ADITYA BIRLA

HINDALCO

SUSTAINABLE OPERATIONS, RESPONSIBLE GROWTH

Hindalco Sustainability Report : 2010-11

HINDALCO... SUSTAINABLE OPERATIONS, RESPONSIBLE GROWTH

Hindalco Industries Limited, a non-ferrous metals powerhouse and a leading producer of aluminium and copper has a global manufacturing presence in 13 countries across 6 continents and reaches customers in more than 50 countries. Post acquisition of Novelis, we are among the top aluminium majors worldwide and the largest vertically integrated aluminium company in India. We operate one of the world's largest custom copper smelter at a single location and have a significant presence in copper business along with captive supplies of raw materials. We now have embarked on major growth initiatives, with expansion program in aluminium, covering mining to finished product. This growth will offer sustainable benefits to our stakeholders including our communities, customers, employees and wider society. Our metal products' unique intrinsic properties including lightweight, strength, durability, conductivity and recyclability offer society great life cycle benefits across many applications including construction, packaging and transportation.

In sync with our lineage-Aditya Birla Group, we have always believed in sustainable operations. This is our first Sustainability Report covering the various aspects of sustainability we practise and respond to in our global operations. It reports our performance in terms of economic, environmental, people-related and societal parameters describing sustainability, further illustrated with some discussions and case studies. The report, prepared as per **GRI G 3.1 Guidelines,** *covers the performance of our major subsidiaries operating in our global operations value chain. This report is a pointer towards our engagement that we have with our stakeholders and reflects on our commitment to respond to them through our actions and future disclosures, including specific reports for operating regions /subsidiaries. We at Hindalco, believe in operating our business in a sustainable manner and in growing our businesses with responsibility towards all our stakeholder; hence theme for this Report is* **"Sustainable Operations, Responsible Growth"**

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FROM THE CHAIRMAN

Dear Stakeholders,

As a Group, we have always operated and continue to operate our businesses as Trustees with a deep rooted obligation to synergize growth with responsibility. Even as we build a robust business model for long term growth, texturing sustainable development within its ambit is part of our process. Environment conservation and sustainable development are always on our radar as is developing sustainable products that benefit our customers and society. Consequently, these are integrated into our business strategies and in our endeavors to foster inclusive growth as well.

Hindalco, our metals major is our Group's flagship company. Since its inception in 1958 with a 20000 T capacity, it has been growing from strength to strength. Today, this metals powerhouse has reached world scale capacities of over half a million tones each for aluminium and copper, and a world scale capacity touching 3 million tones of rolled products operating globally at Novelis; and has attained revenues of about US $ 15.85 billion. Going forward, we have an audacious intent of reaching revenues of US $ 32 billion and a capacity of 1.3 million T of aluminium by 2014. Our Greenfield projects on this growth trajectory are on track.

We are fully cognizant of the challenges that we have to grapple with on this score, the most important of which is sustainable development. For Hindalco, responsible growth entails seeing the big picture and aiming to live in harmony with nature. Hindalco's greenbelt cover in all of its plants is truly impressive. Tens of thousands of trees endow the plants with a sylvan ambience. Every year, the greenery encircling the company's plants is being extended.

To cite a few examples at the operational level would be appropriate. Our endeavors to monitor and reduce our carbon footprint are ongoing. A few projects serve to illustrate this point – adaptation of prebake cell technology for aluminium at Hirakud smelter, conversion of furnace oil fired kilns to gas heating at Belgaum; use of biomass briquette as fuel in Thermic Fluid Heating System at Silvassa; and facilities for change in transport mode from road to rail at Belgaum and Dahej. Increased usage of our aluminium in transport and other applications has significant overall life cycle carbon footprint benefits.

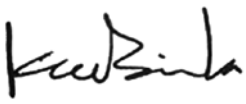
"We are fully cognizant of the challenges that we have to grapple with on this score, **the most important of which is sustainable development.** For Hindalco, responsible growth entails seeing the big picture and aiming to live in harmony with nature."

We, as Aditya Birla Group, will soon venture into the renewable energy space. In the ensuing two years, we will put in place solar power projects of around 200 MW in a bid to make alternative sources of energy.

We believe in inclusive growth. As a Group, we have been and continue to be extremely sensitive to societal needs. In our own small way, we try to bring in relief and make a difference to the lives of the underprivileged sections of society who live in proximity to our plants. We aim to provide healthcare and raise life expectancy, and reduce infant mortality. Through our endeavors in education, we lift literacy rates. Through empowerment and training processes, we promote sustainable livelihood.

This report objectively sets out the progress made in the area of sustainable development and inclusive growth through making underprivileged communities self-reliant.

Best regards,



Kumar Mangalam Birla

FROM THE MANAGING DIRECTOR

Dear Stakeholders,

This is Hindalco's first sustainability report, titled 'Sustainable Operations, Responsible Growth', which outlines our objectives and actions in this area. As a global metals business operating in 13 countries across the aluminium and copper value chains, sustainability and broad-based stakeholder interests are at the core of our operations. This report highlights our sustainability performance in 2010-11, the steps we have taken in this area and the management practices followed in various economic, environmental and social aspects.

Economic prosperity for our stakeholders: From a medium-term perspective, global demand prospects for both copper and aluminium remain robust. Structural factors such as the emerging economies reaching the inflexion point on their growth trajectory and the 'light-weighting' focus in automobile industry are supporting the overall growth consumption. Our business portfolio strategy achieves some degree of de-risking for our overall portfolio through a strong accent on conversion businesses and value-added products.

Our strategic path of a quantum leap in capacities and revenues by 2015 pose significant sustainability imperatives in sourcing, resource optimization, project execution, energy efficiency and social development alongside our sites of operation. Natural resources sustainability – especially copper, bauxite and coal – is important for our continued economic prosperity.

Environmental stewardship in our operations and projects: Aligning our growth and make it harmonious with environmental and social growth is the driving principle behind our operational and project implementation. We have identified areas in the value chain where there are significant impacts on environment and society; and this report highlights some of the innovative approaches undertaken to minimize the impact. These include: changeover of aluminium smelting technology to significantly reduce the greenhouse gas emissions (also registered as a CDM project under UNFCCC), energy optimization and efficiency initiatives, conversion of waste phosphogypsum into farm fertility enhancement products, restoration of waste landfill area by creating usable products out of waste or using technological approaches for restoration of waste land. We have successfully

"Aligning our growth and make it harmonious with environmental and social growth is the driving principle behind our operational and project implementation"

Renusagar Power Plant

vegetated large areas of waste land where 'red mud' generated from alumina production process is disposed. Our subsidiary, Dahej Harbour Infrastructure Limited operates India's only enclosed solid cargo terminal which prevents dust pollution and any loss of materials. When implementing large scale projects, the project design from environment perspective is at par with the latest global standards – going beyond legal compliance and preparing ourselves for the future.

Aluminium is one of the most sustainable materials by virtue of its recyclability. Using recycled aluminium is highly energy efficient. Our wholly owned subsidiary Novelis presently has 33% of recycled aluminium and has ambitious plans to have 80% recycled aluminium by 2020. Recycling of aluminium and copper are definite win-win solutions for both our business and the environment. Our products' overall life cycle benefits also offer win win solutions for our business, consumers and the environment. This includes architectural, electronics, packaging and transportation applications. We are also furthering the usage of aluminium in auto sector, which has the advantages of significantly reducing energy consumption over the life of the vehicle. In this respect, we have taken capability building and development initiatives with the Indian Railways and other entities in the transport sector.

People sustainability: Our 33,000 plus employees across 13 countries representing 15 nationalities are our biggest asset. We take help of reputed agencies to review our initiatives in employee engagement such as the biennial employee engagement survey undertaken by Gallup. Safety of workforce and prevention of accidents at workplace has utmost priority and we take the path of continual improvement by implementing management systems as well as special training and events across all plants on preventive action.

Inclusive growth has always been paramount to us, which is reflected in our commitment towards socio-economic development of the under-privileged communities around us. In 2010, we carried out social projects in healthcare, education, infrastructure development and livelihood generation with the help of expert partners in 660 villages and 10 urban slums in proximity to our plants in India.

As we proceed on our path of exponential growth, we know that it is crucial to deepen our dialogue with all stakeholders. We have our responsibility towards our customers, employees, local community, society, Business Partners, Vendors and Government Bodies at large. Hindalco is poised for growth and leadership through consolidation over the next five years. Sustainability, we believe, has to be a way of life and must continuously progress and improve over the generations to come. This report, 'Sustainable Operations, Responsible Growth', is an important step towards reiterating our commitment to the path we have taken. I welcome your feedback on this report.

Kind regards,

D. Bhattacharya

VISION, MISSION, VALUES

The vision and mission of Hindalco Industries is in line with the Aditya Birla Group vision and mission.

ADITYA BIRLA GROUP VALUES

Hindalco follows the ABG values. These core values define our organisation's character and personality. Our values guide, shape and influence our behaviour and actions.

Integrity

We define integrity as honesty in every action. We shall act and take decisions in a manner that these are fair, honest and follow the highest standards of professionalism. Integrity shall be the cornerstone for all our dealings, be it with our customers, our employees, suppliers, our partners, shareholders, the communities we serve or the government.

Commitment

On the foundation of integrity, we see commitment as doing whatever it takes to deliver as promised. Each one of us shall take ownership for our own work, teams and the part of the organisation we are responsible for. Through this value, we shall build an even sharper results-oriented culture that is high on reliability and accountability. Our commitment is likely to make us a formidable leader and competitor in every market that we are in.

Passion

We define passion as a missionary zeal arising out of an emotional engagement with work which inspires each one to give his or her best. All of us are expected to be enthusiastic in the pursuit of our goals and objectives. We shall recruit and actively encourage employees with a 'fire in the belly'. With this value, we hope to build a culture of innovation and breakthrough thinking, leading to superior customer satisfaction and value creation.

Seamlessness

We understand seamlessness as thinking and working together across functional silos, hierarchy levels, across business lines and geographies. Each one of us shall demonstrate high level of teamwork through sharing and collaborative efforts and garner the synergy benefits from working together. Before we can truly benefit from a borderless world, we need to build a borderless organisation. We visualise free flow of knowledge and information across the group.

Speed

We look upon speed as responding to internal and external customers with a sense of urgency. We shall continuously seek to crash timelines and ensure expeditious completion of our tasks. Through this value, we hope to build an agile and proactive organisation that is prompt to respond to the present and future needs of our customers.

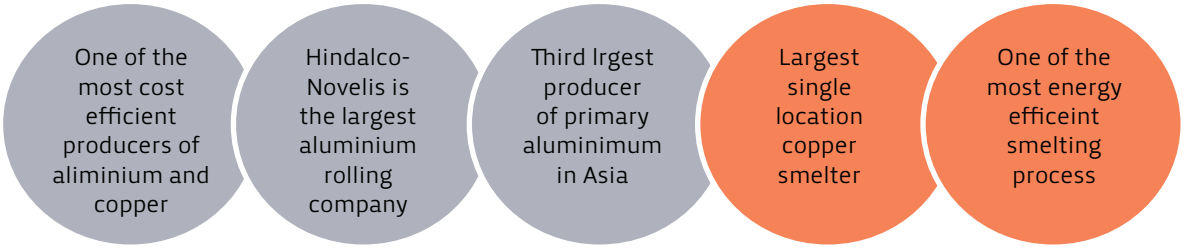
All these values together form our core ideology. They are all equally important and no value will take precedence at the cost of the other. It is in the harmonisation of the five that we see the prospect of greater value creation for all our stakeholders.

All Directors and Senior Executives of Hindalco are covered under The Code of Conduct as per Clause 49 of Listing Agreement.

In addition, all employees are covered under ABG Code of Conduct.

HINDALCO AT A GLANCE

An industry leader in aluminium and copper, Hindalco Industries Limited, the metals flagship company of the Aditya Birla Group is the world's largest aluminium rolling company and one of the biggest producers of primary aluminium in Asia. Acquisition of Novelis Inc. in 2007 positioned Hindalco among the top five aluminium majors worldwide and No. 1 in the world in the rolled products market with a global footprint in 13 countries.



Aditya Birla Group:

The Aditya Birla Group is a US$ 35 billion conglomerate and is in the league of Fortune 500. It is anchored by an extraordinary force of over 133,000 employees, belonging to 42 different nationalities across 6 continents. This year, the Aditya Birla Group was declared among the best employers in India by the Aon-Hewitt Survey and ranked second. It was also ranked among the top employers in the Asia-Pacific region. Now, ABG is ranked No. 1 in Asia Pacific and No. 4 Globally in a study of top companies for Leaders to work.

Before Corporate Social Responsibility (CSR) found a place in corporate lexicon, it was already textured into the AB Group's value systems. The Group's community projects are carried out under the aegis of the Aditya Birla Centre for Community Initiatives and Rural Development, led by Rajashree Birla, a Director on the board of Hindalco. This centre provides the strategic direction and the thrust areas for our work thus ensuring performance management as well.

Hindalco's journey so far:

Established in 1958, we commissioned our aluminium facility at Renukoot in eastern Uttar Pradesh, India in 1962. Over the years, we grew organically and through acquisitions and mergers, notably that of Indal, Birla Copper and the Nifty and Mt. Gordon copper mines in Australia. This strengthened our position in value-added alumina, aluminium and copper products.

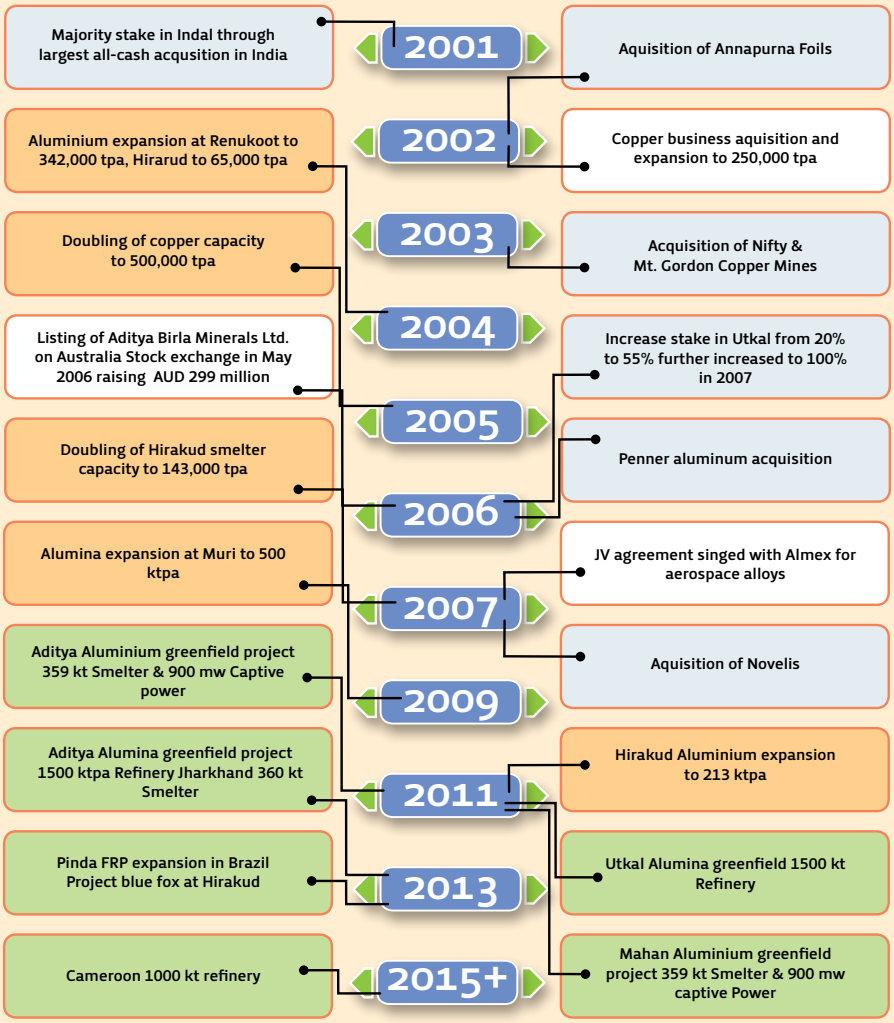
The acquisition of Novelis Inc. in 2007 positioned Hindalco among the top five aluminium majors worldwide and the largest vertically integrated aluminium company in India.

We acquired the copper business from Indo Gulf Corp (a sister company within Aditya Birla Group) in 2002, as a strategic complement to the aluminium business. Copper is produced at Dahej in Gujarat. It is one of the world's largest single-location smelters and uses imported copper concentrate. The copper business also produces many value-added co-products like DAP fertiliser, precious metals and sulphuric acid.

Our growth and progress is supported by a dedicated workforce of more than 33,000 spanning six continents and serving industrial growth in both emerging and developed markets.

Over the years, Hindalco has grown into the largest vertically integrated aluminium company in the country and among the largest primary producers of aluminium in Asia. Its copper smelter is today the world's largest custom smelter at a single location. Hindalco's journey has been challenging at times, but truly exhilarating

Hindalco's decade of transformation



Operations:

A snapshot of Hindalco's operations and projects is presented later in this chapter.

Aluminium

In India, we source bauxite from captive mines and through the open market to produce alumina in refineries using the Bayer refining process. A part of the alumina is sold to customers for non-metallurgical applications in the form of value-added special alumina. Captively used alumina is reduced to molten metal in reduction cells or pots in smelters. This power-intensive process is supported by coal-based captive power plants. Over 40% of the produced metal is transferred to our downstream plants for value-addition. The rest is sold to customers in India and to export markets. Novelis purchases aluminium, both primary and recycled, mainly from external sources.

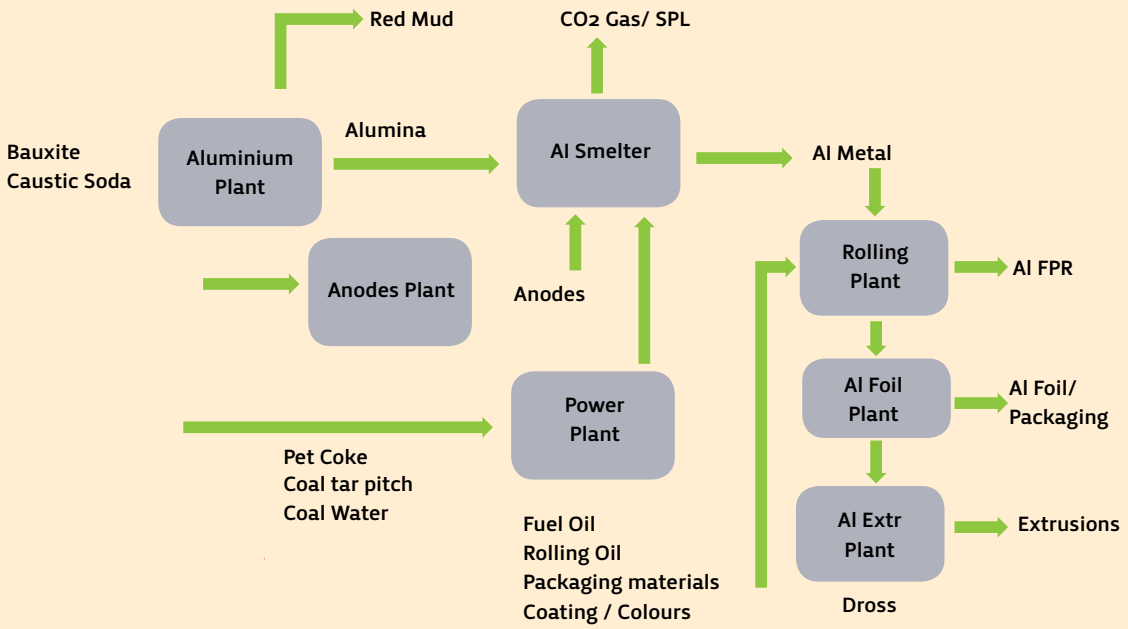
Copper

We currently import our requirement of copper concentrate due to its non-availability in India. About 15 to 20% of the copper concentrate is sourced from our overseas subsidiary (ABML). We also import coal for our captive power plant supplying power to the copper smelter. Imports are handled through a captive all-season jetty. Copper concentrate is first smelted to anode in the smelter and then refined to obtain copper cathodes. More than half of the cathodes are converted to copper rods in the rod mill, the rest is used for other products. During the smelting of copper concentrate, sulphur is released and tapped as sulphuric acid. We use nearly one-fifth of the sulphuric acid captively to produce phosphoric acid and DAP fertiliser. Another co-product of the copper refining process is anode slime. This is further treated in a precious metals refinery to extract gold and silver. Other co-products include selenium, copper telluride, gypsum and iron slag.

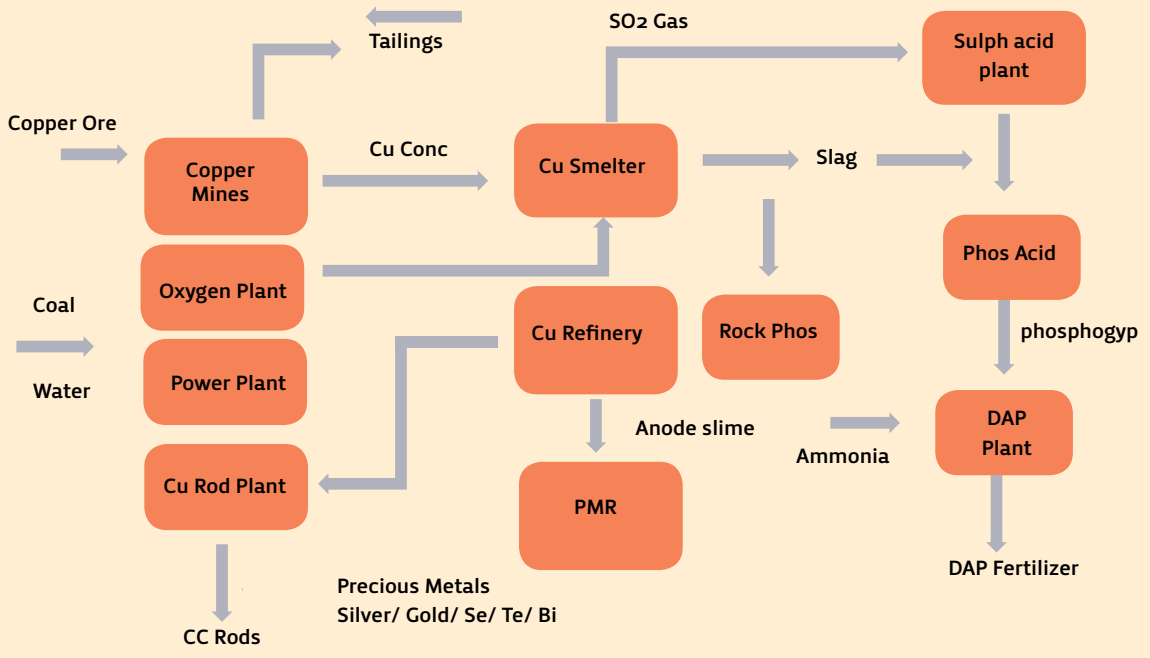
Both aluminium and copper businesses supply to industrial customers and traders. The products range from commodity products (like standard alumina, primary aluminium, copper cathodes) to high-end specialised products (such as lithographic sheets and specific extrusion products). Goods are normally transported from the factory using road or rail route and to the port in India for export shipment.

Production Process

Material flow diagram for aluminium



Material flow diagram for Copper



Business category	Installed capacity	Production in 2010-11	Pointers for economic sustainability
Aluminium			
Alumina	• 1.50 million tonnes • Refineries at Renukoot (0.7), Belgaum(0.35), Muri (0.45) • Captive bauxite mines in India (meets 70% of raw material requirements)	1.35	Develop value-added special products for non-metallurgical uses, sustainable sourcing and competitive cost
Primary aluminium	• 506.4 kilo tonnes • Smelters at Renukoot (345), Hirakud (161.4) • Conductor redraw plant at Renukoot	537.9	Maintain leadership in low-cost aluminium production, managing cost of inputs, supplier sustainability; strong demand outlook from emerging market
Captive power generation	• Capacity: Power generation • Renusagar 742 MW, Hirakud 367 MW • Captive coal mine (23 % of raw material requirements)	9589168 MWh	Power generation efficiency, managing cost of inputs
Rolled aluminium products – India	• Capacity: 205 kilo tonnes • Sheet rolling plants at Renukoot (80), Belur (45), Taloja (50), Mouda (30)	199.8	Getting in new business in emerging markets such as automobiles, construction, beverage can inputs, transport sector (Surface transport)
Rolled aluminium products – Novelis	• 30 Plants across 4 continents[1]	Shipments of aluminium rolled products totalled 2969 kilo tonnes	Increased demand due to strong end-market conditions across all product segments globally
Aluminium extrusions	• Capacity: 31 kilo tonnes • Extrusion plants at Renukoot (23), Alupuram (8)[2]	35.9	Enhance the extrusions portfolio for various applications
Aluminium foils	• Capacity: 40 kilo tonnes • Foil plants at Silvassa (30), Kollur (4), Kalwa (6)	17.7	Develop versatile packaging solutions, promote aluminium recycling
Copper			
India	• Copper cast rods: 142.2 kilo tonnes • Copper cathodes: 500 kilo tonnes • Sulphuric acid: 1670 kilo tonnes • Phosphoric acid: 180 kilo tonnes • Fertilisers (DAP and complexes): 400 kilo tonnes • Gold: 15 tonnes • Silver: 150 tonnes	• Copper cast rods: 144.5 kilo tonnes • Copper cathodes: 335.6 kilo tonnes • Sulphuric acid: 1097 kilo tonnes • Phosphoric acid: 102 kilo tonnes • Fertilisers (DAP & complexes): 219.8 kilo tonnes • Gold: 6.96 tonnes • Silver: 45.076 tonnes	Access to copper concentrate of appropriate quality and margins, management of by-products and value-added products, waste to wealth, treatment and refining charges; strong demand outlook from emerging market
Mines (Australia Nifty, Mount Gordon)		2254259 tonnes of sulphide ore were processed and 243,419 tonnes of copper concentrate (having an average of 25 % of copper) produced. Mount Gordon mines temporarily under care and maintenance during 2010-11	price movements, LME copper prices, treatment and refining charges

1 We had one strike or lockout in 2010-11 that was longer than 7 days which was a 12 day strike during August 2010 in the Ulsan Plant in Korea.

2 There was one instance of strike or lockout longer than 7 days, declared on 22 February 2011.

Mr. Phil Martens President & CEO- Novelis Inc.

Novelis is the world's largest producer of rolled aluminum and the global leader in beverage can recycle. We have initiated a more ambitious phase in our sustainability evolution with the launch of a new and comprehensive set of sustainability goals. At the core of these goals is our pledge to use 80% recycled aluminum inputs in our manufacturing processes by 2020, compared to about 33% today. This will halve the embedded carbon emissions related to our products and help our customers reach their own sustainability targets. We will be entering into partnership with our key stakeholders such as customers, suppliers and consumers to reach our sustainability goals

Projects:

Greenfield projects in India	
Utkal Alumina, 100% subsidiary at Rayagada, Odisha	Construction of the alumina refinery (1.5 million tonnes) and associated 90 MW captive co-generation plant
Aditya Refinery, Odisha	Construction of the 1.5 million tonnes alumina refinery and associated 90 MW captive co-generation plant
Mahan Aluminium, Bargwan, Madhya Pradesh	359 kilo tonnes per annum aluminium smelter and 900 MW captive power plant
Aditya Aluminium, Odisha	359 kilo tonnes per annum aluminium smelter and 900 MW captive power plant
Jharkhand Aluminium, Sonahatu Jharkhand	359 kilo tonnes per annum aluminium smelter and 900 MW captive power plant
Capacity build-up at existing units in India	
Smelter & FRP Plant at Hirakud, Odisha	• Smelter production capacity ramp-up as a result of technology changeover. Current capacity is 189 KTPA and targeted capacity is 301 KTPA • Capacity-building with certain relocation of equipment from Novelis UK enabling production of aluminium rolled products for use in beverage can making. Expected to be commissioned in December 2011.
Alumina, Belgaum	• Projects taken up for production of speciality grade alumina, increase range and diversity of products, meet more customer demands (special products is currently being ramped up from 138 KTPA to 316 KTPA) • Capacity arrangements for transportation through railways (a carbon and cost conscious alternative) • Set-up of co-generation (steam and power) plant
Capacity build-up projects outside India	
South America	• Pinda is the largest aluminium rolling and recycling facility in South America in terms of shipments and the only facility in South America capable of producing can-body and end stock. • Projects underway to increase the plant's capacity by more than 50% to approximately 600 kilo tonnes of aluminium sheet per year.
Asia	• Expand the aluminium rolling and recycling operations in South Korea, in response to the growing demand in Asia and the Middle East. • Increase aluminium sheet capacity by 50% in Asia to 1,000 kilo tonnes annually

Mr. Rengaiyenger Ram
Executive President- Corporate Projects & Procurement

The implementation of several greenfield and brownfield expansion activities by Hindalco and Novelis are strategic under the umbrella of sustainability. For example, resettlement and rehabilitation during land acquisition for projects is considered top priority. We comply with land regulations and our activities are executed to the satisfaction of the displaced communities. We have ensured a smooth and better quality of life for 1800 community members in our Mahan project, the largest resettlement activity so far by Hindalco. This was achieved through consultative and engagement mechanisms as well as understanding the real needs and sentiments of the community

Scope of Report – Companies included

1. Hindalco does not exercise management control
- Aditya Birla Chemicals (India) Limited

2. Small size of business operations
- Hindalco-Almex Aerospace Limited

3. Special purpose investment companies
- Renukeshwar Investments and Finance Limited
- Renuka Investments & Finance Limited
- Lucknow Finance Company Limited
- East Coast Bauxite Mining Company Private Limited
- Suvas Holdings Limited
- A V Minerals (Netherlands) B.V.

4. Operations yet to commence
- Tubed Coal Mines Limited
- Mahan Coal Limited

Scope of Report – Companies excluded

- Novelis Inc
- Aditya Birla Minerals Ltd (ABML) incl. Birla (Nifty) Pty Limited and Birla Mt. Gordon Pty Limited
- Utkal Alumina International Limited (included in corporate projects)
- Dahej Harbour and Infrastructure Limited (included in Birla Copper, Hindalco India)

GOVERNANCE

Today, we are well poised to emerge as a one global metal business with India-centric upstream operations and global value-added downstream businesses. To realise our ambitious growth targets, we remain committed to the adoption of best business practices and adherence to our governance philosophy.

Our Governance Framework

Our governance and disclosure practices are a result of a deeply ingrained value system that reflects a culture of trusteeship and strategic thought process aimed at maximising value for our stakeholders. Our Board works within the ambit of clear and well-defined governance framework which flow from Clause 49 of the Listing Agreement in India, the Sarbanes-Oxley Act and the regulations of the US Securities and Exchange Commission in US, and in accordance with the Australian Stock Exchange (ASX), Corporate Governance Council's (CGC), Principles of Good Corporate Governance and Best Practice Recommendations. The governance framework describes the role of the board, its operations, its relationship with the executive management and the main tasks of its committees.

Hindalco Governance Philosophy

- Board Accountability to Company and Shareholders
- Equitable Treatment of Shareholders
- Strategic Guidance & Effective Monitoring
- Superior Transparency & Timely Dislcosure
- Protection of Minortity Interests

Chair of the Highest Governance Body

During the reporting period, Mr. Kumar Mangalam Birla is the Chairman of the Board.

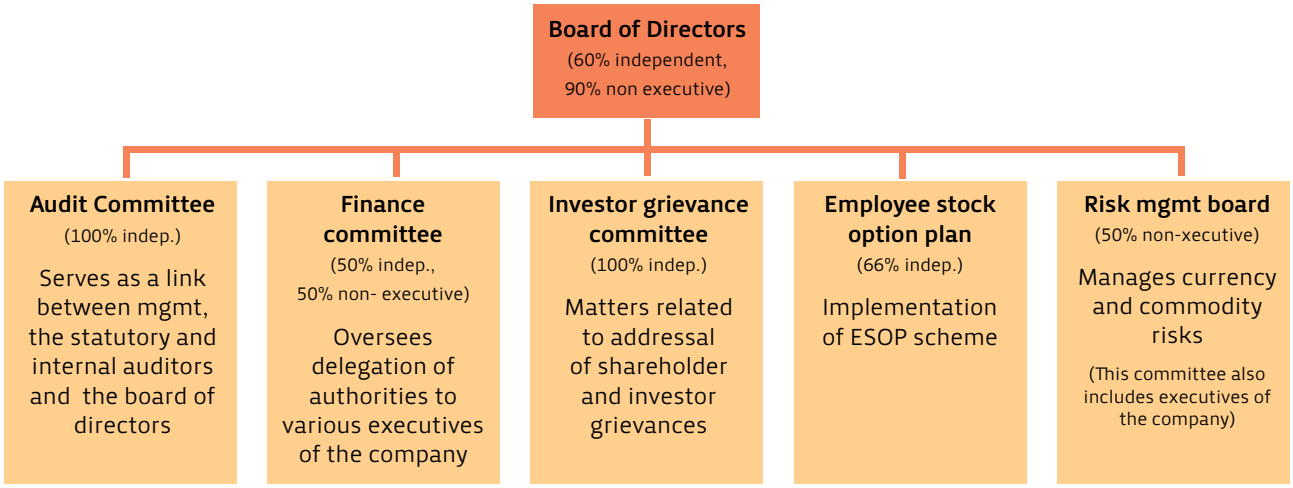
Board of Directors

Our senior leadership has been directing the company on its growth path and enhancing value generation whilst contributing to stakeholder aspirations and society expectations. To drive high-end performances, the Board is continuously sensitised to the broad range of economic, environment and social issues that relate to our portfolio of businesses.

For Hindalco India, our Board consists of eleven Directors-- ten Non-Executive Directors of whom seven are Independent Directors.

There are five non-executive members on the Board of Novelis Inc. who supervise the management of Novelis business and affairs, and annually reviews corporate governance practices in the light of developing requirements. As new provisions come into effect, Novelis Board of Directors will reassess Corporate Governance Practices and implement changes as and when appropriate. Novelis has also established two standing committees i.e. audit and compensation committees.

For ABML, the Board comprises six members, three of whom are independent Non-Executive Directors. ABML acknowledges that this does not constitute a majority of independent Non-Executive Directors but believes the board is of a suitable composition and possesses the necessary skills to govern the company.



Sustainability framework setting and public policy advocacy at the group level

Aditya Birla group has diversified business interests ranging from manufacturing to services. For example, the group's service oriented businesses are in insurance, telecom, retail and outsourcing whereas the manufacturing oriented business consists of metals and mining, textiles, cement and chemicals. The Group has put a structured focus on sustainable development and constituted a framework for spearheading the sustainability agenda. A Sustainability Steering Committee is in place at the Group level which reports to the Chairman and with help of working committees establishes the strategy and work plans specific to each business on sustainability. Looking at the sustainability issues from the Group level has also served the process of incubating ideas and sustainability opportunities and group wide synergies. For example, use of a byproduct generated in a group company as an energy source in another of group's company (Hydrogen generated in caustic soda plants is used as a source of energy for usage in telecom towers). The Steering Committee also participates in advocacy and opportunities presented at a national level for furthering the sustainability agenda and group priorities on sustainability such as low carbon growth

Selection of Directors

We follow a policy of retirement by rotation for the directors. A director elected by shareholders must retire at least once every three years and, if they so wish, offer themselves for re-election. A director appointed by the board as an additional director holds office only until the next annual general meeting and shall then be subject to election by shareholders.

We also organise training programmes for our executive directors. The programmes cover the company's strategic approach, financial framework and the group's approach to risk management.

Procedures for governance of sustainability issues by the Board

The Board regularly monitors compliance to various regulations in economic aspects (such as under Clause 49 of listing agreements), environmental and social aspects (such as with respect to compliance of factories, mines, projects and other activities), as well as a review of activities by each business and a certification process from each business head.

Any development in laws and regulations, applicable to the operations, are placed before the Board and its Committees so as to enable them to recommend suitable changes to the business processes.

The Board also reviews sustainability topics put forward by the executive through various presentation review platforms such as those with internal auditors, external cost and financial auditors, project management and executive teams.

Performance of the Highest Governance Body

The Board evaluates the Directors collectively to reinforce the principle of collective responsibility, as well as periodically undergo an Executive Development Programs and Development Assessment Centre (DAC) – an evaluation of Executives on effective and demonstrable leadership, to drive performance.

Executive Compensation

Remuneration of the Managing Director is recommended by the Board subject to approval of our shareholders. All fees and compensation including sitting fee paid to the Non-Executive Directors are fixed by Board of Directors within the limits approved by the shareholders. Information on Executive and Non-Executive Directors' payment is disclosed in our annual report. We follow a Reward Framework for promotion of safe, responsible, and sustained performance that balances the needs of today with those of tomorrow.

We are in the process of undertaking a comprehensive review –with the objective of linking the performance on health, safety, compliance and operational risk issues with the executive compensation and incentives.

Avoidance of Conflict of Interest

We adhere to the corporate governance code as set out in Clause 49 of the Listing Agreement and subscribe to the provisions in it to avoid conflicts of interest. The company has a practice of maintaining registers wherein the interests of directors both executive and non-executive with respect to directorships they hold in other companies, membership in committees, contracts the company proposes to enter in which they may be interested, etc. are noted.

Shareholder Mechanism

We conduct Annual General Body meeting where shareholders are presented with an opportunity to pose questions to our Chairman, express assent or dissent to resolutions and propose changes. We regularly share information with our shareholders and the investment community through reports and presentations, reports, press releases and updates on our website. We recognise our responsibility in keeping our shareholders and the investment community informed on our progress while providing opportunities for regular dialogue and feedback.

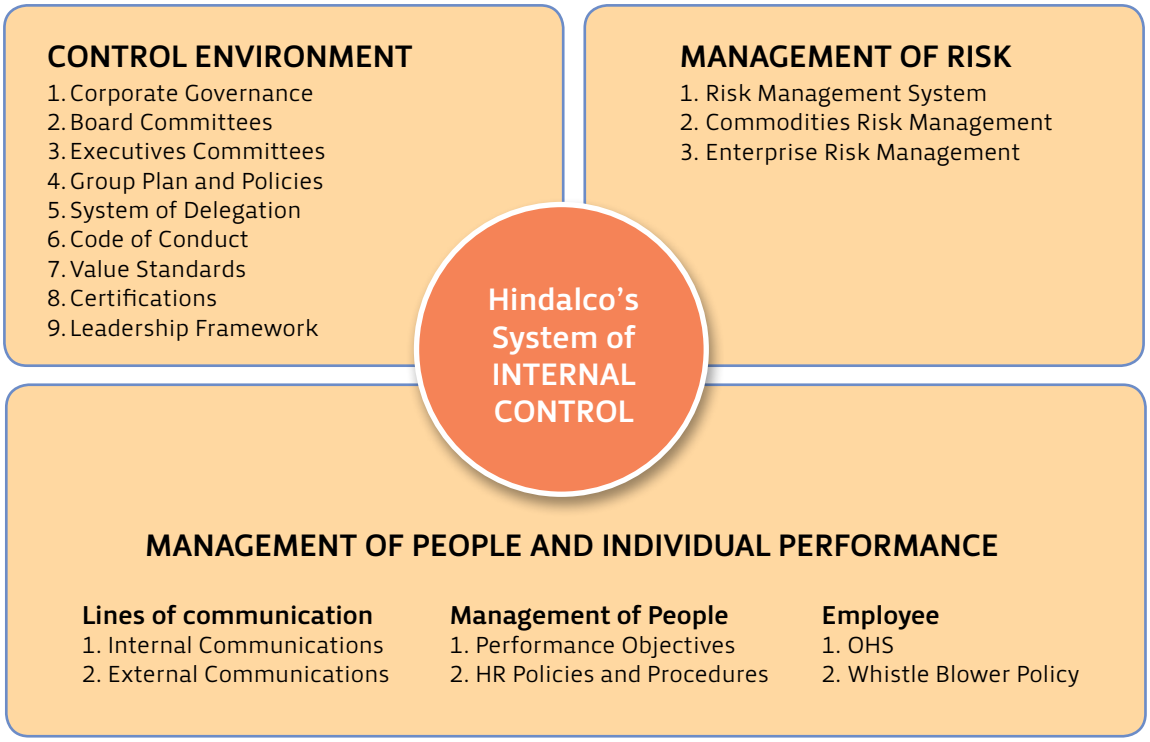
Our system of internal control

The board is responsible for maintaining a sound system of internal control and delegates the establishment and maintenance of this system to the concerned executives. Management systems, organizational structures, processes, standards and behaviours are all components of Hindalco's system of internal control. Management of risk and operational performance is one of the elements of system of internal control. Businesses identify, prioritize, manage, monitor and improve the management of risks on a day-to-day basis to equip them to deal with hazards and uncertainties. The key risks and how they are managed, are reported up through the line in a consistent manner to enable business planning, appropriate intervention and ultimately board oversight.

The Business Review Committee comprising of the Chairman and Managing Director closely monitor business and other risks which may have a critical impact on the Company's performance. This enables the identification of the most important risk management activities. Audit processes are designed to consider whether selected risk management activities are designed and operating effectively. Our internal control programme systematically reviews our financial, operational and compliance controls and also reviews our risk management procedures to provide assurance over their design, implementation and effectiveness. The programme is managed and implemented by our concerned personnel, which reports the results of internal control testing independently to the respective committees of our board. Through this process we are able to provide assurance over the reliability of our reporting.

The Chairman and the Managing Director have constituted a Planning and Budgeting Committee. The Committee formulates plans and budgets for the year describing in details what it expects from the different businesses of the Company. A concept of Pole Star has also been designed which provides targets for businesses to achieve.

The company has formulated a chain of control measures to maintain the desired level of oversight. External Audit, Internal Audit, Departmental Audit, other Audits, Independent Experts etc. are some of the measures.



Precautionary Approach

In line with the Precautionary Principle, the Board ensures that the material risks are identified, understood, and that the systems of risk management and internal control are in place.

Code of Conduct and Ethics

All employees adhere to the Aditya Birla Group Code of Conduct which lists out the non-negotiable set of actions and ethical behavior applicable to all employees across the Group and to the management in particular. All employees upon joining and during the course of employment are provided training on the code of conduct.

Novelis has adopted a Code of Conduct for the Board of Directors and Senior Management that reflects our ethical principles and values. The Novelis Code of Conduct complies with the Sarbanes-Oxley Act and the regulations of the U.S. Securities and Exchange Commission. A revision to the Code is expected to be implemented in Quarter IV of FY 12.

In addition, Novelis has developed a Code of Ethics for Senior Financial Officers, including the President and Chief Operating Officer, the Chief Financial Officer and the Controller. This Code of Ethics reflects our commitment to financial integrity and to full and accurate financial disclosure in compliance with applicable accounting policies, laws and regulations.

Employee Communication

Our employees have access to group's internal grievances process and communication channels via work councils or staff consultation.

We regularly organise communication meets and suggestions at each operating unit. We recognize the rights of workforce representation and consultation, and seek to work in good faith with trade unions and other legally recognised bodies that our employees chose to associate with. We regularly run employee surveys to monitor attitudes and identify areas of improvement.

Comprehensive Management Systems at Hindalco Group

In each operational unit in India and Overseas (as part of Novelis and ABML), we have implemented a comprehensive management system to manage the risks associated with quality, environment, health and safety. This approach ensures that the risks are managed in a decentralized and effective way and form an integral part of unit performance. These systems are based on internationally accepted standards and follow a rigorous process of continual improvement and periodic external and expert assessment.

Quality Management System (QMS)

- All operational units have QMS in accordance with ISO 9001:2008

Occupational Health and Safety Management System (OHSAS)

- All operational units (except one) have EMS in accordance with ISO 14001: 2004
- Plants to have all units complying by 2011-12

Occupational Health and Safety Management System (OHSAS)

- All exceptional units have OHSAS in accordance with OHSAS 18001:2007 standard
- Plants to have all units complying by 2012-13

World Class Manufacturing (WCM)

- Group Excellence Model aimed at achieving excellence in all aspects of business through team involving all employees, incorporates requirements of programmes like TQM, TPM, TPS, BPR, Lean manufacturing and Team Based Management
- Our operational units are at different maturity levels i.e. Bronze, Silver, Gold, Platinum

Laboratory Accreditation

- Taloja R&D Centre and Belur Plant Laboratory have accredatation to ISO/IEC 17025:2005 (International standard for testing and calibation laboratories) trough National Accreditation Board for Calibration and Testing laboratories (NABL)

Quality management in the supply chain

- Our opearational unit at Silvassa supplies componenets to automobile manufacturing and has implemented quality management system based on ISO/TS 16949
- We are also in the process of implementing this at Taloja unit.

Hindalco Sustainability Policies

Quality Policy

We, at Hindalco Industries Limited, are committed to pursue and sustain excellence through continual improvement in all our activities.

To achieve these goals, we shall :

- Meet and exceed the expectations of customers with speed, ensuring reliable and consistent customer service.
- Associate with suppliers to ensure high quality of inputs through proactive partnership.
- Improve effectiveness of Quality Management System with emphasis on in-process control.
- Foster teamwork, educate, train, motivate and involve employees in achieving the Quality objectives.
- Establish viable modernisation of manufacturing facilities and encourage technological innovations.
- Provide value for money and be globally competitive.

D. Bhattacharya
Managing Director

15 March 2006

HINDALCO INDUSTRIES LIMITED

Environmental and Energy Policy

We, at Hindalco Industries Limited – a premier name in Aluminium and Copper, operating across the process chain from mining to semi-fabricated products – stand committed to continually strengthen our energy efficiency and environmental performance in order to achieve Sustainable Development.

To achieve this, we shall:

- Institutionalise an Energy & Environmental Management System across all production and operational activities, which can be monitored through periodic audits.
- Comply with all applicable legislations and go beyond wherever techno-economically viable.
- Enhance material efficiency, achieve high process/equipment productivity and adopt pollution prevention practices.
- Adopt energy-efficient and cleaner technologies, appropriate to the region in which we operate and in line with our future growth and diversification plans.
- Promote use of non-conventional and renewable energy, waste heat recovery and incorporate technological interventions to reduce Green House Gases (GHG) from our operations.
- Reduce open land storage of wastes, and take active measures to promote industrial recycling and re-use.
- Work in partnership with regulatory authorities, relevant suppliers, contractors and stakeholders to meet the requirements of this policy.

D. Bhattacharya
Managing Director

15 March 2006

HINDALCO INDUSTRIES LIMITED

Occupational Health & Safety Policy

We, at Hindalco Industries Limited, value people as our most important resource and are committed to achieve excellence in health and safety management by providing a safe and healthy work environment, at all locations.

To achieve these goals, we shall :

- Inculcate a sense of responsibility related to occupational health & safety, amongst all levels of employees.
- Use safe and better technology for ensuring and upgrading health and safety standards.
- Develop, sustain and continually improve safe work practices and standards to safeguard employees, contractors, community and assets.
- Comply with all prevalent statutory and regulatory requirements related to occupational health and safety.
- Promote and enhance safety awareness and consciousness amongst all employees, through training and development.
- Monitor and review health and safety management systems and working conditions, periodically.

This policy shall be made available to all employees, suppliers, customers, community and other stakeholders.

D. Bhattacharya
Managing Director

15 March 2006

HINDALCO INDUSTRIES LIMITED

Corporate Social Responsibility Policy

We, the employees of Hindalco Industries Limited are committed to realise our Group's Social Vision to actively contribute to the socio-economic development of the underprivileged communities around us for a better, sustainable way of life and thereby help raise the country's Human Development Index.

While adopting the principles of Sustainable Development, we shall strive to work in partnership with the community, government and other stakeholders.

We shall fulfil our responsibility as a good corporate citizen through a comprehensive plan which will focus on :

- Health, Sanitation and Family Welfare
- Primary & Adult Education
- Sustainable Livelihood through income generation, agriculture based programmes including Watershed Development
- Women's Empowerment through Self Help Groups
- Infrastructural Development & Support
- Espousing Social Causes

With the overall aim of building long term socio-economic self reliance among the communities in which we operate.

D. Bhattacharya
Managing Director

15 March 2006

HINDALCO INDUSTRIES LIMITED

ADITYA BIRLA

Technology and Innovation Policy

We, at Hindalco Industries Ltd will strive towards development of technology competencies, for providing innovative solutions to become a global leader in Aluminium and Copper Businesses.

To achieve this we at Hindalco :

- Will provide all necessary resources and support to build a competent, high caliber research, technology and innovation team;
- Will provide appropriate facilities for developing, adapting and implementing high quality products, processes and solutions;
- Will initiate and support Medium and Long Term Projects jointly with Group Science and Technology Centre, appropriate external institutions and customers;
- Will align cost effective Technology and Innovation Programs to fulfill short, medium and long term business objectives of the Company.

D.Bhattacharya
Managing Director

7th August 2010

HINDALCO INDUSTRIES LIMITED

APPROACH TO SUSTAINABILITY

Sustainability has been identified as key to our growth in the coming years. It is also a crucial part of our global business strategy, which is to be one of largest global manufacturers of aluminium and copper. The sustainability benefit of our products is a key driver for increased usage of our metals.

We have long been a leading integrated producer of aluminium, among the industry's top companies across Asia. Hindalco's upstream strategies for the aluminium industry focuses on continuing existing low cost operations and progressing on new green-field projects; that will further improve cost competitiveness through lowest production costs; by controlling key resources, such as bauxite mines, refineries, power plants and coal; and reaping benefits of economies of scale. Due to ample availability of bauxite as well as coal in India, our traditional growth strategy for aluminium business has been to 'develop' new projects (alumina and aluminium production) upstream in our value chain and 'buy' downstream (flat rolled product manufacturing).

Another strong growth catalyst is research and development. We maintain a steady focus on research, which has resulted in advances in the company's operations and commercial strategy as well as an increased focus on foreign trade.

Our continuing success depends on our ability to gain access to the land, people and capital we require. We create long term stakeholder value by managing risks and embracing opportunities through optimisation of the economical, environmental and social aspects.

Key Priorities

1. Accentuate Hindalco's position as the leading global manufacturer of aluminium rolled products and as the lowest cost manufacturer of aluminium and copper
2. Ensure time and cost effective implementation of green-field projects
3. Make sustainability a part of business strategy
4. Identify and secure alternative sources of key raw materials, ores and energy sources
5. Maintain and strengthen action on reducing energy consumption, greenhouse gas emissions, freshwater consumption and waste generation
6. Attract, grow and retain talent at all levels
7. Attempt to continuously reduce injury and incident rates.
8. Utilise the overall life cycle benefits of our products for our customers, consumers and society.

Key achievements

- In 2010-11, Hindalco achieved highest ever underlying EBITDA of US$1.9 billion.
- Ensured efficient and effective management of large green-field and brown-field expansion projects in difficult terrains.
- Achieved successful turn-around of a global acquisition.
- Mapped greenhouse gas emissions to develop the clean development mechanism (CDM) methodology. Registered the first of its kind CDM project in the aluminium sector
- Achieved recycled metal content of 33% in FY 2011 for Novelis.
- Successful rehabilitation of affected local families in the on-going green-field project at Mahan in Madhya Pradesh.
- Use phospho-gypsum and degraded slag, waste in our copper business, to create value added products

- CSR activities undertaken at 660 villages and 10 urban slums, in proximity to our operational plants and upcoming projects, across the country.
- Continued strong growth of aluminium light-weighting programmes with leading automakers including Audi, BMW and Jaguar Land Rover.

Materiality

We conducted a materiality assessment exercise to identify the most significant sustainability issues affecting our business and our stakeholders. Our process has been based on the Global Reporting Initiative (GRI) guidance (www.globalreporting.org). It involved identifying economical, environmental and social topics that are most relevant for Hindalco's performance and considerably influence the appraisals and decisions of our key stakeholders.

The topic identification process covered a peer evaluation exercise conducted across international institutions and global forums in the aluminium and copper sectors. We further drew from our ongoing engagements with our stakeholders to understand the impact on environment, workplace, markets and communities. We followed a structured process to priorities the topics, decide the details and the extent of coverage on each topic.

Our sustainability priorities have been based on the understanding of stakeholder interests. Key personnel from business functions such as finance, strategy, operations, risk management, HR, marketing, commercial, investor relations, corporate social responsibility, technology, health, safety and environment and corporate communications have rated the issues affecting specific stakeholders.

As a final step, we ensured that the report addressed the sustainability issues across our value chain and entities as well as completeness in coverage of scope, boundary and reporting period.

This materiality process drives the performance data and activities that we report here.

Some of the above topics are embedded in our current approach, governance and management systems while for others, we will work towards integrating these in subsequent years.

Engaging with Stakeholders

As an integral part of our business model, we are fully committed to engaging with internal and external stakeholders who are affected by, or have an interest in, what we do. We engage with all our key stakeholders on different economic, environment and social issues in the manner that best suits each stakeholder group, such as social satisfaction surveys in neighbouring communities, third-party survey along with electronic, printed and face-to-face meetings with employees and high-level meetings with government representatives, among others.

We identify our key stakeholder groups at each step of the value chain. These cover government and regulatory bodies, investors and shareholders, lenders, industry, suppliers and service providers, employees, customers, communities and media. The proposed approach is determined by what is materially important to these stakeholder groups.

In the table below, we have presented how we have engaged with these stakeholders during the reporting period and the key sustainability issues identified by them. It also highlights some of the key activities undertaken.

Stakeholder group	How we engaged?	Important issue identified	Key stakeholder engagement activities in the reporting period
Statutory bodies/ Government	• Formal communications through corporate governance and reporting provisions • Participation in government forums	• Legal obligations, policy advocacy	• Inputs towards schemes of National Mission on Enhanced Energy Efficiency (NMEE), the Government of India. • Novelis engaged in policy dialogue with statutory bodies on issues like post consumer recycling • Participation in development of the Voluntary Guidelines, on Corporate Social Responsibility by Ministry of Corporate Affairs, the Government of India.
Investors and shareholders	• Regular meetings with investors to make them aware about company performance and plans • Through "Investor Grievance Committee" at the Board level • Formal procedures to track investor complaints, continuous improvement	• Responsible financing, ensuring community empowerment	• Interaction also took place during the annual general meeting where we communicated on the sustainability issues (economic, environment and social).
Lenders	• Through road shows and formal issue specific questionnaire survey	• Financing decisions, Valued added to the society, demonstrating environmental good practices	• Email based feedbacks were collected from some selected key lenders. The lenders were keen on knowing the information economic sustainability issues and Hindalco's stand on corporate social responsibility including the CSR policy.
Industry Associations	• Core members of: Aluminium Association of India (AAI), International Aluminium Institute (IAI), Confederation of Indian Industry (CII), Federation of Federation of Indian Chambers of Commerce and Industry, American Ceramic Society, The International Committee for the Study of Bauxite, Alumina and Aluminium. • ABML (Australia) is a member of the "Australasian Institute of Mining and Metallurgy" (AIMM)	• Policy advocacy, sector sustainability,	• Contributed to the International Council on Mining and Metals on sustainable development and the Global Copper Supply Chain • Aditya Birla group has launched a forum called "FICCI Aditya Birla CSR Centre for Excellence".
Suppliers and Service Providers	• Interaction with Vendors through focused meetings, Perception by top management, Vendor meets, Stores inventory, Contract Review with suppliers & Service Provider; • Monthly interactions on identification of areas for improvement; • Vendor rating, Consolidation of requirements of group units on common items vis-à-vis suppliers capability and needs, requirement of Strategic Project Purchases.	• Labour management relationship, code of conduct, responsible sourcing	• Navigation plans, Vendor performance analysis on Quality, delivery, service, transportation rates • Consolidation of common items requirements / pricing/ location etc. • Analysis of Project Contract / Vendor analysis • Novelis is in the process of implementing a new Supplier Code of Conduct.
Employees	• Through employee engagement survey, conducted by an independent third party expert for our employees once in every two years. • Through formal employee feedback	• Employment benefits, Talent management, Occupational health and safety, Company values	• The biennial Organizational Health Survey (OHS) conducted by Gallup served as a barometer of the engagement at work index in our Group with a record participation of 97%

Stakeholder group	How we engaged?	Important issue identified	Key stakeholder engagement activities in the reporting period
Employees (cont'd)	• Conducting regular performance • assessment for all employees • Through HR Capability vs. Capacity requirement, Competency Assessment, Leadership effectiveness studies, Feedback from Exit Interview • Using the internal website and magazines as communication platform		• Through "Full Circle", the quarterly e journal of Hindalco Industries Limited, the environmental sustainability issues of different operations have been communicated • Group magazine such as "Aditya Kiran", the CSR initiatives of the groups are being communicated to the employees through Magazines Margdarshika • "Aditya Disha" is an internal website which is being used for all internal communication purpose, reference points for all policies, single window system with e-learning facilities.
Customers	• "Customer Satisfaction Management and Measurement (CSMM)", conducted by an independent market research agency for each business unit • Through Web based Customer Relationship Management (CRM) interface • Customer visits, customer's perception survey, internet, domestic and international publications. • Structured forum MILAP for an interactive dialogue between the marketing team and the SBU technical teams • 'Dealer meets' for FRP business, the IT enabled platform called "Seginsight" to collect and analyze segment-wise data with the intention of developing deep & actionable insights. • Novelis directly engages with its customers through focused sustainability questionnaires and has brought out a scoring and rating system	• Product stewardship, quality, environmental onsiderations, • Waste reduction, recycling rates, ethical business conduct and water consumption	• CSMM survey • Complaint analyses, satisfaction vs. competitors have also been carried out. • Customer satisfaction surveys are done internally for chemical business and through an external agency IMRB (Indian Market Research Bureau) for four categories of Products i.e. Rolled, Primary Metal, Wire rod, Extrusions every year. • The last customer perception survey was conducted by IMRB, a business research organisation on the key parameters concerning customer satisfaction such as quality of product, product consistency, quality of packaging, product warehousing and delivery, technical support, payable management, complaint handling, resolution and behavioural loyalty. The survey covered all our customers in domestic and international markets, and reported an overall consistent improvement and at par with the best in class in the industry for most the parameters
Community (Interested third parties)	• Engaging with communities at each and every stage of project execution through a institutionalized feedback process • Focused mechanisms to involve the Village Development Committees (VDCs), Gram Pradhan and Self Help Groups (SHGs) as well as direct project beneficiaries in the decision making process. • Through social satisfaction surveys conducted through third party independent assessors such as NGOs and social institutions. • Structured CSR Meet by corporate, Meeting with Society Leaders, Government agencies	• CSR activities (ensuring community mpowerment)	• An integral part of our community involvement programme and monitoring framework • Social satisfaction survey • We are an anchor partner to the Sonbhadra Skill Development and Livelihood Promotion Council formed by FICCI.
Media	• Invite media representatives to our annual general body meetings • Formal written issue based communication	• A broad range of sustainability topics	• Written responses on different issues provided to media, as deemed necessary

Red Mud Pond in Belgaum

Sustainable development Framework

After reviewing the key issues recognised by the company and mapping the same to its stakeholders, we identified our main sustainability themes. Given our sector, the sustainability issues encompass global (climate change) and local (air emissions, hazardous waste generation) environmental aspects, people, communities and health and safety. Additionally, there are ample opportunities with newer regulations and markets like carbon and energy related regimes on one hand and operating practices such as reporting on performance and identifying procedural needs on the other.

Bricks from fly ash

We are currently reviewing the strategic approach to our sustainable development activities. This will involve a three step process, starting with enhancing our governance and stewardship to international standards followed by deeper engagement with stakeholders to confirm issues of material importance to them and finally, working to enhance the value we can bring to each of the stakeholder groups.

The various stages in our business that include mining, processing of ores and extended lifetimes of mines between exploration and closure, offer large scope and ample opportunities to develop and implement initiatives towards economic prosperity, environmental stewardship, people sustainability and community development.

Our intention is to integrate sustainability into our strategic thinking, and then into our overall business model. This process creates prosperity for shareholders, investors, employees, communities and our business partners.

Sustainability also entails environmental stewardship aimed at prevention and minimizing or remediating negative environmental impacts of our operations. Over the years, we have been developing and improving programmes including issues around waste management, air quality, climate change, land and water, energy conservation among others. Many of these environmental stewardship measures come with direct or indirect financial benefits.

Social well-being through people sustainability and community empowerment is the third important pillar of our approach to sustainable development. This involves nurturing talent in a safe, healthy workplace with respect and fairness at all times. In our communities, we work towards long-term partnerships built on mutual trust and respect. Developing beneficial sustainable products for society is a key element of our strategy.

Reporting Sustainable development

In the following sections, we discuss our efforts in sustainability with respect to the current economic condition, the environment, our people and the community we operate in.

Economic Prosperity	• This section highlights our contribution to the sustainability of the larger economic system.
Environmental Stewardship	• This section highlights our approach and practices to continually strengthen energy efficiency and ensure optimal resource usage. Our effort to implement the reduce reuse and recycle principle in our waste management has been communicated.
People: Sustaining health safety and talent	• We want to proactively nurture our talent, provide a healthy and safe workplace, build their capacity to implement advanced technologies and lead our organisation into being a valued employer.
Community Empowerment	• In line with the Aditya Birla Group's philosophy, we strive to empower communities through different community development programme in the sector of education, health care, sustainable livelihood, women empowerment and infrastructure development.

Mr. Dilip Gaur Group Executive President- Copper

Our Copper smelting operation at Dahej ranks amongst one of the largest custom smelters at a single location. This places huge responsibility on us to have sustainable operations and continuously strive to improve the environmental impact of our activities. Towards this end, we have done some path breaking work in adding value to our solid waste as a soil conditioner for alkaline soil in the region & enhancing agricultural productivity through incorporation of micro nutrients in our 'branded' soil conditioning products. This has helped in better land and waste management for the society, while generating revenue for the business - a 'win win' combination. Our painstaking efforts to make our waste products useful to other industries as well have borne fruits as are now a leading supplier of phosphogypsum to cement industry in the region & are working on further improving the quality of this phosphogypsum to enhance its incorporation in cement.

Our copper smelting technology makes use of the inherent exothermicity in our feed stock to co-generate steam and power without using any fossil fuel, thus ensuring 'zero' GHG emission on this count! Copper business has also embarked upon a very ambitious plan to use recycled copper as a source of feed and has made considerable progress on this environment friendly initiative. The concern & care for environmental sustainability permeates everything we do! Even for a seemingly routine activity of receiving our imported concentrate feedstock, we have invested in a 'state of the art' totally covered handling & conveying system at our jetty to mitigate dust pollution & minimise threat to marine ecosystem - needless to emphasise significant reduction in GHG intensity as a result of this mechanised investment vis a vis conventional road transport from a feeder ports.

Copper Smelter

CCR Plant - Dahej

Mr. Raghavendra Dhulkhed Senior President- Operations

Aluminium production is an energy and resource intensive process and we have presence in all parts of the process value chain. Moreover, energy and other GHG associated emissions have an impact on climate change. We understand our responsibilities in the global and local sustainability context and have embarked on a structured process of technology adoption to reduce our GHG emissions (a changeover of Aluminium smelting technology at our Hirakud plant) which has also been registered as a CDM project under UNFCCC. We have also initiated a process of mapping the carbon footprint of our operating facilities and in the process identifying and implementing projects to reduce our carbon footprint.

Copper Anode Casting Line

Mr. S. Kulwal CEO & MD- Aditya Birla Minerals Ltd, Australia

Aditya Birla Minerals Ltd (ABML), Australia is operating two copper mines in Australia and is responsible for mining and beneficiation of copper concentrate. ABML is committed to responsible and sustainable development in copper exploration and production operations.

At ABML, we recognise that maintaining a clean environment is a prime management responsibility, and we are committed to continual improvement in environment management. We subscribe to the principles of sustainable development, and comply with all national and local regulations, standards, and procedures. Issues such as environment compliance, global climate change, safety of our personnel, maintaining the socio-economic traditions of the area around the project mine site etc always have highest priority while conducting business and have brought ABML closer to our commitment to sustainable business. We are committed to make this into an opportunity.

Hirakud Power Plant

Impacts, Risk and Opportunities

We operate in the extractive industry (Aluminium and Copper) where we are subjected to a number of internal and external aspects (economic, environmental and social). Evaluation and management of risks is therefore an intrinsic and continuous process in our organization.

Risk identified for the key location or funtions and reviewed on an annual basis.

13 Plants, 2 major mining locations consisting of several mining leases, 12 corporate fuctions and core Business functions have been identified

One risk management official supported by an IT personnel identified for each Location/ Function/ Business

Overall reporting structure for each Location/ Function/ Business with involvement from the unit Head and the head of Departments/ Functions

The external environment presents several risks and opportunities that could impact our sustainability. Our Board ensures that the material risks are identified and understood and oversees the system of risk management and internal controls. The Business Review Committee comprising the Chairman and Managing Director closely monitors the material risks which may have a critical impact on our business performance or on our stakeholders.

We follow a structured approach in identifying and quantifying each risk through a comprehensive risk management framework. We have procedures to inform the Board on risk assessment and management in accordance with the corporate governance policies.

The risks are categorized according to their impact and probability of occurrence and the risk response (mitigate, manage, transfer, insure) is appropriately tailored. We have seen turbulent times in the last few years and our robust risk framework has served us well through these times.

Given the events in the last few years in the context of turmoil in the global financial and commodities markets, our rapidly expanding global footprint and scaling up of capacities, the evolution of carbon regulations in response to climate change, increased resource scarcity and need of local communities, we have focused our attention to these risks and opportunities during the year. We recognize that the external risks and opportunities are continuously evolving and will continue to work on adapting to the emerging realities in the local, national and global environment.

Risk and/or Opportunities	Hindalco's Response
	Economic Risks
1. Commodity Price: Hindalco's performance is significantly impacted by fluctuations in the prices of bauxite, alumina, aluminium, copper and coal. Further, the demand for the Group's products is expected to remain indeterminate and would have an effect on our business.	We take a structured approach in identifying and quantifying each such risk and have a comprehensive risk management policy. Clearly defined policies and management controls govern all risk management activities. Risks associated with fluctuations in the price of the Company's products (Copper, Alumina, Aluminium and precious metals) are minimized by undertaking appropriate hedging transactions. The fair values of all such derivative financial instruments are recognized as assets or liabilities at the balance sheet date. Such derivative financial instruments are used as risk management tools only and not for speculative purposes.
2. Exchange Risk: We remain exposed to fluctuations in foreign currency exchange rates that could affect our overall business performance	Exchange rate movements, particularly the United States Dollar (USD) and Euro (EUR) against Indian Rupee (INR), have an impact on our operating results. In addition to the foreign exchange flow from exports, the commodity prices in the domestic market are derived based on the landed cost of imports in India where LME prices and USD/INR exchange rate are the main factors. We enter into various foreign exchange contracts to protect profitability and mitigate risks arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.
3. Interest Rate Risk: We are exposed to change of interest on our borrowing	We use interest rate swaps to help maintain a strategic balance between fixed and floating rate debts and also to mange overall financing costs.
4. Markets Risk: Aluminium and copper are both global businesses and their in emerging economies like India, China; [other key markets for Hindalco] would be directly linked to the GDP growth in these countries.	We compete for market share largely with imports (relatively high-end) and certain domestic medium-scale / small-scale producers (relatively low-end). Competitive pressures are intense in the downstream products. Hence, we focus on both cost competitiveness (to deal with local competition) and technological edge (to deal with imports). In specialized products, we work with high-end customers to meet their specific requirements in terms of quality and delivery. Following acquisition of Novelis, our access to high-end technology in the FRP space has improved significantly, which gives us a competitive edge. We want to maintain the dominant position in local market and earn a premium over commodity pricing. We continue to focus on high margin value-added products and high-end downstream business in mature and emerging markets.
5. Project Execution Risk: We are in the process of setting up 4 Greenfield projects in difficult terrain; the project execution is contingent upon several external factors including but not limited to land acquisition, project management skills, timely delivery of equipments, regulatory approvals, changes in government policies, inflationary factors, availability of financing, among others. Any delay or change in these activities could result in change in implementation schedule and affect our financial performance.	We are continuously monitoring the progress to ensure that the implementation schedules are adhered to. Since the Greenfield projects are capital intensive, delay in implementation leads to significant interest burden along with the associated opportunity loss. Delays in execution are related to various issues, primary among these are: • Delay in securing statutory clearances • Policy changes in the concerned ministry. For example- changes in Forest clearance rules • Unexpected delays in delivery of critical equipment • Social issues on account of location of the plants in difficult socio-economic regions. We at Hindalco have taken up proactive steps to mitigate most of the above risks, and have been on schedule for the corporate projects.

Risk and/or Opportunities	Hindalco's Response
	Economic Risks
6. Raw material availability: The risk of decreasing availability of good quality bauxite, copper ore and coal; increasing costs of raw materials and variability in quality and supply uncertainty have been steadily on rise for Hindalco over last few years.	We have developed a two pronged strategy: (a) embarking on very high volume Greenfield projects (~Rs. 50 k Cr) with own bauxite and coal, with the aim of minimizing the impact due to current deficiencies in coal & bauxite; and (b) Continuous incremental improvement in operational efficiencies of existing plant and improving sourcing. Copper Mines in Australia meet 25% concentrate requirement of our custom smelter; and we continuously scout for other opportunities for acquisition or development of copper mines in the established geographies to increase the share of captive supply of copper concentrate.
7. Talent Retention: Our ability to maintain our competitive position and implement our business strategy is dependent on the services of key engineering, managerial, financial, commercial, marketing and processing people. Loss or diminution in the services of key employees, particularly as a result of an inability to attract and retain staff, or not maintaining a competitive remuneration structure, could have an adverse effect on our business, financial condition, results of operations and prospects.	We are committed to being among the leading employers in the industry. We have a well laid out talent development plan to attract, nurture and enhance the talent pool. Our training, continuing education and career development programs are designed to ensure that our professionals continuously enhance their business skills. We expose our leading professionals to strategic projects, diverse business roles and critical thinking to nurture them to take up appropriate responsibilities. Enabling policies such as Global Mobility, IDP, Talent pool, etc have ensured the balancing of the work-life balance as well as fulfilling aspirations of the young talent.
8. Local Communities: Our operations and project expansion plans results in community impacts in terms of resettlement of project affected persons, livelihood changes, and rehabilitation. Unless we take up steps to improve the social, economic and institutional development in the communities we operate, this may be a risk to sustainable operations.	We aspire to actively contribute to the social and economic development of the communities in which we operate. In doing so, build a better, sustainable way of life for the weaker sections of society and raise the country's human development index. Against this vision for local community development, all projects are identified in a participatory manner involving in-situ consultation with the local community to identify the need. We call it the participatory rural appraisal mapping process where based on consensus with the village local bodies (panchayats), the projects are prioritized. Through this extensive process, we have identified and prioritized five areas – education, health care, sustainable livelihood, infrastructure development and espousing social causes. All our community projects are carried out under the aegis of The Aditya Birla Centre for Community Initiatives and Rural Development.
9. Climate change: Linkage with operational factors (high energy use, land use changes during mining and water use) and regulatory regimes (National Action Plan on Climate change in India and carbon tax in Australia).	We recognize that there are several challenges and opportunities arising out of the climate change agenda. Being an emissions intensive sector, we are at risk to climate change regulations, levies and taxes. We recognize that we have an important role in climate change mitigation by reducing the emissions intensity in all our operations. We have calculated our carbon footprint and have set up internal targets for reduction (5%). We have developed emission offset projects for reducing PFC emissions and improving energy efficiency. The impact of climate change is likely to manifest through increased variability in water – lack of availability of water on one side and extreme weather events/floods on the other. We recognize that adaptation to climate change is an equally important task and we are focused on water conservation.

Risk and/or Opportunities	Hindalco's Response
	Economic Risks
10. Energy Our sustainability in operations is dependent on the quality, cost and availability of energy sources. We are also subjected to the various taxation and regulatory schemes which impact the fossil fuel based energy usage and hence in turn impact our sustainability. Additionally, a significant portion of energy is consumed in transportation of raw materials and finished goods.	Energy forms the major part of our operating expenses in upstream operations. We track energy performance at each operating unit and are committed to continual improvement in energy efficiency. We also understand the importance of having a sound energy management system in place and to this effect our subsidiary Novelis has embarked on the process of implementing energy management system based on ISO 50001 standard. In economies that are amenable to aluminium recycling, we take steps to enhance the use of recycled (secondary) aluminium instead of primary metal extraction which leads to lesser energy consumption in smelting. We are taking innovative steps in reducing our transportation energy consumption by having modes such as direct lift from mines by ropeway and deep sea transport of raw materials and finished products by dedicated closed tube conveyor. We aim to have continuous improvement in efficiency parameters through benchmarking and incremental innovations, effected through the annual plans with stretched targets.
11. Water availability:	In India, though majority of the aluminium manufacturing units do not depend too much on groundwater in the "water critical" regions presently, going forward it might put increased pressure on water availability and sourcing. We have proactively initiated measures for enhancing our water usage efficiency and to explore a right mix of water sourcing. Our subsidiaries are having groundwater infrastructure, monitoring network and organizational structure in line with the required regulatory guidelines.
12. Sustainable products: As stakeholders take a more holistic approach to sustainability, aluminium and copper products will have growth opportunities due to their excellent life cycle benefits.	With many stakeholders having an increased focus on carbon footprint, aluminium offers opportunities to reduce overall life cycle green house gas emissions. This is particularly the case in transportation applications. For example global aluminium rolled product automotive usage is growing by more than 10% per annum. In the fast growth market of India, there will also be strong market opportunities or our sustainable products including in construction, mass transportation and packaging.

ECONOMIC PROSPERITY

We are well poised to emerge as a global metal business leader consolidating our upstream and downstream presence in aluminium and copper sectors.

Economic Performance

Hindalco and its subsidiaries' consolidated revenues is INR 72,078 crore (US$15.85 billion). During the year, our sales have seen the highest ever year-on-year growth of 19%, on account of strong production volumes, improved product mix and higher commodity prices.

Our strategy is to enhance end-to-end control over various supply chain processes. We would continue to expand the value-added range of our products and take on opportunities to secure raw material supplies.

Parameter	Hindalco-India-Copper & Aluminium (USD Million)	Novelis (USD Million)	ABML (A$)
	2010-11	2010-11	2010-11
Direct Economic Value Generated			
a) Revenues	5238	10577	456
b) Revenue from financial instruments (includes cash received as interest on financial loans, as dividends from shareholdings, as royalties, and as direct income generated from assets	62		1.5
c) Revenues from sale of assets include physical assets and intangibles	-2		1.2
Economic Value distributed			
a) Operating costs- Payments to suppliers, non-strategic investments, royalties, and facilitation payments	4438	9227	269
b) Employee wages and benefits Total monetary outflows for employees (current payments, not future commitments)	228	884	52.7
c) Payments to providers of capital - All financial payments made to the providers of the organization's capital	0	1.7	
-Dividends to all shareholders	63		0
-Interest payment made to providers of loans	48		1.63
'-Any other	0		0
d) Payments to government			
-Tax (corporate, income, property, etc.)	135	115	1.78
-Related penalties paid at the international, national, and local levels.	0		0
e) Community investments- Voluntary contributions and investment of funds in the broader community (includes donations)	7	2	0.016
Economic Value retained	379	Adjusted EIBTDA : 1072 million. Net income attributable to common shareholder : 116 million	133.2

Mr. Sunirmal Talukdar Group Executive President & CFO

The phenomenal economic value which Hindalco delivered in FY11 was driven by coordinated growth strategy through organic expansions and inorganic acquisitions. We have laid a strong strategic foundation for sustaining this growth through various businesses and financing initiatives. In particular, we have transformed ourselves from being a company highly susceptible to commodity price variations to a portfolio of businesses de-risked to a large extent by business model combinations and geographical footprints. We have also developed and introduced several commodity and forex. risk management policies and measures to mitigate volatility and improve stability and predictability of earnings and cash flow.

Our financing and capital restructuring initiatives executed in the last quarter of FY11 have ensured strategic flexibility for both Hindalco and Novelis to finance respective growth aspirations. We have also made significant progress on corporate governance, public reporting, investor relations and regulatory compliance as befits the company with global aspirations. Our highest ever underlying EBITDA of $ 1.9 billion in FY 11 reflects the inherent strength of our company's low cost business model, operational excellence, superior product mix and a balanced and de-risked portfolio of Aluminium and Copper businesses.

Going forward, we are confident that we will sustain the growth momentum through prudential business and financing plans backed by appropriate addressal of risks identified under our enterprise wide risk management exercise.

Financial Incentives from Government

We participate in the export promotion schemes of government of India to promote international trade. While some of our aluminium and copper product exports from India are covered under duty entitlement pass book (DEPB) scheme, export of some of our products from India to specific countries in Asia such as China, Vietnam, Japan, Hong Kong, and Australia are covered under "Market Linked Focused Product Scheme" from January 1, 2010. This has been utilised for copper cathodes exported to these countries. These incentives provide a set-off mechanism against import duties levied on inputs and capital goods. Our phosphatic fertilisers (DAP) also have the advantage of domestic subsidies as provided for the agricultural sector. The amount of export incentives and subsidies for Hindalco India was 31 crores INR in 2010-11.

Novelis has received financial incentives from government in the form of favourable tax holidays in various jurisdictions globally. For the year ending March 2011, this resulted in approximately US $ 11 million reduction to income tax provision. The tax holidays will phase out over periods between time frames of December, 31 2012 and March 31, 2020.

Product and Material Stewardship

Aluminium and copper, by virtue of certain attributes like recyclability, lightweight, strength, and other product features, play an important role in sustainable development and low carbon growth. Aluminium being a lighter metal is instrumental in further energy efficiency and reducing the total life cycle impacts of products. This has also an implication in furthering the sustainable consumption pattern in the society. Our onus is to look for opportunities for product and material stewardship throughout our value chain starting from mining to product end use. We do so by following a mix of approaches including partnering with end-use industry and design experts. Customers of Hindalco - India and Novelis in sectors such as transportation, electronics architecture are realizing the life cycle advantages of using aluminium in various applications. Aluminium plays a key role for the sustainability of new buildings and the renovation of existing ones. Thanks to its properties, aluminium largely contributes to the energy performance, safety and comfort of new buildings. Aluminium's versatility also allows for an easy upgrade of existing buildings. Accordingly Hindalco – India and Novelis is prioritizing the development of products in collaboration or as demanded by these sectors and playing a key role in adoption of this sustainable material.

Novelis Aluminium is being used for construction of several buildings in Masdar city which aims to be a carbon neutral and zero waste city. Along with its recyclable benefits, aluminium further contributes to the city's sustainability objectives by providing heat resistance as well as a cover to ultra violet light and sand thereby minimizing the energy (and expense) required for cleaning, repair and maintenance.

Use of aluminium in transportation

Aluminium plays an important role in decreasing the weight various transportation modes. This results in lesser fuel usage and emissions during the product life cycle. Hindalco is working with major automobile companies in developing components in aluminium such as those used in two wheelers. Similarly, for commercial vehicles, Hindalco's development team has done significant work in the area of developing bus and truck structural components in close collaboration with customers and major design organisations or institutes. Aluminium sheets and extrusions have gained wide acceptance in this sector. Reduction of 40% in vehicle weight has been achieved leading to fuel savings. Novelis and Hindalco – India expertise is enabling automotive manufacturers to reduce emissions and fuel use. Every tonne of aluminium in a car that replaces heavier materials such as iron or steel helps saves an average of 19 tonnes of carbon emissions over the life cycle of the car. This is a potential 3,000 litres less fuel over the life cycle of the car.

Another interesting project underway is Hindalco's partnership with rail transport research bodies. The project is looking at the viability of using aluminium for making railway wagons.

Impacts of low carbon regime(s)

Energy and climate change has taken the centre stage of domestic and international policy arena. In India, a national action plan on climate change has been developed. It constitutes eight missions targeted at various aspects of mitigation and adaptation. There are specific missions for supporting renewable energy and energy efficiency. In India, we are presently subjected to clean coal cess for our coal purchases. We are also assessing the financial implications on the proposed rulings and guidelines.

Perform, achieve and trade (PAT) scheme implemented by Bureau of Energy Efficiency (BEE) under National Mission of Enhanced Energy Efficiency (NMEEE) is a mechanism to promote energy efficiency and energy benchmarking of some of our energy intensive units. We consider this as an opportunity and a risk area. As an internal management approach, we take steps in improving our specific energy consumption by technology upgrade and de-bottlenecking initiatives.

Renewable Purchase Obligation (RPO) is being implemented throughout India for compulsory use of minimum quantity of renewable energy. Regulation on Renewable Energy Certificate (REC) seeks to address the mismatch between availability of RE sources and the requirement of the obligated entities to meet their renewable purchase. We have a large captive electricity generation (1100 MW) capacity which is fossil fuel (coal) based and would seek to capitalise on the opportunities presented by the regulatory framework in furthering our low carbon growth path.

Novelis in USA and ABML in Australia may also be subjected to proposed carbon taxation in respective countries of operations and we are prepared to be in compliance with the proposed legislations and support the low carbon growth.

Use of aluminium products helps limit greenhouse gases emissions: aluminium products save energy because they are strong yet light. For transport, the reduced weight offered by aluminium improves fuel economy. Moreover, aluminium increases payloads within maximum truck weights and reduces the number of trips necessary. For an average family car, each 100 kg weight saving from the use of aluminium amounts to a fuel saving in the range of 0.4-0.6 litre per 100 km. Aluminium in line with Kyoto objective: aluminium products can be reconverted into primary aluminium saving up to 95% of the energy used in their primary production. This process is self-supporting and aluminium recycling rates are outstanding.

Carbon tax implications Aditya Birla Minerals (ABML)

In July 2011, Australian government has announced a proposed carbon tax component on selected businesses of $23 per tonne of CO2 equivalent. The tax will apply from 1st July of 2012. The proposed tax will be incurred by individual facilities that have direct annual GHG emissions of 25,000 CO2 e a year or more (excluding emission from transport fuels and some synthetic green house gases).

In addition, use of Aluminium as an alternative to Steel in Railway Wagon has multiple potential such as., reduction in tare weight, increase in quantum of materials carried, improved fuel efficiency & reduced GHG and potential for a large CDM Project.

Sustainability in Sourcing

We are in a raw material and resource intensive business and our sustainability of operations as well as growth plans are substantially dependent on availability, quality and cost of inputs. We face commodity price risks for our products and input risks for our raw materials. Keeping this in mind, we approach sourcing sustainability in a strategic manner and mitigate the risk by financial and technical means. For our key raw materials i.e. bauxite, coal and copper concentrate, we make best use of opportunities to ensure sourcing sustainability. We achieve this by aligning with captive sources and reputed global miners.

We choose our suppliers carefully. In the procurement of raw materials, the security of the supply is a key criterion. When purchasing materials and services, we procure from the trusted players in the market.

In this process we ensure the sustainability aspects such as financial stability, delivery commitments, environment health and safety, labor management relations, and human rights are addressed in accordance with internationally followed standards.

Going forward we plan to proactively address this sustainability issues in our extended supply chain.

TECHNOLOGY AND INNOVATION

Starting from 1958, based on the then prevailing state-of-the-art technology, we have been regularly adding capacity to existing operations, acquired capacities and set up green-field capacities in aluminium, copper and power plants. This has resulted in a range of technologies being employed in our operations at different maturity levels.

Strategy for technology:

We recognize that regularly upgrading processes and technologies and integrating them to the existing set-up is a key sustainability risk and a significant opportunity for reducing costs, conserving energy, reducing environmental pollution, developing new products and promoting new applications.

Continuous tracking of the technology, equipment supploers. → **Training at all levels on Operations and Maintenance of new technology** → **Sharing of Information to other Plants : reports, reviews**

We are always looking to extract the best performance by combination of technologies, equipment and practices. Data base systems like CTDB, KS 2100, minitabs, etc. are being used for technological improvements in the plant processes.

Hindalco Innovation Centre (HIC):

HIC focuses on sustainable consumption of raw material and sustainable product development and alignment of research and development (R&D) initiatives with business requirements. One of the focus areas of Hindalco is to concentrate on the resource conservation and environmental protection. Minimizing and eliminating environmental effects of Hindalco's products and processes at any point in time in their life cycle, as well as making its own production processes environment friendly and less resource-intensive is embedded in HIC's technical efforts. HIC is supported by Taloja R&D Centre (TRDC) and Belgaum R&D Centre (BRDC), two centralized R&D set-ups focusing on downstream business (Tribology, Metallurgy, Foil Conversion, Modeling, Environment and Energy) and upstream Alumina business (fields of Bauxite, Bayer process and Specialty Hydrates and Alumina).

Novelis has a state of-the-art R&D Set Up at Kingston, Canada. To encourage sustainability innovation, we are building a Global R&D Facility at Atlanta, USA. We believe R&D and Corporate Strategy go hand in hand, and bringing them physically together will make this possible.

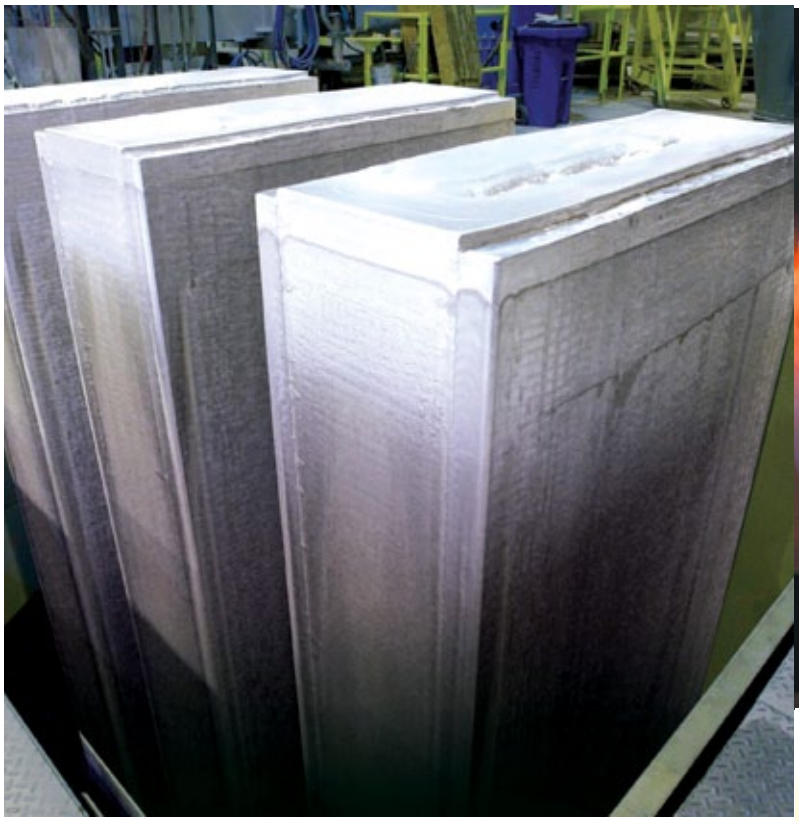
Novelis has some of the leading technologies. We are working on leveraging these technologies at the Indian operations and collaborating internally (between Novelis and HIC) on development of new technologies.

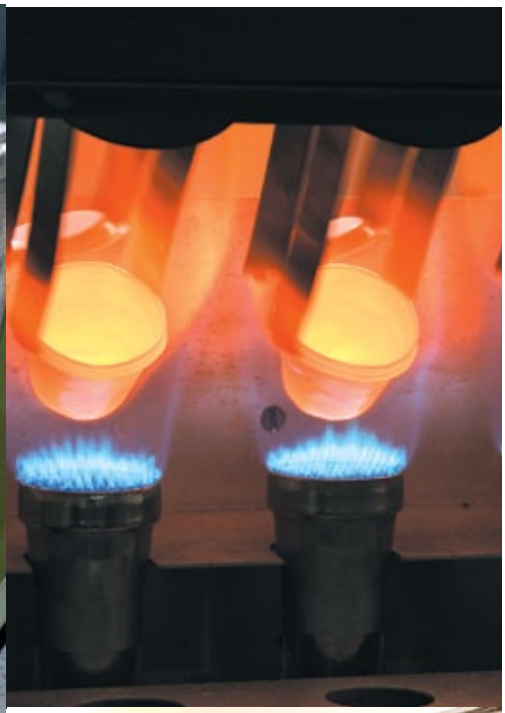
In line with our company strategy, the support provided by technology portfolio and its specifics are presented in the adjoining Table.

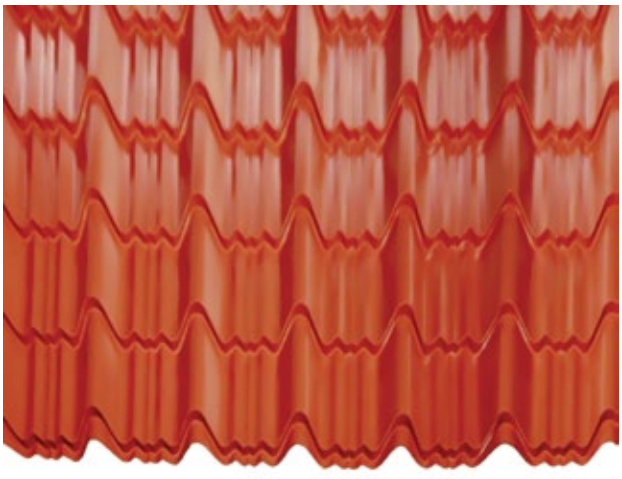
Partnering for Innovation:

We believe in appropriate linkages with academic experts from reputed university departments for furthering its frontiers of relevant knowledge.

Universities	Projects
Sardar Patel University, Anand, Gujarat and Indian Institute of Science, Bangalore	Evaluation of red mud pond embankments at Hindalco Muri and Belgaum Plants
IIT- Roorkee	Development of embankment design for red mud pond at Hindalco Renukoot Plant
Indian Institute of Science, Bangalore	Development of embankment design for red mud pond at Hindalco Muri Plant
Aditya Birla Science and Technology Centre- ABSTC, Navi Mumbai with IIT Mumbai	Development of welding technology for aluminium sheets and evaluation of coated aluminium sheets based on new in-house developed technology.
BITS Pilani	Renukoot unit of Hindalco has established a campus connect in supporting talent upgrade programme







Strategy	Sustainability Connect	Specifics of Technology
To be one of the lowest cost producer of Aluminium where commodity prices are governed by cyclic LME To get maximum benefits during the up cycle and be the last man standing in the down cycle	Resource conservation; environmental protection; reducing GHG emissions; waste minimisation; land usage reduction; energy conservation and reduction of specific energy consumption; efficient asset utilization; conservation of ecosystem; and recycling	**Aluminium:** • use of high silica bauxite; • high temp digestion (RTA as collaborator); • de-bottlenecking of existing pot lines to higher kA (collaboration with technology provider); • advanced Process Control in collaboration with ABSTC (internal partner), and Gami (for brown field expansion). • partnered Kan-nac to help in challenging the design of the pots, to extend the limits of pot current beyond that recommended by technology suppliers. • 360KA Pre-baked, point feed technology from Pechiney for new green-field smelters. • technology upgrades to increase current efficiencies (in house). • greening of red mud fields and making them suitable for vegetation
		Copper: • along with 3 technology suppliers for 3 smelters , also worked with F L Smidth to develop solution for the copper concentrate dusting issue and a significant reduction in capital cost per tonne of copper • use of Phospo-Gypsum (a waste) for Agriculture & Cement
To be a market leader and low cost downstream player as a hedge against the cyclic nature of the upstream Al commodities business	Sustainable product development; light weighting for energy efficiency and minimising environmental impact	**Power:** • technology for efficient, low cost, environmentally superior thermal power (CFBC technology); • surface mining technology for coal • setting up of Hirakud rolled plant with equipment and process technologies suitable for can body stock - technology sourced from Novelis the largest can body stock producer in the world. • actively considering setting up of Novelis fusion technology – a patented technology and the only one of its kind for clad alloy production. • development of technologies for improving the quality, reliability and range of lithographic sheets at Taloja, partnering with Novelis • setting up of equipment, facilities and processes with suitable technologies for producing high quality packaging foil at very competitive costs

Aluminium foil in packaging of pharmaceuticals

Aluminium foil has sustained itself as the most suitable packaging material for pharmaceutical products. The sustainable packaging attributes of aluminium foil include:

- Preserves better than other materials. The absolute barrier effect ensures long shelf-life at room temperature and less use of energy for transportation and storage. This reduces pharmaceutical products' wastage and associated carbon footprint. Aluminium packaging also enables individual dosage to be exactly the prescribed amount improving healthcare and resource utilisation.
- Dead fold ensure less use of secondary packaging or glue.
- Good electrical conductivity leads to lesser energy consumption in sealing the packs.
- Ease of recycling means less use of virgin resources.

Hindalco is a leading player and produces various types of aluminium foil packaging (ranging from a mix of plastic and aluminium to only aluminium packs) to suit the various requirements of pharma products. It also collaborates with its pharma customers to implement new and advanced foil packaging designs which suit the requirements of increased shelf life and catering to a wide variety of pharmacological medicines.

New product development

We have been associated with the continuous adoption of aluminium and copper based products in newer and innovative applications. We help our customers in new product design on the strength of our stringent in-house quality norms supplemented by a well equipped technical and sales team to get the necessary customer requirements and also partner with reputed scientific and research institutes in India and globally. During the reporting period in India, we developed 10 such new product offerings in partnership with our customers and expert bodies and institutes.

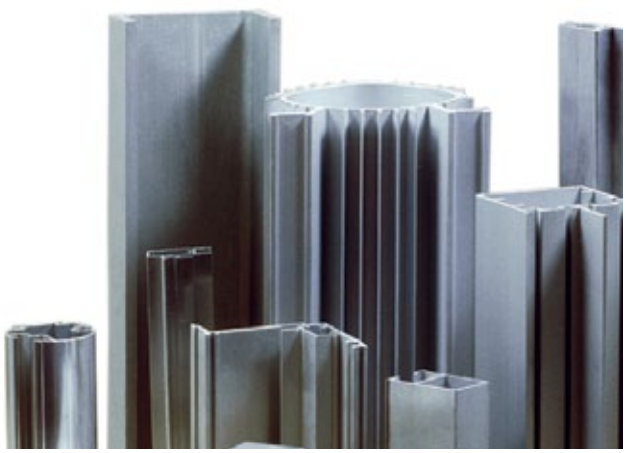
Marketing and communication in case of branded products

We have a central market development cell (CMDC) having specific focus areas for brand and product development. 'Everlast' aluminium roofing sheets, 'Maxloader' truck body structural, 'Freshwrap' foils, 'Eternia' aluminium windows are some of our branded products in the flat products category. Market development at copper business has also helped in interpreting customer requirements and make process modifications for new product offerings. E.g., phosphoric acid process modification to make phosphogypsum suitable for use in cement plants.

Also, all our advertising and visual communication confirms to the Advertising Standards Council of India (ASCI) guidelines.

Aluminium Composite Panel for building

Capacity Building Center



ENVIRONMENTAL STEWARDSHIP

Across the value chain starting from mining, refining, smelting to semi- fabricated products, we heavily rely on natural resources such as bauxite, copper concentrate and water. We recognize the impact that our operations result on the environment and we are committed to continually improving energy efficiency and environmental performances.

Since 2006, we have an environmental and energy policy in place. This guides us in institutionalising our commitment to continually strenghtening our energy efficiency and environmental performances. Our policy framework seeks to engage with stakeholders on institutionalisation of energy and environmental management system, compliance with regulatory requirements, material and energy efficiency in operations, promote usage of renewable energy sources, maintain environmental balance during mining activities and minimise waste.

Approach

We have a joint president responsible for the environment, health and safety at the corporate level who reports to the top management on issues of concern. He coordinates the sustainability efforts of the operating units and provides technical inputs on environmental aspects for new projects and expansions. We have established Environment Management Cell at Corporate to coordinate and provide technical support to plants on environmental activities. Each operating unit has an environment / safety officer who is responsible for the overall plant environment, health and safety related issues and reports directly to the unit head.

Sophisticated control laboratories have been set up to constantly monitor the quality of air emissions and water effluents. We run a well-structured and rewards oriented scheme to encourage employees to participate and provide suggestions on improvement in quality, environment, operations, safety and energy conservation.

At Aditya Birla Minerals Limited (ABML), the board of directors has formed an environmental committee to exercise oversight on environmental compliance at site. The committee also provides the strategic direction to ABML's board on environmental related programmes and associated.

The Novelis sustainability commitment has been pursued by the chief sustainability officer with guidance from the board of directors.

We have implemented several initiatives throughout our process life cycle to improve our environmental performance by reducing Greenhouse Gas (GHG) emissions, improving energy efficiency and increasing the extent of water recycled within our operations. Continuous efforts to conserve resources, minimise and recycle wastes and reuse waste through both conventional and non-conventional waste management practices are an integral part of our business operations.

Sustainable procurement of raw materials has been among our priorities. We relentlessly pursue the development of cleaner production processes that inherently reduce pollution levels and require fewer resources.

Investing for Environmental Protection

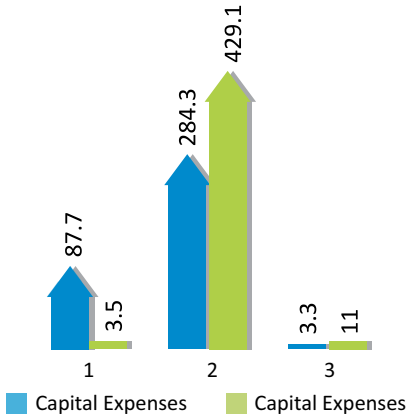
In 2010-11, Hindalco India - Aluminium and Copper business and ABML incurred Rs. 804.6 million on the environmental protection.

No significant fines have been paid by Hindalco India - Aluminium and Copper Business and ABML for non-compliance with environmental laws and regulations.

Novelis has paid as civil penalties:

- $ 285000 for the Logan Aluminium operation for violating the title V Air Permit Violations for administrative deficiencies
- $ 4000 for the Oswego Plant for Title V Air Permit violation related to recycle after burner
- $13125 for the Terre Haute facility for Title V Air Permit violation resulting from discontinuance of NORPAR 13 Lubricant.

Expenditure of Enviromental Protection (Rs. MIO)



1 Hindalco-India Copper
2 Hindalco-India Aluminium 3 ABML

Climate Change: Towards reduction of the Carbon footprint

We acknowledge the Government of India's stance on common but differentiated responsibilities to address the climate change issue. We consume energy at every stage starting from mining operation till value added end product manufacturing.

We have mapped the carbon footprint of our operations in India. We have completed an intensive exercise to measure its carbon footprint, despite its diverse operations — from mining to chemical processes to smelters and a number of downstream aluminium plants- further complicated by copper and chemicals businesses.

To facilitate the process of continuous monitoring, comparison across operating units and improvement, a company wide database on carbon footprint has been developed. Our operating units have identified measures to reduce the carbon footprint. We have employed best in-class technology for all the three new aluminium smelters projects. The smelters will also have advanced process control technology to minimise anode effect, ensure fluoride capture and reduce emissions.

During the year, the total GHG emissions (Scope 1 & Scope 2) were 17260613 Tons CO2e, with Hindalco's aluminium business contributing to 13733882 Tons CO_2e, the copper business contributing to 1081930 Tons CO_2e. Novelis GHG emissions were at 2333673 Tons CO_2e while ABML emitted 111128 Tons CO_2e . The total emissions in the previous year were at 16939786 Tons CO_2e.

About 98% of GHG emissions of Hindalco's aluminium and copper business are from the Scope 1 emissions i.e. the direct GHG emissions, while the Scope 1 emissions as a percentage of total GHG emissions are 56% and 76% in case of Novelis and ABML.

Novelis's reduced its total GHG emissions in 2010-11 by 8,778,500 tCO_2e, of which 99.7% savings were a result of their recycling initiative and 0.3% resulted from energy savings. Novelis has also estimated its supply chain GHG emissions which were 17.91 million tonne CO_2e in 2010-11, up from 15.87 million tCO_2e in 2009-10.

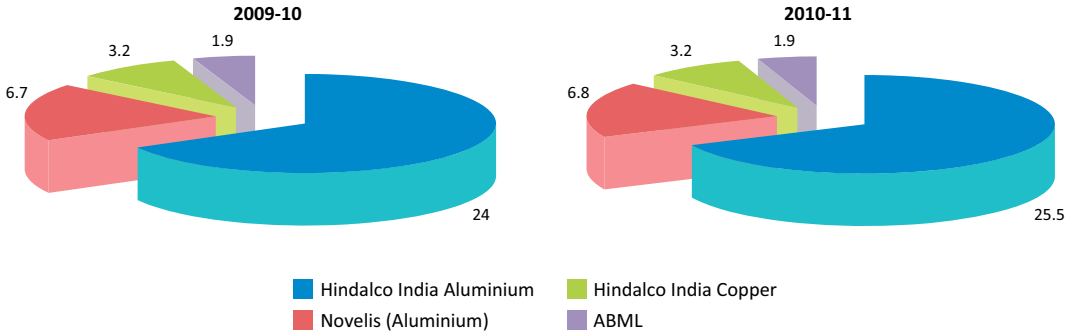
The specific GHG emissions :

We have introduced several innovative measures that not only reduce carbon emissions but also add to the company's bottom line by generating revenue from certified emission reductions generated under the Clean Development Mechanism (CDM).

We are also evaluating the feasibility of implementing some other GHG reduction projects such as project involving conversion of kilns from furnace oil to gas heating, use of biomass briquette as fuel, change in transportation mode from road to rail, replacement of anode baking furnace and economiser modification of spare boiler.

In our Indian copper business, we have started managing the import of raw material and export of finished products through our own jetty operated by Dahej Harbour and Infrastructure Ltd., a subsidiary of Hindalco Industries Ltd. It reduces our dependency on road transport and improves our overall carbon footprint.

Specific GHG emissions (tonne CO_2e/ tonne)

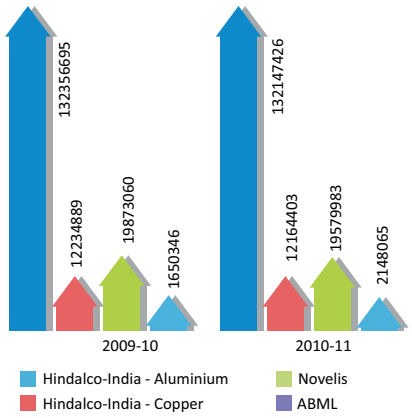


Improving Energy Performance

Producing and processing aluminium and copper are very energy intensive operations, Our alumina plants employ the Bayer process, while aluminium smelters use Hall-Heroult Electrolysis process. It is a modern, energy efficient prebaked technology compared to the old Soderberg technology. This contributes in our effort of having the most energy efficient smelter process in place.

We are the only aluminium manufacturing company in the world with captive mine-based power generation. To a large extent, this reduces our dependency on the grid for power supply. Also, to arrest fluctuating cost and avoid issues regarding availability of coal, we are developing all our greenfield projects based on our own coal. Conserving energy and using it efficiently helps mitigate the gap between demand and supply as well as plays a vital role in reducing the cost of production.

Total Energy Consumption (Gj)




Hirakud Smelter Plant

Embedding Energy Efficiency

We adopted the energy policy in 2006 to reinstate our commitment in conserving energy. We have a well-defined energy management system with a bottom-up and top-down approach. We involve all our employees in energy conservation initiatives, from workmen to top executives in walkthroughs and detailed energy audits, quality circle, WCM committees and suggestion scheme.

We also conduct and participate in various training and knowledge sharing programmes to increase awareness among employees as well as the society on energy efficiency. We have established a dedicated energy cell both at corporate as well as at each operating units. We have energy managers and auditors certified by the Bureau of Energy Efficiency. The energy cell is responsible for planning energy conservation initiatives, tracking latest technological developments in the field of energy conservation, reviewing and recommending energy conservation initiatives in the operating units as well as in new projects.

Since the inception of the EEO programme five years ago in ABML, various energy-saving opportunities have been identified. Six opportunities identified have been implemented yielding a saving of 145,091 GJ during the year.

Selected initiatives in energy conservation

Aluminium operations

Alumina plant: Revamping of intermediate bauxite slurry heater, water reduction through introducing air purging in field sensors trappings thereby reducing steam consumption, installation of patented data matrix technology for better monitoring, etc. are some of the initiatives.

Smelter: Technology change at Hirakud Smelter from Soderberg cell to pre-bake cell.

Fabrication plant: Logic to be developed to stop the motors when the line is stopped in roll forming line.

Foil division: Providing interlock at fin coater for stopping at idle time.

Copper operations

Installation of high pressure liquid oxygen storage and distribution system for smelters to produce and store liquid oxygen and utilise it during high venting potential period. The system results in around 2.23% average reduction in oxygen venting.

Power plant and co-generation

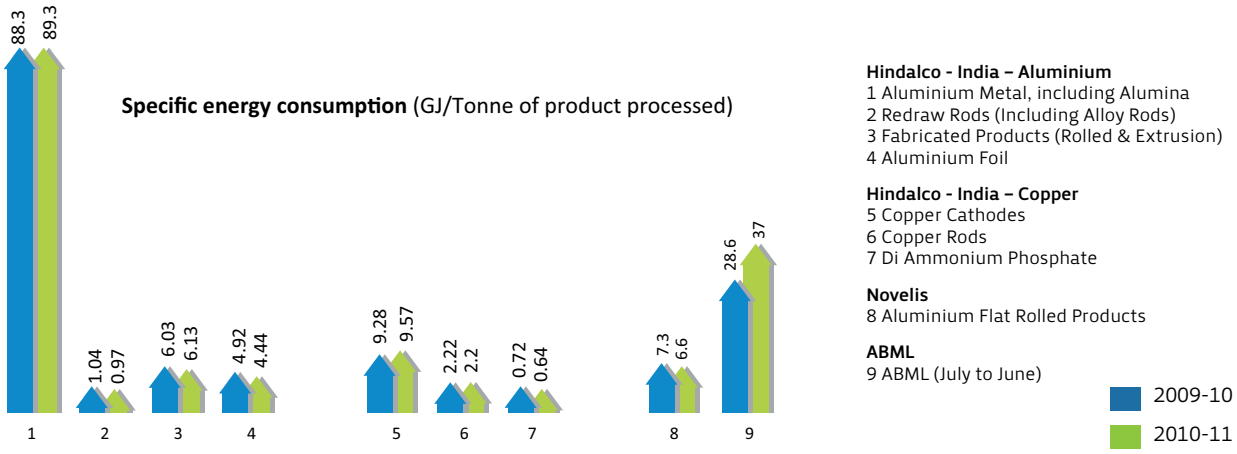
Fabrication and installation of coal dryer for removal of moisture. It enhances boiler efficiency and reduces coal consumption. Also, installation of back pressure steam turbine utilises waste heat.

In 2010-11, Novelis appointed a new global energy efficiency manager to coordinate activities and facilitate the development and sharing of best practices. Novelis is currently in the process of adopting the new ISO 50001 standard, which specifies requirements for an energy management system and enables an organisation to adopt a systematic approach in continuously improving energy efficiency and performance. The Novelis Fabrication division has avoided GHG emission of 27,936 tCO_2e due to its energy efficient initiatives.

Direct Energy:

We use several sources of energy in producing and delivering aluminium and copper products. These include fuel oil (LSHS / Furnace Oil) consumption for alumina production, flat rolled products (FRP) and extrusion, coal consumption for power generation at captive power plant.

Our total direct energy consumption in the year 2010-11 was 166.04 x 106GJ (including ABML), of which, Hindalco aluminium contributed 79.6 % because of its integrated operation.



Indirect Energy:

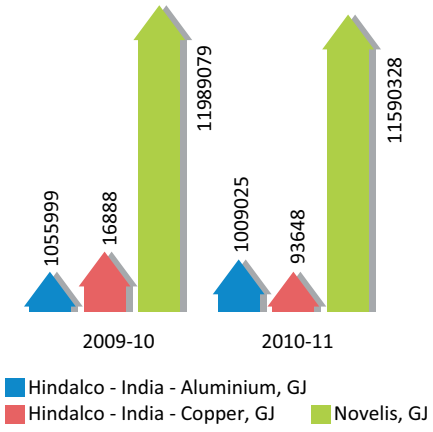
Electricity purchased from grid and steam sourced from outside (utilised in alumina production process) are our sources of indirect energy.

While Hindalco aluminium and Novelis show a decline in indirect energy, the unplanned increase in the indirect energy consumption by the copper business in India is attributed to the major disruption caused at the Dahej plant due to cooling tower problem.

42.8% of Novelis's indirect energy has been sourced from renewable sources, primarily from hydro power.

The trend in indirect energy consumption (105 GJ) in the Hindalco India operations is given below:

Total indirect energy consumption (GJ)



Mr. D. Kohly Chief Operating Officer- Renukoot & Renusagar Units

We are into production of aluminium right from the start of India's advent in this sector. With time we have implemented various initiatives so that our plants are globally competitive from the perspectives of energy and environment. We continue to have strong and integrated management systems based internationally accepted standards at our plant locations to manage environment, occupational health, safety and quality aspects in our operations.

We are exploring various avenues for investing in alternate source of energy. We have studied the schemes and missions introduced by the government of India to promote the use of renewable energy and have started aligning our businesses to leverage the opportunities.

Investing into Renewable Energy:

The Jawaharlal Nehru National Solar Mission is in place and India is on track to achievve mission goals of having 20,000 MW of solar power by 2022. State governments have also framed policies to support the mission. Aditya Birla group has invested in the opporrtunity by establishing a solar business group responsible for implementing full cycle solar projects under the national and state level policy frameworks. This would comprise technology selection, financial closure, project management and arrangement for sale of units. The solar business group would provide a platform for the entire group, including Hindalco Industries, to have a share of renewable energy in their energy mix and help traverse a low carbon growth path.

The business is in the process of commissioning a 15 MW Plant in Gujarat, with future target of setting up 200 MW of solar project in by 2013

Water usage

Efficient use of water and maintaining its quality are crucial for our business. The challenges we face in water management vary across the value chain and geographical locations.

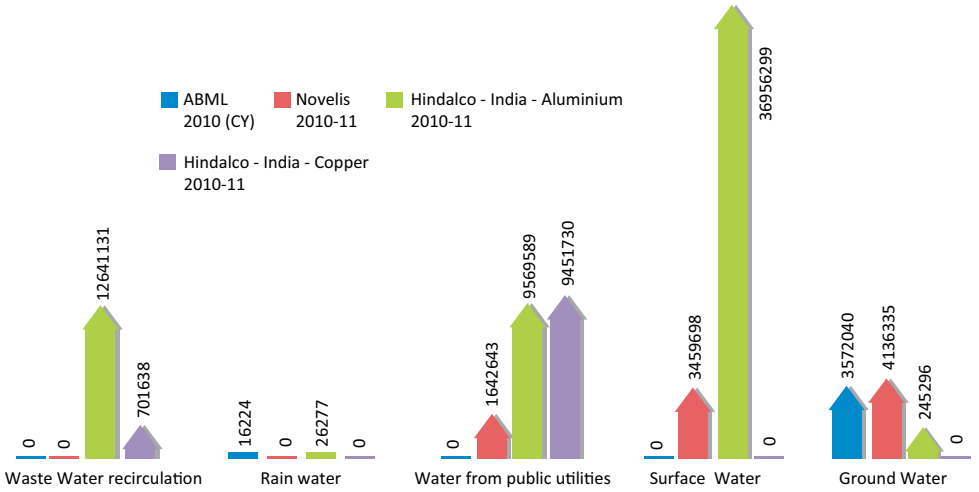
Water uptake and recirculation

Water issues are significant at the upstream of our copper business and downstream of our aluminium business. At our Hirakud operation, the source of water is the Hirakud water dam. Borewells in Silvassa are the main source of water and have helped resolve the problem of water scarcity. Our Belur plant primarily depends on groundwater to meet its requirement. Some of our units are located in regions designated as 'critical' by the Central Ground Water Board of India with regards to groundwater availability. We expect that in future some of the units may be faced with reduced availability of water.

Novelis sources from a combination of surface, groundwater as well as from the public water supply network.

Source of water for ABML is ground water and water through harvesting measures.

Water withdrawal by source (10^5 m3) for 2010-11.



Total Water withdrawal by source, m3 per Annum

1 GROUND WATER 2 SURFACE WATER (INCLUDING SEA WATER, IF USED) 3 WATER FROM PUBLIC NET SUCH AS 4 INDUSTRIAL CORPORATION, MUNICIPAL, DAM ETC. 4 RAINWATER (THROUGH RAINWATER HARVESTING) 5 WASTE WATER RECIRCULATION GENERATED WITHIN THE PLANT

In ABML, the water uptake by the Nifty Copper Operation (NCO) is regulated by the industry licence. Groundwater as well as annual aquifer review has been conducted on a regular basis in line with the license requirements.

Conservation of water:

Over the years, we have undertaken initiatives to enhance the conservation and reuse of water. State-of-the-art automated industrial and domestic effluent treatment plants operate across all the manufacturing units. The treated effluent and domestic water is recycled and used for different processes, horticulture and irrigation.
At our Muri unit, consequent to effluent recycling, the fresh water requirement for the alumina refinery has been reduced by over 60%. We have implemented the pressure sand filter (PSF) backwash water re-use scheme which has resulted in reducing fresh water requirement by about 10 to 15 m3/hr.

The Mouda rolling plant has installed an effluent treatment plant (ETP) for treating and recycling of process effluents. The unit is now a zero discharge plant and has proportionately reduced fresh water consumption.

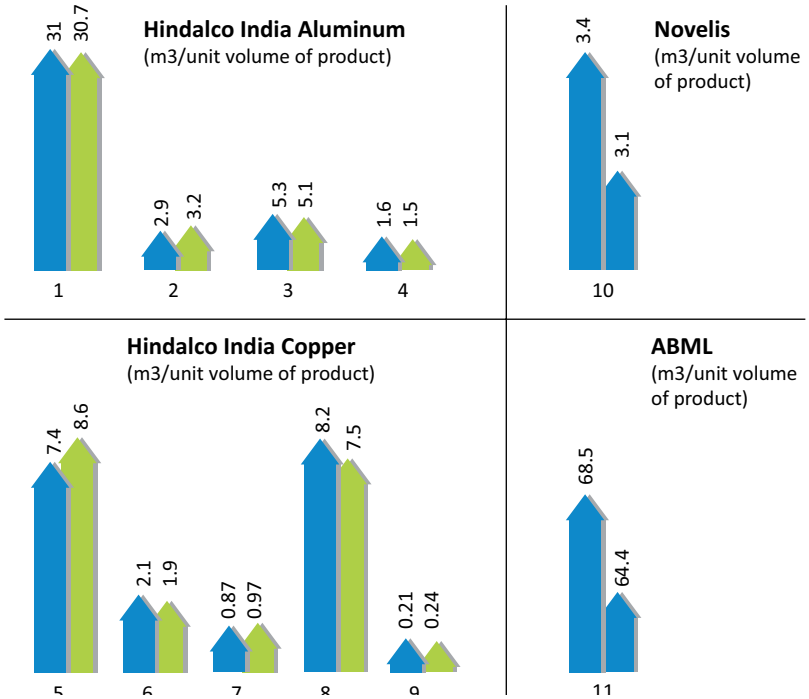
The Belgaum unit has undertaken construction of a new effluent holding pond, a process ETP and a rain water harvesting pond. The unit has completed the construction of HDPE lined Red Mud Pond No 3 for holding plant effluent and run-off water.

At the copper plant in Dahej, Gujarat, a 4400 M3/day reverse osmosis (RO) plant treats the process water from the cooling tower and also some part of treated effluent from outlet of ETP. The treated water from the RO plant is used for horticulture and slag granulation. This has resulted in conserving process water consumption by 1,200 to 1,500 m3/day.

At the Silvassa plant, we have undertaken rain water harvesting, which recharges the borewells and effectively conserves water in the region.

Our Performance on Water Intensity:

We strive to reduce our water consumption per unit volume of product; the specific water consumption for our various products is presented in the chart below:



Efficient use of water in the different processes is calculated based on the water used in each process.

Case study 1

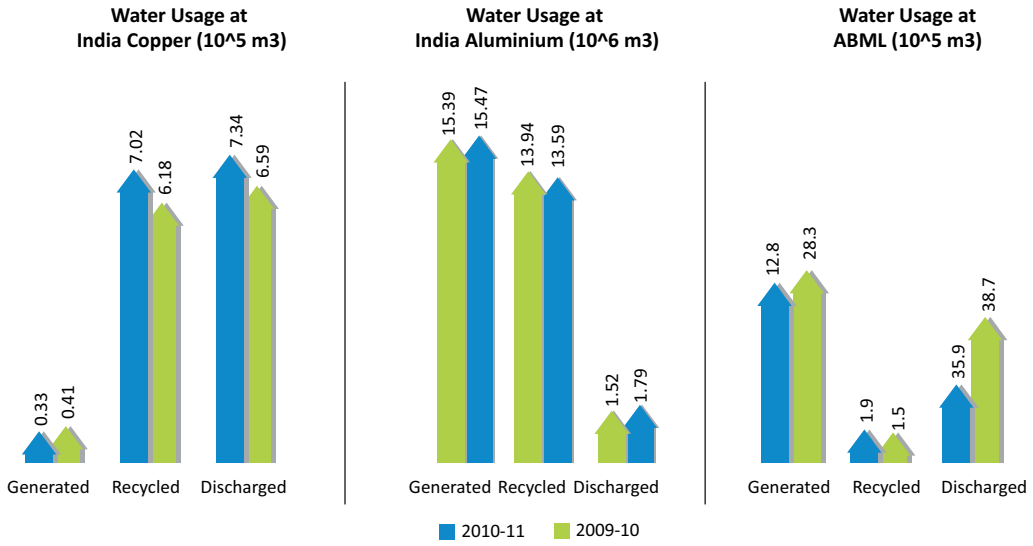
The Muri alumina refinery plant in Jharkhand relies on water from the Subarnarekha river. During summer, due to changing rainfall patterns, the water level in the river recedes posing a challenge to the operation of the refinery. To overcome the challenge of water availability and to ensure smooth operation of the plant throughout the year, several water conservation projects and treated wastewater recycling projects were identified. Few examples :

- Reducing the need for fresh water through attention on leakages in pump gland packing, valves and pipeline and increasing employee awareness.
- Re-using process condensate, boiler blow-down, PSF backwash and spillage of water.
- Recycling the effluent of alumina refinery and power plant after necessary treatment and proper quality control

The implementation of various water conservation initiatives has reduced the specific water consumption of the plant from 12.9 T/ T of production in 2009-10 to 9.7 T/ T of production in 2010-11.

A view of the drip watering system to the plant with the treated sewage

Water sprinkling through mobile tanker



Mr. Sanjay Sehgal President- Alumina & International Trade

Alumina, a raw material for metal production and also used in various other non -metallurgical usage has a significant environmental energy footprint.

We have taken important steps in reducing the energy and environmental footprint with help of technology adoption and remedial actions. The process also generates a residual waste in huge quantities called “red mud” which occupies substantial land fill not suitable for vegetation. In associations with research institutes and experts we have taken pioneering steps to afforest the same with various tree species thereby contributing the pollution abatement and biodiversity conservation. We take similar steps in following defined mine closure plans and rehabilitation of mined areas.

Transportation of raw materials and finished products is an important and energy intensive function of our operation and we have taken good steps such as direct transportation from mine to yard by rope way. In addition, key raw materials such as Bauxite ,coal ,caustic soda and furnace oil are received by rail/rake which was transported by truck . Also, finished good Alumina despatch to Hirakud from Muri is in BTAP rail wagons as compared to trucks These have an impact in reducing the energy usage in transportation as well as better raw material recovery.

Major tree plantation activities around our factories is a way of life. Fresh water consumption has reduced due to improved technology and efficiencies including recycling.

Managing our wastes

The major waste types of Hindalco Aluminium business are red mud, spent pot lining, refractory brick, aluminium rolling oil and dross and that of Hindalco Copper business are discarded slag and Phosphogypsum. Fly ash is common waste to both our businesses. In addition to these waste, our business generates hazardous waste s such as Spent Filter Earth, Waste Solvent, Resins and Caustic Wastes as well. At both the aluminium and copper business operations, we adopt innovative approaches to manage our waste through the principles of reduce, reuse and recycle.

Waste to Wealth

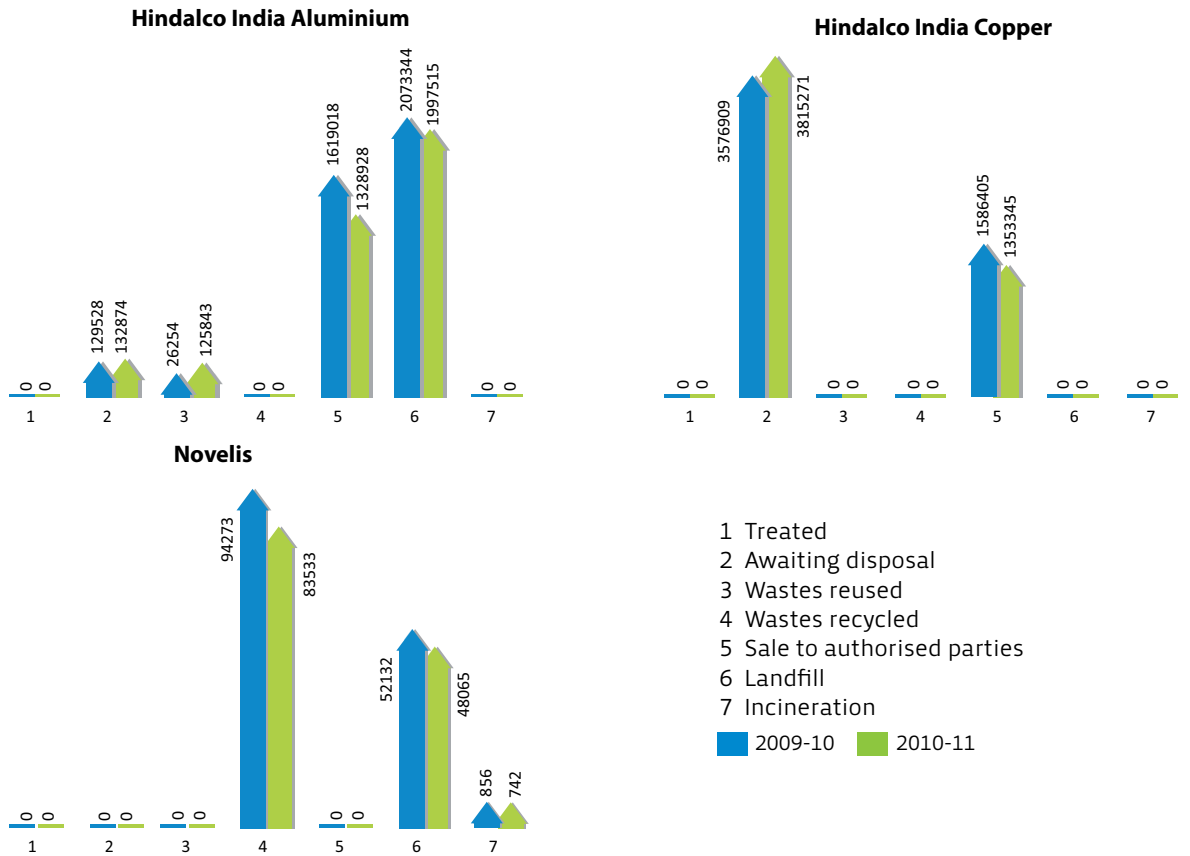
At Birla copper, extraction of phosphoric acid generates 0.6 million tonnes annually of waste material phosphogypsum, having high acidic content. In past, we were landfilling the same as it was hazardous waste. We have worked with the cement industry, agricultural university and farmers for demonstrating benefits of its use. We have developed various grades of products for agricultural use and awareness creation / market study / segregated samples / intense liaison & trial with cement manufacturers/ liaison with Indian Railways for rake loading of Gypsum for huge logistics cost reduction etc. for cement Industry customers. We are investing INR 75 crores in upgrading our phosphoric acid technology to produce phosphogypsum with low / free acidity to cater to increasing customer demand.

For copper slag, Hindalco has worked with reputed institutes and the road-building industry to establish its usage. These actions have not only led to use of waste product for the benefit of customers, but has also helped the company generate extra income and free expensive land. So far, this has resulted in revenues worth 40 crore INR from waste.

Sources	Waste generated	Innovative approaches for waste management
Aluminium		
Bauxite mining	Red mud	Through plantation converting red mud area into greenfield
Smelting	Spent pot lining (SPL)	Co-incineration in the CFBC boiler (trial in process)
Refining	Refractory brick	Recycled into bricks or steel process material
Flat rolled production process	Aluminium rolling oil	Recycling after reprocessing through vacuum distillation unit
Scrap recycling (impurities in scrap aluminum that are collected during melting of the scrap)	Dross	Recovery of aluminium (50% of the total dross) and other metals
Captive power plant	Fly ash	In cement industry, brick manufacturing and landfill purpose
Copper		
Copper mining	Waste rock dump	Managed as per regulatory requirements
Copper smelting	Discarded slag	Usage in road construction and as abrasive material, in the cement (5% permitted as per BIS), as value added products like abrasive tools, cutting tools and as a blasting material instead of sand. Going forward, there are plans to put up initiatives to recover copper from slag (which is around 0.7%).
Phosphatic fertiliser plant	Phosphogypsum	Used as soil conditioner in alkaline soil, additive in cement and fertiliser industries, to manufacture plaster of paris (POP) and gypsum boards.
Captive power plant	Fly ash	For use in agriculture, cement industry and construction

The waste handled within our operations is classified and sorted by type or hazard at each generation point. It is quantified and recorded based on its weight or estimated volume.

Non-hazardous waste (Quantity in MT) :



The copper plant at Dahej has found several avenues to recycle the waste such as phosphogypsum, discarded slag and fly ash.

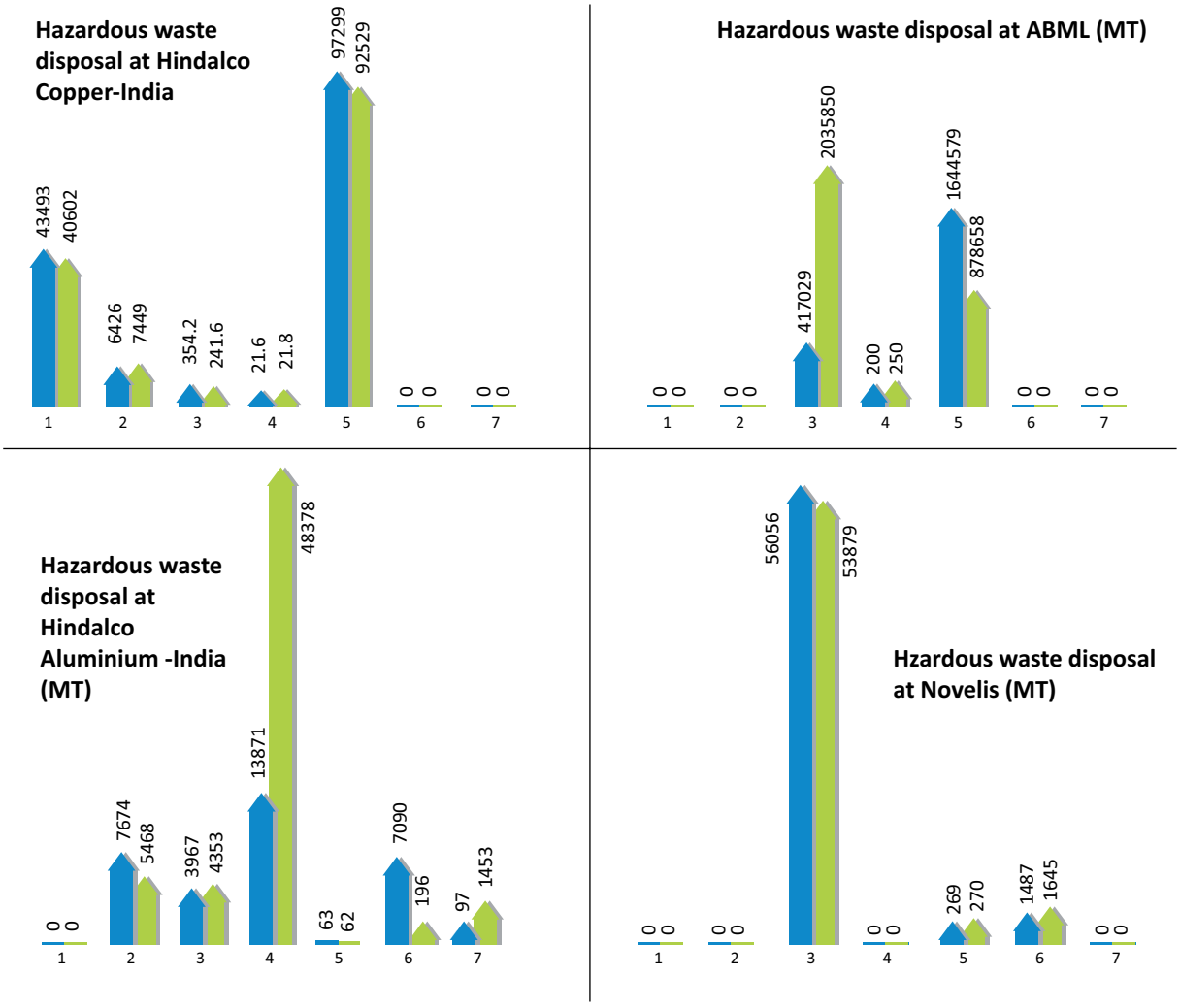
The dry ash handling system has been installed for better ash utilisation and to reduce dusting during unloading of ash from all boilers.

Managing Hazardous Waste

Some of the major hazardous waste generated from our operations includes used and waste oil, spent filter earth, chemical sludge from ETP, spent solvent and resins, alkali residue, spent pot lining, hydro fluosilicic acid and spent electrolyte from refinery plant.

In our Indian operations, hazardous wastes are disposed off as per the stipulations given by the respective state pollution control boards.

Disposal methodology (Quantities in MT)



1 Treated, **2** Reused, **3** Recycled, **4** Disposed through authorized third parties, **5** Disposed into landfills, **6** Disposed through incineration, **7** Awaiting disposal

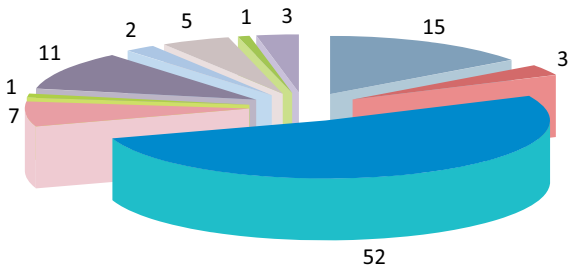
Recycling of Aluminium:

Our aspiration is to faster recovery and recycling of aluminium by providing practical and professional support in consumer awareness and capacity building activities.

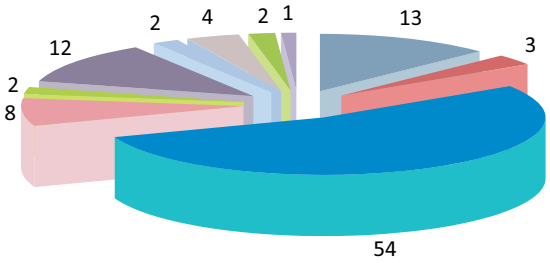
At Novelis, we utilised 33% of our input aluminium from recycled sources. We used approximately 1 million metric tons of recycled material inputs. As the largest beverage can recycler in the world, we purchased and recycled more than 40 billion cans in 2010-11. That's 17% of the global total of cans sold, or 24% of the total cans recycled globally. Recycling of aluminium uses only 5% of the energy required to produce primary aluminium. Thus up to 95 % of greenhouse gas emissions that would have occurred otherwise is avoided.

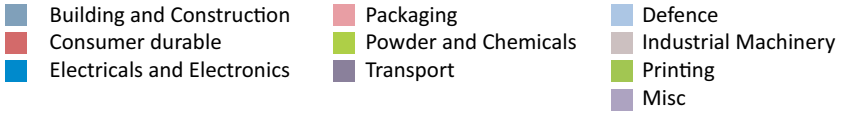
In India, we saw recycling at 2.25% of the raw material used for FRP which is similar to the quantity recycled in the last year. In India, the recycling potential is severely impacted by consumer usage pattern, where most of aluminium being used by consumers gets trapped for an extended time in the product usage phase. The International Aluminium Institute estimate that 75% of aluminium produced is still in use. Many aluminium products have long life cycles, often in excess of 50 years, before they are available for recycling. Virtually, all aluminium that reaches end of life in India is recycled.

Aluminium consumption pattern 2009-10 (in%)



Aluminium consumption pattern 2010-11 (in%)





We track the Indian and global usage pattern and recycling scenario to augment our recycling facilities and further our sustainability agenda, while achieving energy and cost-efficiency.

From July 2010, we have started utilising copper scrap. The total quantity of scrap that has been purchased and consumed during the year is 11,223 metric tonnes (MT), leading to a recycling rate of 3.34 %.

Novelis is the world's leading beverage can recycler, with 40 billion cans recycled in CY 2010.

Novelis has set itself a target of using 80% recycled material through a four-pronged strategy:

- Building the post-consumer purchasing systems
- Increasing post-consumer recycling
- Investing in extra capacity
- Investing design specifications

Spills:

During the year, no incident of significant spill has been recorded.

Air Emissions

There are emissions to the air of various types across the mining, processing and manufacturing of aluminium and copper.

Emission sources

The production of aluminium requires three main processes: bauxite mining, refining of bauxite into alumina and the electrolytic reduction of alumina into aluminium. Each process has its own set of air emissions:

Bauxite Mining
- Particulate/ dust emissions

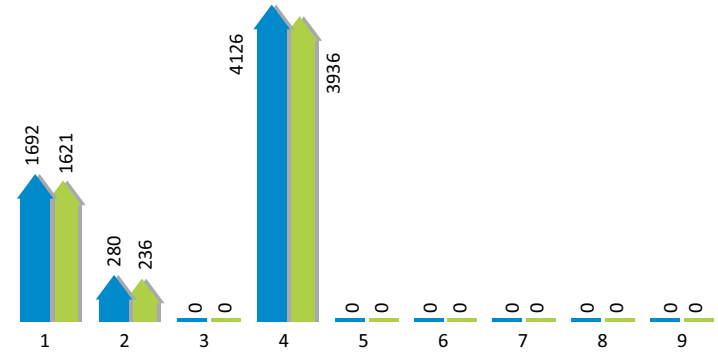
Bauxiterefining (Bayer Process)
- Particulates, SOx, NOx

Aluminium refining (Hall Heroult Process)
- Fluorides, particulates, SOx from process
- SOx, NOx and CO is genereted by power stations

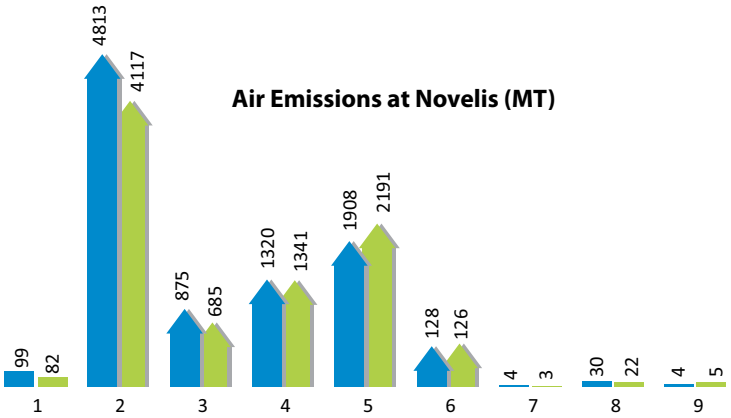
For copper, the primary sources of air contamination at mine sites are fugitive dust emissions from mine pits and underground workings, overburden, waste rock, mine development rock, ore, sub-ore piles, dried tailings and haul roads.

Details of Air Emissions

Air Emissions at Hindalco India-Copper (MT)



Air Emissions at Novelis (MT)



1 SO2 2 TPM 3 Total Fluorides 4 Nox 5 VOC
6 HCl 7 MEK 8 PAH's 9 Toluene 10 POP

Details of Air Emissions	Hindalco India - Aluminium (Mg/Nm3)	Hindalco India - Aluminium (Mg/Nm3)
	2009-10	2010-11
SO2	18-134	20-133
TPM	12 – 314	12 – 318
Total Fluorides	0.56 kg/T	0.54 kg/T
Nox	-	-
VOC	-	-
HCl	-	-
MEK	-	-
PAH's	-	-
Toluene	-	-
Total	-	-

1 SO2 2 TPM 3 Total Fluorides
4 Nox 5 VOC 6HCl 7 MEK
8 PAH's 9 Toluene 10POP

2009-10 2010-11

Emission management

At our operations, we strive to manage our air emission in line with the regulatory requirements, and attempt to recover and convert some of the pollutants into usable products. As a practice, we do monitor our emissions profile in line with the regulatory requirements.

Managing air emission in projects:

Reduce SOx

- RAMCO OPTIMA software installation in the sulfuric acid plant at Dahej for better process control and improved Sulphuric recovery.
- Centralised scrubbing system in the copper plant helps

Arrest SPM

- De-dusting smelter system comprising cyclones and nag filters removers the dust generated during the drying of smelter concentrate, which can be recycled
- Dust Extraction system with bag filters have also been provided at the coal Screen
- Electrostatic precipitators (ESPs) in boilers, calciners, Fume Treatment Plants in Baking Furneces
- Bag filter system, ventilation bag etc. for improved dust collection.
- At the Renusgar Captive Power Plant, an advanced Chemical Jet Dust Suppression system has been installed in all the Coal conveyers and at coal transfer points.

Managing Fluoride emmissions:

- Advance Hi-Tech Dry Scrubbing Systems on all pot lines of Renukoot are in place to efficiently arrest fluorine emission and particulate matter.

Land Resources

Managing the land effectively is primary on our agenda for both the businesses. Land is a crucial resource for new project, waste land reclamation and mining reclamation.

Hindalco has Mine Closure Plans in place for both the coal and bauxite mines where it operates in India and for Copper mines in Australia.

We ensure that we go beyond the legal requirements and target the following objectives in dealing with mine closures:

a) to protect public health and safety after the mine production is stopped;
b) to alleviate or eliminate environmental damage during mining or post mining activities ;
c) to achieve a productive use of the land, or a return to its original condition or an acceptable alternative; and,
d) to the extent achievable, provide for sustainability of social and economic benefits resulting from mine development and operations.

One of the focus areas of research and innovation of Hindalco Innovation Centre is to look into the options for better management of mine closure related issues.

In 1985, our Belgaum plant was the first alumina plant in India to adopt Dry Mud Stacking (DMS), much before the statutory requirement in 2003. Though DMS requires less land and reduces groundwater contamination from chemicals, it creates dust nuisance and is also a skin irritant. We have found a unique solution by using bioremediation technology. For this we have partnered with TERI. It involves developing amenders, trials, treating red mud with different bacteria from TERI's pool to modify the pH suitably and planting species of high alkali tolerance. The huge red mud yards are systematically covered with trees using this new technology. The success of vegetation on red mud ponds (RMP) is unique and to the best of our knowledge, it is first-of-its-kind globally. The successful management of red mud is now cited as a benchmark for alumina producers the world-over.

In India, in order to address the concerns on proper mine closure before the mining operation is ceased, with effect from 10 April 2003, the government has introduced the concept of progressive mine closure plan and final mine closure plan for proper reclamation and rehabilitation of the area held under mining lease. Every lease-holder has to furnish financial assurance to the competent authority and if the mining lessee does not carry out protective, reclamation and rehabilitative measures as envisaged in the approved mine closure plan, the financial assurance can be realised by the state government to carry out the requisite protective measures in the area held under mining lease. One case of non-compliance of mine closure plan by Hindalco Industries Ltd. in Amarkantak bauxite mine has come to the notice of Indian Bureau of Mines (IBM), where the case of forfeiture of financial assurance is with IBM.

Nifty Copper Operations (NCO) under ABML has reclaimed 104.6 ha land area which is 12.5% of the total distributed footprint.

In August 2010, Birla Nifty Pty Ltd. (BNPL), a subsidiary of ABML, adopted a closure planning strategy for NCO. BNPL intends to develop a new closure plan by the end of 2011. A number of studies identified in the NCO closure planning strategy will be carried out to support development of the plan. The area of concern is acid drainage impact on local groundwater from waste rock dump. Detailed monitoring has been planned for the future, while monitoring of rehabilitated areas on the waste rock dump is under progress.

Red mud pond rehabilitation at Muri

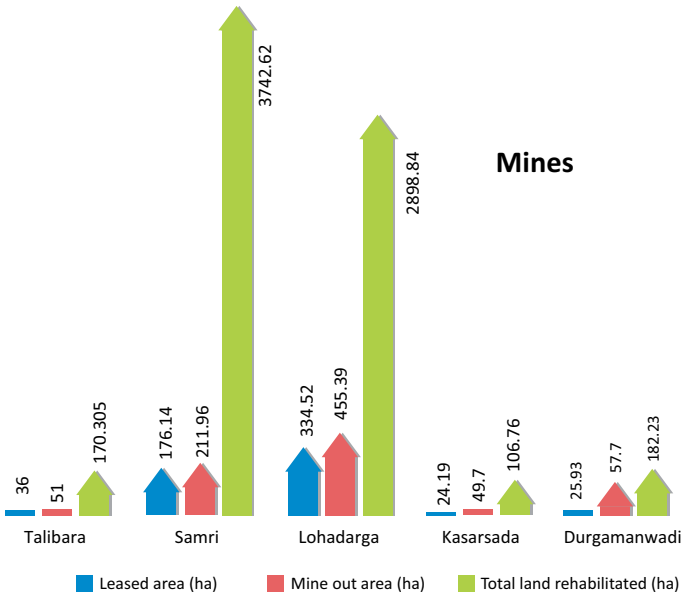
An abandoned red mud pond at Muri now houses over 21,000 trees of many varieties including Neem, Sisham, Jatropha, Babool along with herbs and shrubs. Through this afforestation initiative, we have transformed a waste site into an environmentally beneficial green-belt which acts as a means for phytoremediation of pollutants, improves the quality of air and the aesthetics of the surrounding area. This area also improves the biodiversity of the region as different species of plants, birds and small animals abound in the region.

Managing Mining Environment

In order to maintain the eco- balance in and around the operational areas, Hindalco Mines Division is undertaking initiatives as below:

- Reclamation of Mined Out Areas.
- Rehabilitation of reclaimed area through Plantation, agriculture or other use.
- Afforestation /Green belt development.
- Dust minimization & Water sprinkling on haul Roads for Dust suppression.
- Conserving the top soil through watershed structures like bunds, gully plugs, contours and terraces.
- Monitoring of Ambient Air quality, water quality& Noise level.

In India, we manage bauxite mines at Durgamanwadi, Kasarsada and Lohadarga and a captive coal mine at Talibara.



Biodiversity

Securing access to land and managing it effectively are essential components of our commitment to operate in a responsible manner. We fully appreciate the importance of protecting biodiversity and also recognise the increasing competition for acquiring land and the challenge this presents to all land-users.

We adopt a holistic approach in managing land and bio-diversity. It means we assess and manage the potential impact of our operations throughout their lifecycle across social, environmental and economic spheres. We have minimum requirements at all Hindalco operations that include adhering to a formal hierarchy process that begins with avoiding disturbance, followed by mitigating negative impacts. For all new projects and extensions, we carry out environmental impact assessment studies and ensure that our proposed operations do not have any adverse impacts on the surrounding biodiversity.

The Environmental Impact Assessment study reveals that the Talibara 1 coal mine situated at Khinda village of Sambalpur district, Orissa does not fall under the proposed Sambalpur Elephant Reserve. The other sanctuaries like Badrama, Kholasuni and Debrigarh are at an average distance of 30 km.

One of the priorities that Aditya Birla Minerals has identified under their environmental issues is to minimise their impacts on biodiversity and landscape functions. The company undertakes every care to ensure both Queensland and Western Australian exploration is managed in an environmentally efficient manner.

Terminal at Dahej

Managing the environment while mining– Our experience in Australia

Nifty operation of the Aditya Birla Minerals Limited is working on fulfilling various requirements with regard to water balance, wild life surveys, mine closure plan, seepage analysis and recovery. The development of a mine closure strategy will be a major focus for the coming year. Planning and design for a stabilized landform of the waste rock dump and heap leach pads will be advanced.

The Hirakud Smelter technology change at Hirakud Smelter from Soderberg cell to Prebake cell translated 433,789 tonnes of CO2 equivalent per year of GHG emission reduction. This project was developed as a CDM project.

It is the first and only project in India for PFC reduction to get recognition from UN and also only aluminum smelting CDM project in the world involving technology change for PFC reductions .

Enclosed discharging jetty at Dahej for receiving raw materials for copper unit

Our terminal at Dahej handles a significant quantity of cargo such as Copper concentrate (1.2 million tons annually), Coal (4.6 lakh tons annually), Rock phosphate (4.7 lakh tons annually), Liquid ammonia (36000 MT annually), Sulphuric Acid (0.7 million tons). We operate a mechanised and covered 3.2 km cargo conveyor line in sea which is the only instance in India.

The terminal is fitted with fully enclosed discharging system which prevents dust pollution and loss of cargo. We periodically collect the air sample data to check whether we are in the prescribed limits.

The terminal also does not permit bunkering (refuelling) of ships which reduces chances of any oil spillage significantly

PEOPLE SUSTAINABILITY

The sustained success of Hindalco is a result of the commitments and contributions of its people. We consider people as our most important asset, a workforce anchored by spirit of ownership that helps us respond proactively to challenges and opportunities. Our people have enabled continuous growth, induction of new technologies and the introduction of innovative practices for sustained success. Over the years, we have shared harmonious industrial relations and built upon the similarities. We have also utilised different perspectives that our people bring to the workplace, irrespective of colour, race, religion, disabililty or gender identity. This continues to be a key aspect in our success.

Today, we are a part of a multi-lingual, multi-dimensional Group with dedicated employee strength of 33,609 passionate and committed people.

Our People and Inclusion Strategy

Our leadership seeks collaborative and innovative solutions, fostering an inclusive work environment that keep us and our products on our client and customers radar at all times. This alignment of our People initiaves, with business functions and goals, is what drives our performance.

Human Resources (HR) systems, structure and policies (on recruitment and selection, training and development and personnel policies) have been reviewed, standardised and documented in accordance with the business vision.

We have set objective and measurable performance criteria which are linked to the business goals.

We have identified competencies required across all managerial levels and put in place a structured succession plan

We take pride in championing the cause of employees through proactive employee relations and care.

Insights from the latest employee engagement survey conducted by Gallup

Once in every two years, we carry out an employee satisfaction survey based on Gallup's 12 Elements of Great Managing (www.gallup.com/consulting/52/Employee-Engagement.aspx). The survey is instrumental in developing action plans as it provides insight on key employee engagement parameters. Action plans range from strategic to operational level initiatives. Approximately 50 focus areas (initiatives) with 350 action plans were identified in 2010 as a direct result of the survey and implemented across various Hindalco units. The 2010 survey witnessed 97% participation level across the Aditya Birla Group operations in 31 countries. In our next survey, we will assess the results of our human capital initiatives. Key learnings gained through the survey translated into actions that were implemented. Employee involvement, ownership, empowerment, entrepreneurship and improvement across all levels are propelled through world class manufacturing (WCM) excellence framework encompassing various key management focus areas (KMFAs) with active leadership participation.

We were also voted second in the category of the best employers by AON-HEWITT among 200 Indian companies. We were among the category of best employers in the Asia-Pacific region.

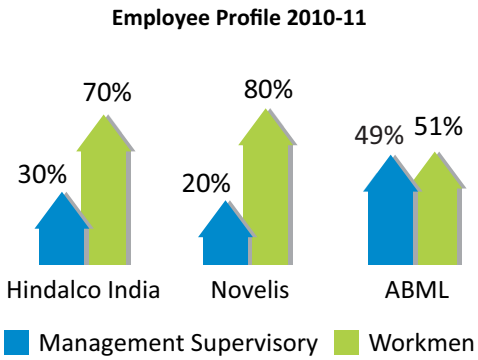
Our Leadership Development Initiatives

- All employees have potential which can be harnessed
- Leadership potential is not fixed, it can be developed – we will facilitate building of leaders through structured processes
- We will invest differentially in different talent and help our managers realize their career aspirations
- The primary ownership of development rests with the individual
- We will create appropriate development opportunities for people to enable them to harness and optimize their capabilities and grow in their careers.
- We would adopt structured processes and practices to develop a leadership pipeline to deliver the business needs

All of our employees, including the Board of Directors and management subscribe to the philosophy of ethical behaviour and compassionate care. We believe and act on the ethos of generosity and compassion. Adherence to Hindalco's code of conduct, country-specific labour laws and practices and collective bargaining agreements are mandatory for all our employees.

Employees Profile and Diversity

We are a multi-ethnic and multi-competency group operating in 13 countries in diverse business functions. At the core of our diversity policies is the recognition that teams comprised of employees from different cultures and backgrounds contribute valuable understanding of complex international markets and deliver better results.



At our India operations, nearly 70% of the employee force belongs to the workmen category, while 30% belong to staff, supervisory and management category. At Novelis 80% of its employees belong to the workmen category while 20% belong to staff, supervisory and management category. In ABML, 49% of its employees belong to management and supervisory staff and the rest 51% belong to the workmen category. We also engage contract employees for our various functions and ongoing projects. In general, our industry struggles with gender equality issues, especially in management positions. We prioritize on recruiting, developing, retaining, and promoting qualified women candidates. We pay attention to the percentage of women in our business Units as a measure of success. For FY 2010-11, we have hired 18 women Graduate Engineers as compared to 13 of previous year.

Moreover, given the nature of operations and locations, the proportion of women employees in India has been traditionally low at 4%.

Performance Management Process

We follow a common appraisal process, through a performance management system, POORNATA. It is a goal-focussed, automated systems driven program. In alignment with their respective roles, it allows the management to formulate and engage in annual goal-setting to achieve respective business strategies. Individual objectives are translated into measurable goals by mutual discussions conducted between superiors and subordinates. For the derived KRAs, the monitoring and implementation is done via a mid-term review. Corresponding corrective actions are also undertaken to facilitate amendment of goals or action plans to meet annual targets.

In addition, annual self-performance reviews in discussion with superiors forms the basis for compensation reviews along with the target performance rating. This facilitates discussion on areas for further development for employees as well as a bonding process between supervisor and subordinates.

Business	No of Employees	% Employees receiving regular performance and career development reviews
India – Copper	1767	100
India-Aluminium	20,496	100
Novelis	10850	38
ABML	496	49

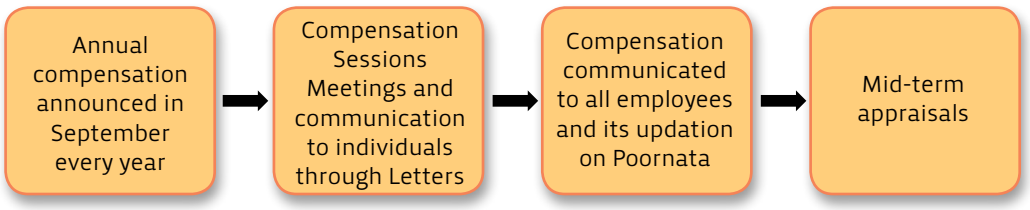
At Novelis, 1790 employees (16 % of all employees) completed Training in 2010-11 performance. There are also additionally a number of operating units with local performance schemes with approximately 2,400 employees (22 %) that have completed annual appraisal and review.

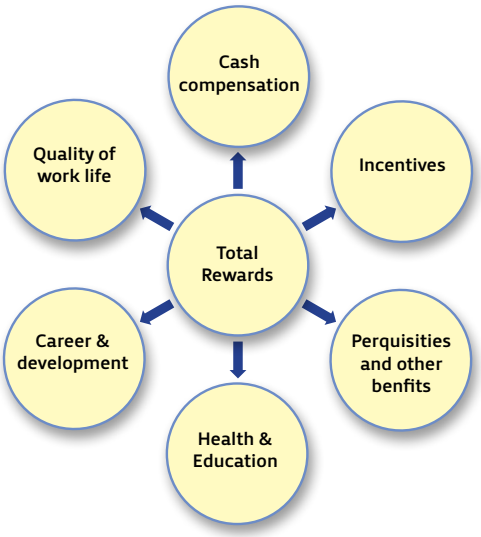
Compensation and Benefit Schemes

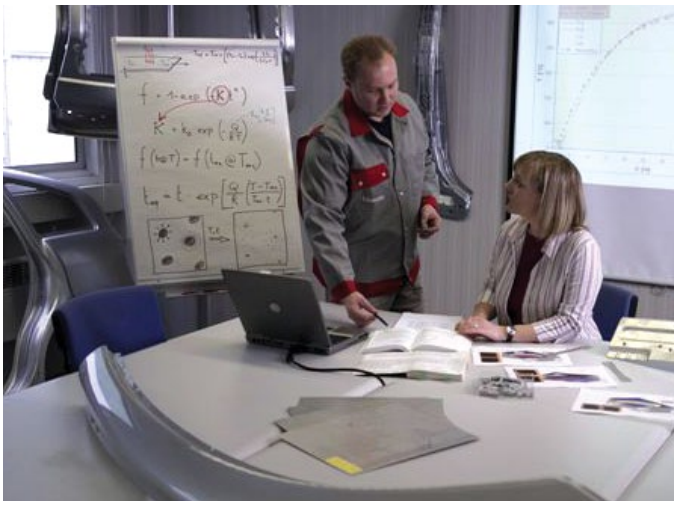
Our compensation programmes are structured to support our core business strategy by rewarding behaviours that deliver results against business goals. The programmes drive performance to meet the expectations of our internal and external stakeholders. Over the last few years, performance linkage to reward has been strengthened with a customised compensation package together with variable pay and benefits. There is no differentiation in the basic salary of men and women. Moreover since we have one Executive Director, we do not have a Remuneration Committee.

Hindalco India-Aluminium and Copper Businesses : 2010-11

Compensation framework involves:







In India, benefit schemes include Mediclaim insurance for employees and their family, a group personal accident insurance (Nishchint), medical reimbursement, scholarships for higher education, and housing loans.

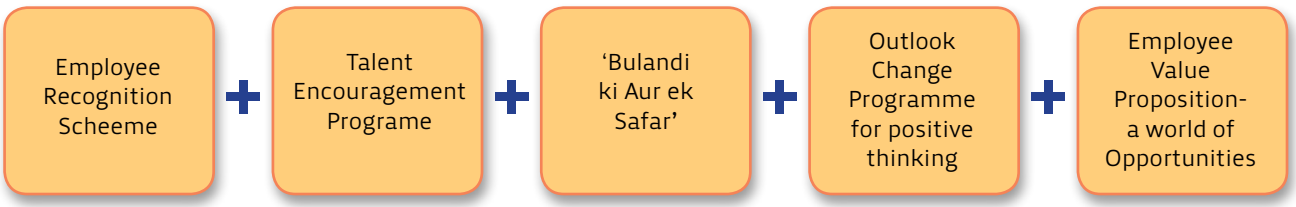
Also, in accordance with SEBI Guidelines, Employee Stock Option Scheme Compensation Committee under the Board of Directors offers stock options to the eligible employees including the Managing Director. Each option is convertible into one equity share of the Company upon vesting/exercise.

Benefits offered by Novelis vary by location depending upon the local requirements and culture. Typically, most benefits which full time employees receive are also available to part-time employees, sometimes at pro—rata levels. Only some benefits are available to temporary employees. Stock options are available only to senior management.

Benefits offered by ABML : Super Annuation, Life and TP insurance equiv to 2 years salary, Annual leave, Sick Leave and Long Service Leave. Senior Managers are eligible for performance based incentive as well.

Managing and Retaining Our Talent Pool

Our short-term and long-term goal is to continue to attract, develop, and retain the best and brightest industry talent. We place a significant emphasis on retaining talent by offering development opportunities, performance based management and incentives. The attrition rate for Management Staff at Hindalco India Aluminium and Copper Business was 9% while it was 11.5% in 2008-09.



We address the developmental needs of our employees and nurture their career aspirations through internal recruitment system, mobility policy, secondment, project and task forces, cross-functional rotation, job enlargement, enrichment and training.

Group wise Achiever Awards

Outstanding Leader
(President/EP & above)

The Outstanding Leader displays exemplary foresight, plans strategically, enables innovation and displays maturity in leadership while delivering consistently outstanding business results. This leader harnesses his/her resources in a creative manner setting high standards of excellence while encouraging people to take necessary risks...

Exceptional Contributor
(General Manager to Jt. President)

The Exceptional Contributor Award this year onwards (2010-11) will be divided into two sub-categories:

1. Exceptional Contributor for Business Success
2. Exceptional Contributor for Functional Excellence

Distinguished Achiever
(Senior Manager to General Manager)

The Distinguished Achiever successfully harnesses team resources and capabilities to consistently deliver results in his/her functional area. He/she brings people together to collaborate, sometimes even across functions, sets high performance standards for self and his team, challenges and motivates people to excel themselves and is generally regarded as a role model for the Group Values. He/she has the ability to recognise and nurture innovation and supports self starters.

Young Professional
(Senior Manager & below)

The Young Professional has a consistent track record of delivering superior results, using effective methodologies to plan and execute the role and displaying perseverance and intellectual integrity at the work place. A self starter, this person displays high levels of energy and initiative, is a willing participant in any initiative and goes the extra mile to accomplish organisational objectives.

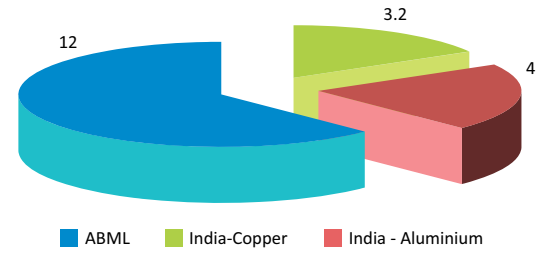
Trainings, Learning, Initiatives

Different initiatives for professional development such as e-learning courses, kaizen schemes, safety week competitions, kaizen competitions, quality month competitions, value champion competition and various other competitions are open to all employees. Management staff get opportunities to develop themselves through team-based projects and focused reviews.

Training areas include Technical Training, Supportive Training and Behavioural / General training. Man hours spent on training was 541738 at Hindalco India and 6181 for ABML. Mandays per capita data: Hindalco India - Aluminium: 3.2, Hindalco - India - Copper: 4.0, ABML: 12.

We had 30,000 touch points with our learners through multiple formats of learning. More than 25,000 employees were enlisted in e-learning programs at Gyanodaya, our institute of management learning. Further, 200 senior-level employees attended specially designed programmes to interact with faculty of leading universities and B-schools. Our senior managers also derived immense value from training and learning sessions conducted by leading consultancies such as the Centre for Creativity Leadership (CCL), the Hay Group, and The Works Partnership (TWP).

Average hours of training per year per employee



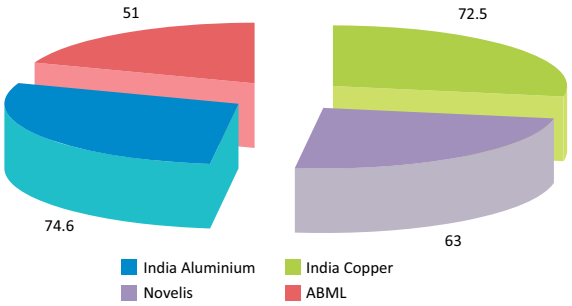
Novelis is committed to developing leaders and leadership talent to achieve the targets of providing “a world-class leadership development program, benchmarked in the top 10% of companies”. In 2010-11, we began with for levels of programme dependent on participants’ experience. Approximately 120 global leaders participated in one of four levels of programme, in all four regions.

Employee Rights at Workplace

All our Indian Units have workmen unions. Topics such as compensation and wages, health and safety, productivity improvement, cost reduction, outsourcing of identified processes are discussed by means of charter of demands from unions and management. Over years, such positive dialogue has provided a sound base for productivity improvement and led to peaceful industrial relations.

Further, we aim to set an example of high ethical standards by following a comprehensive mine closure and R and R policy as stipulated under Rule 23C (1) of Mineral Conservation and Development Rules 1988 (MCDR). This is implemented in our project activities as well as policies to eradicate child labour. No child labour is engaged at any of our operational units in India, at Novelis and at ABML.

Percentage of employees covered by Collective Bargaining



Minimum Notice Period regarding Operational Changes, including whether it is specified in collective Agreements		
Hindalco – India – Aluminium and Copper Businesses	**Novelis**	**ABML**
• The minimum notice period for significant operational changes usually varies by location depending upon local regulations, customs and significance of issue. • The minimum Notice Period for Management Staff is 3 months. • In case of unionised employees, it varies from location to location. Notice period is followed as per the provisions of the Labour management Agreement	• The minimum notice period for significant operational changes usually varies by location depending upon local regulations, customs and significance of issue. • In Germany, this ranges from 1 to 7 months dependent on change. In France, Italy, UK 2 months, Luxembourg 4 month, 1 month in Brazil, 3 months in Switzerland. • The Notice Period / provision for consultation are usually determined by local regulations / customs.	• Seven days to three months

Mr. Vineet Kaul, Chief People Officer

People are an Asset for Hindalco and add value to its Growth and Sustainability. Various People Processes are in place to enhance the Productivity and Wellbeing of our Employees. We are spread across various countries, markets and cultures in a global environment and People work together to achieve the objectives of the Company. Communication and continuous interaction with over 33,000 Employees is the basic requirement and also a challenge.

Talent management is a key area from where we derive sustainable advantage while operating in diverse and challenging situations. Employees are the biggest internal stakeholders of our group. Over 28000 Executives spanning over 31 countries participate in Organisation Health Study (OHS) every 2 years. While this OHS study gives us an indication of what Employees feel about working with Hindalco, it also forms the basis for taking necessary steps in nurturing and retaining our talent across locations and geographies. We are also proud to be an integral part of the Aditya Birla Group which has been declared as "Best Employer" in India. We would like to be considered amongst the Best Employers in all Countries that we operate by virtue of our Employee centric actions.

Managing Director of Hindalco with young professionals

OCCUPATIONAL HEALTH AND SAFETY

Our people are our most important resource. We are committed in providing a safe and healthy work environment at all our locations with aspirations to achieve excellence in health and safety management.

Approach

It begins with dedicated and empowered teams for occupational health and safety at each of our units and at corporate. These teams are accountable for implementing programmes concerning improvement of safety and health for our people and the community at large. Safety performance is a core indicator of overall plant performance and we encourage in-house sharing of information and benchmarking of units on safety. We also understand the need to provide written instructions to have clarity in what we are supposed to do for a safe system. A detailed safety manual covering important safety aspects such as working at heights, hot work permit system, confined space permit, incident investigation and emergency planning is prepared and made available to all employees.

In addition, relevant topics of health and safety are covered in the formal agreements in place with the workmen at our operational units.

Environment, occupational health and safety committees at plants: Unit head, environment, occupational health and safety (EOHS) team, representative from management staff and workmen comprise this committee which looks at EOHS aspects, reviews actions taken, and initiate activities to promote awareness.

A bottom-up process is adopted as employees raise their concerns of health and safety through focused committees on EOHS at each unit. We also have health and safety points such as adherence to safe work practices and usage of personal protective equipment in our formal agreement with our unionised workforce in most of our locations including ABML and Novelis.

Clearance for new projects: A checklist has been developed covering the aspects of environment, occupational health and safety and is used as a part of approval for new projects. In addition, while selecting new technology, environmental and safety requirements are taken into consideration. Implementations of environment and safety requirements, identified during project stage, are reviewed while project is under implementation and also, post-project. In case of any deviation or additional requirements, appropriate actions are planned and implemented.

Management review: Safety performance is tracked at all levels including the board which receives periodic updates from the concerned functional executives. We track our safety performance data for our permanent employees and contract service personnel. Safety performance during project implementation is also monitored and appropriate actions are planned based on data.

Future plans: While systems and procedures are in place, we definitely see an important area of improvement in terms of behavioural aspects to health and safety. In future, we plan to work more on the behavioural part in our management system framework.

Practices at Hindalco

- Hazard Impact and Risk Analysis (HIRA) is done for all the activities including material handling. A well-defined system exists for evaluation of Hazards for their significance & further actions planned to mitigate the severity.
- Human behavioural aspects are also considered while identifying hazards and risks and appropriate control measures are implemented
- A cross functional team comprising of management executives and workmen investigates safety incidents like dangerous occurrences, near misses, and lost time accidents and reports on analysis with respect to 3M – Man, Machine and Material

Update from ABML - This year ABML operative units focussed on development and implementation of a risk based pre-task assessment tool and a hazard reporting tool. In addition, a safety management database system has been implemented during the year to allow for greater transparency in recording, analysis and reporting of safety incidents

An Integrated approach to Safety, Health, Environment and Quality Management Systems at Hindalco India

In a large organisation like Hindalco, with diverse business functions and complex activities, it is often a case on one management system competing with another one which also leads to one getting more importance than the other one depending on a number of factors. There is often a concurrent operation of various systems having unequal importance and thus leading to 'partial' rather than 'total' improvement. Hindalco has adopted several international standards and best practices in implementing management systems for quality, environment, health and safety. These include ISO 14001 environmental management system standard, OHSAS 18001 Occupational health and Safety management system standard, ISO 9001 for quality. The important achievement for Hindalco India has been in having a total integration of management systems with the business and providing equal importance to all aspects of quality, environment, health & safety.

Integrated management system (IMS) at 5 major Hindalco India units address the overlapping issues optimally such as environment v/s health, or quality v/s environment v/s health with a single set of document systems and procedures. There is more reliability in achievement of objectives such as required by customer, or enforced by regulatory authorities and most importantly those mandated by internal performance aspirations in the domain of quality, health, safety and environment.

It is the responsibility of each unit to carry out periodic reviews of aspects and impacts, risk assessment studies corresponding to the process map of the unit to arrive at the significant risks and hazards. This as well as the corporate goals and objectives are a continual source of input to plant IMS policy. This also sets the tone for the highest management approval for IMS implementation.

The biggest impact is in creating a 'One culture' with all aspects considered to be of equal importance and Process-result oriented approach. The implementation aspects are also effective in having a combined system for audits, training and management reviews.

"Spot the Hazard" Week across Hindalco India Units .....

Week across Hindalco India Units .....

We organised a special initiative in the last week of January 2011, "Spot the Hazard" across all our units on spotting various environment and safety hazards and involved all our employees in this initiative. This event had the effect on increasing safety awareness as well as providing valuable inputs in betterment of our management systems. This will be continued every year.

Safety Performance

We track our safety performance data for our permanent employees and contract service personnel.

Monitoring system for Health and Safety

Any management system benefits from periodic review and assessment. To this effect. we have formulated a defined schedule of audit of our Environment, Occupational Health and Safety management system in our units at various levels. The audit findings and recommendations are communicated and actions taken by the concerned departments.

Safety Performance for Hindalco India	Aluminium Business	Copper Business	Greenfield Projects
Total no. of lost time accidents (Reportable Accidents)	70	1	0
Total no. of fatal accidents	2	0	0
Total no. of man-days lost	19661	16	0
Accident Frequency Rate	1.42	0.26	0.00
Accident Severity Rate	400.02	4.18	0.00
Total no. of Minor Injuries (Non-reportable Accidents)	68	8	4
Total no. of Near Misses	1224	0	24

Safety parameters for Novelis	Performance in 2010
Employee Injury or Illness Rate, cases/200000 Hours	0.76
Employee Lost Days Rate (LDR), cases/200000 Hours	54.21
Employee Lost Time Injury Rate , cases/200000 Hours	0.16
Employee Injury or Illness Rate, cases/200000 Hours	0.76
Fatalities	1

Safety Performance at ABML	
Total no. of lost time accidents (Reportable Accidents)	16
Total no. of fatal accidents	0
Total no. of man-days lost	0
Accident Frequency Rate	--
Accident Severity Rate	--
Total no. of Minor Injuries (Non-reportable Accidents)	314
Total no. of Near Misses	18

The Aluminium Business has a bigger footprint in terms of employees and business functions (starting from mining, refining, smelting and value added process units) and hence partially explain the difference in safety performance figures. However we take each and every incident seriously and strive to improve our safety performance and management systems

Elimination of Fatality in Hindalco

We suffered 2 fatalities in our Indian operations.

Fatality in transportation - On 8th March 2011, one of our employees driving a carrier laden with explosives to the mining site in Lohardaga suffered a fatal accident when the explosives detonated. The explosives were sourced from the magazine of authorised explosive distributors and this is the first time such an accident has occurred. This incident is being investigated by Controller of Explosive, Local police administration & Forensic team but, we are yet to conclude on the underlying cause for this accident.

Fatality in Crane movement area - On 20th March 2011, at our Renukoot reduction plant, one of our employees Mr Anand Prakash Rai succumbed to his injuries when he was caught in between the pillar and opposite end of an operating crane. The analysis showed the cause as not following the prescribed route to reach a work station. This brings us again to the behavioural implications in safety as well as improvement in engineering safety. We have taken follow up actions such as enforcing the prescribed walk ways for movement of people and goods, reviewing documented procedures, providing alternate access to workplace (collapsible ladder to crane cabin) and training on behavioural based safety and task observations.

Novelis also suffered a fatality during the reporting period in their coil storage area when a forklift and crane collided with each other.

These fatalities are a great loss, tests our commitment and values for our people, and affect Hindalco as a whole. We have taken lessons from them and have enhanced focus on our safety agenda throughout our global operations.

Occupational health Management at our units

To achieve our ideal state of zero work-related illnesses, injuries, improved health and well-being for all employees, we have a system to assess occupational health hazards and risks comprising of 1) identifying potential risks, 2) planned periodic surveys and 3) monitoring of employees exposed to risks. Some of the key areas of occupational health risk assessment are

Work-related injury that may be triggered or exacerbated by unsafe acts and unsafe conditions at Workplace	Acute and chronic disease that may be associated with, or impacted by, workplace factors	Chemical, physical, and biological agents present in our locations from our manufacturing processes, operations, or products	Ergonomics-Workplace condition monitoring, designing work requirements to meet the abilities of the person

In case of any aberrations, we try to correct the same with improved operational practices and by adopting engineering controls as well as proper use of personnel protective equipment. Process modification, administrative control and use of personal protective equipment are also some interventions to reduce.

Hygiene and people health index

As a part of world class manufacturing initiatives, one of our plants in India (Taloja Plant) has implemented a Hygiene and People Health Index consisting of several measurable parameters representing the health of our workforce and location hygiene aspects. All the employees of this unit are assessed on a set of 10 parameters so as to arrive at a unit level health and hygiene score for the plant. The process of adapting the same and standardisation through out all units in India is under progress

Our association with Fluorosis Research & Rural Development Foundation

Under the guidelines of Central Pollution Control Board, Hindalco initiated the study on the above subject to be carried out by "Fluorosis Research & Rural Development Foundation" in 1984. The objective of the study was – "Health monitoring of workers and supervisors of Aluminium Smelter with focus on prevention and control from ill effects due to inhalation/ingestion of fluorine and fluoride. Hindalco has so far sponsored 4 such studies and are in the process of carrying out the fifth study for the period (2010-13) which includes 750 persons including 100% re-assessment.

The study encompasses aspects such as creating awareness, counseling and promoting good practices on minimizing the impacts. The last completed study (May 2007-Nov 2009) covered a total of 702 employees working in or in the vicinity of the impact area of Renukoot aluminium smelter.

Study of potential biomarkers of occupational diseases in miners in our bauxite mines at Radhanagri, Kolhapur, Maharashtra, India

Under a joint effort with National Institute of Miner's Health (NIMH), Hindalco took a health check of its mining work force working at one of its bauxite mines in India. This involved collection of pathological samples and analysis by NIMH from the miners for 1-2 weeks and presenting the analysis to Hindalco for further action as well as contributing to the body of knowledge on miner's health in India.

Hindalco has an established procedure of conducting medical tests for the miners, which include annual test on pathological, vision, lung function and audio parameters.

COMMUNITY EMPOWERMENT

As part of the Aditya Birla Group, at Hindalco, caring for the underserved is a legacy and an unwritten edict that has been followed by generation after generation. We are proud to be a part of this legacy.

We believe in the trusteeship concept of management. Simply put, in the context of social responsibility it entails ploughing part of the profits into programmes which result in the larger good of society. For 2010-11, we have invested Rs. 444.4 lakhs on community initiatives.

We endeavour to propel inclusive growth as channelized through the Aditya Birla Centre for Community Initiatives and Rural Development, chaired by Ms. Rajashree Birla. In recognition for her exemplary work in social domain, she has been bestowed the Padma Bhushan Award in 2010. Ms. Birla has also been the recipient of the Golden Peacock Life Time Achievement Award for Community Development, which she received in Portugal at the hands of the honourable former Prime Minister of Sweden Mr. Ola Ullsten.

"We cannot sit and hope that things will work out, just because the government's focus is on engaging with the poor to overcome their deprivations. The problem is too humungous for the government alone to resolve. Each of us must act."

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

Our vision

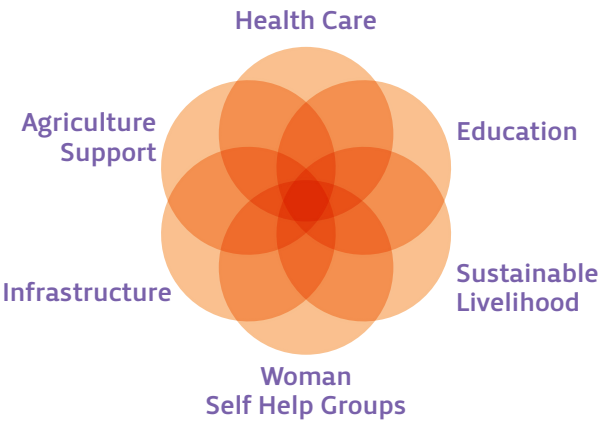
"To actively contribute to the social and economic development of the communities in which we operate. In doing so build a better, sustainable way of life for the weaker sections of the society and raise the country's human development index"

Our CSR Focus

CSR is accorded as much importance as business projects. We follow a comprehensive CSR policy with an overall aim of building long term socio-economic self reliance among communities where we operate. All projects are rigorously assessed, periodically monitored measured against set targets and budgets, and findings shared throughout the Group. We undertake environmental and social impact assessment in line with laws and regulations of the land during our investment decisions, prior to the start of operations and during operations.

In accordance with the principles of sustainable development, we have identified 6 key focus areas. These include a broad spectrum of socio-economic issues and developmental needs where our well designed CSR interventions will significantly help improve the community's quality of life.

Key focus areas



Community Dialogue and Engagement

We advocate an open and transparent dialogue with stakeholders in the communities where we are located. Stakeholder engagements with local communities help us gauge their expectations and provide inputs to our CSR project approach. An open forum for a two-way dialogue with the community, district administration, and government agencies marks the 'needs assessment' necessary for CSR intervention in our projects.

The CSR project identification is driven by our location leadership (also known as the Unit Head) with support of the CSR team. Initiatives are prioritized and implemented in close consultation with the community through a "participatory rural appraisal mapping" process and in discussions with the village Panchayats. The time-bound implementation of the CSR initiative is the responsibility of the community and the CSR team, as is the monitoring of the milestones, and other aspects. Monitoring entails periodic on-site verification of the progress, i.e. the actual output of a community project.

Every Manufacturing Unit has a CSR Cell and CSR Head, who reports to the Group Executive President (Communications & CSR) at the Centre. At the Company, the Business Director takes on the role of the mentor, while the onus for the successful and time bound implementation of the projects is on the various local leadership (Unit Head) and CSR teams.

Village meetings are held periodically to elicit feedback on the benefits of our community programmes and to identify areas for further focus. We ensure that while in the short term we have to do enormous hand-holding, the projects become self sustaining by the beneficiaries over the long haul. After this critical stage is achieved, we withdraw. In this way, we discourage a culture of dependence whilst empowering the community's sense of self reliance. To assess our CSR performances, we have adopted a mechanism of social audit involving third party organizations (NGOs and Social Institutions). Local community based organizations (Self Help Group and Panchyats) and frequent visits by our senior managers. Provide us with additional value-added feedback.

Our internal monitoring of the projects is inclusive of the perceptions of the beneficiaries and villagers. After consolidating views and data from all our beneficiaries, we assess our performance. This guides us further to take corrective measures for future improvement.

Activities in India- Operating Facilities

Activities in India- Operating Facilities

Our CSR activities are concentrated in 660 villages and 10 urban slums, in proximity to our plants, across the country. Here is a snapshot of our work.

Health Care

- Medical camps:
- Mobile medical units and providing ambulance service to remote areas.
- 3,25,000 villagers in 2,563 medical camps for general health checkups
- Rural mobile medical van services for remote villages
- 70 patients given artificial limbs
- Health facilities:
- Setting up well-equipped and professionally manned health centres at several locations
- 5.25 lakh patients have been treated at virtually no cost in the company hospitals
- Regular health camps:
- Eye camps, 2,923 patients operated for cataract and intraocular lens fitting for better eye-sight
- Immunized 14,82,131 children against polio
- Institutional delivery for 75,342 women
- Adolescent health care covered 1,888 girls
- 24,500 villagers opted for planned families

Education

Balwadis:

- Providing for the primary education of 12,365 underprivileged children in year 2010
- Enrolled 7,535 children in the local schools

Adult Literacy:

- Providing formal and informal literacy classes and active support ot the government's mission to improve rural literacy rates, 4,600 people in FY2010

Merit Scholarship:

- Support Girl students for educational endeavours
- 5,875 students awarded merit scholarships
- Support Kasturba Gandhi Balika Vidyalaya for girl education

Sustainable Livelihood

The Aditya Birla Rural Technology Park (Muirpur, Uttar Pradesh, India):

- 290 programmes for 12,976 rural youth conducted in 2010-11. These related to repair and maintenance of diesel pump sets, electric and electronic goods, hand pumps, making bags, ropes, tailoring, knitting and cosmetics besides making of soft toys
- Training in crop diversification, floriculture demonstration, integrated pest management and post harvest have benefited 23,242 farmers.
- Installation of lift irrigation projects, construction of check dams, water channels and digging of wells, have helped 42,532 farmers.
-

The Yashogami Skills Training Centre (Radhanagari, Tarale, Maharashtra, India):

- Training women in skills such as making rexine bags, handicrafts, fashion design, tailoring, food processing, pottery, lamination, electronics assembly, zardozi, jewellery design, papier mache, rangolli, and fabric design.

Women Self Help Groups

- Programmes involve over 11,000 women from rural communities around Hindalco units: 2,000 Self Help Groups empower 24,000 women financially and socially
- Microcredit and micro-finance schemes, entrepreneurship building, oil-processing units, tailoring centres, horticulture and nutrition gardens, diesel and hand pump repair, vermi-compost production, mushroom cultivation, food processing
- Promoting dowryless marriages and widow re-marriages aided 231 poverty affected couples in 2010-11

Infrastructure

Providing Basic Amenities

- Ongoing community support in the form of better roads, potable water systems, biogas plants, building of community centres, animal sheds, construction of dry toilets, provision of street light and electricity, along with subsidizing houses, served the needs of over 2,10,634 people.
- To conserve water and support agriculture, 75 ponds and over a 115 check dams and bore wells were constructed.
- Rural sanitation process, collaboration with Government to construct dry toilets under Total Sanitation Campaign

Habit for Humanity

- Close partnership and building of 100 houses in Renukoot, Uttar Pradesh, mangement time and funds investment
- 105 villages that we have committed for conversion into model villages, 20 have been already transformed this year

Agricultural Support

Irrigation Schemes

- Land brought under irrigation schemes to better yeield and multi-cropping methods

Watershed Development

- Hydel towers, drainage canals, wells, check-dams, pedal pumps, and harvest tanks

Training

- Training in agricultural skills and appropriate farming methods improved the productivity of 40,000 farmers while water harvesting structures continue to support 35,000 families. Over 70,000 animals were immunized in animal husbandry camps.
- Aditya Birla Rural Technology Park at Renukoot, Uttar Pradesh supported people empowerment through capacity building. Within its campus is housed an Agricultural Research section, an Animal Husbandry and Veterinary hospital

Activities in India- New Projects, Expansion Projects

Setting up a new mining, smelting, or refining operation can be disruptive and a cause of concern to the local communities, particularly where resettlement, land rights or areas of spiritual value are involved. Hindalco has over the years developed industry practices in addressing such matters and strived towards effective means of minimising and mitigating negative impacts whilst gaining broad-based community support for our activities.

We have rigorously implemented a comprehensive Resettlement & Rehabilitation (R&R) plan in adherence to the India specific regulations such as the R&R Bill (2009) at our various expansion project locations.

Our Key Challenges

The rapid and accelerated change in the approach to CSR and the significant increased budget has thrown up numerous challenges. We are mindful of the uneven development pattern across the country that requires careful planning and analysis in designing a CSR project in the local context. We are aware of the complex social and environment issues that require working with all key stakeholders. As we step up the programmes, we are faced with acute deficiency of capacity in the local communities, local NGOs, and implementation partners.

In Sum – Our Board of Directors, our Management and all of our employees subscribe to the philosophy of compassionate care and to the upliftment of our rural societies.

Case Study 1:

Mahan Aluminium Project, Madhya Pradesh

The Mahan Aluminium Project acquired 1,299.44 hectares of land that resulted in the relocation of people (for Hindalco) in four villages, 1,628 households, and a population of 5,880 inclusive of ST/SC families (total 791).

Numerous challenges encountered consisted of factors like minimum infrastructure availability in the near-by area of R & R, minimal common area (suitable construction land and water), convincing the local populace for opting for 'Pucca' housing, their beliefs and superstition. Confidence building measures among Project Affected People (PAP) proved helpful. We engaged in an inclusive dialogue process and conducted frequent public hearings (once a week) with the PAP and local government administration representatives, and the local Tahsildar, to resolve issues whilst maintaining cordial relationship with women folk for effective communication and results. Solving issues on-site like provision of ID Cards, and compensation were also addressed and taken care of.

In line with the requirement of the project, the outcome was satisfactory. As of August 31, 2011 over 854 families moved over to their new habitats.

Highlights of R &R Agreement

- 60'x90' Plot & Fully constructed house or Rs. 2.5 Lakhs in lieu of plot and house
- Every individual above the age of 18 years is considered a separate family
- R&R assistance of Rs.15000/- and Transportation allowance Rs.1000/- for each family at the time of shifting excluding free transportation for all household items, khapra, etc.
- Widow, Old Age and Differently abled pension on monthly basis
- Scholarship for each displaced student along with free education at R&R school
- Free Medical facility at R&R Colony
- PHC, School with classes up to 10th class, Community centre, Market Place, Drinking water facility, Spiritual place, Road & Street Light, Anganwadi, Fair price shop, etc. are various infrastructure facilities to be provided at R&R Colony
- Employment opportunity as per skill & education
- Skill development training (ITI etc.) for job & self employment
- Sustenance allowance of 26 days minimum agricultural wages for a year for each family (Currently Rs.2975/month)
- Plantation

Initiatives

- School building for 5th to 10th Cl
- Hospital Building is ready and start from this year
- Drinking water supply through overhead tank and pipeline
- Community Centre and spiritual places
- Market place is under construction
- Drain and Road
- Street light
- Grazing place
- Crematorium place
- Play ground



Case Study 2 : Aditya Alumina and Aluminium, Orissa

The Aditya Alumina project consists of total of 45 Displaced People (DPs). The number of houses handed over for occupation currently is at 44 out of which 39 DPs have moved to R&R colony, while 2 DPs have opted for self-relocation. The number of demolished houses of DPs total to 20.

Health

- 23 health camps have been conducted from April 2010- June 2011 where 4,400 villagers received treatment; health check ups and free medicine.
- World Aids Day was celebrated on 1st December 2010 which was attended by more than 250 villagers.

Supplementing Water Sources

- Drinking water through a tanker is being supplied to all the 11 project affected villages during summer with the involvement of major vendors as no ground water is available during summer.
- 16 nos. of pond have been renovated/excavated during the period from April 2010 to June 2011
- 8 nos. of bore wells have been installed / repaired from April 2010 to June 2011 for excavation of new pond and renovation of existing Ponds to meet the water problems of the affected villagers.

Education

- 12 additional class rooms have been provided in 4 schools in the project affected villages and the construction of 3 rooms is under progress.
- School uniform has been supplied to poor school students.
- An awareness programme on “Health & Hygiene” has been conducted for the school children.

Women Empowerment

- Ongoing guidance is being provided to 18 women SHGs in the project affected villages
- For capacity building, the process is on to form two more SHGs with the involvement of villagers.
- A Training program on “Empowering SHGs” was organized with the support of a external Resource person which was attended by 35 participants.
- On an average one meeting per month is being conducted with the SHG.
- We have engaged a NGO SFA to work for the society even in a better manner.

Plantation

- In 2010, 4,500 saplings were planted and in year 2011 , 15,000 saplings are already planted and an additional 10,000 is proposed to be planted.
- Proposal to plant 6 lakhs saplings in next 5 years; and a nursery is being developed to raise 1.2 lakh saplings per year.

Augmentation of infrastructure

- 7 km of CC road and 1.5 Km (internal) CC road have been constructed for the use of villagers.
- The Approval has been given for construction of a Worship structure, as the existing one was inside the project area.
- We will construct another one & half Km. murrum/CC road.

Resettlement & Rehabilitation

- 63 houses were ready at Pandaloi R & R Colony for villagers from village Dhudkabahal. The displacement process is completed after receiving approval of the government.
- Construction of 84 houses is under progress at Pandoloi R &R Colony for shifting of core plant DPs.
- 171 nos. of houses under construction at Ludhapali R & R Colony for at Ash-pond area.

Awareness in Society

- Celebrating and creating awareness about the World Environment Day.
- Planted upto 5000 trees with the active participation of employees and villagers.

ANNEXURES

- Awards
- Memberships
- Abbreviations
- Raw Materials
- GRI Index
- About the report


On the occasion of
The Twelfth International Business Horizon
INBUSH 2010
Hindalco Industries Ltd.
Amity Corporate Excellence Award

Awards

Area	Company	Awards received
Environmental resource and conservation	Hindalco India (Renukoot)	Greentech Environment Excellence Gold Award 2010 in the metals sector for its efforts towards environment management by Greentech Foundation, New Delhi
	Hindalco India (Dahej)	Greentech Environment Excellence Gold Award
	Hindalco India (Renusagar)	Greentech Environment Excellence Gold Award
	Hindalco India (Renusagar)	Golden Peacock Environment Management Award, special commendation
	Hindalco India (Hirakud Power Division)	Greentech Gold Award 2010 in thermal power sector for outstanding achievement in environment management by Greentech Foundation, New Delhi
	Hindalco India (Muri)	National Award for Excellence in Water Management 2010, 'Beyond the Fence' category, for the indigenous work being done by the unit, outside the fence as a corporate citizen and fulfilling its corporate responsibilities
	Novelis	Silver Gaia Award at Big 5 international building and construction exhibition in Dubai, recognising the environmental benefits of the company's pre-painted cladding sheet
	Novelis	'The Return on Environment Award' from General Electric
Energy	Hindalco India (Renukoot)	National Energy Conservation Award (second prize) 2010, in the metals sector, presented by the Ministry of Energy, Government of India
	Hindalco India (Renusagar)	CII Energy Conservation Award, certificate of appreciation
	Hindalco India (Hirakud (Smelter))	Certificate of appreciation for commendable efforts towards energy conservation, presented by CII, Kolkata
CSR	Hindalco India (Renukoot)	Golden Peacock Award for Corporate Social Responsibility
	Hindalco India (Renukoot)	Amity Corporate Excellence Award for Corporate Social Responsibility by Amity International Business School
	Novelis	Corporate Social Responsibility Award for Novelis subsidiary Alcom from StarBiz-ICR in Malaysia
Human Resource Development (HRD)	Hindalco India (Taloja)	Best HR Practices by National Institute of Personnel Management, Raigad Chapter
	Hindalco India (Renukoot)	NIPM Gold Award for best HR practices
	Hindalco India (Renukoot)	Greentech HR Excellence Silver Award for excellence in training
	Hindalco India (Renukoot)	Five Workmen received the prestigious Vishwakarma Rashtriya Purashkar by the Ministry of Labour, Govt. of India
	Hindalco India (Renukoot)	Five Workman received the prestigious Prime Ministers' Shram Awards - 2010
Safety	Hindalco India (Dahej)	Greentech Safety Silver Award
	Hindalco India (Renusagar Power Division)	Commendation for Safety Innovation Award 2010 by the Institution of Engineers (India)
	Hindalco India (Renusagar)	Greentech Safety Gold Award 2011 in power sector for outstanding achievement in safety management by Greentech Foundation, New Delhi
	Hindalco India (Renukoot)	Greentech Gold Safety Award for occupational health and safety management in the mining and metals sector by Greentech Foundation, New Delhi
	Hindalco India (Birla Copper)	Greentech Silver Safety Award 2010 for occupational health and safety management in the mining and metals sector by the Greentech Foundation, New Delhi

Area	Company	Awards received
Safety	Novelis	Award for outstanding EHS performance in Sierre, Switzerland, from the Swiss safety organisation SUVA
	Novelis	Safety Awards from Liberty Mutual: five Gold Awards and one Silver Award for Loss Control in North America
Manufacturing	Hindalco India (Renukoot)	Indian Manufacturing Excellence Award, Silver Certificate by The Economic Times and Frost and Sullivan
	Novelis	Manufacturing Excellence Award in North America from Liberty Mutual
Exports	Hindalco India (Renukoot)	Best Exporter Award by Container Corporation of India for contributing to India's economic progress through significant volume of exports
Quality	Hindalco India (Renukoot)	Gold Award to QC teams at the International Quality Circle Competition
	Hindalco India (Renukoot)	Golden Peacock National Quality Award
	Hindalco India (Renukoot)	Par Excellence and Excellence Awards at the National Quality Circle Convention
	Hindalco India (Hirakud)	Excellence Awards at the National Quality Circle Convention
	Hindalco India (Hirakud Power)	Silver and Bronze Awards to the quality control (QC) team at the International Quality Circle Competition
	Hindalco India (Dahej)	Runners-up awards at the National Quality Circle Convention
Supply chain	Hindalco India (Taloja Rolling plant)	An award cum- recognition from TATA TOYO Radiators Limited for helping them in their import substitution (high impact localisation--around 32 crore is their purchase per year) of one of their key supplies.
	Novelis	Impress Global Supplier Award from Impress Group
	Novelis	Supplier Excellence Award for Innovation from Rexam
	Novelis	'Zero Defect' Supplier Quality Award from Rheem Manufacturing
	Novelis	Excellent Business Partner, Green Procurement Partner and Long Business Partner awards from OYL Manufacturing (Alcom)
	Novelis	Top Supplier Award from Bombardier Recreational Products
	Novelis	Preferred Supplier to Fujifilm's Graphic Systems Division and Supplier of the Year in North America
	Novelis	EAFA (European Aluminium Foil Association) Alufoil 2011 trophy

Memberships

1. International Aluminium Institute (IAI). This is a Global Forum of the world's Aluminium Producers that aims to demonstrate its responsibility in relation to all key sustainability issues affecting the aluminium industry - environmental, health, safety and recycling.
2. European Aluminium Association – Novelis is a member of this Society
3. American Ceramic Society
4. The International Committee for the Study of Bauxite, Alumina and Aluminium
5. Aluminium Association of India (AAI) - Hindalco – India – Aluminium Business is the Member of this Association.
6. International Copper Promotion Council India (ICPCI). This is the Indian centre of the International Copper Association (ICA), and support their principle objective of promoting beneficial usage of copper addressing concerns related to safety, health, environment and energy savings.
7. Indian Copper Development Centre (ICDC), a non-trading and non-profit making organization.
8. Metal Packaging Europe, Europe
9. Confederation of Indian Industry, India
10. FICCI, India
11. All India Management Association
12. Indian Chamber of Commerce
13. TERI, Business Council for Sustainability Development, India
14. National Safety Council, India

Abbreviations

AAI	Aluminium Association of India
ABML	Aditya Birla Minerals Limited
ABSTC	Aditya Birla Science Mumbai & Technology Centre
AIMM	Australasian Institute of Mining and Metallurgy
APSRTC	Andhra Pradesh State Road Transport Corporation
ASCI	Advertising Standards Council of India
BEE	Bureau of Energy Efficiency
BESCO	Bharathiya Electric Steel Company
BNPL	Birla Nifty Pty Ltd
BRDC	Belgaum Research and Development Centre
CART	Collaborate – Alleviate – Resolve - Together
CCL	Centre for Creativity Leadership
CDM	Clean Development Mechanism
CII	Confederation of Indian Industry
CO	Carbon monoxide
CO2	Carbon dioxide
CRM	Customer Relationship Management
CSMM	Customer Satisfaction Management and Measurement
CSR	Corporate Social Responsibility
CTC	Central Technical Cell
CY	Calendar year
DAP	Di Amonium Phosphate
DAC	Development Assessment Centre
DEPB	Duty Entitlement Pass Book
DMS	Dry Mud Stacking
DP	Displaced People
EAFA	European Aluminium Foil Association
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
ESP	Electrostatic Precipitator
EUR	Euro
ETP	Effluent Treatment Plant
FICCI	Federation of Indian Chambers of Commerce & Industry
FO	Furnace Oil
FRP	Flat Rolled Products
FY	Financial year
GHG	Greenhouse Gas
GJ	Giga Joules
GRI	Global Reporting Initiative
GSRTC	Gujarat State Road Transport Corporation
Ha	hectare
HIC	Hindalco Innovation Centre
HDPE	High Density Poly Ethylene
HR	Human resource
IAI	International Aluminium Institute
ICDC	Indian Copper Development Centre
ICPCI	International Copper Promotion Council India
IDP	Individual Development Programme
IIT	Indian Institute of Technology
IMRB	Indian Market Research Bureau
IMS	Integrated management system
INR	Indian Rupee
ISO 9001	Quality management systems — Requirements
ISO-14001	Environmental management systems — Requirements with guidance for use
ISO/TS 16949	Quality management systems — Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organizations
JV	Joint venture

KFA	Key Focus Areas
KRA	Key Result Area
KTPA	Kilo tonne per annum (1000 tonne per annum)
LME	London Metal Exchange
m3	Cubic meter
MCDR	Mineral Conservation and Development Rules 1988
MSRTC	Maharashtra State Road Transport Corporation
MT	Metric tonne
mtCO2e	Million tonne of carbon dioxide equivalent
MTPA	Metric tonne per annum
MW	Mega Watt
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
NCO	Nifty Copper Operation
NGO	Non-governmental organization
NIPM	National Institute of Personal Management
NORPAR	Normal Paraffin
NOx	Oxides of Nitrogen such as nitrogen dioxide
NPK	Sodium, Phosphorus and Potassium
OHSAS 18001	Occupational Health and Safety Assessment Series (standards for occupational health and safety management system)
PAP	Project Affected People
PAT	Perform
PFC	Per Fluoro Carbon
POP	Plaster of Paris
PSF	
QC	Quality Control
QCDIP	Quality, Cost, Delivery, Innovation and Productivity
RDSO	Research Designs and Standards Organisation
RE	Renewable Energy
REC	Renewable Energy Certificate
RMP	Red Mud Pond
RO	Reverse Osmosis
RPO	Renewable Purchase Obligation
R&R	Rehabilitation and Resettlement
SEBI	Securities and Exchange Board of India
SHG	Self Help Group
SOx	Oxides of sulphur such as sulphur dioxide
SPL	Spent Pot Lining
TERI	The Energy and Resources Institute
TRDC	Taloja Research and Development Centre
tCO2e	Tonne carbon dioxide equivalent
TWP	The Works Partnership
USD	United States Dollar
UNFCCC	United Nations Framework Convention on Climate Change
VDC	Village Development Committees
WCM	World Class Manufacturing

Raw Materials at Hindalco-India-Aluminium, Hindalco-India-Copper, Novelis and ABML

Sr. No.	Description	2009-10	2010-11
1	Bauxite, MT per Annum	1360126	1135775
2	Aluminium Fluoride, MT per Annum	8425	9043
3	Caustic Soda, MT per Annum	178496	187795
4	Calcined Peroleum Coke, MT per Annum	156872	159275
5	Pitch, MT per Annum	41191	49858
6	Copper Concentrate, MT per Annum	1176075	1177490
7	Rock Phosphate, MT per Annum	271318	344355
8	Ammonia, MT per Annum	41191	49858
9	Coal (For generation of Steam), MT per Annum	9730854	9730685
10	Furnace Oil (Fuel Oil, LDO, HSD), MT per Annum	210481	213702
11	Steam, purchased, MT per Annum	243341	225797
12	Aluminium, MT per annum	NA	2988000
13	Alumina, MT per Annum	NA	158000
14	Alloying Elements, MT per annum	NA	36000
15	Coatings, MT per annum	NA	24000
16	Paper, MT per annum	NA	21000
17	ORE tonnes (mined at site)	2131227	2193298
18	Grinding media Ball mill	1387	1283
19	Grinding media SAG mill	2521	1985
20	Caustic	1513	790
21	Lime	2029	2767
22	Cement/Mincem	63427	63427
23	Emulsion/ANFO (explosives)	1342	1113

Note 1 Item Nos. 1 to 11 are for Hindalco- India - Aluminium and Hindalco-India - Copper
Note 2 Item Nos. 12 to 16 are for Novelis. Note 3 : Item Nos. 17 to 23 are for ABML

GRI Index

1. Strategy and Analysis			
Profile Disclosure	**Description**	**Status**	**Report Section**
1.1	Statement from the most senior decision-maker of the organization.		Message from Chairman (Page 4), Aditya Birla Group, Message from Managing Director, Hindalco (Page 6)
1.2	Description of key impacts, risks, and opportunities.		"a) Mission, Vision and Values (Page 23) b) Approach to Sustainability" (Page 23)
2. Organizational Profile			
2.1	Name of the organization.		Hindalco Industries Limited
2.2	Primary brands, products, and/or services.		Hindalco at a glance – Operations (Page 10)
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.		Hindalco at a glance – Operations (Page 10)
2.4	Location of organization's headquarters.		
2.5	Number of countries where the organization operates		Inside cover page
2.6	Nature of ownership and legal form.		Hindalco at a glanbce (Page 10)
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).		Inside cover page
2.8	Scale of the reporting organization.		Inside cover page, Hindalco at a glance (Page 10), Economic performance (Page 36)
2.9	Significant changes during the reporting period regarding size, structure, or ownership.		None
2.10	Awards received in the reporting period.		Annexure – Awards (Page 79)
3. Report Parameters			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.		Annexure - About the Report (Page 93)
3.2	Date of most recent previous report (if any).		Inside cover page
3.3	Reporting cycle (annual, biennial, etc.)		Annual and coinciding with our financial reporting period (Page 93)
3.4	Contact point for questions regarding the report or its contents.		Back page
3.5	Process for defining report content.		Approach to Sustainability - materiality assessment (Page 25)
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.		Inside cover page
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).		Inside cover page
3.8	Basis for reporting on joint ventures, subsidiaries, etc		Annexure - Report Scope and Boundary (Page 93)
3.9	Data measurement techniques etc		Annexure - Data measurement techniques (Page 93)
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g.,mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).		None
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.		Not Applicable

3.12	Table identifying the location of the Standard Disclosures in the report.		-
3.13	Policy and current practice with regard to seeking external assurance for the report.		We would like to enhance the quality and credibility of our sustainability communication in future by aspiring for a higher GRI level as well as seeking external assurance on the sustainability report
4. Governance, Commitments, and Engagement			
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.		Our Governance Framework - Chair of the highest governance body, Board of directors (Page 18)
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.		No. (Page 18)
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.		
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.		Governance - Shareholder mechanism (Page 20), Employee Communication (Page 21)
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).		Executive Compensation (Page 19)
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.		Our Governance Framework - Avoidance of Conflict of Interest (Page 20)
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.		Our Governance Framework-Board of Directors (Page 18)
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.		Mission Vision and Values (Page 8)
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.		Our Governance Framework - Procedures for governance of sustainability issues by the board (Page 19)
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.		Our Governance Framework - Performance of the highest governance body (Page 19)
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.		"Our Governance Framework - Precautionary Approach, Impact, Risks and Opportunities" (Page 21)

4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.		-
4.13	Memberships in associations etc		Annexure - Membership in associations (Page 80)
4.14	List of stakeholder groups engaged by the organization.		Engaging with stakeholders (Page 25)
4.15	Basis for identification and selection of stakeholders with whom to engage.		(Page 25 to Page 27)
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.		(Page 25 to Page 27)
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.		(Page 25 to Page 27)
G3 DMA	**Description**		**Hindalco Response**
DMA EC	Disclosure on Management Approach EC		"Our economic performance is reviewed on a quarterly basis at the board level. We also adhere to established policies on Corporate Social Responsibility, Technology and Innovation, Environment and Energy in our operations and investments thereby addressing the concerns and expectations of our stakeholders and accounting for any environmental and social externalities in our operations and investment. The various topics under this management approach are detailed in the report sections as • Financial Performance • Impact of low carbon regime • Technology and Innovation • Community dialog and empowerment " (Page 36)
DMA EN	Disclosure on Management Approach EN		Section - Environmental Stewardship (Page 44)
DMA LA	Disclosure on Management Approach LA		People sustainability, Occupational Health and Safety
DMA HR	Disclosure on Management Approach HR		Employee Rights at workplace (Page 60, Page 66) , Community Dialog and Engagement (Page 71)
DMA SO	Disclosure on Management Approach SO		Community Empowerment (Page 71)
DMA PR	Disclosure on Management Approach PR		Product and Material Stewardship (Page 37)
Economic			
Economic performance			
EC1	Direct economic value generated and distributed,	F	Financial Performance (Page 36)
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	F	Impact of Low Carbon Regime (Page 38)
EC3	Coverage of the organization's defined benefit plan obligations.	F	People Sustainability - Employee Compensation and benefits (Page 63)
EC4	Significant financial assistance received from government.	P	Financial Incentives from the Government (Page 37)

Market presence			
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	N	-
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	N	-
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	N	-
Indirect economic impacts			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	P	Community empowerment (Page 75)
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	N	-
Environmental			
Materials			
EN1	Materials used by weight or volume.	F	Annexure - Material Consumption (Page 83)
EN2	Percentage of materials used that are recycled input materials.	F	Environment Stewardship - Recycling of Aluminium (Page 55), Case study: Novelis, Recycling of Copper (Page 55)
Energy			
EN3	Direct energy consumption by primary energy source.	F	Environment stewardship - Direct energy (Page 47 & Page 48)
EN4	Indirect energy consumption by primary source.	P	Environment stewardship - Indirect energy (Page 49)
EN5	Energy saved due to conservation and efficiency improvements.	F	Environment stewardship - Selected Initiatives (Page 48)
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	N	-
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	N	-
Water			
EN8	Total water withdrawal by source.	F	Environment stewardship - Water uptake and recirculation (Page 50)
EN9	Water sources significantly affected by withdrawal of water.	N	-
EN10	Percentage and total volume of water recycled and reused.	F	Environment stewardship - Conservation of water (Page 50 & Page 51)
Biodiversity			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	N	-
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	N	-
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	F	Environment stewardship - Managing Mining Environment (Page 58)
EN13	Habitats protected or restored.	P	Environment stewardship - Land Resources (Page 57)

EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	N	-
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.	N	-
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	N	-
Emissions, effluents and waste			
EN16	Total direct and indirect greenhouse gas emissions by weight.	F	Environment stewardship - Climate Change: Towards reduction of carbon footprint (Page 46)
EN17	Other relevant indirect greenhouse gas emissions by weight.	P	(Page 49)
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	F	(Page 48)
EN19	Emissions of ozone-depleting substances by weight.	N	-
EN20	NOx, SOx, and other significant air emissions by type and weight.	F	Environment stewardship - Air Emissions (Page 56)
EN21	Total water discharge by quality and destination.	F	Environment stewardship - Conservation of water (Page 51 & Page 52))
EN22	Total weight of waste by type and disposal method.	F	Environment stewardship - Managing our waste (Page 52)
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks.	N	-
EN23	Total number and volume of significant spills.	F	Environment stewardship – Spills (Page 55)
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	N	-
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	N	-
Products and services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	F	Environment stewardship – Energy (Page 46 - 49)
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	N	-
Compliance			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	F	Environmental Stewardship - Investing for Environmental protection (Page 46)
Transport			
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	P	Environmental Stewardship - Message from Chemical Business Head (Page 52)
Overall			
EN30	Total environmental protection expenditures and investments by type.	P	Environmental Stewardship - Investing for Environmental protection (Page 46)

Social: Labor Practices and Decent Work			
Performance Indicator	**Description**		**Hindalco Response**
Employment			
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	F	People Sustainability - Introduction, Employee Profile (Page 61 & Page 62)
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	N	-
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	F	People Sustainability - Employee compensation and benefits (Page 63)
LA15	Return to work and retention rates after parental leave, by gender.	N	-
Labor/management relations			
LA4	Percentage of employees covered by collective bargaining agreements.	F	People Sustainability - Employee rights at workplace (Page 65)
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	F	People Sustainability - Employee rights at workplace (Page 65)
MM4	Number of strikes and lock-outs exceeding one week's duration, by country.	F	Hindalco at a glance – Operations (Page 14)
Occupational health and safety			
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	N	-
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	F	Occupational Health and Safety - Monitoring system for health and safety (Page 69)
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	N	-
LA9	Health and safety topics covered in formal agreements with trade unions.	F	Occupational Health and Safety – Introduction Approach (Page 67
Training and education			
LA10	Average hours of training per year per employee by gender, and by employee category.	P	People Sustainability - Training, Learning, Initiative (Page 64)
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	N	-
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	F	People Sustainability - Performance management process (Page 62)
Diversity and equal opportunity			
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	N	-

Equal remuneration for women and men			
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	F	People Sustainability - Compensation and benefit scheme (Page 63)
Social: Human Rights			
Investment and procurement practices			
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	N	-
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	N	-
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	F	Governance - Code of Conduct (Page 21)
Non-discrimination			
HR4	Total number of incidents of discrimination and corrective actions taken.	N	-
Freedom of association and collective bargaining			
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	N	-
Child labor			
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	F	People Sustainability - Employee rights at workplace (Page 65)
Forced and compulsory labor			
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	N	-
Security practices			
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	N	-
Indigenous rights			
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.	N	-
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	N	-
Assessment			

HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	N	-
Remediation			
HR11	"Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms."	N	-
Social: Society			
Local communities			
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	F	Community Empowerment - Dialog and Engagement (Page 73), Environmental Stewardship - Land Resources (Page 57)
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.	N	-
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.	N	-
Artisanal and small-scale mining			
MM8	Number (and percentage) or 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.	N	-
Resettlement			
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	N	-
Closure planning			
MM10	Number and percentage of operations with closure plans.	N	-
SO9	Operations with significant potential or actual negative impacts on local communities.	N	-
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	N	-
Corruption			
SO2	Percentage and total number of business units analyzed for risks related to corruption.	N	-
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	N	-
SO4	Actions taken in response to incidents of corruption.	N	-
Public policy			
SO5	Public policy positions and participation in public policy development and lobbying.	P	Governance - Sustainability Framework setting and Public Policy advocacy at the group level (Page 19)
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	N	-

Anti-competitive behavior			
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	N	-
Compliance			
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	N	-
Social: Product Responsibility			
Materials Stewardship	**description**		
MM11	Programs and progress relating to materials stewardship.	P	Economic Performance - Product and material Stewardship (Page 37)
Customer health and safety			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	F	Economic Performance - Product and material Stewardship (Page 37)
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	N	-
Product and service labelling			
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	N	-
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	N	-
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	F	Engaging with our stakeholders – Customers (Page 27)
Marketing communications			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	N	-
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	N	-
Customer privacy			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	N	-
Compliance			
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	N	-

About This Report

This is our first sustainability report. We looked at our mission, vision, values along with policies, strategy and future vision to come up with a detailed analysis of the performance of the Hindalco Industries Limited and its subsidiaries over the past financial year 2010-11. Please refer to following sections for more information about the report's scope and boundaries, as well as our plans for future reporting.

The Global Reporting Initiative

We have aligned this report to conform to the Global Reporting Initiative (GRI) G3.1 Sustainability Reporting Guidelines and the GRI Mining and Metals sector supplement. The GRI defines three Application Levels for sustainability reports. We have assessed this report against the GRI's requirements and believe it complies with a **B Application Level.**

We did not seek third party assurance of this report; however, we follow international standards and best practices , to the possible extent, to collate our data. Some of the data in this report has been subject to various forms of internal and third-party verification. For example, the financial data was audited for disclosure in the Annual Report. the Annual Report and some environmental data was reported to regulatory authorities.

Report scope, boundary

We have utilized the GRI boundary protocol to define our report boundary with the objective of covering our entities in the value chain. The entities covered are those over which we have control and /or significant influence and/or which have significant impacts in context of sustainability.

Accordingly our report boundary includes the operating units under Hindalco Industries Limited in India for both aluminum and copper business and our subsidiaries, Novelis Inc and Aditya Birla Minerals Limited. Novelis Inc is in the process of publishing its First sustainability report. This has been duly referenced in this report. We have also included Utkal Alumina International Limited under our aluminum business project performance and Dahej Harbour and Infrastructure Limited under our Copper business performance.

While defining the boundary for this report, we have in principle followed the Report Boundary guidance to arrive at the boundary of the report. We have exercised control or significant influence both in and through its relationships with our subsidiaries in upstream and downstream of the value chain.

Data measurement techniques, assumptions, calculations, collection

At Hindalco, we have an integrated management system (IMS) in place at our operating units that addresses the sustainability performance indicators and corresponding data recordings. Please refer to the section on Environment for details of the same, Based on international standards on quality, environment, health & safety and social aspects, data on both environmental and social performance indicators are subjected to set of defined procedures, internal control system, and checking. We also take guidance from international institutions in aligning our analysis and metrics with international peer benchmarks. Data reported in this report is hence consistent with regulatory and voluntary disclosure requirements as seen across the board. We have also highlighted any assumptions and calculations in the section itself for better readability of the report.

Reporting Period and Future Reporting

Other than relevant baseline data or context from preceding years where specified, the information contained in this report covers the period April 1, 2010, to March 31, 2011, which is Hindalco' 2011 fiscal year (FY11).
We have committed to publicly reporting our economic, environmental and social sustainability performance on an annual basis.

Report feedback

We seek to develop and improve on our reporting process and welcome your feedback on this report. This would provide valuable inputs to our future reporting exercises:

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HINDALCO

IN THE TRUE SPIRIT OF SUSTAINABILITY, ANY FEEDBACK THAT CAN HELP MAKE THE ORGANISATION'S SUSTAINABILITY REPORT BETTER IS GENUINELY APPRECIATED. IF YOU HAVE ANY SUGGESTIONS, FEEDBACK OR EVEN JUST A QUERY, PLEASE CONTACT:

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