

a wards a world

Make the World
Greener
Stronger
Smarter



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This is the Hindalco's Seventh Sustainability Report for the period 1st April, 2016 to 31st March, 2017¹. The report has been prepared a per 'in-accordance' - comprehensive criteria of Global Reporting Initiative (GRI) - G4 reporting standards.

All India operations for Aluminium and Copper have been covered. Novelis publishes its own sustainability report with materiality issues specific to its operations, hence it has been omitted from the boundary of this report. We have excluded Novelis Inc. and ABML from the scope; hence all data and information of the previous reporting periods is restated accordingly.

The report covers information that has impact on Hindalco's performance due to economic conditions, changes or new regulation/ laws/ other related statutory and incidental factors.

This is a GRI G4 'In-accordance' - comprehensive report and has been independently and externally assured by **KPMG in India**, as per **AA 1000 Assurance Standard 2008**. The Assurance Statement is given at the end of the report. We have taken note of the suggestions for further improvement from the statement and have already initiated actions to address the same. Except the first Sustainability Report of 2010-11, all the other reports have been Assured by an External Agency.

We hope that this report will provide a comprehensive snapshot of our approach to sustainability, the progress we are making and the roadmap for the future. We would welcome any feedback from readers either on the contents of this report or the approach we are taking at ehs@adityabirla.com².

Based on the financial year, our sustainability report is annually published³ and all our sustainability reports are available online on our website <http://www.hindalco.com/sustainability/sustainability-reports>.



ABOUT THE REPORT



ADITYA BIRLA GROUP

THE ADITYA BIRLA GROUP (ABG) VISION

The Aditya Birla Group endeavours to become the leading Indian conglomerate for sustainable business practices across its global operations.




CHAIRMAN, MR. KUMAR MANGALAM BIRLA




OUR VALUES

SEAMLESSNESS



Seamless synergy between thoughts and actions ensures smooth performances

SPEED



From agility and speed of thought rises a performance that's ahead of its time

PASSION




Inspiring performances come from the passion to create and innovate

COMMITMENT



Commitment to live up to your promise delivers flawless performances

INTEGRITY



Performances based on professional integrity never hit a false note

Message from Managing Director

Dear Stakeholders

This year's Report 'Towards a two-degree world: Greener - Stronger - Smarter' reflects our zealous endeavour towards keeping the temperature climb under two. According to UN's Inter-governmental Panel on Climate Change, the global average temperature has climbed 0.85° C (from 0.65° C to 1.06° C) between 1880 and now. Climate scientists are warning a hold of temperature increase to less than a two-degree increase by the end of the century and it won't be easy.

With the world at the brink of tipping beyond two-degrees, the agenda of businesses can no longer be mere economic growth. Climate change is everyone's business and the challenges and consequences of Global Warming must be shared.

We, at Hindalco have accepted this responsibility long before it was mandated by the governments. This is evident in the fact that 2016-17 is our seventh year of sustainability reporting – our promise towards greater transparency, accountability and improved processes to ensure a greener world.

India today is one of the fastest growing economies. We have to make sure that this progress is inclusive and causes minimum adverse impact. Everyday Hindalco finds ways to make the lives of its stakeholders better than before – through its products, through conscious existence, through environmental sensitivity and a better, collective vision of a healthier future for all. We approach our commitment to making a difference with the same fervour with which we pursue our business goals.

Over 2016-17, the company's performance has been commendable. It registered a record Consolidated EBITDA at ₹13,558 Crore on a turnover of ₹102,631 Crore. Hindalco produced record aluminium metal at 1.3 million tonnes (up 12 percent), while our Alumina production increased by 8 percent. Due to subdued market demand, we consciously slowed down our Copper rod production during the year.

This sustained growth in business is due to our people who have made it possible and in turn Hindalco is hugely invested in their growth. Having established people-oriented world-class HR practices, we continue to be one of the preferred employers in the country and have been able to attract and retain the best of talents across functions. Hindalco is also very particular in taking care of all basic amenities for all its employees, regardless of age, gender and class of employees.

This has been possible by strengthening our corporate governance in order to ensure that our corporate culture encourages ethical conduct from all its employees with a strong sense of commitment and transparency towards all stakeholders as well as fair decision-making right across our supply chain.

Hindalco practices a 'Zero Harm' culture. Ensuring health and safety of not just our employees but contract workers, is of paramount importance. Most of the company's manufacturing sites have OHSAS-18001:2007 (OHS) certifications and plant level management teams work in close coordination with our corporate management teams to implement international best practices.

We have also been able to align our sustainability initiatives and strategies with the UN Sustainable Development Goals (SDGs). Though this alignment at a global level we are more likely to create long-term and lasting changes. Because of the nature of its business, Hindalco has identified few areas of prime importance.

Water Conservation and achieving 'Zero Liquid Discharge' Status continue to be our focus area. Various initiatives have been undertaken across our plants towards reduction of water consumption and efficient recycling of treated water. Over the past three years we have been able to double the water recycled at our units. We are working towards achieving the World Business Council for Sustainable Development's Water and Sanitation and Hygiene pledge (WASH pledge) to ensure that we provide safe drinking water, sanitation and hygiene in all our operations.

Avoidance, Reduction and Reuse of waste created is systematically and efficiently handled through Hindalco's 'Value from Waste' initiative. We regularly explore innovative ways of reducing and re-using waste generated. For instance, this year a bauxite residue Filtration unit instituted will help in reducing the caustic soda content in the bauxite residue.

A number of initiatives have also been taken towards energy efficiency and reduction of GHG emissions. Alternative sources of fuel and power such as biomass and solar power were successfully commissioned during the year. In recognition of its initiatives, the Ministry of Power awarded the National Energy Conservation Award to Mahan Aluminium.

Our global presence brings with it a global responsibility. We owe it to our customers to provide the best and most environment-friendly products. Hindalco's two primary Research & Development centres along with research labs at all manufacturing units work towards creating process efficiencies and innovative products such as value added products from waste.

We especially feel responsible for the well-being of communities around us. During the life cycle of our mines, we interact with as many as 5-7 generations of local communities. Our mining practices, regeneration activities and community engagement practices are geared towards minimising environmental impact and maximising socio-economic impact during the development of mines. Our CSR activities, carried out under the 'Aditya Birla Centre for Community Initiatives and Rural Development', reach out to over 25 lakh people, in proximity to our plants all over India.

As industry leaders in Aluminium and Copper, we have an opportunity to shape the future and we hope to do justice to it. Moving forward, we invite our shareholders to support our sustainability-related efforts by engaging in synergic cooperation.



SATISH PAI
Managing Director

Hindalco

A leader in Aluminum and Copper

Hindalco Industries Limited, a metals flagship company and a subsidiary of the Aditya Birla Group, is the industry leader in aluminium and copper. Its 51 units with a workforce of 35,000, span 4 continents and 13 countries. Headquartered in Mumbai, India, it is the world's largest aluminium rolling company and one of Asia's biggest producers of primary aluminium. Its state-of-art copper facility comprises a world-class copper smelter and a fertiliser plant along with a captive jetty. The copper smelter is among the world's largest custom smelters at a single location.

In India, the company's aluminium units across the country encompass the gamut of operations from bauxite mining, alumina refining, coal mining, captive power plants and aluminium smelting to downstream rolling, extrusions and foils. The Birla Copper unit produces copper cathodes and continuous cast copper rods, along with other by-products, including gold, silver, and DAP fertilisers. It is India's largest private producer of gold.



Hindalco Industries Limited is a publicly traded company listed in the Bombay Stock Exchange, the National Stock Exchange of India Ltd and Luxembourg Stock Exchange. Hindalco has been accorded Star Trading House status in India. Its aluminium is accepted for delivery under the High-Grade Aluminium Contract on the London Metal Exchange (LME), while its copper quality is also registered on the LME with Grade A accreditation.

Hindalco, in keeping with the requirement of the listing agreements with Stock Exchanges in India, subscribes to National Voluntary Guidelines on CSR and discloses the same.

Hindalco and its employees participate in public policy advocacy only through industry/ trade/ commerce/ business associations

All our units are ISO 9001, 14001 and OHSAS 18001 certified. Furthermore, many of our units have adopted the Integrated Management System (IMS) certification, reflecting a combined business excellence model. Apart from being a dominant player in the domestic market, Hindalco's products are well-accepted in the international markets.

Our popular brands like Eternia Windows, Maxloader and Hindalco Extrusions under the extrusions segment, Everlast Roofings under the flat rolled products segment, Freshwrap and Superwrap under the aluminium foil products segment, as well as Birla Copper and Birla Balwan under the copper mainstream products and co-products segment have garnered strong customer acceptance.

HINDALCO'S Operations in India

Bauxite mines:

Lohardaga, Samri, Maliparbat, Baphlimali, West Coast Mines

Coal Mines:

Gare Palma, Kathautia, Dumri,

Integrated Aluminium Complex:

Renukoot

Alumina Refinery:

Muri, Utkal Alumina

Alumina Refinery & Innovation Centre:

Belgaum

Aluminium Smelter & Power Plant:

Mahan Aluminium, Aditya Aluminium, Hirakud

Power Plant:

Renusagar

Aluminium Flat Rolled Products:

Hirakud, Taloja, Belur, Mouda

Aluminium Foil Products:

Mouda, Kollur

Aluminium Extrusions:

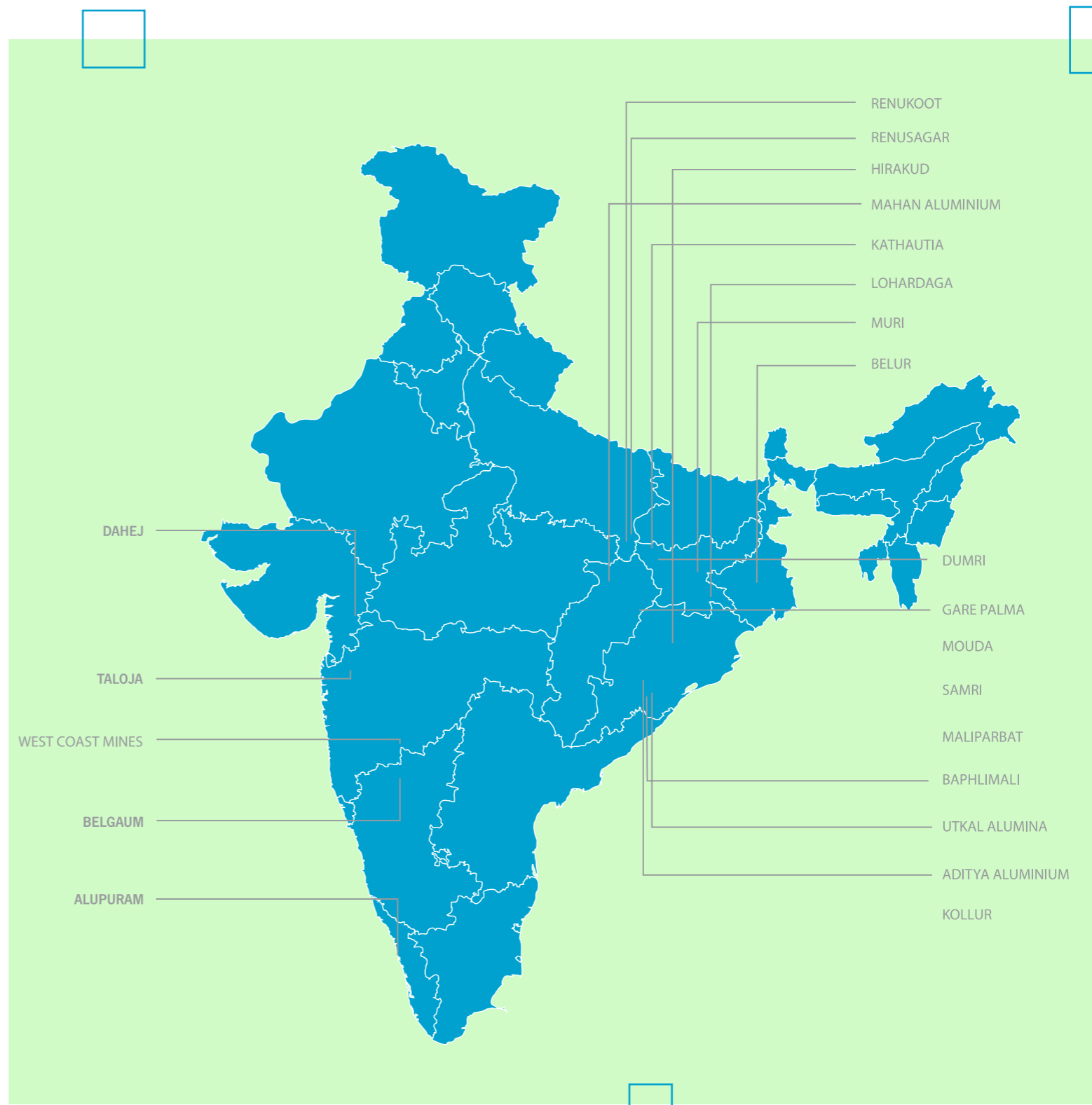
Alupuram

Innovation Centre:

Taloja

Integrated Copper Complex:

Dahej



Aluminium

With a pan-Indian presence that encompasses the entire gamut of operations, from bauxite mining, alumina refining, aluminium smelting to downstream rolling, extrusions and recycling, Hindalco enjoys a leadership position in aluminium and downstream value-added products in India.

Our finished products include alumina, primary aluminium in the form of ingots, billets and wire rods, value-added products such as rolled products, extrusions and foils. Metallurgical alumina is used for our own captive needs. Chemical alumina and hydrates are used in range of industries including water treatment, fillers in cables and plastics, refractories and ceramics, glass among others¹⁰.



Finished Products

Alumina

Primary Aluminium

- Ingots
- Billets
- Wire Rods

Value-added Products

- Rolled Products
- Extrusions
- Foils

Hindalco's integrated complex at Renukoot, in Uttar Pradesh, India, houses an alumina refinery, an aluminium smelter and facilities for the production of semi-fabricated products. Power is sourced from our Renusagar power plant, located about 45km from Renukoot. Our facilities also include an aluminium smelter and an aluminium FRP facility (for rolled products, extrusions products and wire rods) at Hirakud (Odisha) with a captive power plant and coal mine, and alumina refinery at Muri (Jharkhand). Our Chemical grade alumina plant is located at Belagavi (Karnataka), and rolling mills at Belur (West Bengal), Taloja near Mumbai and Mouda near Nagpur (Maharashtra). Foil rolling facilities are situated at Mouda near Nagpur (Maharashtra) and Kollur (Telangana) and our extrusion plant at Alupuram (Kerala).



Hindalco's new age smelters at Aditya (Odisha) and Mahan (Madhya Pradesh), operating on state-of-the-art AP36 technology, have not only resulted in expansion of our capacities but also improved cost-efficiency of our operations. These smelters have their own captive power plants and source alumina from Utkal, our 100% subsidiary.

Utkal Alumina (Odisha) is a world class refinery with one of the lowest cost structure in the world. The bauxite for Utkal is sourced from Baphimali mines by an 18 kilometer long conveyor, one of its kind in the world.

Copper



Being one of the largest copper smelters, places upon us a huge responsibility of pushing forward the agenda of sustainable business practices. Our brands are globally recognized for their high quality. While we continue to push our business development and register year-on-year profits for our shareholders, we remain conscious of our accountability to environment and society.

Our focus is to achieve operational excellence while minimizing resource use and causing least environmental impact. We give great emphasis on creating 'Value from Waste'. As a step towards creating a circular economy, we strive towards maximum utilization of the waste generated from the copper business.

By signing the WASH Pledge, we have committed to implementing access to safe water, sanitation and hygiene in and around our areas of operation.

Our adherence to international standards, be it quality, health and safety or corporate governance, accelerates our sustainable business development agenda. As we continue to strengthen Birla Copper brands, we are simultaneously committed to generating economic, societal, and environmental value.

Mr J C Laddha
CEO – Birla Copper

Hindalco's Copper Business, popularly known as Birla copper, is one of the pillars of Hindalco's Metal business. It is not only among the world's most cost-efficient producers of copper, encompassing 15 different technologies, it is also one of the best integrated custom smelters in the world at any single location. Located at Dahej in Gujarat, India, its smelting operations are the country's largest.

The integrated Dahej complex has copper smelting, refining, and copper rod manufacturing plant. Precious Metal Recovery (PMR) plant, captive power plant, oxygen plant, captive jetty, fertilizer and other utilities.

Copper concentrate is sourced from various global sources and comes through company owned, all season, deep water, direct berthing jetty.

Birla Copper is an ISO 9001, 14001 and OHSAS 18001 certified company, registered on the London Metal Exchange as Grade - A copper brand and certified as a Star Trading House having NABL accredited laboratory.

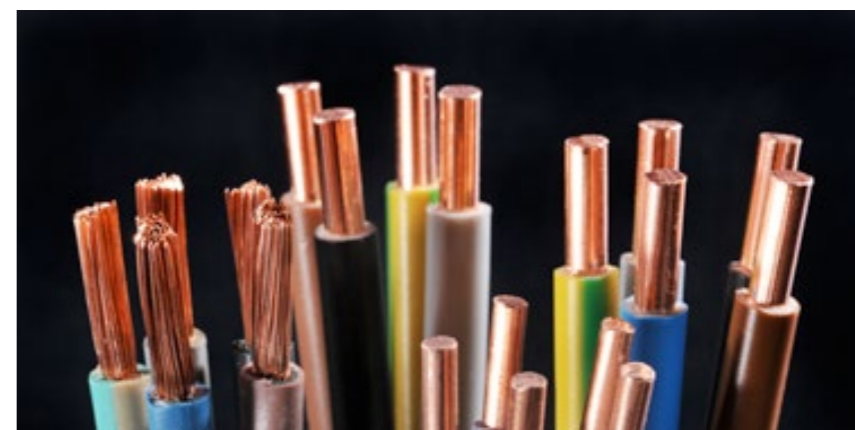
Hindalco produces copper cathodes branded as Birla Copper and Birla Copper II, are known for high purity and meets the international quality standards.

Apart from the above, Hindalco also produces value added products like continuous cast copper rods in various sizes from 8mm dia to 19.6mm dia, OFC range copper rods, copper bars and Bare copper wires of less than 6mm diameter both annealed and non-annealed.





We also produce precious metals like gold, silver and selenium along with the co-product Sulphuric acid. This, Sulphuric Acid, is also utilized to produce phosphoric acid and fertilizers like di-ammonium phosphate (DAP) and Nitrogen Phosphorus Potassium (NPK) complexes etc.



Chemicals

Hindalco produces standard alumina, standard hydrate and speciality aluminas and hydrates. Our specialised aluminas and hydrates are products of the technological innovations of its R&D team. The Belgaum R&D Centre is recognised by the Department of Scientific & Industrial Research (DSIR), Government of India.

Our chemicals serve a wide range of customers around the world with our standard and speciality aluminas and hydrates, offering a wide spectrum of grades to suit diverse applications, like high-grade refractories, ceramics, fire retardant plastics, alum, zeolite and many more. Today, our customised, tailor-made products serve 37 countries across the world.

Hindalco's captive bauxite mines in Jharkhand, Chhattisgarh, Maharashtra and Orissa, provide the raw material to our alumina refineries located at Belgaum in Karnataka, Muri in Jharkhand and Renukoot in Uttar Pradesh, India. The alumina refineries at Belgaum, Muri and Renukoot have installed capacities of 350,000 tpa, 450,000 tpa and 700,000 tpa, respectively.



Industries and markets served

Hindalco's products are used across the world in several industries ranging from automobiles to packaging and pharmaceuticals. Hindalco products and applications cater to numerous markets and provide for all industrial and commercial requirements like:

Aluminium

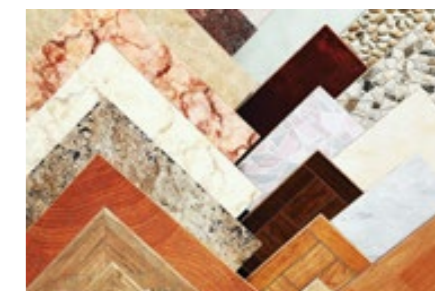
- Automotive and transport
- Building and construction
- Defence
- Electricals and electronics
- Industrial applications
- Pharmaceuticals and packaging
- White Goods

Copper

- Wire and cable industries
- Electrical and power equipments
- Transportation (Automobile and Railways)
- Consumer Durable and other applications
- Agrochemicals

Chemicals

- Ceramics
- Refractories



3. FUTURE PROOFING THROUGH GOVERNANCE



We at Hindalco grow and create opportunities for a sustainable future, making it resilient to changes. Future-proofing our business requires vision and foresight, and paving that way is our robust governance structure.

The Aditya Birla Group is one of the pioneers in the field of Corporate Governance. As a part of the Group, Hindalco is committed to continuously adopt and adhere to best governance practices. Governance structures and practices are designed to have the processes and internal controls to meet the requirements imposed by regulators, government bodies or internal policies.

The governance philosophy of the Group and our Company rests on five basic tenets – Board’s accountability to the Company and the Stakeholders, strategic guidance

and effective monitoring by the Board, protection of minority interests and rights, equitable treatment of all Stakeholders as well as superior transparency and timely disclosure. The Group Values-Integrity, Commitment, Passion, Seamlessness and Speed, also reflect this philosophy.

Hindalco Industries Ltd., strives to operate in a manner to meet stakeholders’ aspirations and societal expectations.

The cornerstone of Governance is intended to transcend the legal compliances and to function within a framework which is based on accountability at all levels, transparency in dealing with all stakeholders’, practicing ethical conduct at every step, safeguarding stakeholders’ interest and endeavour to be a responsible Corporate citizen.

Governance and Compliance initiates at three interlinked levels and percolates to the employees –

Strategic supervision by the Board of Directors

Strategic management by the Corporate Management Committees

Executive management by the Units and Functional Heads.

Board of Directors

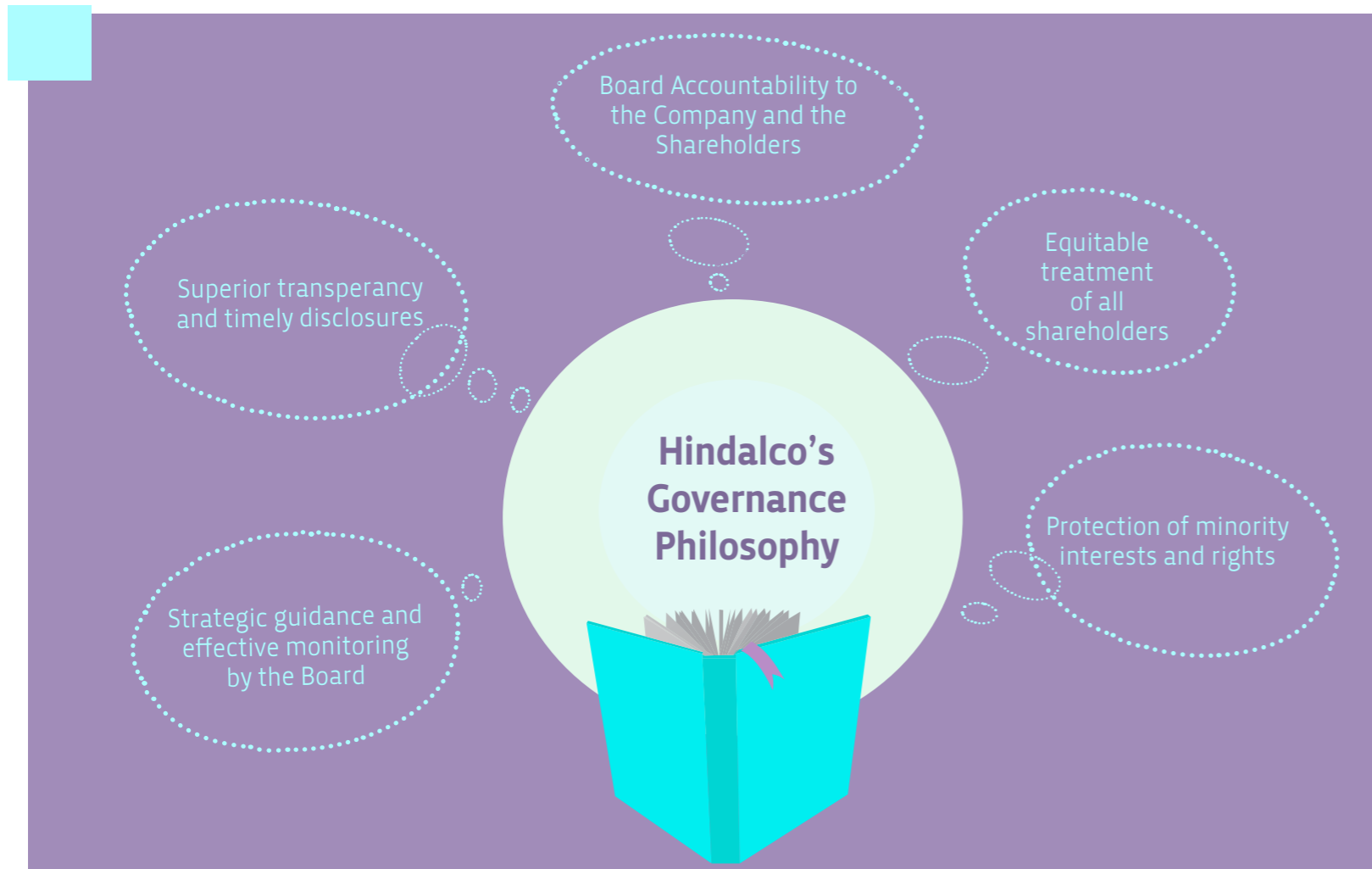
The Board of Directors is an apex body constituted by the shareholders for overseeing Company’s overall functioning. At the apex of Hindalco’s Board is the Chairman, who is a Non Executive Director . The Board comprises Independent Directors and a Woman Director.

The strength of the Board on 31st March, 2017 was twelve; the composition of the Board, including other Directorship(s)/Committee Membership(s) of Directors was as follows:

Mr Kumar Mangalam Birla	Non Executive
Mrs Rajashree Birla	Non Executive
Mr A.K. Agarwala	Non Executive
Mr D.Bhattacharya	Non Executive
Mr M.M.Bhagat	Independent
Mr K.N.Bhandari	Independent
Mr Jagdish Khattar	Independent
Mr Ram Charan	Independent
Mr Y.P Dandiwala	Independent
Mr Girish Dave	Independent
Mr Satish Pai	Managing Director
Mr Praveen Kumar Maheshwari	Whole time Director

Hindalco’s Board met 6 times during the year ended 31st March, 2017. Details with regard to composition of the governance body and committees are mentioned in Directors report under Hindalco’s Annual report 16-17

G4-34, G4-38, G4-39, G4-40, LA-12



Committees of the Board of Directors



Various committees have been constituted to deal with specific areas. The Committees of the Board play a crucial role in the governance structure of the Company. The Board supervises the execution of its responsibilities by the committees.



Audit Committee

The Committee comprises of three Non Executive Directors, all of whom are Independent Directors. The Managing Director, Chief Financial Officer, representatives of Statutory Auditors and Internal Auditors are permanent invitees of the Audit Committee. One of the key function of committee includes evaluation of organisations risk management framework on periodic basis.

Nomination and Remuneration Committee

The Nomination and Remuneration Committee consists of three members out of which two are Independent Directors and one of them is the Chairman. The Chairman of the Board is member of the Committee.

Stakeholders' Relationship Committee

The Company has a Stakeholder's Relationship Committee presently comprising of three directors out of which two are independent and one is a non executive director.

Corporate Social Responsibility Committee

The Corporate Social Responsibility Committee comprises of 5 members out of which 1 member is an independent director.

Risk Management Committee

The Committee consists of members of Board and management. The Managing Director and CFO are members of the Committee.

Executive Committees

- Sustainability Committee
- Safety Board
- Executive Committee
- Values Committee
- Sexual Harassment Committee
- Compliance Committee

Sustainability Committee

The Committee, chaired by the Managing Director, reviews the sustainability performance on the basis of set KPIs every month with unit teams along with other committee members. The Committee directs and reviews sustainability aspects including disclosures, stakeholder concerns, reports to the Board as appropriate.

Safety Board

Safety board chaired by Managing directors includes business heads and functional heads, reviews safety initiatives and performances with unit teams every month.

Values Committee

The Company promotes ethical behaviour in all its business activities and has put in place a mechanism for reporting illegal and unethical behaviour. The employees are free to report violations of applicable laws and regulations and Code of Conduct. The Company has constituted Value Standards Committee wherein the whistle blower may send a complaint to the independent reporting mechanism - Ethics Hotline or to Values Standards Committee (VSC) at their location.

Compliance Committee

The Committee comprises of executives of the Company Chaired by the Managing Director. The Committee reviews all laws applicable to the Company and take actions to ensure compliances.

Sexual Harassment Committee

The Company has zero tolerance for sexual harassment at workplace and has adopted a Policy on prevention, prohibition and redressal of sexual harassment at workplace in line with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the Rule as there under for prevention and redressal of complaints of sexual harassment at workplace. All women, including women visiting the Company's office premises or women service providers are covered under this policy. All employees are treated with dignity with a view to maintain

a work environment free of sexual harassment whether physical, verbal or psychological. During the financial year 2016-17 the Company has not received any complaint on sexual harassment.

At Hindalco, all policies and positions are proposed by the respective function heads with consultation of relevant stakeholders and approved by the Managing Director.

Code of Conduct

The Code of Conduct, as adopted by the Board of Directors, is applicable to all Directors Senior Management/employees of the Company. The Code is available on the Company's Website viz., <http://www.hindalco.com/investorcentre/code-of-conduct>.

For the reporting period, all Directors, Senior Management personnel of the Company have confirmed their adherence to the provisions of the said Code.

Whistle Blower Policy

The Company promotes ethical behaviour in all its business activities and has put in place a mechanism for reporting illegal and unethical behaviour. The employees are free to report violations of applicable laws and regulations and Code of Conduct. The Company has constituted Value Standards Committee wherein the whistle blower may send a complaint to the independent reporting mechanism - Ethics Hotline or to Values Standards Committee (VSC) at their location.

Hindalco strictly stands against any form of child labour and forced labour. We currently do not operate in any region considered to have significant risk of violations of human right. This adherence goes right across our supply chain. We are in the process of setting up formal screening mechanisms for our significant suppliers, vendors and other business partners to identify concerns regarding human rights.

Hindalco does not discriminate in employment or any other opportunity, based on caste, religion, region, gender and age. During the reporting year, no cases of discrimination were recorded.

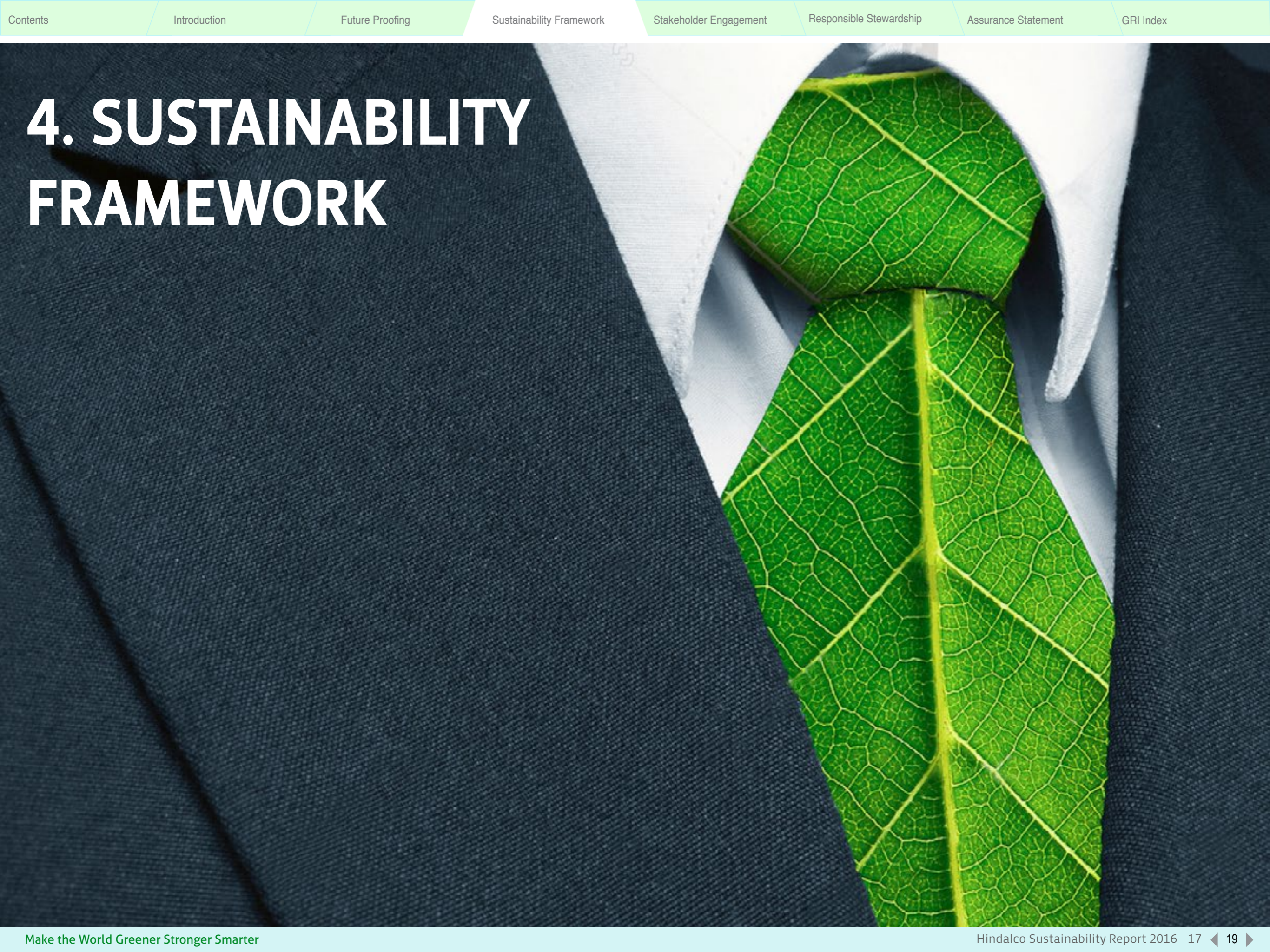
In order to maintain a clean working culture, we don't support or encourage or lobby with any political party or the government.

All employees are made aware of the company's position on corruption and bribery. We elaborate, inform and train our employees on what constitutes corruption and bribery; and how to distinguish and diligently act in practical situations. All our business units are analysed for risk related to corruption. During the reporting period, no such cases of corruption has been observed.

We support good market practices, and understand that a competitive environment leads to overall growth of the market. Therefore, we encourage our fellow competitors, stand categorically against monopolising the market or getting involved in any anti-competitive behaviour. We are the founding member of the Aluminium Association of India and have subscribed to the International Aluminium Association. Being a part of such forums, gives us a platform for sharing our best practices and contributes towards a constructive growth environment.

No Non Compliance or strictures or penalties have been imposed on the Company by stock exchange (s) or SEBI or any statutory authority on any matters related to capital markets during the last three years.

4. SUSTAINABILITY FRAMEWORK





Sustainability Policy

We, at Hindalco Industries Limited, operating across the process chain from mining to semi-fabricated products in non-ferrous metals, will strive for excellence in sustainable processes, products and practices to create long term value for all our stakeholders, while conserving resources, protecting the environment, nurturing our people and enriching societal well-being.

To achieve this, we

- Continue to have a strong Governance Structure.
- Comply with all applicable legislations, regulations and codes of practices.
- Integrate Sustainability considerations into all our business decisions.
- Seek to minimise the impact on Environment and Society, by reduction in our carbon footprint and by conservation of key resources, while operating our business.
- Promote the principles of waste prevention, reduction, reuse, recycling and recovery to minimise waste generation and strengthen the management of wastes.
- Continue to improve health and safety of the workforce and establish Zero Harm culture within our businesses.
- Involve our local communities and stakeholders and engage with them to ensure that any impacts are identified and managed effectively.
- Strive to deliver products and services, which have low environmental impact across their life cycle.

Sustainability Vision

Hindalco endeavours to become a leading metals Company for sustainable business practices across the global operations, balancing its economic growth with environmental and societal interests.

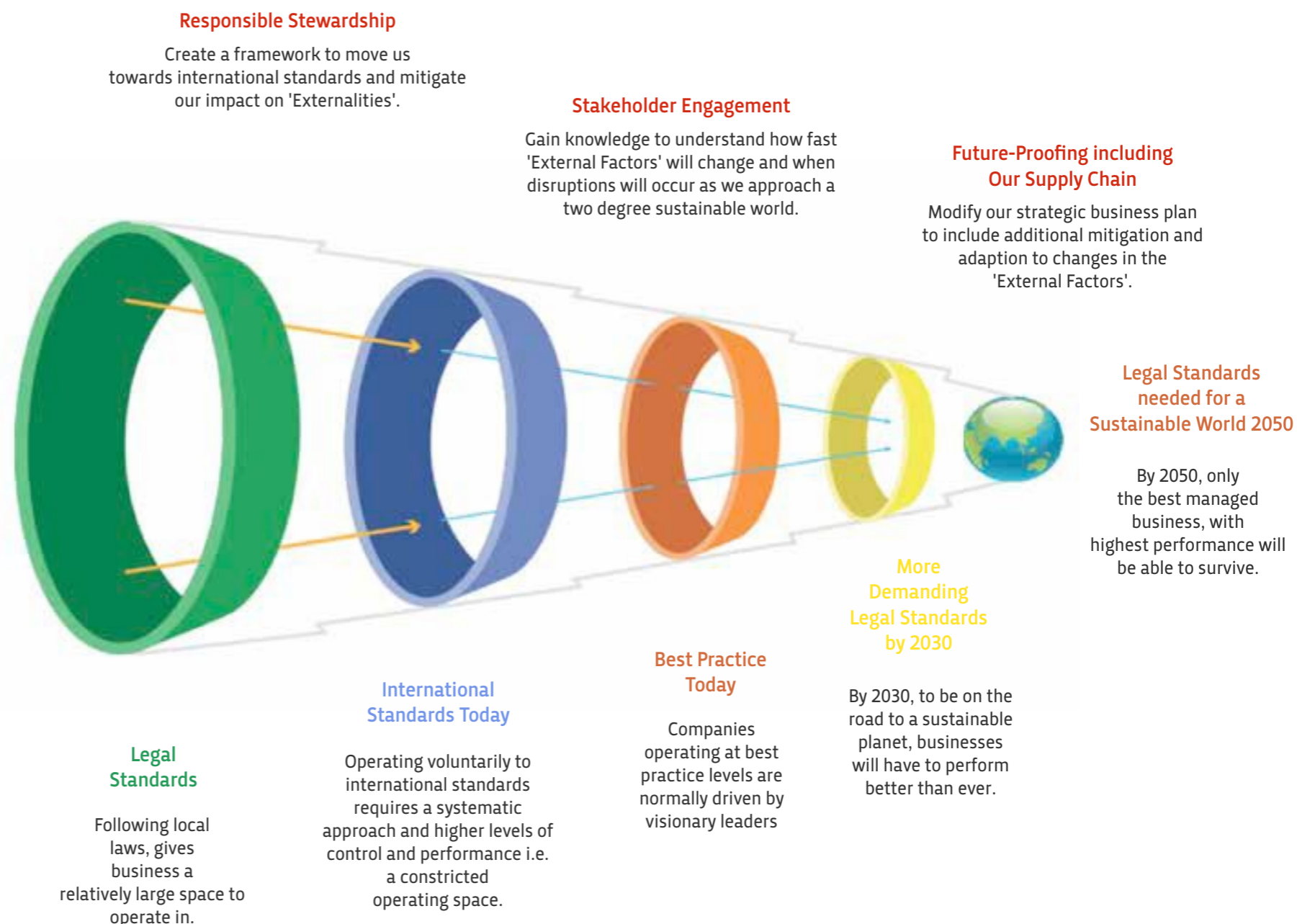
Sustainability Framework

Being a subsidiary of the Aditya Birla Group, Hindalco's approach to sustainability is aligned with the Group's triple-faceted framework resting on Responsible Stewardship, Stakeholder Engagement and Future-proofing including our Supply Chain

Responsible Stewardship: Being a global organization, we achieve high standards by complying with international standards and exceeding expectations placed on us.

Stakeholder Engagement: In order to operate within a two-degree world, it is our constant endeavour to understand and seamlessly integrate externalities by engaging with our stakeholders at a simple as well as strategic level.

Future-proofing: Our leaders' strategic vision ensures that through planned approach we manage uncertainties of the future in order to grow our business along a sustainable path.



Sustainability Management

At Hindalco, sustainability is the fore-thought for business growth. A Sustainability Board, under the leadership of the Managing Director oversees the company's sustainability efforts.

Hindalco's approach to sustainability focuses on areas like sustainable mining practices, energy conservation, recycling, environment-friendly

disposal of industrial wastes, safety practices, socio-economic development of the communities around the plant and empowerment of employees. It sets clear policy and institutional framework, systematically monitors performance, encourages continuous improvements and innovative practices, and deepens the dialogue with all stakeholders.



Our approach includes:

- Choosing the right technology for our greenfield projects to ensure energy efficiency.
- Enhancing material efficiency, process/equipment productivity backed by pollution prevention practices and adoption of cleaner technologies for brownfield projects.
- 3R approach for water conservation to achieve 'Zero Liquid Discharge' target
- Waste Management System for systematic collection of scrap and safe storage/disposal and re-use of wastes.
- Continuous efforts to conserve resources, minimise and recycle wastes.
- Controlling emissions through dry scrubbing and electrostatic precipitators and discharge through appropriate effluent treatment plants.
- Rehabilitation through afforestation of mined areas and rehabilitation of waste disposal sites by greening, e.g. fly ash mound and abandoned red mud dump.
- Promoting industrial recycling of waste like spent pot lining, fly ash, spent caustic, etc.
- Product Sustainability through focused Research and Development Providing equal opportunities to all

5. STAKEHOLDER ENGAGEMENT



Hindalco recognises the needs and benefits of meaningful engagement with its stakeholders – both internal and external. Our Management moves with a vision of creating shared value, by understanding and expanding meaningful partnerships between businesses and stakeholders.

Hindalco engages with stakeholder groups that have impact on its business and its business could have an impact on them. Such an assessment is conducted internally. We have mechanism in place for periodic engagement with stakeholders on need basis. Based on the feedback from stakeholders, action plans are prepared and implemented by respective teams.

Following are the details of our engagement with our stakeholder groups:

<p>Employees & Labor Management Unions (Internal Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Fair wages and Rewards • Work life Balance • Training & Skill development • Career Growth • Occupational Health and Safety • Job Security • Transparent Communication <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Emails and Meetings • Intranet Portals • Employee Satisfaction Surveys • Training Program • Performance appraisal reviews • Grievance Redressal Mechanisms 	<p>Customers (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Timely Delivery • Quality • Pricing • Post-sales Support • Product related certifications • EHS Management Systems <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Emails and Meetings • Intranet Portals • Employee Satisfaction Surveys • Training Program • Performance appraisal reviews • Grievance Redressal Mechanisms 	<p>Suppliers (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Timely Payment • Continuity of orders • Capacity Building • Transparency <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Emails and Meetings • Vendor Assessment & Review • Supplier Audits • Signed Contracts • Training Workshops and Seminars • Social Gatherings 	<p>Communities (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Local Employment • Environmental pollution control • Infrastructure development • Training & Livelihood programs • Participation in social services <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Training & Workshops • Regular Meetings • Need Assessment & Satisfaction Surveys • CSR Reports
<p>Investors & Shareholders (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Sustainable Growth & Returns • Risk Management • Corporate Governance • Market Share • Operational Performance <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Board Meetings • Annual Reports • Website 	<p>Government & Regulatory Bodies (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Tax and Royalties • Compliance to laws & regulations • Employment • Pollution Prevention • Local Economy Growth <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Annual Reports • Communication with regulatory bodies • Formal Dialogues 	<p>Media (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Community Relations <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Social Media • Press Releases • Interviews • Website 	<p>Industry Associates (External Stakeholder)</p> <p>CONCERNS</p> <ul style="list-style-type: none"> • Regulations, compliance with Industry Standards <p>ENGAGEMENT PLATFORM</p> <ul style="list-style-type: none"> • Meetings, as per need



Materiality Analysis

Based on our engagement with various stakeholders, emerged issues that were of consequence to the organization and its stakeholders. For identifying material aspects, we followed a rigorous process:

Materiality identification:

- > Inputs from Leadership
- > Questionnaire based on inputs from leadership team
- > Feedback from
 - Employees on Questionnaire, surveys like VIBES etc.
 - Customer Satisfaction Surveys, dealers meet
 - Tier 1 suppliers
 - Community engagement programs, CSR reports etc.
 - Prioritisation of Materials identified at Business Level

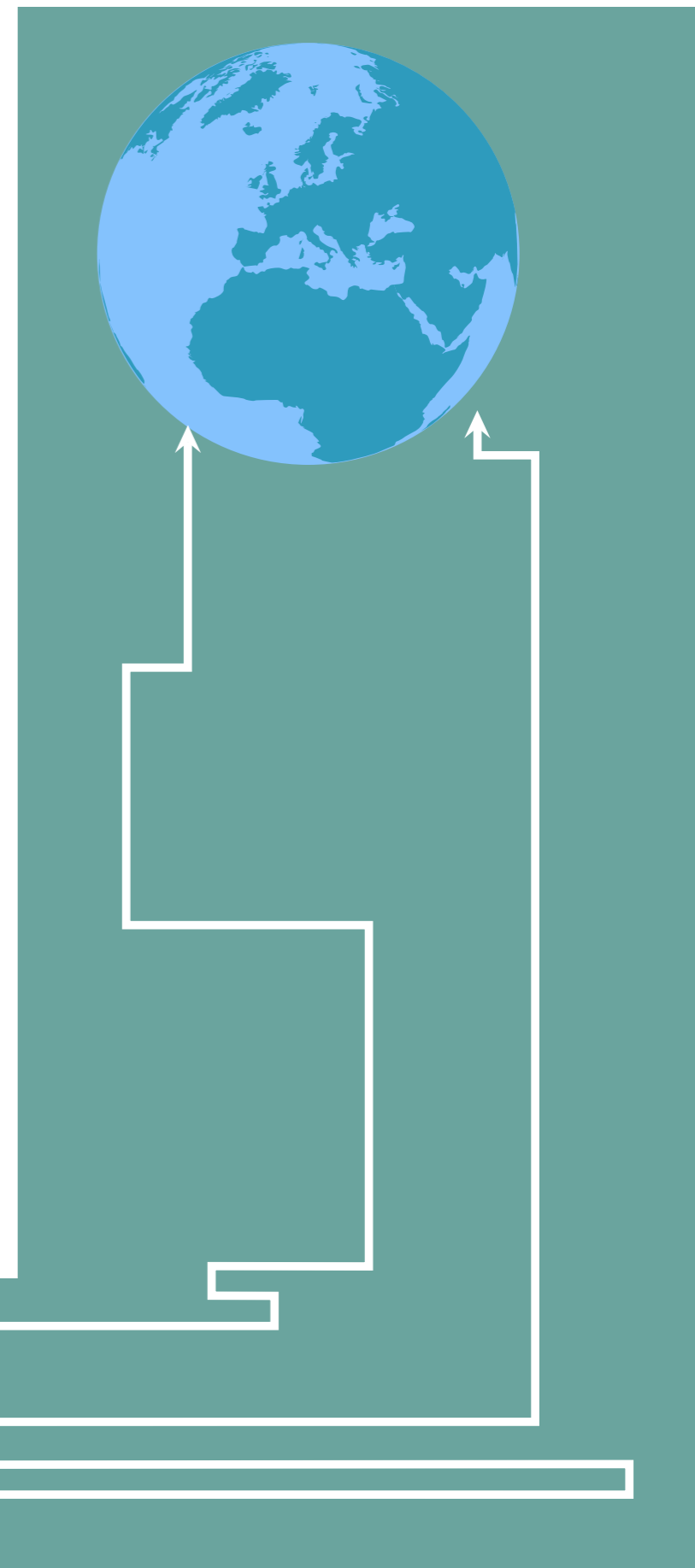
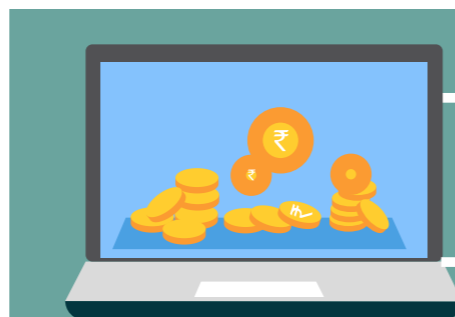


The material aspects were identified keeping in mind positive and negative aspects within and outside the value chain. Key aspects identified were:

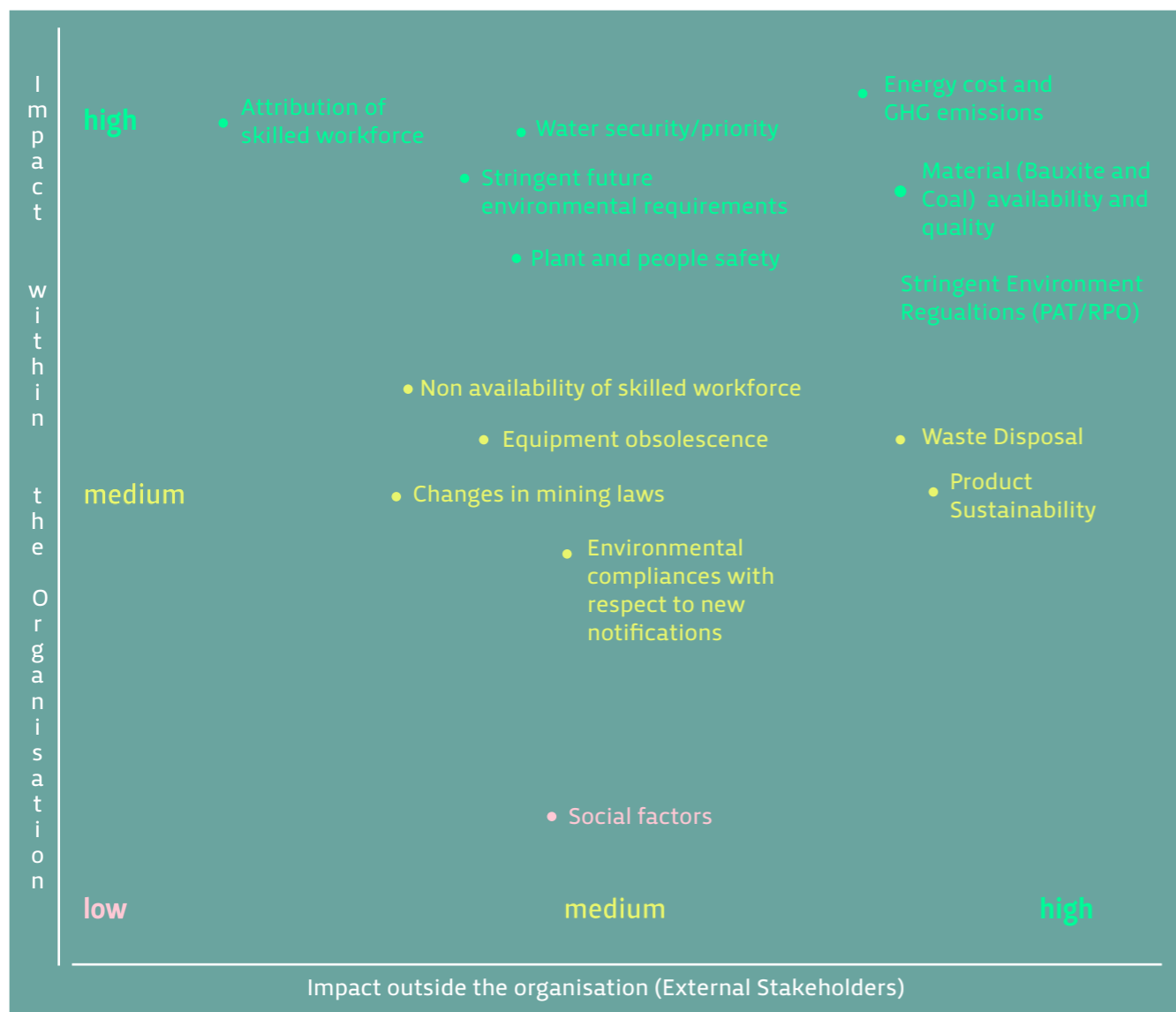
- > Climate Change
- > Water Security/Priority
- > Material Availability & Waste Management
- > Regulatory Risks
- > Energy Cost
- > Product Development
- > Attrition of Skilled Workforce
- > Plant & People Safety
- > Non-availability of Skilled Workforce
- > Equipment Obsolescence
- > Community Development
- > Dependence on Select few Customers
- > Decline of LME

Inputs from our significant internal and external stakeholders, also help us identify and prioritize potential risks related to Climate Change, water security, raw materials, waste management, product development and other regulatory risks.

Hindalco has a structured approach to identify and quantify each risk that helps us to strategically monitor and mitigate these risks. Decentralisation of the risk management process helps address these challenges in an effective manner. Plant level risks are handled at the plant level. Functional risks brought up by identified stakeholders are addressed by the relevant functional teams. Progress on targets and our response towards mitigating above mention risks have been covered under different sections of the report.



Materiality Assessment – Aluminium Business



Actions being implemented to mitigate impacts of these key challenges as part of risk management plan

Materiality Assessment – Copper Business



Actions being implemented to mitigate impacts of these key challenges as part of risk management plan

6. RESPONSIBLE STEWARDSHIP

- Economic Stewardship
- Product Stewardship
- Environmental Stewardship
- Employee Stewardship
- Community Stewardship



Economic Stewardship



As financial stewards of the company, it is our primary role to improve corporate performance by managing risks. While the success of businesses rests on long-term

steady profits, sustainable and inclusive growth unlocks opportunities and opens doors for collaborative progress.

At Hindalco, our focus has been to integrate sustainable development into business planning so that the benefits of our growth percolate to our stakeholders. We integrate environmental and social considerations into our business planning and decision-making processes. Through our practice of identification and mitigation of sustainability risks we have been able to maximise shared value by creating greater accountability to all our stakeholders.

Mr Praveen Maheshwari
Chief Financial Officer

Record Consolidated EBITDA at ₹ 13,558 crore (up 36 percent over the previous year) on a turnover of ₹102,631 crore.

Produced record aluminium metal at 1.3 million tonnes (up 12 percent) and alumina at 2.9 million tonnes (up 8 percent).



During 2016-17 Hindalco's Alumina production was up 8 per cent and Aluminium metal production extended by 12 per cent as compared to the previous year. Value Added Products (including Wire Rod) production was at 481 kilotonne, higher by 14 per cent as compared to previous year. The Company's new plants Aditya Aluminium, Mahan Aluminium and Utkal Alumina are operating at their rated capacities. Utkal Alumina,

amongst the lowest cost alumina producers' globally, produced 1.5 million tonnes of alumina during the year.

Due to planned shutdown the cathode production was lower than previous year (376 KT vs 388 KT). Rod production was lower due to lower domestic demand.

The climate change implications on the mining sector

can impact production due to potential physical or regulatory risks.

Interacting with strategic stakeholders about these issues, we endeavour to scan the horizon to better understand them and their likely risk to our business.

We constantly try to pre-empt such risks and have

been taking positive steps to wards their mitigation with respect to reductions in energy use, water use, and improvements in safety performance (elaborated later in the report). During the reporting year however, our economic performance remained untouched owing to climate change factors.

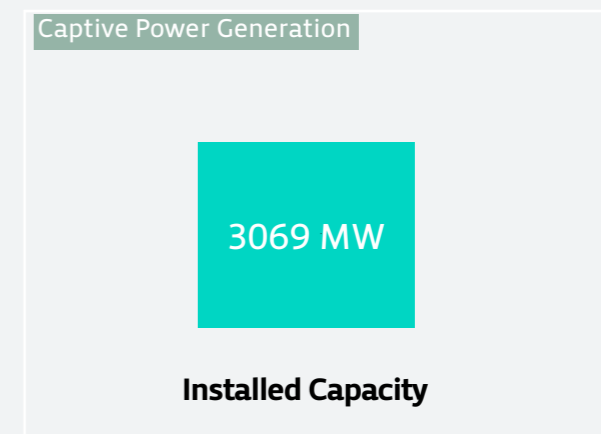
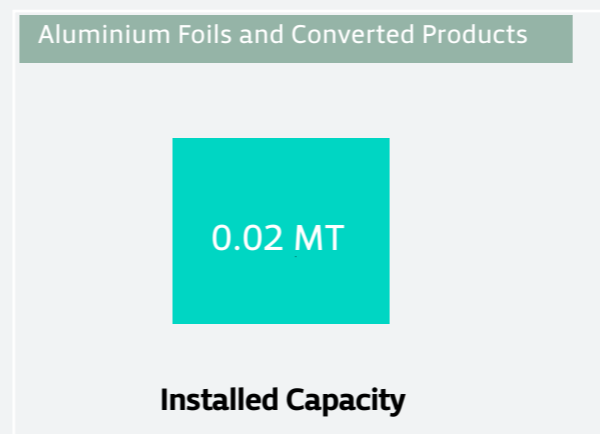
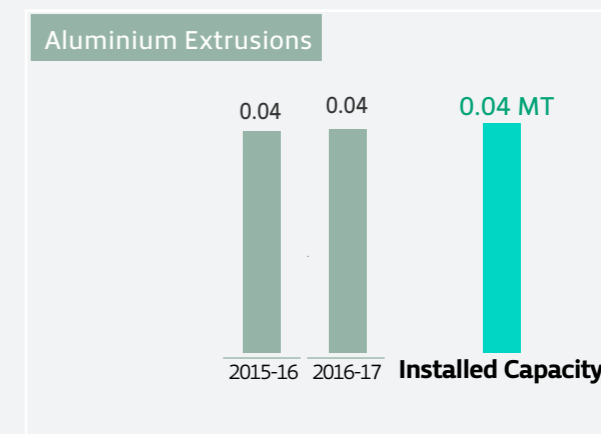
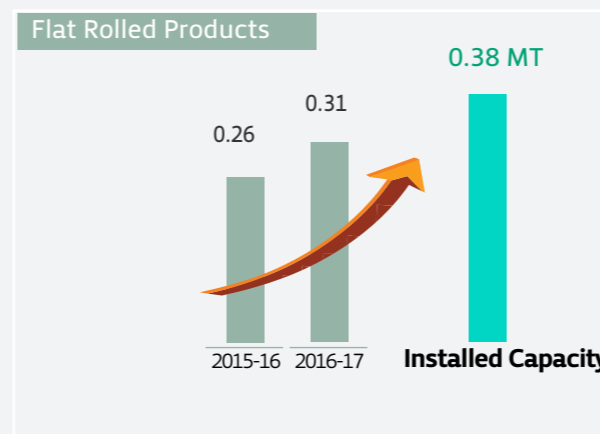
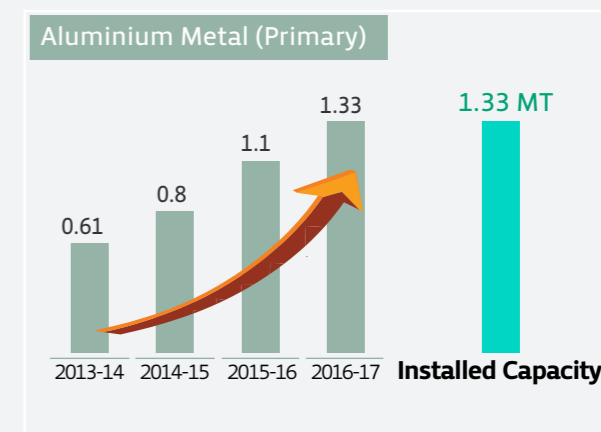
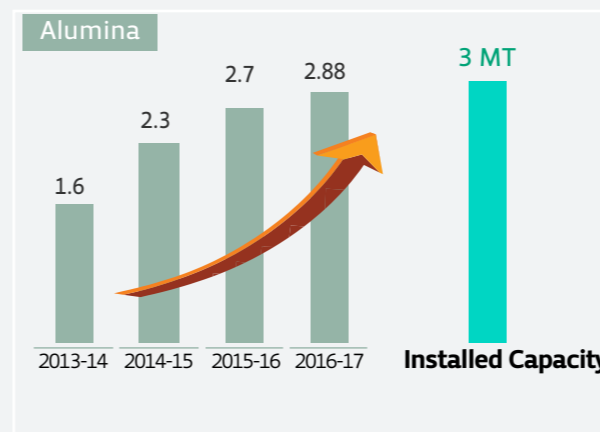
Aluminium

New Plants operating at designed capacity – During FY17, the Company produced record Aluminium metal at 1.3 million tonnes and alumina at 2.9 million tonnes

Alumina production up by 8% and Aluminium metal production up by 12%

VAP production increased by 14% in line with our long-term strategy

Utkal Alumina produced 1.5 million tonnes of alumina during the year and is amongst the lowest cost alumina producers globally.

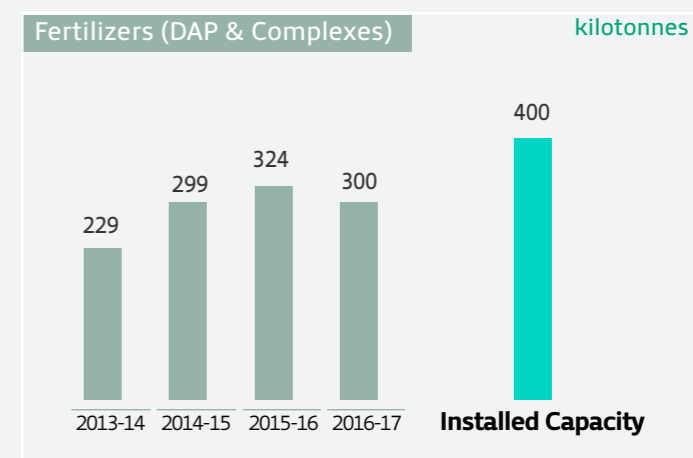
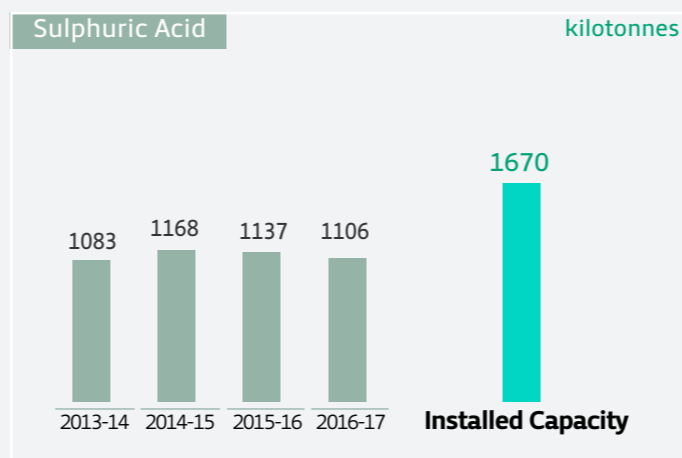
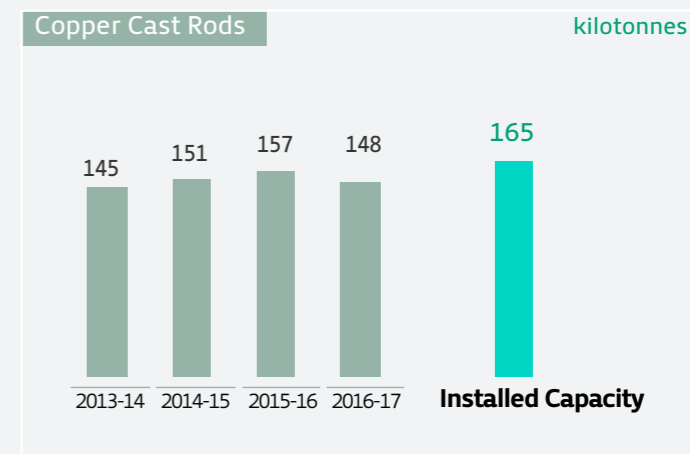
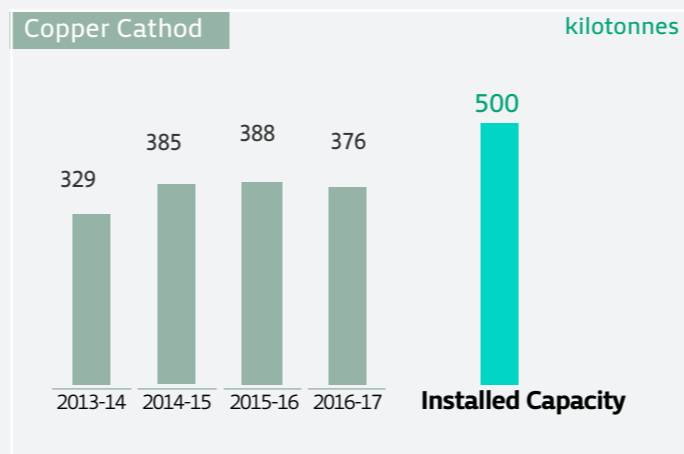


Copper

The Copper Business continued to deliver robust operational performance

The dip in Cathodes production was mainly due to planned shutdown in both the smelters.

Copper Rods production was down by 5 percent as compared to last year mainly on account of subdued demand and downtime due to machine up-gradation during the year.

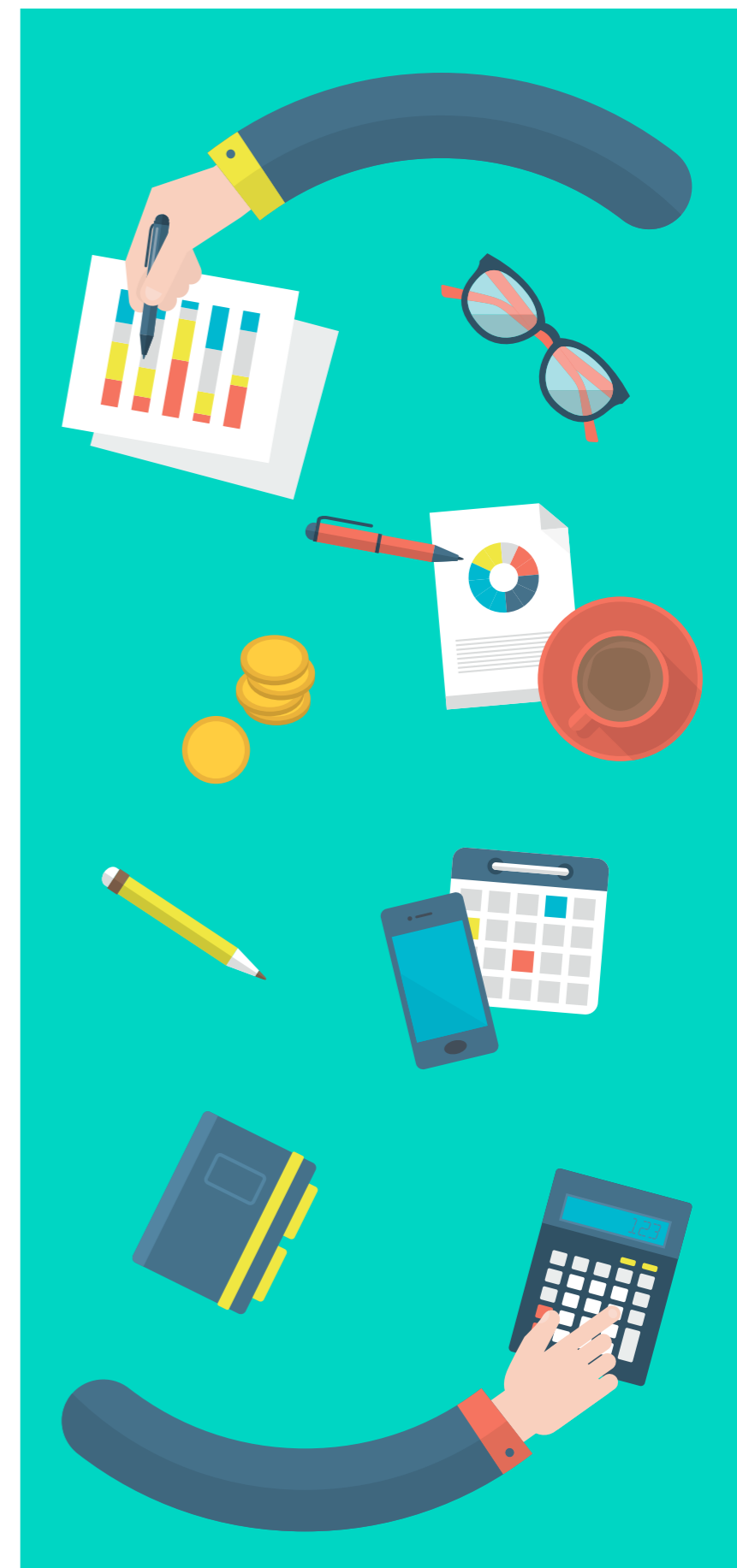


Financial Highlights

Direct Economic Value Generated and Distributed

(₹ Crore)

	Aluminium	Copper	Corporate	Utkal Alumina
Economic Value Generated				
Net sales by business	18,663	18,273	-	2,152
Revenue from financial instruments	91	50	887	7.75
Revenues from sale of assets	-5	-19	1	0.02
TOTAL GENERATED	18,750	18,305	888	2160
Economic Value Distributed				
Operating costs	13,818.06	16,736.70	-183.78	1,432.42
Employee wages and benefits	1,471	128	153	55
Payments to providers of capital	1,581	59	931	492
Payments to government	-	-	596	-
Community investments	1	-	22	-
TOTAL DISTRIBUTED	16871	16923	1518	1979
Economic Value Retained				
Profit Before Tax	-	-	-	-
Profit After Tax	-	-	-	-
Earnings per share	-	-	-	-
TOTAL RETAINED	-	-	1556.89	(114)



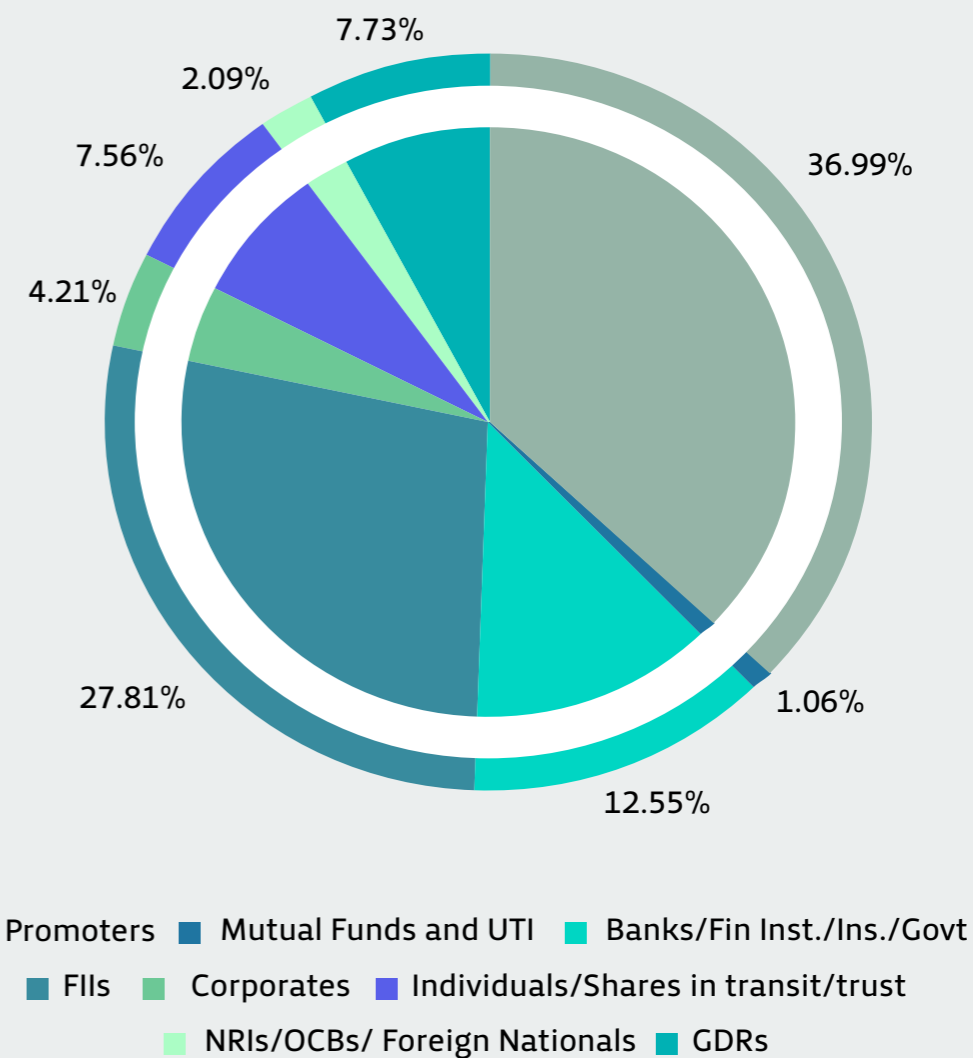
Financial Assistance from Government

	Aluminium	Copper	Corporate	Utkal Alumina
Tax relief or credits	-	-	-	-
Subsidies	287	-	-	-
Investment grants	-	-	-	-
R&D grants	-	-	-	-
Other grants	-	-	-	-
Any other financial benefit (specify)	-	-	-	-

Defined Benefit Plan Obligations

	Aluminium	Copper	Corporate	Utkal Alumina
Present value of Defined Benefit Obligations at the beginning of the year	-	-	846.05	5.87
Current Service Cost	-	-	56.14	0.97
Past Service Cost	-	-	-	-
Interest Cost	-	-	62.42	0.39
Curtailement Cost / (Credit)	-	-	-	-
Settlement Cost / (Credit)	-	-	-	-
Plan amendments	-	-	-	-
Acquisitions Cost	-	-	-	-
Actuarial (Gain) or Loss	-	-	(73.17)	(1.42)
Benefits paid	-	-	(27.51)	0.03
Present value of Defined Benefit Obligations at the end of the year	-	-	863.93	5.84

Shareholding Pattern



Product Stewardship

Research & Development

Teams from Hindalco units, Renukoot (Renusagar, Dahej, Hirakud, Taloja among others) earned highest level awards at the Regional and National Quality Circle Conventions, including Gold Awards and Excellence and Par Excellence awards.

We target to achieve 200 KTPA potential through new product and application development by 2020

During the reporting period, ₹19.38 Crore was spent on Research and Development

Hindalco's Research and Development teams work to create pioneering solutions to the technology challenges we face. Better products and innovative manufacturing processes ensure product quality while safeguarding the environment. With over 200 employees dedicated to R&D including our global technology centres, we offer leading expertise in areas of applied technology, market-led innovation and customer technical services.

Research and development at Hindalco in India is spear headed by its two Innovation centres at Belagavi and Taloja, both recognised by the Department of Scientific & Industrial Research (DSIR), Government of India. Taloja has also been accredited 'in accordance with the standard ISO/IEC 17025:2005' by the National Accreditation Board for Testing and Calibration Laboratories (NABL).

The Belagavi Innovation Centre conducts research in the field of Bauxite, Bayer process and Alumina, while the Taloja innovation centre specialises in the field of development of new product and applications, metallurgical services and Oil & Lubrications. Developmental and analytical services over the years have earned both the centres national and international recognition, including the National Award for R&D efforts.

Every manufacturing plant in turn has its own R&D/ technical cell that works on quality assurance, process improvements, and new product development. R&D teams at unit levels have launched projects to achieve higher amperage, lower specific energy consumption and minimal interruptions of process flow.



The Hindalco Technology division has developed a technology roadmap and identified key thrust areas focusing on generation of Value from Waste, reduction specific energy consumption & emissions, reduction of specific water consumptions, optimal use of raw material, development of new products and applications and increase metal recovery from different processes. In addition to some of these, for Copper, the focus is on increasing recovery of copper and other precious metals like silver, gold, selenium, tellurium etc.

For conducting R&D in select areas of work, Hindalco engages the Aditya Birla Group's corporate research and development centre, Aditya Birla Science and Technology Company Private Limited ("ABSTCPL"). ABSTCPL's forte of having multi-disciplinary teams of technical experts, scientists and engineers, enables us to develop competencies in select areas in order to provide long term value to business. In addition, many collaborative research projects are being undertaken with reputed research organisations and educational institutes, such as IIT Bombay, IIT Kharagpur, IIT BHU, IMMT Bhubneshwar, NML Jamshedpur and AMPRI Bhopal.

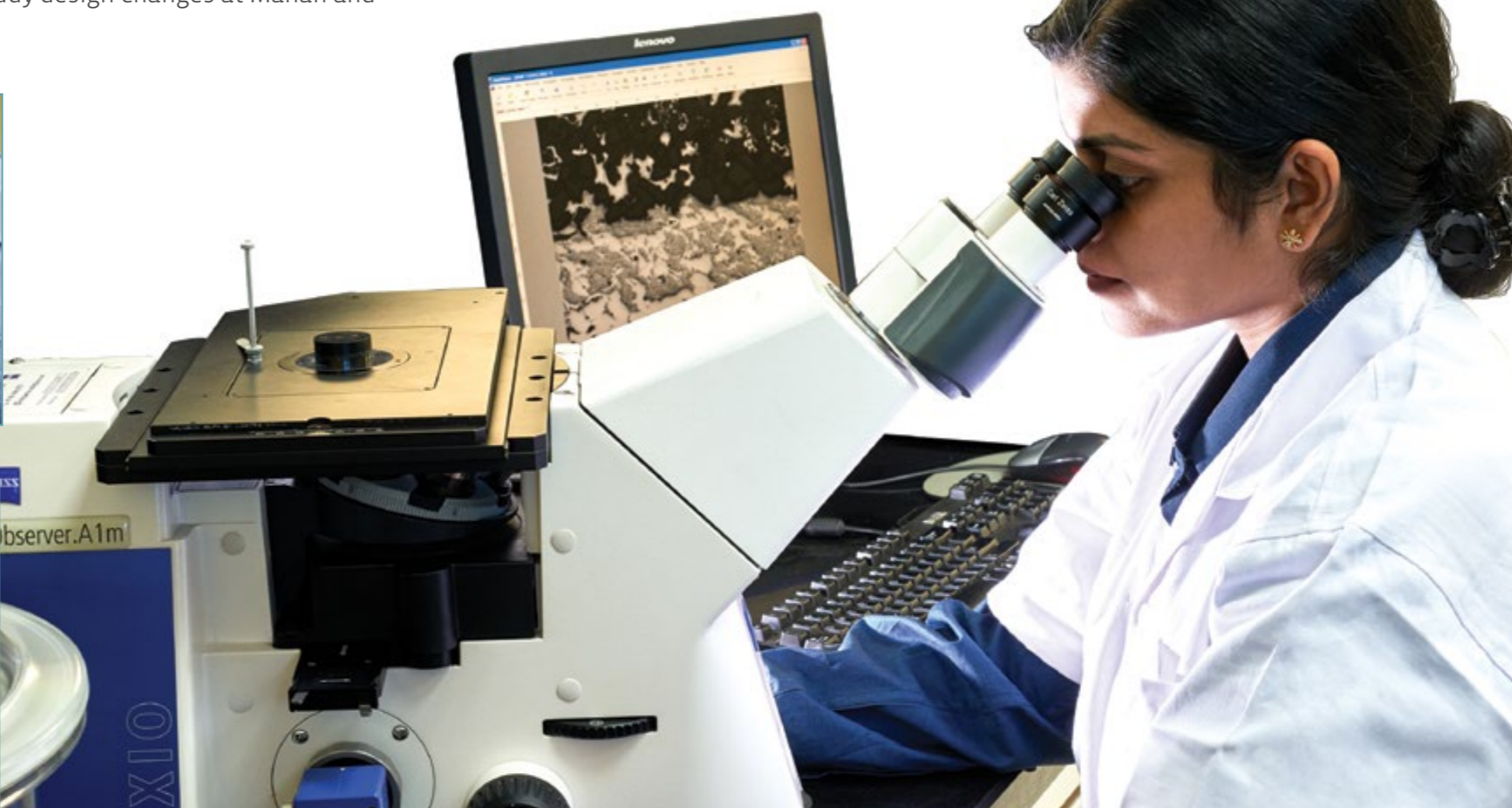
Technology Absorption over 2016-17

- Developed Special grades of alumina for ceramic, display glass and other applications like fire retardant fillers.
- Research on value-added applications of process waste material like bauxite residue and fly ash.
- Successful trials in a group of pots at Hirakud operating at lower specific energy consumption with a new design developed jointly with ABSTC.
- Full commercialization of 8079 grade Aluminum blister laminate foil.
- Development of Can body stock grade rolling ingots and sheets.
- Upgraded existing Copper flash smelter-1 by increase in shaft diameter to increase production.
- New process developed for recovery of Copper from refinery effluent
- Mathematical modelling of pots to study design changes at Mahan and Hirakud smelter jointly with ABSTCL.



Encouraging Innovation

- Think Tank Meeting - Young engineers are provided opportunities to interact with the unit Leadership and encouraged to take up innovative projects. A specific forum for such interaction is the Think Tank Meeting chaired by the Unit Head.
- Innovation Assessment Tool - A tool has been created for objective assessment of ideas valuing various facets of innovation.



Product responsibility

Hindalco manufactures diverse range of products and has a wide customer base spanning sectors from pharmaceuticals and packaging to automotive and transport. All our products comply with local and international product regulations including codes, service information and labeling. We do not produce or sell any banned products. There is no significant environmental impact during product distribution and employee travel.

All our products meet the compliance requirements of the markets including the ones related to Environment, Health & Safety. During the reporting period, there were no non-compliance incidents. No non-compliance/strictures/penalties have been imposed on the Company by stock exchange(s) or SEBI or any statutory authority on any matters related to capital markets. We haven't receive any complaints regarding breaches of customer privacy or loss of customer data.

Customer Satisfaction

Our responsibility does not end at production. In order to provide best products and services to our customers, it is important that we engage with and understand customer expectations. An online portal, Customer Relationship Management², has been set up for globally engaging with our customers where we encourage them to share issues related to product quality, delivery, and other significant aspects.

In order to gauge our performance against customer expectations, we also conduct regular Customer Satisfaction Surveys. Since 2015, we have also adopted the Net Promoter Score (NPS) system and have so far carried out the NPS Top Down survey for Wire Rod (FY 2015, FY 2016 and FY 2017), Ingot (FY 2016) and FRP (FY 2017). The NPS Top Down survey presents the scores vis-à-vis our competition and gives more actionable feedback. We will extend it to our other SBUs by next year.

For all categories, FY 2017 NPS Dipstick survey showed scores over 50, far ahead of the competition.

Project Digitization, an initiative undertaken on Customer Delight for Aluminium business, was aimed at improving overall customer experience with Hindalco.

For the Copper business, we have already rolled out an NPS (Mission Happiness) bottom up practice in current year. At its pilot stage of 60 Customers contributing nearly 65% of our domestic sales, the NPS score till date is 37.



Supply Chain

Hindalco Central Logistics Cell recognised with the Economic Times Award for Supply Chain Management & Logistics and the Express Logistics & Supply Chain Leadership award for excellence in manufacturing supply chain engineering and logistics.

Hindalco’s sustainability initiatives expand beyond our business walls to include our suppliers and vendors. This has resulted in conservation of resources, optimisation of processes, reduced costs and increased productivity. We encourage promotion of local suppliers and vendors in order to save costs and in turn transfer these benefits to our end customers. To the extent possible, raw materials are sourced locally/nationally. we are in the process of developing mechanism to capture this information

Key elements of Supply Chain

Aditya Birla Groups’s well-defined Supply Chain and Procurement Policy helps build a sustainable supply chain for the growth and sustenance of businesses. It ensures compliance to the local, national and international legislation within the supply chain and adherence to the ABG Code of Global Business Ethics and Compliance Standards and conformance to the ABG Sustainability Framework requirements by tier one suppliers. The Policy is periodically reviewed and updated as necessary.

For the Copper business, we have already rolled out an NPS (Mission Happiness) bottom up practice in current year. At its pilot stage of 60 Customers contributing nearly 65% of our domestic sales, the NPS score till date is 37.

Engagement with suppliers

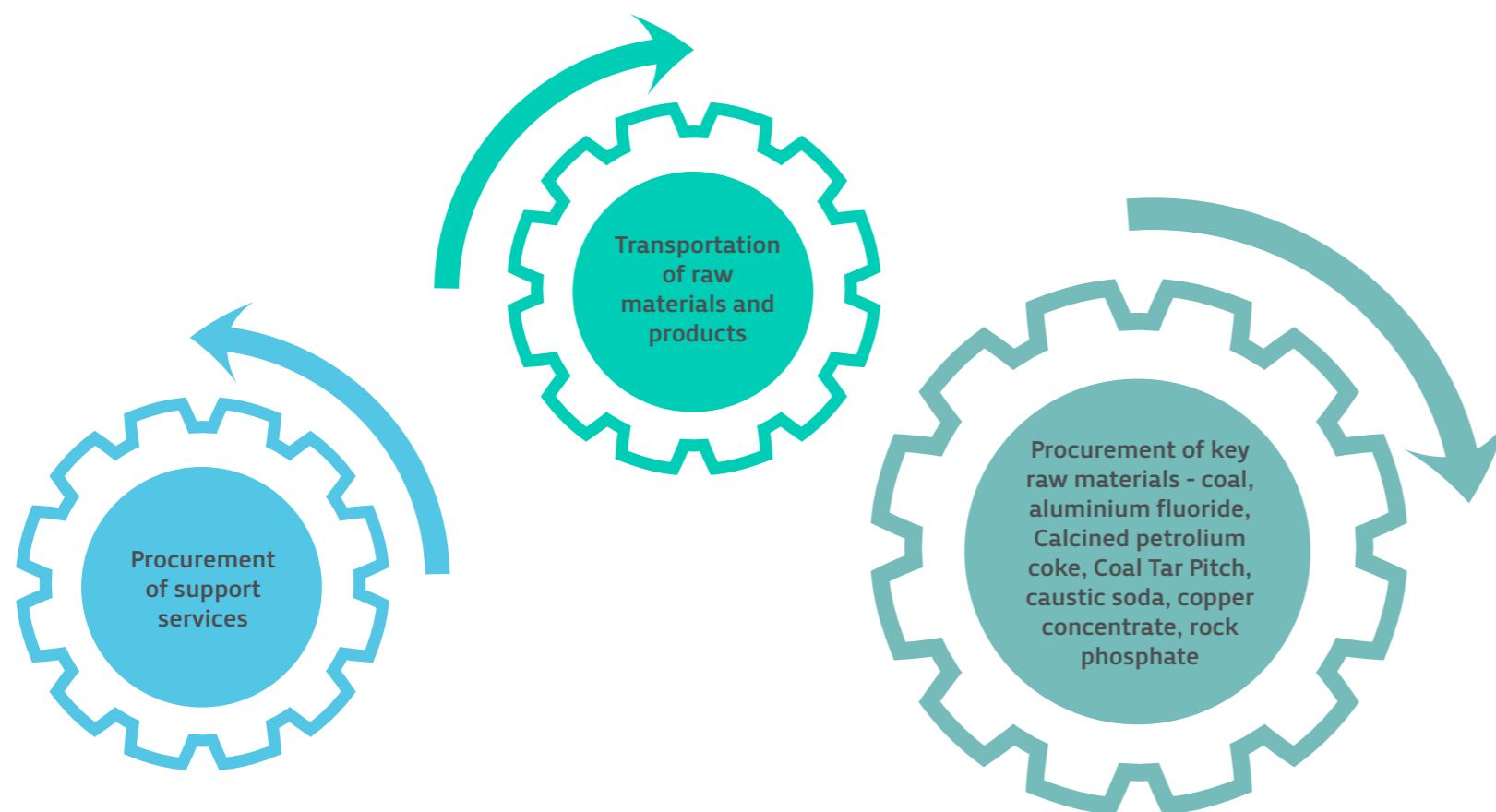
In order to ensure a sustainable value chain, we work very closely with our vendors and suppliers on multiple levels. Expectations are set through a supplier code of conduct including Human Right issues like child labour and ensuring fair and transparent business practices⁵. We also encourage our suppliers to develop their environment and social management systems. All new suppliers are required to submit evidence for compliance with applicable regulations, including environment, safety, labour and human rights practices. During the reporting period, no penalties / or terminations were placed on any supplier for violation of labour practices or any negative impact on environment or society. Due to our policies and regular engagement, we have been able to strengthen our supply chain over the years.

We recognize that building capabilities of our suppliers will improve our performance. Working with suppliers on improving their process and practices is a priority. Hindalco regularly holds capacity building programmes with its local suppliers.

Supplier meets are held regularly. This is a two way communication. One, it helps Hindalco’s business partners better understand our needs in terms of service and quality expectations; and two, it is an opportunity for our suppliers to share their grievances and concerns. Hindalco also ensures that its suppliers are made aware of best safety practices.

We are in the process of developing a formal tracking mechanism to capture the environmental, social and economic impact of our value chain. This will also include a grievance redressal mechanism.

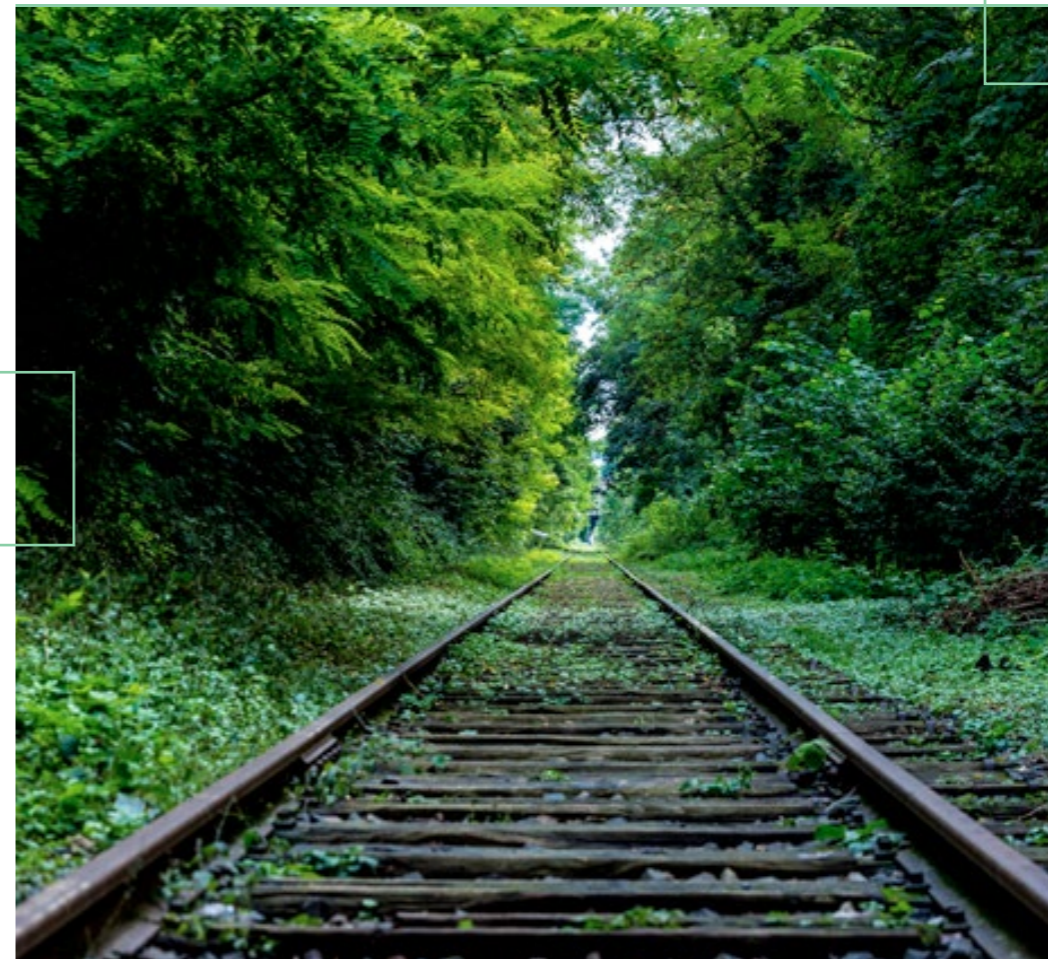
During the reporting cycle, no changes were carried out in structure of supply chain, relationship with suppliers (termination and selection), including selection & termination.



Environmental Stewardship

	%age improvement from Last Year
Specific Energy Consumption	
Aluminium: 73.58 GJ/tonne	2.19%
Copper: 9.03 GJ/tonne	2.14%
Specific GHG Emission (Index to FY 15)	
Aluminium: 88.38 %	6.25%
Copper: 92.21%	3.18%
Specific Water Consumption	
Aluminium: 60.57 m ³ /tonne	8.91%
Copper: 23.88 m ³ /tonne	0.20%
Material Recycling (External)	
Aluminium: 7.04%	1.29 %
Copper: 13.8%	99.71%
Increase in Green Cover	
6,62,532 trees planted	49.9 %

- Targets**
- 35% reduction in Specific energy consumption & GHG emission from Base year 2005-06 by 2030
 - 40% reduction in Specific Water consumption from base year 2011-12 by 2025
 - Zero Liquid Discharge in all operations (11 sites are already ZLD) by 2020
 - Value from Waste - utilising 10% bauxite residue & 100% fly ash by 2020



Energy & GHG Emission intensity for Aluminium is reported for process energy for Primary aluminium production, which includes Energy & GHG Emissions from Aluminium Refinery, Aluminium Smelter & Carbon Anode plant in their ratio of use per ton of metal.

Energy & GHG Emission intensity for Copper is reported for process energy for Copper production, which includes Energy & GHG Emissions from Copper Smelter & Copper Refinery per ton of copper produced from copper concentrate.

Hindalco is committed to demonstrating Environmental stewardship by taking major steps towards combating climate change. While our production processes focus on reducing our environmental footprint, we continue our efforts to best mitigate and manage unavoidable damages. We strive to become leaders in environmental performance through our commitment to following stringent environmental standards and adopting international best environmental practices towards energy efficiency, waste minimization, recycle and reuse of waste & waste water, minimization of hazardous waste generation and safe disposal.

- Dr P. K. Banerjee
Chief Technology Officer

Our Environmental Management system focuses on continual improvement of our environmental results through technological interventions, introduction of state of art technologies & equipment and continuous on-line environment monitoring systems.

Our newly commissioned Greenfield and Brownfield Projects ensure minimal impact on the environment and best utilization of resources by conservation and maximizing reuse/recycle. In all operating units and in new projects, Hindalco has installed technoeconomically viable mitigation measures in the areas of water, air, energy and waste.

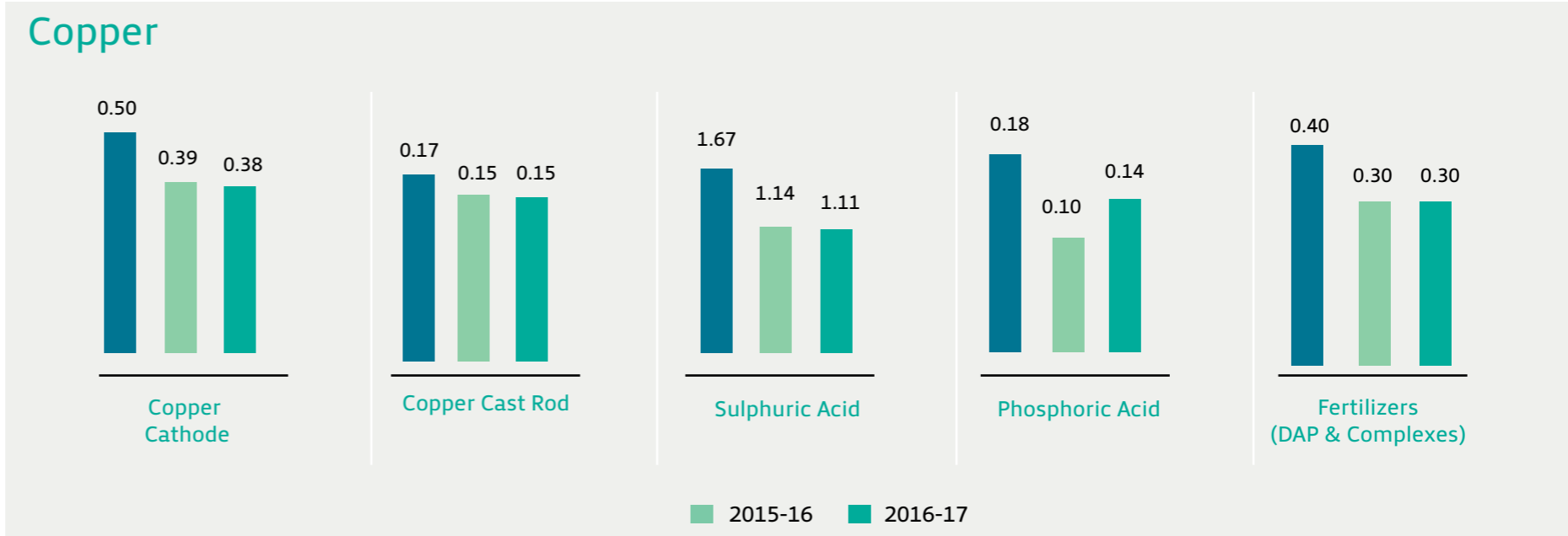
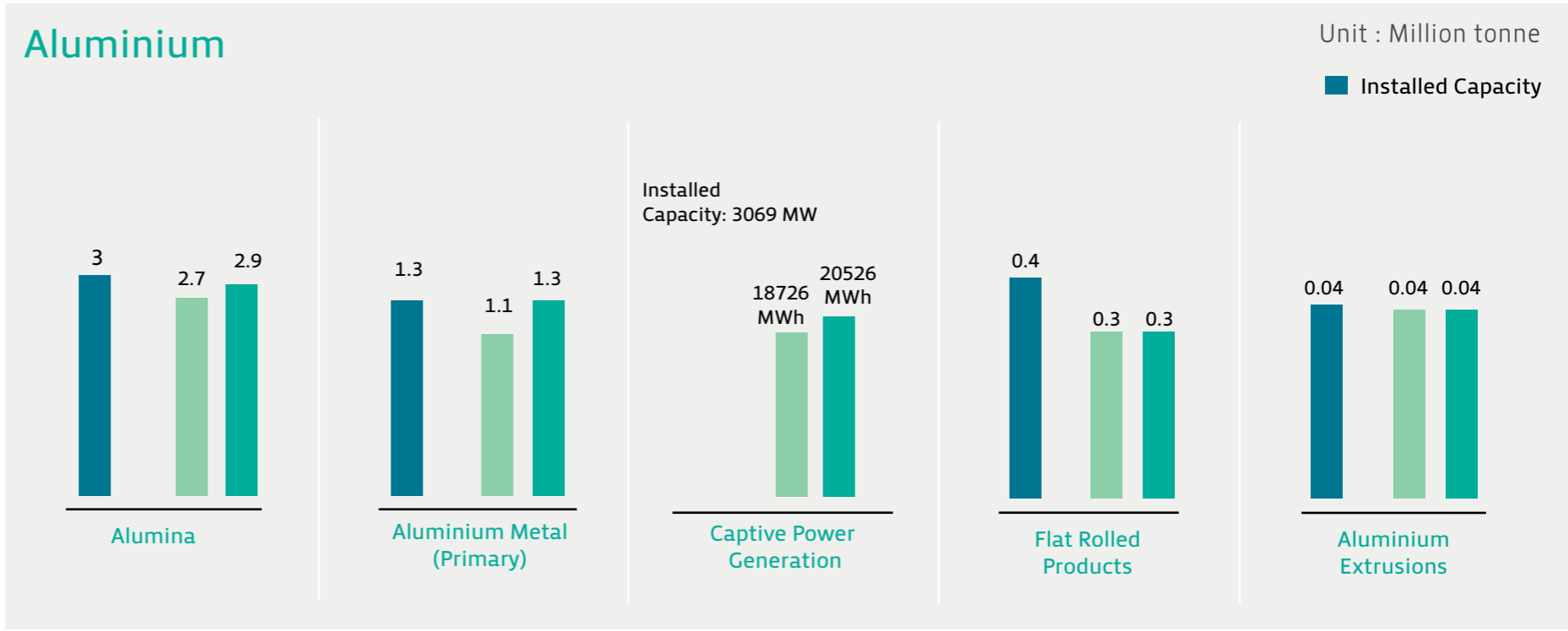
¹We regularly submit environmental compliance reports to relevant authorities. Protection of environment is one of our core business agendas. Our environmental protection expenditure during FY 2017 was ₹181.89 Crore. The Capital investment on Energy conservation equipment & projects for the year was ₹41.1 Crore. There were no fines or non-monetary sanctions levied on account of non-compliance with environmental laws and regulations.

Material Management

Hindalco's mining and manufacturing practices take into account interests of all its stakeholders as well as ecological conservation. We follow a multi-dimensional approach of resource sustainability throughout our value chain. Technology and process improvements towards material use efficiencies are well ingrained in our

Environmental Policy. In addition, we have defined management responsibilities, systems and performance indicators for each of the steps in resource sustainability. Our strategy has been to have a good mix of captive sources as well as long-term sourcing relationships with raw material suppliers based on productivity, cost and sustainability parameters.

Production

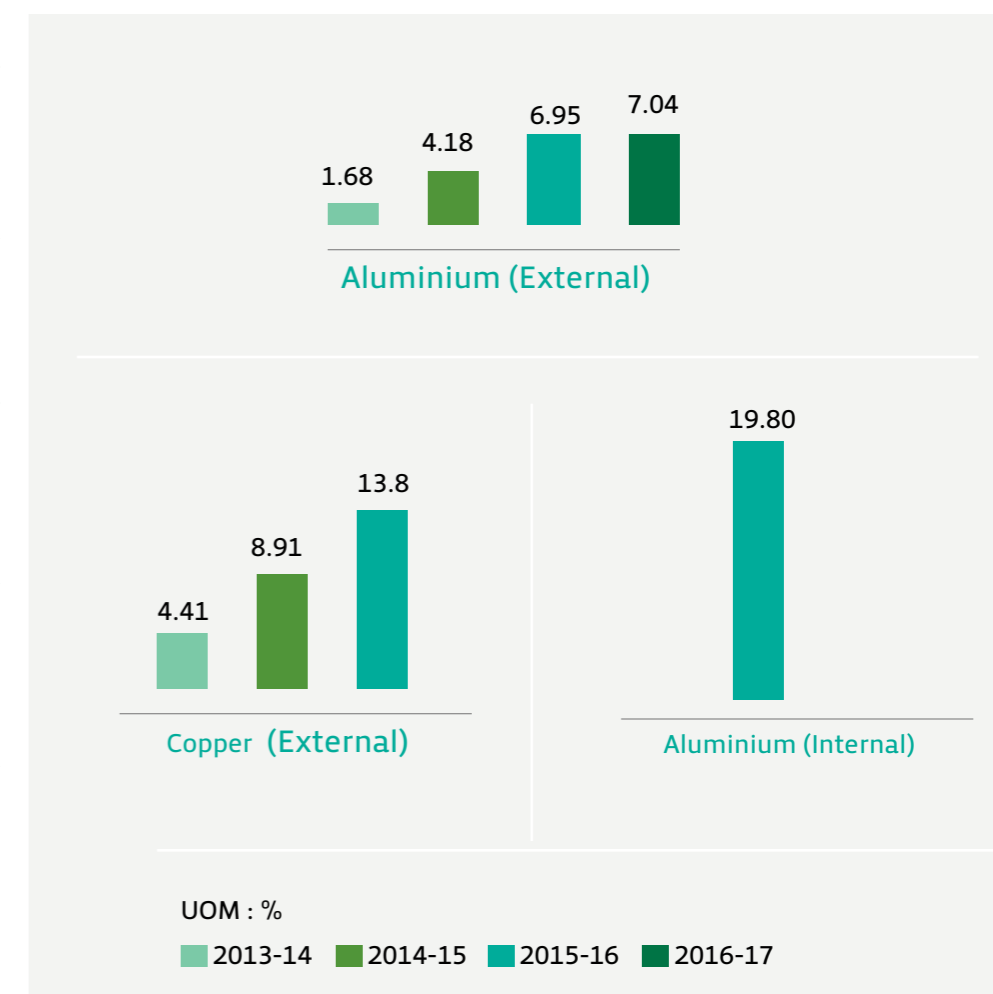


Raw Material Consumption

Product Name	UOM	2013-14	2014-15	2015-16	2016-17
Aluminium Floride	000' tonnes	13.39	14.81	15.68	18.59
Calcined Petroleum Coke	000' tonnes	166.17	312.67	419.36	490.79
Caustic Soda	000' tonnes	194.54	210.33	269.04	289.39
Pitch	000' tonnes	42.58	74.42	79.72	108.29
Rock Phosphates	000' tonnes	346.97	456.14	521.14	461.68
Ammonia	000' tonnes	53.12	66.89	75.39	71.53
Bauxite	million tonnes	4.14	7.18	8.38	8.83
Copper Concentrate	million tonnes	1.2	1.27	1.23	1.26

Recyclable Material Consumption

Hindalco's product portfolio largely comprising of Aluminium and Copper lends itself to huge recycling potential. Infact Aluminium is the most valuable material in the recycling bin and can be recycled directly back into itself over and over again. Recycling of aluminium and copper greatly reduces energy and environmental impacts. Our downstream manufacturing plants have dedicated aluminium recycling and remelting facilities. We recycle process scrap from customers and scrap collected from the market together with our own process scrap. Our copper smelting facility at Dahej also undertakes recycling of copper scrap and recovery of copper from slag discarded by conventional production activities.



Ensure access to affordable, reliable, sustainable and modern energy for all

7 AFFORDABLE AND CLEAN ENERGY



Energy and Emission

- After successful commissioning of 1 MW solar PV power plant at Alupuram, Kerala unit in FY16, progress has been made for setting up a 30 MW Solar PV Power plant at Aditya Smelter unit, Odisha
- In order to reduce the fugitive emission and SO₂ exposure in work environment, water cooled hoods were installed with two convertors to trap secondary gas
- To reduce SO₂ emission in ambient air initiatives taken are: Drying Tower Demister pads replacement, Arresting of Pre-heater tube bundle and Leakage from Gas Heat Exchanger-62 HX 02 arrested by plugging 205 tubes
- Fresh catalyst (V₂O₅) 163 m³ charged in convertor for effective conversion of SO₂ to SO₃. Based on performance evaluation, total 3240 bags of compartment Bag Filter of concentrator dryer, replaced. PM emission reduced by 30%.

ENERGY

National Energy Conservation Award presented by the Bureau of Energy Efficiency, Ministry of Power, Government of India to Mahan Aluminium

Tajola FRP was awarded Maharashtra State Energy Development Agency (MEDA) Energy Conservation Award for 2015-16.

Champion of the Champions Trophy in the "Energy Vertical" of GHKC & GreEnv Contest 2016-17 won by Dahej Copper Complex

Aluminium and Copper manufacturing have high-energy footprint and therefore, energy management is a key environmental aspect for Hindalco. Most of the company's power requirements are met through its captive power plants. With new coal linkages attained in FY2017, coal security is now at over 60% of the Company's annual requirement of the domestic Aluminium Business.

We have dedicated Energy Cells with Energy Manager / Energy Auditor Certified by “Bureau of Energy Efficiency” that ensure planning and implementing energy conservation initiatives, tracking latest technological developments in the field of energy conservation and exploring Renewable, Eco-friendly Green sources of energy. Each Unit practices walk-through and detailed Energy Audits, Quality Circles, OPEX Committees and Energy Conservation Month, to ensure wider and deeper involvement. Through the Suggestion Scheme employees are encouraged to come up with energy savings ideas that are recognised and rewarded.

During the reporting year, periodic energy audits were conducted in all units. A number of energy-saving initiatives were undertaken and green energy projects implemented.

Energy Use (Aluminium and Copper)

Business	Sector	2014-15	2015-16	2016-17
Total Energy Consumption (million GJ)				
Aluminium	Total	201.68	243.85	262.46
	Direct	199.35	241.36	259.91
	Indirect	2.33	2.49	2.55
Copper	Total	13.39	13.69	12.71
	Direct	13.16	13.53	12.43
	Indirect	0.23	0.16	0.28

Energy Consumption outside the organization is significantly low as compared to consumption within the organisation. Hence the organization has no plans to report this data as of now.

Steps Taken towards Conservation of Energy

- Reduction in steam consumption in Aluminium Refinery units through process optimization and loss reduction.
- Cathode lining optimization and use of new design collector bar in Aluminium Smelter for loss reduction.
- Reduction in DC Power consumption in pots by optimizing pot voltage in Aluminium Smelter
- Efficiency improvement in Boilers through process optimization
- Auxiliary power reduction through automation
- Replacement of Metallic Fan blade of Cooling Towers with FRP blades.
- Rationalization of motor, pump & fan capacities.
- Replacement of inefficient pumps & motors with high efficiency pumps & motors
- Reduction in line losses through power factor improvement by capacitor installation
- Installation of translucent roofing sheet/sun pipe light to use more natural light.
- Replacement of conventional light with energy efficient LED Light.
- Installation of VFD in variable load application
- Combustion efficiency improvement and loss reduction in Furnaces
- Compressed Air system efficiency improvement

Steps Taken For Utilising Alternate Sources of Energy.

- Use of biomass as a supplementary fuel in our boilers.
- Use of translucent roofing sheet/Sun light pipe for more use of Natural light and use of turbo-ventilators in place of conventional exhaust fans.
- After successful commissioning of 1 MW solar PV power plant at Alupuram, Kerala unit in FY16, progress has been made for setting up a 30 MW Solar PV Power plant at Aditya Smelter unit, Odisha.

EMISSION

The nature of our operations involves burning of fossil fuels, moving ores and wastes, and smelting of metals, which releases gases and particulates into the atmosphere. Oxides of sulphur and nitrogen and particulate matter form the majority of the air pollutants from our operations are regularly monitored while using control equipment to restrict air emission load from the processes. Our air emissions are within the applicable limits and monitored rigorously for any deviations.

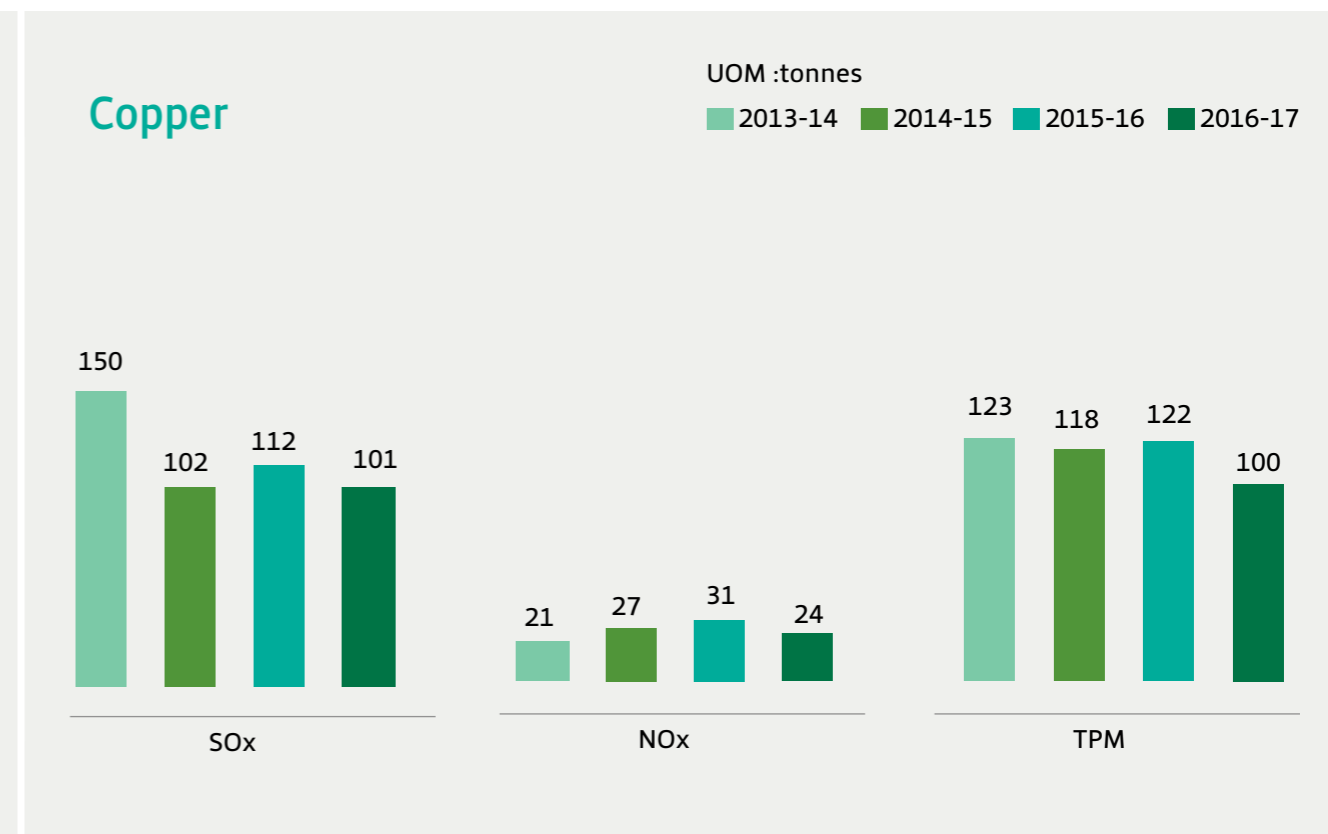
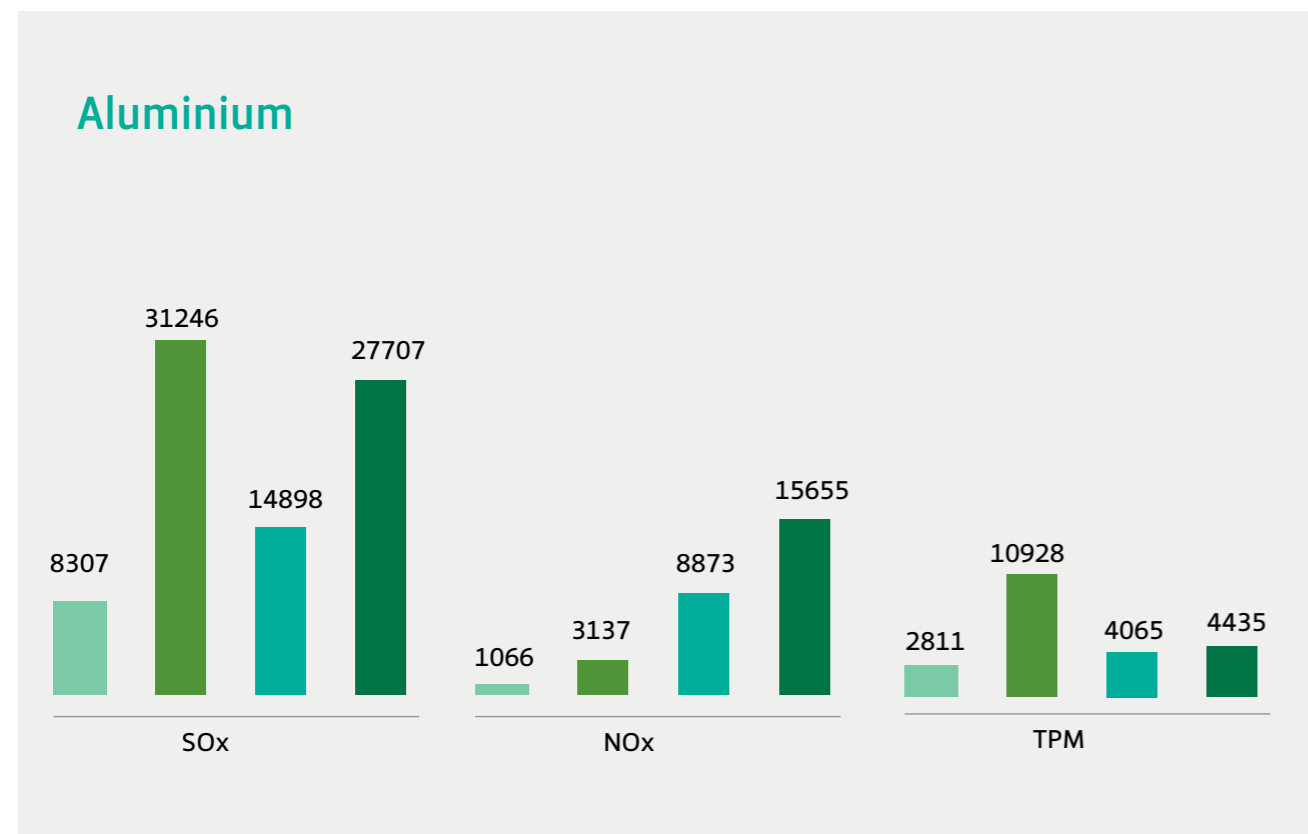
Hindalco currently tracks the GHG emissions due to fuel consumption on site (scope 1) and emissions that occur outside our sites, due to our import/purchase of electricity (scope 2). Scope 3 emissions are negligible as compared to Scope 1 & 2 emissions and we are in the process of setting up a system for measuring Scope 3 emissions. Hindalco has been focusing on reducing all form of emissions.

While emissions due to fuel consumption recorded a reduction for Copper manufacturing, emissions during production of Aluminium increased. This was due to an increase in production of the final products.

GHG Emission

Business	Sector	2014-15	2015-16	2016-17
Total GHG emissions (million tCO₂e)				
Aluminium	Total	20.40	25.79	26.60
	Scope-1	19.85	25.25	26.07
	Scope-2	0.55	0.54	0.53
Copper	Total	1.23	1.21	1.15
	Scope-1	1.17	1.17	1.09
	Scope-2	0.06	0.04	0.06

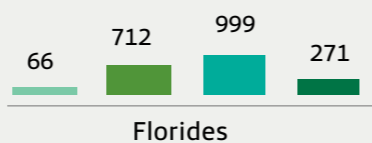
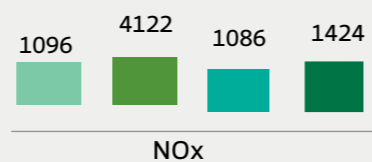
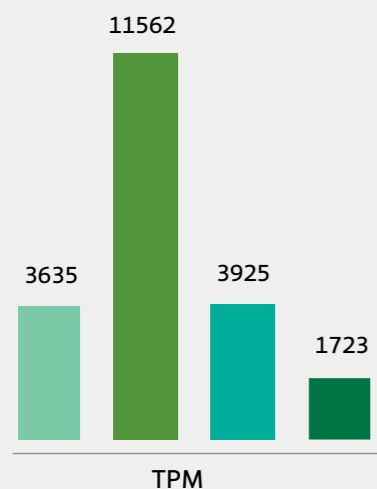
Air Emission from Fuel Burning of Aluminium and Copper



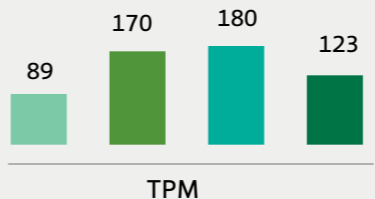
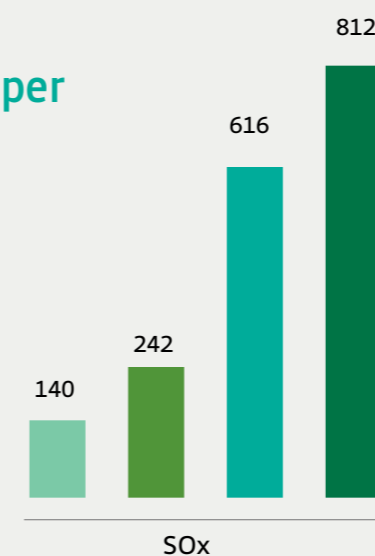
EN-15, EN-16, EN-17, EN-18, EN-19, EN-21

Air Emission from Processing of Aluminium and Copper

Aluminium

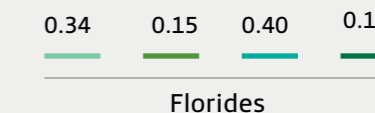
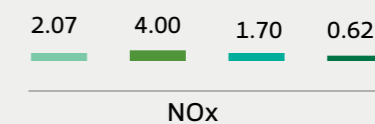


Copper



UOM : tonnes

2013-14 2014-15 2015-16 2016-17



Ozone Depleting Substances (ODS)

Particulate	UOM	2013-14	2014-15	2015-16	2016-17
R22	tonnes	0.35	3.54	3.33	3.20
R12	tonnes	0.71	-	-	-
R134A	tonnes	0.01	2.15	1.82	1.43
R 124	tonnes				0.01
R 407C		0.04	0.03	-	-

Emission and Air Quality Management Initiative

A number of initiatives were taken in order to reduce GHG emission and manage ambient air quality:

At the Dahej Plant

- Installation of water cooled hoods (worth ₹ 12 crore) with two convertors to trap secondary gas led to a 50% reduction in SO₂ level in work environment.
- Drying Tower Demister pads replacement, arresting of Pre-heater tube bundle and Leakage from Gas Heat Exchanger-62 HX 02 arrested by plugging 205 tubes at the Sulphuric Acid Plant-1 helped reduce SO₂ emission in ambient air.
- At Smelter III, fresh catalyst (V₂O₅) 163 m³ charged in convertor for effective conversion of SO₂ to SO₃. 3240 bags of compartment Bag Filter of concentrator dryer were replaced causing a PM emission reduction by 30%.

At Aditya Aluminium

- ESPs with two parallel gas paths of 99.9 % efficiency installed in each units of CPP to achieve the emission level within 50 mg/Nm₃.
- Tri-Flue Stacks with 275 m height installed for wider dispersion of pollutants
- State-of-art dry Bottom ash collection system installed in each units
- 12 Bag filters installed in Coal Handling Plant & Ash Handling Plant for fugitive dust control
- Dust suppression & dry Fog System installed in coal handling/ conveying circuit, & ash silo areas.

- Gas Treatment Center (GTC) with dry scrubbing system installed in Pot line for recycling of fluoride and venting out cleaning air through the stack having 100 m height.
- Larger anodes and Hyper dense phase system for dust free alumina transfer installed in pot room.
- Fume Treatment Centre (FTC) installed attached to ABF for recovery of fluoride and venting out
- 63 de-dusting systems installed at Alumina handling, Coke Handling, Green Anode Plant, Anode Rodding Shop, Bath Recycling Shop, Carbon Recycling Shop, Anode Baking Furnace and other area of Smelter for control of fugitive emission and recycling of the dust collected in the bag filters.
- Mechanized road sweeping machine deployed for cleaning of all internal roads to minimize fugitive dust emission from roads.

At Hirakud Smelter

- Hirakud Smelter has completed installation of 'Laser based on-line fugitive fluoride analyser system' resulting in generation of real time data, which helped decrease fugitive emissions

At Renukoot

- New Dross cooling chamber build at Cast house plant 2 in order to provide clean atmosphere inside the plant.
- To prepare the arrangement of Bypass system in Vessel service condition, Cogen-II Air line was diverted during Cogen Common header Shut down. As the result, during an emergency break down any job in the Vessel can be attended to and vessel can be cleaned.
- It had been observed that there was too much dusting during the loading of Fly Ash in Bulkers/ Containers from Ash Silo Telescopic spout. To control this, a Fly Ash ventilation module was provided that resulted in Fly Ash dust emission below the 50 mg/Nm³ norm.



- At the Smelter plant, failure of pot meant manually digging out the frozen bath from pot cavity with jack hammer that was more time consuming and caused air pollution. Installation of a new pot cell, resulting in net savings of ₹ 47.39 Lac, less noise and no air pollution
- In the potroom, use of a mechanical broom/dust collector instead of a manual broom, substantially reduced dust generation

At Muri

- Installation of a 3-phase transformer led to 20-25% reduction of SPM of the boilers

Water Management



Ensure access to water and sanitation for all

- A 450 m₃ per day Sewage Treatment Plant has been commissioned in 2017 at a cost of ₹.1.2 Crore at Belagavi
- Six rain water harvesting and ground water recharge pits were developed in the Nuapada Township at Utkal Alumina
- Recycled 2,90,312 m³ of trade effluent from ETP, in process and cooling and a total 18,509 m³ of sewage from domestic sewage treatment facilities in gardening and horticulture after treatment
- As a step towards reduction of water consumption, recycle, reuse and rain water harvesting systems, we have utilized 17,466 m³ of rain water in the Plant
- At Muri, a guard pond of 65,000 m³ capacity established besides the ETP to store waste water and storm water from Smelter and waste water from CPP

Water Management is accorded a very high priority at Hindalco and measures are taken towards optimizing its usage. Water Conservation and achieving 'Zero Liquid Discharge' status continue to be our focus area. Water withdrawal at all sites is within permissible quantities set by regulatory authorities and thereby, We ensure that water withdrawal for our operations and other activities does not in any way impact the water sources . During FY2017, we achieved recycling of 23% of our total water consumption, doubling it in a short span of 3 years from 11.6% in FY2014.

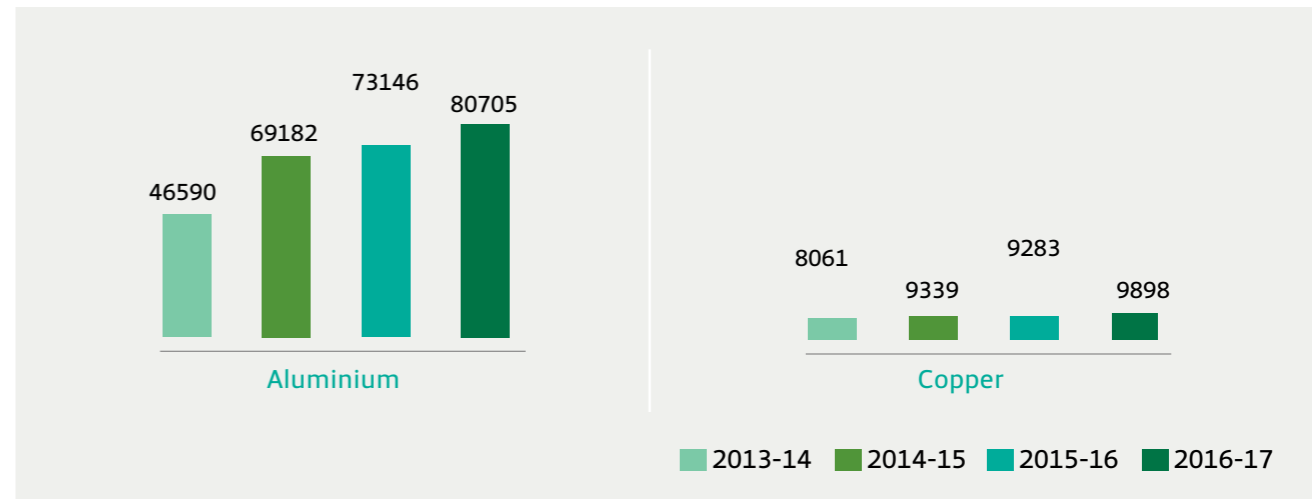
Water Withdrawal

UOM: 000'm³

Source	2013-14	2014-15	2015-16	2016-17
Surface Water	44800.55	68132.35	71800.22	90467.07
Ground Water	0.00	0.00	137.89	3.72
Rain Water Harv	479.52	21.29	16.76	153.28
Municipality etc.	9372.35	10368.12	9566.65	160.00
Total Withdrawal	54652.42	78521.76	81521.52	90592.9

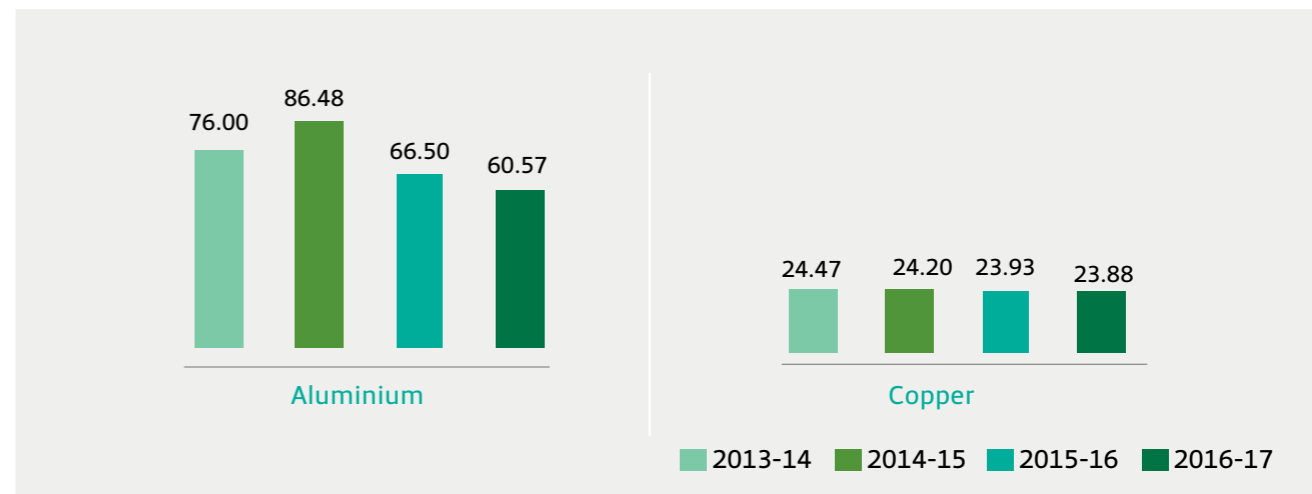
Water Consumption

UOM : 000'm³



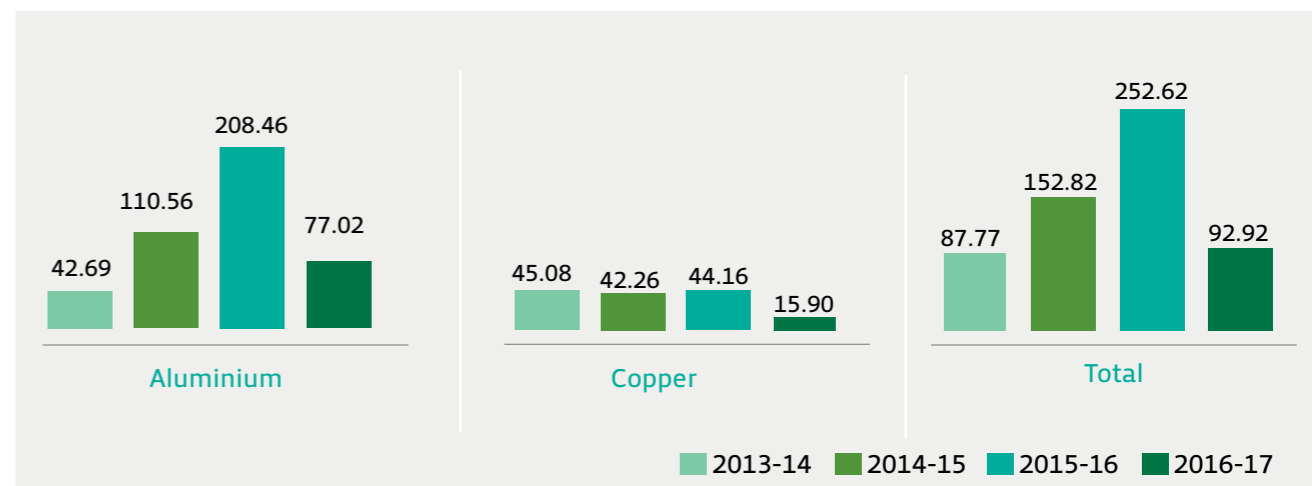
Specific Water Consumption

Unit : m³/tonne



Effluent Discharge

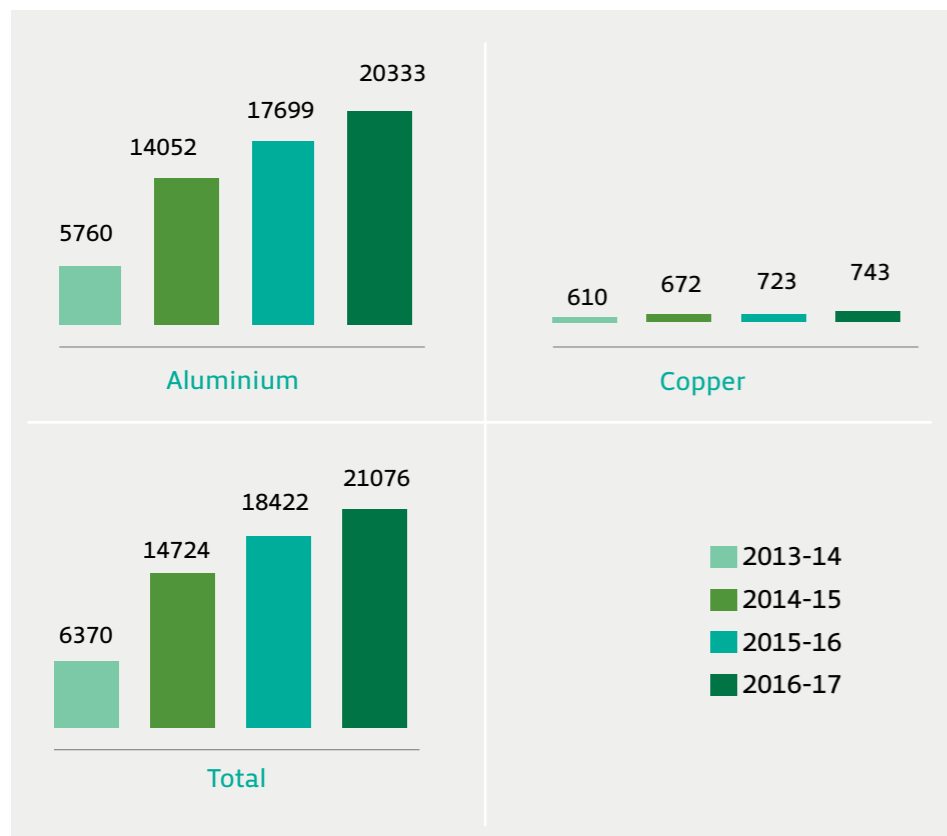
Unit : 000'm³



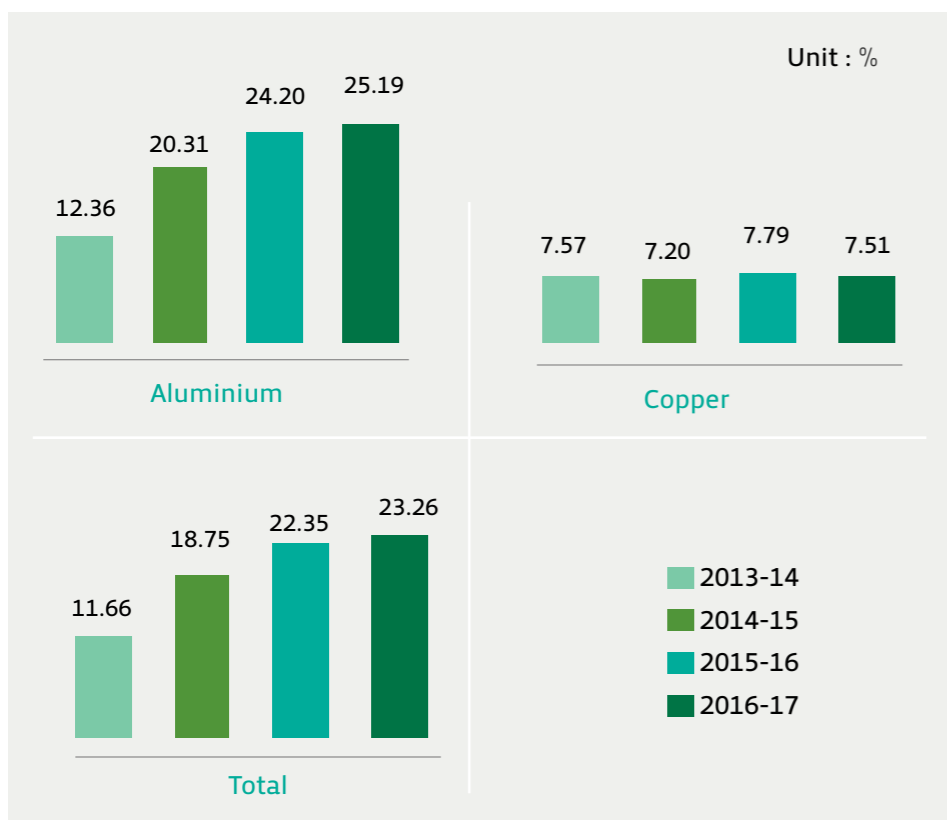
EN-8, EN-9, EN-22, EN-26

Recycled Water Consumption

Unit : 000'm₃



Recycled Water



Water Management Initiatives

Various initiatives have been undertaken across Hindalco Plants towards reduction of water consumption and efficient recycling of treated water.

Belagavi

- Sewage Treatment Plant of capacity 450 m³ per day was commissioned in 2017 at around ₹1.2 crores. The plant treats colony effluent including sewage and sullage, and the treated water is used for Gardening. This helps in water conservation and provides water for gardening throughout the year. The plant stabilization trial is in progress.

Utkal Alumina

- Six rain water harvesting and ground water recharge pits were developed in the Nuapada Township. Collected gets filtered before being allowed for ground water recharge.
- This unit operates on a ZLD philosophy. All the alkaline waste water generated from different operational areas of the refinery is collected in a special designed RCC lined caustic pond and being reused in the same process.
- A separate guard pond collects the surface runoff for further utilisation. To continuously monitor the quality of the water at the outlet of the Guard pond, flow meter, IP Camera and pH meters have been installed and connected to the central DCS. Both the IP camera and the Flow meter have also been connected to OSPCB & CPCB servers through RT-DAS and data is being transmitted on real time basis.

Mahan Aluminium

- We are operating the plant on Zero Discharge Principle. It has well maintained ETPs with double stage Reverse Osmosis Plant. The STPs were successfully commissioned during 2016-17 for domestic effluent from residential and workplace areas. During 2016-17, we have recycled total 290312 m³ of trade effluent from ETP, in process and cooling and a total 18509 m³ of sewage from domestic sewage treatment facilities in gardening and horticulture after treatment.

Renukoot

- This unit has state-of-the-art automated industrial & domestic effluent treatment plant to treat the effluent generated by the plants and colony. The treated effluent and treated domestic water is recycled back for use in plant process/cooling purpose. The company has initiated number of initiatives for recycling and reuse of treated effluent resulting in reduction of fresh water consumption to the tune of 4000 m³ per day.
- Utilization of ETP treated Water in all toilet uninal pots in place of Fresh River Water in Plant-1 resulted in water saving of 500 m³ per day.
- 200 m³ per day water saved by fixing orifice on taps where water flow was high.

Belur

- Utilized 17,466 m³ of rain water at the Plant.

Taloja

- Upgraded the existing 58 m³ Effluent Treatment Facility and installed the online monitoring system to ensure smooth operation of ETP.

Muri

- Nine rain water harvesting pits and two injection wells within the colony premises were installed to arrest rain water.
- Two Pressure Filters were commissioned successfully which improved from 62% to 75% solids in cake and thus helped in reducing plant water consumption.

Aditya Aluminium

An Integrated waste water recycling & management scheme implemented for both Smelter and CPP. This included:

- A guard pond of 65,000 m³ capacity established besides the ETP to store waste water and storm water from Smelter and waste water from CPP
- Separate drainage for rain water & waste water established
- Double stage ETP of 300 m³/h installed for treatment of waste water of both CPP and Smelter and the treated water from this ETP is reused in CPP
- Two Sewage treatment plants established in Plant and Township separately of 600 m³ per day and 300 m³ per day respectively. The treated water from STPs used for greenbelt and gardening purposes

Alupuram

To prevent over flow of water into land and minimise use of fresh water,

- Closure of the V notch in casting plant & extrusion RC tanks is proposed to prevent any over flow of water into land.



- A Sludge drying bed is planned for storing the slurry during the time of cleaning in the casting plant and extrusion.

Mouda

- In order to reduce water consumption, two intake well pumps were replaced from Water lubrication to Oil lubrication. As a result, 250 m³ water was saved per month



Waste Management

Across our operations, our aim is to avoid, reduce and reuse the waste that is created, by managing it through a life cycle approach. Hindalco's initiative – value-from-waste – is a systematic collection of scrap and safe storage/disposal and re-use of waste generated. For instance, the Dahej plant supplies Fly Ash from Power Plant for construction application. In addition, re-use of wastes like copper slag and Phosphogypsum is progressing as per plan. At Aditya Aluminium, used Anode Butt generated is completely recycled and pre-processed used anode butt received from Hirakud smelter is also reused in green anode making. During 2016-17, Hindalco Belagavi dispatched 3,15,968 tonnes of

bauxite residue to Cement Industries. At Muri, 46,000 tonnes bauxite residue was dispatched to ACC cement plant through railway rake. 220 MT of fly ash was also dispatched to Sree Cement through bulker in June-July 2017.

During the reporting year, non-hazardous waste generated (Fly Ash, Bottom Ash, bauxite residue, Lime Grit, MS Scrap, Card Board, Paper Scrap, Canteen Waste, Granulated Slag etc.) was 10.97 million tonnes, while hazardous waste was 0.29 million tonnes. Hazardous waste was disposed off through authorized vendors as per the Pollution Control Board norms.

We do not have significant spills from any of our processes and operations. We do not import or export any waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII.

At mines, 1.38 million tonne over burden material was generated in FY 2017. Over burden is dumped in the mined area in coal mines. Top Soil is preserved and plantation is done at the reclaimed area. At all the mining sites, the over burden is being dumped as per the mining plan and within the area earmarked for such activity.

Waste Generated (Aluminium – million tonnes)

Waste	2013-14	2014-15	2015-16	2016-17
Non Hazardous	3.69	7.71	8.36	9.38
Hazardous	0.03	0.05	0.04	0.16

Waste Disposed (Aluminium – million tonnes)

Waste	2013-14	2014-15	2015-16	2016-17
Non Hazardous	-	6.83	7.18	7.42
Hazardous	-	0.05	0.04	0.17

Waste Generated (Copper – million tonnes)

Waste	2013-14	2014-15	2015-16	2016-17
Non Hazardous	1.36	1.63	1.71	1.59
Hazardous	0.13	0.15	0.14	0.13

Waste Disposed (Copper – million tonnes)

Waste	2013-14	2014-15	2015-16	2016-17
Non Hazardous	-	1.38	1.66	0.87
Hazardous	-	0.15	0.14	0.13

Waste Disposal By destination (total)

Deatination	UOM	2013-14	2014-15	2015-16	2016-17
Landfil	million tonnes	2.65	4.496	4.000	4.255
Sale to accredited/ authorised waste recycler	million tonnes	3.37	3.74	2.70	1.88
Recycled/ Reused	million tonnes	0.01	0.12	1.10	2.40
Municipal Landfil	million tonnes	0.000	0.031	0.0004	0.002

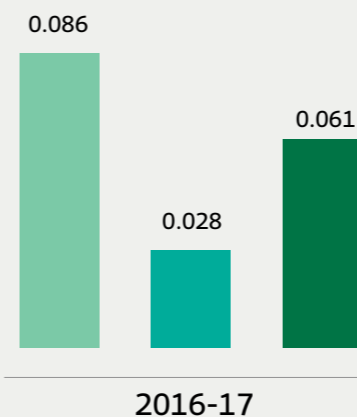
Non Hazardous Waste Disposal by Destination (Copper)

Deatination	UOM	2015-16	2016-17
Landfil	million tonnes	0.069	0.060
Sale to accredited/ authorised waste recycler	million tonnes	1.66	0.87
Recycled/ Reused	million tonnes	-	-

Non Hazardous Waste Disposal by Destination (Aluminium)

Deatination	UOM	2015-16	2016-17
Landfil	million tonnes	4.00	4.10
Sale to accredited/ authorised waste recycler	million tonnes	1.04	1.01
Recycled/ Reused	million tonnes	1.10	2.31
Municipal Landfil	million tonnes	0.0004	0.002

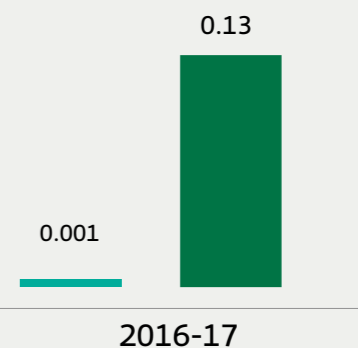
Hazardous Waste Disposal by Destination (Aluminium)



Unit : million tonnes

■ Recycle/ Reuse
 ■ Incineration
 ■ Secured Landfil/ TSDF

Hazardous Waste Disposal by Destination (Copper)



Unit : million tonnes

■ Recycler
 ■ Secured Landfil/ TSDF



Waste Management Initiatives

Utkal Alumina

In order to reduce the caustic soda content in the bauxite residue, a state of the art bauxite residue, Filtration unit has been successfully installed. This will dispose off around 75-80% solids instead of the 55-60% solids being disposed off currently through the HCSD technology thereby improving the life of the Bauxite residue Pond as well as reduce the risk of ground water contamination and dyke failure due to earth movement as in case of wet-ponding. The semi-dry cake of the Bauxite residue is easier to handle and is proven resource in Cement kilns.

Muri

2nd pressure filter technology is being commissioned for Bauxite residue filtration which has helped in reducing soda content in red mud and improving the life of bauxite residue Pond and also helped to reduce fine mud dust particles.

Gabion wall project work around the bauxite residue pond is nearing completion. This will enhance the life of the existing bauxite residue Pond and also helping for protection of Soil erosion & limiting fugitive dust after completion of tree plantation around the periphery of bauxite residue Pond

Aditya Aluminium

- 1044.13 MT dross was recycled alongwith bath materials in pots out of total 2402 MT dross generated (43.4%, as against the plan of 60%)



- 100% GTC and FTC filter bags are recycled for energy efficiency
- 144.42 MT of Skimmed coke reused in pot as a covering material out of total 644 MT skimmed coke generated (55% reused)
- Out of total 989 MT dross generated, 489.31 MT Shot blasting dust was reused along with bath materials in pots (49.5% reused)

Alupuram

With scrap extruded sections and billet butt ends readily available in Renukoot, and the scarcity in the availability of primary ingots to Alupuram from other locations, the unit decided to exploit the comparatively lower price of scrap and the abundant volume of scrap available in Renukoot and gulf market. Billets could be made with scrap without any deterioration in quality and reduced cost. This resulted in reduction in the cost of alloying elements consumption since the scrap procured contains some alloying elements in them, depending on the alloy, and, scrap consumption increased from 49% in 2014-15 to 78% in 2016-17.

Hirakund Smelter

Full phased set up established as per the CPCB protocol for recycling of Aluminium Dross at Hirakud with valid SPCB CTO and HW authorisation from statutory bodies. In House dross recycling of 2531.55 MT was achieved during 2016-17.

Renukoot

- Reuse of waste heat exhausted from Anode bake furnaces in the form of hot flue gases and elimination of steam and electricity use to preheat and maintain the Furnace oil temperature resulted in 0.7 TPH saving till date.
- 60% of all food waste from approximately 200 house holds, canteen and guest house was used in the form of compost at conservancy and garden

Preserving life and land



Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

- Developed a full-fledged in-house nursery spreading over an area of five acres having capacity of 2.0 lakh saplings at Utkal Alumina
- Planted 54,500 saplings at Mahan Aluminium during FY 16-17 with a survival rate of more than 90%

Hindalco operates in collaboration with environmental experts to gauge potential impact on local biodiversity and takes steps to address them. We focus on preservation and restoration of ecosystems and adopt protective approaches such as fencing of mine lease areas in order to restrict trespassing from and to the adjoining forest areas; plantation of local species around the mine lease area to attenuate noise impact, reduction of dust pollution, increase of green cover, retain soil cover and reduce soil erosion and restoration of mine area with proper slope, drainage and plantation of appropriate native species. Watershed structures like bunds, gully plugs, contours and terraces are part of our mine design plans and help in conserving the top soil. We constantly monitor the ambient air quality, water quality and noise levels around our mining operations.

Formation of volunteer task force for patrolling the forests, in collaboration with local forest department, is another important step to preserve the forests and ecology. We work and assist the local Forest Regulator and Developer, in conservation and rejuvenation. At Durgmanwadi, Dhangarwadi, Samri, Tatijharia and Kujam, Biodiversity Management Plan has been approved

by the concerned Forest Regulator and Developer and the same is being implemented.

Mining at Kathautia Open Cast Coal Mine started in February 2017. For all our mines, we have Mining Plans and Mine Closure Plans, approved by the regulatory bodies. These plans include aspects of Biodiversity Management. All our mined out areas are scientifically afforested. To improve the quality of plantation and specially procured soil, manure, bagasse and press-mud are used. We collaborate with the local forest department and care is taken to plant local native species. Mining waste generally consists of overburden generated from mining out and it is backfilled into the mined out pits for use in the subsequent afforestation. We preserve the topsoil for later use in rehabilitation. At Hindalco, none of our plants are in / close to protected or reserved areas.

Mining Management

Mining Management (Ha.)	2013-14	2014-15	2015-16	2016-17
Total mining area leased	6443.23	11574.58	9327.09	11337.257
Total area mined out	175.33	122.22	104.153	126.273
Total area reclaimed	128.14	129.12	88.006	108.035
Total area disturbed	155.58	107.9	87.183	126.053
Total area rehabilitated	114.9	112.65	1103.73	94.8
Total area disturbed and not rehabilitated	197.6	134.139	328.28	282.539

EN11, EN-12, EN-13, EN-14, MM-1, MM-10

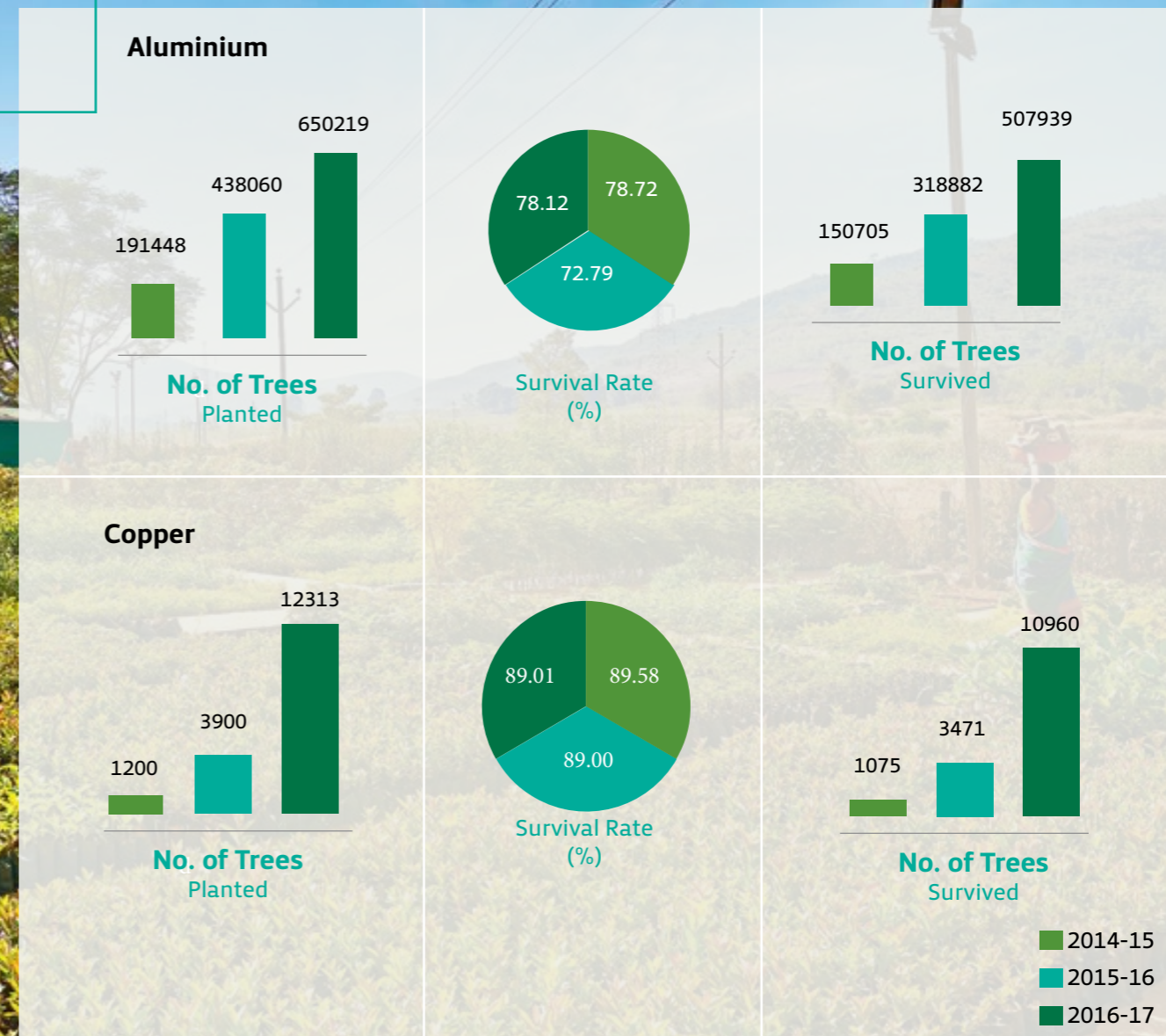


Green Belt Development at Hindalco

In order to maintain an ecological balance around its operations, Hindalco constantly looks to increase the green cover through its green belt development programme.

Utkal Alumina has developed a full-fledged in-house nursery spreading over an area of five acres with a capacity of 2.0 lakh saplings at the Plant site and another nursery at Baphlimali Bauxite Mines of capacity 0.5 lakh saplings. 70,000 saplings were planted during the year. 54,500 saplings were planted at Aditya Aluminium during FY 16-17 with a survival rate of more than 90%. Central Nursery developed 1.5 lakhs saplings. Mahan Aluminium planted 2,30,300 saplings covering the area 106.8 Ha. Till date 4,90,434 saplings have been planted over 210.85 Ha. 3,65,309 trees with a survival rate of over 95% have been planted in Dahej so far. The Renusagar Plant has 34% of total land (70 ha) covered under green belt development.

At Muri, an abandoned red mud pond was converted to green belt through afforestation. It currently houses over 65,000 trees with varieties such as Neem, Sisham, Jatropha, babool along with herbs and shrubs all around the abandoned pond. The area is home to different species of plants as well as birds and small animals.



Employee Stewardship



Hindalco's long-term success rests on its people who have responded to and shaped the challenges of the future. As societies expectation of businesses is changing, skilled manpower is becoming its most valuable resource.

Our HR practices help us attract and retain best available talent. Employees are given

opportunities to realize their full potential. We don't think of employees as our workers – they are our partners in progress. The company fosters a culture of ownership so the employees don't feel they are working 'for' the organization but 'with' the organization; which is why Hindalco has one of the lowest attrition rates in the country. We pride ourselves in being equal opportunity employers and have recently had the first woman head in the group. Diversity is an important aspect for us as we operate globally and compete with our global counterparts.

We believe that performance comes through empowerment. Our well laid-out processes and management systems foster an environment of well-rounded growth. With 70% of our people at operative level, it is imperative that we focus on long-term continuous skill enhancement of our people. Training and development are well integrated with business objectives. Competencies are aligned and built through formal training programmes, mentoring, peer-to-peer learning and involvement in community programmes.

Occupational health and safety matters are particularly critical in mining and metals sector where the accident and ill-health record compares poorly to other sectors. Health and safety is given paramount importance at Hindalco. Our strict mechanisms and policies are aimed at achieving zero fatalities and injuries.

- Mr Samik Basu

Chief Human Resources Officer



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

- 22643 people across 21 locations in India
- 30% Management; 70% Workmen
- Women form 6% of the total workforce
- Attrition Rate: 4.9%
- New hires: 766 across locations
- Maternity leave availed: 17, with all employees joining back ¹

Hindalco manages a workforce of around 35,000 across 11 countries. Its well laid down processes like talent management, employee engagement, performance management, rewards and recognition fully equip line and HR Managers for robust implementation of best practices. At Hindalco, we are always looking for talent, driven by the commitment and passion

to achieve and excel. At the core are the Group values of integrity, commitment, passion, seamlessness and speed which combine with our vision to be the best in our business. Hindalco’s vertical and horizontal integration in the aluminium and copper industries offers opportunities for a range of employment positions. Its presence in multiple locations

across geographies offers opportunities for employees to be exposed to various nations and cultures.

Total employee strength of our India operations was 26910 with the management staff forming 28% of our total operations and unionised employees forming bulk of our operations at 72%.

Manpower Details - Permanent	Aluminium	Copper	Mines	Total
Total Manpower Strength (Management Staff and Unionised Employees)	22711	1521	2678	26910
Number of Management Staff	3369	375	218	3962
Number of Local Management Staff including Diploma Trainees	2968	14	490	3472
Number of Unionised Employees including Subordinate Staff / OG, permanent workmen, Regular Badli, Temporary Badli, Temporary Workmen	16374	1132	1970	19476

New Employees Hired	Aluminium	Copper	Mines	Total
New employees hired	348	17	144	495
Management Cadre	183	14	16	212
Male Employees in Management Cadre	154	12	15	181
Female Employees in Management Cadre	29	2	1	31

Age Group	Management	Staff	Grand Total
50 and above	1070	526	1596
41 to 50	1083	813	1896
41 to 50	72	61	133
30 to 40	1132	1147	2279
below 30	605	925	1530
Grand Total	3962	3472	7434

G4-LA1, G4-LA12, G4-10

Equality in Employment and Human Rights

Our employees are partners in our journey towards achieving organizational excellence. Hindalco is part of the multi-ethnic and multi-competency Aditya Birla Group operating in 13 countries in diverse business functions. At the core of Hindalco's diversity policies is the recognition that teams comprising employees from different cultures and backgrounds contribute valuable understanding of complex international markets and deliver better results.

We provide equal and merit-based employment opportunities to all employees and applicants without regard to race, colour, religion, gender, age, disability or any other protected status in recruitment, hiring, compensation, promotion, training, assignment of work, performance evaluation and all other aspects of employment. Similar wages are provided to employees at the same grade⁴. Fewer female employees than male are on account of the nature of our operations.

All our operations in India have work unions and 70 % of the workforce is covered under the provision of collective bargaining. The principal of collective bargaining is implemented with full transparency and trust. All our units have long-term understanding with the unions and all settlements are governed as per the prevailing labour legislation at the national and state level. All disagreements are settled mutually between plant management and plant workmen representatives. Minimum notice period for any significant operational changes is three months for management staff and for union workers, it is as per local regulations. Unionized employees also undergo training on aspects like skill building, knowledge enhancement, business objectives and values, so they can become an integrated part of the company as well as the group. Over the years, such positive dialogue has provided a sound base for productivity improvement and led to peaceful industrial relations.

We do not discriminate by gender, race, age, religion, caste for wages. All our units record 100% compliance in terms of minimum wages, payment of wages, payment of bonus act, factories act and all other prevailing labour laws. Our Entry Level wage is equal to or more than the local minimum wages at all locations. All senior management level recruitments are based on merit.

Human Rights issues such as child labour, forced/compulsory labour, sexual harassment, discrimination etc., have been incorporated under related policies and practices which we extend to all employees, contractual employees and other partners across our units. All grievances are brought to the supervisor and eventually to the unit heads. During the reporting year there were no grievances incidents related to human rights violation or discrimination at any of our units. Non of our operations were identified to be having significant risk of violation of right to collective bargaining

All our security personal are aware of basic human rights and at the time of joining, are trained on Organisations policies & procedures. We are in process to provide formal training in the organisation's human rights policies or specific procedures and their application to security.

Performance Management and Compensation

Hindalco's performance management and compensation systems are benchmarked against the best industry standards to ensure fair, competitive and rewarding remuneration. They are aligned to support our business strategy and to ensure cohesive growth for both, the employee and the business.

Performances are measured both, at individual and unit level. Wages, benefits and bonuses for employees that are covered under unions are determined by collective bargaining agreements which covers health and safety topics as well, at their respective locations.

Performance Evaluation Approach

Our performance management system called Poornata, follows a common appraisal process, which is a goal-focused, automated systems driven programme. Employee performance is reviewed against agreed job goals and all employees participate in at least one performance review in a financial year. Expectations in terms of KRA, goals & objectives are clearly laid down at the beginning of the year and we further ensure that these should be SMART – Specific, Measurable, Attainable, Reasonable along with the Timelines. The process encourages two-way communication about the job, identifies factors that affect performance and need improvement, and, establishes goals for next review period. Good performance is recognized and rewarded through various tools and techniques starting from annual compensation revision and annual performance pay plan. In addition to structured rewards, we have various recognition tools like 'Pride' – project based team and individual rewards; 'Praise' – an online individual recognition platform; Aditya Birla Group Awards which is recognition at group level; Long service award; and for base level, different awards like 'Sabashi Award', 'Bhagidari Award' and employee of the month, quarter, year.



G4-11, EC-5, EC-6, LA-4, LA-8, LA-11, LA-13, HR1, HR-2, HR-3, HR-4, HR-5, HR-6, HR-7

Learning and Development

Hindalco works with its employees to develop career paths that enable them to reach their full potential, provide job satisfaction and maximize contribution to the company. Towards this, we provide our employees on the job support to advance their education and training. Across locations, the Company has full-fledged learning infrastructure to support its learning objectives. The Company's strategy aims at equipping all its people across Units with business-linked knowledge, technical and behavioral improvement based learning events.

We have a structured way of organizing learning and development that starts from need identification from top management right to the bottom line, through various system and processes including

one-to-one interaction, feedback, survey, skill matrices, etc. Once the need is identified, we fine tune, shortlist and prioritise the needs. Based on this need assessment, an annual learning planer is designed for separate categories of people – management, supervisory and operative – further bifurcated into behavioral & functional trainings. Technical programmes are based upon various priorities of training need identification and a functional training plan is worked out. Though various topics of Human Right are part of our Code of Conduct & trainings, systems to capture these records will be developed by FY19.

Senior Hindalco employees also participate in various training programmes organized by the Group's Training Centre, Gyanodaya, on Skills Management Development and lifelong learning that supports the continued employability of employees and assists them in managing career endings. Development and grooming of

new employees is done through training and mentoring. We have pan-Hindalco ABG competency-based learning planner, covering the management. We have a pool of identified trainers whom we send to our units for the programmes. All the programmes have a standard uniform design with objectives, outlines, outcomes and the action plan post the programme. We annually assess the effectiveness of these programmes through a 360-degree feedback system. The effectiveness of the training programmes is monitored through on-the-job performance, pre & post-tests, feedback from immediate superiors, peers, subordinates and performance reviews. Hindalco also encourages employees to attend conferences and seminars in order to enhance their job skills. We have designated programmes for women, gen Y, HR professionals, finance professionals that also cover aspects like safety and behavior-based safety programmes.



No. of man hours in training	Aluminium	Copper	Mines	Total
Total number of manhours training provided to Management Staff	208624	13869	10697	233190
Total number of manhours Management Staff provided –Male	195104	13609	10649	219362
Total number of manhours training provided to Management Staff – Female	14614	260	80	14954
Total number of manhours training provided to Unionized Employees	475717	5798	192435	673950
Total number of manhours training provided to Unionized Employees - Male	470356	5790	192419	668565
Total number of manhours training provided to Unionized Employees - Female	490	8	16	514

LA-9, LA-10, HR-2

Employee Benefits

Hindalco provides a range of benefits to its regular and full-time employees as per applicable laws. These include retirement benefits, provident fund, gratuity, superannuation, maternity benefits, life and disability insurance cover. Other benefits provided to employees include facilities such as canteen

facilities, medical facilities for self and independent, Nischint, which is life insurance, group personal accident medical reimbursement, scholarship for the wards of the employees, etc. Coverage of these benefits varies in different operational regions and with levels of employment.

Our employees are kept regularly informed about operational changes through variety of channels. Operational changes are always agreed upon ahead of time by all parties, and included as a clause in labour contract.

Benefits	Staff & Workmen	Temporary/Casual Workmen	Contractor's Workmen
Canteen Facilities	Yes	Yes	Canteen Allowance
Mediclaime Insurance Employee & dependents	Yes (For management staff only)	Yes (under ESI Scheme)	No
Residential Accommodation	Yes	No	No
Nishchint (Group Life Insurance)	Yes (For management staff only)	No	No
Group Personal Accident Insurance	Yes (For management staff and Non Esi Workmen)	Group Insurance in lieu of EDLI scheme	No
Medical Reimbursement	Yes (for Non ESI workmen)	No	No
Housing Loan	Yes	No	No
Scholarship-Educational Support	Yes	No	No

Key HR Initiatives during the Year

The Aditya Birla group celebrated its 12th Anniversary across units during February 2017 where we reinforced our values and their significance. 3rd anniversary of our press launch was celebrated across Hindalco units to enforce a culture of appreciation. Unique

programmes like HR connect, ELP, HR Connect Next, Soaring High were conducted across the units during the year. We continued with the model smelter simulator training for smelter professionals at Aditya & Mahan unit. Young leadership programmes were

conducted where we initiated young professionals in the field of Finance, HR & technology. We continue with the HR Strategy 20-20 aligned with the priorities of 2016-17.



Health and safety

Safety Pledge - Hindalco

We, the employees of HINDALCO INDUSTRIES LIMITED solemnly affirm that we for the benefit of Ourselves, Our Company, Our Society and Our Nation will follow all the Environment, Health and Safety Rules of our Company and will do everything possible to prevent all types of incidents, accidents and losses.

Samri Mines awarded National Safety Award -1st Prize (President's award) for longest accident free period

Gare Palma Coal Mines was awarded various first and second prizes for Overall safety, Safety Management Plan, E&M, Ventilation, etc., and on Recovery during Zonal Safety and Rescue competitions, organised by the Director General of Mines Safety

Environment Health & Safety (ESH) Award (2nd Runners Up) 2016 presented to Hindalco Hirakud Power by the CII, Odisha at the 12th State Level Competition on Best Practices in Environment, Safety and Health (ESH)

Muri Alumina was awarded the CII Eastern Region Award for Safety Health & Environment (SHE) with 3 Star Rating

Second prize for "Best Safe Industry" in Mega industries category was awarded by Department of Factories, Government of Karnataka, to Belagavi Alumina

Our workforce is the backbone of our business and their Health and Safety has an immediate, direct impact on our operations. At Hindalco, we ensure compliance of our employees with various regulations and corporate programmes for management of critical risks. Safety is considered a **Core Value** and safety performance is monitored across locations in order to inculcate and ensure a culture of 'ZERO HARM'.

Safety Management

Our plants and mines follow an environmental, health and safety management standard that integrates environment and safety responsibilities into everyday business. Our Safety Board, comprising top management and multi-leveled functional teams at all locations, ensures implementation of best global safety management standards. In addition, 1-5% of our total workforce, including management and operative staff, has representation in formal Joint Environment, Occupational Health & Safety (EOH&S) Committees at all our facilities. These committees discuss and are responsible for monitoring all issues related to health and safety as well as enhancing OHS performance. Line managers are directly responsible and accountable for implementation of all the EHS programmes and initiatives.

Focused steps were taken during the year to improve and better manage safety standards at Hindalco:

1. Safety standard committee with seven task forces was formed across Hindalco for uniform implementation of following seven safety standards:

- o Work at Height Safety,
- o Confined Space Entry,
- o Lock Out, Tag Out & Try Out (LOTOTO)
- o Electrical Safety Standard,
- o Hot Work &
- o Internal transport / Road safety.

2. Subject Matter Experts (SMEs) were identified for each standard from line functions from each unit and trained to impart specialised training.

3. Self Assessment Questionnaires (SAQs) are devised against each standard to verify and monitor uniform implementation of each above mentioned standard by each unit

4. Corporate / cross entity OHS audit focusing on implementation of standards was carried out with the help of above developed SMEs to validate SAQ scores

5. Introduced and implemented Road safety travel policy

Our efforts towards improving safety standards is reflected in the year on year decrease in accidents and incidents as indicated below:

Business-wise statistics

	Employee & Contractual workers			
	2013-14	2014-15	2015-16	2016-17
Total no. of lost time accidents (Reportable Acc)	52	45	43	37
Total no. of fatal accidents	9	5	5	3
Total no. of man-days lost	56287	35530	31899	20061
Lost Time Injury Frequency Rate (LTIFR)	0.37	0.39	0.36	0.29
Lost Time Injury Severity Rate (LTISR)	405.8	305.9	270	157
Total no. of Minor Injuries (Non-reportable Accidents)	174	1166	1219	711
Total Man-hours worked (in Mio)	138.7	116.15	118.3	128

	Aluminium and mines		Copper	
	Employees	Contractor	Employees	Contractor
Total no. of lost time accidents (Reportable Acc)	16	21	0	0
Total no. of fatal accidents	0	3	0	0
Total no. of man-days lost	1025	18966	0	0
Lost Time Injury Frequency Rate (LTIFR)	0.3	0.28	0	0
Lost Time Injury Severity Rate (LTISR)	19	256	0	0
Total no. of Minor Injuries (Non-reportable Accidents)	276	414	15	6
Total Man-hours worked (in Mio)	50.7	67.2	3.1	6.8
Incident reported	227929	-	17926	-
Incident corrected	190087	-	17264	-

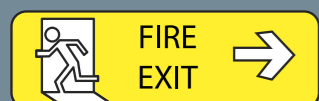
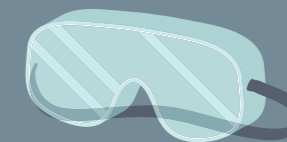
G4-LA5, G4-LA6

Safety Training and awareness

Extensive work is in progress to ensure risk control in areas Hindalco considers important like mining activities, road traffic management and contractor management. In order to build a sustainable safe work place environment, a common health and safety management system across Hindalco is being implemented. This includes implementation of world-class safety standards, organisational safety competency and capability improvement, safety leadership development, a cross auditing activity to enhance sharing experiences and sharing best practices across Hindalco.

A scheme of observing monthly safety theme, which was introduced in 2012 has almost reached its maturity level. The goal was to influence behaviours around and about how to avoid the leading causes of preventable injuries and fatalities. Each Month, during the year, carries a theme and is dedicated to a particular cause that brings attention to critical safety issues. This scheme is meant to bring more focus on one critical safety issue during the month while maintaining focus on all other safety issues.

We also conducted training on confined workspace, working at height, rescue management, electrical safety and safety legislation.



Employee	31 hours per employee
Contractors	21.6 hours per contractor

Health Awareness

The metals and mining sector involves a number of operations and workers are exposed to various risks which may render them prone to occupational health risks. As a preventive strategy for managing the health and safety of its workforce, Hindalco conducts a number of awareness and training sessions and equips its employees with necessary skills for carrying out their respective tasks.

During 2016-17, Qualitative Exposure Assessment (QIEA) was carried at all units and mines of Hindalco to know sources of work environment pollutants like dust, fumes, noise etc., if any, using services of qualified industrial hygienist.

Awareness programmes and training sessions are also held on a regular basis for employees and their families on health and hygiene. Periodic medical check-ups are conducted and appropriate medical treatment is ensured for affected employees. Families are also made aware of lifestyle diseases, their prevention and management.

Community Stewardship

Hindalco has made it its business to grow through a partnership approach and prides itself on giving back to society. It is an on-going commitment to our spirit of sharing and caring. Our social development strategy adopts programmes dedicated to uplifting communities through development programmes that not only lead to short-term sustenance but long-term empowerment so that societies of tomorrow find themselves on a better footing.

Mrs. Rajashree Birla
Chairperson, Aditya Birla Centre for Community Initiatives and Rural Development

Integrating social and environmental concerns and impacts in its business operations and interactions with their stakeholders has been at the core of Hindalco's growth. Our Social Responsibility is a cohesive strategic business management concept beyond charity, sponsorships or philanthropy.

Hindalco's comprehensive and well-drafted CSR Policy is in accordance with Section 135 of the Companies Act, 2013. Details of our policies and spending towards social development are declared in our Annual Financial Report.

The Company's CSR policy is available on the Company's website, www.hindalco.com

Over 2016-17, Hindalco's CSR expenditure was ₹ 28.36 Crore – 2.7% of the average net profit of the company for the last three financial years.



Composition of the CSR Committee



Mrs Rajashree Birla
Chairperson

Mr Askaran Agarwala
Member

Mr Satish Pai
Member

Mr Jagdish Khattar
Member

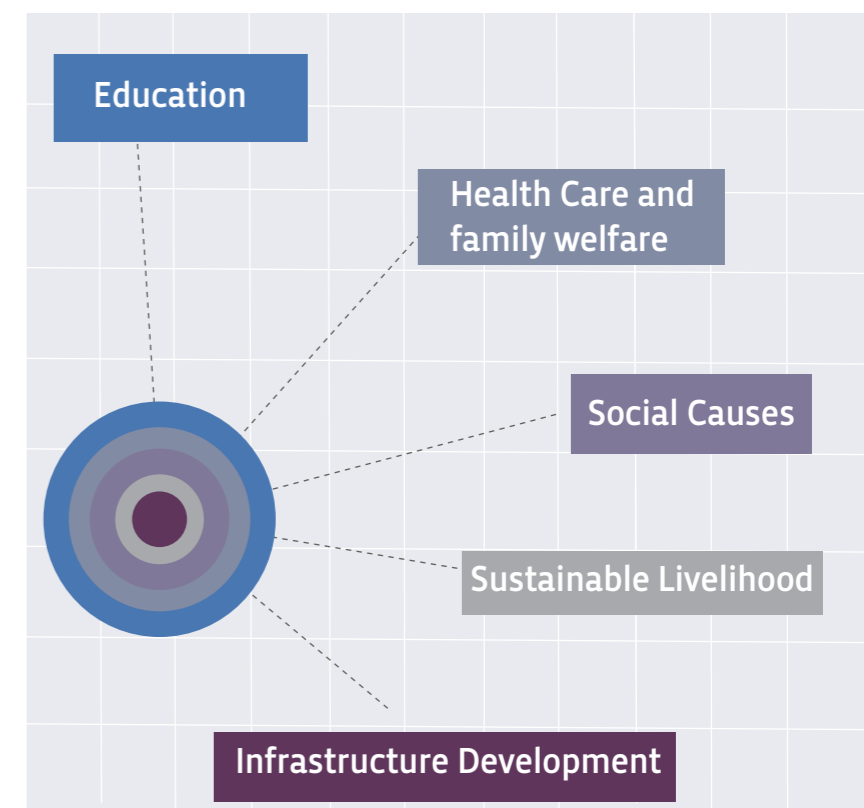
Mr D Bhattacharya
Member

Dr Pragnya Ram
Group Executive President, Corporate Communication & CSR, Permanent Invitee

Focus Areas

Investing part of our profits beyond business was a norm at the Company even before governments recognized its need and mandated it. Our projects are carried out under the aegis of the 'Aditya Birla Centre for Community Initiatives and Rural Development', led by Mrs Rajashree Birla. The Centre provides strategic direction and the thrust areas for our work, also ensuring performance management.

Our development activities fall under five key areas: Healthcare, Education, Sustainable Livelihood, Infrastructure and espousing Social Causes. Our initiatives spanned across the country impacting people in Jharkhand, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, West Bengal, Gujarat, Maharashtra, Karnataka, Kerala. During the reporting period, no concerns were raised by local community at any of our operations. We are in the process of developing the mechanism to measure indirect economic impacts due to multiplier effect of our operations across the value chain



Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



- Foster Girl child education through 10 Kasturba Gandhi Balika Vidyalayas (KGBV) - 1,638 girls students
- Organised 234 'meet the parent' counselling events at Renukoot, Renusagar, Lohardaga, Singrauli, Samri, Belgavi, Lapanga and Kathautia. - 4,279 students back to school

Hindalco's education initiatives include projects related to Preschool education like Balwadies/play schools/ crèches; School Education Programmes like Enrolment awareness programmes/ events, Formal schools; Education support programmes like Knowledge Centre/ Library; Vocational and Technical Education that focus on Strengthening ITIs; School Infrastructure that focuses on New School Building Construction

We provide Science teachers to Government Schools to help the students overcome the weaknesses and get through the Board exams. We have started "Mahan Jyoti Scholarships" to help meritorious but underprivileged girl students and encourage them to continue higher education.

Expenditure on Education

	Allocated (₹ Lakh)	Actual (₹ Lakh)
Preschool Education	10	12.55
School Education Programme	1010	1228.40
Education Support Programmes	50	58.39
Vocational and Technical Education	55	67.28



Anganwadies and balwadies	No.	122
Students in anganwadies & balwadies	No.	5270
Schools	No.	32
Students	No.	9591
Education and training activities (outside colony) for students	No. of beneficiaries	6089
Other initiatives to encourage education (eg. Mid-day meal, kitchen construction, utensils etc.) Merit scholarships, educational materials	No. of beneficiaries	44857

Health Care and Family Welfare



Good Health and Well being Ensures health safety and promotes well being for all



Clean Water and Sanitation Ensure access to water and sanitation for all

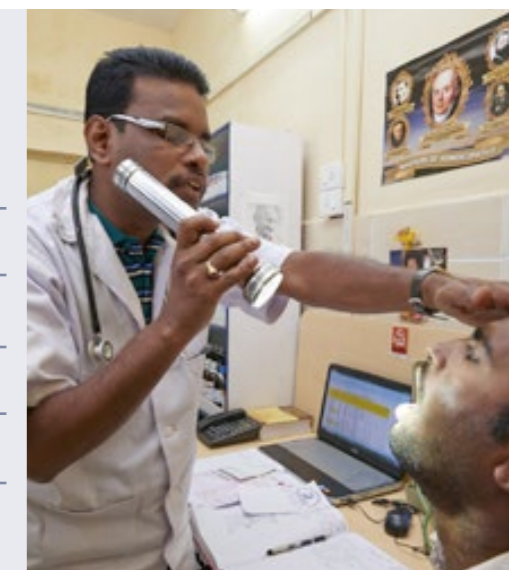


Our health care initiatives include projects related to Preventive health care like Immunization, Pulse Polio Programme; Curative health care programmes like specialized health camps , eye camps; Reproductive and child health which focuses of mother and child care and

adolescent health care; Quality/Support programme having focus on treatment of BPL, old age and needy, support to differently abled; Health infrastructure which includes renovation of health centres and issues related to water and sanitation.

Expenditure on Health Care

	Allocated (₹ Lakh)	Actual (₹ Lakh)
Preventive Health Care	100	123.74
Curative Health Care	125	162.62
Reproductive & Child Health	20	26.12
Quality/Support Programmes	30	34.16



- Worked with 611 malnourished children from 91 Anganwadis across units so that the illnesses and deaths due to malnutrition can be avoided
- Constructed 265 individual household toilets at Milupara village of Tamnar Block of Raigarh district of Chhattisgarh. Govt. of Chhattisgarh is going to declare Milupara as one among the open defecation free villages of Chhattisgarh.
- Nearly 13,665 women participated in 106 camps on ante-natal, post-natal care, mass immunisation, nutrition and escort services for institutional delivery.

Health and medical facilities (includes mother & child health care)	No. of beneficiaries	314739
Health awareness programs (e.g. HIV awareness, awareness on health & hygiene, water borne disease related awareness, etc.)	No. of programs	1540
	No. of beneficiaries	149773
Company managed hospitals, dispensaries/ clinics	No.	24
	No. of beneficiaries	254113
Support extended to Government/ charity run primary health centres	No.	8
	No. of beneficiaries	10162
Safe drinking water & sanitation	No. of beneficiaries	122958
Sanitation facilities constructed/ supported	No.	18006

Social Causes



Expenditure on Social Causes

	Allocated (₹ Lakh)	Actual (₹ Lakh)
Social events to minimize causes of poverty	100	123.74
Awareness programmes	125	162.62
Social security	20	26.12
Promotion of heritage /culture/sports	30	34.16
Support to old-age homes and orphanages	30	34.16

Our initiatives towards Social Causes include Widow re-marriage/dowry-less mass marriages, Culture and sports and Women empowerment. These cover support to mass marriages, widow remarriages, awareness programmes, campaigns against social abuse and early marriages, support to Old age, widows and physically challenged persons/ poor, and, promotion of culture and sports.



Support to widows, old age and handicapped people	Nos. of beneficiaries	7951
Marriages solemnised	Nos. of beneficiaries	374

Infrastructure Development



- Towards promoting green energy initiatives, we have installed 40 solar street lights at Milupara, Kondkel and Banjikhoh Villages
- Installed 2 solar operated 24x7 drinking water supply units at Samri
- Installed 10 biogas units at Singrauli and Hirakud
- Distributed 760 Solar lamps at Singrauli, Dumri and Belgavi



Hindalco's focus on Infrastructure Development covers Community centres, village schools, roads, homes for the homeless, rural electrification, construction of check dams, natural resource conservation programmes, non-conventional energy promotion, and, irrigation and water storage structures.



Expenditure on Infrastructure

	Allocated (₹ Lakh)	Actual (₹ Lakh)
Health Infrastructure	160	181.39
School Infrastructure	60	74.83
Rural Infrastructure Development	210	260.49
Livelihood Infrastructure	22	37.39
Natural resource conservation programmes and non-conventional energy	66	92.53

Sustainable Livelihood

- In collaboration with Indian Lac Research Institute, Namkum Ranchi, we conducted training programme on scientific Lac cultivation method for 278 farmers at Muri. Further, these farmers were supported and guided to increase Lac productivity
- We have started CSR in Coal Mines Locations in Jharkhand and Chhattisgarh
- In Lohardaga Mines we conducted training programme on Mulberry plantation for 55 farmers in collaboration with Central Silk Board. Post training follow-ups and hand holding is being provided to make it sustainable and scalable
- In Dumarpath village of Pakhar mines, we have promoted “Seed Bank” for the poor farmers of 16 villages where 2650 farmers are benefitted
- This year we have formed 102 Self Help Groups to help 1235 women members to start business and earn.

Our Livelihood initiatives include projects related to Self-help groups (microfinance for women and farmers), integrated agriculture development, integrated livestock development, watershed management and micro enterprise development. It also includes skill development / vocational training through Aditya Birla Technology Park for integrated training programme and VT centres at most of our plants in collaboration with it is.

Expenditure on Infrastructure

	Allocated (₹ Lakh)	Actual (₹ Lakh)
Agriculture and farm land based	42	50.32
Non-farm and skill-based income generation Programmes	32	43.31
Animal Husbandry	6	7.60
Strengthening and Formation of Community Based Organisations/SHGs	19	26.15

Training women, SHGs & vocational training	No. of beneficiaries	38951
Agricultural support and training	No. of beneficiaries	37,341
Animal husbandry development program and vaccination camp	No. of cattles	26575
Plantation	No. of saplings	137640



7. ASSURANCE STATEMENT



KPMG (Registered)
1st Floor, Lodha Excelus
Apollo Mills Compound
N. M. Joshi Marg, Mahalaxmi
Mumbai - 400 011, India

Telephone: +91(22) 3989 6000
Fax: +91(22) 3090 2511
Internet: www.kpmg.com/in

Independent Limited Assurance Statement to Hindalco Industries Limited on their Sustainability Report for Financial Year 2016-17

To the Management of Hindalco Industries Limited, Century Bhavan, 3rd floor, Dr. Annie Besant Road, Worli, Mumbai 400030, India

Introduction

We ('KPMG in India', or 'KPMG') have been engaged by Hindalco Industries Limited ('Hindalco' or 'The Company') to provide an independent assurance on its Sustainability Report 16-17 ('The Report').

The Company's management is responsible for identifying its material topics, engaging with its stakeholders and developing the content of the Report. KPMG was not involved in drafting of the report. Our sole responsibility is to provide independent assurance on the correctness and reliability of report content as described in the scope of assurance.

Reporting Criteria

The report has been prepared by Hindalco according to the Global Reporting Initiative's (GRI) G4 guidelines 'in-accordance'-Comprehensive option for sustainability reporting.

Assurance Standards

We conducted the assurance in accordance with

- Limited Assurance requirements of International Federation of Accountants' (IFAC) International Standard on Assurance Engagements (ISAE) 3000 (revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information.
 - Under this standard, we have reviewed the information presented in the report against the characteristics of relevance, completeness, reliability, neutrality and understandability.
- Type 2, Moderate level assurance requirements of AA1000 Assurance Standard 2008 by AccountAbility.
 - Under this standard, we have reviewed the nature and extent of adherence to the AA1000 AccountAbility Principles and the quality of publicly disclosed information as part of the Report limited to performance indicators/information required by above mentioned Reporting Criteria

Scope and Boundary – Limited Assurance Engagement

Our scope of an assurance included selected disclosures and information on material aspects pertaining to Hindalco's (Aluminium and Copper business) India operations for the period 01 April 2016 to 31 March 2017 based on Global reporting Initiative's (GRI) G4 Guidelines as listed below.

The General and Specific Standard Disclosures that were subjected to assurance are as follows:

General Standard Disclosures

- Strategy and Analysis (G4-1, G4-2)
- Organization Profile (G4-3 to G4-10)

KPMG, an Indian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity

CIN U74140MH2005PTC153503



- Identified Material Aspects and Boundaries (G4-17, G4-19 to G4-23)
- Stakeholder Engagement (G4-24 to G4-27)
- Report Profile (G4-28, G4 – 29, G4-30, G4-31)
- Governance (G4-34, G4-35, G4-36, G4-39, G4-41, G4-42, G4-47, G4-48, 49)
- Ethics and Integrity (G4-56, G4-57)

Specific Standard Disclosures

- Environment
 - Materials (G4-EN1, G4-EN2), Energy (G4-EN3, G4-EN5, G4-EN6), Water (G4-EN8, G4-EN10), Emissions (G4-EN15, G4-EN16, G4-EN18, G4-EN20, G4-EN21), Effluents and waste (G4-EN23)
- Labor Practices and Decent Work
 - Employment (G4-LA1), Occupational Health & Safety (G4-LA8), Training and Education (G4-LA9)
- Human Rights
 - Non-discrimination (G4-HR3)
- Society
 - Local Communities (G4-SO1, G4-SO2)
- Product Responsibility
 - Customer Satisfaction (G4-PR5)

Limitations in Conducting the Assurance

Our assurance process was subject to the following limitations:

- Verification of claims was limited only to the selected disclosures and information presented in the report for the above mentioned reporting period.
- Any statement/remarks/comments indicating intention, opinion, belief and/or aspiration by Hindalco were excluded from the scope of assurance.
- KPMG did not play any role in determining which if any, recommendations should be implemented.
- The assurance statement does not include verification of financial performance indicators/information that was sourced from Hindalco's FY 16-17 annual report.
- Assurance visits were limited to the sites which are mentioned in the Methodology.

Our Methodology

Our procedures involve conducting assessment of the risks of material misstatements of selected performance indicators and underlying internal controls relevant to the information published in the report. Our procedures were designed to gather sufficient and appropriate evidence to determine that the selected performance information is not materially misstated.

We have obtained sample evidence, information and explanations that were considered necessary in relation to the assurance scope and have arrived at conclusions mentioned below. Our work included a range of evidence-gathering procedures including:

- Assessing that the report is prepared in accordance with the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) G4 - in accordance "Comprehensive" option)
- Testing on a sample basis, the evidence supporting the selected disclosures and information.
- Assessing the correctness of the quantification methods and models used to arrive at the disclosures presented in the report.
- Verifying systems and procedures used for quantification, collation and analysis of sustainability performance indicators included in the Report.
- Understanding the appropriateness of various assumptions used for estimation of performance related disclosures by Hindalco
- Discussions with the personnel responsible for the evaluation of competence required to ensure reliability of selected disclosure and information presented in the Report



- Discussion on sustainability with senior executives at the different plant locations and at the corporate office to understand the risk and opportunities from sustainability context and the strategy Hindalco is following.
- Assessing stakeholder engagement process through interactions with relevant internal stakeholders and review of related documentation.
- Reviewing the company's approach to identify material issues and stakeholder engagement framework
- Reviewing the processes deployed for collection, compilation and reporting of sustainability performance indicators mentioned above.

As part of verification process, we have conducted site visits to the following facilities of Hindalco:

1. Hindalco, Copper – Dahej
2. Hindalco – Hirakud Smelter
3. Hindalco – Hirakud Power
4. Hindalco – Hirakud FRP
5. Hindalco, Aluminium-Renukoot
6. Hindalco, Aluminium-Mahan
7. Hindalco, Aluminium (Sheet rolling)-Taloja
8. Hindalco, Renusagar

Appropriate documentary evidence was obtained on a sample basis to support our conclusions on the selected disclosure and information verified. Where such documentary evidence could not be collected due to sensitive nature of information, our team verified the same at Hindalco's premises.

Our Conclusion

We have reviewed the Sustainability Report of Hindalco. Based on our review and procedures performed as described above, nothing has come to our attention that causes us not to believe that the selected sustainability disclosures and information presented in the Report is fairly represented in line with the identified material issues and is in accordance with the sustainability reporting guidelines (G4) of the Global Reporting Initiative.

We have provided our observation to the company in a separate management letter. These, do not, however, affect our conclusions regarding the Report.

Our Observations

As per AA1000AS 2008 principles

- **Inclusivity**
 - Inclusivity is the process of involving stakeholders in developing and achieving strategies, plans and outcomes that address issues, risks and impacts in an accountable way. Hindalco is committed to be accountable to those on whom it has an impact or who have an impact on it. The company has already taken initiatives to register expectations and concerns of both internal and external stakeholders. Hindalco may now focus on building capacities of its stakeholders and involving them in strategic decision making.
- **Materiality**
 - Hindalco has identified stakeholders and issues that are material to each group. However, it may decide to disclose the methodology and approach for incorporating stakeholders' (internal and external) feedback to prioritize material issues for the company in the report. In this regard, Hindalco may perform stakeholder engagement and materiality assessment to revisit the material issues, taking into consideration changing sustainability context.
- **Responsiveness**
 - Hindalco's vision is to create value for its stakeholders. It is apparent that stakeholder views are acknowledged and taken into consideration. The report explicitly defines expectations and concerns of both internal & external stakeholders along with the engagement platforms adopted by Hindalco to address them.



Independence

The assurance was conducted by a multidisciplinary team including professionals with suitable skills and experience in providing assurance on environmental, social and economic information in line with the requirements of the ISAE 3000 (revised) and AA1000 Assurance standard 2008. Our work was performed in conformance to the requirements of the IFAC Code of Ethics for Professional Accountants, which requires, among other requirements, that the members of the assurance team (practitioners) as well as the assurance firm (assurance provider) be independent of the assurance client, in relation to the scope of this assurance engagement, including not being involved in writing the Report. The Code also includes detailed requirements for practitioners regarding integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. KPMG has systems and processes in place to monitor compliance with the Code and to prevent conflicts regarding independence. The firm applies International Standard on Quality Control (ISQC) 1 and the practitioner complies with the applicable independence and other ethical requirements of the International Ethics Standards Board for Accountants (IESBA) code.

Responsibilities

Hindalco is responsible for developing the Report contents. Hindalco is also responsible for identification of material sustainability issues, establishing and maintaining appropriate performance management and internal control systems and derivation of selected performance disclosures reported. This statement is made solely to the Management of Hindalco in accordance with the terms of our engagement and as per scope of assurance. Our work has been undertaken so that we might state to Hindalco those matters for which we have been engaged to state in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Hindalco for our work, for this Report, or for the conclusions expressed in this independent assurance statement. The assurance engagement is based on the assumption that the selected disclosures and information provided to us is complete and true. We expressly disclaim any liability or co-responsibility for any decision a person or entity would make based on this assurance statement. By reading this assurance statement, stakeholders acknowledge and agree to the limitations and disclaimers mentioned above.

Prathmesh Raichura

Director

KPMG in India

30th April 2018



8. GRI DISCLOSURES INDEX

GRI G4 Indicator	Coverage	Page No.	UNGC Linkage	SDG Linkage	Statement
DISCLOSURES					
STRATEGY AND ANALYSIS					
G4 - 1	FULL	6,7	---		
G4 - 2	FULL	25,33	---		
ORGANISATIONAL PROFILE					
G4 - 3	FULL	8	---		
G4 - 4	FULL	8,10,11	---		
G4 - 5	FULL	8, 9	---		
G4 - 6	FULL	8	---		
G4 - 7	FULL	8	---		
G4 - 8	FULL	11	---		
G4 - 9	FULL	8, 9, 31,38	---		
G4 - 10	FULL	8, 54	Principle 6	SDG - 8	
G4 - 11	FULL	55	Principle 3	SDG - 8	
G4 - 12	FULL	36	---		
G4 - 13	FULL	36	---		
G4 - 14	FULL	3	---		
G4 - 15	FULL	8	---		
G4 - 16	FULL	8	---		
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES					
G4 - 17	FULL	9	---		
G4 - 18	FULL	3.25	---		
G4 - 19	FULL	25, 26	---		
G4 - 20	FULL	25, 26	---		
G4 - 21	FULL	25, 26	---		
G4 - 22	FULL	3	---		
G4 - 23	FULL	3	---		
STAKEHOLDER ENGAGEMENT					
G4 - 24	FULL	24	---		
G4 - 25	FULL	24	---		
G4 - 26	FULL	24	---		
G4 - 27	FULL	24	---		
REPORT PROFILE					
G4 - 28	FULL	3	---		
G4 - 29	FULL	3	---		
G4 - 30	FULL	3	---		
G4 - 31	FULL	3	---		
G4 - 32	FULL	3	---		
G4 - 33	FULL	3	---		
GOVERNANCE					
G4 - 34	FULL	15	---		
G4 - 35	FULL	16	---		
G4 - 36	FULL	16	---		
G4 - 37	FULL	16	---	SDG - 16	

GRI G4 Indicator	Coverage	Page No.	UNGC Linkage	SDG Linkage	Statement
G4 - 38	FULL	15	---	SDG - 5, SDG - 16	
G4 - 39	FULL	15	---	SDG - 16	
G4 - 40	FULL	16	---	SDG - 5, SDG - 16	
G4 - 41	FULL	17	---	SDG - 16	
G4 - 42	FULL	17	---		
G4 - 43	FULL	18	---	SDG - 4	
G4 - 44	FULL	18	---		
G4 - 45	FULL	6,7, 16,17	---	SDG - 16	
G4 - 46	FULL	16	---		
G4 - 47	FULL	16	---		
G4 - 48	FULL	17	---		
G4 - 49	FULL	17	---		
G4 - 50	FULL	17	---		
G4 - 51	FULL	17,18	---		
G4 - 52	FULL	17,18	---		
G4 - 53	FULL	18	---	SDG - 16	
G4 - 54	FULL	18	---		
G4 - 55	FULL	18	---		
ETHICS AND INTEGRITY					
G4 - 56	FULL	17	Principle 10	SDG - 16	
G4 - 57	FULL	17	Principle 10	SDG - 16	
G4 - 58	FULL	17	Principle 10	SDG - 16	
ECONOMIC					
MATERIAL ASPECT: ECONOMIC PERFORMANCE					
G4-EC1	Full	31	---	SDG - 2, SDG - 5, SDG - 7, SDG - 8, SDG - 9	
G4-EC2	Full	29	Principle 7	SDG - 13	
G4-EC3	Full	32	---		
G4-EC4	Full	32	---		
MATERIAL ASPECT: MARKET PRESENCE					
G4-EC5	Full	55	Principle 6	SDG - 1, SDG - 5, SDG - 8	
G4-EC6	Full	55	Principle 6	SDG - 8	
MATERIAL ASPECT: INDIRECT ECONOMIC IMPACTS					
G4-EC7	Full	65,66	---	SDG - 2, SDG - 5, SDG - 7, SDG - 9, SDG - 11	
G4-EC8	Full	62-67	---	SDG - 1, SDG - 2, SDG - 3, SDG - 8, SDG - 10, SDG - 17	
MATERIAL ASPECT: PROCUREMENT PRACTICES					
G4-EC9	Full	36	---	SDG - 12	
ENVIRONMENT					
ASPECT: MATERIALS					
G4-EN1	Full	39	Principle 7, Principle 8	SDG - 8, SDG - 12	
G4-EN2	Full	39	Principle 8	SDG - 8, SDG - 12	

GRI G4 Indicator	Coverage	Page No.	UNGC Linkage	SDG Linkage	Statement
ASPECT: ENERGY					
G4-EN3	Full	41	Principle 7, Principle 8	SDG -7, SDG - 8, SDG - 12, SDG - 13	
G4-EN4	Full	41	Principle 8	SDG -7, SDG - 8, SDG - 12, SDG - 13	
G4-EN5	Full	37	Principle 8	SDG -7, SDG - 8, SDG - 12, SDG - 13	
G4-EN6	Full	41	Principle 8, Principle 9	SDG -7, SDG - 8, SDG - 12, SDG - 13	
G4-EN7	Full	41	Principle 8, Principle 9	SDG -7, SDG - 8, SDG - 12, SDG - 13	
ASPECT: WATER					
G4-EN8	Full	45,46	Principle 7, Principle 8	SDG - 6	
G4-EN9	Full	45	Principle 8	SDG - 6	
G4-EN10	Full	46	Principle 8	SDG - 6, SDG - 8, SDG - 12	
ASPECT: BIODIVERSITY					
G4-EN11	Full	51	Principle 8	SDG - 6, SDG - 15	
G4-EN12	Full	51	Principle 8	SDG - 6, SDG - 15	
G4-EN13	Full	51	Principle 8	SDG - 6, SDG - 15	
G4-EN14	Full	51,52	Principle 8	SDG - 6, SDG - 15	
ASPECT: EMISSIONS					
G4-EN15	Full	42	Principle 7, Principle 8	SDG - 3, SDG - 12, SDG - 13	
G4-EN16	Full	42	Principle 7, Principle 8	SDG - 3, SDG - 12, SDG - 13	
G4-EN17	Full	42	Principle 7, Principle 8	SDG - 3, SDG - 12, SDG - 13	
G4-EN18	Full	42	Principle 8	SDG - 13	
G4-EN19	Full	37,42	Principle 8, Principle 9	SDG - 13	
G4-EN20	Full	43	Principle 7, Principle 8	SDG - 3, SDG - 12	
G4-EN21	Full	42,43,44	Principle 7, Principle 8	SDG - 3, SDG - 12	
ASPECT: EFFLUENTS AND WASTE					
G4-EN22	Full	45	Principle 8	SDG - 3, SDG - 6, SDG - 12, SDG - 14	
G4-EN23	Full	48,49	Principle 8	SDG - 3, SDG - 6, SDG - 12	
G4-EN24	Full	48	Principle 8	SDG - 3, SDG - 6, SDG - 12, SDG - 14	
G4-EN25	Full	48	Principle 8	SDG - 3, SDG - 12	
G4-EN26	Full	45	Principle 8	SDG - 6, SDG - 15	
ASPECT: PRODUCTS AND SERVICES					
G4-EN27	Full	35, 37, 44, 46, 47, 50	Principle 7, Principle 8, Principle 9	SDG - 6, SDG - 8, SDG - 12, SDG - 13	
G4-EN28	Full	39, 48	Principle 8	SDG - 8, SDG - 12	
ASPECT: COMPLIANCE					
G4-EN29	Full	35, 38	Principle 8	SDG - 16	
ASPECT: TRANSPORT					

GRI G4 Indicator	Coverage	Page No.	UNGC Linkage	SDG Linkage	Statement
G4-EN30	Full	35	Principle 8	SDG - 11, SDG - 13	
ASPECT: OVERALL					
G4-EN31	Full	38	Principle 7, Principle 8, Principle 9	SDG - 7, SDG - 9, SDG - 12, SDG - 13, SDG - 14, SDG - 15, SDG - 17	
ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT					
G4-EN32	Full	36	Principle 8		
G4-EN33	Full	36	Principle 8		
ASPECT: ENVIRONMENTAL GRIEVANCE MECHANISMS					
G4-EN34		36	Principle 8	SDG - 16	
MINING MANAGEMENT					
MM1 - Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	Full	51	---	SDG - 3, SDG - 6, SDG - 12, SDG - 14, SDG - 15	
MM2 - The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	Full	52	---	SDG - 6, SDG - 15	
MM3 - Total amounts of overburden, rock, tailings, and sludges and their associated risks	Full	48	---	SDG - 3, SDG - 6, SDG - 12	
MM4 - Number of strikes and lock-outs exceeding one week's duration, by country	Full	Statement	---	SDG - 8	No strikes/ lockouts during reporting period
MM5 - Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities	Full	Statement	---	SDG - 1, SDG - 2	None of the operations in or adjacent to indigenous people's territories
MM6 - Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples	Full	Statement	---	SDG - 1, SDG - 2	No disputes relating to land use, customary rights of local communities and indigenous peoples
MM7 - The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes	Full	Statement	---	SDG - 1, SDG - 2	No disputes relating to land use, customary rights of local communities and indigenous peoples
MM8 - Number (and percentage) of company operating sites where artisanal and small-scale mining (asm) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks	Full	Statement	---	SDG - 1, SDG - 2, SDG - 3, SDG - 6, SDG - 8, SDG - 12	We do not have operating sites adjacent to artisanal and small-scale mining
MM9 - Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process	Full	Statement	---	SDG - 2	At Gare Palma IV/4 approx 10 Family resettled since block allocation. In case of of Greenfield projects
MM10 - Number and percentage of operations with closure plans	Full	51	---		All Baux & Coal mines have mining plan and mining closure plans.
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK					
ASPECT: EMPLOYMENT					
G4-LA1	Full	34	Principle 6	SDG - 5, SDG - 8	
G4-LA2	Full	57	---	SDG - 8	
G4-LA3	Full	53	Principle 6	SDG - 5, SDG - 8	
ASPECT: LABOR/MANAGEMENT RELATIONS					
G4-LA4	Full	55	Principle 3	SDG - 8	

GRI G4 Indicator	Coverage	Page No.	UNGC Linkage	SDG Linkage	Statement
ASPECT: OCCUPATIONAL HEALTH AND SAFETY					
G4-LA5	Full	59	---	SDG - 8	
G4-LA6	Full	59	---	SDG - 3, SDG - 8	
G4-LA7	Full	60	---	SDG - 3, SDG - 8	
G4-LA8	Full	55	---	SDG - 8	
ASPECT: TRAINING AND EDUCATION					
G4-LA9	Full	56	Principle 6	SDG - 4, SDG - 5, SDG - 8	
G4-LA10	Full	56	---	SDG - 8	
G4-LA11	Full	55	Principle 6	SDG - 5, SDG - 8	
ASPECT: DIVERSITY AND EQUAL OPPORTUNITY					
G4-LA12		15, 54	Principle 6	SDG - 5, SDG - 8	
ASPECT: EQUAL REMUNERATION FOR WOMEN AND MEN					
G4-LA13	Full	55	Principle 6	SDG - 5, SDG - 8, SDG - 10	
ASPECT: SUPPLIER ASSESSMENT FOR LABOR PRACTICES					
G4-LA14	Full	36	---	SDG - 5, SDG - 8, SDG - 16	
G4-LA15	Full	36	---	SDG - 5, SDG - 8, SDG - 16	
ASPECT: LABOR PRACTICES GRIEVANCE MECHANISMS					
G4-LA16	Full	36	---	SDG - 16	
SUB-CATEGORY: HUMAN RIGHTS					
ASPECT: INVESTMENT					
G4-HR1	Full	55	Principle 2		
G4-HR2	Full	55, 56	Principle 1		
ASPECT: NON-DISCRIMINATION					
G4-HR3	Full	55	Principle 6	SDG - 5, SDG - 8, SDG - 16	
ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING					
G4-HR4	Full	55	Principle 3	SDG - 8	
ASPECT: CHILD LABOR					
G4-HR5	Full	55	Principle 5	SDG - 8, SDG - 16	
ASPECT: FORCED OR COMPULSORY LABOR					
G4-HR6	Full	55	Principle 4	SDG - 8	
ASPECT: SECURITY PRACTICES					
G4-HR7	Full	55	Principle 1	SDG - 16	
ASPECT: INDIGENOUS RIGHTS					
G4-HR8	Full	Statement	Principle 1	SDG - 2	No cases on violation involving the rights of indigenous peoples observed during the reporting year.
ASPECT: ASSESSMENT					
G4-HR9	Not Reported	Ststatement	Principle 1		We do not have formal Human Right reviews and/ or impact assessments in the reporting year
ASPECT: SUPPLIER HUMAN RIGHTS ASSESSMENT					
G4-HR10	Full	36	Principle 2		
G4-HR11	Full	36	Principle 2		
ASPECT: HUMAN RIGHTS GRIEVANCE MECHANISMS					

GRI G4 Indicator	Coverage	Page No.	UNGC Linkage	SDG Linkage	Statement
G4-HR12	Full	36	Principle 1	SDG - 16	
SUB-CATEGORY: SOCIETY					
ASPECT: LOCAL COMMUNITIES					
G4-SO1	Full	61-68	Principle 1		All our operations implemented local community engagement, impact assessment and developed programs
G4-SO2	Full	Statement	Principle 1	SDG - 1, SDG - 2	No negative impact on local communities
ASPECT: ANTI-CORRUPTION					
G4-SO3	Full	17	Principle 10	SDG - 16	
G4-SO4	Full	17	Principle 10	SDG - 16	
G4-SO5	Full	17	Principle 10	SDG - 16	
ASPECT: PUBLIC POLICY					
G4-SO6	Full	18	---	SDG - 16	
ASPECT: ANTI-COMPETITIVE BEHAVIOR					
G4-SO7	Full	17	---	SDG - 16	
ASPECT: COMPLIANCE					
G4-SO8	Full	17	---	SDG - 16	
ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY					
G4-SO9	Full	36	---		
G4-SO10	Full	36	---		
ASPECT: GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY					
G4-SO11	Full	36	---	SDG - 16	
SUB-CATEGORY: PRODUCT RESPONSIBILITY					
ASPECT: CUSTOMER HEALTH AND SAFETY					
G4-PR1	Full	35	---		
G4-PR2	Full	35	---	SDG - 16	
ASPECT: PRODUCT AND SERVICE LABELING					
G4-PR3	Full	35	---	SDG - 12	
G4-PR4	Full	35	---	SDG - 16	
G4-PR5	Full	35	---		
ASPECT: MARKETING COMMUNICATIONS					
G4-PR6	Full	35	---		
G4-PR7	Full	35	---	SDG - 16	
ASPECT: CUSTOMER PRIVACY					
G4-PR8	Full	35	---	SDG - 16	
ASPECT: COMPLIANCE					
G4-PR9	Full	35	---	SDG - 16	

Business Responsibility Report

As per Regulation 34 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 read with SEBI Circular dated 4th November, 2015 issued by Securities and Exchange Board of India, those listed entities which have been submitting sustainability reports to overseas regulatory agencies/ stakeholders based on internationally accepted reporting frameworks need not prepare a separate report for the purpose of the National Voluntary Guidelines on Social, Environmental and Economic Responsibility of Business, but only furnish the same to their stakeholders along with the details of the framework under which their Business Responsibility Report has been prepared and a mapping of the principles contained in the aforesaid guidelines to the disclosures made in their sustainability reports.

Hindalco has been publishing its Sustainability Report since FY11 on Global Reporting Initiative (GRI) Framework. The report for 2015-16 titled 'Plugged In Sustainability @ Hindalco' prepared as per GRI G4 guidelines "In accordance - Comprehensive" assured by an external independent assessing agency. This year's report too (Sustainability Report for FY 2016-17) has been published and hosted on our website www.hindalco.com.

Any shareholder interested in obtaining a physical copy of the same may write to the Company Secretary at the Registered Office of the company.

Section A: General Information about the Company

1.	Corporate Identity Number (CIN) of the Company	L27020MH1958PLC011238			
2.	Name of the Company	Hindalco Industries Limited			
3.	Registered address	3rd Floor, Century Bhavan, Dr. Annie Besant Road, Worli, Mumbai: 400030			
4.	Website	www.hindalco.com			
5.	E-mail id	anil.malik@adityabirla.com			
6.	Financial Year reported	1st April, 2016 to 31st March, 2017			
7.	Sector(s) that the Company is engaged in (industrial activity code-wise)	ITC Code	Product Description		
		7601	Aluminium Ingots		
		7606	Aluminium Rolled Products		
		7605	Aluminium Redraw Rods		
		740311	Copper Cathodes		
		740710	Continuous Cast Copper Rods		
8.	List three key products/ services that the Company manufactures/provides (as in balance sheet) :	(i) Aluminium Ingots / Rolled Products (ii) Copper Cathodes (iii) Concast Copper Rods			
9.	Total number of locations where business activity is undertaken by the Company	i. 5 major International Locations			
		<ul style="list-style-type: none"> • USA • Germany • United Kingdom • Brazil • South Korea 			
9.	Total number of locations where business activity is undertaken by the Company	ii. Number of National Locations:			
		<ul style="list-style-type: none"> • 4 Aluminium; • 1 Copper Unit • 4 Chemical Units (including one unit of Utkal Alumina International Limited, wholly owned subsidiary of the Company) • 4 Power Units • 5 Rolled FRP • 2 Extrusions • 2 Foil • Registered Office and Zonal Marketing Offices • Bauxite and Coal Mines in the state of Jharkhand, Chhattisgarh, Maharashtra and Orissa. 			
10.	Markets served by the Company	Local	State	National	International
		√	√	√	√

Section B: Financial Details of the Company (Standalone)

1.	Paid-up Capital (INR)	₹222.72 Crore
2.	Total Turnover (INR)	₹39,383.12 Crore
3.	Total Profits after taxes (INR)	₹1556.89 Crore
4.	Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%)	The Company's total spending on CSR was ₹28.36 crore which is 2.70 % of the average net profit for the previous three financial years.
5.	List of activities in which expenditure in 4 above has been incurred	<ul style="list-style-type: none"> a. Education b. Health Care c. Women empowerment d. Sustainable Livelihood e. Infrastructure Development

Section C: Other Details

1. Does the Company have any Subsidiary Company/Companies?

Yes, as on 31st March, 2016, the Company has 48 (forty eight) subsidiaries - 13 (thirteen) domestic and 35 (thirty five) foreign.

2. 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):

Hindalco's Sustainability Report covers the India Operations including Greenfield Projects, along with overseas subsidiary Novelis Inc. Further, Novelis Inc., also publishes Sustainability Report based of Global Reporting Initiative (GRI) framework.

3. Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities?

At present, suppliers and distributors with whom the Company does business, do not participate in the Business Responsibility initiatives of the Company directly.

1. Details of Director/Directors responsible for BR:

a) Details of the Director/Directors responsible for implementation of the BR policy/policies

DIN Number	00013496
Name	Mr. Jagdish Khattar
Designation	Independent Director

b) Details of the BR head:

Sr.No.	Particulars	Details
1.	DIN Number (if applicable)	N.A.
2.	Name	Mr Anil Malik
3.	Designation	President & Company Secretary
4.	Telephone number	022-66626666
5	e-mail id	anil.malik@adityabirla.com

2. The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business released by the Ministry of Corporate Affairs has adopted nine areas of Business Responsibility. These briefly are as follows:

Principle No.	Description	Reference to Sustainability Report
P1	Businesses should conduct and govern themselves with ethics, transparency and accountability	Chapter on Future Proofing through Governance, Page 14 to 18
P2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle	Chapter on Product Stewardship, Page 33 to 35
P3	Businesses should promote the well being of all employees.	Chapter on Employee Stewardship, Page 53 to 57
P4	Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised	Chapter on Future Proofing through Governance, Page 14 to 18
P5	Businesses should respect and promote human rights	Chapter on Future Proofing through Governance, Page 14 to 18 and Employee Stewardship, Page 55
P6	Businesses should respect, protect, and make efforts to restore the environment	Chapter on Environment Stewardship, Page 37 to 52
P7	Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner	Chapter on Future Proofing through Governance, Page 14 to 18
P8	Businesses should support inclusive growth and equitable development	Chapter on Supply Chain, Page 36 and Community Stewardship, Page 61 to 67
P9	Businesses should engage with and provide value to their customers and consumers in a responsible manner	Chapter on Product Responsibility & Customer Satisfaction, Page 35 and Future Proofing through Governance, Page 14 to 18

Glossary

ABG	Aditya Birla Group	HW	Hazardous Waste	OHS	Occupational Health and Safety
ABML	Aditya Birla Minerals Limited	IAI	International Aluminium Institute	OHSAS 18001	Occupational Health and Safety Assessment Series (standards for Occupational Health and Safety Management System)
ABSTCPL	Aditya Birla Science Mumbai & Technology Company Private Limited	ICDC	Indian Copper Development Centre		
		ICPCI	International Copper Promotion Council India	OPEX	Operating Expenses
AMPRI	Advanced Materials and Processes Research Institute	IDP	Individual Development Plan	OSPCB	Orissa State Pollution Control Board
BEE	Bureau of Energy Efficiency	IIT	Indian Institute of Technology	PAP	Project Affected People
BHU	Banaras Hindu University	IIMT	International Institute of Management and Technical Studies	PAT	Perform-Achieve-Trade
BRDC	Belgaum Research and Development Centre			PFC	Per Fluoro Carbon
CII	Confederation of Indian Industry	IMRB	Indian Market Research Bureau	POP	Plaster of Paris
CO	Carbon Monoxide	IMS	Integrated Management System	PM	Particulate Matter
CO2	Carbon Dioxide	INR	Indian Rupee	R&D	Research & Development
CPCB	Central Pollution Control Board	IP Camera	Internet Protocol camera	RCC	Reinforced Concrete Cement
CPO	Chief People Officer	ISO 9001	Quality Management Systems – Requirements	RMF	Red Mud Filtration
CPP	Captive Power Plant	ISO-14001	Environmental Management Systems – Requirements with guidance for use	RO	Reverse Osmosis
CFO	Chief Financial Officer			RPO	Renewable Purchase Obligation
CSR	Corporate Social Responsibility	IEC 17025:2005	General Requirements for the Competence of Testing and Calibration Laboratories	3R	Reduce, Reuse & Recycle
DAP	Di-Ammonium Phosphate	KPIs	Key Performance Indicators	RT-DAS	Real Time Data Acquisition System
DC	Direct Current	KFA	Key Focus Area	QIEA	Qualitative Exposure Assessment
DCS	Distributed Control System	KLD	Kilo litre per day	SAQs	Self-assessment Questionnaires
DSIR	Development of Scientific & Industrial Research	KRA	Key Result Area	SBU	Sub – Business Units
EBITDA	Earnings before Interest, Taxes, Depreciation, and Amortisation	KTPA	Kilo tonne per annum (1000 tonne per annum)	SDGs	Sustainable Development Goals
		KGBV	Kasturba Gandhi Balika Vidyalaya	SEBI	Securities and Exchange Board of India
EHS	Environment, Health and Safety	LME	London Metal Exchange	SHG	Self Help Group
EIA	Environmental Impact Assessment	LTTC	Long Term Tariff Contract	SOX	Oxides of Sulphur such as Sulphur Dioxide
EOH&S	Environment, Occupational Health & Safety	LED	Light-emitting Diode	SMART	Specific, Measurable, Attainable, Reasonable, along with Timeline
ESP	Electrostatic Precipitator	m3	Cubic meter		
ETP	Effluent Treatment Plant	MEDA	Maharashtra Energy Development Agency	SMEs	Subject Matter Experts
FII	Foreign Investors	MT	Metric Tonne	SPCB	State Pollution Control Board
FICCI	Federation of Indian Chambers of Commerce & Industry	MtCO2e	Million Tonne of Carbon Dioxide Equivalent	SPL	Spent Pot Lining
		MTPA	Metric Tonne per annum	STP	Sewage Treatment Plant
FO	Furnace Oil	MW	Mega Watt	TERI	The Energy and Resources Institute
FRP	Flat Rolled Products	MWh	Mega Watt Hour	TPM	Total Particulate Matters
FTG	Fume Treatment Centre	NABL	National Accreditation Board for Testing and Calibration Laboratories (NABL) is An Autonomous body under the aegis of Department of Science & Technology, Government of India	tCO2e	Tonne Carbon Dioxide Equivalent
FY	Financial year			UN	United Nations
GHG	Greenhouse Gas			UNGC	United Nations Global Compact
GDR	Global Depository Receipt	NCO	Nifty Copper Operation	UOM	Unit of Measurement
GJ	Giga Joules	NGO	Non-governmental Organization	UTI	Unit Trust of India
GRI	Global Reporting Initiative	NML	National Metallurgical Laboratory	VSC	Values Stakeholder Committee
GTC	Gas Treatment Centre	NPS	Net Promoter Score	VIBES	Vibration of employees Voice
Ha	Hectare	NOX	Oxides of Nitrogen such as Nitrogen Dioxide	VFD	Variable Frequency Drive
HIC	Hindalco Innovation Centre	NRI	Non-resident Indian	V205	Vanadium(V) Oxide
HIV	Human Immunodeficiency Virus	OCBs	Overseas Corporate Bodies	WASH	Access to Safe Water, Sanitation and Hygiene
HCSD	High Concentration Slurry Disposal	ODS	Ozone Depleting Substances	WBCSD	World Business Council for Sustainable Development
HR	Human Resource			ZLD	Zero Liquid Discharge

Please contact: Head Sustainability

Hindalco Industries Limited

Registered Office

Ahura Centre, 1st Floor, B Wing,
Mahakali Caves Road,
Andheri (East), Mumbai 400 093
Ph: +91 22 6691 7000
Fax: +91 22 6691 7001



Corporate Office

Birla Centurion, 7th Floor
Pandurang Budhkar Marg
Worli, Mumbai 400 030, India
T: +91 22 6662 6666 / 6261 0555

www.adityabirla.com
www.hindalco.com