>	<b>302.10</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 31.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 Rs. Crore

Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
<b>2016-17</b>						
<b>Impact on amount due to change in Discount rate (-/+0.5%)</b>	2.95	2.77	0.08	0.07	0.08	0.08
% Change compared to base due to sensitivity [+ /(-)%]	4.58%	4.31%	3.19%	3.02%	2.14%	2.07%
<b>Impact on amount due to change in Salary growth (+/-0.5%)</b>	1.43	1.12	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	2.23%	1.74%	—	—	—	—
<b>Impact on amount due to change in Attrition rate (+/-0.5%)</b>	0.20	0.20	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.31%	0.31%	0.06%	0.06%	0.07%	0.07%
<b>Impact on amount due to change in Mortality rate (-/+10%)</b>	0.14	0.14	0.01	0.01	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.21%	0.21%	0.51%	0.51%	0.03%	0.03%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
<b>2016-17</b>						
<b>Impact on amount due to change in Discount rate (-/+0.5%)</b>	0.40	0.38	0.28	0.27	10.70	10.07
% Change compared to base due to sensitivity [+ /(-)%]	2.86%	2.71%	3.82%	3.62%	3.41%	3.21%
<b>Impact on amount due to change in Salary growth (+/-0.5%)</b>	—	—	—	—	1.35	1.52
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	—	—	0.43%	0.48%
<b>Impact on amount due to change in Attrition rate (+/-0.5%)</b>	0.01	0.01	—	—	0.34	0.34
% Change compared to base due to sensitivity [+ /(-)%]	0.04%	0.04%	0.05%	0.05%	0.11%	0.11%
<b>Impact on amount due to change in Mortality rate (-/+10%)</b>	—	—	—	—	2.11	2.11
% Change compared to base due to sensitivity [+ /(-)%]	0.03%	0.03%	0.03%	0.03%	0.67%	0.67%



## NOTES TO THE FINANCIAL STATEMENTS

Amount in Rs. Crore

### 31.C Sensitivity analysis of defined benefit plans

Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
<b>2017-18</b>						
<b>Impact on amount due to change in Discount rate [+ /(-) 0.5%]</b>	3.87	3.74	0.07	0.07	0.08	0.07
% Change compared to base due to sensitivity [+ /(-)%]	3.06%	2.95%	3.19%	3.02%	2.14%	2.07%
<b>Impact on amount due to change in Salary growth (+/-0.5%)</b>	—	—	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Impact on amount due to change in Attrition rate (+/-0.5%)</b>	0.07	0.15	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.05%	0.12%	0.06%	0.06%	0.07%	0.07%
<b>Impact on amount due to change in Moratlity rate (-/+10%)</b>	0.73	0.81	0.01	0.01	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.58%	0.64%	0.51%	0.51%	0.03%	0.03%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
<b>2017-18</b>						
<b>Impact on amount due to change in Discount rate [+ /(-) 0.5%]</b>	0.39	0.37	0.27	0.26	17.74	16.77
% Change compared to base due to sensitivity [+ /(-)%]	2.86%	2.71%	3.82%	3.62%	3.09%	2.92%
<b>Impact on amount due to change in Salary growth (+/-0.5%)</b>	—	—	—	—	4.31	4.27
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.75%	0.74%
<b>Impact on amount due to change in Attrition rate (+/-0.5%)</b>	0.01	0.01	—	—	0.49	0.49
% Change compared to base due to sensitivity [+ /(-)%]	0.04%	0.04%	0.05%	0.05%	0.09%	0.09%
<b>Impact on amount due to change in Moratlity rate (-/+10%)</b>	—	—	—	—	3.49	3.49
% Change compared to base due to sensitivity [+ /(-)%]	0.03%	0.03%	0.03%	0.03%	0.61%	0.61%

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 FINANCIAL STATEMENTS

### 32. Other expenses

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
(a) Stores and spares consumed	344.52	318.57
(b) Repair and maintenance to		
(1) Buildings	38.75	30.49
(2) Machinery	155.94	138.71
(3) Others	24.82	20.16
(c) Other Manufacturing Expenses		
(1) Water charges	26.71	24.18
(2) Royalty	127.70	108.53
(3) Contribution to District Mineral Fund and National Mineral Exploration Trust	40.88	34.73
(4) Continuous Technical Assistance expenses	8.76	8.52
(5) Others	72.35	54.47
(d) Freight and handling charges		
(1) Incoming materials (Alumina)	113.45	102.16
(2) Outgoing materials	152.97	163.97
(e) Auditors remuneration and out-of-pocket expenses		
(i) As Auditors	0.26	0.26
(ii) For Taxation matters	0.08	0.05
(iii) For Other services	0.22	0.21
(iv) For reimbursement of expenses	0.12	0.02
(f) Payment to Cost Auditors	0.03	0.03
(g) Security and fire fighting expenses	117.77	104.57
(h) Corporate social responsibility expenses [refer note 32.1]	29.01	29.69
(i) Administrative and general expenses	109.90	97.94
(j) Renewable purchase obligation	120.37	63.02
(k) Provision towards disputed Government dues and others	7.06	178.12
(l) Selling and distribution expenses	28.16	27.83
(m) Write off of Inventories, Claims etc	15.98	27.96
(n) Bad and doubtful Provisions	13.43	56.93
(o) Others	40.90	37.10
<b>Total other expenses</b>	<b>1,590.14</b>	<b>1,628.22</b>

#### Note:

##### 32.1 Expenditure on Corporate Social Responsibility.

- a) Gross amount to be spent by the company during the year ended March 31, 2018 is Rs.27.88 crore (March 31, 2017 Rs.27.56 crore)
- b) Amount spent during the year ended March 31, 2018
- |                                       |   |
|---------------------------------------|---|
| i) Construction/acquisition of assets | Rs. Nil crore (previous year Rs. 0.32 Crore)    |
| ii) On purpose other than (i) above   | Rs. 29.01 crore (previous year Rs. 29.69 crore) |
| Total                                 | Rs. 29.01 crore (previous year Rs.30.01 crore)  |





## NOTES TO THE FINANCIAL STATEMENTS

### 33. Exceptional items

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Exceptional items</b>		
a. Write back of provision against disputed interest on water charges [refer note: 33.1]	(785.71)	—
b. Reversal of liability towards DMF contribution on bauxite extraction	(18.32)	—
c. Refund claim of DMF contribution on coal procurement	(22.37)	—
d. Employment benefits in the form of interest subsidy [ refer note: 33.2]	46.44	—
e. Write back of doubtful provision against advance to employees towards (d) above [refer note: 33.2]	(44.12)	—
f. Other (income)/ expenses	—	40.15
<b>Total exceptional items</b>	<b>(824.08)</b>	<b>40.15</b>

#### Note:

- 33.1 Dispute with the Department of Water Resources, Govt. of Odisha over interest claim on water charges dues have been settled during the year. In terms of the settlement, the Company paid Rs.58.18 crore at one go discharging the liability accrued till 31.10.2017. Consequent to the settlement excess liability of Rs. 785.71 crore provided for in the books till 31.03.2017 has been written back and considered as an exceptional item.
- 33.2 In conformity with DPE guidelines, the Board of Directors of the Company, in their meeting held on 5th of May 2018, approved amendment to the old pay revision circular of 2007 withdrawing the item of "Interest Subsidy" from the cafeteria of perks. Accordingly, the value of interest subsidy on loans to employees, hitherto kept as advance recoverable from them reducing employee benefits expenditure by the corresponding amount, stands not realisable. Since the matter was challenged by the employees in Court, provisions were duly made against such advance considering the same as doubtful of recovery. The development subsequent to the balance sheet date is considered as an adjusting event and accordingly the interest subsidy amount earlier converted into advance is treated as employee benefit expenditure of the current year. The corresponding provision held there against is written back in the current year and taken to income. Both the expenditure and write back of provision have been taken as exceptional items.
- 33.3 The Central Government introduced Mines and Minerals (Contribution to District Mineral Foundation) Rules by which the Company is liable to contribute @30% of royalty on minerals and coals as Contribution to District Mineral Foundation (DMF). As per the Rules, contribution to be made was made effective from 12.01.2015. The date of applicability was challenged by Federation of Indian Mineral Industries of which the Company is a member. As per Hon'ble Supreme Court verdict dated 13.10.2017, contribution to DMF for minerals and coals will be effective from 17.09.2015 and 20.10.2015 respectively, the dates when the rates were prescribed by the Central Government or with effect from the date on which the DMF was established by the State Government whichever is later. Accordingly, the Company reversed the liability provided for the period from 12.01.2015 to 16.09.2015 for minerals and claimed refund of DMF contribution paid on coal procurement during the period from 12.01.2015 to 19.10.2015. The reversal of liability and claim of refund is taken into income of the current year as an exceptional item.

### 34. Income taxes

Amount in Rs. Crore

#### 34.1 Income tax recognised in profit or loss

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Current tax</b>		
In respect of the current year	521.99	219.57
In respect of the prior years	271.19	(0.05)
	<b>793.18</b>	<b>219.52</b>
<b>Deferred tax</b>		
In respect of the current year	(101.71)	97.81
In respect of the prior years	—	(3.68)
Others (MAT credit entitlement)	4.95	(17.46)
	<b>(96.76)</b>	<b>76.67</b>
<b>Total income tax expense recognised in the current year</b>	<b>696.42</b>	<b>296.19</b>



## NOTES TO THE FINANCIAL STATEMENTS

The income tax expense for the year can be reconciled to the accounting profit as follows:

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Profit before tax</b>	<b>2,038.83</b>	<b>964.72</b>
Income tax expense thereon @ 34.608% :	705.60	333.87
Tax effect of -		
i) income exempt from taxation	(23.71)	(12.39)
ii) disallowable expenses (permanent difference)	9.89	10.24
iii) expenses allowable in excess of expenditure incurred	(12.53)	(0.97)
iv) effect of concessions (research and development and other allowances)	(12.95)	(21.94)
v) difference for long-term capital gains	8.54	—
vi) adjustment relating to earlier years	29.16	—
vii) others	(7.58)	(12.62)
<b>Income tax expense recognised in profit or loss</b>	<b>696.42</b>	<b>296.19</b>

### 34.2 Income tax recognised directly in equity

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Current tax</b>		
Share buy-back costs	—	(3.06)
<b>Income tax recognised directly in equity</b>	<b>—</b>	<b>(3.06)</b>

### 34.3 Income tax recognised in other comprehensive income

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Deferred tax</b>		
Arising on Income and expenses recognised in other comprehensive income		
- Remeasurements of defined benefit obligation	2.63	4.80
<b>Total income tax recognised in other comprehensive income</b>	<b>2.63</b>	<b>4.80</b>
Bifurcation of the income tax recognised in other comprehensive income into:		
Items that will be reclassified to profit or loss	—	—
<b>Items that will not be reclassified to profit or loss</b>	<b>2.63</b>	<b>4.80</b>

## 35. Segment information

### 35.1 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.

### 35.2 Segment revenues and results

The following is an analysis of the Company's revenue and results from operations by reportable segment



## NOTES TO THE FINANCIAL STATEMENTS

Amount in Rs. Crore

Operating Segments	Segment revenue	
	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	5162.02	4046.21
Aluminium segment	6408.81	5537.42
Unallocated	126.75	108.64
<b>Total for operations</b>	<b>11,697.58</b>	<b>9,692.27</b>
Less: Intersegment revenue	2,079.27	1,642.25
<b>Revenue from operations</b>	<b>9,618.31</b>	<b>8,050.02</b>

Operating Segments	Segment results	
	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	1,520.83	976.92
Aluminium segment	(367.07)	(224.78)
<b>Segment result before exceptional items, interest and tax</b>	<b>1,153.76</b>	<b>752.14</b>
Exceptional Income/(Expenses)	824.08	(40.15)
Interest & financing charges	1.95	2.69
Interest and dividend income	240.37	383.03
Other unallocated income net of unallocated expenses	(177.43)	(127.61)
<b>Profit before tax</b>	<b>2,038.83</b>	<b>964.72</b>

### 35.3 Segment assets and liabilities

	Segment Assets		Segment Liabilities	
	As at 31.03.2018	As at 31.03.2017	As at 31.03.2018	As at 31.03.2017
Chemical segment	4,041.84	3,643.06	1041.48	780.06
Aluminium segment	5,117.43	5,165.16	1606.60	1902.94
<b>Total segment assets and liabilities</b>	<b>9,159.27</b>	<b>8,808.22</b>	<b>2,648.08</b>	<b>2,683.00</b>
Unallocated	5,454.53	5,693.44	309.46	367.28
<b>Total assets and Liabilities</b>	<b>14,613.80</b>	<b>14,501.65</b>	<b>2,957.54</b>	<b>3,050.28</b>

### 35.4 Other segment information

	Depreciation and amortisation		Additions to non-current assets	
	Year ended 31.03.2018	Year ended 31.03.2017	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	174.36	173.01	256.64	(3.10)
Aluminium segment	248.31	270.62	(119.74)	(67.90)
Unallocated	57.74	36.72	17.14	(449.68)
<b>Total for operations</b>	<b>480.40</b>	<b>480.36</b>	<b>154.04</b>	<b>(520.68)</b>

	Material non-cash expenditure	
	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	45.70	6.24
Aluminium segment	85.53	64.37
Unallocated	7.56	(0.21)
	<b>138.79</b>	<b>70.39</b>



## NOTES TO THE FINANCIAL STATEMENTS

Amount in Rs. Crore

### 35.5 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 31.03.2018	Year ended 31.03.2017
Chemical segment (Hydrate and Alumina)	3,199.37	2,584.25
Aluminium segment (Aluminium)	6,216.38	5,272.19
<b>Total</b>	<b>9,415.75</b>	<b>7,856.44</b>

### 35.6 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 31.03.2018	Year ended 31.03.2017	As at 31.03.2018	Year ended 31.03.2017
India	5,340.29	4,231.45	8,999.90	8,845.86
Outside India	4,075.46	3,624.99	—	—
<b>Total</b>	<b>9,415.75</b>	<b>7,856.44</b>	<b>8,999.90</b>	<b>8,845.86</b>

Note:

- Inter-segment transfer of Calcined Alumina is considered at average sales realization from export sales during the period less freight from Refinery to Port at Vizag plus export incentive. Transfer of power from Aluminium segment to Chemical segment is considered at the annual / periodic average purchase price of power from State Grid at Alumina Refinery.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities. Revenue, expenses, assets and liabilities, which relate to the enterprise as a whole and are not allocable on a reasonable basis, have been included under Unallocated Common segment.

### 36. Earnings per share

	Year ended 31.03.2018	Year ended 31.03.2017
	Rs. per share	Rs. per share
<b>36.1 Basic Earnings per share (Rs.)</b>		
From total operations	6.94	2.98
<b>Total Basic earnings per share</b>	<b>6.94</b>	<b>2.98</b>

#### 36.2 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 Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
Profit for the year attributable to Owners of the Company	1,342.41	668.53
<b>Earnings used in the calculation of basic earnings per share</b>	<b>1,342.41</b>	<b>668.53</b>
	As at 31.03.2018	As at 31.03.2017
<b>Weighted average number of equity shares used in calculation of basic earnings per share (in crore)</b>	<b>193.29</b>	<b>224.71</b>



## NOTES TO THE FINANCIAL STATEMENTS

### 37. Financial Instruments

Amount in Rs. Crore

#### 37.1 Categories of financial instruments

	As at 31.03.2018	As at 31.03.2017
<b>Financial Assets</b>		
<b>Measured at fair value through profit or loss (FVTPL)</b>		
(a) Mandatorily measured:		
(i) Investments in mutual funds	592.96	1221.13
(ii) Forward contract on foreign currency	Nil	Nil
<b>Measured at Amortised cost</b>		
(a) Cash and bank balances	25.35	24.83
(b) Other financial assets at amortised cost	3,389.28	2,770.76
	<b>4,007.59</b>	<b>4,016.72</b>
<b>Financial Liabilities</b>		
<b>Measured at Amortised cost</b>	<b>1,538.08</b>	<b>1,386.62</b>

#### 37.2 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.

#### 37.3 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.

#### 37.4 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.



## NOTES TO THE FINANCIAL STATEMENTS

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:

	Liabilities as at		Assets as at	
	31.03.2018	31.03.2017	31.03.2018	31.03.2017
USD	33.96	1.96	173.98	98.57
EURO	15.13	2.57	—	—

### 37.4.1 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, 2018 and March 31, 2017.

	USD impact		EURO impact	
	Year ended 31.03.2018	Year ended 31.03.2017	Year ended 31.03.2018	Year ended 31.03.2017
Impact on profit or loss for the year	14.0	9.7	1.51	0.26

### 37.5 Other price risks

#### 37.5.1 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.

### 37.6 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.

### 37.7 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 maintaining adequate reserves and banking facilities by continuously monitoring forecast and actual cashflows and by matching the maturity profiles of financial assets and financial liabilities.



## NOTES TO THE FINANCIAL STATEMENTS

### 38. Related party disclosures

#### 38.1 Related parties

##### A. Key Managerial Personnel:

###### I) Whole time Directors

(a) Dr. T K Chand	Chairman-Cum-Managing Director
(b) Shri K C Samal	Director (Finance)
(c) Shri V Balasubramanyam	Director (Production)
(d) Shri B K Thakur	Director (HR)
(e) Shri S K Roy	Director (Proj & Tech)

###### Others

Shri K N Ravindra	Executive Director-Company Secretary (upto 31.05.2017)
Shri N K Mohanty	Company Secretary (w.e.f 01.06.2017)

###### II) Part time Official Directors: (Nominee of Govt. of India):

- (a) Shri Subhash Chandra, IFS (upto 16.02.2018)
- (b) Dr N K Singh, IFS (upto 27.03.2018)
- (c) Dr. K Rajeswara Rao, IAS (w.e.f 19.02.2018)
- (d) Shri Anil Kumar Nayak, IOFS (w.e.f 27.03.2018)

###### III) Part time non official (Independent) Directors:

- (a) Shri Dipankar Mahanta
- (b) Shri S Sankararaman
- (c) Shri Pravat Keshari Nayak
- (d) Prof.Damodar Acharya
- (e) Shri Maheswar Sahu
- (f) Smt. Kiran Ghai Sinha
- (g) Shri N N Sharma (w.e.f 06.09.2017)
- (h) Smt. Achla Sinha (w.e.f 08.09.2017)

##### B. Joint Ventures & associates

- (a) Angul Aluminium Park Pvt. Ltd.
- (b) NPCIL-NALCO power company Ltd.
- (c) GACL NALCO Alkalies & Chemicals Pvt. Ltd.

##### C. Post Employment Benefit Plan

- (a) Nalco Employees Provident Fund Trust
- (b) Nalco Employees Group Gratuity 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 major business transactions during the year with the following CPSEs.

###### i) Purchase of Goods and Services

- a) Indian Oil Corporation Ltd.
- b) Bharat Petroleum Corporation Ltd.
- c) Hindustan Petroleum Corporation Ltd.
- d) Mahanadi Coalfields Ltd.
- e) Northern Coalfields Ltd.
- f) Singareni Collieries Ltd.
- g) Western Coalfields Ltd.
- h) Eastern Coalfields Ltd.
- i) Numaligarh Refinery Ltd.
- j) Bharat Earthmovers Ltd.
- k) Bharat Heavy Electrical Ltd.
- l) Mineral Exploration Corporation Ltd.
- m) Balmer Lawrie & Co.
- n) East Coast railways
- o) Vizag Port Trust
- p) MECON Limited.
- q) Engineers India Ltd.



## NOTES TO THE FINANCIAL STATEMENTS

- ii) **Sale of Goods**
- National Small Industries Corporation (NSIC)
  - Steel Authority of India Ltd.
  - Rashtriya Ispat Nigam Ltd.
  - National Thermal Power Corporation Ltd.

### 38.2 Related Party Transactions

#### I. Key Managerial Personnel Amount in Rs. Crore

##### Remuneration to Key Managerial Personnel

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
<b>Short-term employee benefits</b>		
— Salaries	3.22	3.04
— Contribution to Provident Fund	0.21	0.20
— Medical Benefits	0.01	0.01
— Other Benefits	0.03	0.03
<b>Post employment benefits #</b>	(0.01)	
<b>Other long term benefits</b>	0.03	
<b>Total</b>	<b>3.49</b>	<b>3.28</b>

# Since actuarial valuation of employee benefit expenses under post-employment benefits and other long-term benefits are done on an overall basis for all employees, these expenses for the key managerial persons is considered on a proportionate basis.

##### Loans / advances due from Key Managerial Personnel

Particulars	As at 31.03.2018	As at 31.03.2017
Outstanding at the end of the year	0.01	0.04
Maximum amount due at any time during the year	0.07	0.09

#### II. Joint Venture Companies

During the year the company has made following transaction with the JVs.

Amount in Rs. Crore

Name of JV	Nature of Transaction	Year ended 31.03.2018	Year ended 31.03.2017
Angul Aluminium Park Pvt Ltd.	Equity Contribution (rights issue)	1.52	—
Angul Aluminium Park Pvt Ltd.	Equity Contribution ( share application money)	—	13.71
NPCIL-NALCO power company Ltd		—	—
GACL NALCO Alkalies & Chemicals Limited	Equity Contribution (preferential issue)	48.53	—
GACL NALCO Alkalies & Chemicals Limited	Equity Contribution (rights issue)	28.00	—
GACL NALCO Alkalies & Chemicals Limited	Equity Contribution ( share application money)	—	22.8
GACL NALCO Alkalies & Chemicals Limited	Receivable- man power assistance	0.03	0.24

##### Balance at the end of the reporting day

Name of JV	Nature of Transaction	As at 31.03.2018	As at 31.03.2017
Angul Aluminium Park Pvt Ltd.	Investment in equity	16.22	14.7
NPCIL-NALCO power company Ltd	Investment in equity	0.03	0.03
GACL NALCO Alkalies & Chemicals Limited	Investment in equity	101.33	24.8
GACL NALCO Alkalies & Chemicals Limited	Receivable- Man power assistance	51.33	0.47

Note: Investment in Equity in M/s Angul Aluminium Park Pvt. Ltd and M/s GACL NALCO Alkalies & Chemicals Ltd. as on 31.03.2017 includes share application money of Rs.13.71 Crore and Rs.22.80 crore respectively.





Amount in Rs. Crore

III. Post Employment Benefit Plan

Transactions during the year

Name of Trust	Nature of Transaction	Year ended 31.03.2018	Year ended 31.03.2017
NEPF Trust	PF-Contribution	332.99	95.79
NEGG Trust	Funding of shortfall	12.6	8.46

Outstanding balance at the end of the year

Name of Trust	Nature of Transaction	As at 31.03.2018	As at 31.03.2017
NEPF Trust	PF-Contribution payable	38.45	21.2
NEGG Trust	Funding of shortfall payable	271.05	12.08

IV. Nalco Foundation

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
Contribution to CSR Trust	21.50	7.00

V. Govt. Of India : Transaction during the year

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
Buyback of shares	—	2835.00
Interim Dividend-2017-18	546.947	—
Final Dividend-2015-16	—	108.11
Interim Dividend-2016-17	—	403.62

VI. CPSEs/ Govt Undertakings – Transaction during the year

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
Purchase of goods and services from CPSEs/ Govt undertakings	2747.9	1392.11
Sale of goods to CPSEs and Govt undertakings	1147.49	1016.21

Outstanding balance at the end of the year

Particulars	As at 31.03.2018	As at 31.03.2017
Payable for purchase of goods and services from CPSEs/ Govt. undertakings	195.03	92.3
Receivable for sale of goods to CPSEs and Govt. undertakings	—	0.41

39. Regrouping of previous year's figures

Previous year's figures have been regrouped/rearranged wherever necessary to make them comparable

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA B K Sarawagi)  
Partner (M. No.:054894)

(CA Rajendra Patro)  
Partner (M. No.:019423)

Place: Bhubaneswar

Date: May 26, 2018



## INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF NATIONAL ALUMINIUM COMPANY LIMITED

### Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of **National Aluminium Company Limited** (hereinafter referred to as “the Company”) and its associate and jointly controlled entities, which comprises the Consolidated Balance Sheet as at 31<sup>st</sup> March, 2018, Consolidated Statement of Profit and Loss (including Other Comprehensive Income), the Consolidated Statement of Cash Flows and the Consolidated Statement of Changes in Equity for the year then ended, and a summary of the significant accounting policies and other explanatory information (hereinafter referred to as “consolidated financial statements”).

#### Management's Responsibility for the Consolidated Financial Statements

The Company's board of directors is responsible for the preparation of these consolidated financial statements in terms of the requirements of the Companies Act, 2013 (hereinafter referred to as “the Act”) that give a true and fair view of the consolidated financial position, consolidated financial performance including other comprehensive income, consolidated cash flows and consolidated changes in equity of the Company including its associate and jointly controlled entities in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under Section 133 of the Act, read with relevant rules made thereunder.

The respective board of the Company and its associate and jointly controlled entities are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding their assets 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 the 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.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. While conducting the audit, we have taken into account the provisions of the Act, the accounting and auditing standards and matters, which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the company's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by company's board of directors, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence obtained by us is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements.

#### Opinion

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 Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Company including its associate and jointly controlled entities, as at 31<sup>st</sup> March, 2018 and their consolidated profit including other comprehensive income, their consolidated cash flows and the consolidated changes in equity for the year then ended.

#### Other Matter

The consolidated financial statements include the Company's share of net loss of Rs.0.22 crore for the year ended 31<sup>st</sup> March, 2018, in respect of the



associate and jointly controlled entities, whose financial statements have not been audited by us. These financial statements have been audited by other auditors whose reports have been furnished to us and our opinion on the consolidated financial statements, in so far as it relates to the amounts and disclosures included in respect of these associate and jointly controlled entities, and our report in terms of Sub-sections (3) and (11) of Section 143 of the Act, in so far as it relates to these associate and jointly controlled entities, 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 matter with respect to our reliance on the work done and reports of the other auditors.

#### Report on Other Legal and Regulatory Requirements

1. In compliance to directions of the Comptroller and Auditor General of India u/s.143(5) of the Act, we give in Annexure “A” to this report a statement on the matters specified therein.
2. 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 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, 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 Accounting Standards specified under Section 133 of the Act, read with relevant rules made thereunder.
  - 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 and on the basis of the reports of the statutory auditors of its associate and jointly controlled entities incorporated in India, none of the director of these associate and jointly controlled entities is disqualified as on 31st March, 2018 from being appointed as a director in terms of Section 164 (2) of the Act.
  - f. With respect to the adequacy of the internal financial controls over financial reporting of the Company including its associate and jointly controlled entities and the operating effectiveness of such controls, refer to our separate report in Annexure “B”.
  - g. 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 consolidated financial statements disclose pending litigations of the Company including its associate and jointly controlled entities - Refer Note 25 to the consolidated financial statements, the impact of which on the consolidated financial position is not ascertainable as the matters are sub-judice ;
    - ii. the Company including its associate and jointly controlled entities did not have any material foreseeable losses on long-term contracts including derivative contracts;
    - iii. there has been no delay in transferring amounts, required to be transferred to the Investor Education and Protection Fund by the Company.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No.054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423



**ANNEXURE TO THE INDEPENDENT AUDITORS' REPORT ON  
CONSOLIDATED IND AS FINANCIAL STATEMENTS FOR THE YEAR ENDED  
31<sup>ST</sup> MARCH 2018 OF NATIONAL ALUMINIUM COMPANY LIMITED**

ANNEXURE "A"

(Referred to in paragraph 1 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 by the Comptroller & Auditor General of India

1. According to the information and explanations given to us by the management and on the basis of our examination of books and records of the Company and reports of the other auditors and information furnished by the management of associate and jointly controlled entities as the case may be, we report that:

- (i) The Company including its associate and jointly controlled entities have clear title/lease deeds for freehold and leasehold land respectively wherever the title/lease deeds are executed. There are 66.92 acres of freehold and 2244.55 acres of leasehold land out of 8022.63 acres of freehold and 9878.52 acres of leasehold land in respect of which the title/lease deeds are not yet executed. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land.
- (ii) There are 7 cases of write-off of advances, debtors and claims amounting to Rs.31.98 lacs as detailed below. The reason of write-off, as explained to us, is that these are old balances lying unadjusted / unrealized for a long time, have become time-barred and chances of recovery / adjustments are remote.

Types of write-off / waiver	No. of cases	Amount in Rs. Lacs
Advances	1	0.22
Claims	6	31.76
<b>Total</b>	<b>7</b>	<b>31.98</b>

- (iii) (a) Proper records are maintained by the Company including its associate and jointly controlled entities for inventories lying with third parties.
- (b) The Company including its associate and jointly controlled entities have not received any asset as gift/grant(s) from Government or other authorities during the year.

2. Our reports under Section 143(5) of the Act on the consolidated financial statements of National Aluminium Co. Ltd., in so far as it relates to the associate and jointly controlled entities of the Company, is based on the corresponding reports of the auditors of such associate and jointly controlled entities (hereinabove mentioned as the "other auditors") and information furnished by the management of such associate and jointly controlled entities. The Company has one associate and two jointly controlled entities. As informed to us, GACL-NALCO Alkalies & Chemicals Pvt. Ltd., a jointly controlled entity of the Company, is not a Government company and hence Section 143(5) is not applicable to it.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No. 054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423



## ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31<sup>ST</sup> MARCH, 2018 OF NATIONAL ALUMINIUM COMPANY LIMITED

ANNEXURE "B"

### 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 March 31, 2018, we have audited the internal financial controls over financial reporting of NATIONAL ALUMINIUM COMPANY LIMITED (hereinafter referred to as "the Company") and its associate and jointly controlled entities, 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 its associate and jointly controlled entities 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 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 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

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 deemed to be 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 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 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 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 associate and jointly controlled entities, 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, 2018, 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.

### Other Matters

Our aforesaid reports 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 associate and jointly controlled entities, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies.

**For Guha Nandi & Co.**  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No. 054894

Place : Bhubaneswar  
Date : 26.05.2018

**For Patro & Co.**  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423



**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,  
BHUBANESWAR FOR THE YEAR ENDED 31 MARCH 2018.**

The preparation of consolidated financial statements of National Aluminium Company Limited for the year ended 31 March 2018 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 auditors appointed by the Comptroller and Auditor General of India under Section 139(5) read with Section 129(4) of the Act are responsible for expressing opinion on the 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 26 May, 2018.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 143(6)(a) read with Section 129(4) of the Act of the consolidated financial statements of National Aluminium Company Limited for the year ended 31 March, 2018. We conducted a supplementary audit of the financial statements of National Aluminium Company Limited, but did not conduct supplementary audit of the financial statements of its associate companies NPCIL-NALCO Power Company Limited and Angul Aluminium Park Private Limited for the year ended on that date. Further, Section 139(5) and 143(6)(a) of the Act are not applicable to its associate company GACL-NALCO Alkalies & Chemicals Private Limited being private entity for appointment of their Statutory Auditor nor for conduct of supplementary audit. Accordingly, C&AG 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 audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to statutory auditors' report.

**For and on the behalf of the  
Comptroller & Auditor General of India**

(Suparna Deb)

**Director General of Commercial Audit  
& Ex-officio Member, Audit Board-I, Kolkata**

Place : Kolkata

Date : 29 June 2018



## CONSOLIDATED BALANCE SHEET AS AT MARCH 31, 2018

Amount in Rs. Crore

Particulars	Notes	As at 31.03.2018	As at 31.03.2017
<b>Assets</b>			
<b>(1) Non-current assets</b>			
(a) Property, plant and equipment	5	7,019.38	7,018.63
(b) Capital work-in-progress	6	825.83	514.65
(c) Intangible assets	7	120.08	125.80
(d) Intangible assets under development	8	89.39	51.35
(e) Financial assets			
(i) Investments	9	116.75	38.91
(ii) Trade receivables	10	—	—
(iii) Loans	11	74.96	80.60
(iv) Other financial assets	12	13.14	10.77
(f) Other non-current assets	14	739.51	1,004.51
<b>Total non-current assets</b>		<b>8,999.04</b>	<b>8,845.22</b>
<b>(2) Current assets</b>			
(a) Inventories	15	1,194.08	1,155.93
(b) Financial assets			
(i) Investments	9	592.96	1,221.13
(ii) Trade receivables	10	258.13	184.25
(iii) Cash and cash equivalents	16	25.35	24.83
(iv) Bank balances other than (iii) above	16	2,743.60	2,262.40
(v) Loans	11	29.29	36.70
(vi) Other financial assets	12	152.55	156.49
(c) Current tax assets (Net)	13	32.13	34.12
(d) Other current assets	14	585.81	579.94
<b>Total current assets</b>		<b>5,613.90</b>	<b>5,655.79</b>
<b>Total assets</b>		<b>14,612.94</b>	<b>14,501.01</b>
<b>Equity and liabilities</b>			
<b>(1) Equity</b>			
(a) Equity share capital	17	966.46	966.46
(b) Other equity	18	9,537.49	9,238.69
<b>Total equity</b>		<b>10,503.95</b>	<b>10,205.15</b>
<b>Liabilities</b>			
<b>(2) Non-current liabilities</b>			
(a) Financial liabilities			
(i) Trade payables	20	15.63	19.61
(ii) Other financial liabilities	21	2.85	2.36
(b) Provisions	22	436.09	328.11
(c) Deferred tax liabilities (Net)	23	1,151.45	1,245.58
(d) Other non-current liabilities	24	62.04	48.27
<b>Total non-current liabilities</b>		<b>1,668.06</b>	<b>1,643.93</b>
<b>(3) Current liabilities</b>			
(a) Financial liabilities			
(i) Borrowings	19	44.99	51.09
(ii) Trade payables	20	961.74	844.46
(iii) Other financial liabilities	21	512.87	469.10
(b) Other current liabilities	24	545.45	1,170.21
(c) Provisions	22	375.88	117.07
<b>Total current liabilities</b>		<b>2,440.93</b>	<b>2,651.93</b>
<b>Total liabilities</b>		<b>4,108.99</b>	<b>4,295.86</b>
<b>Total equity and liabilities</b>		<b>14,612.94</b>	<b>14,501.01</b>

See accompanying notes (1-41) to the financial statements

For and on behalf of Board of Directors

(CS. N K Mohanty)  
(Company Secretary)

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.:054894)

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.: 019423)

Place : Bhubaneswar

Date : May 26, 2018



# CONSOLIDATED STATEMENT OF PROFIT AND LOSS FOR THE PERIOD ENDED MARCH 31, 2018



Amount in Rs. Crore

	Notes	Year ended 31.03.2018	Year ended 31.03.2017
I Revenue from operations	27	9,618.31	8,050.02
II Other Income	28	299.65	408.27
<b>III Total Income (I + II)</b>		<b>9,917.96</b>	<b>8,458.29</b>
<b>IV EXPENSES</b>			
(a) Cost of raw materials consumed	29	1,465.31	1,181.79
(b) Cost of power and fuel consumed	29	2,747.92	2,212.53
(c) Changes in inventories of finished goods and work-in-progress	30	47.43	(96.59)
(d) Employee benefits expenses	31	2,261.20	1,537.44
(e) Finance costs		1.95	2.69
(f) Depreciation and amortisation expenses	5 & 7	480.40	480.36
(g) Excise duty		108.86	506.98
(h) Other expenses	32	1,590.14	1,628.22
<b>Total expenses (IV)</b>		<b>8,703.21</b>	<b>7,453.42</b>
<b>V Profit/(loss) before exceptional items and tax (III - IV)</b>		<b>1,214.75</b>	<b>1,004.87</b>
VI Exceptional Items	33	(824.08)	40.15
VII Share of Profit/(loss) of Joint Ventures		(0.22)	(0.81)
VIII Profit/(loss) before tax (V -VI+ VII)		2,038.61	963.91
<b>IX Tax Expense</b>			
(1) Current tax	34	793.18	219.52
(2) Deferred tax	34	(96.76)	76.67
<b>X Profit/(loss) for the period (VIII - IX)</b>		<b>1,342.19</b>	<b>667.72</b>
<b>XI Other comprehensive income</b>			
(i) Items that will not be reclassified to profit or loss - Remeasurement gains / (losses) on defined benefit plans		52.66	13.88
(ii) Income tax relating to items that will not be reclassified to profit or loss	34	2.63	4.80
<b>Other comprehensive income for the period(net of tax) (XI)</b>		<b>50.03</b>	<b>9.08</b>
<b>XII Total comprehensive income for the period (X+XI) (comprising profit/(loss) and other comprehensive income for the period)</b>		<b>1,392.22</b>	<b>676.80</b>
<b>XIII Earnings per equity share:</b>			
(1) Basic (in Rs.)	36	6.94	2.97
(2) Diluted (in Rs.)	36	6.94	2.97

See accompanying notes (1-41) to the financial statements

(CS. N K Mohanty)  
(Company Secretary)

For and on behalf of Board of Directors

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

In terms of our attached report of even date.

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA B K Sarawagi)  
Partner (M. No.: 054894)

(CA Rajendra Patro)  
Partner (M. No.: 019423)

Place : Bhubaneswar  
Date : May 26, 2018



## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE PERIOD ENDED MARCH 31, 2018

Amount in Rs. Crore

### A. Equity share capital

Balance as at 31.03.2016	1,288.62
Changes in equity share capital during the year	
Buy-back of equity shares	(322.16)
<b>Balance as at 31.03.2017</b>	<b>966.46</b>
Changes in equity share capital during the year	—
<b>Balance as at 31.03.2018</b>	<b>966.46</b>

### B. Other equity

Amount in Rs. Crore

Other equity	Reserves and surplus			Total
	Capital redemption reserve	General reserve	Retained earnings	
Balance as at 31.03.2016	—	11,461.22	445.08	11,906.30
Profit for the year	—	—	667.72	667.72
Other comprehensive income (net of taxes)	—	—	9.08	9.08
<b>Total comprehensive income for the year</b>	<b>—</b>	<b>—</b>	<b>676.80</b>	<b>676.80</b>
Premium on Buy-back of equity shares	—	(2,512.81)	—	(2,512.81)
Expenses on Buy-back of equity shares	—	(5.72)	—	(5.72)
Transfer of general reserve to Capital redemption reserve	322.16	(322.16)	—	—
Final dividend for previous year	—	—	(144.97)	(144.97)
Tax on final dividend for previous year	—	—	(29.51)	(29.51)
Interim dividend for the year	—	—	(541.22)	(541.22)
Tax on interim dividend for the year	—	—	(110.18)	(110.18)
<b>Balance as at 31.03.2017</b>	<b>322.16</b>	<b>8,620.53</b>	<b>296.00</b>	<b>9,238.69</b>
Profit for the year	—	—	1,342.19	1,342.19
Other comprehensive income (net of taxes)	—	—	50.03	50.03
<b>Total comprehensive income for the year</b>	<b>—</b>	<b>—</b>	<b>1,392.22</b>	<b>1,392.22</b>
Interim dividend for the year	—	—	(908.48)	(908.48)
Tax on interim dividend for the year	—	—	(184.94)	(184.94)
<b>Balance as at 31.03.2018</b>	<b>322.16</b>	<b>8,620.53</b>	<b>594.80</b>	<b>9,537.49</b>

For and on behalf of Board of Directors

(CS. N K Mohanty)  
(Company Secretary)

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.:054894)

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.: 019423)

Place : Bhubaneswar  
Date : May 26, 2018



## CONSOLIDATED CASH FLOW STATEMENT FOR THE YEAR ENDED MARCH 31, 2018

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>A. Cash flows from operating activities</b>		
<b>Profit for the period</b>	<b>1,342.19</b>	<b>667.72</b>
Adjustments for:		
Income tax expense recognised in profit or loss	696.42	296.19
Share of profit of Associates	—	—
Share of profit of Joint Ventures	0.22	0.81
Finance costs recognised in profit or loss	1.95	2.69
Interest income recognised in profit or loss	(184.79)	(292.64)
Dividend income recognised in profit or loss	(33.65)	(8.78)
Net (gain) / loss on sale of non—current investments	(13.91)	—
Net (gain) / loss on disposal of property, plant and equipment	(0.44)	(0.10)
Net (gain) / loss arising on financial assets mandatorily measured at fair value through profit or loss	(2.96)	(77.81)
Impairment loss recognised on other assets	13.43	56.93
Inventories of stores, spares written off	15.98	27.96
Depreciation and amortisation of non—current assets	480.40	480.36
Net foreign exchange (gain)/loss	2.55	7.90
<b>Operating profit before working capital changes</b>	<b>2,317.39</b>	<b>1,161.23</b>
Movements in working capital:		
(Increase) / decrease in inventories	(54.62)	(129.56)
(Increase) / decrease in trade receivables	(73.88)	50.96
(Increase) / decrease in loans and other financial asset	14.62	17.75
(Increase) / decrease in other assets	(23.02)	(49.52)
Increase / (decrease) in trade payables	110.75	200.31
Increase / (decrease) in other financial liabilities	6.25	21.25
Increase / (decrease) in other liabilities	(766.01)	315.21
Increase / (decrease) in provisions	417.56	66.74
<b>Cash (used in) / generated from operations</b>	<b>1,949.04</b>	<b>1,654.37</b>
Income taxes paid	(482.49)	(218.43)
<b>Net cash flow from operating activities</b>	<b>1,466.55</b>	<b>1,435.94</b>
<b>B. Cash flows from investing activities</b>		
Payments to acquire financial assets	(420.00)	(184.00)
Proceeds from sale of financial assets	1,065.03	49.96
Payments to acquire equity in joint ventures and associates	(78.05)	(38.47)
Investment in term deposits with banks	(326.27)	2,183.02
Dividends received from other investments	33.65	8.78
Interest received from banks and others	184.79	292.64
Payments for property, plant and equipment (including capital advances)	(790.78)	(757.98)
Proceeds from disposal of property, plant and equipment	11.82	16.53
Payments for other intangible assets	(46.57)	(20.14)
<b>Net cash flow from investing activities</b>	<b>(366.38)</b>	<b>1,550.34</b>
<b>C. Cash flows from financing activities</b>		
Payments for buy—back of equity shares	—	(2,834.97)
Payments for share buy—back costs	—	(5.72)
Proceeds from short term borrowings	(6.10)	51.09
Finance cost paid	(0.13)	(0.39)
Dividends paid on equity shares	(908.48)	(686.19)
Tax on dividends paid on equity shares	(184.94)	(139.69)
<b>Net cash flow from financing activities</b>	<b>(1,099.65)</b>	<b>(3,615.87)</b>
<b>Net increase or (decrease) in cash or cash equivalents</b>	<b>0.52</b>	<b>(629.59)</b>
<b>Cash and cash equivalents at the beginning of the year</b>	<b>24.83</b>	<b>654.42</b>
<b>Cash and cash equivalents at the end of the year [refer note 16.A]</b>	<b>25.35</b>	<b>24.83</b>

**Note:**

Figures in the brackets are cash outflow/income as the case may be.

For and on behalf of Board of Directors

(CS. N K Mohanty)  
(Company Secretary)

(K C Samal)  
Director (Finance)  
DIN: 03618709

(Dr. T K Chand)  
Chairman-Cum-Managing Director  
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.  
Chartered Accountants  
FRN-302039E

(CA B K Sarawagi)  
Partner (M. No.: 054894)

For Patro & Co.  
Chartered Accountants  
FRN-310100E

(CA Rajendra Patro)  
Partner (M. No.: 019423)

Place : Bhubaneswar  
Date : May 26, 2018



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 1 - Corporate Background

National Aluminium Company Limited is a Navranta Company, a Central Public Sector Enterprise under Ministry of Mines, Government of India, incorporated under the relevant provisions of the Companies Act and is listed in the stock exchanges in India. The Company is engaged in the business of manufacturing and selling of Alumina and Aluminium. The Company is operating a 22.75 lakh TPA Alumina Refinery plant located at Damanjodi in Koraput district of Odisha and 4.60 lakh TPA 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. 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 (Jaisalmer & Devikot) and Maharashtra (Sangli) to harness the renewable energy and to comply with its Renewable Purchase Obligation.

National Aluminium Company Limited, its associate NPCIL-NALCO Power Company Ltd, Joint venture Companies Angul Aluminium Park Pvt. Ltd. and Gujarat Alkalies & Chemicals Pvt Ltd constitute the Group. The consolidated financial statement of the Group includes consolidated Balance sheet as on 31.03.2018, consolidated statement of profit & loss for the period ended 31.03.2018, consolidated cash flow statement and consolidated statement of change in equity for the period ended 31.03.2018.

### Note No.2 Statement of Compliance:

All the Indian Accounting Standards issued and notified by the Ministry of Corporate Affairs under the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and are applicable for the year and relevant to the Group have been taken into consideration and complied with, without any exception while preparing the consolidated financial statements of the Group.

### Note No.3 Significant Accounting Policies:

#### 3.1 Basis of preparation

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

The financial statements have been prepared on historical cost basis, except for 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 Group's operating cycle and other criteria set out in Schedule-III of the Companies Act 2013. Based upon the nature of business, the Group has ascertained a 12 month operating cycle for the purpose of current or non-current classification of assets and liabilities.

#### 3.2 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.

#### 3.3 Investments 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. 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 Group'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 Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognizing its share of further losses. Additional losses are recognised only to the extent that the Group 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 Group'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 Group'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 Group 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 Group'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.

The Group discontinues the use of the equity method 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 Group retains an interest in the former associate or joint venture and the retained interest is a financial asset, the Group 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 Group 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 Group continues to use the equity method 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 Group reduces its ownership interest in an associate or a joint venture but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognised in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

### 3.4 Property, Plant and Equipment

Property, plant and equipment, other than freehold lands, held for use in the production and/or supply of goods or services, or for administrative purposes, are stated at cost, less accumulated depreciation and accumulated impairment losses. Freehold lands, unless impaired, are stated at cost.

#### 3.4.1 Initial Measurement

The initial cost comprises purchase price, 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.

Spare parts having unit value of more than Rs.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 Rs.1 lakh is also recognised as Property, Plant and Equipment.

#### 3.4.2 Subsequent expenditure

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 Group over a period of more than one year, are capitalised and the carrying amount of the identifiable parts so replaced is derecognised.

#### 3.4.3 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.

#### 3.4.4 Depreciation and amortisation

Depreciation on assets 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.

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 Group has chosen a benchmark of Rs.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 are reviewed at each year end and the effect of change, if any, is accounted for prospectively.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the purpose of depreciation of assets, useful lives of -

- immovable property, plant and equipment at bauxite mines is up to the lease period of the mines;
- captive thermal power generation plant namely Captive Power Plant(CPP)is considered to be 30 years;
- Steam Power Plant (SPP) is considered to be 25 years.
- Red Mud Ponds and Ash Ponds at Alumina Refinery and Ash Ponds at CPP are based on their estimated remaining useful lives evaluated on the basis of technical estimates made periodically.
- 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.

Assets laid on land not owned by the Group are depreciated over a period of five years 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 Rs.10,000/- or less are depreciated fully in the year in which they are put to use.

Property, plant and equipment other than mentioned above are subject to the following useful lives.

Sl.No.	Particulars of asset category (Property, Plant & Equipment)	Range of useful life in years
1	Buildings	30-60
2	Plant and machinery	15-40
3	Vehicles	08 - 10
4	Furniture and fixtures	08 - 10
5	Computer equipment	06

### 3.4.5 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. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

### 3.4.6 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:

- it is probable that the future economic benefit associated with the stripping activity will be realised;
- the component of the ore body for which access has been improved can be identified; and
- 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.

## 3.5 Intangible Assets

### 3.5.1 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.

### 3.5.2 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.

### 3.5.3 Mining Rights

The costs of mining rights include amounts paid towards Net Present Value (NPV) and upfront money as determined by the regulatory authorities.

Cost of mining rights are amortised over the total estimated remaining commercial reserves of mining property and are subject to impairment loss.

### 3.5.4 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.



### 3.5.5 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.

### 3.5.6 Software

Operating software acquired separately (RDBMS, Sybase, ERP/SAP) are capitalised as software.

### 3.5.7 License and Franchise

Amount of expenditure incurred for obtaining license for use of technology is capitalised under the head "License and Franchise".

### 3.5.8 De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from its use. Gains or losses arising from disposal/de-recognition are recognised in the statement of profit and loss.

### 3.5.9 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 a period of 10 years from the date of commissioning.

### 3.6 Impairment of tangible and intangible 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.

### 3.7 Functional & Foreign Currencies

Items included in the financial statements are measured using the currency of the primary economic environment i.e. Indian Rupee in which the Company operates.

In preparing the financial statements, transactions in foreign currencies i.e. currencies other than the entity's functional currency 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.

### 3.8 Provisions and contingencies

#### 3.8.1 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.

#### 3.8.2 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 Group has recognised the obligated restoration, rehabilitation and decommissioning liability as per statutory mandate.

Net present value of such costs are provided for and a corresponding amount is capitalised at the commencement of each project. 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.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 3.8.3 Environmental liabilities

Environmental liabilities are recognised when the Group become obliged, legally or constructively to rectify environmental damage or perform remedial work.

### 3.8.4 Legal Obligations

Provision is recognised once it has been established that the Group has a present obligation based on consideration of the information which becomes available up to the date of reporting.

### 3.8.5 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 Group 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.

### 3.8.6 Contingent Assets

Contingent assets are not recognised in the financial statement, but are disclosed where inflow of economic benefits is probable.

### 3.9 Leases

At the inception of a lease, the lease arrangement is classified as either a finance lease or an operating lease, based on the substance of the lease arrangement.

#### 3.9.1 Assets taken on finance lease

Financial leases are those that transfer substantially all the risks and rewards incidental to ownership of the asset to the lessee.

Finance leases are capitalised at the commencement of lease, at the lower of the fair value of the property or the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income over the period of the lease.

#### 3.9.2 Assets taken on operating lease

Leases other than finance leases are operating leases, and the leased assets are not recognised in the Group's balance sheet. Upfront lease payments, if any, made under operating leases are apportioned and recognised in the statement of profit and loss over the term of the lease. Rent and maintenance charges paid for assets/facilities taken on operating leases are charged to revenue in the period in which they arise.

### 3.10 Inventories

Inventory of raw material, including bulk material such as coal and fuel oil are valued at the lower of cost net of tax credit wherever applicable and net realisable value.

Stores and spares other than those meeting the criteria for recognition as Property, Plant and Equipment are valued at cost net of tax credit wherever applicable.

Stores and spares (other than major spares considered as Property, Plant and Equipment) 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.

Cost of raw materials, stores and spares as stated above are determined on moving weighted average price.

Inventories of finished goods, semi-finished goods, intermediary products and work-in-process including process scrap are valued at lower of cost and net realisable value. Cost is generally determined at moving weighted average price of materials, appropriate share of labour and related overheads. 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.

Inventory of scraps internally generated are valued at net realisable value.

### 3.11 Trade receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the outstanding is due for payment within a period 12 months or less from the reporting date, they are classified as current assets otherwise as non-current assets.

Trade receivables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

### 3.12 Financial Instruments

Financial assets and liabilities are recognised when the Group 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. Cash or Cash Equivalent

The Group considers all short-term bank deposits having a maturity period of three months or less as cash & cash equivalent. Term deposits in Bank with a maturity period of more than 3 months are considered as other Bank Balance.

### b. 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.

### c. 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.

### d. 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 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.

## 3.12.3 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.

## 3.12.4 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.

## 3.12.5 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.

## 3.13 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.

## 3.14 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. All other borrowing cost is recognised in profit or loss in the period in which they are incurred.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 3.15 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 Group 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.

### 3.16 Employee Benefits

#### 3.16.1 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.

#### 3.16.2 Post-employment and long term employee benefits

##### 3.16.2.1 Defined contribution plans

A defined contribution plan is plan under which fixed contributions are paid to a separate entity. Contributions to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them for such contributions.

##### 3.16.2.2 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. Re-measurement gains and losses of the net defined benefit liability are recognised immediately in other comprehensive income. 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,

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.

#### 3.16.3 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.

### 3.17 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenues are reduced by the estimated rebates and other similar allowances.

#### 3.17.1 Sales of Goods

Revenue is recognised when all the following criteria are satisfied:

- (a) significant risks and rewards of ownership has been transferred to the customer;
- (b) there is no continuing management involvement with the goods usually associated with ownership, nor effective control over the goods sold has been retained;
- (c) the amount of revenue can be measured reliably; and
- (d) it is probable that the economic benefits associated with the transaction will flow to the Group.

#### 3.17.2 Sale of Energy

Sale of wind power is recognised on the basis of energy transmitted to DISCOMs at the price notified by respective authorities.

Sale of power from captive power plant is considered on the basis of quantity injected to state GRID excluding wheeling to Refinery but including inadvertent energy injection, at the price notified by appropriate authority.

Revenue from 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 Group; and
- (c) recovery of the consideration is assured reasonably.



### 3.17.3 Income from dividend and interest

#### 3.17.3.1 Dividend

Dividend income from investments is recognised when the right to receive the dividend is established.

#### 3.17.3.2 Interest

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Group 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.

#### 3.17.3.3 Income from Incentives from Government Agencies

Incentives from government agencies in the nature of duty draw back and Merchandise Export from India Scheme (MEIS) on exports and incentives on generation of renewable sources of energy are recognised as per the relevant statute on compliance of the conditions provided thereunder.

### 3.18 Income Taxes

Tax expense represents the sum of current tax and deferred tax.

#### 3.18.1 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.

#### 3.18.2 Deferred taxes

Deferred tax expense or income is recognised on temporary difference between the carrying amount of assets and liabilities in the financial statements 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

#### 3.19 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 Group.

#### 3.20 Cash flow statement

Cash flow statement is prepared in accordance with indirect method prescribed in Ind AS 7 'Statement of Cash Flows'.

#### 3.21 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 Rs.50 crore.

### 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 Group's accounting policies that have the most significant effect on the amounts recognised in the financial statements, management has decided that reporting of Group's financial assets at amortised cost would be appropriate in the light of its business model and have confirmed the Group's positive intention and ability to hold these financial assets to collect contractual cash flows.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 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 Group 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 Group 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 measurements and valuation processes

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 Group 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 Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>Carrying amount of:</b>		
Freehold land	84.33	84.33
Buildings	591.68	564.63
Plant and equipment	6,245.74	6,300.69
Furniture and fixtures	8.91	7.65
Office equipments	23.64	7.32
Vehicles	13.06	8.93
Railway sidings	52.02	45.08
	<b>7,019.38</b>	<b>7,018.63</b>

	Freehold land	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
<b>Cost or deemed cost</b>								
<b>Balance as at 31.03.2016</b>	71.33	597.24	6,113.86	9.47	11.45	12.73	53.68	6,869.76
Additions	13.03	41.27	982.44	2.62	4.18	1.81	—	1,045.35
Disposals	(0.03)	—	(17.38)	(0.06)	(0.12)	(0.10)	—	(17.69)
<b>Balance as at 31.03.2017</b>	<b>84.33</b>	<b>638.51</b>	<b>7,078.92</b>	<b>12.03</b>	<b>15.51</b>	<b>14.44</b>	<b>53.68</b>	<b>7,897.42</b>
Additions		63.78	372.57	3.97	20.54	6.75	10.67	478.28
Disposals		(0.03)	(33.06)	(0.04)	(0.03)	(33.16)		
<b>Balance as at 31.3.2018</b>	<b>84.33</b>	<b>702.26</b>	<b>7,418.43</b>	<b>16.00</b>	<b>36.01</b>	<b>21.16</b>	<b>64.35</b>	<b>8,342.54</b>
<b>Accumulated depreciation and impairment</b>								
<b>Balance as at 31.03.2016</b>	—	36.76	361.91	2.04	4.48	2.97	4.53	412.69
Depreciation Expense	—	37.12	417.45	2.38	3.79	2.55	4.07	467.36
Disposals	—	—	(1.13)	(0.04)	(0.08)	(0.01)	—	(1.26)
<b>Balance as at 31.03.2017</b>	—	<b>73.88</b>	<b>778.23</b>	<b>4.38</b>	<b>8.19</b>	<b>5.51</b>	<b>8.60</b>	<b>878.79</b>
Depreciation Expense		36.73	416.18	2.71	4.21	2.59	3.73	466.15
Disposals		(0.03)	(21.72)		(0.03)			(21.78)
<b>Balance as at 31.3.2018</b>	—	<b>110.58</b>	<b>1,172.69</b>	<b>7.09</b>	<b>12.37</b>	<b>8.10</b>	<b>12.33</b>	<b>1,323.16</b>

### Notes :

- Title deeds have been executed for freehold land acquired through Govt. of Odisha, except for land measuring 66.92 acres. The Company is in the process of conversion of freehold land for Industrial use and has taken-up matter with Revenue Authorities.
- Registration formalities in respect of office space of 6,459 Sq.ft at Kolkata purchased from Kolkata Municipal Development Authority with a carrying amount of Rs.5.50 crore is under progress.
- During the year the Company has acquired lease hold land of 715.89 acre at a cost of Rs. 105.95 crore for its Coal Mines Division. Being an operating lease, the cost of such acquisition has been recognised as prepaid expenses to be amortised over the period of lease. Besides an amount of Rs. 17.12 crore has been paid towards stamp duty and registration fees for leasehold land for Bauxite mines.

## 6. Capital work-in-progress (CWIP)

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
Capital Work-in-progress	702.91	473.33
Construction materials including in transit	124.16	42.10
	<b>827.07</b>	<b>515.43</b>
Less: Provision for impairment	(1.24)	(0.78)
<b>Total Capital Work-in-progress</b>	<b>825.83</b>	<b>514.65</b>

- The amount of capital work in progress includes an amount of Rs.43.98 crore (previous year Rs.41.40 crore) towards infrastructural development expenditure directly attributable to Coal Mines Division.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 7. Intangible assets

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
<b>Carrying amount of:</b>		
User right	9.99	11.81
Computer software	2.08	1.68
Mining rights [refer note 8.1]	103.58	105.94
Licenses	4.43	6.37
	<b>120.08</b>	<b>125.80</b>

	Amount in Rs. Crore				
	User right	Computer software	Mining rights	Licenses	Total intangible assets
<b>Cost or deemed cost</b>					
Balance as at 31.03.2016	15.43	4.47	121.11	10.25	151.26
Additions	—	0.19	—	—	0.19
Disposals	—	—	—	—	—
Balance as at 31.03.2017	15.43	4.66	121.11	10.25	151.45
Additions	—	2.32	6.21	—	8.53
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.3.2018	15.43	6.98	126.97	10.25	159.63
<b>Accumulated depreciation and impairment</b>					
Balance as at 31.03.2016	1.81	1.56	7.34	1.94	12.65
Depreciation Expense	1.81	1.42	7.83	1.94	13.00
Disposals	—	—	—	—	—
Balance as at 31.03.2017	3.62	2.98	15.17	3.88	25.65
Depreciation Expense	1.82	1.92	8.57	1.94	14.25
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.3.2018	5.44	4.90	23.39	5.82	39.55

#### Notes:

- The Company is operating its mining activities at Panchpatmali bauxite mines based on lease granted by Government of Odisha. In connection with lease renewal, the Company has paid NPV and related payments which is capitalized as intangible assets under Mining Rights and amortized on straight line basis as per the Accounting Policy of the Company.
- User right includes proportionate value of a cluster project i.e. 220 KV substation at Laxmipur, Koraput with equal participation of two more beneficiary companies sharing equal rights to use the facility.

### 8. Intangible assets under development

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
Mining right	39.49	26.34
User rights	49.90	25.01
	<b>89.39</b>	<b>51.35</b>

#### Note:

- Mining right under development constitutes amount paid for allotment of coal blocks.
- User right under development constitutes amount spent for 220 KV transmission line from Refinery plant to 220 KV switching station at Laxmipur, Koraput.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS



## 9. Investments

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>		
<b>A.1 Investments in equity instruments</b>		
<b>A.1.1 Investment in associates</b>		
Unquoted investments		
NPCIL-NALCO Power Company Limited (26,000 shares of Rs. 10 each fully paid up)	0.02	0.02
<b>Total investment in associates</b>	<b>0.02</b>	<b>0.02</b>

### Details of associates

Details of each of the Company's associates at the end of the period are as follows

Name of the associate	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
NPCIL-NALCO Power Company Limited	Development of nuclear power, Kakrapara, Gujarat	26%	26%

Note: The Board of Nuclear Power Corporation of India Limited (NPCIL) and the Board of National Aluminium Company Limited (NALCO) have passed a board resolution in their respective meeting held on Mar 20, 2017 and Mar 2, 2017 to liquidate the associate company. The financial impact of the associate company no longer continuing as a going concern is insignificant.

### Financial Information in respect of individually not material associates

Aggregate information of associates that are not individually material		
The Group's share of profit (loss) for the year	*	*
The Group's share of other Comprehensive income	—	—
The Group's share of total Comprehensive income	*	*

\* Share of loss of the year and profit for the previous year are less than rupees one thousand.

### A.1.2 Investment in joint ventures

Unquoted investments		
Angul Aluminium Park Private Limited (As at 31.03.2018 : 1,62,23,900 shares of Rs. 10 each fully paid-up, as at 31.03.2017: 9,90,000 shares of Rs. 10 each fully paid-up).	16.91	1.36
Share application money for 1,37,10,000 shares of Rs.10 each fully paid.	—	13.71
<b>Total</b>	<b>16.91</b>	<b>15.07</b>
During the year Angul Aluminium Park Private Limited has issued 1,52,33,900 nos. of fully paid equity shares of Rs. 10/- each to the Company.		
GACL-NALCO Alkalies & Chemicals Private Limited (As at 31.03.2018: 10,13,30,934 shares of Rs. 10 each fully paid up, as at 31.03.2017: 20,00,000 shares of Rs. 10 each fully paid up).	99.79	1.00
Share application money for 2,28,00,000 shares of Rs.10 each fully paid.	-	22.80
<b>Total</b>	<b>99.79</b>	<b>23.80</b>
During the year GACL-NALCO Alkalies & Chemicals Private Limited has issued 9,93,30,934 nos. of fully paid equity shares of Rs. 10/- each to the Company.		
<b>Total investment in joint ventures</b>	<b>116.70</b>	<b>38.87</b>

### 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	
(a) Angul Aluminium Park Private Limited	Promoting aluminium specific downstream in Odisha, Bhubaneswar, Odisha.	49.00%	49.50%
(b) GACL-NALCO Alkalies & Chemicals Private Limited	Production of caustic soda, Vadodara, Gujarat.	40.00%	40.00%



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 9. Investments

Amount in Rs. Crore

Financial Information in respect of individually not material associates				
Particulars	GNAL		AAPPL	
	As at 31.03.2018	As at 31.03.2017	As at 31.03.2018	As at 31.03.2017
Non- current assets	210.22	0.55	3.92	1.07
Current asset	47.93	25.94	42.24	36.11
Non- current liabilities	—	—	11.18	20.67
Current liabilities	8.67	1.19	0.45	0.05
<b>The above amounts of assets and liabilities includes the following:</b>				
Cash and cash equivalents	37.87	25.94	0.03	0.02
Current financials liabilities (excluding trade payables and provisions)	1.14	0.03	0.23	0.04
Non- current financials liabilities (excluding trade payables and provisions)	—	—	11.18	20.67
Revenue	2.63	0.11	1.17	0.82
Profit or loss from continuing operations	(1.34)	(2.02)	0.66	0.31
Other comprehensive income for the year	—	—	—	—
Total comprehensive income for the year	(1.34)	(2.02)	0.66	0.31
<b>The above profit / (loss) for the year include the following:</b>				
Depreciation and amortisation	0.01	0.00	—	—
Interest Income	2.63	0.11	1.17	0.82
Interest expenses	—	—	—	—
Income tax expense/(income)	0.73	0.03	0.23	0.14
<b>Reconciliation of the above summarised financial information to the carrying amount of the interest in JVs recognised in the consolidated financial statements:</b>				
Net asset of the Joint Venture	249.48	2.50	34.52	2.75
Proportion of the Group's ownership interest in JV (%)	40%	40%	49%	50%
Proportion of the Group's ownership interest in JV (INR)	99.79	1.00	16.91	1.36
Add:- additional subscription of share warrant/ advance against equity	—	22.80	—	13.71
Add:- goodwill on acquisition	—	—	—	—
Less:- unrealised profit	—	—	—	—
<b>Group's share in the net asset of JV</b>	<b>99.79</b>	<b>23.80</b>	<b>16.91</b>	<b>15.07</b>
<b>Carrying amt of the Group's interest in JV</b>	<b>99.79</b>	<b>23.80</b>	<b>16.91</b>	<b>15.07</b>
<b>A.1.3 Investment in other entities</b>				
<b>Unquoted investments</b>				
Odisha Capital Market & Enterprises Limited. (2,89,000 shares of Rs. 1 each fully paid up)	—	—	0.03	0.03
<b>Total - Investments in other entities</b>	<b>—</b>	<b>—</b>	<b>0.03</b>	<b>0.03</b>
<b>Total - Investments in equity instruments</b>	<b>—</b>	<b>—</b>	<b>116.75</b>	<b>38.91</b>
<b>Total non-current investments</b>	<b>—</b>	<b>—</b>	<b>116.75</b>	<b>38.91</b>
<b>Additional information</b>				
Aggregate book value of quoted investments and market value thereof	—	—	—	—
Aggregate carrying amount of unquoted investments	—	—	116.75	38.91
Aggregate amount of impairment in value of investments	—	—	—	—





## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 9. Investments

Amount in Rs. Crore

B. Current		As at 31.03.2018	As at 31.03.2017
Investments in Mutual Funds	Units in '000	Amount in Rs. Crore	Units in '000
<b>Quoted Investments</b>			
UTI FTIF SERIES XVIII – X			20,000
UTI FTIF SERIES XVIII – XII			40,000
UTI FTIF SERIES XVIII – XIII			40,000
UTI FTIF SERIES XIX – I			25,000
UTI FTIF SERIES XIX – III			75,000
UTI FTIF SERIES XIX – IV			25,000
UTI FTIF SERIES XIX – VI			50,000
UTI FTIF SERIES XIX – VIII			35,000
UTI FTIF SERIES XIX – IX			100,000
UTI FTIF SERIES XIX – X			10,000
UTI FTIF SERIES XIX – XI			60,000
SBI SDFS-366 Days-Series-A-22			50,000
SBI SDFS-366 Days-Series-A-24			50,000
SBI SDFS-366 Days-Series-A-27			30,000
SBI SDFS-366 Days-Series-A-28			50,000
SBI SDFS-366 Days-Series-A-31			40,000
SBI SDFS-366 Days-Series-A-32			35,000
SBI SDFS-366 Days-Series-A-34			25,000
SBI SDFS-366 Days-Series-A-35			50,000
BOI AXA Liquid Fund	899	90.09	499
BOI AXA TA Fund	2,012	202.61	—
Canara Robeco Liquid	747	75.08	298
IDBI Liquid Fund	998	100.06	299
SBI Premier Liquid Fund			299
Union KBC Liquid	450	45.05	300
UTI Money Market Fund	798	80.07	299
<b>Total - Other current Investments</b>		<b>592.96</b>	<b>1,221.13</b>
<b>Additional Information</b>			
Aggregate book value of quoted investments and market value thereof		592.96	1,221.13
Aggregate carrying amount of unquoted investments		—	—
Aggregate amount of impairment in value of investments		—	—

#### Category-wise classification:

	As at 31.03.2018	As at 31.03.2017
Financial assets (quoted investments) mandatorily measured at fair value through profit or loss (FVTPL)	592.96	1,221.13
	<b>592.96</b>	<b>1,221.13</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 10 . Trade receivables

Amount in Rs. Crore

A. Non-current	As at 31.03.2018	As at 31.03.2017
(a) Unsecured, considered good	—	—
(b) Unsecured, considered doubtful	37.11	37.11
Less: Allowance for doubtful debts (expected credit loss allowance)	37.11	37.11
<b>Net non-current trade receivables</b>	<b>—</b>	<b>—</b>
B. Current	As at 31.03.2018	As at 31.03.2017
(a) Unsecured, considered good	258.13	184.25
(b) Unsecured, considered doubtful	—	—
Less: Allowance for doubtful debts	—	—
<b>Net current trade receivables</b>	<b>258.13</b>	<b>184.25</b>

#### Notes:

10.1 The sale of goods (Alumina and Aluminium) is made against either advances received from customer or letter of credit. The advance received from customer is adjusted on supply of material. The average credit period for sale of wind power is 30 days from the date of metering which is considered as collection period. There is no commercial arrangement for sale of inadvertent thermal power generated at captive power plant. It is linked to the wheeling arrangement in view of the plant requirement. The amount receivable on account of such power sale takes a longer period for settlement. There is no receivable for such sale as the cost of purchase for power drawn from the grid to meet production shortfall is substantially higher compared to such sale.

10.2 Customers that individually represent more than 5% of the total trade receivable as on 31.03.2018:

Customers	% of trade receivables	Customer Category
a. HYDRO ALUMINIUM INTERNATIONAL SA	60%	Alumina
b. G-STEELMET PTE LTD	7%	Aluminium
c. RDPPC, DEVIKOT, RAJASTHAN	5%	Wind Power

10.3 The company has used a practical approach by computing the expected credit loss allowance for trade receivable based on a case to case basis. Since there is no credit period for sale of alumina and aluminum and the sale is either made against an advance or backed by letter of credit (LC) given by customers, no provision is made against such receivables. For sale of wind power, although there is no credit arrangement, the Company makes provision for allowances based on credit loss experience and forward looking information.

10.4 Age of receivables

	As at 31.03.2018	As at 31.03.2017
<b>Alumina and Aluminium</b>		
0-30 days	225.30	144.13
More than 30 days	37.11	37.11
	<b>262.41</b>	<b>181.24</b>
<b>Wind Power</b>		
Within the credit period	13.05	6.79
1-30 days past due	2.55	4.84
More than 30 days past due	17.23	28.49
	<b>32.83</b>	<b>40.12</b>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS



		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>11. Loans</b>			
<b>A. Non-current</b>			
(a) Loans to employees			
Secured, considered good		64.44	68.62
Unsecured, considered good		10.12	11.69
(b) Loans to others			
Secured, considered good		0.40	0.29
<b>Total non-current loans</b>		<b>74.96</b>	<b>80.60</b>
<b>B. Current</b>			
(a) Loans to employees			
Secured, considered good		18.74	20.57
Unsecured, considered good		10.27	15.58
(b) Loans to related parties			
Secured, considered good [refer note 11.2]		0.01	0.04
(c) Loans to others			
Secured, considered good		0.27	0.51
<b>Total current loans</b>		<b>29.29</b>	<b>36.70</b>

**Note:**

- 11.1 Loans to employees and others are carried at amortised cost.
- 11.2 The amount of loan outstanding from the related parties is the amount of house building loan taken by the directors of the Company in the capacity of employee prior to their directorship. Further information on these loans is set out in note 38-related party disclosure.

		Amount in Rs. Crore	
		As at 31.03.2018	As at 31.03.2017
<b>12. Other financial assets</b>			
<b>A. Non current</b>			
Security deposits		13.14	10.77
<b>Total other non-current financial assets</b>		<b>13.14</b>	<b>10.77</b>
<b>B. Current</b>			
(a) Security deposits [refer note 12.2]		151.00	151.00
(b) Advances to employees [refer note: 33.2]		—	44.35
(c) Insurance claims receivables and others		10.00	12.66
<b>Gross - other current financial assets</b>		<b>161.00</b>	<b>208.01</b>
<b>Less: Allowance for bad and doubtful other current financial assets</b>			
(a) Advances to employees [refer note: 33.2]		—	44.35
(b) Insurance claims		8.45	7.17
<b>Total allowance for bad and doubtful - other current assets</b>		<b>8.45</b>	<b>51.52</b>
<b>Total other current financial assets</b>		<b>152.55</b>	<b>156.49</b>

**Note:**

- 12.1 Other financial assets are carried at amortised cost.
- 12.2 An amount of Rs. 151 crore deposited with Gujarat Mineral Development Corporation (GMDC) since 2011-12 is due for refund as GMDC has cancelled the plan to set up alumina refinery at Gujarat jointly with the Company. The refund process is initiated by GMDC and is awaiting approval from the Government of Gujarat. No interest claim on the deposit is recognised till it becomes certain that the interest will be realised.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 13. Current tax assets

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
Income tax	32.13	34.12
<b>Total current tax assets</b>	<b>32.13</b>	<b>34.12</b>

### 14. Other assets

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>A. Non-current</b>		
(a) Capital advances	153.83	114.88
(b) Advances other than capital advance:		
Advance with public bodies		
(1) Customs, excise, sales tax, port trusts etc.	230.68	250.27
(2) Deposits with Income Tax Authority	294.80	603.50
(3) Other Government authorities	4.59	4.01
(c) Others		
Prepaid expenses		
(1) Lease-hold land premiums	30.22	5.26
(2) Deferred employee benefits	25.66	26.86
<b>Gross other non-current assets</b>	<b>739.78</b>	<b>1,004.78</b>
<b>Less: Allowance for bad and doubtful for other non-current assets</b>		
(a) Capital advances	0.27	0.27
<b>Total allowance for bad and doubtful other non-current assets</b>	<b>0.27</b>	<b>0.27</b>
<b>Total other non-current assets</b>	<b>739.51</b>	<b>1,004.51</b>

### B. Current

	As at 31.03.2018	As at 31.03.2017
Advances other than capital advances		
(a) Claims with statutory authorities		
(1) Export Incentive Claims	34.23	27.16
(2) Generation Based Incentive on power generated from renewable source and Renewable energy certificates	7.27	4.09
(3) VAT, CENVAT and GST Credit Recoverable	258.27	266.81
(4) Claims receivable from customs, excise and railway authorities	33.62	10.29
(b) Prepaid expenses		
(1) Lease-hold land premiums	113.63	17.39
(2) Deferred employee benefits	4.57	5.37
(3) Other prepaid expenses	4.12	4.43
(c) Gold medallion and stamp in hand	0.07	0.08
(d) Other receivables	1.90	1.70
(e) Other advances		
(i) Advances to employees	23.91	23.06
(ii) Advances to suppliers and service providers	312.51	391.49
(iii) Others	5.72	30.13
<b>Gross other current assets</b>	<b>799.82</b>	<b>782.00</b>
<b>Less: Allowance for bad and doubtful other current assets</b>		
(a) VAT and CENVAT Credit Recoverable	200.27	188.83
(b) Claims receivable from customs, excise and railway authorities	7.74	7.74
(c) Other receivables	0.98	0.38
(d) Advances to suppliers and service providers	2.38	2.45
(e) Others	2.64	2.66
<b>Total allowance for bad and doubtful other current assets</b>	<b>214.01</b>	<b>202.06</b>
<b>Total other current assets</b>	<b>585.81</b>	<b>579.94</b>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS



Amount in Rs. Crore

**Note:**

14.1 The position of prepaid lease premiums on account of acquisition of lease hold land is as below:

	Opening un amortised amount	Lease premium paid during the year	Amortisation during the year	Closing un amortised amount carried forward
Corporate office	1.58	—	0.02	1.56
Bauxite Mines	3.87	17.12	1.29	19.70
Refinery	1.48	—	0.02	1.46
Smelter	1.24	—	0.02	1.22
Coal Mines	—	105.95	—	105.95
WPP	14.48	—	0.52	13.96
	<b>22.65</b>	<b>123.07</b>	<b>1.87</b>	<b>143.85</b>

14.2 Consequent to introduction of Goods and Services Tax Law w.e.f. 01.07.2017, the undisputed amount of indirect tax credit (Cenvat, Service Tax, CVD, OVAT) amounting to Rs. 95.78 crore as on the transition date has been adjusted with the GST liability. The disputed amount of tax credit of pre GST regime aggregating to Rs.209.99 crore is continuing in the books as current assets out of which an amount of Rs. 200.27 crore being doubtful of realisation has been provided for.

## 15. Inventories

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
(a) Raw materials	161.07	75.69
(b) Work-in-progress	284.33	236.37
(c) Carbon Anodes	77.76	93.62
(d) Finished goods	143.21	222.72
(e) Coal and fuel oil	188.64	186.71
(f) Stores and spares	319.48	328.60
(g) Scrap and disposables	19.59	12.22
<b>Total inventories</b>	<b>1,194.08</b>	<b>1,155.93</b>
<b>Included above, goods-in-transit:</b>		
(i) Raw materials	17.23	9.80
(ii) Coal and fuel oil	8.47	32.44
(iii) Stores and spares	12.88	15.81
<b>Total goods-in-transit</b>	<b>38.58</b>	<b>58.05</b>

**Note:**

- 15.1 Cost of inventories recognised as expenses during the year is Rs. 4,143.52 crore (previous year : Rs. 3,403.89 crore).
- 15.2 Cost of inventories recognised as expenses includes Rs. 5.47 crore (previous year: Rs. 13.02 crore) in respect of write-downs of inventory for non-moving items.
- 15.3 Inventories are hypothecated/pledged against cash credit facility.
- 15.4 Method of valuation of inventories is stated in note 3.10 of Significant Accounting Policies.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 16.A. Cash and cash equivalents

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
(a) Balances with banks		
(1) Balance with scheduled banks		
(i) In current account	25.35	24.83
<b>Total cash and cash equivalents</b>	<b>25.35</b>	<b>24.83</b>

### 16.B. Bank balances (other than Cash and cash equivalents)

	As at 31.03.2018	As at 31.03.2017
(a) In deposit account ( having original maturity between 3-12 months)	2,586.88	2,260.61
(b) Earmarked balance with scheduled banks	156.72	1.79
<b>Total other bank balance</b>	<b>2,743.60</b>	<b>2,262.40</b>

**Note:**

16.B.1 Earmarked balance with scheduled banks represents amount deposited towards unclaimed dividend amounting to Rs.1.70 crore and deposit of Rs.155.02 crore (including accrued interest) under court's directive towards disputed electricity duty.

16.B.2 Amount due for credit to Investor's Education and Protection Fund at the end of the current year Rs. Nil. (previous year Rs. Nil)

### 17. Share Capital

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
<b>Authorised share capital:</b>		
6,00,00,00,000 equity shares of Rs. 5 each	3,000.00	3,000.00
	3,000.00	3,000.00
<b>Issued and subscribed capital comprises:</b>		
1,93,29,28,884 fully paid-up equity shares of Rs. 5 each (As at 31.03.2017: 1,93,29,28,884 fully paid-up equity shares of Rs. 5 each)	966.46	966.46
	<b>966.46</b>	<b>966.46</b>

#### 17.1 Reconciliation of the number of equity shares

	Number of shares	Amount Rs. in Crore
Balance as at 31.03.2016	2,57,72,38,512	1,288.62
Buy-back of shares	(64,43,09,628.00)	(322.16)
<b>Balance as at 31.03.2017</b>	<b>19,32,928,884</b>	<b>966.46</b>
Changes during the period	—	—
<b>Balance as at 31.03.2018</b>	<b>19,32,928,884</b>	<b>966.46</b>

- (i) The Company has only one class of equity shares having a par value of Rs. 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) During 2016-17 Company bought back 64,43,09,628 numbers of equity shares of Rs. 5 each which has led to decrease in the equity share capital from Rs. 1,288.62 crore to Rs. 966.46 crore.
- (iii) Government of India has divested 27,77,65,383 Nos fully paid equity shares (through OFS 17,80,69,927 Nos, through employee offer 76,17,057 Nos and through ETF 9,20,78,399 Nos), consequent to which the holding of Government of India has come down from 1,44,14,82,490 Nos (74.58%) as on 31.03.2017 to 1,16,37,17,107 Nos (60.20%) as on 31.03.2018.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 17.2 Details of shares held by each shareholder holding more than 5% of shares

Amount in Rs. Crore

	As at 31.03.2018		As at 31.03.2017	
	Number of shares held	% of holding of equity shares	Number of shares held	% of holding of equity shares
<b>Fully paid equity shares</b>				
Government of India	1,16,37,17,107	60.20%	1,44,14,82,490	74.58%
Life Insurance Corporation of India	15,84,31,120	8.20%	20,43,84,512	10.57%

### 18. Other equity

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
	(a) Capital redemption reserves	322.16
(b) General reserve	8,620.53	8,620.53
(c) Retained earnings	594.80	296.00
<b>Total</b>	<b>9,537.49</b>	<b>9,238.69</b>

### 18.1 Movement in other equity

	Reserves and Surplus			Total
	Capital redemption reserves	General reserve	Retained earnings	
<b>Other equity</b>				
<b>Balance as at 31.03.2016</b>	—	11,461.22	445.08	11,906.30
Profit for the year	—	—	667.72	667.72
Other comprehensive income (net of taxes)	—	—	9.08	9.08
<b>Total comprehensive income for the year</b>	—	—	<b>676.80</b>	<b>676.80</b>
Premium on Buy-back of equity shares	—	(2,512.81)	—	(2,512.81)
Expenses on Buy-back of equity shares	—	(5.72)	—	(5.72)
Transfer of general reserve to Capital redemption reserve	322.16	(322.16)	—	—
Final dividend for previous year	—	—	(144.97)	(144.97)
Tax on final dividend for previous year	—	—	(29.51)	(29.51)
Interim dividend for the year	—	—	(541.22)	(541.22)
Tax on interim dividend for the year	—	—	(110.18)	(110.18)
<b>Balance as at 31.03.2017</b>	<b>322.16</b>	<b>8,620.53</b>	<b>296.00</b>	<b>9,238.69</b>
Profit for the year	—	—	1,342.19	1,342.19
Other comprehensive income (net of taxes)	—	—	50.03	50.03
<b>Total comprehensive income for the year</b>	—	—	<b>1,392.22</b>	<b>1,392.22</b>
Interim dividend for the year	—	—	(908.48)	(908.48)
Tax on interim dividend for the year	—	—	(184.94)	(184.94)
<b>Balance as at 31.03.2018</b>	<b>322.16</b>	<b>8,620.53</b>	<b>594.80</b>	<b>9,537.49</b>

- 18.2 The Company had bought back its own equity shares on Septmeber 26, 2016 at a premium utilising general reserve amounting to Rs. 2834.97 crore and consequently a sum equal to the nominal value of the shares so bought back amounting to Rs. 322.16 crore had been transferred to the capital redemption reserve account in terms of Section 69 of the Companies Act, 2013.
- 18.3 During the year the Company has paid interim dividend @ Rs.4.7 per equity share amounting in total Rs. 908.48 crore. During the preceeding year, Company paid interim dividend of Rs. 541.22 crore for financial year 2016-17 and final dividend of Rs. 144.97 crore for financial year 2015-16. Dividend tax of Rs. 184.94 crore, Rs. 110.18 crore and Rs. 29.51 crore on these respective amounts of diviends have been paid by the Company.
- 18.4 The Board has recommended a final dividend of Re. 1.00 per share (20% on the equity shares of Rs. 5 each) amounting to Rs. 193.29 crore for approval of shareholders in the ensuing Annual General Meeting. Considering the applicable dividend distribution tax the amount of dividend payout works out to Rs. 232.64 crore.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 19. Borrowings

Amount in Rs. Crore

Current (secured at amortised cost)	As at 31.03.2018	As at 31.03.2017
Liabilities towards bills discounted	44.99	51.09
<b>Total other current financial liabilities</b>	<b>44.99</b>	<b>51.09</b>

### 20. Trade payables

Amount in Rs. Crore

A. Non-current	As at 31.03.2018	As at 31.03.2017
(1) Creditors for supplies and services		
– Dues to micro and small enterprises	—	—
– Others	15.63	19.61
<b>Total non-current trade payables</b>	<b>15.63</b>	<b>19.61</b>
<b>B. Current</b>		
(1) Creditors for supplies and services		
– Dues to micro and small enterprises	4.53	3.09
– Others	507.50	653.80
(2) Accrued wages and salaries	449.71	187.57
<b>Total current trade payables</b>	<b>961.74</b>	<b>844.46</b>

#### Notes:

- 20.1 Accrued wages and salaries includes liability provision of Rs.279.15 crore towards impending pay revision of non-executive employees effecting from 01.01.2017 besides outstanding dues of Rs.96.68 crore towards performance related pay and Rs. 36.80 crore for settlement of differential gratuity liability to employees superannuated during the period 01.01.2017 to 28.02.2018 arising due to enhancement of gratuity limit from Rs.10 lakh to Rs.20 lakh.
- 20.2 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 disclosure pursuant to said Act in respect of such dues included in trade payables (note-21) and other financial liabilities (note-22) is as under.

Particulars	As at 31.03.2018	As at 31.03.2017
i) Principal amount due	5.82	4.49
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

### 21. Other financial liabilities

Amount in Rs. Crore

A. Non current	As at 31.03.2018	As at 31.03.2017
Creditors for capital supplies and services		
- Dues to micro and small enterprises	—	—
- Others	2.85	2.36
<b>Total other non-current financial liabilities</b>	<b>2.85</b>	<b>2.36</b>
<b>B. Current</b>	<b>As at 31.03.2018</b>	<b>As at 31.03.2017</b>
(a) Unpaid dividends	1.70	1.79
(b) Creditors for other liabilities		
(1) Creditors for capital supplies and services		
- Dues to micro and small enterprises	1.29	1.40
- Others	397.38	359.66
(2) Security deposits from customers	2.24	1.57
(3) Refund due to customers	15.41	14.52
(4) Liabilities for discount on sales to customers	94.69	88.62
(5) Employees' recoveries	0.16	1.54
<b>Total other current financial liabilities</b>	<b>512.87</b>	<b>469.10</b>

### 22. Provisions

Amount in Rs. Crore

A. Non-current	As at 31.03.2018	As at 31.03.2017
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Post retirement medical benefits scheme (PRMBS)	116.35	57.17
(ii) Settling in benefit on retirement	1.82	2.40
(iii) Nalco benevolent fund scheme (NBFS)	2.32	2.51
(iv) Nalco retirement welfare scheme( NRWS)	10.27	10.32
(v) Retirement gift	6.45	6.68
(2) Other long-term employee benefits		
(i) Compensated absences	249.77	210.57
(ii) Long service rewards	9.10	8.88
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	16.06	7.50
(b) Other Provisions		
(1) Asset restoration obligations/dismantling	23.57	21.70
(2) Other legal and constructive obligations	0.38	0.38
<b>Total non-current provisions</b>	<b>436.09</b>	<b>328.11</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 22. Provisions

Amount in Rs. Crore

B. Current	As at 31.03.2018	As at 31.03.2017
(a) Provision for employee benefits		
(1) Retirement benefits obligations		
(i) Gratuity (funded)	271.05	12.08
(ii) Post retirement medical benefits scheme (PRMBS)	10.18	7.14
(iii) Settling in benefit on retirement	0.45	0.01
(iv) Nalco benevolent fund scheme (NBFS)	1.30	1.35
(v) Nalco retirement welfare scheme( NRWS)	3.37	3.52
(vi) Retirement gift	0.63	0.67
(2) Other Long-term employee benefits		
(i) Compensated absences	23.29	20.26
(ii) Long service rewards	0.99	0.62
(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	5.55	20.29
(b) Other Provisions		
(1) towards corporate social responsibility (CSR)	32.64	33.36
(2) towards other legal and constructive obligations	26.43	17.77
<b>Total current provisions</b>	<b>375.88</b>	<b>117.07</b>

### C. Movement of provisions

#### (1) Movement of retirement benefit obligations [refer note 31]

#### (2) Movement of employee benefits

	Compensated absences	Long service rewards	NEFFARS
<b>Balance at 31.03.2016</b>	197.35	8.29	21.21
Additional provisions recognised	70.55	1.13	19.68
Reductions arising from payments	(47.64)	(0.71)	(13.10)
Change arising from remeasurement	10.57	0.79	—
<b>Balance at 31.03.2017</b>	<b>230.83</b>	<b>9.50</b>	<b>27.79</b>
Additional provisions recognised	56.08	1.21	8.17
Reductions arising from payments	(93.54)	(2.47)	(14.35)
Reductions arising from remeasurement	79.69	1.86	—
<b>Balance at 31.03.2018</b>	<b>273.06</b>	<b>10.10</b>	<b>21.61</b>

#### (3) Movement of other Provisions

	Asset restoration obligation	Legal and Constructive Obligation	Corporate social responsibility (CSR)
<b>Balance at 31.03.2016</b>	18.37	8.89	37.59
Additional provisions recognised	1.66	8.51	—
Reductions arising from payments	—	—	(4.23)
Unwinding of discount	1.67	0.75	—
<b>Balance at 31.03.2017</b>	<b>21.70</b>	<b>18.15</b>	<b>33.36</b>
Additional provisions recognised	0.09	8.65	—
Reductions arising from payments	—	—	(0.72)
Unwinding of discount	1.78	0.02	—
<b>Balance at 31.03.2018</b>	<b>23.57</b>	<b>26.82</b>	<b>32.64</b>



**Note:**

- 22.1 Provision related to retirement and other long term employee benefits are provided, in the case of gratuity as per the Gratuity Act and for other benefits as per Company rules. Liability for the same is recognised on the basis of actuarial valuation by independent actuary.
- 22.2 Provision for asset restoration obligation and constructive obligation is made based on management estimation in line with Ind AS 16 and Ind AS 37 respectively.
- 22.3 Provision for CSR expenditure is the unspent CSR obligation of the Company prior to introduction of Companies Act, 2013.

**23. Deferred tax liabilities**

	Amount in Rs. Crore	
	As at 31.03.2018	As at 31.03.2017
Deferred tax liabilities	1,501.72	1,505.87
Deferred tax assets	350.27	260.29
	<b>1,151.45</b>	<b>1,245.58</b>

2016-17	Opening balance as at 01.04.2016	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2017
<b>Deferred tax liabilities relating to:</b>				
Property, plant and equipment	(1,365.50)	(98.43)	—	(1,463.93)
FVTPL financial assets	(35.16)	12.23	—	(22.93)
Provision for defined benefit obligation (OCI)	(14.21)	—	(4.80)	(19.01)
<b>Deferred tax liabilities</b>	<b>(1,414.87)</b>	<b>(86.20)</b>	<b>(4.80)</b>	<b>(1,505.87)</b>
<b>Deferred tax assets in relation to:</b>				
Provision for compensated absences and other employee benefits	78.51	14.28	—	92.79
Provision for defined benefit obligation	44.65	12.46	—	57.11
Provision for doubtful debts / advances	57.82	27.04	—	84.86
Temporary Difference due to application of section 43B	2.81	(2.81)	—	—
MAT credit entitlement	—	17.46	—	17.46
Others	66.97	(58.90)	—	8.07
<b>Deferred tax assets</b>	<b>250.76</b>	<b>9.53</b>	<b>—</b>	<b>260.29</b>
<b>Deferred tax (liabilities) / assets (net)</b>	<b>(1,164.11)</b>	<b>(76.67)</b>	<b>(4.80)</b>	<b>(1,245.58)</b>

2017-18	Opening balance as at 01.04.2017	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2018
<b>Deferred tax liabilities relating to:</b>				
Property, plant and equipment	(1,463.93)	(19.00)	—	(1,482.93)
FVTPL financial assets	(22.93)	25.78	—	2.85
Provision for defined benefit obligation (OCI)	(19.01)	—	(2.63)	(21.64)
<b>Deferred tax liabilities</b>	<b>(1,505.87)</b>	<b>6.78</b>	<b>(2.63)</b>	<b>(1,501.72)</b>
<b>Deferred tax assets in relation to:</b>				
Provision for compensated absences and other employee benefits	92.79	1.71	—	94.50
Provision for defined benefit obligation	57.11	31.44	—	88.55
Provision for doubtful debts / advances	84.86	5.36	—	90.22
Temporary Difference due to application of section 43B	—	60.12	—	60.12
MAT credit entitlement	17.46	(4.95)	—	12.51
Others	8.07	(3.70)	—	4.37
<b>Deferred tax assets</b>	<b>260.29</b>	<b>89.98</b>	<b>—</b>	<b>350.27</b>
<b>Deferred tax (liabilities) / assets (net)</b>	<b>(1,245.58)</b>	<b>96.76</b>	<b>(2.63)</b>	<b>(1,151.45)</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 24. Other liabilities

		Amount in Rs. Crore	
		As at	As at
		31.03.2018	31.03.2017
<b>A. Non-current</b>			
(i)	Deposits under NEFFARS	62.04	48.27
<b>Total other non-current liabilities</b>		<b>62.04</b>	<b>48.27</b>
<b>B. Current</b>			
(i)	Revenue received in advance	53.06	73.36
(ii)	Statutory and other dues		
(a)	Electricity duty [refer note: 24.1]	192.01	22.09
(b)	Tax deducted and collected at source	40.91	15.13
(c)	Contribution to NEPF trust and NPS	47.40	30.02
(d)	Disputed dues towards water charges	—	839.97
(e)	Others (Service tax, excise duty etc)	53.53	114.59
(iii)	Renewable energy purchase obligation [refer note 24.2]	146.87	60.34
(iv)	Deposits under NEFFARS	10.69	13.25
(v)	Grants for property, plant and equipment	0.58	0.61
(vi)	Other credit balances	0.40	0.85
<b>Total other current liabilities</b>		<b>545.45</b>	<b>1,170.21</b>

**Note:**

- 24.1 The Energy Department of Govt. of Odisha vide its notification dated May 12, 2017 has enhanced the rate of electricity duty from Rs.0.30 paise per unit to Rs.0.55 paise per unit of consumption. Aggrieved by the said notification, Confederation of Captive Power Plants, Odisha of which the Company is a member, has challenged the order in the Hon'ble High Court of Orissa. As an interim measure, the Hon'ble High Court in its order dated 01.06.2017 has directed the petitioner to deposit the differential electricity duty in a separate interest bearing bank account which shall be subject to the result of writ petition. Accordingly, the Company provided for electricity duty expenditure at the enhanced rate and deposited the money into a separate interest bearing bank account as per direction of the Court. Interest earned on such deposits is not recognised as income but treated as liability along with the unpaid enhanced electricity duty. The liability including accrued interest on such deposits as at reporting date is Rs. 155.02 crore. Besides, the amount also includes undisputed liability for the month of Mar-18 to be paid in Apr.-18.
- 24.2 As per the provisions of Odisha Electricity Regulatory Commission (OERC) notification dated 1st August 2015, the Company, being an obligated entity has the obligation to generate power equal to 7.5% (previous year 4.5%) of its total consumption from renewable sources comprising of 3% (previous year 1.50%) from solar renewable source and 4.5% (previous year 3%) from non-solar renewable sources.
- Cumulative non-solar obligation as on 31.03.2018 is Rs.16.42 crore (as on 31.03.2017 Rs.3.16 crore) towards 1,09,444 (previous year 21,066) nos of non-solar Renewable Energy Certificates (REC) valued @ Rs. 1,500 (previous year Rs 1,500) per certificate. During the year 1,49,829 nos. (previous year 1,14,493 nos) of non-solar REC has been retained by the Company as a compliance to Renewable Purchase Obligation.
- Due to non-fulfillment of the obligation to generate required quantum of power from renewable source of solar energy, the Company has provided cumulative liability upto 31.03.2018 for Rs. 130.45 crore (previous year Rs. 57.18 crore) towards 3,72,716 (previous year 1,63,371) nos. of solar REC value at Rs. 3,500 (previous year Rs. 3,500) per certificate.

### 25. Contingent liabilities (to the extent not provided for)

		Amount in Rs. Crore	
		As at	As at
		31.03.2018	31.03.2017
<b>Claims against the Company not acknowledged as debts</b>			
<b>a. Demand from statutory authority</b>			
1.	Sales Tax	366.17	427.84
2.	Excise duty	100.68	165.46
3.	Custom duty	102.77	52.00
4.	Service tax	18.11	2.31
5.	Income tax	706.40	797.94
6.	Entry tax and road tax	232.28	253.19
7.	Land acquisition and interest there on	35.49	44.21
8.	Stamp duty	204.53	204.53
9.	Demand from Dept. of mines Govt. of Odisha	136.32	136.32
10.	NPV related demand under Mining lease	93.10	93.10
11.	Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	119.24	—

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS



	As at 31.03.2018	As at 31.03.2017
<b>b. Claim by contractors/suppliers and others</b>		
1. Claims of Contractor's suppliers and others	436.99	270.96
<b>Total</b>	<b>2,552.08</b>	<b>2,447.86</b>

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.

## 25.1. Movement of contingent liabilities

	As at 31.03.2017	Reduction during the year	Addition during the year	As at 31.03.2018
<b>a. Demand by statutory authority</b>				
1. Sales Tax	427.84	(61.67)	—	366.17
2. Excise duty	165.46	(141.78)	77.00	100.68
3. Custom duty	52.00	(45.71)	96.48	102.77
4. Service tax	2.31	(1.72)	17.52	18.11
5. Income tax	797.94	(91.54)	—	706.40
6. Entry tax and road tax	253.19	(23.86)	2.95	232.28
7. Land acquisition and interest there on	44.21	(9.37)	0.65	35.49
8. Stamp duty	204.53	—	—	204.53
9. Demand from Dept. of mines Govt. of Odisha	136.32	—	—	136.32
10. NPV related demand under Mining lease	93.10	—	—	93.10
11. Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	—	—	119.24	119.24
<b>b. Claim by contractors/suppliers and others</b>				
1. Claims of Contractor's suppliers and others	270.96	(7.37)	173.40	436.99
<b>Total</b>	<b>2,447.86</b>	<b>(383.02)</b>	<b>487.24</b>	<b>2,552.08</b>

## 26. Commitments

Amount in Rs. Crore

	As at 31.03.2018	As at 31.03.2017
a) Estimated amount of Contracts remaining to be executed on capital account and not provided for	297.02	201.84
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.	18.11	18.11
(2) Amount payable to Orissa Mining Corporation, project proponent of Utkal D coal block in terms of reallocation of allotment of the block in favour of the Company.	Nil	95.18
(3) Export obligation for import of capital goods under Export Promotion Capital Goods Scheme.	107.80	117.69
<b>Total</b>	<b>422.93</b>	<b>432.82</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 27. Revenue from operations

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
(a) Sale of products (including excise duty)		
1) Export:		
i) Alumina	3,047.36	2,443.04
ii) Aluminium	1,028.10	1,181.95
2) Domestic:		
i) Alumina	152.01	141.21
ii) Aluminium	5,188.28	4,090.24
(b) Sale of power		
i) Thermal power	3.40	4.75
ii) Wind Power	85.97	71.80
(c) Other operating income		
1) Export Incentives		
i) Alumina	33.06	30.25
ii) Aluminium	30.24	38.98
2) Incentives on Renewable Energy		
i) Renewable Energy certificates	33.84	28.67
ii) Generation based incentives	6.94	8.18
3) Own manufactured goods internally used /capitalised	9.11	10.95
<b>Revenue from operations</b>	<b>9,618.31</b>	<b>8,050.02</b>

**Note:**

27.1 Domestic sale of alumina and aluminium includes excise duty amounting to Rs.4.22 crore and Rs.124.74 crore considered upto 30.06.2017 (previous year Rs.15.88 crore and Rs.478.63 crore respectively for full year). Goods and Service Taxes collected under Goods and Service Tax Act are not included in sales.

### 28. Other income

	Amount in Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
(a) Interest income		
(i) Interest income earned from financial assets that are not designated as at fair value through profit or loss:		
— Bank deposits	171.89	265.65
— Loans to employees	12.46	14.23
— Other financial assets carried at amortised cost	0.44	0.70
(ii) Interest income earned towards Income tax refund	—	12.06
(b) Dividend income		
— Dividends from current investments	33.65	8.78
(c) Net foreign exchange gain/(loss)	(2.55)	(7.90)
(d) Net gain/(loss) on financial assets designated as at FVTPL	2.96	77.81
(e) Net gain/(loss) on sale of other non-current investments	13.91	—
(f) Write back of liabilities no longer required [refer note: 28.1]	20.56	14.29
(g) Income from internally generated scrap	22.68	9.04
(h) Others	23.65	13.61
<b>Total other income</b>	<b>299.65</b>	<b>408.27</b>

**Note:**

28.1 Unclaimed deposits 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 CONSOLIDATED FINANCIAL STATEMENTS

### 29. Cost of materials consumed

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>A. Raw material</b>		
(1) Caustic soda	795.39	677.30
(2) C.P. coke	403.70	269.47
(3) C.T. pitch	127.80	101.13
(4) Aluminium flouride	62.67	60.05
(5) Lime	45.06	44.45
(6) Others	30.69	29.39
<b>Total raw materials consumed</b>	<b>1,465.31</b>	<b>1,181.79</b>
<b>B. Power and Fuel</b>		
(1) Coal	1,757.22	1,531.39
(2) Fuel oil	523.66	455.71
(3) Duty on own generation [refer note: 24.1]	400.70	214.06
(4) Purchased power	60.36	3.99
(5) Power transmission charges	5.98	7.38
<b>Total Power and Fuel consumed</b>	<b>2,747.92</b>	<b>2,212.53</b>

### 30. Changes in inventories of finished goods, intermediaries and work-in-process

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Finished goods</b>		
Opening stock		
(1) Bauxite	3.07	7.73
(2) Chemical	154.15	93.81
(3) Aluminium	41.52	25.98
<b>Opening stock</b>	<b>198.74</b>	<b>127.52</b>
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	18.22	6.06
(3) Aluminium	5.76	2.79
<b>Excise duty on opening stock</b>	<b>23.98</b>	<b>8.85</b>
<b>Total opening stock of finished goods</b>	<b>222.72</b>	<b>136.37</b>
<b>Less:</b>		
Closing stock		
(1) Bauxite	9.20	3.07
(2) Chemical	114.18	154.15
(3) Aluminium	19.83	41.52
<b>Closing stock</b>	<b>143.21</b>	<b>198.74</b>
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	—	18.22
(3) Aluminium	—	5.76
<b>Excise duty on closing stock</b>	<b>—</b>	<b>23.98</b>
<b>Total Closing stock of finished goods</b>	<b>143.21</b>	<b>222.72</b>
<b>(Accretion)/Depletion in finished goods</b>	<b>79.51</b>	<b>(86.35)</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 30. Changes in inventories of finished goods, intermediaries and work-in-process

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Intermediaries</b>		
Opening stock		
Anodes	82.97	96.08
Others	10.65	7.17
<b>Total opening stock of intermediaries</b>	<b>93.62</b>	<b>103.25</b>
Less: Closing stock		
Anodes	66.75	82.97
Others	10.99	10.65
<b>Total closing stock of intermediaries</b>	<b>77.74</b>	<b>93.62</b>
<b>(Accretion)/depletion in intermediaries</b>	<b>15.88</b>	<b>9.63</b>
<b>Work-in-process</b>		
Opening stock	236.37	216.50
Less: Closing stock	284.33	236.37
<b>(Accretion)/depletion in work-in-process</b>	<b>(47.96)</b>	<b>(19.87)</b>
<b>Total (Accretion)/Depletion in inventory</b>	<b>47.43</b>	<b>(96.59)</b>

### 31. Employee benefit expense

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
(a) Salaries and wages, including bonus	1,659.81	1,240.25
(b) Contribution to provident and other funds		
1) Provident fund	100.89	96.00
2) Gratuity	301.91	29.38
3) Post employment pension scheme	88.07	88.54
(c) Staff welfare expenses	110.52	83.27
<b>Total employee benefit expense</b>	<b>2,261.20</b>	<b>1,537.44</b>

#### Notes:

#### 31.A. Employee benefits

- i) Pay revision of executive employees effective from 01.01.2017 has been implemented in the month of January 2018. Differential expenditure over and above the liability provided till 31.03.2017 for the period from 01.01.2017 to 31.03.2017 is charged off in the current year.
- ii) Pay revision of non-executive employees is due from 01.01.2017 for which Long Term Wage Settlement is awaited. The Company has provided liability for pay revision for the current year Rs.223.72 crore (Previous year Rs.55.43 crore for the period 01.01.2017 to 31.03.2017).
- iii) Consequent upon the Govt. of India notification dated 29.03.2018 in respect of the Payment of Gratuity Act, 1972 for enhancement of ceiling limit of gratuity from Rs. 10.00 lakh to Rs.20 lakh per employee, the Company has considered the enhanced gratuity limit for valuation of gratuity liability of its employees on roll as on 31.03.2018 based on actuarial valuation. In addition an amount of Rs. 36.80 crore has been provided towards differential gratuity to be settled directly by the Company to the employees superannuated during the period from 01.01.2017 to 31.03.2018.
- iv) In terms of approval accorded by the Board of Directors in their 299th meeting held on 10th May, 2017, the Company has revised its Post Retirement Medical Benefit Scheme (PRMBS) w.e.f. 01.04.2017. The benefits as available by the amended scheme has been considered in the valuation of liability by actuary.

#### 31.B. Employee benefit plans

##### 31.B.1 Defined contribution plans

- a) **Provident fund:** The Company pays fixed contribution to Provident Fund at predetermined rates, to a separate trust, which invests the funds in permitted securities. On contributions, the trust is required to pay a minimum rate of interest, to the members, as specified by Govt. of India.
- b) **Pension fund:** The Company pays fixed contribution to the trustee bank of 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.

##### 31.B.2 Defined benefit plans

- a) **Gratuity:** Gratuity payable to employees as per The Payment of Gratuity Act subject to a maximum of Rs.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.
- b) **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 ceiling limit of expenses fixed by the Company. The liability under the scheme is recognised on the basis of actuarial valuation.

- c) **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.
- d) **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 @ Rs.30/- per member per death, in the event of death of a member while in the service of the company and matching contribution by the Company. The liability for the same is recognised on the basis of actuarial valuation.
- e) **NALCO Retirement Welfare Scheme :** The objective of the scheme is to provide financial assistance as a gesture of goodwill for post retirement support to employees retiring from the services of the company. As per the scheme the recovery from each employee member would be Rs. 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.
- f) **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 Rs. 25000/- per retiring employees to be presented on superannuation/ retirement. The liability for the same is recognised on the basis of actuarial valuation.

### 31. B.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 company's rule.The liability for the same is recognised on the basis of actuarial valuation.
- 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, the Company pays monthly benefit to the employee/ nominee at their option and on deposit of prescribed amount as stipulated under the scheme 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, longevity risk and salary risk:-

- i. **Actuarial risk:** It is the risk that benefits will cost more than expected. This can arise due to one of the following reasons:  
 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.  
**Variability in mortality rates:** If actual mortality rates are higher than assumed mortality rate assumption than the gratuity benefits will be paid earlier than expected. Since there is no condition of vesting on the death benefit, the acceleration of cashflow will lead to an actuarial loss or gain depending on the relative values of the assumed salary growth and discount rate.  
 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 will increase the plan's liability.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	Valuation as at	
	31-03-2018	31-03-2017
Discount rate(s)	7.50%	7.25%
Expected rate(s) of salary increase	6%	6%
Mortality	IALM 2006-2008 ULTIMATE	IALM 2006-2008 ULTIMATE
Attrition Rate	1%	1%



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 31. Employee benefit expense

Amount in Rs. Crore

Amounts recognised in statement of profit and loss in respect of these defined benefits plans are as follows:-

	Year ended 31.03.2018	Year ended 31.03.2017
Service Cost		
Current Service Cost	(35.47)	(35.34)
Net Interest expense	(28.89)	(22.45)
<b>Components of defined benefit costs recognised in profit or loss</b>	<b>(64.36)</b>	<b>(57.79)</b>
<b>Remeasurement of the net defined benefit liability:</b>		
Return on the net defined benefit liability	(0.88)	9.35
Actuarial (Gains)/losses arising from changes in financial assumptions	71.41	(17.38)
Actuarial (Gains)/losses arising from experience assumptions	(17.89)	21.92
<b>Components of defined benefit costs recognised in other comprehensive income</b>	<b>52.64</b>	<b>(3.49)</b>
<b>Total</b>	<b>(11.72)</b>	<b>(61.28)</b>

The current service cost and the net interest expense for the year are included in the "Employee benefits expense" line item in the consolidated statement of profit and loss.

The remeasurement of the net defined liability is included in other comprehensive income.

The amount included in the balance sheet arising from the entity's obligation in respect of its defined benefit plans is as follows:

	Post retirement medical benefit	Settling- in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
<b>March 31, 2017</b>						
Present value of defined benefit obligation	(64.31)	(2.41)	(3.86)	(13.84)	(7.34)	(314.04)
Fair value of plan assets	—	—	—	—	—	302.10
<b>Net liability arising from defined benefit obligation</b>	<b>(64.31)</b>	<b>(2.41)</b>	<b>(3.86)</b>	<b>(13.84)</b>	<b>(7.34)</b>	<b>(11.94)</b>
<b>March 31, 2018</b>						
Present value of defined benefit obligation	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)
Fair value of plan assets	—	—	—	—	—	302.48
<b>Net liability arising from defined benefit obligation</b>	<b>(126.52)</b>	<b>(2.27)</b>	<b>(3.62)</b>	<b>(13.64)</b>	<b>(7.08)</b>	<b>(271.05)</b>

Movements in the present value of the defined benefit obligations are as follows:

	Post retirement medical benefit	Settling- in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
<b>Opening defined benefit obligations as at April 01, 2016</b>	<b>(61.24)</b>	<b>(2.74)</b>	<b>(3.94)</b>	<b>(13.13)</b>	<b>(6.92)</b>	<b>(298.02)</b>
Current service cost	(4.32)	(0.44)	—	—	—	(30.58)
Interest Cost	—	(0.18)	(0.27)	(0.89)	(0.48)	(20.63)
<b>Remeasurement</b>						
Actuarial (Gains)/losses arising from changes in financial assumptions	(1.12)	(0.11)	(0.12)	(0.56)	(0.39)	(15.08)
Actuarial (Gains)/losses arising from experience assumptions	(0.89)	0.64	(0.03)	(0.92)	(0.16)	23.28
Benefits paid	3.26	0.42	0.50	1.66	0.61	27.00



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

	Post retirement medical benefit	Settling- in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
Others						
Closing defined benefit obligation as at March 31, 2017	(64.31)	(2.41)	(3.86)	(13.84)	(7.34)	(314.03)
Current service cost	—	(0.41)	—	—	—	(35.06)
Interest Cost	(4.66)	(0.16)	(0.26)	(0.97)	(0.54)	(22.30)
<b>Remeasurement</b>						
Actuarial (Gains)/losses arising from changes in financial assumptions	5.76	0.03	0.04	0.18	0.13	65.27
Actuarial (Gains)/losses arising from experience assumptions	16.52	0.23	(0.30)	(0.72)	0.26	(33.88)
Past Service Cost, including losses/(gains) on curtailment	(84.10)	—	—	—	—	(267.07)
Benefits paid	4.27	0.45	0.76	1.71	0.41	33.54
Others (describe)	—	—	—	—	—	—
Closing defined benefit obligation as at March 31, 2018	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)

### 31. Employee benefit expense

Amount in Rs. Crore

Movements in the fair value of the plan assets are as follows:

	Gratuity (Funded)
Opening fair value of plan assets as at April 01, 2016	290.25
Interest income	21.04
<b>Remeasurement</b>	
Return on plan assets (excluding amounts included in net interest income)	9.35
Contribution from the employer	8.46
Benefits paid	(27.00)
Closing fair value of plan assets as at March 31, 2017	302.10
Interest income	22.64
<b>Remeasurement</b>	
Return on plan assets (excluding amounts included in net interest income)	(0.88)
Others (describe)	(0.25)
Contribution from the employer	12.40
Benefits paid	(33.53)
Closing fair value of plan assets as at March 31, 2018	302.48

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	
	31-03-2018	31-03-2017
Investments in Funds:		
1. Insurance Companies	302.48	302.10
<b>Total</b>	<b>302.48</b>	<b>302.10</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 31.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 Rs. Crore

Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2016-17						
Impact on amount due to change in Discount rate (-/+0.5%)	2.95	2.77	0.08	0.07	0.08	0.08
% Change compared to base due to sensitivity [+ /(-)%]	4.58%	4.31%	3.19%	3.02%	2.14%	2.07%
Impact on amount due to change in Salary growth (+/-0.5%)	1.43	1.12	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	2.23%	1.74%	—	—	—	—
Impact on amount due to change in Attrition rate (+/-0.5%)	0.20	0.20	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.31%	0.31%	0.06%	0.06%	0.07%	0.07%
Impact on amount due to change in Mortality rate (-/+10%)	0.14	0.14	0.01	0.01	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.21%	0.21%	0.51%	0.51%	0.03%	0.03%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2016-17						
Impact on amount due to change in Discount rate (-/+0.5%)	0.40	0.38	0.28	0.27	10.70	10.07
% Change compared to base due to sensitivity [+ /(-)%]	2.86%	2.71%	3.82%	3.62%	3.41%	3.21%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	1.35	1.52
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	—	—	0.43%	0.48%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.01	0.01	—	—	0.34	0.34
% Change compared to base due to sensitivity [+ /(-)%]	0.04%	0.04%	0.05%	0.05%	0.11%	0.11%
Impact on amount due to change in Mortality rate (-/+10%)	—	—	—	—	2.11	2.11
% Change compared to base due to sensitivity [+ /(-)%]	0.03%	0.03%	0.03%	0.03%	0.67%	0.67%



31.C Sensitivity analysis of defined benefit plans

Amount in Rs. Crore

Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2017-18						
Impact on amount due to change in Discount rate [-/+ 0.5%]	3.87	3.74	0.07	0.07	0.08	0.07
% Change compared to base due to sensitivity [+ /(-)%]	3.06%	2.95%	3.19%	3.02%	2.14%	2.07%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.07	0.15	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.05%	0.12%	0.06%	0.06%	0.07%	0.07%
Impact on amount due to change in Moratlity rate (-/+10%)	0.73	0.81	0.01	0.01	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.58%	0.64%	0.51%	0.51%	0.03%	0.03%
Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
2017-18	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate [-/+ 0.5%]	0.39	0.37	0.27	0.26	17.74	16.77
% Change compared to base due to sensitivity [+ /(-)%]	2.86%	2.71%	3.82%	3.62%	3.09%	2.92%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	4.31	4.27
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.75%	0.74%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.01	0.01	—	—	0.49	0.49
% Change compared to base due to sensitivity [+ /(-)%]	0.04%	0.04%	0.05%	0.05%	0.09%	0.09%
Impact on amount due to change in Moratlity rate (-/+10%)	—	—	—	—	3.49	3.49
% Change compared to base due to sensitivity [+ /(-)%]	0.03%	0.03%	0.03%	0.03%	0.61%	0.61%

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 CONSOLIDATED FINANCIAL STATEMENTS

### 32. Other expenses

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
(a) Stores and spares consumed	344.52	318.57
(b) Repair and maintenance to		
(1) Buildings	38.75	30.49
(2) Machinery	155.94	138.71
(3) Others	24.82	20.16
(c) Other Manufacturing Expenses		
(1) Water charges	26.71	24.18
(2) Royalty	127.70	108.53
(3) Contribution to District Mineral Fund and National Mineral Exploration Trust	40.88	34.73
(4) Continuous Technical Assistance expenses	8.76	8.52
(5) Others	72.35	54.47
(d) Freight and handling charges		
(1) Incoming materials (Alumina)	113.45	102.16
(2) Outgoing materials	152.97	163.97
(e) Auditors remuneration and out-of-pocket expenses		
(i) As Auditors	0.26	0.26
(ii) For Taxation matters	0.08	0.05
(iii) For Other services	0.22	0.21
(iv) For reimbursement of expenses	0.12	0.02
(f) Payment to Cost Auditors	0.03	0.03
(g) Security and fire fighting expenses	117.77	104.57
(h) Corporate social responsibility expenses [refer note 32.1]	29.01	29.69
(i) Administrative and general expenses	109.90	97.94
(j) Renewable purchase obligation	120.37	63.02
(k) Provision towards disputed Government dues and others	7.06	178.12
(l) Selling and distribution expenses	28.16	27.83
(m) Write off of Inventories, Claims etc	15.98	27.96
(n) Bad and doubtful Provisions	13.43	56.93
(o) Others	40.90	37.10
<b>Total other expenses</b>	<b>1,590.14</b>	<b>1,628.22</b>

**Note:**

**32.1 Expenditure on Corporate Social Responsibility.**

a) Gross amount to be spent by the company during the year ended March 31, 2018 is Rs.27.88 crore (March 31, 2017 Rs.27.56 crore)	
b) Amount spent during the year ended March 31, 2018	
i) Construction/acquisition of assets	Rs. Nil crore (previous year Rs. 0.32 crore)
ii) On purpose other than (i) above	Rs. 29.01 crore (previous year Rs. 29.69 crore)
Total	Rs. 29.01 crore (previous year Rs.30.01 crore)



33. Exceptional items

Amount in Rs. Crore

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Exceptional items</b>		
a. Write back of provision against disputed interest on water charges [refer note: 33.1]	(785.71)	—
b. Reversal of liability towards DMF contribution on bauxite extraction	(18.32)	—
c. Refund claim of DMF contribution on coal procurement	(22.37)	—
d. Employment benefits in the form of interest subsidy [ refer noe: 33.2]	46.44	—
e. Write back of doubtful provision against advance to employees towards (d) above [refer note: 33.2]	(44.12)	—
f. Other (income)/ expenses	—	40.15
<b>Total exceptional items</b>	<b>(824.08)</b>	<b>40.15</b>

Note:

- 33.1 Dispute with the Department of Water Resources, Govt. of Odisha over interest claim on water charges dues have been settled during the year. In terms of the settlement, the Company paid Rs.58.18 crore at one go discharging the liability accrued till 31.10.2017. Consequent to the settlement excess liability of Rs. 785.71 crore provided for in the books till 31.03.2017 has been written back and considered as an exceptional item.
- 33.2 In conformity with DPE guidelines, the Board of Directors of the Company, in their meeting held on 5th of May 2018, approved amendment to the old pay revision circular of 2007 withdrawing the item of “Interest Subsidy” from the cafeteria of perks. Accordingly, the value of interest subsidy on loans to employees, hitherto kept as advance recoverable from them reducing employee benefits expenditure by the corresponding amount, stands not realisable. Since the matter was challenged by the employees in Court, provisions were duly made against such advance considering the same as doubtful of recovery. The development subsequent to the balance sheet date is considered as an adjusting event and accordingly the interest subsidy amount earlier converted into advance is treated as employee benefit expenditure of the current year. The corresponding provision held there against is written back in the current year and taken to income. Both the expenditure and write back of provision have been taken as exceptional items.
- 33.3 The Central Government introduced Mines and Minerals (Contribution to District Mineral Foundation) Rules by which the Company is liable to contribute @30% of royalty on minerals and coals as Contribution to District Mineral Foundation (DMF). As per the Rules, contribution to be made was made effective from 12.01.2015. The date of applicability was challenged by Federation of Indian Mineral Industries of which the Company is a member. As per Hon’ble Supreme Court verdict dated 13.10.2017, contribution to DMF for minerals and coals will be effective from 17.09.2015 and 20.10.2015 respectively, the dates when the rates were prescribed by the Central Government or with effect from the date on which the DMF was established by the State Government whichever is later. Accordingly, the Company reversed the liability provided for the period from 12.01.2015 to 16.09.2015 for minerals and claimed refund of DMF contribution paid on coal procurement during the period from 12.01.2015 to 19.10.2015. The reversal of liability and claim of refund is taken into income of the current year as an exceptional item.

34. Income taxes

Amount in Rs. Crore

34.1 Income tax recognised in profit or loss

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Current tax</b>		
In respect of the current year	521.99	219.57
In respect of the prior years	271.19	(0.05)
	<b>793.18</b>	<b>219.52</b>
<b>Deferred tax</b>		
In respect of the current year	(101.71)	97.81
In respect of the prior years	—	(3.68)
Others (MAT credit entitlement)	4.95	(17.46)
	<b>(96.76)</b>	<b>76.67</b>
<b>Total income tax expense recognised in the current year</b>	<b>696.42</b>	<b>296.19</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The income tax expense for the year can be reconciled to the accounting profit as follows:

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Profit before tax</b>	<b>2,038.61</b>	<b>963.91</b>
Income tax expense thereon @ 34.608% :	705.52	333.59
Tax effect of -		
i) income exempt from taxation	(23.71)	(12.39)
ii) disallowable expenses (permanent difference)	9.89	10.24
iii) expenses allowable in excess of expenditure incurred	(12.53)	(0.97)
iv) effect of concessions (research and development and other allowances)	(12.95)	(21.94)
v) difference for long-term capital gains	8.54	—
vi) Adjustment relating to earlier years	29.16	—
vii) others	(7.58)	(12.62)
<b>Income tax expense recognised in profit or loss</b>	<b>696.34</b>	<b>295.91</b>

### 34.2 Income tax recognised directly in equity

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Current tax</b>		
Share buy-back costs	—	(3.06)
<b>Income tax recognised directly in equity</b>	<b>—</b>	<b>(3.06)</b>

### 34.3 Income tax recognised in other comprehensive income

	Year ended 31.03.2018	Year ended 31.03.2017
<b>Deferred tax</b>		
Arising on Income and expenses recognised in other comprehensive income		
- Remeasurements of defined benefit obligation	2.63	4.80
<b>Total income tax recognised in other comprehensive income</b>	<b>2.63</b>	<b>4.80</b>
Bifurcation of the income tax recognised in other comprehensive income into:		
Items that will be reclassified to profit or loss	—	—
<b>Items that will not be reclassified to profit or loss</b>	<b>2.63</b>	<b>4.80</b>

## 35. Segment information

### 35.1 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.





### 35.2 Segment revenues and results

The following is an analysis of the Company's revenue and results from operations by reportable segment

Amount in Rs. Crore

Operating Segments	Segment revenue	
	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	5162.02	4046.21
Aluminium segment	6408.81	5537.42
Unallocated	126.75	108.64
<b>Total for operations</b>	<b>11,697.58</b>	<b>9,692.27</b>
Less: Intersegment revenue	2,079.27	1,642.25
<b>Revenue from operations</b>	<b>9,618.31</b>	<b>8,050.02</b>

Operating Segments	Segment results	
	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	1,520.83	976.92
Aluminium segment	(367.07)	(224.78)
<b>Segment result before exceptional items, interest and tax</b>	<b>1,153.76</b>	<b>752.14</b>
Exceptional Income/(Expenses)	824.08	(40.15)
Interest & financing charges	1.95	2.69
Interest and dividend income	240.37	383.03
Other unallocated income net of unallocated expenses	(177.65)	(128.42)
<b>Profit before tax</b>	<b>2,038.61</b>	<b>963.91</b>

### 35.3 Segment assets and liabilities

	Segment Assets		Segment Liabilities	
	As at 31.03.2018	As at 31.03.2017	As at 31.03.2018	As at 31.03.2017
Chemical segment	4,041.84	3,643.06	1041.48	780.06
Aluminium segment	5,117.43	5,165.16	1606.60	1902.94
<b>Total segment assets and liabilities</b>	<b>9,159.27</b>	<b>8,808.22</b>	<b>2,648.08</b>	<b>2,683.00</b>
Unallocated	5,453.67	5,692.80	309.46	367.28
<b>Total assets and Liabilities</b>	<b>14,612.94</b>	<b>14,501.01</b>	<b>2,957.54</b>	<b>3,050.28</b>

### 35.4 Other segment information

	Depreciation and amortisation		Additions to non-current assets	
	Year ended 31.03.2018	Year ended 31.03.2017	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	174.36	173.01	256.64	(3.10)
Aluminium segment	248.31	270.62	(119.74)	(67.90)
Unallocated	57.74	36.72	16.92	(449.68)
<b>Total for operations</b>	<b>480.40</b>	<b>480.36</b>	<b>153.82</b>	<b>(520.68)</b>

	Material non-cash expenditure	
	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment	45.70	6.24
Aluminium segment	85.53	64.37
Unallocated	7.56	(0.21)
<b>Total for operations</b>	<b>138.79</b>	<b>70.39</b>



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 35.5 Revenue from major products

Amount in Rs. Crore

The following is an analysis of the Company's revenue from continuing operations from its major products and services

	Year ended 31.03.2018	Year ended 31.03.2017
Chemical segment (Hydrate and Alumina)	3,199.37	2,584.25
Aluminium segment (Aluminium)	6,216.38	5,272.19
<b>Total</b>	<b>9,415.75</b>	<b>7,856.44</b>

### 35.6 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 31.03.2018	Year ended 31.03.2017	As at 31.03.2018	Year ended 31.03.2017
India	5,340.29	4,231.45	8,999.04	8,845.22
Outside India	4,075.46	3,624.99	—	—
<b>Total</b>	<b>9,415.75</b>	<b>7,856.44</b>	<b>8,999.04</b>	<b>8,845.22</b>

Note:

- Inter-segment transfer of Calcined Alumina is considered at average sales realization from export sales during the period less freight from Refinery to Port at Vizag plus export incentive. Transfer of power from Aluminium segment to Chemical segment is considered at the annual / periodic average purchase price of power from State Grid at Alumina Refinery.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities. Revenue, expenses, assets and liabilities, which relate to the enterprise as a whole and are not allocable on a reasonable basis, have been included under Unallocated Common segment.

### 36. Earnings per share

	Year ended 31.03.2018	Year ended 31.03.2017
	Rs. per share	Rs. per share
<b>36.1 Basic Earnings per share (Rs.)</b>		
From total operations	6.94	2.97
<b>Total Basic earnings per share</b>	<b>6.94</b>	<b>2.97</b>

### 36.2 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 Rs. Crore	
	Year ended 31.03.2018	Year ended 31.03.2017
Profit for the year attributable to Owners of the Company	1,342.19	667.72
<b>Earnings used in the calculation of basic earnings per share</b>	<b>1,342.19</b>	<b>667.72</b>
	As at 31.03.2018	As at 31.03.2017
<b>Weighted average number of equity shares used in calculation of basic earnings per share (in crore)</b>	<b>193.29</b>	<b>224.71</b>



37. Financial Instruments

Amount in Rs. Crore

37.1 Categories of financial instruments

	As at 31.03.2018	As at 31.03.2017
<b>Financial Assets</b>		
<b>Measured at fair value through profit or loss (FVTPL)</b>		
(a) Mandatorily measured:		
(i) Investments in mutual funds	592.96	1221.13
(ii) Forward contract on foreign currency	Nil	Nil
<b>Measured at Amortised cost</b>		
(a) Cash and bank balances	25.35	24.83
(b) Other financial assets at amortised cost	3,388.42	2,770.12
	<b>4,006.73</b>	<b>4,016.08</b>
<b>Financial Liabilities</b>		
<b>Measured at Amortised cost</b>	<b>1,538.08</b>	<b>1,386.62</b>

37.2 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.

37.3 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.

37.4 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.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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 amount of the Company's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:

	Liabilities as at		Assets as at	
	31.03.2018	31.03.2017	31.03.2018	31.03.2017
USD	33.96	1.96	173.98	98.57
EURO	15.13	2.57	—	—

### 37.4.1 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, 2018 and March 31, 2017.

	USD impact		EURO impact	
	Year ended 31.03.2018	Year ended 31.03.2017	Year ended 31.03.2018	Year ended 31.03.2017
Impact on profit or loss for the year	14.0	9.7	1.51	0.26

### 37.5 Other price risks

#### 37.5.1 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.

### 37.6 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.

### 37.7 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 maintaining adequate reserves and banking facilities by continuously monitoring forecast and actual cashflows and by matching the maturity profiles of financial assets and financial liabilities.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 38. Related party disclosures

#### 38.1 Related parties

##### A. Key Managerial Personnel:

###### I) Whole time Directors

(a) Dr. T K Chand	Chairman-Cum-Managing Director
(b) Shri K C Samal	Director (Finance)
(c) Shri V Balasubramanyam	Director (Production)
(d) Shri B K Thakur	Director (HR)
(e) Shri S K Roy	Director (Proj & Tech)
<b>Others</b>	
Shri K N Ravindra	Executive Director-Company Secretary (upto 31.05.2017)
Shri N K Mohanty	Company Secretary (w.e.f 01.06.2017)

###### II) Part time Official Directors: (Nominee of Govt. of India):

- (a) Shri Subhash Chandra, IFS (upto 16.02.2018)
- (b) Dr. N K Singh, IFS (upto 27.03.2018)
- (c) Dr. K Rajeswara Rao, IAS (w.e.f 19.02.2018)
- (d) Shri Anil Kumar Nayak, IOFS (w.e.f 27.03.2018)

###### III) Part time non official (Independent) Directors:

- (a) Shri Dipankar Mahanta
- (b) Shri S Sankararaman
- (c) Shri Pravat Keshari Nayak
- (d) Prof. Damodar Acharya
- (e) Shri Maheswar Sahu
- (f) Smt. Kiran Ghai Sinha
- (g) Shri N N Sharma (w.e.f 06.09.2017)
- (h) Smt. Achla Sinha (w.e.f 08.09.2017)

##### B. Post Employment Benefit Plan

- (a) Nalco Employees Provident Fund Trust
- (b) Nalco Employees Group Gratuity Trust

##### C. Entity controlled by a person identified in (A) as KMP

- (a) Nalco Foundation

##### D. Government that has control or significance influence:

- (a) Govt. of India

##### E. Entities on which Govt of India has control or significant influence (CPSEs)

The Company has major business transactions during the year with the following CPSEs.

###### i) Purchase of Goods and Services

- a) Indian Oil Corporation Ltd.
- b) Bharat Petroleum Corporation Ltd.
- c) Hindustan petroleum Corporation Ltd.
- d) Mahanadi Coalfields Ltd.
- e) Northern Coalfields Ltd.
- f) Singareni Coliaries Ltd.
- g) Western Coalfields Ltd.
- h) Eastern Coalfields Ltd.
- i) Numaligarh Refinery Ltd.
- j) Bharat Earthmovers Ltd.
- k) Bharat Heavy Electrical Ltd.
- l) Mineral Exploration Corporation Ltd.
- m) Balmer Lawrie & Co.
- n) East Coast railways
- o) Vizag Port Trust
- p) MECON Limited.
- q) Engineers India Ltd.

###### ii) Sale of Goods

- a) National Small Industries Corporation (NSIC)
- b) Steel Authority of India Ltd.
- c) Rashtriya Ispat Nigam Ltd.
- d) National Thermal Power Corporation Ltd.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 38.2 Related Party Transactions

#### I. Key Managerial Personnel Amount in Rs. Crore

##### Remuneration to Key Managerial Personnel

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
<b>Short-term employee benefits</b>		
— Salaries	3.22	3.04
— Contribution to Provident Fund	0.21	0.20
— Medical Benefits	0.01	0.01
— Other Benefits	0.03	0.03
<b>Post employment benefits #</b>	(0.01)	—
<b>Other long term benefits</b>	0.03	—
<b>Total</b>	<b>3.49</b>	<b>3.28</b>

# Since actuarial valuation of employee benefit expenses under post-employment benefits and other long-term benefits are done on an overall basis for all employees, these expenses for the key managerial persons is considered on a proportionate basis.

##### Loans / advances due from Key Managerial Personnel

Particulars	As at 31.03.2018	As at 31.03.2017
Outstanding at the end of the year	0.01	0.04
Maximum amount due at any time during the year	0.07	0.09

#### II. Post Employment Benefit Plan

##### Transactions during the year

Name of Trust	Nature of Transaction	As at 31.03.2018	As at 31.03.2017
NEPF Trust	PF-Contribution	332.99	95.79
NEGG Trust	Funding of shortfall	12.6	8.46

##### Outstanding balance at the end of the year

Name of Trust	Nature of Transaction	As at 31.03.2018	As at 31.03.2017
NEPF Trust	PF-Contribution payable	38.45	21.2
NEGG Trust	Funding of shortfall payable	271.05	12.08

#### III. Nalco Foundation

Particulars	As at 31.03.2018	As at 31.03.2017
Contribution to CSR Trust	21.50	7.00

#### IV. Govt. of India : Transaction during the year

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
Buyback of shares	—	2835.00
Interim Dividend-2017-18	546.947	—
Final Dividend-2015-16	—	108.11
Interim Dividend-2016-17	—	403.62

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS



## V. CPSEs/ Govt Undertakings – Transaction during the year

Particulars	Year ended 31.03.2018	Year ended 31.03.2017
Purchase of goods and services from CPSEs/ Govt. undertakings	2747.9	1392.11
Sale of goods to CPSEs and Govt. undertakings	1147.49	1016.21
<b>Outstanding balance at the end of the year</b>		
Particulars	As at 31.03.2018	As at 31.03.2017
Payable for purchase of goods and services from CPSEs/ Govt. undertakings	195.03	92.3
Receivable for sale of goods to CPSEs and Govt. undertakings	—	0.41

### 39. Regrouping of previous year's figures

Previous year's figures have been regrouped/rearranged wherever necessary to make them comparable.

### 40. Disclosure of additional information :

Amount in Rs. Crore

#### (a) As at and for the year ended March 31, 2018

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
<b>Associates (Investments as per the Equity method)</b>								
<b>Indian</b>								
NPCIL-NALCO Power Company Limited.	0.00%	0.06	0.00%	0.00	0.00%	0.00	0.00%	0.00
<b>Joint Ventures (Investments as per the Equity method)</b>								
<b>Indian</b>								
Angul Aluminium Park Private Limited	0.33%	34.52	0.02%	0.32	0.00%	0.00	0.02%	0.32
GACL NALCO Alkalies & Chemicals Private Limited	2.38%	249.48	(0.04%)	(0.54)	0.00%	0.00	(0.04%)	(0.54)
<b>Total</b>	<b>2.89%</b>	<b>284.06</b>	<b>(0.00)</b>	<b>(0.21)</b>	<b>—</b>	<b>—</b>	<b>(0.00)</b>	<b>(0.21)</b>

#### (b) As at and for the year ended March 31, 2017

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
<b>Associates (Investments as per the Equity method)</b>								
<b>- Indian</b>								
NPCIL-NALCO Power Company Limited.	0.0%	0.06	0.0%	0.00	0.0%	0.00	0.0%	0.00
<b>Joint Ventures (Investments as per the Equity method)</b>								
<b>- Indian</b>								
Angul Aluminium Park Private Limited	0.27%	27.19	0.02%	0.15	0.00%	0.00	0.05%	0.31
GACL NALCO Alkalies & Chemicals Private Limited	0.25%	25.30	-0.12%	(0.81)	0.00%	-	-0.30%	(2.02)
<b>Total</b>	<b>0.40%</b>	<b>52.54</b>	<b>(0.00)</b>	<b>(0.66)</b>	<b>-</b>	<b>-</b>	<b>(0.00)</b>	<b>(1.71)</b>



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

## 41 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

Name of Associates/Joint Ventures	Associate	Joint ventures	
	NPCIL-NALCO Power Company Ltd.	Angul Aluminum Park Pvt. Ltd.	GACL NALCO Alkalies & Chemicals Pvt. Ltd.
1. Latest audited Balance Sheet Date	31.03.2018	31.03.2018	31.03.2018
2. Shares of Associate/ Joint Ventures held by the company on the year end			
No.	26,000	16,223,900	101,330,934
Amount of Investment in Associates / Joint Venture (Rs.)"	260,000	162,239,000	1,013,309,340
Extend of Holding %	26.00%	49.00%	40.00%
3. Description of how there is significant influence	[refer note 41.2]	[refer note 41.2]	[refer note 41.2]
4. Reason why the associate / joint venture is not consolidated	—	—	—
5. Networth attributable to share holding as per latest audited Balance sheet (Rs.)	144,880	224,558,180	997,932,400
6. Profit /(Loss) for the year (Rs.)			
i. Considered in Consolidation	(181)	3,244,290	(5,368,000)
ii. Not Considered in Consolidation	—	—	—

#### Note:

41.1 None of the associates or joint ventures have commenced operations.

41.2 Voting power as per the percentage of equity held.

For Guha Nandi & Co.  
Chartered Accountants  
FRN: 302039E

(CA B. K. Sarawagi)  
Partner  
Membership No.054894

Place : Bhubaneswar  
Date : May 26, 2018

For Patro & Co.  
Chartered Accountants  
FRN: 310100E

(CA Rajendra Patro)  
Partner  
Membership No. 019423





## 5 YEARS PERFORMANCE AT A GLANCE

### PHYSICAL

Sl	Particulars	Units	2017-18	2016-17	2015-16	2014-15	2013-14
<b>1</b>	<b>Production:</b>						
	Bauxite	MT	70,25,109	68,25,000	63,40,142	57,39,120	62,92,677
	Alumina Hydrate	MT	21,05,500	21,00,100	19,53,000	18,51,000	19,25,000
	Aluminium	MT	4,25,515	3,87,422	3,72,183	3,27,070	3,16,492
	Power (net)	MU	6,547	6,066	5,841	5,131	4,989
	Wind Power	MU	243	198	156	175	144
<b>2</b>	<b>Export Sales:</b>						
	Alumina	MT	12,76,715	12,43,103	11,74,224	11,84,595	13,09,473
	Aluminium	MT	75,847	1,00,591	94,671	60,752	1,01,243
<b>3</b>	<b>Domestic Sales:</b>						
	Alumina, Hydrate and Other Chemicals	MT	60,641	51,797	45,702	40,048	33,288
	Aluminium	MT	3,50,469	2,84,926	2,77,753	2,65,328	2,18,420
	Power (Net)	MU	24	30	31	28	27
	Wind Power	MU	243	198	156	175	144

### FINANCIAL

(Rs. Crore)

Sl	Particulars	2017-18	2016-17	2015-16	2014-15	2013-14
<b>A</b>	<b>Income Statement :</b>					
1	Exports	4075	3,625	3,247	3,307	3,719
2	Domestic Sales	5429.66	4,308	3,910	4,464	3,305
3	Gross Sales (1+2)	9,505	7,933	7,157	7,771	7,024
4	Less : Excise Duty	128.96	495	454	509	375
5	Net Sales (3 - 4)	9,376	7,438	6,703	7,262	6,649
6	Other Income :					
7	Operating	113.19	117	113	121	132
8	Non-operating	299.65	408	537	673	558
9	Operating expenses	8,092	6,476	5,879	5,677	5,847
10	Operating Profit (5+7-9)	1,397	1,080	937	1,706	934
11	Exceptional Items	(824)	40	(54)	(148)	49
12	Earning before interest, dep. & taxes (EBIDT)(10+8 -11)	2,521	1,447.77	1,528	2,527	1,443
13	Interest & Financing charges	1.95	3	1	—	—
14	Earning before dep. & taxes (EBDT) (12- 13)	2,519	1,445	1,527	2,527	1,443
15	Depreciation and Amortisation	480	480	424	414	525
16	Profit before Tax (PBT) (14-15)	2,039	965	1,103	2,113	918
17	Provision for Tax	696.42	296	372	791	276
18	Net Profit (PAT) (16 - 17)	1,342	669	731	1,322	642
<b>B</b>	<b>Balance Sheet :</b>					
19	Equity Capital	966	966	1,289	1,289	1,289
20	Reserves & Surplus	9538	9,239	11,618	11,508	10,834
21	Networth (19+20)	10,505	10,206	12,907	12,797	12,122
22	Loans	—	—	—	—	—
23	Net Fixed Assets	7139	7,019	6,468	6,645	6,792
24	Working Capital	2,737	2,365	5,625	5,501	3,949
25	Capital Employed (23+24)	9,877	9,384	12,093	12,146	10,741
<b>C</b>	<b>Ratios :</b>					
26	Operating Profit Margin (OPM) (%) (10 / 5*100)	14.90	14.51	13.98	23.50	14.05
27	Net Profit Margin (%) (18 / 5 *100)	14.32	8.99	10.91	18.21	9.65
28	Return on Capital Employed (ROCE) (%) (18/25*100)	13.59	7.12	6.04	10.89	5.98
29	Return on Networth (RONW)(%) (18/21*100)	12.78	6.55	5.66	10.33	5.29
<b>D</b>	<b>Others :</b>					
30	Book value per share of Rs.5 each(in Rs.)	54.35	52.80	50.08	49.65	47.04
31	Earnings per share (in Rs.)	6.94	2.98	2.84	5.13	2.49
32	Dividend per Share( in Rs.)	5.7	2.80	2.00	1.75	1.50



## RECONCILIATION OF PUBLISHED QUARTERLY (REVIEWED) FINANCIAL RESULTS AND ANNUAL (AUDITED) FINANCIAL RESULTS FOR THE YEAR 2017-18

(Rs.in crore except sl.no. 11 and 12)

Sl. No.	Particulars	1st Quarter (Reviewed)	2nd Quarter (Reviewed)	3rd Quarter	4th Quarter (Reviewed)	Total of four quarters	Full Year (Audited)	Variiances
1	2	3	4	5	6	7	8	9
1	Revenue from Operation(Gross)	1911.57	2454.76	2388.82	2863.16	9618.31	9618.31	-
2	Other Income	85.86	80.97	75.51	57.31	299.65	299.65	-
3	Total Expenditure Excl.Depreciation	1684.51	2119.74	2044.51	2374.05	8222.81	8222.81	-
4	Depreciation & Provision	116.97	112.32	124.34	126.77	480.40	480.40	-
5	Profit Before Tax & Exceptional Items	195.95	303.67	295.48	419.65	1214.75	1214.75	-
6	Exceptional Items	-	(16.21)	(801.46)	(6.41)	(824.08)	(824.08)	-
7	Profit Before Tax	195.95	319.88	1096.94	426.06	2038.83	2038.83	-
8	Provision for Tax	67.01	85.25	375.16	169.00	696.42	696.42	-
9	Net Profit(PAT)	128.94	234.63	721.78	257.06	1342.41	1342.41	-
10	Paid up Equity Share Capital	966.46	966.46	966.46	966.46	966.46	966.46	-
11	Earning per Share (Rs.) (Not annualised)	0.67	1.21	3.73	1.33	6.94	6.94	-
12	Aggregate of non-promotor Shareholding:							
	Number of Shares	669516321	669516321	769211777	769211777	769211777		
	Percentage of Shareholding	34.64	34.64	39.80	39.80	39.80		

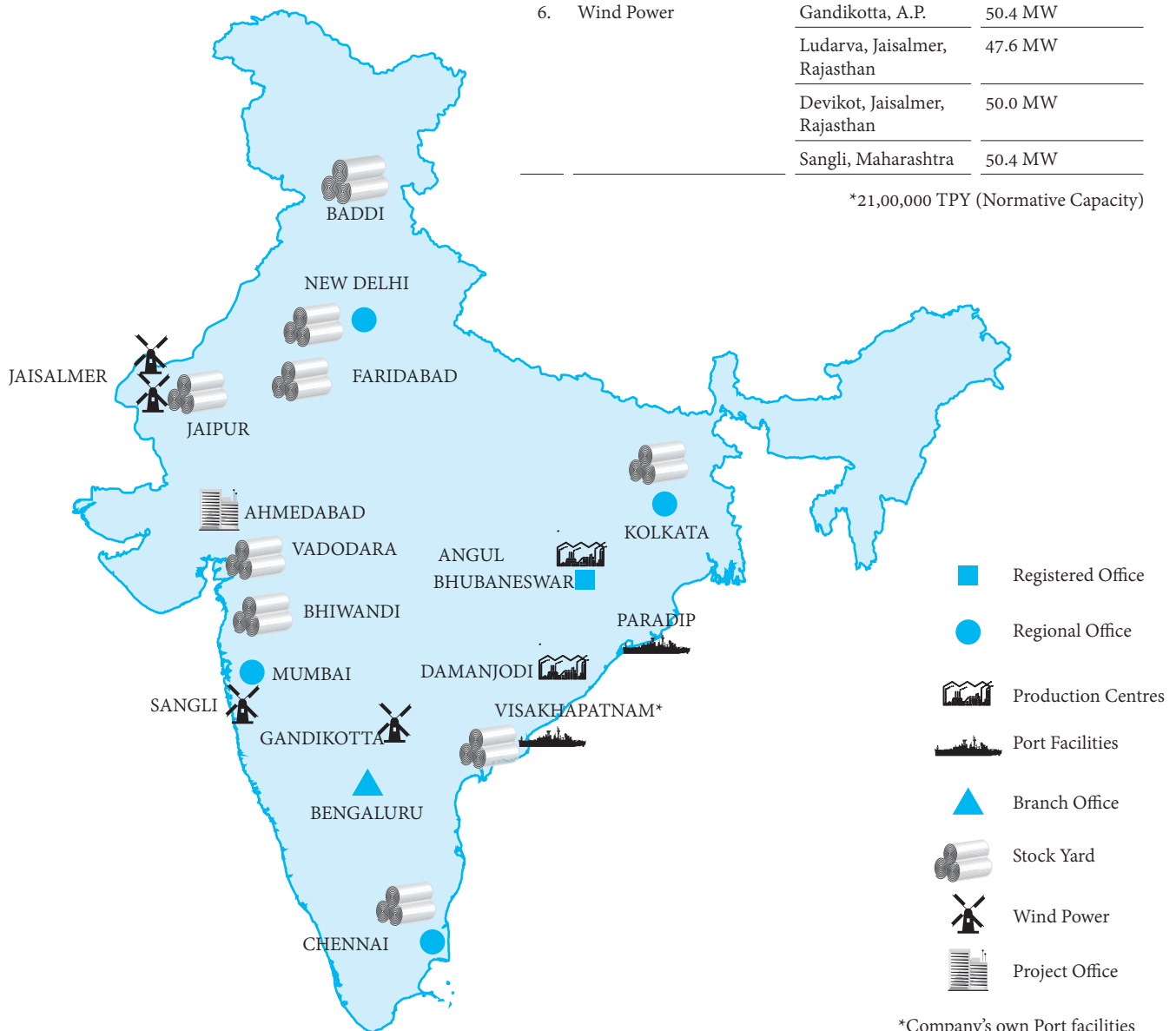
Note: Annual Earning per Share is based on the weighted average no of shareholding during the financial year 2016-17.



## NALCO'S VARIOUS PRODUCTION UNITS, THEIR LOCATION & INSTALLED CAPACITIES

1.	Bauxite Mines	Panchpatmali	68,25,000 TPY
2.	Alumina Refinery	Damanjodi	22,75,000 TPY*
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

\*21,00,000 TPY (Normative Capacity)



\*Company's own Port facilities



## OFFICES AND CUSTOMER CONTACT CENTRES

### REGD. & CORPORATE OFFICE

#### NALCO Bhawan

Plot No. - P/1, Nayapalli  
Bhubaneswar - 751 013 (Odisha)  
Phone : 0674-2301988 to 2301999  
Fax : 0674-2300550/2300470/  
2300521/2300640

### UNITS

#### 1. Mines & Refinery

Mines & Refinery Complex  
Damanjodi - 763 008  
Dist. : Koraput (Odisha)  
Phone : 06853-254515/254550/254251  
Fax : 06853-254361/254214

#### 2. Captive Power Plant

Dist. : Angul (Odisha)  
PIN : 759 122  
Phone : 06764-220158  
Fax : 06764-220646

#### 3. Smelter Plant

NALCO Nagar - 759 145  
Dist. : Angul (Odisha)  
Phone : 06764-220110  
Fax : 06764-220738/220206

### PORT FACILITIES

#### Visakhapatnam

Opp. Ore Handling Complex  
Port Area, Visakhapatnam - 530 035  
Andhra Pradesh  
Phone : 0891-2561433/2561435  
Fax : 0891-2561598  
E-mail : gmport@nalcoindia.co.in

#### Paradip (Port Office)

'V' Point  
Badapadia  
Paradip - 751 142  
Phone : 06722-221286  
Fax : 06722-221286  
E-mail : nalco\_paradeep@nalcoindia.co.in

### REGIONAL OFFICES

#### 1. Eastern Region

1st Floor, J K Millenium Centre  
46-D, Chowringhee Road,  
Kolkata - 700 071  
Phone : 033-662244510-34  
Fax : 033-22810393/22878936  
E-mail : rmeast@nalcoindia.co.in

#### 2. Western Region

215, T.V. Industrial Estate  
S.K. Ahire Marg, Worli, Mumbai - 400 030  
Phone : 022-24939288/89  
Fax : 022-24950500  
E-mail : bbsinghbabu@nalcoindia.co.in

#### 3. Northern Region

Core - 4, 5th Floor, South Tower,  
District Centre, Scope Minar,  
Laxmi Nagar, Delhi - 110 092  
Phone : 011-22010793-94, 22010801  
Fax : 011-22010800/22010790/792  
E-mail : pradyumna.pradhan@nalcoindia.co.in

#### 4. Southern Region

3E, Century Plaza, 560, Anna Salai,  
Teynampet, Chennai-600 018  
Phone : 044-24344162/24349157  
Fax : 044-24343495  
E-mail : rmsouth@nalcoindia.co.in

### BRANCH OFFICE

#### Bengaluru

Ground Floor, Jal Bhavan, No. 5 & 6,  
1st Stage, 1st Phase, BTM Layout,  
Bannerghatta Main Road,  
Bengaluru - 560 029  
Phone : 080-26637297/26637083/  
26637084  
Fax : 080-26530148  
E-mail : nalbir@nalcoindia.co.in

### STOCK YARDS

#### 1. Bhiwandi

National Aluminium Company Limited  
C/o. NSIC Limited, Godown No. 42/57,  
Indian Corp. Compound, Mankoli Naka,  
Mumbai Nasik Road, Thane, Maharashtra  
Bhiwandi - 421 302,  
Phone: 02522-320047

#### 2. Kolkata

National Aluminium Company Limited  
C/o. Balmer Lawrie & Company Limited  
WH, 1-Sonapur Road,  
Kolkata - 700 088, West Bengal,  
Phone: 033-24506840

#### 3. Jaipur

National Aluminium Company Limited  
C/o. Central Warehousing Corporation  
Central Warehouse,  
SP-1296, Sitapura Industrial Area  
Tonk Road, Jaipur - 302 022, Rajasthan  
Phone : 0141-2770226  
Fax : 0141-2770817

#### 4. Faridabad

National Aluminium Company Limited  
C/o. NSIC Limited  
India Garage Equipment,  
Plot No. 51, Sec-6  
Faridabad, Haryana - 121 003  
Phone : 0129-4102430

#### 5. Visakhapatnam

National Aluminium Company Limited  
NALCO Port Facilities  
Port Area, Visakhapatnam - 530 035  
Andhra Pradesh  
Phone : 0891-2721032

#### 6. Baddi

National Aluminium Company Limited  
C/o. NSIC Limited  
Village : Dharampur  
P.O. : Baddi, Tehsil : Nalagarh,  
Dist. : Solan - 173205, Himachal Pradesh  
Phone : 0179-5657895

#### 7. Chennai

National Aluminium Company Limited  
C/o. M/s. Container Corporation of  
India Ltd., ICD,  
Sathankadu Village  
Tiruvottiyur  
Chennai - 600 019, Tamil Nadu

#### 8. Vadodara

C/o. NSIC Limited  
Godown No. 1C/2, Central Warehousing  
Corporation, Near Ranoli Flyover, Karachiya,  
Vadodara, Gujarat - 391350  
Phone : 0265-2240101

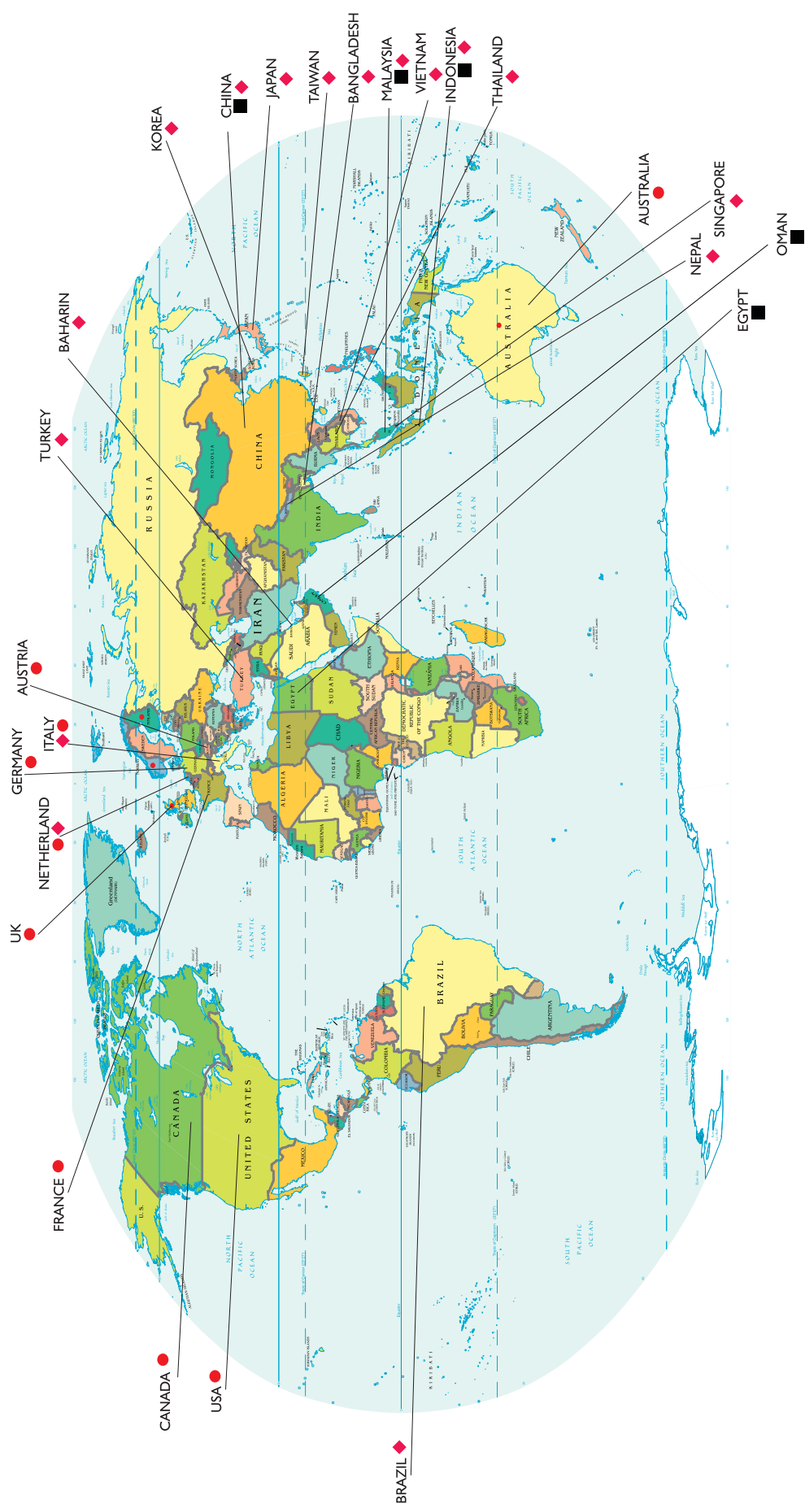
#### 9. New Delhi

C/o. NSIC Limited  
Appollo Flege Integrated Logistics Pvt. Ltd.  
Khasra No. 93, Village: Bamnoli,  
P.O.: Dhulsiras, New Delhi-110077  
Phone: 011-65356735



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# Global Reach



TECHNOLOGY ASSOCIATES



ALUMINA EXPORT



ALUMINIUM EXPORT



नालको  NALCO

National Aluminium Company Limited

(A Government of India Enterprise)

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