



## HINDALCO INDUSTRIES LIMITED

**Registered Office:** "Century Bhavan", Third Floor, Dr. Annie Besant Road, Worli, Mumbai - 400 030.

**NOTICE** is hereby given that the **Fifty-Fourth** Annual General Meeting of the Shareholders of Hindalco Industries Limited will be held at Ravindra Natya Mandir, P. L. Deshpande Maharashtra Kala Academy, Prabhadevi, Mumbai-400025 on **Tuesday**, the **10th September, 2013** at **2.30 P.M.** to transact, with or without modification(s) as may be permissible, the following business:

1. To receive, consider and adopt the Audited Balance Sheet as at 31st March, 2013 and Profit and Loss Account for the year ended on that date, the Report of the Directors and the Auditors thereon.
2. To declare and sanction the payment of Dividend on equity shares of the Company for the financial year 2012-2013.
3. To appoint a Director in place of Mr. Kumar Mangalam Birla, who retires from office by rotation and being eligible, offers himself for re-appointment.
4. To appoint a Director in place of Mr. A. K. Agarwala, who retires from office by rotation and being eligible, offers himself for re-appointment.
5. To appoint Auditors of the Company to hold office from the conclusion of this Meeting until the conclusion of the next Annual General Meeting of the Company and to fix their remuneration and for the purpose, to pass the following Resolution, which will be proposed as an Ordinary Resolution:

**"RESOLVED** that pursuant to the provisions of Section 224 and other applicable provisions, if any, of the Companies Act, 1956, Messrs Singhi & Company (Registration No. 302049E), Chartered Accountants, Kolkata, the retiring Auditors, be and is hereby re-appointed as the Auditors of the Company to hold office from the conclusion of this Meeting until the conclusion of the next Annual General Meeting of the Company and that the Board of Directors of the Company be and is hereby authorized to fix their remuneration for the said period and reimbursement of actual out of pocket expenses, as may be incurred in the performance of their duties."

6. To appoint a Director in place of Mr. Jagdish Khattar, who was appointed to fill up the casual vacancy on the Board caused by the demise of Mr. E.B. Desai, under Article 141 of the Articles of Association of the Company and who holds office under the said Article and Section 262 of the Companies Act, 1956 (hereinafter referred

to as the "Act") as a Director, only up to the date of this Annual General Meeting, and in respect of whom, the Company has received a notice in writing alongwith a deposit of ₹ 500/- under Section 257 of the Act, from a member signifying her intention to propose him as a candidate for the office of Director and in that behalf, to consider and if thought fit to pass the following Resolution, which will be proposed as an Ordinary Resolution :

**"RESOLVED** that pursuant to the relevant provisions of the Articles of Association of the Company and the Companies Act, 1956, including interalia, Section 257, Mr. Jagdish Khattar be and is hereby elected and appointed as a Director of the Company, liable to retire by rotation."

7. To consider and if thought fit, to pass the following resolution, which will be proposed as a Special Resolution:

**"RESOLVED** that in terms of Article 162 of the Articles of Association of the Company and pursuant to the provisions of Sections 198, 269, 309, 311 and all other applicable provisions, if any of the Companies Act 1956, read with Schedule XIII and all other applicable guidelines for managerial remuneration issued by the Central Government from time to time, the Company hereby approves the reappointment of Mr. D. Bhattacharya as the Managing Director of the Company for a period of five years with effect from 30<sup>th</sup> September, 2013, on the terms as to remuneration and otherwise as set out hereunder and with liberty to the Board (which term shall be deemed to include the Committee, if any, constituted by the Board from time to time) to alter the said terms and conditions in such manner as may be agreed to between the Board and Mr. D. Bhattacharya in the best interests of the Company but subject to the restrictions, if any, contained in the Companies Act, 1956 and Schedule XIII to the said Act or otherwise as may be permissible at law.

Terms and Conditions of Appointment:

### (1) Period

Five years w.e.f. 30<sup>th</sup> September, 2013

### (2) Salary

Basic Salary as may be decided by the Board of Directors of the Company from time to time, subject however to a ceiling of ₹ 75,00,000/- (Rupees Seventy Five Lakhs only) per month.

- (3) All other terms and conditions as approved by the shareholders in the meeting held on 18<sup>th</sup> September, 2009 and 23<sup>rd</sup> September, 2011 will remain same.

**RESOLVED FURTHER** that:

- (a) in the event of loss or inadequacy of profits in any Financial Year, Mr. D. Bhattacharya, shall, subject to the approval of the Central Government, if any required, be paid remuneration by way of Salary and Perquisites as specified above, subject to the restrictions, if any, set out in Schedule XIII of the Companies Act, 1956, from time to time.
- (b) So long as Mr. D. Bhattacharya functions as Managing Director of the Company, he shall not be subject to retirement by rotation and shall not be paid any sitting fees for attending the meetings of the Board or any Committee(s) thereof.

**FURTHER RESOLVED** that pursuant to the provisions of Section 314(1) of the Companies Act, 1956, Mr. D. Bhattacharya may be holding any office or place of profit by his being director of the Company's subsidiaries/Joint ventures, approval be and is hereby granted to Mr. D. Bhattacharya to accept sitting fees/directors' fee or such other remuneration for attending the meetings of the Board of Directors or committees of such subsidiary companies as may decided by the Board of such subsidiaries, wherever he is member of the Board.

For the purpose of giving effect to the above Resolution, the Board of Directors of the Company be and is hereby authorized to do all such acts, deeds and things as are necessary or desirable and to settle any question or difficulty that may arise, in such manner as it may deem fit, from the time to time."

8. To consider and if thought fit, pass the following resolution, which will be proposed as a Special Resolution:

**"RESOLVED** that pursuant to the relevant provisions of the Articles of Association of the Company (hereinafter referred to as the "Articles") and the Companies Act, 1956 (hereinafter referred to as the "Act") including, inter alia, Sections 257 and 260, Mr. Satish Pai be and is hereby elected and appointed as a Director of the Company, not liable to retire by rotation.

**RESOLVED FURTHER** that in terms of Article 166 of the Articles and pursuant to the provisions of Sections 198, 269, 309, 311 and all other applicable provisions, if any of the Act, read with Schedule XIII and subject to approval of the Central Government, as may be necessary, and all other applicable guidelines for managerial remuneration issued by the Central Government from time to time, the Company hereby approves

the appointment of Mr. Satish Pai as the Whole time Director of the Company for a period of five years with effect from 13<sup>th</sup> August, 2013 on the terms as to remuneration and otherwise as set out hereunder and with liberty to the Board (which term shall be deemed to include the Committee, if any, constituted by the Board from time to time) to alter the said terms and conditions in such manner as may be agreed to between the Board and Mr. Satish Pai in the best interests of the Company but subject to the restrictions, if any, contained in the Companies Act, 1956 and Schedule XIII to the said Act or otherwise as may be permissible at law:

**Terms & Condition of Appointment**

**(1) Period**

Five years w.e.f. 13th August, 2013.

**(2) Salary:**

- a) Basic Salary ₹ 37,50,000/- (Rupees Thirty Seven Lakhs Fifty Thousand only) per month, with such increments as may be decided by the Board of Directors of the Company from time to time, subject however to a ceiling of ₹ 58,00,000/- (Rupees Fifty Eight Lakhs only) per month.
- b) Special Allowance of ₹ 11,27,330/- (Rupees Eleven Lakhs Twenty Seven Thousand Three Hundred and Thirty only) per month, with such increments as may be decided by the Board of Directors of the Company from time to time, subject however to a ceiling of ₹ 40,00,000/- (Rupees Forty Lakhs only) per month provided that this allowance will not be taken into account for calculations of benefits such as Provident Fund, Gratuity, Superannuation and Leave Encashment.
- c) Variable Pay - Performance Bonus linked to achievement of targets, as may be decided by the Board of Directors subject to a maximum of ₹ 8,00,00,000/- (Rupees Eight Crores only) per annum.
- d) Long-term Incentive Compensation (LTIC) including Stock Option Plan, if any, from the Company or its subsidiaries as per the Scheme applicable to the Executive Directors and/or Senior Executives of the Company and/or its Subsidiaries and/or any other Incentive applicable to Senior Executives of the Company/Aditya Birla Group, in such manner and with such provisions as may be decided by the Board, considering the above.

**(3) Perquisites:**

- a) Housing: Company provided (furnished/unfurnished) accommodation and reimbursement of other expenses relating to house maintenance as per the

rules of the Company or House Rent Allowance of equivalent value, in lieu of Company provided accommodation.

- b) Medical Expenses: Reimbursement of expenses incurred for self and dependant family at actuals (including domiciliary and medical expenses and insurance premium for medical and hospitalization policy, as applicable).
- c) Leave Travel Expenses: For self and family in accordance with the Rules of the Company.
- d) Two Cars for use of Company's business.
- e) Company's contribution towards Provident Fund and Superannuation Fund and any other retiral program, on Basic salary as per the Rules of the Company or equivalent cash out wherever the laws allow it.
- f) Gratuity calculated on Basic salary as per the Rules of the Company.
- g) Club Fees: Fees of one Corporate Club in India (including admission and membership fee).
- h) Personal Accident Insurance Premium for self and family as per Rules of the Company.
- i) Leave and encashment of leave, in accordance with the Rules of the Company.
- j) Reimbursement of entertainment, travelling and all other expenses incurred for the business of the Company. Travelling expenses of Spouse accompanying on any official overseas or inland trip will be governed as per the rules of the Company.
- k) In the event of separation, Mr. Satish Pai shall be entitled to compensation for "loss of office", equivalent to 18 months Fixed Compensation (Basic Salary, Special Allowance, Perks and benefits) as per the terms of appointment, subject to limit specified under Section 318(4) of the Companies Act, 1956. However he shall not be entitled to payment of any compensation for loss of office in the cases mentioned in Section 318 (3) of the Companies Act, 1956.
- l) Other allowances / benefits /perquisites: Any other allowances, benefits and perquisites as per the policies and rules applicable to the senior executives of the Company and/or any other allowances, perquisites as the Board may from time to time decide.

The above perquisites will be in accordance with the Schemes, policies and the rules of

the Company as applicable from time to time unless the Board decides to vary the same specifically.

#### **(4) Other Terms:**

- a) Subject as aforesaid, Mr. Satish Pai shall be governed by such other Policies and Rules as to payment or otherwise as are applicable to the Senior Executives of the Company from time to time.
- b) The aggregate of the remuneration and perquisites as aforesaid in any financial year shall not exceed the limits prescribed from time to time under Sections 198,309,310 and all other applicable provisions of the Companies Act, 1956 read with Schedule XIII to the said Act or any statutory modifications or re-enactment thereof for the time being in force, or otherwise as may be permissible at law.
- c) For the purpose of Gratuity, Provident Fund, Superannuation and other like benefits, the service of Mr. Satish Pai will be considered as continuous service with the Company from the date of his joining the Company.
- d) All perquisites and other benefits as above, will be considered on the basis of Annual salary from July to June as per the policy of the Company.
- e) The Board of Directors (which term shall be deemed to include any Committee constituted/to be constituted by the Board) be and are hereby authorized to revise the remuneration and perquisites payable to Mr. Satish Pai from time to time, subject to the limits approved by the shareholders.
- f) The appointment may be terminated at any time by either party by giving 3 months notice of such termination in writing to the other.
- g) In the event of loss or inadequacy of profits in any Financial Year, Mr. Satish Pai shall, subject to the approval of the Central Government, if any required, be paid Remuneration by way of Salary and Perquisites as specified above, subject to the restrictions, if any, set out in Schedule XIII of the Companies Act, 1956, from time to time.
- h) So long as Mr. Satish Pai functions as Whole time Director of the Company, he shall not be subject to retirement by rotation and shall not be paid any sitting fees for attending the meetings of the Board or any Committee(s) thereof.

**FURTHER RESOLVED** that pursuant to the provisions of Section 314(1) of the said Act, Mr. Satish Pai may be holding any office or place of profit by his being director of the

Company's subsidiaries/Joint ventures, approval be and is hereby granted to Mr. Satish Pai to accept sitting fees/directors' fee or such other remuneration for attending the meetings of the Board of Directors or committees of such subsidiary companies as may be decided by the Board of such subsidiaries, wherever he is member of the Board."

9. (a) To consider and if thought fit, to pass the following Resolution, which will be proposed as a Special Resolution:

**"RESOLVED** that in accordance with the provisions contained in the Memorandum and Articles of Association of the Company, and Sections 81(1A) and all other applicable provisions, if any, of the Companies Act, 1956 (the "Act") including any statutory modification(s) or re-enactment(s) thereof, for the time being in force, the provisions of the Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999, as amended from time to time (the "SEBI Guidelines"), the Listing Agreement(s) entered into by the Company with the stock exchanges where the securities of the Company are listed, and subject to all other Rules, Guidelines and Regulations issued by the Reserve Bank of India, and under any other applicable laws for the time being in force and subject to such approvals, consents, permissions and sanctions, as may be required, and further subject to such terms and conditions as may be prescribed while granting such approvals, consents, permissions and sanctions and which may be agreed to and accepted by the Board of Directors (hereinafter referred to as the "Board" which term shall be deemed to include any Committee, including the ESOS Compensation Committee constituted by the Board to exercise its powers conferred by this resolution), consent of the Company be and is hereby accorded to introduce and implement the 'Hindalco Industries Limited Employee Stock Option Scheme 2013' (the "Scheme 2013"), the salient features of which are furnished in the explanatory statement to the Notice and consent be and is hereby accorded to the Board to create, grant, offer, issue and allot at any time in one or more tranches, to or for the benefit of such person(s) who are in the permanent employment of the Company in the management cadre, whether working in India or outside India, including any Managing and Whole time Director(s) of the Company (hereinafter referred to collectively as "employees") (selected on the basis of criteria decided by the Board and/or ESOS Compensation Committee thereof) under the Scheme 2013, such number of Stock Options

(comprising of options and/or restricted stock units) exercisable into not more than 54,62,000 equity shares of ₹ 1/- each, at such price, in one or more tranches and on such terms and conditions as may be fixed or determined by the Board in accordance with the SEBI Guidelines or other provisions of law as may be prevailing at that time.

**RESOLVED FURTHER** that in case of any corporate action (s) such as rights issue, bonus issue, merger and sale of division or other reorganisation of capital structure of the Company, as applicable from time to time, if any additional equity shares are issued by the Company, for the purpose of making a fair and reasonable adjustment to the Stock Options granted earlier, the above ceiling of 54,62,000 equity shares shall be deemed to be increased to the extent of such additional equity shares to be issued.

**FURTHER RESOLVED** that in case the equity shares of the Company are either sub-divided or consolidated, then the number of equity shares to be issued and allotted on the exercise of Stock Options granted under the Scheme 2013 and the exercise price of Stock Options granted under the Scheme 2013 shall automatically stand augmented or reduced, as the case may be, in the same proportion as the present face value of ₹ 1/- per equity share bears to the revised face value of the equity shares of the Company after such sub-division or consolidation, without affecting any other rights or obligations of the employees who have been granted Stock Options under the Scheme 2013.

**RESOLVED FURTHER** that without prejudice to the generality of the above but subject to the terms as may be approved by the members of the Company, the Board be and is hereby authorised to formulate, evolve, decide upon and implement the Scheme 2013 and determine the detailed terms and conditions of the aforementioned Scheme 2013, including but not limited to, the quantum of the Stock Options to be granted per employee, the number of Stock Options to be granted in each tranche, the terms or combination of terms subject to which the said Stock Options are to be granted, the exercise period, the vesting period, the vesting conditions, instances where such Stock Options shall lapse and to grant such number of Stock Options, to such employees of the Company, at par or at such other price, at such time and on such terms and conditions as set out in the Scheme 2013 and as the Board may in its absolute discretion think fit.

**FURTHER RESOLVED** that the Board be and is hereby authorised to issue and allot equity shares of the Company upon the



exercise of the Stock Options from time to time in the manner aforesaid and such equity shares shall rank *pari passu* in all respects with the then existing equity shares of the Company.

**RESOLVED FURTHER** that the Board be and is hereby authorised to take necessary steps for listing of the equity shares allotted under the Scheme 2013 on the stock exchanges where the securities of the Company are listed, in accordance with the provisions of the Listing Agreement with the concerned stock exchanges, the SEBI Guidelines and all other applicable Laws and Regulations.

**FURTHER RESOLVED** that the Board be and is hereby authorised to make any modifications, changes, variations, alterations or revisions in the Scheme 2013, as it may deem fit, from time to time or to suspend, withdraw or revive the Scheme 2013 from time to time, in conformity with the provisions of the Act, the SEBI Guidelines and other applicable laws unless such variation, amendment, modification or alteration is detrimental to the interest of the grantees who have been granted Stock Options under the Scheme 2013.

**RESOLVED FURTHER** that for the purpose of giving effect to the above Resolutions, the Board be and is hereby authorised to do all such acts, deeds, matters and things as it may, in its absolute discretion, deem necessary, expedient or proper and to settle all questions, difficulties or doubts that may arise in relation to formulation and implementation of the Scheme 2013 at any stage, including at the time of listing of the equity shares issued herein, without requiring the Board to secure any further consent or approval of the members of the Company to the end and intent that they shall be deemed to have given their approval thereto expressly by the authority of this resolution."

- (b) To consider and if thought fit, to pass the following Resolution which will be proposed as a Special Resolution:

**"RESOLVED** that in accordance with the provisions contained in the Memorandum and Articles of Association of the Company, and Sections 81(1A) and all other applicable provisions, if any, of the Companies Act, 1956 (the "Act") including any statutory modification(s) or re-enactment(s) thereof, for the time being in force, the provisions of the Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999, as amended from time to time (the "SEBI Guidelines"), the Listing Agreements entered into by the Company with the stock exchanges where the

securities of the Company are listed, and subject to all other Rules, Guidelines and Regulations issued by the Reserve Bank of India, and under any other applicable laws for the time being in force and subject to such approvals, consents, permissions and sanctions, as may be required, and further subject to such terms and conditions as may be prescribed while granting such approvals, consents, permissions and sanctions and which may be agreed to and accepted by the Board of Directors (hereinafter referred to as the "Board" which term shall be deemed to include any Committee, including the ESOS Compensation Committee constituted by the Board to exercise its powers conferred by this resolution), consent of the Company be and is hereby accorded to the Board to extend the benefits and coverage of 'Hindalco Industries Limited Employee Stock Option Scheme 2013' ("the Scheme 2013") referred to in the Resolution under Item No. 9(a) of this Notice, also to such persons who are in permanent employment of any present and future holding/subsidiary companies of the Company in the management cadre, whether working in India or outside India, including any Managing and Whole time Director(s) of the holding and/or subsidiary companies of the Company (selected on the basis of criteria decided by the Board and/or the ESOS Compensation Committee thereof) under the Scheme 2013 in the manner mentioned in the Resolution under Item No. 9(a) of this Notice, on such terms and conditions as may be fixed or determined by the Board in accordance with the SEBI Guidelines or other provisions of the law as may be prevailing at that time.

**RESOLVED FURTHER** that for the purpose of giving effect to the above resolution, the Board be and is hereby authorised to do all such acts, deeds, matters and things as it may, in its absolute discretion, deem necessary, expedient or proper and to settle any questions, difficulties or doubts that may arise in relation to formulation and implementation of the Scheme 2013 at any stage including at the time of listing of the securities, without requiring the Board to secure any further consent or approval of the Members of the Company to the end and intent that they shall be deemed to have given their approval thereto expressly by the authority of this resolution."

By Order of the Board of Directors

Place: Mumbai  
Date: 13<sup>th</sup> August, 2013

Anil Malik  
Company Secretary

## NOTES FOR MEMBERS' ATTENTION

1. A MEMBER ENTITLED TO ATTEND AND VOTE IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF/HERSELF AND THE PROXY NEED NOT BE A MEMBER OF THE COMPANY.

THE INSTRUMENT APPOINTING A PROXY SHOULD HOWEVER BE DEPOSITED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THAN FORTY-EIGHT HOURS BEFORE THE COMMENCEMENT OF THE MEETING.

NOTICE is also hereby given that the Register of Members and Transfer Books in respect of Equity Shares of the Company will remain closed from Tuesday, the 3<sup>rd</sup> September, 2013 to Tuesday, the 10<sup>th</sup> September, 2013 (both days inclusive) for the purpose of payment of dividend.

2. The relevant explanatory statement pursuant to Section 173(2) of the Companies Act, 1956, in respect of item Nos 6, 7, 8,9 of the Notice set out above, is annexed hereto.
3. I. The Company has listed its Shares at:
  - a) BSE Limited, Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai – 400 001.
  - b) The National Stock Exchange of India Limited, 5<sup>th</sup> Floor, Exchange Plaza, Plot No. C/1, G Block, Bandra-Kurla Complex, Bandra (E), Mumbai- 400 051.II. The Company has listed its Debentures at:

The National Stock Exchange of India Limited, 5<sup>th</sup> Floor, Exchange Plaza, Plot No. C/1, G Block, Bandra-Kurla Complex, Bandra (E), Mumbai – 400 051.

The listing fees of these Exchanges have been paid in time.

4. As per the requirement of Clause 49 of the listing agreement on Corporate Governance for appointment/reappointment of the Directors, a statement containing details of the concerned Directors is provided herewith.
5. All the documents referred to in the accompanying Notice and Explanatory Statement are available for inspection at the Registered office of the Company on all working days (except Saturdays, Sundays and Public Holidays) between 11.00 a.m. and 1.00 p.m. up to the date of Annual General Meeting.

### ANNEXURE TO NOTICE

Explanatory Statement pursuant to the provisions of Section 173(2) of the Companies Act, 1956.

#### Item No.6

Mr. Jagdish Khattar was appointed as a Director of the Company by the Board of Directors at its meeting held on 9<sup>th</sup> May, 2011, to fill up the casual vacancy on the Board caused by the demise of Mr. E.B. Desai. Pursuant to the provisions of Article 141 of the Articles of Association of the Company and Section

262 of the Companies Act, 1956, (hereinafter referred to as the "Act") he holds office as director only up to the date of this Annual General Meeting. As required under Section 257 of the Act, a Notice has been received from a member signifying her intention to propose him as a candidate for the office of Director of the Company liable to retire by rotation. Mr. Jagdish Khattar started his career as an IAS officer. He served as the Chief Executive Officer and Managing Director of Maruti Suzuki India Ltd. (Formerly Maruti Udyog Ltd.) from 1999 to 2007. With his vast experience in business and industrial circles, his presence on the Board is a great advantage and the Board feels it is beneficial for the Company to continue to avail of his services as a Director of the Company. The Resolution is accordingly commended for your acceptance.

Mr. Jagdish Khattar is interested in this resolution.

#### Item No.7

Mr. D. Bhattacharya was initially appointed as the Managing Director of the Company with effect from 2<sup>nd</sup> October 2003 for the period of 5 years. He was reappointed for a further period of 5 years with effect from 1<sup>st</sup> October, 2008 and his present term expires on 30<sup>th</sup> September 2013. The Board of Directors of the Company has subject to shareholders approval, approved the re-appointment of Mr. D. Bhattacharya as the Managing Director for a further period of five years with effect from 30<sup>th</sup> September 2013, for which the resolution as in this item of the Notice is proposed for your approval.

Mr. Bhattacharya as the Managing Director, has developed a compelling long term strategy for accelerated growth of the Company. Under his leadership, the Company grew significantly. He has conceptualized several green field and brown field growth projects to sustain the competitive position and strength of the Company. The acquisition of Novelis has been done under his leadership. Given Mr. Bhattacharya's track record as the Managing Director of the Company and the compelling issues before the Company, such as integration with Novelis and the timely completion of Greenfield projects, it would be in the best interest of the Company to consider the re-appointment of Mr. Bhattacharya for a further period of five years.

Though the possibility of such a situation is not likely to arise during any of the years comprised by the period of his office, in view of the relevant provisions of Schedule XIII of the above Act for payment of remuneration to a Managing Director in the event of loss or inadequacy of profits, this resolution is being proposed as a special resolution.

The other relevant information as required by the above Schedule is set out at one or the other place in the other documents forming part of the Annual Accounts, which are being circulated to the members. The resolution together with the explanatory statement may also be regarded as an abstract of the terms of the re-appointment of Mr. D. Bhattacharya,

as the Managing Director of the Company under Section 302 of the Companies Act, 1956.

The Board accordingly commends the Resolution for your acceptance.

Mr. D. Bhattacharya is interested in the resolution.

#### **Item No.8**

Mr. Satish Pai was appointed as an Additional Director by the Board of Directors in the meeting held on 13<sup>th</sup> August, 2013. Pursuant to Section 260 of the Companies Act, 1956 and Article 140 of the Articles of Association of the Company, he holds office only upto the date of this Annual General Meeting of the Company. As required under Section 257 of the Companies Act, 1956, a Notice has been received from a member along with a deposit of ₹ 500/- signifying her intention to propose Mr. Satish Pai as a Director of the Company.

The Board of Directors in the meeting held on 13<sup>th</sup> August, 2013, has subject to shareholders and Central Government approval, appointed Mr. Satish Pai as a Whole Time Director of the Company for a period of five years with effect from 13<sup>th</sup> August, 2013 for which the resolution as in this item of the Notice is proposed for your approval.

Mr. Satish Pai, a Mechanical Engineer from IIT- Madras, joined Schlumberger Limited, a \$40 billion global leader in Oil & Gas exploration and Oilfield Services, as a field engineer in 1985. In his 28 year long career with Schlumberger Limited, Mr. Pai has held various important positions including large Profit & Loss responsibilities. He has wide experience of working in many countries, including in the Middle East, South East Asia, Africa, Russia, UK and USA, and has led many mergers and acquisitions, apart from holding global roles leading Oilfield Technology Services, IT Services, Human Resources and large manufacturing units. He was the Executive Vice President, Worldwide Operations, of Schlumberger Limited.

Though the possibility of such a situation is not likely to arise during any of the years comprised by the period of his office, in view of the relevant provisions of Schedule XIII of the above Act for payment of remuneration to a Whole Time Director in the event of loss or inadequacy of profits, this resolution is being proposed as a special resolution.

The remuneration of the Whole Time Director as set out in the resolution is in line with the trend prevailing in the Corporate Sector in the Country. The resolution together with the explanatory statement may also be regarded as an abstract of the terms of appointment of Mr. Satish Pai, as the Whole Time Director of the Company under Section 302 of the Companies Act, 1956.

Mr. Satish Pai as a candidate for the office of Director and with a view to confirm his appointment as a Whole Time Director made earlier by the Board, the resolution is commended for your acceptance.

Mr. Satish Pai is interested in the resolution.

#### **Item No.9**

Stock Options in the hands of the employees have long been recognized as an effective instrument to align the interests of the employees with that of the Company providing an opportunity to the employees to share the growth of the Company. Accordingly, the Company intends to reward, attract, motivate and retain employees and Directors of the Company, its holding and subsidiary companies in the increasingly competitive environment, for their high levels of individual performance, efforts to improve the financial performance of the Company and their loyalty to the Company, by offering them equity shares by way of an employee stock options scheme. The eligible employees shall be granted employee stock options in the form of options ("Options") and/or Restricted Stock Units ("RSUs") (Options and RSUs are collectively referred to as "Stock Options") which will be exercisable into equity shares upon such terms and conditions applicable to the Stock Options, as the case may be.

The Board of Directors ("the Board") of the Company at its meeting held on 28<sup>th</sup> May, 2013 resolved to introduce the 'Hindalco Industries Limited Employee Stock Option Scheme 2013' (hereinafter referred to as the "Scheme 2013") subject to the approval of the members and provisions of the Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999, as amended from time to time (the "SEBI Guidelines").

The Company intends to offer not more than 54,62,000 equity shares of ₹ 1/- each under the Scheme 2013 by way of grant of Stock Options. The Scheme 2013 will be administered by the ESOS Compensation Committee constituted in the meeting of the Board of Directors held on 7<sup>th</sup> December, 2006.

Your approval is being sought for issue of Stock Options to eligible employees of the Company, including its Managing and Whole Time Director(s) and that employees including Managing and Whole Time Director of its holding and / or subsidiary companies.

The Scheme 2013 is being formulated in accordance with the SEBI Guidelines. The salient features of the Scheme 2013 are as under:

#### **(1) Total number of Stock Options to be granted:-**

The total number of Stock Options (comprising of Options and RSUs) that may in the aggregate be granted shall be such number that will entitle the grantees to acquire, in one or more tranches, such equity shares of the Company not exceeding 54,62,000 equity shares of ₹ 1/- each. The aggregate number of RSUs proposed to be granted under the Scheme 2013, shall not be exercisable into more than 50% of the overall ceiling of equity shares to be issued under the Scheme 2013 (which number shall be adjusted in lieu of adjustments/ reorganisation of the capital structure of the Company from time to time).

One Stock Option when exercised, entitles the grantees to one equity share (i.e. one Option will entitle the grantee to one equity share and one RSU will entitle the grantee to one equity share) of ₹ 1/- each fully paid up.

In case of any corporate action(s) such as rights issue, bonus issue, merger and sale of division, split or consolidation among others, a fair and reasonable adjustment needs to be made to the Stock Options granted. Accordingly, if any additional equity shares are issued by the Company to the grantees for making such fair and reasonable adjustment, the ceiling of 54,62,000 equity shares shall be deemed to be increased to the extent of such additional equity shares to be issued.

Stock Options not vested due to non-fulfillment of the vesting conditions, vested Stock Options which the grantees expressly refuse to exercise, Stock Options (vested and not exercised and unvested) which have been surrendered and any Stock Options granted but not vested or exercised within the stipulated time due to any reasons, shall lapse and these Stock Options or the underlying equity shares will be available for grant under the present Scheme 2013 or under a new scheme, subject to compliance with the provisions of the Applicable Law, as may be prevailing at that time.

**(2) Identification of classes of employees entitled to participate in the Scheme 2013:-**

Persons who are permanent employees in the management cadre, working in or out of India, including Managing and Whole time director(s) of the Company, and that of the holding and/or subsidiary companies, as may be decided by the Board and/or the ESOS Compensation Committee, shall be eligible for grant of Stock Options under the Scheme 2013.

The following category of employees/Directors shall not be eligible to participate in the Scheme 2013:

- (a) a promoter or belonging to the promoter group;
- (b) an Independent Director(s) and Non Executive Director(s);
- (c) a Director who either by himself or through his relatives or through any body corporate, directly or indirectly holds more than 10% of the outstanding equity shares of the Company.

**(3) Requirements of vesting and period of vesting:-**

The Board and/or the ESOS Compensation Committee may, at its discretion, lay down certain criteria including but not limited to performance metrics on the achievement of which the granted Stock Options would vest. The detailed terms and conditions relating to such performance based criteria for vesting, the period over which and the proportion in which the Stock Options granted would vest would be subject to

the minimum and maximum vesting period as specified below.

- **Vesting period for Options:**

The Options would vest not earlier than one year and not later than five years from the date of grant of Options or such other period as may be determined by the Board and/or the ESOS Compensation Committee. The vesting schedule (i.e. exact proportion in which and the exact period over which the Options would vest) would be determined by the Board and/or the ESOS Compensation Committee, subject to the minimum vesting period of one year from the date of grant of Options. The Options granted under the Scheme 2013 shall vest in one or more tranches.

- **Vesting period for RSUs:**

The RSUs would vest not earlier than one year and not later than three years from the date of grant of RSUs or such other period as may be determined by the Board and/or the ESOS Compensation Committee. The vesting schedule (i.e. exact proportion in which and the exact period over which the RSUs would vest) would be determined by the Board and/or the ESOS Compensation Committee, subject to the minimum vesting period of one year from the date of grant of RSUs. The RSUs granted under the Scheme 2013 shall vest in one or more tranches.

**(4) Exercise price or pricing formula:-**

**Exercise price for Options:** The Options may be issued at such price that the Board and/or the ESOS Compensation Committee may determine on the date of the grant of Stock Options under the Scheme 2013 and specified in the relevant grant documents provided that the exercise price per Option shall not be less than the face value of the equity share of the Company.

**Exercise price for RSUs:** The RSUs may be issued at face value or at such higher price as may be determined by the Board and/or the ESOS Compensation Committee on the date of grant of RSUs under the Scheme 2013.

**(5) Exercise period or process of exercise:-**

The Exercise period would commence from the date of vesting and will expire on the completion of five years from the date of vesting of the Stock Options or such other period as may be determined by the Board and/or the ESOS Compensation Committee.

The Stock Options will be exercisable by the employees by a written application to the Company accompanied by payment of the exercise price, in such manner and on execution of such documents, as may be prescribed by the Board and/or the ESOS Compensation Committee from time to time. The Stock Options will lapse if not exercised within the specified exercise period.



**(6) The Appraisal process for determining the eligibility of employees:-**

The appraisal process for determining the eligibility of the employees will be specified by the Board and/or the ESOS Compensation Committee and will be based on criteria, such as role/criticality of the employee, length of service with the Company, work performance, technical knowledge, managerial level, future potential and such other criteria that may be determined by the Board and/or the ESOS Compensation Committee at its sole discretion.

The Board and/or the ESOS Compensation Committee may decide to extend the benefits of the Scheme to new entrants or to existing employees on such basis as it may deem fit.

**(7) Disclosure and accounting policies:-**

The Company shall comply with such applicable disclosure and accounting policies as may be prescribed by the SEBI Guidelines and prescribed by the concerned authorities from time to time.

**(8) Maximum number of Stock Options to be issued per employee and in aggregate:-**

The maximum number of Stock Options to be granted to any employee shall be decided by the Board and/or the ESOS Compensation Committee. However, the number of Stock Options that may be granted to a single employee under the Scheme 2013 shall not exceed 0.2% of the paid up equity share capital at the time of grant of Stock Options (which number shall be adjusted in lieu of adjustments/ re-organisation of the capital structure of the Company from time to time).

The aggregate of all such Stock Options under the Scheme 2013 shall not result in more than 54,62,000 equity shares of the Company which number shall be adjusted in lieu of adjustments/ re-organisation of the capital structure of the Company from time to time.

**(9) Method of Stock Option valuation:-**

To calculate the employee compensation cost, the Company shall use the Intrinsic Value method for valuation of the Stock Options granted. The difference between the employee compensation cost so computed and the cost that shall have been recognized if it had used the Fair Value of the Stock Options, shall be disclosed in the Directors' Report and also the impact of this difference on profits and on Earnings per share of the Company shall also be disclosed in the Directors' Report.

**(10) Transferability of Stock Options:-**

The Stock Options granted to an employee will not be transferable to any person and shall not be

pledged, hypothecated, mortgaged or otherwise alienated in any manner. However, in the event of the death of a Stock Option holder while in employment, the right to exercise all the Stock Options granted to him/her till such date shall be transferred to his/her legal heirs or nominees.

**(11) Other Terms:-**

The Board and/or the ESOS Compensation Committee shall have the absolute authority to vary or modify the terms of the Scheme 2013 in accordance with the regulations and guidelines prescribed by the Securities and Exchange Board of India or regulations that may be issued by any other appropriate authority, from time to time, unless such variation, modification or alteration is detrimental to the interest of the employees who have been granted Stock Options under the Scheme 2013.

As the Scheme would entail the issue of further shares to persons other than the existing shareholders, in terms of Section 81(1A) of the Companies Act, 1956, as amended, consent of the Members is required by passing a special resolution in general meeting. Further, approval of the Members by passing a special resolution is required for offering Stock Options under the SEBI Guidelines. Additionally, in accordance with the SEBI Guidelines, a separate resolution is required to be passed as a special resolution by the Members of the Company, if the benefits of the Scheme 2013 as stated in Resolution No.9(a) of the accompanying Notice are being extended to the employees of the holding and/or subsidiary companies, therefore, a separate resolution as stated in Resolution No. 9(b) is proposed to extend the benefits of the Scheme 2013 to the permanent employees (in the management cadre), including Managing and Whole time director(s) of the holding and/or subsidiary companies of the Company.

The Board accordingly commends the Resolutions for your acceptance.

None of the Directors of the Company are in any way, concerned or interested in the resolutions, except to the extent of the Stock Options that may be offered to them under the Scheme 2013. The Stock Options to be granted under the Scheme 2013 shall not be treated as an offer or invitation made to the public for subscription in the securities of the Company.

By Order of the Board of Directors

Place: Mumbai  
Date: 13<sup>th</sup> August, 2013

Anil Malik  
Company Secretary

## Details of Directors seeking appointment and re-appointment in Annual General Meeting fixed on 10th September, 2013.

Name of Director	Mr. Kumar Mangalam Birla	Mr. A.K.Agarwala	Mr. Jagdish Khattar	Mr. D. Bhattacharya	Mr. Satish Pai
Date of Birth	14.06.1967	01.07.1933	18.12.1942	13.09.1948	29.12.1961
Date of Appointment	16 <sup>th</sup> November, 1992	11 <sup>th</sup> September, 1998	9 <sup>th</sup> May, 2011	30 <sup>th</sup> April, 2003	13 <sup>th</sup> August, 2013
Expertise in specific functional areas	Industrialist	Industry and Finance	Industry and Marketing, IAS (Retired)	Industry and Management	Industry and Management
Qualifications	A.C.A,M.B.A.	B.Com, F.C.A, LLB	BA (Hons), LLB	B. E. (Chemicals), IIT	B. E (Mech) IIT
List of outside Directorships held excluding Alternate Directorship, Private Companies and Foreign Companies.	<ol style="list-style-type: none"> <li>Grasim Industries Limited</li> <li>Aditya Birla Nuvo Limited</li> <li>Birla Sunlife Asset Mangement Company Limited.</li> <li>Birla Sun Life Insurance Company Limited.</li> <li>Essel Mining &amp; Industries Limited.</li> <li>Ultratech Cement Limited</li> <li>Century Textiles and Industries Limited.</li> <li>Idea Cellular Limited</li> <li>Pilani Investment &amp; Industries Corporation Limited.</li> </ol>	<ol style="list-style-type: none"> <li>Aditya Birla Chemicals(India) Limited.</li> <li>Tanfac Industries Limited.</li> <li>Udyog Services Limited.</li> <li>Aditya Birla Insurance Brokers Limited.</li> <li>Aditya Birla Power Company Limited</li> <li>Aditya Birla Health Services Limited</li> </ol>	<ol style="list-style-type: none"> <li>HDFC ERGO General Insurance Company Limited</li> <li>Steel Authority of India Limited</li> </ol>	<ol style="list-style-type: none"> <li>Pidilite Industries Limited</li> <li>Mahan Coal Limited</li> </ol>	Nil
*Chairman/ Member of the Committee of the Board of Directors of Company	—	—	—	—	—
*Chairman/ Member of the Committee of the Board of Directors of other companies					
a. Audit Committee	—	—	Steel Authority of India Limited	—	—
b. Investor Grievances Committee					
No. of Shares Held in the Company	865,740	116,148	2,500	90,740	—

\* Note: Pursuant to Clause 49 of the Listing Agreement only two Committees viz. Audit Committee and Investor Grievances Committee are considered.



## HINDALCO INDUSTRIES LIMITED

Registered Office: "Century Bhavan", Third Floor, Dr. Annie Besant Road,  
Worli, Mumbai - 400 030.

### ATTENDANCE SLIP

Please complete this attendance slip and hand it over at the entrance of the Hall.

Full Name of Shareholder in Block Letters:

Folio No:

No of shares held:

I hereby record my presence at the Fifty-Fourth Annual General Meeting of the Company at Ravindra Natya Mandir, P.L. Deshpande Maharashtra Kala Academy, Prabhadevi, Mumbai - 400025 on **Tuesday**, the **10th September, 2013** at **2.30 P.M.**

**Signature of Shareholder**

NOTE: Only Shareholders of the Company or their proxies will be allowed to attend the Meeting.



## HINDALCO INDUSTRIES LIMITED

Registered Office: "Century Bhavan", Third Floor, Dr. Annie Besant Road,  
Worli, Mumbai - 400 030.

### PROXY FORM

Folio No:

No. of shares held:

I/We\_\_\_\_\_ of \_\_\_\_\_ being a  
Member /Members of the above named Company, hereby appoint Mr.\_\_\_\_\_ of  
\_\_\_\_\_ or failing him Mr. \_\_\_\_\_ of \_\_\_\_\_ or  
failing him Mr. \_\_\_\_\_ of \_\_\_\_\_ as my/our proxy to vote for me/us  
on my/our behalf at the Fifty-Fourth Annual General Meeting of the Company to be held on **Tuesday**, the  
**10th September, 2013** at **2.30 P.M.** and any adjournment thereof.

As witness my/our hand(s) this\_\_\_\_\_ day of \_\_\_\_\_ 2013.

Signature \_\_\_\_\_

Affix  
Re. 1  
Revenue  
Stamp  
Here

NOTE: The Proxy must be deposited at the Registered Office of the Company not less than 48 hours before the time for holding the Meeting.



Good things come to those who *innovate.*  
To those who weather the storm,  
*who challenge the norms,*  
who stay true to their vision, values and beliefs.

To those who follow their *passion,*  
stick to their commitments and keep  
*their heads up high* in times of difficulty.

As we continue on our path to growth & success  
we will tackle setbacks and difficulties with the same focus,

*persistence*  
*strength*  
that we believe in.

ANNUAL REPORT | 2012 - 2013

HINDALCO INDUSTRIES LIMITED





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Mr. Aditya Birla  
We live by his values.  
Integrity, Commitment, Passion, Seamlessness and Speed.



Dear Shareholder,

### **The global scenario**

Across the world in 2012 the economy remained a worry. Global GDP fell to 3.2% compared to 4% in 2011. Many of the systemic vulnerabilities continued. Among these were fiscal fragility, hidden and unknown risks of financial derivative instruments and the problems of the weaker Eurozone economies. The increasing instances of political gridlock aggravated the situation.

While these are not totally left behind, there are strong positives. The unwinding of financial leverage, several rounds of liquidity injections, with Japan also joining in augur well for the global economy. Alongside, continuing low interest rates, sharp corrections in commodity and energy prices and a modest recovery in the US housing market ring in a degree of optimism. Furthermore, the private corporate sector seems on the path to stepping up investment outlays. Thankfully, the worst case outcomes have been averted. The US has not fallen off the fiscal cliff. And despite the recent financial shocks in Cyprus, government bond yields have fallen. The global economy has clearly shown a lot of resilience.

The global economy is now moving on to a surer recovery mode. The IMF projects growth at 3.25% in 2013, increasing to 4.0% in 2014. GDP growth in emerging markets and developing countries is placed at 5.3% in 2013, increasing to 5.7% in 2014. US GDP is expected to grow 1.9% in 2013, rising sharply to 3.0% in 2014. Europe will remain a laggard, with growth projected at -0.3% this year, and inching to just over 1% in 2014. China's growth will scale back from its recent double digit levels to 7-8%, which is still respectable.

Developments on the global front undeniably dented India's growth level, besides the issues at home.

---

*Your Company has outperformed its peers on every aspect. Its consolidated revenues at nearly US dollars 15 billion (₹ 80,193 crores) and EBITDA at US dollars 1.6 billion (₹ 8,849 crores), is indeed a notable feat in the current context.*

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*The Mahan Aluminium produced its first metal. Utkal Alumina commenced charging bauxite to commission the Plant. Aditya Aluminium will go on stream during this calendar year. Hirakud Flat Rolled Products project - the first of its kind to produce high-end canbody stock; and the Mouda Foils project were commissioned as well.*

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### **The Indian economy – ongoing resilience**

Slow growth, investor diffidence, the rupee falling to an all time low, power outages and a poor monsoon added to the country's woes. High commodity prices and supply constraints of critical raw material, such as coal and natural gas further compounded the problem. Unsurprisingly then, India's GDP growth slowed markedly in 2012-13, to 5%, down from 6.2% in the previous year. The manufacturing sector recorded a growth of only 1.9% in 2012-13, down from 2.7% in 2011-12. Export growth in 2012-13 was 5.1%, compared to 15.3% in the previous year.

There are good signs, as we move into fiscal 2013 – 2014. There have been some positive policy developments in recent months. These include a decline in interest rates and a move towards market-based pricing for diesel and petrol. If this pricing flexibility persists, it could make a considerable dent in the subsidy bill. The expectation of a normal monsoon is a positive, going forward.

In FY 2013-14, GDP growth is projected to rise modestly to around 6.0% with much of the improvement likely only in the second half of the year. Industrial activity will continue to be adversely affected by regulatory bottlenecks. The recent decline in commodity prices, particularly of crude oil, and continuing buoyancy of FII inflows will pave the way for greater exchange rate stability, and a moderation of inflation. The RBI projects a 5.5% increase in the wholesale price index in FY 2013-14, down from 7.3% in the previous year.

These developments affect your Company's growth and performance.

Your Company has outperformed its peers on every aspect. Its consolidated revenues at nearly US dollars 15 billion (₹80,193 crores) and EBITDA at US dollars 1.6 billion (₹8,849 crores), is indeed a notable feat in the current context. But for the subdued growth in the global economy, the depressed state of metal prices, and the relatively high energy prices, which impacted the different segments within the Metals Business, your Company would have posted even better results.

Your Company has delivered several projects commendably. It's growth strategy acquired further shape and flesh. To cite a few projects – the Mahan Aluminium produced its first metal. Utkal Alumina commenced charging bauxite to commission the Plant. Aditya Aluminium will go on stream during this calendar year. Hirakud Flat Rolled Products project - the first of its kind to produce high-end canbody stock; and the Mouda Foils project were commissioned as well. These projects sharpen the value-addition edge of your Company.

At the global level, on the projects front, Novelis too commissioned its new Cold Mill at the Pinda Plant in Brazil. Its rolling capacity expansion in Korea and the automotive finishing line in the US are on track and expected to be flagged off in the current fiscal. An auto finishing line in China has commenced. In pursuit of its goal of recouring to 80% recycled content by 2020, Novelis has embarked upon recycling expansions aggressively.

Novelis reported Adjusted EBITDA of US dollars 961 million in FY13, only marginally shy of US dollar 1.05 billion in the previous year, despite severe macroeconomic headwinds.

Your Company's consolidated capex spend was close to US dollars 2.6 billion (₹14,000 crores). This is the third consecutive year of the highest ever capex spend. These investments, which we have persevered, will not only propel us towards the growth trajectory planned for the Metals Business, but will also, create the lowest-cost production bases on the global cost curve - ones that can withstand any phase of the business cycle.

I am pleased to state that the Copper Business put up yet another robust performance, despite the sharp reduction in Sulphuric acid realizations. Deft Concentrate sourcing, coal sourcing and a higher proportion of value-added production enabled it to achieve outstanding results. The strong performance of the Copper Business, which has a conversion business model, cushioned the pressure on aluminium margins. It once again vindicated the virtue of our de-risked business model in the Metals Business.

### Outlook

As aluminium prices continue to remain weak in the international market, the Metals Business will face challenges in the near-term. Furthermore, depreciation and the interest burden from its expansion projects, will also have a bearing on the financial results in FY-14. Nevertheless, the Business remains extremely well-placed for the long-term, with the addition of these mega-scale assets in our portfolio. As these projects ramp up to their full potential, your Company will see an exponential growth in volumes and profitability in the years ahead.

### To our Teams

I thank all of our teams. For most of our employees, I can say with certitude that their commitment towards their responsibility to give results has been incredibly overwhelming. They have enriched your Company and determined its course over the years. I am confident that as we move into an even higher growth trajectory, our people will continue to rise to the increasing demands of their work.

### The Aditya Birla Group in perspective

Over the last two years, significant changes have impacted the global and domestic business scenario. Given our resilience, our Group has managed to weather the storm. Our consolidated revenue at US 42 billion dollars is marginally above that of the last year.

I believe, that if we have been able to sustain our revenues, it is because of the quality of our 136,000 strong workforce spread over 36 countries and 42 nationalities. The hallmark of our overall leadership development efforts has been our belief in taking "bets on our people". And it has indeed paid off.

Our entrepreneurial DNA also encourages risk taking which includes taking risks with people, of course with safety nets. We believe that

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*Our entrepreneurial DNA also encourages risk taking which includes taking risks with people, ofcourse with safety nets. We believe that people are endowed with immense capability - our task is to spot them, early in their careers and provide them with suitable opportunities to try their hand at and test their skills. Our investment in people processes has enabled us have a robust bench strength of talent. Our entire focus is on ensuring that we always remain a meritocracy.*

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*Our in-house learning university 'Gyanodaya' is a globally benchmarked institution. It leverages resources from around the world to meet the development needs of our leadership. Last year it had 28,000 touch points and partnered with several external institutions and corporations for collaborative learning. More than a 1,000 executives take courses at Gyanodaya each year.*

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people are endowed with immense capability - our task is to spot them, early in their careers and provide them with suitable opportunities to try their hand at and test their skills. Our investment in people processes has enabled us have a robust bench strength of talent. Our entire focus is on ensuring that we always remain a meritocracy. This pool of talent is developed through a series of planned exposures, assignments and training opportunities so that they are prepared to take on leadership roles as and when these emerge.

Let me elucidate these aspects with an overview of our talent management and leadership development processes.

Two new programmes namely "Step UP" and "Turning Point" have been launched. These aim primarily to prepare Departmental Heads and Functional Heads for the next stage of their career development as Functional heads and Cost Centre heads respectively. The first pilot batches have already undergone the initial rounds of training. These programmes will be further institutionalized.

Last year, I had alluded to the launch of our *P&L Leaders Development Program*, called – "The Cutting Edge". The objective of this program is to prepare our high-performing functional heads to take on P&L roles. The program has taken off to a solid start. The first batch of participants has been already absorbed in the global immersion program across 4 different countries. The second batch of "The Cutting Edge" will soon start their programme.

To augment talent on the technical side, we have also been hiring, for the first time, a select set of manufacturing professionals directly at the Group level – The first group has already moved into our businesses.

Our in-house learning university 'Gyanodaya' is a globally benchmarked institution. It leverages resources from around the world to meet the development needs of our leadership. Last year it had 28,000 touch points and partnered with several external institutions and corporations for collaborative learning. More than a 1,000 executives take courses at Gyanodaya each year.

Furthermore, we have institutionalized global career paths - driven both by the individual and the organization's needs. To a great extent this allows an individual to 'take charge of his own career'. We leverage vacancies across the Group and stimulate talent mobility by identifying and moving leaders across geographies and functions and into new roles as part of their career development. Development for us today means providing people opportunities to learn from their work rather than taking them away from their work to learn.

Let me give you some statistics relating to fast tracking of talent. Since April 2011, from our management cadre comprising of 37,600 colleagues 15%, i.e. 5,824 have been promoted, 18% i.e. 6,481 have moved roles and 12% i.e. 4,543 have moved location.

Additionally, we seek feedback in an institutionalized way and conduct conversations with our people across the Group to gauge their

engagement with our Group. We call it 'Vibes'. The Vibes survey is carried out by a global reputed external HR research agency. This year 94% of our 35,000 Executives participated in the Vibes survey – which is an indication of their engagement with the Group. It was very heartening for me to see that 92% of employees have an overwhelming sense of pride in our Group. More than 80% are engaged employees and again over 90% say that they understand the connect between their work and goals of business.

Today, we are reckoned as an Employer of Choice that offers a World of Opportunities for talent.

I take great pride in sharing with you that our Group (Aditya Birla Group) has topped Nielsen's Corporate Image Monitor 2012-13. An extract from their media release would interest you –

*"Aditya Birla Group has emerged as the Number 1 corporate, the 'Best in Class' across all the six pillars of Corporate Image, according to the annual Corporate Image Monitor 2012-13, conducted by Nielsen, a leading global provider of insights and information into what consumers watch and buy. The six pillars of Corporate Image comprise of Product & Service quality, Vision and Leadership, Workplace Management, Financial Performance, Operating style and Social responsibility.*

*Nielsen's Corporate Image Monitor measures the reputation of the 40 leading companies in India across sectors and serves as an important indicator of the strength of the corporate brand".*

The survey was conducted among policy makers, the financial media, financial analysts, investors, professionals from the corporate sector and the general public across 7 metros. The 40 corporates covered in this survey were selected using The Economic Times-500 and the Business Today-500 list of listed companies. Nielsen is a global market research company, headquartered in New York and operating in 60 countries.

#### **In sum**

Let me conclude that we have strong Balance Sheets, robust cash-flows and gearing levels well within reasonable limits. The global presence of our Group and the experience of operating in 36 countries invests us with the strength to acquire assets or grow organically anywhere in the world in different business environments.

And finally, our indomitable strength of running low cost, highly-efficient and vastly productive operations, through our embedded culture of continuous improvement and innovation, will see us through good times as well as tough times.

Yours sincerely,



Kumar Mangalam Birla

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*It was very heartening for me to see that 92% of employees have an overwhelming sense of pride in our Group. More than 80% are engaged employees and again over 90% say that they understand the connect between their work and goals of business.*

*Today, we are reckoned as an Employer of Choice that offers a World of Opportunities for talent.*

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## ...DIVERSE WORLD




















51 units • 11 countries

SUBSIDIARIES	UNIT LOCATED AT	
Novelis Inc	North America	<ul style="list-style-type: none"> <li>• Rolled Product</li> <li>• Foil</li> <li>• Recycled Product</li> </ul>
	Europe	<ul style="list-style-type: none"> <li>• Rolled Product</li> <li>• Recycled Product</li> </ul>
	Asia	<ul style="list-style-type: none"> <li>• Rolled Product</li> <li>• Recycled Product</li> </ul>
	South America	<ul style="list-style-type: none"> <li>• Rolled Product</li> <li>• Alumina</li> <li>• Aluminium</li> <li>• Recycled Product</li> </ul>
Aditya Birla Minerals Limited	Nifty Mines Mt Gordon Mines Australia	<ul style="list-style-type: none"> <li>• Copper Cathode</li> <li>• Copper Concentrate</li> <li>• Copper Concentrate</li> </ul>



## WIDE OPERATIONS

- Around 34000 workforce • 15 + nationalities

	Alumina Refinery		Coating		Integrated Aluminium Complex
	Aluminium Extrusion Plant		Cold Rolled		Integrated Copper Complex
	Aluminium Foil Plant		Continuous Casting		Power Plant
	Aluminium Rolled Product Plant		Converting		R & D / Technology Centre
	Aluminium Smelter		Copper Mines		Recycling
	Bauxite Mines		Finishing		
	Coal Mines		Hot Rolled		



# OUR VALUES



**INTEGRITY**  
Honesty in every action



**COMMITMENT**  
Deliver on the promise



**SEAMLESSNESS**  
Boundary less in letter and spirit



**PASSION**  
Energized action



**SPEED**  
One Step Ahead Always

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**BOARD OF DIRECTORS****Non Executive Directors**

Mr. Kumar Mangalam Birla, *Chairman*

Mrs. Rajashree Birla

Mr. Chaitan Manbhai Maniar

Mr. Madhukar Manilal Bhagat

Mr. Kailash Nath Bhandari

Mr. Askaran Agarwala

Mr. Narendra Jamnadas Jhaveri

Mr. Ram Charan

Mr. Jagdish Khattar

Mr. Meleveetil Damodaran

**Executive Director**

Mr. Debnarayan Bhattacharya  
*Managing Director*

**CHIEF FINANCIAL OFFICER**

Mr. Praveen Kumar Maheshwari

**COMPANY SECRETARY**

Mr. Anil Malik

**CORPORATE**

Mr. Bharat Bhushan Jha  
*Senior President*  
*(Corporate Projects & Procurement)*

Mr. Vineet Kaul,  
*Chief People Officer*

**BUSINESS/UNIT HEAD**

Mr. Dilip Gaur,  
*Group Executive President, Copper*

Mr. Sachin Satpute,  
*Chief Marketing Officer, Aluminium*

Mr. Satish Mohan Bhatia,  
*President (Foil & Packaging)*

Mr. Raghavendra Dhulkhed,  
*Senior President (Operations)*

Mr. Sanjay Sehgal,  
*President (Chemicals)*

Mr. Dinesh Kumar Kohly,  
*Chief Operating Officer*  
(Renukoot, Renusagar & Mahan Units)

**Novelis Inc**

Mr. Debnarayan Bhattacharya, Vice Chairman

Mr. Philip Martens, President & CEO

**Utkal Alumina International Limited**

Mr. Rajesh Jha, CEO

**Aditya Birla Minerals Limited**

Mr. Debnarayan Bhattacharya, Chairman

Mr. Sunil Kulwal, CEO & MD

**AUDITORS**

Singhi & Co., Kolkata

**COST AUDITOR**

R.Nanabhoy & Co., Mumbai

		(₹ Crore)									
	2012-13	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04
<b>PROFITABILITY</b>	<b>USD in Mn *</b>										
Net Sales and Operating Revenues	4,793	26,057	26,597	23,859	19,522	18,220	19,201	18,313	11,396	9,523	6,208
Cost of Sales	4,388	23,853	23,492	20,705	16,572	15,184	15,800	14,298	8,791	7,247	4,708
Operating Profit	405	2,204	3,105	3,155	2,950	3,036	3,401	4,015	2,605	2,276	1,500
Depreciation and Impairment	130	704	690	687	667	645	588	638	521	463	317
Other Income	181	983	616	347	260	637	493	370	244	270	240
Interest and Finance Charges	80	436	294	220	278	337	281	242	225	170	177
Profit before Tax and Exceptional Items	376	2,047	2,737	2,595	2,265	2,690	3,026	3,505	2,103	1,913	1,246
Exceptional Items (Net)	-	-	-	-	-	-	-	-	(3)	9	-
Profit before Tax	376	2,047	2,737	2,595	2,265	2,690	3,026	3,505	2,106	1,904	1,246
Tax for current year	64	348	500	469	462	611	705	940	450	575	407
Tax adjustment for earlier years (Net)	-	-	-	(11)	(113)	(151)	(541)	-	-	-	-
Net Profit	312	1,699	2,237	2,137	1,916	2,230	2,861	2,564	1,656	1,329	839
<b>FINANCIAL POSITION</b>											
Gross Fixed Assets (excluding CWIP)	2,777	15,073	14,478	14,287	13,793	13,393	12,608	11,253	10,418	8,773	6,658
Capital Work-in-Progress (CWIP)	4,348	23,605	16,257	6,030	3,703	1,390	1,120	1,476	833	1,323	468
Depreciation and Impairment	1,469	7,975	7,328	6,703	6,059	5,506	4,799	4,246	3,635	3,169	1,918
Net Fixed Assets	5,656	30,703	23,407	13,615	11,438	9,277	8,929	8,483	7,616	6,927	5,208
Investments (including Current)	3,773	20,482	18,087	18,247	21,481	19,149	14,108	8,675	3,971	3,702	3,377
Other Long term Assets/(Liabilities) - (Net)	81	440	1,017	3,384	-	-	-	-	-	-	-
Net Current Assets	1,415	7,683	5,318	4,780	2,716	5,068	4,051	3,741	4,150	1,958	1,833
Capital Employed	10,925	59,308	47,829	40,025	35,634	33,493	27,088	20,900	15,737	12,587	10,418
Loan Funds	4,448	24,145	14,572	9,038	6,357	8,324	8,329	7,359	4,903	3,800	2,565
Deferred Tax Liability (Net)	219	1,191	1,225	1,287	1,366	1,411	1,324	1,126	1,233	1,130	995
Net Worth	6,258	33,972	32,032	29,700	27,911	23,758	17,436	12,415	9,601	7,657	6,858
<b>Net Worth represented by</b>											
Share Capital	35	191	191	191	191	170	123	104	99	93	92
Share Warrants/ Suspense	100	541	541	-	-	-	140	-	-	-	-
Reserves and Surplus #	6,123	33,240	31,300	29,509	27,720	23,588	17,174	12,311	9,502	7,564	6,765
	6,258	33,972	32,032	29,700	27,911	23,758	17,436	12,415	9,601	7,657	6,858
<b>Dividend</b>											
Preference Shares (including Tax)	-	-	-	-	-	0.03	0.03	-	-	-	-
Equity Shares (including Tax)	55	300	335	334	301	269	265	202	247	212	172
<b>RATIOS AND STATISTICS</b>											
	<b>Unit</b>	<b>2012-13</b>	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>	<b>2008-09</b>	<b>2007-08</b>	<b>2006-07</b>	<b>2005-06</b>	<b>2004-05</b>	<b>2003-04</b>
Operating Margin	%	8.46	11.67	13.22	15.11	16.66	17.71	21.92	22.86	23.90	24.17
Net Margin	%	6.52	8.41	8.96	9.81	12.24	14.90	14.00	14.53	13.96	13.51
Gross Interest Cover	Times	1.61	3.62	5.74	5.23	5.48	6.08	10.50	11.19	12.47	8.77
Net Interest Cover	Times	7.31	12.67	15.92	11.55	10.90	13.88	18.09	12.65	14.98	9.82
ROCE	%	4.19	6.34	7.03	7.14	9.04	12.21	17.93	14.79	16.55	13.66
ROE	%	5.00	6.98	7.19	6.86	9.39	16.41	20.66	17.24	17.36	12.23
Basic EPS \$	₹	8.88	11.69	11.17	10.82	14.82	22.23	25.52	16.79	13.48	8.53
Diluted EPS \$	₹	8.87	11.68	11.16	10.81	14.82	22.11	25.52	16.79	13.48	8.53
Cash EPS \$	₹	12.55	15.29	14.76	14.58	19.10	26.80	31.87	22.07	18.18	11.76
Dividend per Share	%	140	155	150	135	135	185	170	220	200	165
Capital Expenditure	₹ in Cr.	7,341	8,453	6,318	2,860	1,121	1,049	1,516	1,188	1,097	669
Foreign Exchange earnings on Export	₹ in Cr.	7,572	7,857	7,096	5,268	5,148	6,434	6,973	3,643	2,605	1,295
Debt Equity Ratio	Times	0.71	0.45	0.30	0.23	0.35	0.48	0.59	0.51	0.50	0.37
Book value per Share \$	₹	177.44	167.31	155.14	145.87	139.73	142.09	118.97	97.40	82.54	74.16
Market Capitalisation	₹ in Cr.	17,538	24,774	40,040	34,682	8,850	20,260	13,963	19,196	12,002	11,256
Number of Equity Shareholders	Nos.	441,166	383,721	320,965	339,281	435,064	335,337	520,019	396,766	117,721	117,124
Number of Employees	Nos.	20,238	19,975	19,341	19,539	19,867	19,667	20,366	19,593	19,687	13,675
Average Cash LME (Aluminium)	USD	1,976	2,317	2,257	1,868	2,234	2,623	2,663	2,028	1,779	1,496
Average Cash LME (Copper)	USD	7,855	8,485	8,140	6,112	5,885	7,521	6,985	4,099	3,000	2,046

\* Balance sheet items are translated at closing exchange rate and Profit & Loss items are translated at average exchange rate.

# Including Employee Stock Options Outstanding but Net of Miscellaneous Expenditure.

\$ Figures recomputed for all the years prior to 2005-06 for stock split in the ratio of 10 : 1 (Face value ₹ 10/- to ₹ 1/-) effected in 2005-06.

Figures for 2002-03 onwards include figures relating to the copper business of Indo Gulf Corporation Limited acquired pursuant to Scheme of Arrangement with effect from 01.04.2002.

Figures for 2004-05 onwards include figures relating to de-merged Units of Indian Aluminium Company, Limited acquired pursuant to Scheme of Arrangement with effect from 01.04.2004.

Figures for 2007-08 onwards include figures of Indian Aluminium Company, Limited amalgamated pursuant to Scheme of Amalgamation with effect from 01.04.2007.

(₹ Crore)											
	2012-13 USD in Mn *	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04
<b>PROFITABILITY</b>											
Net Sales and Operating Revenues	14,751	80,193	80,821	72,202	60,708	65,963	60,013	19,316	12,120	10,105	8,223
Cost of Sales	13,309	72,356	72,637	64,274	50,962	62,993	53,378	14,886	9,275	7,675	6,268
Operating Profit	1,442	7,837	8,184	7,929	9,746	2,970	6,635	4,431	2,845	2,431	1,956
Depreciation and Impairment	526	2,861	2,864	2,759	2,784	3,038	2,488	865	796	632	514
Other Income	186	1,012	783	513	323	691	656	409	281	278	280
Interest and Finance Charges	382	2,079	1,758	1,839	1,104	1,228	1,849	313	301	216	235
Profit before Tax and Exceptional Items	720	3,909	4,345	3,843	6,181	(605)	2,954	3,662	2,028	1,860	1,486
Exceptional Items (Net)	-	-	-	-	-	-	-	-	(2)	13	1
Profit before Tax	720	3,909	4,345	3,843	6,181	(605)	2,954	3,662	2,030	1,847	1,485
Tax for current year	166	903	820	974	1,932	(805)	1,189	958	440	623	487
Tax adjustment for earlier years (Net)	(3)	(17)	(34)	(10)	(103)	(149)	(548)	0	(0)	(72)	1
Profit before Minority Interest	557	3,023	3,559	2,879	4,352	349	2,313	2,703	1,590	1,296	997
Minority Interest	(4)	(20)	211	366	424	(172)	219	16	11	11	4
Share in Profit/ (Loss) of Associates (Net)	3	16	(50)	57	3	37	(100)	1	-	-	-
Net Profit	558	3,027	3,397	2,456	3,925	484	2,193	2,686	1,580	1,285	993
<b>FINANCIAL POSITION</b>											
Gross Fixed Assets (excluding CWIP)	11,062	60,051	53,961	48,207	45,622	46,220	42,112	14,271	13,443	10,953	10,259
Capital Work-in-Progress (CWIP)	6,232	33,831	22,798	9,253	5,801	2,949	2,457	1,917	1,040	1,639	712
Depreciation and Impairment	4,076	22,126	18,661	15,802	16,622	14,404	7,405	5,035	4,600	3,906	3,041
Net Fixed Assets	13,218	71,756	58,098	41,657	34,801	34,765	37,164	11,153	9,883	8,685	7,929
Investments (including Current)	2,324	12,614	10,551	10,855	11,246	10,389	14,008	7,874	3,163	2,956	1,866
Other Long term Assets /(Liabilities) - (Net)	(572)	(3,105)	(2,154)	618	-	-	-	-	-	-	-
Net Current Assets	2,872	15,591	11,588	11,236	5,172	3,011	4,254	4,257	3,967	2,161	2,249
Capital Employed	17,842	96,856	78,084	64,366	51,219	48,165	55,426	23,285	17,014	13,802	12,043
Loan Funds	10,371	56,299	40,859	29,366	23,999	28,310	32,352	8,443	6,279	4,931	3,724
Minority Interest	324	1,759	1,709	2,217	1,737	1,287	1,615	857	130	86	93
Deferred Tax Liability (Net)	639	3,468	3,605	3,760	3,938	2,811	4,172	1,172	1,228	1,134	1,195
Net Worth	6,508	35,330	31,911	29,023	21,545	15,758	17,286	12,814	9,377	7,651	7,031
<b>Net Worth represented by</b>											
Share Capital	35	191	191	191	191	170	123	104	147	142	141
Share Warrants/ Suspense	100	541	541	-	-	-	140	-	-	-	-
Reserves and Surplus #	6,373	34,598	31,179	28,832	21,353	15,588	17,023	12,709	9,230	7,510	6,889
	6,508	35,330	31,911	29,023	21,545	15,758	17,286	12,814	9,377	7,651	7,031
<b>Dividend</b>											
Preference Shares (including Tax)	-	-	-	-	-	0.03	0.03	-	-	-	-
Equity Shares (including Tax)	56	303	359	334	303	271	268	204	249	213	173
<b>RATIOS AND STATISTICS</b>											
	Unit	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04
Operating Margin	%	9.77	10.13	10.98	16.05	4.50	11.06	22.94	23.47	24.05	23.78
Net Margin	%	3.77	4.20	3.40	6.47	0.73	3.65	13.90	13.03	12.71	12.08
Gross Interest Cover	Times	2.04	3.16	3.56	6.99	2.35	3.30	9.91	8.87	10.32	8.60
Net Interest Cover	Times	4.26	5.10	4.59	9.12	2.98	3.94	15.44	10.37	12.54	9.53
ROCE	%	6.18	7.82	8.83	14.22	1.29	8.67	17.07	13.69	15.04	14.29
ROE	%	8.57	10.64	8.46	18.22	3.07	12.69	20.96	16.85	16.79	14.13
Basic EPS \$	₹	15.81	17.74	12.84	22.17	3.21	17.04	26.73	16.02	13.03	10.11
Diluted EPS \$	₹	15.81	17.74	12.83	22.16	3.21	16.95	26.73	16.02	13.03	10.11
Cash EPS \$	₹	30.75	32.70	27.25	37.88	23.40	36.38	35.33	24.09	19.44	15.33
Capital Expenditure	₹ in Cr	14,090	13,802	8,408	5,983	2,452	2,989	2,349	1,758	1,565	1,177
Debt Equity Ratio	Times	1.59	1.28	1.01	1.11	1.80	1.87	0.66	0.67	0.64	0.53
Book value per Share \$	₹	184.53	166.68	151.61	112.59	92.68	140.86	122.79	95.14	82.47	76.03

\* Balance sheet items are translated at closing exchange rate and Profit & Loss items are translated at average exchange rate.

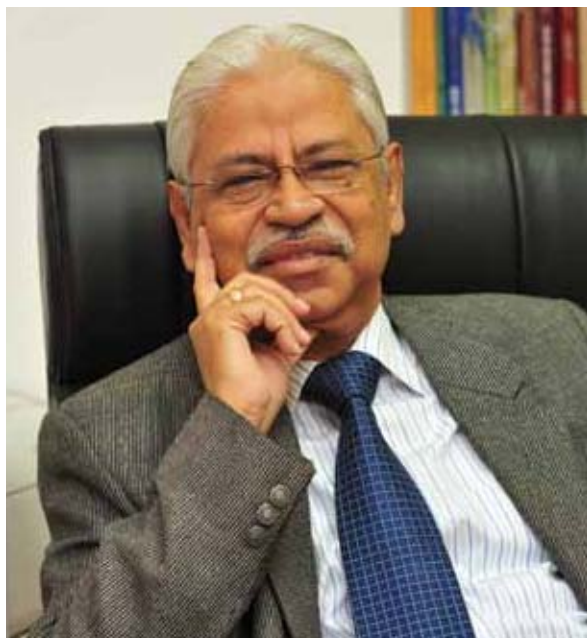
# Including Employee Stock Options Outstanding but Net of Miscellaneous Expenditure.

\$ Figures recomputed for all the years prior to 2005-06 for stock split in the ratio of 10 : 1 (Face value ₹ 10/- to ₹ 1/-) effected in 2005-06.

Figures for 2003-04 onwards include the figures of Aditya Birla Chemicals (India) Limited which has become subsidiary of the Company with effect from 07.05.2003.

Figures for 2007-08 onwards include the figures of Novelis Inc., a foreign subsidiary, acquired by the Company on 16.05.2007 through its wholly-owned overseas subsidiaries.





**D. Bhattacharya**  
Managing Director

### Business Overview

FY 13 indeed was one of the toughest years for aluminium industry in many ways, especially for the Indian aluminium industry. Globally, aluminium prices continued to remain depressed; overcapacity and inventory overhang added to the weak sentiment for the commodities. If during the first half European sovereign debt issue continued to haunt the commodities, in the second half, it was the impending slowdown in China that put a lid on any price recovery. The emerging markets that were the torch bearer of Global recovery post 2009 have witnessed fluctuating fortunes and many have been plagued with issues arising out of uncertainties around sustainability of growth, rising inflation and political uncertainty. The emerging markets in the recent past have underperformed developed markets.

For the Indian producers the situation was even more challenging. If declining GDP growth, slowdown in manufacturing sector and power sector impacted the demand in a low pricing (LME) scenario, the cost pressures continued, primarily driven by high energy prices. While the prices

of crude and its derivatives continued to remain high globally, depreciating rupee resulted in an additional burden on the Indian consumers. Coal prices continued to increase in India, even as the Global coal prices cooled off.

Against this external backdrop, your Company also witnessed several one-off adversities that tested the mettle of the Company. Renukoot and Hirakud smelters experienced production outages due to varied reasons, Muri faced an unprecedented water scarcity, Dahej copper smelter had to undertake an extended shutdown, Novelis lost production in the 3rd quarter due to the issues experienced during the roll out of new ERP at two units.

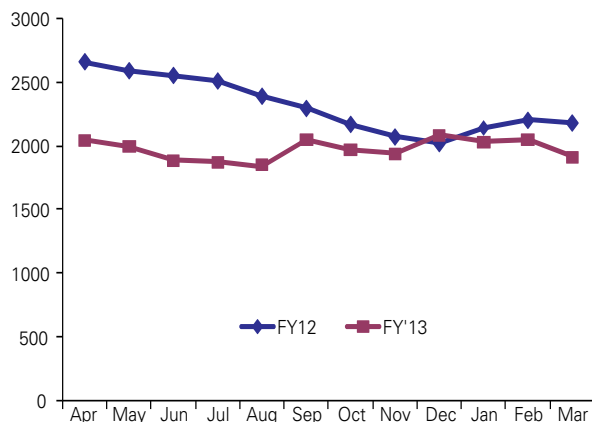
Despite all this, the Company has managed to deliver a solid performance.

### Business Highlights

- FY 13 was a major stepping stone in your Company's long term strategic path. The year brought the Company on the verge of commissioning of its Greenfield projects. These projects would redefine and enhance the cost competitiveness which will ensure the business' long term sustainability. Utkal and Mahan have achieved significant milestones and commissioning activities have started at these two projects.
- A unique strategy to catapult Indian aluminium market to the next level is put in place and soon Hindalco shall be producing can body stock and ultra thin gauge foils from the facilities in Hirakud and Mouda respectively. This downstream strategy would not only enhance the product portfolio but is also expected to re-define the aluminium usage in India.
- Significant capex was also incurred in Novelis to capture the growth in other emerging markets and product portfolios across the globe. This will ensure the Company's global leadership in FRP (flat rolled products) space and enhance the profitability.
- Novelis has also made significant strides to strengthen its recycling capabilities which will help improve the cost structure and enhance competitiveness and profitability.

- Hindalco's consolidated revenue stood at ₹80,193 crore as compared with ₹80,821 crore in FY 12.
- Profit before depreciation, interest and taxes stood at ₹8,849 crore as compared with ₹8,967 crore in FY12. This was a solid performance against the backdrop of various setbacks and macroeconomic challenges.
- Net profit attributable to the shareholders for the year stood at ₹3,027 crore as compared with ₹3,397 crore in FY 12.
- The decline in profit is primarily due to lower aluminium LME realisations, sustained cost pressures, certain one offs that afflicted both Hindalco and Novelis and weakness in demand in certain global geographies following macroeconomic headwinds.

LME Aluminium Price (\$ per ton)



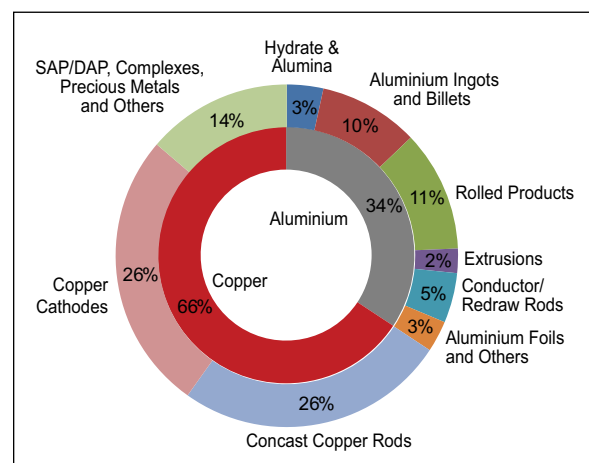
- Of the total annual revenue of ₹80,193 crore, Aluminium Business contributed ₹62,191 crore, vs. ₹62,059 crore in the last year. Aluminium EBIT for FY13 was ₹4,388 crore - broadly at FY12 levels.
- Copper business delivered a creditable performance against the backdrop of adverse macroeconomic conditions and one timers. This performance was achieved on the back of strong operating efficiencies, enhanced product mix, focused value creation through waste-to-wealth initiatives and higher co-product margins.
- Copper revenue at ₹17,518 crore, was lower than ₹18,364 crore generated in FY12. This decline was mainly on account of lower

realisation resulting from lower LME. The copper EBIT for the year was ₹740 crore as compared with ₹1,119 crore in FY 12.

- The Company continued with further financing initiatives to progress on the charted growth path.
  - Your Company achieved the financial closure of Aditya aluminium project this year. A common rupee loan agreement for ₹9,896 crore was signed by the Company on 17th September, 2012 with a group of 28 banks / financial institutions.
  - Your Company raised ₹6,000 crore through secured non convertible debentures, the single largest issuance by a private corporate in India in recent times at a very attractive pricing in a deal that was widely termed as market reviving deal. These debentures are listed on the wholesale debt market segment of National Stock Exchange.
  - As a part of the overall financial closure for the project, your Company raised USD 100 million finance from Export Development Canada for its Mahan Aluminium Project.

#### HIL Standalone:

Standalone revenues for the financial year were stable at ₹26,057 crore as compared with ₹26,597 crore in FY 12. Profit before interest and depreciation was ₹3,187 crore vs. ₹3,721 crore in FY 12.



This decline in the profit was mainly due to lower realisations coupled with increased cost of production which was mitigated to some extent by improved efficiencies and higher other income. Net profit for the year stood at ₹ 1,699 crore as compared with ₹ 2,237 Cr in FY 12. The net profit declined due to lower operating profits and higher finance costs.

High coal costs and elevated crude prices continued to impact the margins of aluminium business. The costs were also higher due to operational setbacks that resulted in production loss during the year.

Copper business with its thrust on multiple value drivers and pass through model, once again delivered a robust performance despite plant shutdown, lower co-product realisations and cost pressures.

#### Operational Highlights:

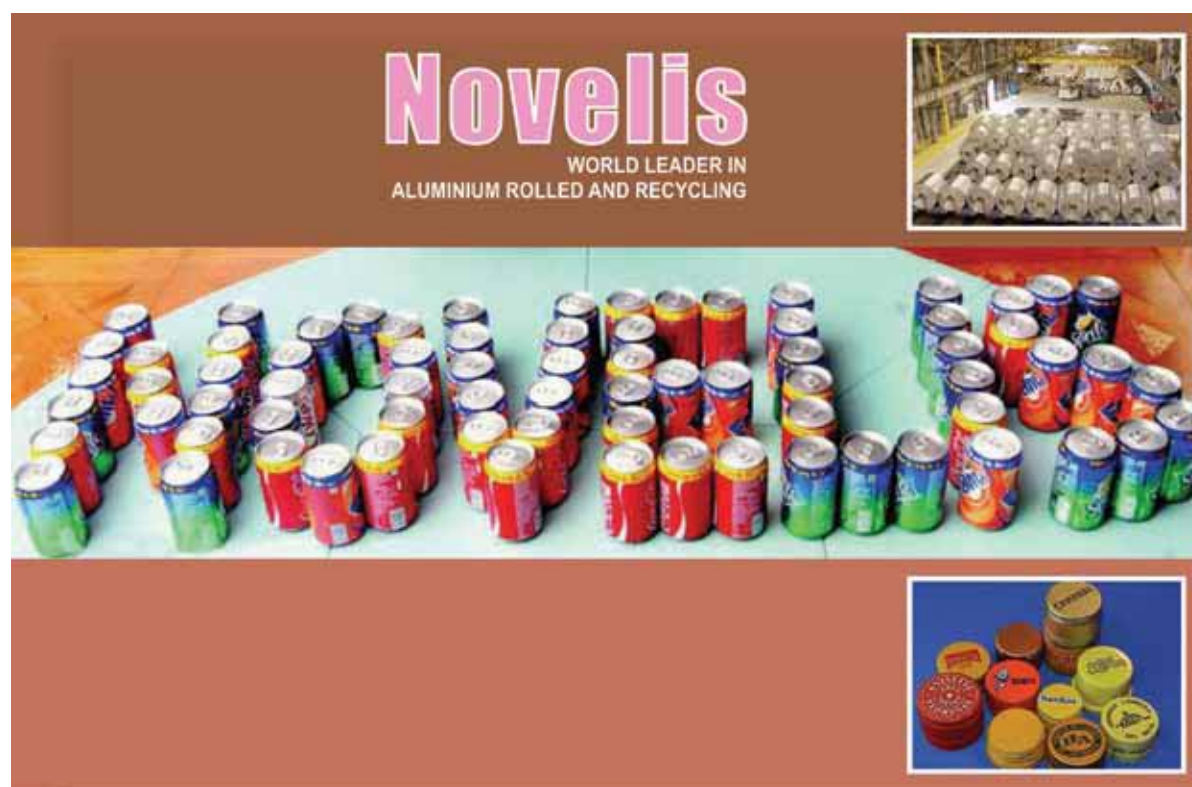
##### Novelis

Novelis, reported net income attributable to its common shareholder of \$202 million for fiscal

2013. Excluding tax-effected certain items, net income for fiscal 2013 was \$241 million, compared to a net income of \$218 million for fiscal 2012.

Adjusted EBITDA for FY 13 was \$961 million, compared to \$1,053 million reported for FY 12. The year-over-year decrease was mostly due to disruptions related to the ERP implementation in two North American plants in the third quarter, pricing pressures in several operating regions, lower average aluminum prices, and an impact from a fire at a North American plant in the fourth quarter as also higher pension expense.

Shipments of aluminum rolled products totalled 2,786 kilotonnes for fiscal 2013, down slightly compared to shipments of 2,838 kilotonnes for the same period last year due mostly to the sale of the Novelis' three foil plants in Europe and production disruptions in North America. Net sales for FY 13 were \$9.8 billion, an 11% decrease compared to the \$11.1 billion reported in the previous year. This decline was due to lower average aluminum prices and lower shipments when compared to last year.





Novelis achieved a number of significant accomplishments in FY 13:

- Record capital investment in the business of \$775 million, primarily geared at major global rolling, finishing and recycling expansions for its key products segments of can, automotive and specialties.
- Solid liquidity of \$760 million for FY 13 despite its aggressive capital expenditure program.
- Increased the recycled content in its products by 4 percentage points to 43% for FY 13 making good progress toward its goal of having 80% recycled content in its products by 2020.
- Continued optimization of its footprint and product portfolio, including the sale of three foil plants in Europe, the closure of a plant in Canada and shutdown of a smelter pot line in Brazil.

### Aditya Birla Minerals

FY13 was a challenging year for Aditya Birla Minerals, your Company's 51% owned subsidiary, on several counts.

- Average copper prices were lower compared to the previous year in AUD terms.
- There was a decline in the mine grade at Nifty. While this was in line with the mining plan, it impacted the output.
- Though Mt Gordon operations were taken out of care and maintenance during the year, the ramp up fell short of the expectation.

Higher volumes and operational improvements at Nifty were negated by macro factors and high cost at Mt Gordon, which was put back under care & maintenance. A strategic review has been initiated to maximize the value of Mt Gordon.

Aditya Birla Minerals achieved an increase in copper production by 16% mainly on

account of restart of Mt Gordon mine. The sales volume grew by 14% compared to the previous year, however the revenue in value terms increased marginally by around 1%. The profitability was adversely affected mainly due to lower realisation of copper compared to the previous year and higher average unit cost of production due to more volume from Mt Gordon operations at higher cost.

The Company registered an operating loss of A\$10.9 Mn as compared to operating profit of A\$30.8 Mn in the previous year. The Company incurred a net loss of A\$8.3 Mn as compared with net profit of A\$26.6 Mn in FY 2012.

- Aditya Birla Minerals had a balance of cash and cash equivalents of \$100.41 million as on 31<sup>st</sup> March 2013.

During the year, Aditya Birla Minerals mined and processed around 3.4 Mn tonnes of ore, which was higher by almost 21% as compared with the previous year. At Nifty, the ore mined was 2.27 million tonnes representing an increase of 8% over previous year, while at Mt Gordon, the ore mined was 1.10 million tonnes representing an increase of 59% over the previous year.

- The scoping study of Mt Gordon operations based upon Sub-level cave mining method was completed during the year.

The completion of Scoping study marks a significant milestone for Mt Gordon operations and Aditya Birla Minerals. The study indicates that Mt Gordon can produce approximately 4.0mt per annum for 9 years with a total life of mine of 16 years (till 2028).

A consultant has been appointed to carry out strategic review ("Strategic Review") of the Mt Gordon operations and advise management various strategic options based on this Scoping study results. The strategic review includes considering corporate and operational strategies for Mt Gordon, including examining development options available to Aditya Birla Minerals.



**Hindalco Earnings per share (EPS)**

The standalone basic and diluted Earning Per Share was at ₹ 8.9 per share in FY13 as compared with EPS of ₹ 11.7 in FY12. The consolidated EPS was ₹ 15.8 per share as compared with ₹ 17.7 per share last year.

**Business Performance Review:****Aluminium Business****Industry Review**

Global economy has been trudging along in the last one year in view of several macro economic uncertainties and risks. Some of the impending risks such as the Euro region break up and sharp US contraction seem to have been averted for now. Encouraging growth in the US and liquidity boosting policies by certain central banks have enabled the global economy to grow around 3.2% in 2012.

However, commodities are still languishing given the declining growth in China that hit a 13 year low, slowdown in Europe and lacklustre growth in other emerging markets.

The fact that commodity prices are ruled by sentiments more than pure demand - supply dynamics, in an era where commodities have evolved as an important asset class, too had a major bearing on the commodity prices.

Repeated episodes of global risk aversion and relatively high energy costs cast a shadow on the metals and mining businesses. Many Mergers & Acquisitions went sour as global players found it difficult to cope with the challenging macroeconomic environment. In 2012 itself the write downs on acquisitions exceeded USD 50 Bn. In India, the growth rate slowed down as rising inflation and widening current account deficit constrained the monetary policy. Uncertain regulatory environment too impacted the growth as investment appetite declined.

**Demand – Supply**

Global Aluminium demand growth normalised to around 5% in 2012, after a sharp growth in the preceding two years on the back of global recovery from the 2009 crisis. The aluminium demand was



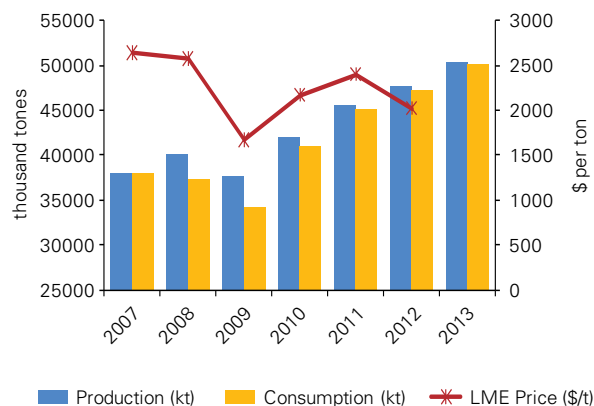
around 47 Mn tonnes. The demand growth rate dropped as Chinese demand growth moderated to 10% after clocking a growth rate of 19% and 16% in the previous two years. Elsewhere, aluminium consumption increased strongly except for Europe where consumption was stagnant. Demand from the US and emerging economies increased at around 6-7% with Asian demand increasing at over 8%.

With regard to end use sectors, in China, visible slowdown in the construction sector following government enforced restrictions and decline in demand from packaging sector resulted in decline in demand growth. However, the demand from automobile and consumer goods sectors remained strong. In the US, though demand growth was secular across all industries, the primary demand drivers were automobile and aerospace sectors. In Japan, government policies with respect to reconstruction post Tsunami, increased government expenditure; and of late depreciating yen have resulted in a stable demand.

In India, power sector continued to be the dominant driver of aluminium demand consuming almost 42% of aluminium. This, coupled with stable growth in other sectors such as automobile, packaging and construction, led to ~ 9% demand growth in CY 2012.

Globally, aluminium production increased by around 4.5% to ~ 47.7 Mn tonnes. Chinese production

**Production (kt) Consumption (kt) LME Price (\$/t)**

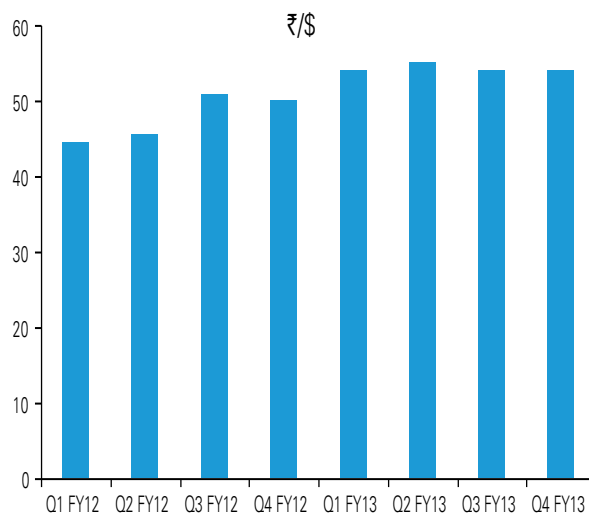
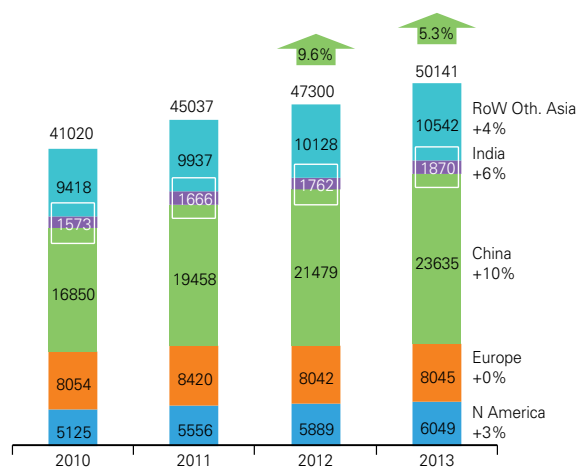


increased by almost 14% to 22 Mn tonnes, which was around 47% of global production. However, in rest of the world, there was a decline in production, which was lower by 2.5% (YOY basis). Barring Middle East, there were production curtailments in most geographies. In Australia and Europe, production declined by 5%, while in North America it was lower by around 2.4%.

Chinese capacities increased by over 14% as new capacities continued to come on stream especially in Western China, while the closure of old capacities lagged behind.

The industry continued to be plagued by high inventories; and the global aluminium inventory, including the off-exchange stocks, is estimated at over 12 million tonnes, which has been a huge overhang on the prices.

**Demand & Market**





## Primary Aluminium

LEADING LOW-COST  
PRODUCER OF  
ALUMINIUM



Strong contango and low financing cost ensured that more and more stocks got diverted to the warehouses under financial contracts. This, coupled with strong demand and low load out rates due to various reasons including logistic challenges, ensured high regional premiums, which reached historic high. Across the globe, local premiums were higher than \$220/tonne.

Sluggish global economic conditions, surplus production, rising inventories and periodic bouts of risk aversion leading to bearish sentiments have resulted in low aluminium prices.

Cost of production for most aluminium players continued to remain high due to challenges pertaining to energy inputs and resources.

In the western world, rising grid tariffs with increasing energy demand continued to impact power costs that account for almost 30-40% of aluminium cost of production. South Africa too continued to struggle with energy inflation. In China, smelters on the east side continued to suffer

as energy prices continued to climb up with the deficit widening in the east coast region. China, now, is in the process of building new capacities in the Western/North Western region, endowed with abundant coal reserves and this is expected to bring down the power cost substantially. Indian smelters continued to bear the brunt of rising coal prices and rising diesel prices accentuated by policy changes in the oil sector.

The other important input cost for the aluminium smelters is alumina cost. Alumina prices have been rising in the recent past as China continues to consume large amount of alumina. Export ban/increased taxes from some countries like Indonesia and India on bauxite also impacted the cost of bauxite (raw material for alumina) and hence alumina. Alumina prices have moved up to almost 17-18% of aluminium prices and are expected to remain strong in the wake of strong demand from Chinese and Middle Eastern smelters as also constrained supplies of ore (bauxite) due to various reasons such as higher costs, declining



grades, resource nationalism, logistic challenges, regulatory road blocks, etc.

Several global producers continued to make losses due to rising costs and depressed prices. In fact, the recent aluminium pricing scenario is the longest period, wherein aluminium prices have been well below the marginal cost of production; and where over 25% of producers are estimated to have been making cash losses.

### Operational Review

Against this backdrop, your Company's aluminium business had an operational performance that was truly creditable and indeed superior to most global peers.

### Alumina

Alumina production at 1.32 Million tonnes was at the same level as in the previous year despite issues related to deteriorating bauxite quality and challenges in sourcing of bauxite.

### Primary Metal

As compared with the previous year, primary aluminium production declined by 6% to 542 KT. This decline was on account of operational setbacks in the first half, where natural calamities too played a part. In the second half, production returned to normalcy.

### Value Added Products (VAP)

The value added downstream sales grew by 4% over the last year. This growth was a result of your company's focused strategy of value maximisation and was despite lower upstream volumes and supply chain hiccups.

(Kt)	FY13	FY12
Downstream Sales (or VAP)	240	231

### Financial Performance

The turnover of the aluminium domestic business decreased by 3% to ₹ 8,776 crore vis-à-vis





₹ 9,037 crore in the previous year. This decline was due to lower LME and lower metal volumes.

Earnings before interest and taxes (EBIT) was lower at ₹ 930 crore as compared with ₹ 1,822 crore in FY 12, as higher input costs put further pressure on the business reeling under weak LME and production setbacks. This was a creditable performance in the face of strong cost inflation in a year that witnessed coal prices increasing by over 20% and caustic soda prices going up by as much as 32%. In addition, your Company also witnessed cost push on account of declining bauxite quality.

The cost pressures were to some extent neutralized through multiple initiatives, including:

- Optimization of the sales mix,
- Higher sale of special hydrate / alumina,
- Continuous improvement in efficiencies.

Even though EBITDA margins fell on account of adverse macroeconomic factors, Hindalco's margins continued to remain ahead of most of the global peers.

## Outlook

Global economic conditions have somewhat improved during the past six months. The Policymakers in developed countries have defused two of the biggest short-term risks to global activity at least for the moment - the threat of the euro zone breakup and a sharp fiscal contraction in the United States. Financial stability has improved, according to the IMF's latest World Economic Outlook (WEO). The report forecasts real global GDP growth of 3.3% on an annual average basis in 2013.

Long term outlook for aluminium continues to remain strong with Global aluminium demand expected to increase at a CAGR of 6% over next five years. China will continue to be the torchbearer of this demand increase, with expected growth of 9% till 2020, taking its consumption to almost 37 Mn tonnes. This growth rate, though strong, pales in comparison with the stupendous rate at which Chinese aluminium consumption has grown over the last decade. Infrastructure investment, especially power sector is expected to lead the growth as China





rebalances its economy and increases its thrust on domestic consumption.

Other emerging markets too are expected to grow strongly, with Indian demand growth expected to be in double digits. The Indian aluminium consumption prospects remain strong with an expected demand pull from the power sector. India's demand for housing, retail and office space is expected to rise rapidly as the urbanisation ratio is set to increase from 31% in 2011 to 40% by 2030 with an estimated 610 million people living in the cities by 2030.

In the developed world, the demand will mostly continue to be consumer driven. US demand is expected to be robust over the short term with auto sector growing strongly and some recovery seen in the housing and construction sectors. The transportation sector is expected to display the strongest growth, driven by higher vehicle production and increased substitution of steel by aluminium as vehicle lightweighting gathers pace. This will lead to higher demand for auto body sheet

throughout the forecast period.

The outlook for Europe is again not too bright having been plagued with several macro-economic issues. In the mature Japanese market, demand will remain relatively static, but the falling Yen should help keep Japanese manufacturing exports competitive.

The supply is expected to remain strong as several producers continued to produce despite low LME. High physical premiums too worked as an incentive to continue production. Global Aluminium production is expected to grow at a rate matching the demand growth over the next five years. Bulk of production increase will come from China and Middle East. Production from both these regions is expected to grow at around 8-9%.

In the recent past, there have been some capacity curtailments but overall production continued to increase, especially in China. New Chinese capacities in the North West/Western China are expected to come on stream over next few years.

An estimated 10 Mn tonnes capacity is getting added in interior China while some of the high cost capacities in the eastern China are expected to close down. While many of these closures are logical, the timing is uncertain due to subsidies from provincial government. In China, smelters will be challenged by the issues in sourcing alumina / bauxite, especially considering the recent restrictions on bauxite export from Indonesia and logistic challenges/cost inflation in transportation of bauxite/alumina to the interior China.

### Business Outlook

Over the years, your Company has successfully demonstrated benefits of an integrated approach with low cost upstream operations and significant abilities and reach in the downstream business. The robustness of Novelis' de-risked business model and focused approach to leverage the dominance in its chosen product segments has yielded desired outcome in challenging times.

Hindalco's aggressive Greenfield expansion programme is on the verge of delivering, despite tough ground conditions at its project locations.

Once these projects stabilise fully, they will ensure long term sustainability of your Company built on a sound strategy; thus yielding superior returns and value addition.

### Greenfield Projects

Greenfield Projects have made significant progress during the year. These projects, with their vertical integration and logistical advantages, shall enhance the cost competitiveness of aluminium business and will establish it as the 'Last Man Standing'.

- **Utkal Alumina International Ltd (UAIL):**

The construction of the alumina refinery, along with a 90 MW captive co-generation plant at UAIL, a 100% subsidiary of the Company is at the final stages of completion. The commissioning activities and trial run production are expected to commence shortly. The output from UAIL would be sufficient to feed alumina to the Mahan and the Aditya Smelters.



*Utkal Alumina International Ltd.*



- **Mahan Aluminium project:**

This 360 KTPA Aluminium Smelter, along with 900 MW captive power plant, is set up in Bargawan, Madhya Pradesh. The state of the art facility set up is also at the final stages of completion and the first metal was tapped in April, 2013. This is now gearing up for phased commissioning and subsequent ramp up.

These projects will re-define Hindalco's aluminium business since all these projects will have a world beating cost structure once they get on stream in totality.

Mahan coal block has received stage 1 clearance from MOEF and is expected to gear up for coal production after obtaining stage 2 clearance.

- **Aditya Aluminium project:**

A 360 KTPA, Aluminium smelter along with a 900 MW captive power plant, identical to the Mahan Aluminium project, is coming up in Odisha. The project is slated for commissioning activities in 2013.

**Brownfield Projects:**

There were important developments in India w.r.t. your Company's strategic goal of higher VAP proportion.

The Hirakud FRP project has been commissioned. This project, which involved relocation of equipment from an idled facility of Novelis, is the first and the only facility that will have the capability to produce canbody stock in India. This facility that is now under ramp up; will take Hindalco's FRP play on a higher plateau in terms of capability and profitability in the coming years.

**Novelis:**

Novelis is now in the consolidation phase and is investing in some strategic projects that would enable it to build on the current solid foundation. Rolling mill expansion in Brazil has been commissioned in FY 13. The other major strategic expansions in South Korea and the United States are progressing well with expected commissioning of both in FY 14. Novelis has also progressed well in China, and will initially focus on automotive sheet finishing capabilities. It has also invested in



*Mahan Aluminium project*



the US in the same segment; these investments will enable us in solidifying our global automotive leadership position.

In FY13, Novelis' capex crossed \$ 0.75 billion. It is planning to spend another \$ 0.65-0.70 bn in the current fiscal. The capex initiatives of Novelis have a clear tilt towards emerging markets, auto industry applications and recycling – which are aligned to the key trends in Aluminium industry globally and will place Novelis in a very strong position to benefit from these trends as they evolve further in future.

Novelis invested in major recycling initiatives in all four operating regions, including advanced equipment and technology to process diversified scrap inputs, which will enable the Company to achieve recycled content of 50% in its products by 2015.

### Copper Business

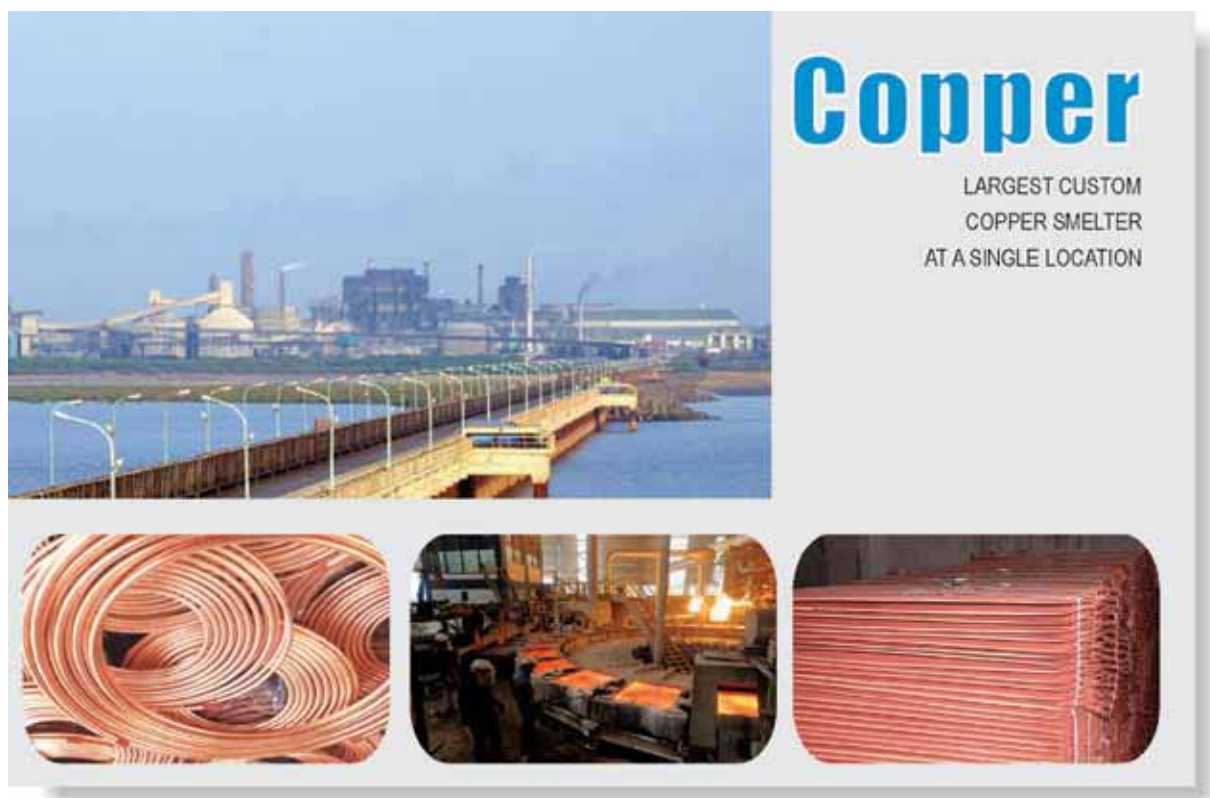
#### Industry Review

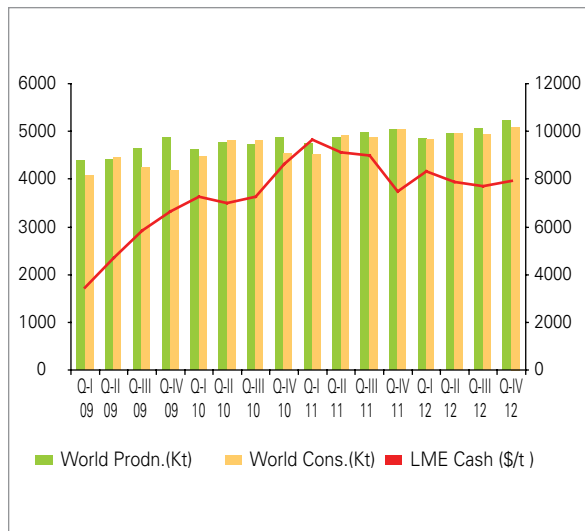
In 2012, world refined consumption was static at 19.7Mt. Refined consumption grew in Asia, Middle

East, North America and Latin America last year, but declined in Europe, Africa and Oceania. The main reason for stagnation in 2012 was a 2.2% year-on-year fall in consumption in the second quarter, which is usually the strongest in the year, as growth slowed abruptly in China. Despite this sharp slowdown in 2012, Chinese demand increased at around 5%, accounting for around 42% of Global copper demand.

In the USA, financial fears had weighed on demand in the latter part of 2012, although 2013 seems to have started on a firmer footing. Continued improvement in key end use sectors is also expected to propel demand through the balance of the year. The construction market has been a focus of attention for some time following stellar growth in housing starts and this now seems to be feeding through into consumption of cathode.

European consumption declined by almost 7% as industrial growth dropped sharply amidst the fears of Euro breakdown. The demand in Japan, the other large consumer, remained stagnant.





The refined copper supply was in surplus throughout the year with supply outstripping demand.

Copper produced from scrap (at smelters, refineries and in direct use) amounted to 9.97Mt in 2012, an increase of 1.8% on the prior year and accounting for 38.6% of all copper consumed.

During the year, LME stocks increased and now are at the highest level in last ten years. Stocks in China too have increased sharply. Total exchange stocks at 0.9 Mn tonnes are at levels not seen since 2002.

The treatment and refining charges (TC/RC) for the CY 2012, were better than CY 11, as a slowdown in demand provided a window of opportunity to the custom smelters. In CY 12, benchmark TC/RC were ~ 15% higher than CY 2011 benchmark. Spot TC/RC showed a significant volatility throughout the year partly on account of mine disruptions, strikes and demand fluctuations. Average spot TC/RC levels for 2012 were over 30% lower than in 2011. The smelters also suffered on account of incessant cost push.

#### Business Performance:

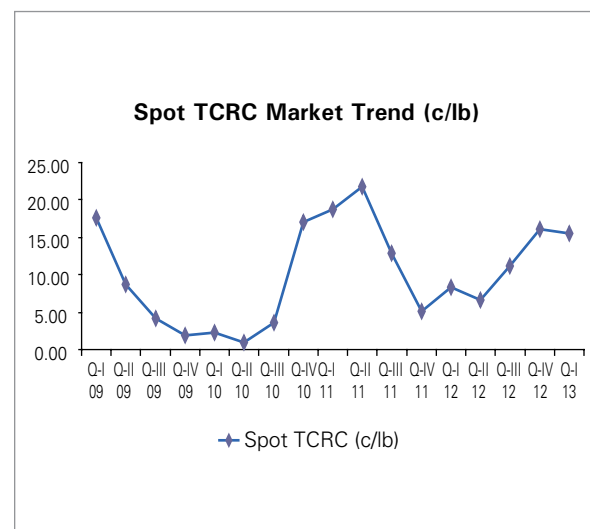
Copper business got impacted due to plant shutdowns in the first half that resulted in decline

in production. The output for the year at 314 KT was 5% lower than the previous year. Despite this, the endeavour to maximise VAP production resulted in higher volumes of CCR. The TC/RC for the year was marginally better, though co-product prices were significantly lower as industrial growth slowed down.

For custom smelters like your Company, copper prices are just a pass through and the margins are largely determined by TC/RC and other value drivers, viz. co-products. This year, while higher TC/RC were supportive, weak co-product prices and high input costs along with plant shutdowns negated the impact of better TC/RC. With improved product and market mix, and better operating efficiencies, copper business managed to deliver a robust performance. The EBIT for the year stood at ₹ 768 crore as compared to ₹ 802 crore in the previous year.

#### Outlook

In the short-term, the pace of copper supply growth relative to demand is expected to keep the market in surplus till 2017. Industry forecasts expect growth in refined copper consumption to be 4.9% in 2013, driven largely by China and North America. Smelter capacity is expected to continue growing with a CAGR of 5.8% p.a. till 2016.



On account of the market surplus and risk averse macroeconomic environment, copper prices are expected to remain subdued over next 1-2 years. This may lead to delays and/or deferrals in those projects that are either in construction or due to come on line over the coming years. Overall mine production capacity is forecast to rise from 16.2Mt in 2011 to 21.3Mt by 2015, an increase of 32%. Beyond 2015, mine production may be subdued due to reserve depletion.

Long term TC/RC for 2013 is around 10% better than in 2012. However, spot TC/RC are expected to remain volatile depending on the news flow.

Copper demand globally is expected to be little subdued and so are the prices. Over the period 2016 to 2018, projected deficits as a result of the slower pace of production growth should see prices recovering.

However, your Company's business which is predominantly converter business is largely insulated from copper prices. Better TC/RC due to surplus of mine metal, recovery in the Indian economy and manufacturing sector augurs well for the business. A weak rupee will also support the performance.

### Financial Review & Analysis

- Hindalco's consolidated revenue stood at ₹80,193 crore as compared with ₹ 80,821 crore in FY 12. Profit before depreciation, interest and taxes stood at ₹ 8,849 crore as compared with ₹ 8,967 crore in FY12. This decline was only marginal against the backdrop of significant challenges faced by your company such as lower aluminium LME realisations, strong cost pressures, certain one offs that afflicted both Hindalco and Novelis; and weakness in demand in certain geographies following macroeconomic headwinds.

- Standalone revenue for the year was stable at ₹ 26,057 crore. Profit before interest and depreciation was ₹ 3,187 crore vs. ₹ 3,721 crore in FY12.

### Other Income

- Standalone other Income at ₹ 983 crore was higher on account of better yields and higher treasury corpus and dividend from subsidiaries.

### Interest

- Consolidated Interest expenses increased from ₹ 1,758 crore to ₹ 2,079 crore. In standalone business, finance costs went up from ₹ 294 crore to ₹ 436 crore due to increase in debt levels in line with drawl of new debt.

### Depreciation

- Consolidated depreciation (including impairment) was steady at ₹ 2,861 crore (₹ 2,864 crore in FY 12).
- Standalone depreciation charges (including impairment) were at ₹ 704 crore in FY13 as compared to ₹ 690 crore in FY12.

### Taxes

- The provision for tax was at ₹ 348 crore in standalone business and ₹ 886 crore in consolidated business.

### Profit

- Net profit attributable to the shareholders stood at ₹ 3,027 crore as compared with ₹ 3,397 crore in FY 12.
- Standalone Net profit for the year stood at ₹ 1,699 crore vs. ₹ 2,237 crore in FY12. Net profit declined owing to higher financing costs which increased with higher average debt levels.

**CASH FLOW ANALYSIS**

₹ in Crore

Particulars	FY12	FY13	%
<b>SOURCE OF CASH</b>			
Cash from operations	2,122	(352)	-3%
Non-operating income	550	514	5%
Net debt Inflows	5,534	9,932	98%
Equity Raised	543	-	-
Capital Subsidy	-	5	
Return of Capital by subsidiaries	67	-	-
Divestments of investments (Net)	624	-	-
<b>Total</b>	<b>9,440</b>	<b>10,099</b>	<b>100%</b>
<b>APPLICATION OF CASH</b>			
Short-term Investments (Net)	-	2,704	26%
Net capital expenditure	7,157	5,510	52%
Investment/Loans in subsidiaries	451	542	5%
Interest & Finance Charges	1,019	1,520	14%
Dividend payout	324	331	3%
<b>Total</b>	<b>8,951</b>	<b>10,607</b>	<b>100%</b>
<b>Increase/(Decrease) in Cash and Cash Equivalents</b>	<b>489</b>	<b>(508)</b>	

Cash from operations was significantly lower compared to last year due to increase in working capital and lower operating profits. Net increase in borrowing of ₹ 9,932 crore was mainly to finance the capital expenditure of ₹ 5,510 crore and increase in working capital.

**Risk Management**

Hindalco's financial performance is significantly impacted by fluctuations in the prices of Aluminium, Alumina, exchange rates and interest rates. The Company takes a very structured approach to the identification and quantification of each such risk and has a comprehensive board approved

risk management policy. The company has also put in place an elaborate ERM (Enterprise Risk Management) framework.

**Internal controls**

A strong internal control culture is pervasive throughout Aditya Birla Group. Regular internal audits at all locations are undertaken to ensure that the highest standards of internal control are maintained. The effectiveness of a business' internal control environment is a component of senior management performance appraisals. The principal aim of the system of internal control is the management of business risks, with a view to enhancing the shareholders' value and safeguarding the Group's assets. It provides a reasonable assurance on the internal control environment and assurance against material misstatement or loss.

**Sustainability**

Your Company has always believed in sustainable operations. Hindalco has published its second Sustainability Report-2011-12 covering Hindalco globally, including Hindalco India, Novelis and Aditya Birla Minerals Limited, Australia. The report covers various aspects of sustainability that are practised in your Company's global operations. It reports the performance in terms of economic, environmental, people related and social parameters as per GRI G 3.1 guidelines. Novelis has published its sustainability report as well.

Your Company has taken several steps to ensure compliance and proactive steps towards sustainable and responsible growth.

**Human capital**

Aditya Birla Group has time and again been adjudged amongst the best employer in India by global agencies such as Hewitt. Its culture and reputation as a business leader in the industry enables it to recruit and retain the best available talent in India.





Your Company's professionals are its most important assets. The Company is committed to remaining among the industry's leading employers. It has a pool of around 20,000 employees in its fold. The Group has a well laid talent development plan that ensures attracting the talent and provides for nurturing and enhancement of talent.

### Training and Development

Your Company's training, continuing education and career development programs are designed to ensure that its professionals enhance their business skills. Various Group initiatives and learning campus provide continuous learning opportunities. In-house faculty conducts integrated training for new employees. Leadership development is a core part of the Company's training program.

### Summing Up

With global economic recovery still being weak and with the continued presence of downside

macroeconomic risks, outlook for the commodities sector and for the metals industry remains cautious. However, your Company's performance in the recent years, including in FY13, demonstrates its ability to perform in the face of strong headwinds in business environment – thanks to its balanced portfolio model and the continuous pursuit of operational excellence.

Even during these turbulent times, your Company has doggedly pursued its three-pronged strategy, comprising of:

- Aggressive growth in aluminium in India to create 'Last Man Standing' assets,
- Robust conversion businesses (Novelis and Copper) to cushion the impact of volatility in LME, and
- Thrust on value-added products in each line of business.

With its aggressive expansion programme approaching the stage of commissioning in

FY13, your Company is well poised to achieve its strategic goals. Indeed, with its low cost advantage, balanced business portfolio and a footprint aligned to secular industry trends, your Company will be

in a sweet spot when global economic recovery gathers momentum – catapulting it to far greater heights in the coming years.

#### CAUTIONARY STATEMENT

*Statements in this “Management’s Discussion and Analysis” describing the Company’s objectives, projections, estimates, expectations or predictions may be “forward looking statements” within the meaning of applicable securities laws and regulations. Actual results could differ materially from those expressed or implied. Important factors that could make a difference to the Company’s operations include global and Indian demand supply conditions, finished goods prices, feedstock availability and prices, cyclical demand and pricing in the Company’s principal markets, changes in the Government regulations, tax regimes, economic developments within India and the countries within which the Company conducts business and other factors such as litigation and labour negotiations. The Company assumes no responsibility to publicly amend, modify or revise any forward looking statements, on the basis of any subsequent development, information or events or otherwise.*

## COMPANY'S PHILOSOPHY ON CORPORATE GOVERNANCE

Corporate governance refers to the systems and policies that influence a corporation's administration. It involves regulatory and market mechanisms, and the roles and relationships between a Company's management, board, shareholders and other stakeholders.

Corporate Governance at the Aditya Birla Group is a continuing process. The Group is committed to the adoption of best governance practices and their adherence in true spirit at all times.

Your Company continuously strives to achieve excellence in corporate governance through its values – Integrity, Commitment, Passion, Seamlessness and Speed.

In terms of Clause 49 of the Listing Agreement executed with stock exchanges, the details of compliance are as follows:

### BOARD OF DIRECTORS

#### Composition of the Board

Your Company's Board comprises of 10 Non-Executive Directors as on 31st March, 2013, with considerable experience in their respective fields. Of these, 7 Directors are Independent Directors. Clause 49 of the Listing Agreement, requires that if the Non Executive Chairman of the Company is the promoter then at least half of the Board of Directors of such Company should consist of Independent Directors and we are in compliance with the same.

None of the Directors on the Board is a Member of more than 10 Committees or a Chairman of more than 5 Committees (as specified in Clause 49), across all the Companies in which they hold Directorships. All the Directors have periodically intimated about their Directorship and Membership in the various Boards/Committees of other companies. The same is within the permissible limits as provided by the Companies Act, 1956, and Clause 49 of the Listing Agreement.

The details of the attendance of each Director at the Board Meetings and General Meetings held during the year and Directorships, Membership/Chairmanship in Board Committees of other Companies are as follows:

Director	Category	No. of Board Meetings Attended	Attendance at last AGM	No. of other Directorships Held <sup>3</sup>	Companies Committee Positions Held <sup>4</sup>	
				Public	Member	Chairman
Mr. Kumar Mangalam Birla	Non-Executive	6	Yes	9	—	—
Mrs. Rajashree Birla	Non-Executive	3	No	6	1	—
Mr. A.K. Agarwala <sup>2</sup>	Non-Executive	5	Yes	6	—	—
Mr. C.M. Maniar	Independent	4	Yes	13	6	—
Mr. M.M. Bhagat	Independent	6	Yes	4	2	1
Mr. K.N. Bhandari	Independent	6	Yes	9	2	1
Mr. N.J. Jhaveri	Independent	5	Yes	6	1	3
Mr. Jagdish Khattar	Independent	4	Yes	2	1	—
Mr. Ram Charan <sup>6</sup>	Independent	—	No	—	—	—
Mr. M. Damodaran <sup>5</sup>	Independent	4	No	9	5	2
Mr. D. Bhattacharya	Managing Director	6	Yes	3	—	1

1. Independent Director means a director defined as such under Clause 49 of the Listing Agreement.

2. Mr. A. K. Agarwala was an Executive Director till 10th September, 2003. Thereafter, he has moved to other responsibilities in the Aditya Birla Group.

3. Excludes Directorship held in Private Companies, Foreign Companies and Companies incorporated under Section 25 of the Companies Act, 1956.

4. Represents only Membership/Chairmanship of Audit Committee and Shareholders'/Investors' Grievance Committee of Indian Public Limited Companies.

5. Appointed as a Director w.e.f. 16th April, 2012.

6. However he has attended four meetings through tele conference.

### Board's Functioning and Procedure

Hindalco's Board of Directors play a primary role in ensuring good governance and functioning of the Company. All statutory and other significant and material information including information as mentioned in Annexure IA to Clause 49 of the Listing Agreement is placed before the Board to enable it to discharge its responsibility of strategic supervision of the Company as trustees of the shareholders. The Company has a procedure to inform the Board members about risk assessment and minimisation procedure. The procedure is reviewed by the Board to ensure that the Company manages risks through the means of a properly defined framework. The Board also reviews on a regular basis conformity to all the applicable laws by the Company. The Members of the Board have complete freedom to express their opinion, and decisions are taken after detailed discussion. The details of Board meetings held during the FY 2012-2013 are as outlined below:

Date of Board Meeting	City	No. of Directors Present
8th May, 2012	Mumbai	8 out of 11
27th June 2012	Mumbai	6 out of 11
14th August 2012	Mumbai	9 out of 11
11th September 2012	Mumbai	8 out of 11
6th November 2012	Mumbai	9 out of 11
8th February 2013	Mumbai	9 out of 11

### Board Meetings

The Company Secretary drafts the agenda for each meeting along with the explanatory notes. Every Board member is free to suggest items for inclusion in the agenda. The Board meets at least once in a quarter to review the quarterly results as such items as may be expedient. Additional meetings are held when necessary.

### COMMITTEES OF THE BOARD OF DIRECTORS

The Board has constituted following Committees of Directors to deal with matters and monitor the activities falling within the respective terms of reference:

### AUDIT COMMITTEE

#### Constitution of Audit Committee and its Functions

Your Company has an Audit Committee, at the Board level, which acts as a link between the management, the statutory and the internal auditors and the Board of Directors, and oversees the financial reporting process. The Committee presently comprises of four Non-Executive Directors, all of whom are Independent Directors. During the year, the Audit Committee met 6 times to deliberate on various matters. The details of the attendance by the Committee members are as follows:

Name of Director	Attended
Mr. C.M. Maniar	4
Mr. K.N. Bhandari	6
Mr. M.M. Bhagat	6
Mr. N.J. Jhaveri	5

1. The Chairman of the Audit Committee, Mr. M.M. Bhagat was present at the last Annual General Meeting of your Company held on 11th September, 2012.
2. The Managing Director, CFO, the Representative of the Statutory Auditor, Head of the Internal Audit are permanent invitees of the Audit Committee. The Representative of the Cost Auditors is invited to the Audit Committee Meetings whenever matters relating to cost audit are considered.
3. Mr. Anil Malik, Company Secretary, acted as Secretary to the Committee.

The Audit Committee is endowed with the following powers:

1. To investigate any activity within its terms of reference.
2. To seek information from any employee.
3. To obtain outside legal or other independent professional advice.
4. To secure attendance of outsiders with relevant experience and expertise, when considered necessary.



### Role of Audit Committee

The role of the Committee includes the following:

1. Overseeing of the Company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.
2. Recommending to the Board the appointment, re-appointment and, if required, the replacement or removal of the statutory auditor and the fixation of audit fees.
3. Approval of payment to statutory auditors for any other services rendered by the statutory auditor.
4. Reviewing, with the management, the annual financial statements before submission to the Board for approval, with particular reference to:
  - a. Matters required to be included in the Directors' Responsibility Statement in the Board's report pursuant to Clause (2AA) of Section 217 of the Companies Act, 1956.
  - b. Changes, if any, in accounting policies and practices, and reasons for the same.
  - c. Major accounting entries involving estimates based on the exercise of judgement by the management.
  - d. Significant adjustments made in the financial statements arising out of audit findings.
  - e. Compliance with listing and other legal requirements relating to financial statements.
  - f. Disclosure of any Related Party transactions.
  - g. Qualifications, if any, in draft audit report.
5. Reviewing, with the management, the quarterly financial results before submission to the Board for approval.
6. Reviewing, with the management, the statement of uses/application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilised for purposes other than those stated in the offer document/prospectus/notice and the report submitted by monitoring the utilisation of proceeds of a public or rights issue and making appropriate recommendations to the Board to take up steps in this matter.
7. Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems.
8. Reviewing the adequacy of internal audit function, including the structure of the internal audit department, staffing and seniority of the officials heading the departments, reporting structure coverage and frequency of internal audit.
9. Discussion with internal auditors on any significant findings and follow up there on.
10. Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board.
11. Discussion with statutory auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern.
12. To look into the reasons for substantial defaults in payment to the depositors, debenture holders, shareholders (in case of non-payment of declared dividends) and creditors.
13. To review the functioning of the Whistle Blower mechanism, in case the same is existing.
14. Reviewing the following information:
  - i. Management discussion and analysis of financial condition and results of operations;
  - ii. Statement of significant related party transactions (as defined by the audit committee), submitted by the management;
  - iii. Management letters/letters of internal control weaknesses issued by the statutory auditor; and
  - iv. Internal audit reports relating to internal control weaknesses; appointment, removal and terms of remuneration of the Chief Internal Auditor.
15. Reviewing any other areas which may be specified as role of the Audit Committee under the Listing Agreement, Companies Act and other statutes, as amended from time to time.

### INVESTOR GRIEVANCE COMMITTEE

The Company has an "Investor Grievance Committee" at the Board level to deal with various matters relating to redressal of shareholder's and investor grievances, such as transfer and transmission of shares, issue of duplicate shares, non-receipt of dividends/notices/Annual Reports, etc. In addition, the Committee looks into other issues including status of dematerialisation/rematerialisation of shares and debentures, systems and procedures followed to track investor complaints and suggest measures for improvement from time to time.

The composition of the Committee is as follows:

Mr. C.M. Maniar - Chairman

Mr. K.N. Bhandari - Member

Mr. Anil Malik, Company Secretary, is the Compliance officer and acts as Secretary to the Committee.

During the year under review, the Committee met four times to deliberate on various matters referred above. Details of attendance by Directors for the Committee meetings are as follows:

Name of the Director	Attended
Mr. C.M. Maniar	4
Mr. K.N. Bhandari	4

The Company's shares are compulsorily traded and delivered in dematerialised form in all Stock Exchanges. To expedite the transfer in the physical segment, necessary authority has been delegated to certain officers, who are authorised to transfer up to 10,000 shares under one transfer deed.

Details of complaints received, disposed off and pending during the year, number of shares transferred during the year, time taken for affecting these transfers and the number of share transfers pending are furnished in the "Shareholder Information" section of this Annual Report.

### Non-Executive Directors' Compensation and Disclosure

All fees/compensation including sitting fees paid to the Non-Executive Directors of the Company are fixed by the Board of Directors within the limits approved by the shareholders. Details of sitting fees/compensation paid including Stock Options, if any, to them are given at the respective places in the report.

### Remuneration of Directors and Others

Since the Company has one Executive Director, your Company does not have a Remuneration Committee. The Board of Directors decide the remuneration of the Managing Director.

The Company has a system where all the directors or senior management of the Company are required to disclose all pecuniary relationship or transactions with the Company. No significant material transactions have been made by the Non-Executive Directors with the Company during the year.

Besides sitting fees @ ₹ 5,000/- per meeting of the Board or Committee thereof, the Company also pays Commission to the Non- Executive Directors.

For the FY- 2012-13, the Board has approved payment of ₹ 10 Crore (Previous Year ₹ 14 Crore) as Commission to the Non-Executive Directors of the Company pursuant to the authority given by the shareholders at the Annual General Meeting held on 23rd September, 2011, to pay Commission not exceeding 1% of the net profits of the Company to the Non-Executive Directors of the Company. The amount of Commission payable is determined after assigning weightage to attendance and the type of meeting and other responsibilities.

Executive Director is paid remuneration within the limits envisaged under Schedule XIII of The Companies Act, 1956. The said remuneration is approved by the Board as well as Shareholders of the Company.

The details of Remuneration package, fees paid, etc., to Directors for the year ended 31st March, 2013 are as follows:

**(a) Non-Executive Directors:**

Name of Director(s)	Sitting Fees Paid (In ₹)	Commission Payable (₹ in Lakhs)	Total Payments Paid/Payable in 2012-13 (₹ in Lakhs)
Mr. Kumar Mangalam Birla	30,000	923.46	923.76
Mrs. Rajashree Birla	15,000	16.69	16.84
Mr. A. K. Agarwala	70,000	7.77	8.47
Mr. M. M. Bhagat	65,000	10.27	10.92
Mr. C. M. Maniar	1,05,000	7.75	8.80
Mr. K. N. Bhandari	85,000	11.64	12.49
Mr. N.J. Jhaveri	50,000	8.52	9.02
Mr. Ram Charan	—	4.00	4.00
Mr. Jagdish Khattar	20,000	4.98	5.18
Mr. M. Damodaran	20,000	4.92	5.12

Notes:

1. No Director is related to any other Director on the Board, except Mr. Kumar Mangalam Birla and Mrs. Rajashree Birla, who are son and mother, respectively.
2. Your Company has a policy of not advancing any loan to its Directors except to Executive Director in the course of normal employment.
3. The Company has obtained shareholders' approval for payment of commission to its Non-Executive Directors and Independent Directors, not exceeding 1% of Net Profit of the Company.
4. Stock Options were not granted to any Non-Executive Directors.

**(b) Paid to Executive Director**

Executive Director	Relationship with other Directors	Business Relationship with the Company, if any	Remuneration paid during 2012-13			
			All elements of remuneration package i.e., salary, benefits, bonuses, pension, etc.	Fixed component & performance linked incentives, along with performance criteria	Service contracts, notice period, severance fee	Stock Options details, if any
Mr. D. Bhattacharya	None	Managing Director	₹ 20,60,90,764	See Note (a)	See Note (b)	See Note (c)

- (a) Mr. D. Bhattacharya was paid a sum of ₹ 6,51,00,740 towards performance bonus linked to achievement of targets.
- (b) The appointment is subject to termination by three months notice in writing on either side. Mr. D. Bhattacharya had been re-appointed for a further period of 5 years w.e.f. 1st October, 2008. No severance fee is payable to the Managing Director.
- (c) 2,70,100 & 7,00,000 stock options were granted on 23rd August, 2007 & 25th January, 2008, respectively, out of which 87,525 Options were exercised by Mr. D. Bhattacharya.

**Employee Stock Options Scheme – 2006:**

In accordance with applicable SEBI Guidelines, ESOS Compensation Committee of the Board of Directors of the Company on 23rd August, 2007, granted 1,940,250 stock options at a price of ₹ 98.30 per share (1st Tranche) and on 25th January, 2008, granted 1,033,140 stock options at a price of ₹ 150.10 per share (2nd Tranche) and on 3rd September, 2010, granted 5,72,160 options at a price of ₹ 118.35 per share (3rd Tranche), to the eligible employees. Each option is convertible into one equity share of the Company upon exercise. The exercise price of the option has been determined in accordance with relevant SEBI Guidelines. (Refer Annexure 'A' to the Directors' Report).

Details of Stock Options granted to Mr. D. Bhattacharya: Managing Director, are as under:

Managing Director	1 <sup>st</sup> Tranche			2 <sup>nd</sup> Tranche		
	No. of Options Granted	Vesting Date & (Percent Vesting)	Exercise Period	No. of Options Granted	Vesting Date & (Percent Vesting)	Exercise Period
Mr. D. Bhattacharya	2,70,100	23.08.08 (25%)	By 22.08.2013	7,00,000	25.01.09 (25%)	By 24.01.2014
		23.08.09 (25%)	By 22.08.2014		25.01.10 (25%)	By 24.01.2015
		23.08.10 (25%)	By 22.08.2015		25.01.11 (25%)	By 24.01.2016
		23.08.11 (25%)	By 22.08.2016		25.01.12 (25%)	By 24.01.2017

All directors have disclosed their shareholding in the Company. None of the Directors is holding any debentures of the Company.

Details of Shareholding of Directors as on 31st March, 2013, are as follows:

NAME OF THE DIRECTORS	SHARES (₹ 1 paid-up)
Mr. Kumar Mangalam Birla	8,65,740
Mrs. Rajashree Birla	6,12,470
Mr. A.K. Agarwala	1,16,148
Mr. C.M. Maniar	47,565
Mr. M.M. Bhagat	4,050
Mr. K.N. Bhandari	3,571
Mr. N.J. Jhaveri	5,000
Mr. Ram Charan	NIL
Mr. Jagdish Khattar	2,500
Mr. M. Damodaran	NIL
Mr. D. Bhattacharya	90,740



**Code of Conduct**

The Hindalco Code of Conduct, as adopted by the Board of Directors, is applicable to all Directors, Senior Management/Employees of the Company. The Code is available on the Company's website.

For the year under review, all Directors, Senior Management personnel of the Company have confirmed their adherence to the provisions of the said Code.

Declaration as required under Clause 49 of the Listing Agreement

We hereby confirm that:

All Directors and Senior Management have affirmed compliance with Code of Conduct for the financial year ended 31st March, 2013.

Place: Mumbai

D. Bhattacharya  
Managing Director

**CODE OF CONDUCT FOR PREVENTION OF INSIDER TRADING**

As part of Aditya Birla Group, the Company has a strong legacy of fair, transparent and ethical governance practices. The Company has a Code of Conduct for Prevention of Insider Trading in the Shares and securities of the Company for its Directors and Designated employees.

**SUBSIDIARY COMPANIES**

Your Company does not have any material non-listed Indian Subsidiary Company. The Audit Committee reviews the financial statements and investments made by unlisted subsidiary companies once in a year. The minutes of the Board meetings as well as statements of all significant transactions of the unlisted subsidiary companies are placed before the Board for their review.

**DISCLOSURES****(A) Basis of Related Party Transaction**

All the related party transactions are strictly done on arm's length basis. The Company places all the relevant details of related party transaction, entered in the normal

course of business, before the Audit Committee from time to time. There was no material related party transaction, which is not in the normal course of the business, entered into by the Company during the year. Attention of the Members is drawn to the disclosures of transactions with the related parties set-out in Notes on Accounts forming part of the financial statements.

**(B) Non Compliances/Strictures/Penalties Imposed**

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

**(C) Disclosure of Accounting Treatment**

Your Company has followed all relevant Accounting Standards while preparing the Financial Statements.

**(D) Risk Management**

Risk evaluation and management is an ongoing process within the Organisation. Your Company has comprehensive risk management policy and it is periodically reviewed by the Board of Directors.

**(E) Proceeds from Public Issues, Rights Issues, Preferential Issues, etc:**

The Company has allotted 15,00,00,000 warrants on a preferential basis to the Promoter Group on 22nd March, 2012 entitling them to apply for and obtain allotment of one equity share of ₹ 1/- each fully paid-up at a price of ₹ 144.35 per share against each such warrant at any time after the date of allotment but on or before the expiry of 18 months from the date of allotment, in one or more tranches. The Company has received ₹ 541.31 crore being 25%, against these warrants. The entire amount so received is being utilised for various Greenfield and Brownfield Projects expenditure as per the terms of issue.

**(F) Remuneration of Directors**

This is included separately in this Section.

**(G) Management**

Management Discussion and Analysis Report is prepared in accordance with the requirements laid out in Clause 49 of the Listing Agreement and forms part of this Annual Report.

No material transaction has been entered into by the Company with the Promoters, Directors or the Management, their subsidiaries or relatives, etc., that may have a potential conflict with interests of the Company.

**(H) Shareholders**

The Company has provided the details of Directors seeking re-appointment in the Annual General Meeting provided with this Annual Report.

Quarterly Presentations on the Company results are available on the website of the Company ([www.hindalco.com](http://www.hindalco.com)) and the Aditya Birla Group website ([www.adityabirla.com](http://www.adityabirla.com)).

**CEO/CFO Certification**

The Managing Director and CFO have certified to the Board that:

- a. They have reviewed the financial statements and the Cash Flow statement for the year and that to the best of their knowledge and belief :
  - i. these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
  - ii. these statements together present a true and fair view of the Company's affairs and are in compliance with the existing

accounting standards, applicable laws and regulations.

- b. There are, to the best of their knowledge and belief, no transactions entered into by the Company during the year which are fraudulent, illegal or violative of the Company's Code of Conduct.
- c. They accept responsibility for establishing and maintaining internal controls for financial reporting and that they have evaluated the effectiveness of internal control systems of the Company pertaining to financial reporting and they have disclosed to the auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which they are aware and the steps they have taken or propose to take to rectify these deficiencies.
- d. They have indicated to the auditors and the Audit Committee the following:
  - i. significant change if any in internal control over financial reporting during the year;
  - ii. significant changes in accounting policies if any during the year and that the same have been disclosed in the notes to the financial statements; and
  - iii. instances of significant fraud of which they have become aware and the involvement therein, if any, of the management or an employee having a significant role in the Company's internal control system over financial reporting.

**REPORT ON CORPORATE GOVERNANCE**

A separate section on Corporate Governance forms part of the Annual Report. The Certificate from the Statutory Auditors confirming compliance with all the conditions of the Corporate Governance as stipulated in Clause 49 of the Listing Agreement forms part of this report.

**GENERAL BODY MEETINGS**

Details of Annual General Meetings:

Location and time, where Annual General Meetings (AGMs) in the last three years were held:

Year	AGM	Location	Date	Time
2011-12	AGM	Ravindra Natya Mandir	11th September, 2012	2.30 pm
2010-11	AGM	Ravindra Natya Mandir	23rd September, 2011	2.30 pm
2009-10	AGM	Ravindra Natya Mandir	3rd September, 2010	2.30 pm

In the last three years special resolution as set out in the respective notices for AGM's were passed by shareholders.

Whether any special resolution passed last year through postal ballot? No

Person who conducted the postal exercise: Not Applicable

Whether any special resolution is proposed to be conducted through postal ballot: No

**MEANS OF COMMUNICATION**

- Quarterly Results:

Newspaper	Cities of Publication
Financial Express (English)	All editions
Navshakti (Marathi)	Mumbai Edition only

- Any website, where displayed : [www.hindalco.com](http://www.hindalco.com)  
[www.adityabirla.com](http://www.adityabirla.com)
- Whether the Company Website displays
  - All official news releases : Yes
  - Presentation made to Institutional Investors/Analysts : Yes

Besides that, Annual Reports, Quarterly Results, Shareholding Pattern Statement, etc., are posted on the Corporate Filing and Dissemination System as per the requirements of Clause 52 of the Listing Agreement.

**General Shareholder Information**

Provided in the 'Shareholder Information' section.

**Status of Compliance of Non-mandatory Requirement**

- The Company maintains a separate office for the Non-Executive Chairman. All necessary infrastructure and assistance are available to enable him discharge his responsibilities effectively.
- The Company has a policy of conducting an orientation for a new director on the business model in order to get him acquainted with the operation and functioning of the Company.
- Your Company does not have a Remuneration Committee. The Board of Directors fixes the remuneration of the Managing Director.
- "Performance Update" consisting of financial and operational performance for the first six months of the financial year has been sent to the shareholders since 2000-01. However, this practice has been discontinued from 2008-09. Analyst Report is uploaded in the Company's website, which is more elaborative and informative.

5. During the period under review, there is no audit qualification in the financial statements.
6. The Management and the Executive Director give extensive briefings to the Board members on the Business model. The Company has also formed a Risk Management Board comprising of Directors and Executives of the Company which meets periodically to review Commodity and Foreign Exchange exposures and actions taken thereon.
7. All the Aditya Birla Group Companies have common "Corporate Principles and Code of Conduct" applicable to all the employees. *Inter alia*, it provides mechanism to enforce and report violations of the principles and the code, if any.
8. We have a Whistle Blower Policy and the Audit Committee reviews the same.

### AUDITORS' CERTIFICATE ON CORPORATE GOVERNANCE

#### To the Members of Hindalco Industries Limited

We have examined the compliance of the conditions of Corporate Governance by Hindalco Industries Limited for the year ended 31st March, 2013, as stipulated in Clause 49 of the Listing Agreement of the said Company with the Stock Exchanges in India.

The Compliance of conditions of Corporate Governance is the responsibility of the Management. Our examination was limited to the procedures and implementation thereof, adopted by the Company for ensuring the compliance of conditions of Corporate Governance. It is neither an audit nor an expression of the opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in the above mentioned Listing Agreement.

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

For SINGHI & CO.  
Chartered Accountants  
Firm Registration No. 302049E

Camp: Mumbai  
Dated: the 28<sup>th</sup> day of May, 2013.  
1-B, Old Post Office Street,  
Kolkata – 700 001.

(RAJIV SINGHI)  
Partner  
Membership No. 53518



1. Annual General Meeting
  - Date and Time : 10th September, 2013 at 2.30 p.m.
  - Venue : Ravindra Natya Mandir  
P.L. Deshpande Maharashtra Kala Academy  
Prabhadevi  
Mumbai - 400 025
2. Financial Year
  - Financial reporting for the quarter ending June 30, 2013 : On or before 14th August, 2013
  - Financial reporting for the half year ending September 30, 2013 : On or before 14th November, 2013
  - Financial reporting for the quarter ending December 31, 2013 : On or before 14th February, 2014
  - Financial reporting for the year ending March 31, 2014 (Audited ) : On or before 30th May 2014
  - Annual General Meeting for the year ended March 31, 2014 : September, 2014
3. Dates of Book Closure : 3rd September, 2013 to 10th September, 2013
4. Dividend Payment Date : After 13th September, 2013  
(Within 30 days from the date of AGM subject to approval of shareholders)
5. Registered Office : Century Bhavan, 3<sup>rd</sup> Floor,  
Dr. Annie Besant Road,  
Worli, Mumbai - 400 030.  
Tel: (91-22) 6662 6666  
Fax: (91-22) 2422 7586 / 2436 2516  
E-Mail: anil.malik@adityabirla.com  
Website: www.adityabirla.com
6. a. Listing Details:

Equity Shares	Global Depository Receipts (GDRs)	Non-Convertible Debentures
<b>BSE Limited</b> Phiroze Jeejeebhoy Towers Dalal Street, Mumbai – 400 001.  <b>National Stock Exchange of India Limited</b> “Exchange Plaza”, Bandra-Kurla Complex, Bandra (East), Mumbai – 400 051.	<b>Societe de la Bourse de Luxembourg</b> Societe Anonyme, RC B6222, B.P.165, L-2011, Luxembourg	<b>National Stock Exchange of India Limited</b> “Exchange Plaza”, Bandra-Kurla Complex, Bandra (East), Mumbai – 400 051.

*Note: Listing fees has been paid to all the Stock Exchanges as per their Schedule.*



- b. Overseas Depository for GDRs : J.P. Morgan Chase Bank  
60 Wall Street, New York, NY 10260  
Tel.: 1-302-552 0253 Fax: 1-302-552 0320
- c. Domestic Custodian of GDRs : Citibank, N.A.  
Trent House Plot No. C-60  
Bandra-Kurla Complex, Bandra (East)  
Mumbai – 400 051  
Tel.: 91-22- 40296118
7. ISIN : Equity Share: ISIN INE038A01020  
GDR: ISIN US4330641022  
USIP No. 433064300

8. Details of Debenture issued:

Interest Payment Date	Interest	Series	Date of Allotment	Tenure	Maturity Date	Record Date	ISIN No.
25th April	Annually	9.55% Series (2012)-I	25th April, 2012	10 Years	25th April, 2022	7 days prior to each Interest and/or Redemption Payment	INE038A07258
27th June	Annually	9.55% Series (2012)-II	27th June, 2012	10 Years	27th June, 2022	7 days prior to each Interest and/or Redemption Payment	INE038A07266
2nd August	Annually	9.60% Series (2012)-III	2nd August, 2012	10 Years	2nd August, 2022	7 days prior to each Interest and/or Redemption Payment	INE038A07274

9. Stock Code:

Stock Code	Scrip Code
Bombay Stock Exchange	500440
National Stock Exchange	HINDALCO

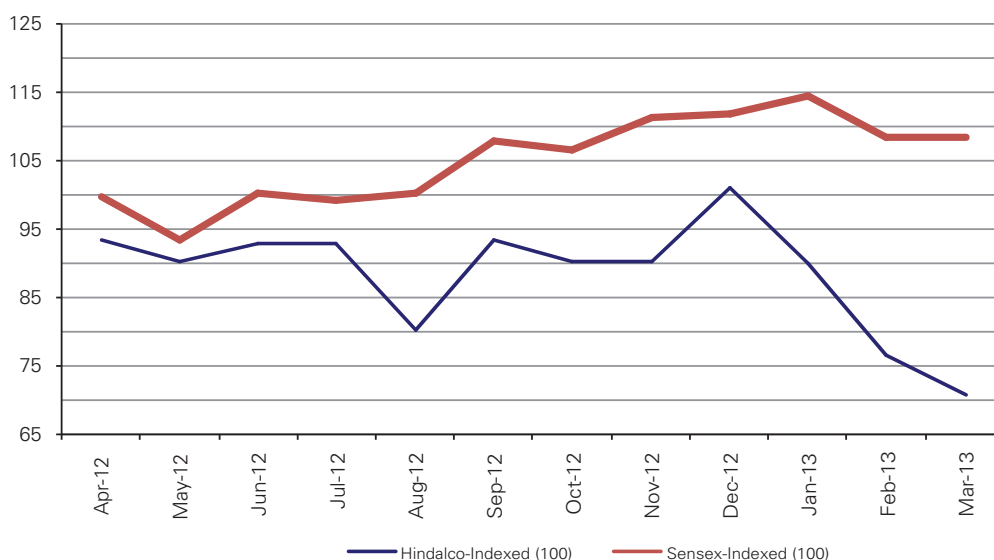
Stock Exchange	Reuters	Bloomberg
Bombay Stock Exchange	HALC.BO	HNDL IN
National Stock Exchange	HALC.NS	NHNDL IN
Luxembourg Stock Exchange (GDRs)	(GDRs)	HDCL LI

Name and Address of Debenture Trustee : IDBI TRUSTEESHIP SERVICES LIMITED  
Asian Building, Ground Floor, 17, R. Kamani Marg,  
Ballard Estate, Mumbai - 400 001

10. Stock Price Data:

	Bombay Stock Exchange				National Stock Exchange				Luxembourg Stock Exchange		
	High	Low	Close	Volume	High	Low	Close	Volume	High	Low	Close
	(In ₹)			(In Nos.)	(In ₹)			(In Nos.)	(In US\$)		
<b>Mar-13</b>	102.50	86.90	91.50	23,569,441	102.60	86.90	91.60	194,054,995	1.87	1.56	1.69
<b>Feb-13</b>	117.35	98.50	99.35	23,405,702	117.40	98.00	98.90	183,860,325	2.16	1.81	1.83
<b>Jan-13</b>	137.00	112.80	115.75	18,677,800	137.10	112.70	116.20	168,545,579	2.51	2.10	2.17
<b>Dec-12</b>	133.75	115.00	130.60	18,041,637	133.75	115.00	130.50	168,393,583	2.43	2.13	2.38
<b>Nov-12</b>	118.75	104.90	116.35	12,829,285	118.80	104.80	116.60	113,117,166	2.19	1.89	2.14
<b>Oct-12</b>	126.35	110.60	116.45	14,279,936	126.50	100.00	116.55	132,553,246	2.43	2.00	2.16
<b>Sep-12</b>	121.85	100.15	120.50	17,225,123	121.90	100.00	120.70	181,380,944	2.31	1.81	2.28
<b>Aug-12</b>	124.00	102.35	103.75	15,715,243	124.75	102.30	103.85	139,362,630	2.22	1.87	1.87
<b>Jul-12</b>	127.80	113.00	119.90	17,425,858	127.90	113.00	120.10	143,099,006	2.30	2.04	2.16
<b>Jun-12</b>	126.80	112.80	119.90	17,620,153	127.00	112.70	119.90	158,786,322	2.23	2.01	2.16
<b>May-12</b>	121.95	105.35	116.70	24,439,512	121.95	105.35	116.65	243,197,117	2.27	1.91	2.08
<b>Apr-12</b>	133.60	115.50	120.60	20,327,717	133.65	115.50	120.75	179,749,330	2.61	2.00	2.29

11. Stock Performance:



## 12. Stock Performance over the past few years:

Absolute Returns (in %)				Annualised Returns (in %)			
	1YR	3YR	5YR		1YR	3YR	5YR
Hindalco	-29.2%	-49.5%	-38.8%	Hindalco	-29.2%	-20.3%	-9.4%
SENSEX	8.2%	7.5%	20.4%	SENSEX	8.2%	2.4%	3.8%
NIFTY	7.3%	8.3%	20.0%	NIFTY	7.3%	2.7%	3.7%

## 13. Registrar and Transfer Agents : The Company has In-House Investors Service Department registered with SEBI as Category II Share Transfer Agent vide Registration No. INR 000003910

**Investors Service Department**

Hindalco Industries Limited  
 Ahura Centre, 1<sup>st</sup> Floor, B Wing  
 Mahakali Caves Road  
 Andheri (East), Mumbai – 400 093.  
 Tel: (91-22) 6691 7000  
 Fax: (91-22) 6691 7001  
 E-mail: hilinvestors@adityabirla.com

## 14. Share Transfer System : Share transfer in physical form are registered and returned within a period of 15 days of receipt, provided the documents are clear in all respects. Officers of the Company have been authorised to approve transfers upto 10,000 shares in physical form under one transfer deed, and one Director of the Company has been authorised to approve the transfers exceeding 10,000 shares under one transfer deed.

The total number of shares transferred in the physical form during the year was 1,857,182.

Transfer period (in days)	2012-13			2011-12		
	No. of Transfers	%	No. of Shares	No. of Transfers	%	No. of Shares
1-10	5,088	99.20	1,831,268	637	77.31	673,645
11-15	37	0.72	16,694	147	17.84	108,703
15 and above	3	0.08	9,220	40	4.85	41,193
<b>Total</b>	<b>5,128</b>	<b>100.00</b>	<b>1,857,182</b>	<b>824</b>	<b>100.00</b>	<b>823,541</b>

## 15. Investor Services:

## a. Complaints received during the year:

Nature of Complaints	2012-13		2011-2012	
	Received	Cleared	Received	Cleared
Relating to Transfers, Transmissions Dividend, Interest, Redemption, Demat – Remat, Rights Issue and Change of Address etc.	49	47*	30	30

\*Note: In the last quarter two complaints were pending due to non-receipt of demand draft from bank towards dividend payment.

## b. Shares pending for transfer: Nil



## 16. Distribution of Shareholding of as on 31st March:

No. of Equity Share Held	2013			
	No. of Shareholders	% of Shareholders	No. of Shares Held	% Share Holding
1-1000	409,555	92.83	69,316,890	3.62
1001-2000	14,785	3.35	21,858,049	1.14
2001-5000	9,914	2.25	31,646,760	1.65
5001-10000	3,645	0.83	26,092,227	1.36
10001-50000	2,511	0.57	49,465,780	2.58
50001-100000	271	0.06	19,589,548	1.02
100001 and above	485	0.11	1,696,613,814	88.63
<b>Total</b>	<b>441,166</b>	<b>100</b>	<b>1,914,583,068</b>	<b>100</b>

17. Dematerialisation of Shares and Liquidity : Around 97% of outstanding shares have been dematerialised. Trading in Hindalco Shares is permitted only in the dematerialized form from 5th April, 1999, as per notification issued by the Securities and Exchange Board of India.
18. Details on use of public funds obtained in 3 years : Not Applicable
19. Outstanding GDRs/Warrants/Convertible Bonds : 159,663,688 GDRs are outstanding as on 31st March, 2013. Each GDR represents one underlying equity share.
20. Investor Correspondence : The Company Secretary  
Hindalco Industries Limited  
Century Bhavan, 3<sup>rd</sup> Floor,  
Dr. Annie Besant Road,  
Worli, Mumbai - 400 030.  
Tel: (91-22) 6662 6666  
Fax: (91-22) 2422 7586 / 2436 2516  
E-mail: anil.malik@adityabirla.com



## 21. Plant Locations:

Aluminium & Power	Copper	Chemicals	FRP, Foil & Packaging and Extrusions
<b>Renukoot Plant*</b> P.O. Renukoot -231217 Dist Sonebhadra Uttar Pradesh. Tel : (05446) 252077-9 Fax: (05446) 252107/426	<b>Birla Copper Division</b> P.O. Dahej, Lakhigam Dist. Bharuch – 392 130 Gujarat Tel: (02641) 256004/06, 251009 Fax: (02641) 251002	<b>Muri</b> Post Chotamuri-835 101 Dist: Ranchi, Jharkhand Phone: (06522) 244253/334 Fax: (06522) 244342	<b>Silvassa Foils</b> Village Khutli, Khanvel, Silvassa-396 230 U.T. of Dadra & Nagar Haveli Tel: (0260) 2677021 - 4 Fax: (0260) 2677025
<b>Renusagar Power Division</b> P. O. Renusagar Dist. Sonebhadra, Uttar Pradesh. Tel:(05446)277161-3/ 278592-5 Fax: (05446) 277164/		<b>Belgaum</b> Village Yamanapur Belgaum 590 010 Karnataka Tel: (0831) 2472716 Fax: (0831) 2472728	<b>Belur FRP</b> 39, Grand Trunk Road Belurmth 711 202 Dist: Howrah West Bengal Tel: (033) 2654 7210/12 Fax: (033) 2654 9982/5740
<b>Hirakud Smelter</b> Hirakud 768 016 Dist: Sambalpur Odisha Tel: (0663) 2481307/1452 Fax: (0663) 2481356		<b>Mines</b>  <b>Chandgad Mines</b> At Post: Chandgad 416509 Dist: Kolhapur Maharashtra Tel/Fax: (02320) 213342	<b>Taloja FRP</b> Plot 2, MIDC Industrial Area Taloja A.V. Dist : Raigad Navi Mumbai - 410 208 Maharashtra Tel: (022) 2741 2261 66292929 Fax: (022) 2741 2430/31
<b>Hirakud Power</b> Post Box No.12 Hirakud 768 016 Dist: Sambalpur Odisha Tel: (0663) 2481307 Fax: (0663) 2481342/342/365 Fax: (0663) 2541642		<b>Durgmanwadi Mines</b> At Post Radhanagri Dist: Kolhapur, Maharashtra - 416 212 Tel: (02321) 2371008 Fax: (02321) 237478	<b>Alupuram Extrusions</b> Alupuram, P.B. No.30 Kalamassery - 683 104 Dist: Ernakulam, Kerala Tel: (0484) 2532441-48 Fax: (0484) 2532468
<b>Mahan Aluminium</b> Hindalco Industries Ltd. NH-75 E, Singrauli Sidhi Road, P.O., Bargawan, Pin-486886, District - Singrauli, M.P. Telephone No. 07805281014		<b>Lohardaga Mines</b> Dist: Lohardaga 835 302 Jharkhand Tel/ Fax: (06526) 224112	<b>Mouda</b> Village Dahali Ramtek Road, Mouda Nagpur – 441 104 Tel: (07115) 660777/786
<b>Aditya Aluminium</b> Hindalco Industries Limited Lapanga District - Sambalpur - 768212, Odisha Phone: 0663 – 2114424 Fax: 0663 - 2590434		<b>Talabira Mines</b> Talabira-1, Coal Project Qrs. No. A6/1 Saraswati Vihar P.O. Sankarma Dist. Sambalpur, Orissa Tel: (0663) 2230573	<b>Kollur Foils</b> Village- Kollur Re Puram Mandal Via Mutangi Medak Dist Andhra Pradesh – 502 300 Tel: (08413) 234300, 234204/05 Fax: (08455) 288829
		<b>Samari Mines</b> P.O: Kusumi 497222 Dist : Sarguja Chattisgarh Tel/Fax(07778)274325	<b>Hirakud FRP</b> Hindalco Industries Limited Hirakud - 768016 District - Sambalpur, Odisha Telephone No.: 0663-6625000 Fax No.: 0663-2481344

\*Renukoot works has also manufacturing facilities of Chemicals, FRP and Extrusions.

## 22. Categories of Shareholding (as on 31st March):

Category	2013				2012			
	No. of Share-holders	% of Share-holders	No. of Shares Held	% Share Holding	No. of Share-holder	% of Share-holders	No. of Shares Held	% Share Holding
Promoters	21	0.01	613,797,188	32.06	21	0.01	613,797,188	32.06
Mutual Funds & UTI	154	0.03	38,908,908	2.03	208	0.05	55,205,320	2.88
Banks/ Financial Institutions/Ins/Govt.	139	0.03	257,642,547	13.45	133	0.03	230,734,741	12.05
FII's	417	0.09	468,425,836	24.46	486	0.13	514,065,053	26.85
Corporates	4,040	0.92	137,646,452	7.19	3,866	1.01	126,797,076	6.62
Individuals/Shares in Transit/Trust	427,519	96.91	193,631,127	10.12	370,523	96.56	169,637,949	8.86
NRIs/ OCBs/Foreign Nationals	8,875	2.01	44,867,322	2.35	8,483	2.21	43,556,986	2.28
GDRs*	1	0.00	159,663,688	8.34	1	0.00	160,747,995	8.40
<b>Total</b>	<b>441,166</b>	<b>100.00</b>	<b>1,914,583,068</b>	<b>100.00</b>	<b>383,721</b>	<b>100.00</b>	<b>1,914,542,308</b>	<b>100.00</b>

\*14542309 GDR's are held by Promoter and Promoter Group.

## 23. Per share data:

Particulars	2012-13	2011-12	2010-11	2009-10	2008-09
Net Earnings (₹ in Crore)	1,699	2,237	2,137	1,916	2,230
Cash Earnings (₹ in Crore)	2,403	2,927	2,824	2,583	2,875
EPS (₹)	8.9	11.7	11.2	10.8	14.8
CEPS (₹)	12.6	15.3	14.8	14.6	19.1
Dividend per Share (₹)	1.4@	1.6	1.5	1.4	1.4
Dividend Pay Out (%)	17.6@	15.0	15.6	15.70	12.0
Book Value per Share (₹)	177.4	167.3	155.1	145.9	139.7
Price to Earnings (x)*	10.3	11.1	18.7	16.8	3.5
Price to Cash Earnings (x)*	7.3	8.5	14.2	12.4	2.7
Price to Book Value (x)*	0.5	0.8	1.3	1.2	0.4

\*Stock Prices as on 31st March.

@ Proposed Dividend

## 24. OTHER USEFUL INFORMATION FOR SHAREHOLDERS

Shareholders, who have not yet encashed their dividend warrants for the years 2006-2007 to 2011-2012, may approach the Company for revalidation/issue of duplicate dividend warrants quoting reference of their Ledger Folio numbers/DP and Client ID.

Shareholders of 6% Cumulative Redeemable Preference Shares, who have not yet encashed their dividend warrants for the years 2007-2008, 2008-2009 and Redemption warrants may approach the Company for revalidation/issue of duplicate dividend warrants quoting reference of their Ledger Folio numbers/DP and Client ID.

The Unclaimed dividend for the financial year 2005-2006 has been transferred by the Company to the Investor Education and Protection Fund, constituted by the Central Government under Section 205A and 205C of the Companies Act, 1956.

Shareholders are advised that dividends for the financial year ended 2006-2007 onwards, which remains unpaid/unclaimed over a period of 7 years, have to be transferred by the Company to Investor Education and Protection Fund (IEPF), constituted by the Central Government under Sections 205A and 205C of the Companies Act, 1956. Shareholders, who have not claimed the dividend for this period, are requested to lodge their claim with the Company, as under the amended provisions of Section 205B of the Act, no claim shall lay for the unclaimed dividends from IEPF by the Members.

The details of Dividend paid by the Company and the respective due dates of transfer of unclaimed/un-encashed dividend to the designated fund of the Central Government:

Date of Declaration	Financial Year of Dividend	Due Date of Transfer to the Government
28th July, 2006	2005-06	August 2013
12th March, 2007	2006-07	April 2014
19th September, 2008	2007-08	October 2015
19th September, 2008	2007-08 (Dividend on Preference Shares)	October 2015
14th March, 2009	2008-09 (Dividend on Preference Shares)	April 2016
18th September, 2009	2008-09	October 2016
3rd September, 2010	2009-10	October 2017
23rd September, 2011	2010-2011	October 2018
11th September, 2012	2011-2012	October 2019

### Green Initiative in Corporate Governance – Service of Documents in Electronic Form

As you are aware, Ministry of Corporate Affairs (MCA), Government of India, vide its Circular(s) Nos. 17 and 18 dated 21st April, 2011 and 29th April, 2011, respectively, has now allowed the companies to send Notices of General Meetings/other Notices, Audited Financial Statements, Directors' Report, Auditors' Report, etc., henceforth to their shareholders electronically as a part of its Green Initiative in Corporate Governance.

Keeping in view the aforesaid green initiative of MCA, your Company shall send the Annual Report and other documents to its shareholders in electronic form at the e-mail address provided by them



and made available to us by the Depository. Shareholders may also register their e-mail IDs with the Company for receiving Annual Reports and Notices through e-mail.

#### Unclaimed Shares in Physical Form

In pursuant to Clause 5A of the Listing Agreement, the Company has already sent three remainders to all the shareholders whose shares are returned undelivered, in the Company's Rights Issue offer made in the years 2005 and 2008. The Company has taken all steps to comply with Clause 5A of the Listing Agreement.

Clause 5A(II) of the Listing Agreement provides the manner of dealing with the shares issued in physical form pursuant to a public issue or any other issue, and which remains unclaimed with the Company. In compliance with the provisions of the said Clause, the Company has sent three remainders under Registered Post to the shareholders, whose share certificates were returned undelivered and are lying unclaimed so far.

The Company has transferred and dematerialized 1,344,056 Equity Shares in the escrow account named "Hindalco Industries Limited Unclaimed Shares Suspense Account". No shares were transferred from the account to the shareholders accounts during the year.

In terms of the applicable SEBI guidelines and amended listing agreement. The shares certificate return undelivered are no longer in physical form and hence the shares may be provided in demat account and said demat account should be in the name and style as stated in our register of members.

For claiming of Undelivered Shares, the shareholder should approach to the Company with demat account details together with the certified copy of the client master list, a self certified copy of the PAN Card along with a request letter duly signed as per specimen signature lodged with our records and proof of residence for change of address (if any)/credit of shares in demat account and payment of unclaimed dividend and redemption amount.

#### INVESTOR SERVICES

- i. Equity Shares of the Company are under compulsory demat trading by all investors, with effect from 5th April, 1999. Considering the advantages of scrip less trading, shareholders are requested to consider dematerialisation of their shareholding so as to avoid inconvenience in future.
- ii. Shareholders/Beneficial Owners are requested to quote their Folio Nos./DP and Client ID Nos., as the case may be, in all correspondence with the Company. All correspondences regarding shares and debentures of the Company should be addressed to the Investor Service Department of the Company at Ahura Centre, 1<sup>st</sup> Floor, 'B' Wing, Mahakali Caves Road, Andheri (East), Mumbai - 400 093, and not to any other office(s) of the Company.
- iii. Shareholders holding shares in physical form are requested to notify to the Company, change in their address/Pin Code number and Bank Account details promptly by written request under the signatures of sole/first joint holder. Beneficial Owners of shares in demat form are requested to send their instructions regarding change of name, change of address, bank details, nomination, power of attorney, etc., directly to their DP.
- iv. To prevent fraudulent encashment of dividend warrants, members are requested to provide their Bank Account details (if not provided earlier) to the Company (if shares are held in physical form) or to DP (if shares are held in demat form), as the case may be, for printing of the same on their dividend warrants.
- v. Non-resident members are requested to immediately notify:
  - change in their residential status on return to India for permanent settlement; and
  - Particulars of their NRE Bank Account with a bank in India, if not furnished earlier.



- vi. In case of loss/misplacement of share certificate, investors should immediately lodge an FIR/Complaint with the police and inform to the Company along with original or certified copy of FIR/acknowledged copy of the complaint.
- vii. For expeditious transfer of shares, shareholders should fill in complete and correct particulars in the transfer deed, wherever applicable, registration number of Power of Attorney should also be quoted in the transfer deed at the appropriate place.

Further, please note that Securities and Exchange Board of India (SEBI), vide its Circular No MRD/DoP/Cir-05/2009, dated 20th May, 2009, has made it mandatory for the transferee(s) to furnish the copy of the PAN Card to the Company for registration of physical transfer of shares.

Investors, therefore, are requested to furnish the self-attested copy of PAN Card at the time of sending the physical transfer of shares.

- viii. Shareholders are requested to keep record of their specimen signature before lodgement of shares with the Company to obviate possibility of difference in signature at a later date.
- ix. Shareholder(s) of the Company, who have multiple accounts in identical name(s) or holding more than one Share Certificates in the same name under different Ledger Folio(s), are requested to apply for consolidation of such Folio(s) and send the relevant Share Certificates to the Company.
- x. Section 109A of the Companies Act, 1956, extends nomination facility to individuals holding shares in physical form in companies. Shareholders, in particular, those holding shares in single name, may avail of the above facility by furnishing the particulars of their nominations in the prescribed Nomination Form.
- xi. Shareholders are requested to give us their valuable suggestions for improvement of our investor services.
- xii. Shareholders are requested to quote their E-mail IDs, Telephone/Fax numbers for prompt reply to their communication.

In case of any query contact –

Investor Service Department  
Hindalco Industries Limited  
Ahura Centre, 1<sup>st</sup> Floor, B Wing  
Mahakali Caves Road  
Andheri (East), Mumbai – 400 093.  
Tel: (91-22) 6691 7000  
Fax: (91-22) 6691 7001  
Email ID: hilinvestors@adityabirla.com



***“As a Group on the sustainability journey, our thrust is on the three critical dimensions of people, planet and profit.***

*We have always looked upon our people as the single most important asset of our extended Aditya Birla family. Looking outside the organization, for us, the welfare of the communities in which we operate continues to be our priority. This is manifest in the various CSR projects that we run, providing the less fortunate strata of society with education, healthcare, sustainable livelihood and infrastructure support.*

*On the profit dimension, i.e. economic value added, our journey is well known. In the past 17 years, we have grown 20 times in revenue. During the last one decade, the CAGR in EBITDA has been 19%.*

*Our Group’s Sustainability Vision is.*

*“By 2017, the Aditya Birla Group endeavours to become the leading Indian conglomerate for sustainable business practices across its global operations, balancing its economic growth with environmental and societal interests”.*

*This vision provides a common guiding principle as well as an operating framework for all our businesses”.*

- Kumar Mangalam Birla, Chairman  
Aditya Birla Group

In line with your Chairman’s mandate, your Company has moved forward with a slew of positive steps towards improved sustainability and resource conservation, synergizing growth with responsibility.

Our key focus areas include – leadership in sustainability activities in the company and its subsidiaries, comprehensive Environment Management system, Energy conservation, Emissions Reduction, Waste Management and Reduction, Water Conservation, as well as enhanced environmental performance in the Greenfield plants and projects.

#### **Environment Management System**

Your company operates its plants on the principle of sustainable development and the commitment for preservation and protection of clean and green environment. Environmental Management is one of the vital dimensions for sustainable development and enduring growth. Your company cares for and continually improves environmental results through technological interventions, introduction of greener technologies, equipment, application of state-of-art environment monitoring systems, procedures and best practices as well

as self-imposition of stringent targets. While growing in capacity, Greenfield and Brownfield expansions, your company has ensured minimal impact on its Environment and best utilization of resources by conservation and maximizing reuse/recycle. In all units and projects of your company, adequate mitigation measures in the areas of water, air, energy and wastes have been installed.

Most of the Manufacturing Sites of your Company are ISO-9001:2008 (QMS), ISO-14001:2004(EMS) and OHSAS-18001:2007(OHS) certified. The plant level Environment Management Cell works closely with the Corporate Environment Team and the Corporate Compliance Monitoring Cell to ensure implementation of pollution prevention measures and to comply with all regulatory requirements. Design, Development and Implementation of Integrated Management System covering QMS, EMS and OHSAS are currently in progress at the Nagpur and Hirakud FRP Plants.

Your company is a Member of TERI Business Council for Sustainable Development (BCSD), a National level body, driving initiatives in climate protection, emission reduction and efficient use of resources.





### Environment Policy and Plan

Your company's management has adopted the guidelines provided by the Ministry of Environment and Forests (MoEF). This entails adaptation of Corporate Environmental Responsibility that declares the intent to implement and promote self-regulation covering all aspects of the business cycle, and to commit necessary resources to meet the applicable environmental regulations. In response, a policy to 'Strengthen the Environment Management System conforming to National / International Standards and continually improve the performance' will be adopted by your company. The organization structure to support the same has been put in place. In addition, a rigid and foolproof compliance assurance system is under implementation across all units and operations of your company.

### Self Monitoring and Reporting on Environmental Aspects

Your company has features of its Corporate Sustainability Report that covers 'sustainability of planet' (environment) as a key section online. Two annual Sustainability Reports have been released in 2010-11 and 2011-12, covering Hindalco's India Operations including Greenfield projects, along

with its overseas subsidiaries, Aditya Birla Minerals- Australia and Novelis. The report for 2011-12 titled 'Enduring Growth for Global Leadership' has been assured an A+ rating as by Global Reporting Initiatives (GRI) standards by an external independent assessing agency.

One important environmental self-declaration by your company is the quarterly internal publication of its Carbon-Footprint, that is now in its third year. The report measures and reports internally, its scope-I and II CO<sub>2</sub> footprint as 14.9 million TPA of CO<sub>2</sub> equivalent. A program is in place to reduce its CO<sub>2</sub> footprint. The Renukoot complex has been awarded Green House Gas verification certificate as per ISO 14064-2006 standard by an international certifying agency during 2011-12.

### Water

Water has been a focus area in your company. Various manufacturing units have adopted the zero-discharge concept, putting up state of art facilities to increase processing, reuse and recycle of waste water.

At its Renukoot complex, industrial and domestic effluent streams are treated to get water quality as per the local Pollution Control Board norms.



The total treated industrial effluent and partial domestic effluent is recycled back for process and horticulture use. At Renusagar Power Division, Effluent Treatment Plant (ETP), Sewage Treatment Plant (STP) and Ash Water Recovery Treatment Plant (AWRTP) are in operation to treat all the effluent generated and the treated effluent is recycled in plant operation. Zero Process Discharge concepts have been established at Renukoot, Renusagar and Bauxite Mines Operations.

The Dahej Complex has installed additional Sewage Treatment Plant based on Membrane Bio-Reactor technology. This new technology is capable of generating good quality of treated water, that is recycled to the process units, as well as for gardening purposes.

The Muri Alumina refinery is totally dependent on the water of Subarnarekha River, in Jharkhand, to operate the plant. Due to the changing rainfall pattern, in the summer season, the water level in the river goes down and it becomes very critical to operate the alumina refinery, as the river bed level becomes insufficient for withdrawing water. There is a real challenge to operate the plant in the summer season. To overcome the critical water availability and to ensure smooth operation of the plant, projects were identified and implemented to conserve fresh water. Projects like recycling of treated water from ETP in Plant, utilization of treated water from the sewage treatment plant water for dust suppression, in place of fresh water, has reduced the water consumption from 12.91 m<sup>3</sup>/T of alumina in FY 10 to 7.42 m<sup>3</sup>/MT of Alumina in FY 13. In addition, a Rain water harvesting project has been implemented to recharge the water bed under the ground, and to help raise the ground water table in the region.

The Hirakud Complex has installed a 500 kilo litres per day Sewage Treatment Plant (STP) for treatment of all sewage water coming from Smelter and Captive Power Plant. Additional a 250 kilo litres per day Effluent Treatment Plant has been installed for treatment of excess fluoride contaminated waste water. All the treated water is recycled / reused in the smelter process. In all, we will be recycling 17,000 kilo litres per month of waste water in the smelter after treatment. The quality of treated water is monitored using online Fluoride Analyzers, to ensure the safety of reuse.

At the Greenfield project at Mahan Aluminium, all waste water generated from process/ site is treated at state of art effluent treatment plant for recycle and re-use. In the smelter complex, a drainage network has been established to collect all rain water to the effluent treatment plant and to use the treated water for process, and horticulture.

The construction of water reservoirs and rain water harvesting facilities has been a feature in all the Greenfield projects of your company. At Mahan Aluminium Project, a facility to collect rain water runoff in the large raw water reservoir has been set up. During the monsoon of 2011-12, about 24 Lakh cubic meter of rain water was collected, and this fulfilled the water requirement during the last phase of construction as well as during the commissioning runs of the power plant.

#### **Air Pollution Management**

All our Aluminium pot-lines are equipped with state of art efficient Dry Scrubbing System. These ensure that the quality of emissions are well below the prescribed standard. Advanced Electro-static precipitators installed in our Calciners and Boilers ensure that the quality of particulate emission from stacks well below prescribed standard of the respective local Pollution Control Boards. The use of state of art Fume-Treatment-Plant and Wet scrubbing system in anode baking furnaces in the aluminium potlines at Renukoot maintain the baking furnace stacks within the prescribed limits. A state of art facility for anode baking furnaces is also planned at Renukoot to replace the old anode baling furnaces, leading to further improvement in air emission quality.

In the Greenfield Aluminium smelter complex at Mahan, state of art air pollution control facilities such as Bag Filters, Dust Suppression Systems, Electrostatic Precipitator, Gas Treatment Center, Fume Treatment Centre etc have been installed, and commissioned. A contemporary design of dry scrubber to capture any Fluorides & other pollutants from pot room off gases has been commissioned. In the captive power plant at Mahan, Electrostatic Precipitators are provided to capture particulate emission from the Power plant, and to maintain the quality of stack off-gases. All the major stacks are equipped with online monitoring systems to keep a close watch.

In the Remelt and Recycling Furnaces in your Talaja Plant, the use of furnace oil has been replaced by Piped Natural Gas, that has been available at site during this year. Piped natural gas as a cleaner fuel, has helped in lowering the emission and improving the net energy requirement of the plant.

In line with the revised notification from the Ministry of Environment & Forests, your company's plants and projects have provided for Ambient Air Quality Monitoring stations, to monitor the quality of ambient air within the neighborhood. This ensures protection from any detrimental effect of our operations on the surrounding.

### Waste Management through Value Addition

Your company's businesses are resource intensive; and resources are getting scarcer day by day. In these trying times, your company has adopted the innovative approach of developing waste as an additional resource of value.

The Renukoot Plant has established the practice of upgrading all solid wastes in an environment-friendly manner. Spen-pot-Lining waste from the Aluminium Pot Lines is processed to recover cryolite and

carbon for reuse. Sludge from the effluent treatment plant is processed to make soil conditioner for the plantation. Sludge from sewage treatment plant is utilized as manure in the company's horticulture activities. Renukoot and Renusagar power plants have a facility for dry ash collection in all our Boilers. The entire fly ash generated in Renukoot and Renusagar is sold to cement plants; while dumped ash is used for making fly ash bricks used for in-house construction activities. The Renukoot plant has a process ready to recover alumina from the dross. This is waste generated during handling of molten metal.

The Dahej copper plant uses discard slag from its copper smelter for road building, as well as an alternative to river sand in sand-blasting, construction activities etc. Waste phosphogypsum from the phosphoric acid plant is sold to cement plants or used for soil conditioning, thus saving the mined natural gypsum. The Copper plant has started recovering valuable minor metals such as bismuth, selenium, tellurium from process sludge. Technology for recovering copper from effluent to create significant value is being developed.



The Taloja plant is developing a technology for cost effective recovery of oil vapours, otherwise lost from the rolling mill stacks.

Disposal of the bauxite residue after recovery of alumina, in red mud ponds, is an established practice in aluminium industry worldwide. In the Muri alumina facility, the red mud disposal area has become a constraint, bringing up the need for a new red mud pond. The Muri Plant has successfully completed a study on utilization of Red Mud in Cement Industries. Based on the study, 14,430 MT of Red Mud was sent to a large local cement producer for use in their process as raw material.

For management of hazardous waste, Hirakud has constructed and put in use 5,600 M3 capacity of Secured Land Fill (SLF) for Scientific disposal of hazardous waste generated in the processes such as sludge from effluent treatment plant, fluoride contaminated dust, ladle cleaning residues, used bag filters from fume treatment plant, fluoride laden dust from pot cleaning, Shot blasting dust / resins / fullers earth etc. The Hirakud unit has also entered into an agreement with a government recognized waste disposal facility in Sukinda, Jajpur, Odisha, for Waste Management and safe disposal of Hazardous waste, as per the prevailing regulations.

The Mouda Plant has installed a Vacuum Distillation Unit for capture, reprocessing and reuse of spent rolling Oil recovering value as well as protecting the environment in the process.

#### **Mining:**

In the various bauxite mines of your company, any dust generated during mining is suppressed by sprinkling of water on haul roads. Rain water is harvested specifically for use in dust suppression, so that the ground water in mine area is saved. Garland drains are provided around the mining pits to prevent the rainwater entering

into our mine pits. Check Dams are constructed to recharge water and to improve the water table in the region.

Your company has an established practice of reclaiming the mined-out land systematically by laying topsoil to conserve the land in its original state. The reclaimed land is used for afforestation as well as for agricultural purpose. The total number of trees planted in Samri Mines during the year 2012-13 are 18,200 and in Lohardaga, 50,000 saplings have been planted during last 3 years through TERI (The Energy and Resource Institute, New Delhi). Most of the saplings planted are of medicinal varieties.

#### **Green Belt Development**

In all units of Hindalco, one has to look for the manufacturing plant within a large number of green plants.

In Mahan site, 500 hectares of land has been assigned for green belt development and over 15,000 plants of local variety have been planted.

Dahej has a fully developed green belt spanning 117 hectares, with over 3 lakh plants with a remarkable survival rate of over 85%.

In Muri, tree plantation has been done in 4 new areas in and around the plant premises. The total number of saplings planted in these areas is approximately 9,800.

The Hirakud Plant has planted 25,800 saplings in Smelter in SLF area, Road side, School area, and in ash mound area. In addition, 15,700 saplings have been planted in Talabira Coal Mines area.

With the focus provided by the Chairman and Board of Directors of your Company, Hindalco endeavours to become one of the leading global company for sustainable business practices in the world of non-ferrous metals, across its global operations, balancing its economic growth with environmental and societal interests.



## “What is our definition of Inclusive Growth?”

*An India, free from poverty. An India, of inclusive growth. An India, where every person realises his or her optimal potential. An India, where every human being lives a life of dignity. An India, that can hold her head high in the hegemony of nations.”*

— Mrs. Rajashree Birla,

Chairperson, Aditya Birla Centre for Community Initiatives and Rural Development

This vision of your Director underlines all of your Companies CSR activities.

Your Company's CSR Report has been framed on the lines of the Companies Bill 2012, which has been cleared by the Lok Sabha in December 2012. As stipulated, your Company has constituted as CSR Committee at the Board level with – Mrs. Rajashree Birla, Chairperson, Mr. Askaran Agarwala, Director, Mr. N. Jhaveri, Independent Director and Dr. (Mrs.) Pragnya Ram, Group Executive President, Corporate Communications and CSR, who has been inducted as a permanent invitee.

Your Company's Corporate Social Responsibility policy was featured in your Company's Annual Report 2009-10. It conforms to the CSR guidelines stipulated in the Companies Bill and has been approved by your Board.

Your Company's CSR activities are carried out under the umbrella of the Aditya Birla Centre for Community Initiatives and Rural Development, which is led by your Director, Mrs. Rajashree Birla.

Your Company works in 660 villages and 10 urban slums in proximity to your Company's 21 Units spread across 11 states in India. We reach out to a rural populace of 32 lakh. Through our focused endeavours in healthcare, education, sustainable livelihood, infrastructure support and social causes, we work towards alleviating poverty.

### Healthcare

Through our 2,382 medical camps and healthcare awareness and various projects, we reached out to 3,30,000 villagers in the deep interiors. Those diagnosed with serious ailments were referred to our hospitals for treatment.

At the eye camps organised by us, over 5,000 people were examined. Of these, 2,876 patients were operated for cataract and provided with intraocular lenses for better sight.

Over 76,398 villagers participated in the speciality medical camps organized across the company's plants

for tuberculosis, malaria, hepatitis, dental checkups and other health problems. In addition, Aids awareness programmes were organised across all the Units wherein 7,573 adults participated.

More than 2,51,000 villagers enlisted for general health checkups and treatment at Hindalco's hospitals.

### Mother and Child Health Care

In collaboration with the district health department, 487,465 children were immunized against polio.

Additionally 12,820 women took advantage of the anti-natal, post natal, mass immunization, nutrition programmes and escort services for institutional delivery. These form part of our Reproductive and Child Health Care programmes.

Awareness programmes relating to reproductive issues were attended by 6279 ladies. Under the National family welfare programme, we organised 25 family planning camps in co-ordination with the local government.

### Education

Working closely with the district authorities, we foster the education of the girl child. Under the Sarva Shiksha Abhiyan and the Rashtrya Madhyamik Shiksha Abhiyan's - Kasturba Gandhi Balika Vidyalayas (KGBV), we have been able to enlist 120 rural girls, who had earlier abandoned studies, to rejoin the learning stream. We have successfully enrolled them at the KGBVs. We run four Aditya Bal Vidya Mandir Schools in the villages in Uttar Pradesh. We have 1,000 students studying at these schools.

Our career counselling programmes saw the active participation of 7,849 students. Subsequently, many of them joined the ITIs, while some of them opted for vocational training at our various units.

The Government's Balwadi and Anganwadi projects at various places are running successfully. At the balwadis that we support, 14,000 preschoolers have taken their first steps towards informal learning





processes. At our local schools, most of which are attached to our plants, more than 22,500 students are provided with quality education.

Merit scholarships have been accorded to 11,000 students, studying at the village schools, supported by us.

We support the delivery of the midday meals programmes in schools at Dahej and Hirakud.

Our adult literacy programmes have benefitted 1,400 learners.

#### **Safe Drinking Water and Sanitation**

Construction of check dams, ponds, digging bore wells and setting up portable water systems continue. Over a 100 low cost toilets were constructed. This year, these projects have made a qualitative difference to 39,135 families engaged in agriculture.

#### **Sustainable Livelihood**

At the Aditya Birla Rural Technology Park, more than 360 programmes were organised. The thrust continued on the repair and maintenance of diesel pump sets, repair of electric and electronic goods, hand pumps, making of rexine bags, soft toys, ropes, tailoring and knitting, ways to enhance agricultural output, veterinary science and dairy products.

Through our Sustainable Livelihood projects, the skill sets of 7,793 rural youths have been honed. This has enabled them stand on their feet.

On the agricultural front, we have reached out to 47,478 farmers, helping them to earn better. Training in crop diversification, floriculture, integrated pest management and post harvest technology has been a value addition to their skills.

Over 42 Farmers from the Silli Block of Ranchi district of Jharkhand were taken for an exposure visit to Namkum Lakh Research Centre, Ranchi to understand the process of making items from lac.

To ensure cost optimization through economies of scale in the procurement of inputs, to realise better margin through collective marketing of agricultural produces, to avail all the facilities and services under different schemes and to enrich knowledge by exchanging ideas and information. We promoted 11 farmer clubs in 11 peripheral villages in Odisha. These clubs have been promoted in line with NABARD guidelines, involving the agriculture, horticulture, veterinary departments along with financial institutions. It is proposed to federate the members of these clubs to a producer's company.

Under the social forestry programme and with the help of the forest department we ensured

the distribution of seedlings and saplings to 100,000 farmers.

#### Self Help Groups and Income Generation

Across Hindalco over 2,200 Self Help Groups empowered 26,000 households economically and socially. Most of the SHGs have been linked with the economic schemes of NABARD and the District Industries Centre. At the various centres, women engaged in a series of activities like tailoring, weaving, knitting crafting, bamboo baskets, san sutli (rope) vermin compost, rearing saplings, mushroom cultivation, making pickles and spices, vegetable cultivation and fruit vending, grocery shops etc that generate income for them.

To enhance livelihoods of families of our project peripheral villages, we have initiated commercial broiler poultry farming involving 14 farmers of 5 villages in Odisha. These farmers have formed an association “**Maa Manikswari Kukuda Palan Sangha**”, for facilitating backward and forward linkages. It has also established one retail outlet for maximizing profit.

#### Infrastructure Development

Our activities are varied. We have helped to build better roads, set up potable water systems, bio gas plants, community centres, animal sheds, street lights and electricity along with low cost housing etc. We have

reached out to 3,88,432 people. At some of the locations, we support the local population in maintaining their panchayat meeting halls, community halls and school buildings.

More than 400 families in UP gained with our having assisted them replace the traditional “choolas” (stoves) with smokeless “smart stoves”.

#### Espousing Social Causes

In partnership with the Govt. district authorities, village panchayats, other like minded NGOs and the community, we organised dowry less widow remarriage programme at Renukoot. Over 156 widows became wives once again.

#### Our Investments

For the year 2012-13, our CSR spend was ₹ 29.79 crore – which is 1.48% of the average net profit for the last 3 years. In addition, we mobilised ₹ 65.40 crores through the various schemes of the Government, acting as catalysts for the community.

#### In sum

Through our intense involvement with the underprivileged sections of the community, in our own humble way, we have helped lower the level of poverty in the villages and the urban slums, in proximity to our plants.





**Dear Shareholders,**

Your Directors are pleased to present the 54<sup>th</sup> Annual Report along with the audited annual standalone and consolidated accounts of your Company for the year ended 31st March, 2013.

**1. Financial Performance**

The FY 13 was one of the toughest years for non-ferrous metal industry. Globally Aluminum prices continued to remain depressed, plagued with overcapacity, inventory overhang to add to the weak sentiments for the commodities.

In the Indian context, slowdown in manufacturing sector and power sector impacted demand in a low pricing (LME) scenario, the cost continued to remain high, primarily driven by high crude prices. While the prices of crude and its derivatives continued to remain globally high, depreciating rupee resulted in an additional burden. The coal prices continued to increase in India, even as the Global coal prices cooled off.

**Financial Performance Summary**

(₹ Crore)

Particulars	Standalone		Consolidated	
	Year Ended 31/03/2013	Year Ended 31/03/2012	Year Ended 31/03/2013	Year Ended 31/03/2012
<b>Revenue from Operations</b>	<b>26,057</b>	<b>26,597</b>	<b>80,193</b>	<b>80,821</b>
<b>EBITDA</b>	<b>2,204</b>	<b>3,105</b>	<b>7,837</b>	<b>8,184</b>
Other income	983	616	1,012	783
<b>Profit Before Interest, Tax, Depreciation and Amortisation</b>	<b>3,187</b>	<b>3,721</b>	<b>8,849</b>	<b>8,967</b>
Depreciation	704	690	2,861	2,864
Finance Costs	436	294	2,079	1,758
<b>Profit Before Tax</b>	<b>2,047</b>	<b>2,737</b>	<b>3,909</b>	<b>4,345</b>
Tax Expenses	348	500	886	786
<b>Net Profit Before Minority Interest and Share in Associates</b>	<b>1,699</b>	<b>2,237</b>	<b>3,023</b>	<b>3,559</b>
<b>Share in Profit/(Loss) of Associates (Net)</b>			<b>(16)</b>	<b>50</b>
<b>Minority Interest</b>			<b>(20)</b>	<b>211</b>
<b>Net Profit for the Period</b>	<b>1,699</b>	<b>2,237</b>	<b>3,027</b>	<b>3,397</b>
<b>Basic EPS</b>	<b>8.88</b>	<b>11.69</b>	<b>15.81</b>	<b>17.74</b>

**2. Standalone Results**

The Standalone revenue for the year is flat at ₹ 26,057 crore as in FY 12. Profit before interest and depreciation was ₹ 3,187 crore vs. ₹ 3,721 crore in FY 12. This was achieved despite a significantly lower LME and a constant escalation of input costs, largely mitigated by improved efficiencies and higher other income.

Net profit for the year stood at ₹ 1,699 crore vs. ₹ 2,237 crore in FY 12.

The Financial Year 2013 was marked by consistently low Aluminium LME and

constantly increasing costs. As a result, Aluminium companies across the globe suffered during this year. However, Hindalco was able to mitigate impact of the above factors by improved efficiencies and higher volumes. Consequently, the Company's results in this business segment stand out on almost every parameter in the peer group – both domestic and international.

**3. Consolidated Results**

Despite a sluggish market and headwinds in all businesses of the Company, the

Consolidated Revenue as well as Profit before Depreciation, Interest and Tax for the year at ₹ 80,193 and ₹ 8,849 crore, respectively, compare well with last year's corresponding figures. With regard to segment results, Aluminium Segment has done particularly well by maintaining its EBIT at ₹ 4,388 crore on consolidated basis.

Net profit attributable to the shareholders stood at ₹ 3,027 crore.

#### 4. Dividend

For the year ended 31st March, 2013, the Board of Directors of the Company have recommended dividend of ₹ 1.40 per share (Previous year ₹ 1.55 per share) to equity shareholders aggregating to ₹ 313.60 crore (Previous year ₹ 344.89 crore) including Dividend Distribution Tax of ₹ 45.56 crore for the year ended 31st March, 2013.

#### 5. Appropriations:

**Allocation and Appropriations of surplus in the statement of Profit and Loss account in FY13 are as under:**

Summary of appropriation of Profit and Loss Account	FY 13	FY 12
Balance as at the beginning of the year	400.00	350.00
Add: Profit for the year	1,699.20	2,237.20
Less: Transferred to Debenture Redemption Reserve	(150.00)	-
Less: Dividend on Equity Shares - (a)	(268.05)	(296.76)
Less: Dividend Distribution Tax - (a) & (b)	(31.67)	(38.41)
Less: Transferred to General Reserve	(899.48)	(1,852.03)
<b>Balance as at the end of the year</b>	<b>750.00</b>	<b>400.00</b>

- (a) Dividend on Equity Shares and Tax on Dividend include ₹ 0.01 crore (Previous year ₹ 0.01 crore) pertaining to previous year for Equity shares issued before the record date of dividend.
- (b) Tax on Dividend is net of ₹ 13.89 crore (Previous year ₹ 9.73 crore) being dividend distribution tax paid by a subsidiary.

#### 6. Growth Plans underway in Aluminium

Your Company is pursuing various brownfield and greenfield growth opportunities in Aluminium as described below:

##### Projects – in India

		Estimated Capacity	Actual or estimated
Location	Description of Expansion	(at full capacity)	Commission Date/ Progress Update
Hirakud, Odisha	Smelter Expansion	52 Kt	Under Commissioning
	Captive Power Plant Expansion	100 MW	
	Rolling Plant	135 Kt	Partially Commissioned
Rayagada, Odisha (Utkal Alumina)	Alumina Refinery	1500 Kt	Under Commissioning
	Captive Power Plant	90 MW	
Bargawan, Madhya Pradesh (Mahan Aluminium)	Aluminium Smelter	360 Kt	First Metal Tapped, commissioning being undertaken in phased manner
	Captive Power Plant	900 MW	
Lapanga, Odisha (Aditya Aluminium)	Aluminium Smelter	360 Kt	2013
	Captive Power Plant	900 MW	

All these ongoing projects of the Company with a cumulative investment of around ₹ 28,000 crores have either been commissioned or are in advanced stages of commissioning/implementation.



**Project - Overseas**

		<b>Estimated Capacity</b>	<b>Actual or Estimated</b>
<b>Location</b>	<b>Description of Expansion</b>	<b>(at full capacity)</b>	<b>Commission Date/ Progress Update</b>
<b>North America</b>			
Oswego, NY	Automotive Sheet Finishing Plant	200 Kt	Mid CY 2013
<b>Europe</b>			
Nachterstedt, Germany	Recycling Expansion	250 Kt	Mid CY 2014
<b>Asia</b>			
Ulsan and Yeoungiu, South Korea	Rolling Expansion	350 Kt	Mid CY 2013
Yeoungiu, South Korea	Recycling Expansion	265 Kt	October 12
Changzhou, China	Automotive Sheet Finishing Plant	120 Kt	End CY 2014
<b>South America</b>			
Pinda Brazil	Rolling Expansion	220 Kt	December 12
Pinda, Brazil	Can coating line	100 Kt	End CY 2013
Pinda, Brazil	Recycling expansion	190 Kt	End CY 2013

**7. Finance**

**Financial closure of Aditya Smelter** was achieved of ₹ 9,896 crore. The tenure of the loan has been kept at 12.50 years to allow the project to have enough operational cash surplus for servicing the loan. The Company received an overwhelming response from the lenders despite a tight credit market.

**Debenture Issue:** To further augment financial resources, the Company has issued 10-year 9.55 per cent and 9.60 per cent secured redeemable non-convertible debentures for a total amount of ₹ 4,500 crore and ₹ 1,500 crore respectively on private placement basis. These debentures are listed on the wholesale debt market segment of National Stock Exchange (NSE).

**Repayment of Term Loan:** During the year, your Company also repaid the loan taken earlier of ₹ 5,143 crore.

**8. Consolidated Financial Statements**

In accordance with Accounting Standards AS-21 on Consolidated Financial Statements read with Accounting Standard

AS-23 on Accounting for investments in Associates and AS-27 on Financial Reporting of Interest in Joint Ventures, the audited Consolidated Financial Statements are provided in the Annual Report.

**9. Management Discussion and Analysis Report**

The Management Discussion and Analysis Report forming part of Directors' Report for the year under review, as stipulated under Clause 49 of the Listing Agreement with the Stock Exchange(s), forms part of the Annual Report. The report provides a strategic direction and a more detailed analysis on the performance of individual businesses and their outlook.

**10. Corporate Governance**

Your Directors reaffirm their commitment to the corporate governance standards as prescribed by the Listing Agreement with the Stock Exchange(s). A separate section on Corporate Governance together with a certificate from the Auditors of the Company regarding full compliance of conditions of Corporate Governance as stipulated under Clause 49 of the Listing Agreement forms part of the Annual Report.

## 11. Directors' Responsibility Statement

Your Directors affirm that the audited accounts containing financial statements for the financial year 2012-13 are in full conformity with the requirements of the Companies Act, 1956. They believe that the financial statements reflect fairly, the form and substance of transactions carried out during the year, and reasonably present the Company's financial condition and results of operations. These statements were audited by the statutory auditors of the Company, M/s. Singhi & Co., Chartered Accountants.

Your Directors further confirm that:

- (i) In the preparation of the annual accounts, the applicable accounting standards have been followed, along with proper explanations relating to material departures, if any;
- (ii) the accounting policies have been selected and applied consistently and judgements and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit of the Company for the financial year;
- (iii) proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities; and
- (iv) the annual accounts have been prepared on a going-concern basis.

Your Company's internal Auditors have conducted periodic audits to provide reasonable assurance that the established policies and procedures have been followed.

## 12. Novelis Inc. (wholly owned subsidiary)

The performance of Novelis was negatively impacted by pricing pressures from competitors, supply chain disruptions due to the implementation of a new ERP system in two North American plants, as well as production challenges and softer demand.

Shipments of flat rolled products are marginally lower at 2,786 Kt for the year ended 31st March, 2013, compared to 2,838 Kt in the prior year. Net sales was 11% lower, primarily driven by a 15% decline in average aluminium prices and a fall in flat rolled product volumes by 2%.

## 13. Aditya Birla Minerals Limited (51 per cent subsidiary)

The Company's copper production extended by 16% mainly on account of restart of Mt Gordon mine. Sales volume is up by 14% compared to the previous year. The revenue in value terms was sustained. Profitability was adversely affected given lower realisation of copper compared to the previous year and higher average unit cost of production, because of higher volume from Mt Gordon operations at higher cost.

At Nifty, the ore mined was 2.27 million tonnes up by 8% over the previous year. At Mt Gordon, the ore mined was 1.10 million tonnes representing a step up of 59% over the previous year.

Mt Gordon mines operations is currently placed under care and maintenance.

## 14. Employee Stock Options Scheme ESOS-2006

The shareholders of the Company has approved an Employee Stock Options Scheme ("ESOS-2006"), formulated by the Company, under which the Company may issue 6,475,000 options to its permanent employees in the management cadre, in one or more tranches, whether working in India or out of India, including the Whole-Time Directors of the Company. Each option when exercised would be converted into one fully paid-up equity share of ₹ 1/- each of the Company. The ESOS-2006 is administered by the Compensation Committee of the Board of Directors of the Company ("the Committee"). Under the ESOS 2006, the Committee has granted 3,545,550 options to its eligible employees in three tranches. Disclosure pursuant to the provisions of the Securities and Exchange Board of India (Employee Stock Options Scheme) Guidelines, 1999, is given in Annexure-A.

**ESOS-2013**

At a meeting held on 28th May, 2013, the Board of Directors approved the formulation of a new Employee Stock Options Scheme, viz., "Hindalco Industries Limited Employee Stock Options Scheme-2013" (ESOS-2013) in terms of the SEBI Guidelines. The Board mandated the existing ESOS Compensation Committee to implement and administer the ESOS-2013. Resolutions seeking your approval for introduction and implementation of ESOS-2013 and granting such number of Stock Options exercisable into not more than 54,62,000 equity shares of ₹ 1/- each to the permanent employees, including any Managing or Whole-time Director(s) of your Company and its holding and/or subsidiary companies are included in the Notice convening the Annual General Meeting together with the Explanatory Statement.

**15. Particulars as per Section 217 of the Companies Act, 1956**

The information relating to the conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo required under Section 217 (1)(e) of the Companies Act, 1956, is set out in a separate statement attached to this report (Annexure B).

In accordance with the provisions of Sections 217 (2A), read with the Companies (Particulars of Employees) Rules, 1975, the names and other particulars of employees are to be set out in the Directors' Report, as an addendum thereto. However, as per the provisions of Section 219 (1)(b)(iv) of the Companies Act, 1956, the report and accounts, as therein set out, are being sent to all members of the Company excluding the aforesaid information about employees. Any member, who is interested in obtaining such particulars about employees, may write to the Company Secretary at the Registered Office of the Company.

**16. Fixed Deposits**

The Company has not accepted any public deposits and, as such, no amount on account of principal or interest on public deposits was outstanding as on the date of the Balance Sheet.

**17. Directors**

In accordance with Article 146 of the Articles of Association of the Company, Mr. Kumar Mangalam Birla, Mr. Askaran Agarwala retire from office by rotation and, being eligible, offer themselves for reappointment.

Mr. Jagdish Khattar was appointed as a Director in casual vacancy caused due to demise of Mr. E.B. Desai and holds office upto the forthcoming Annual General Meeting, and is eligible for reappointment.

The term of appointment of Mr. D. Bhattacharya as Managing Director is expiring on 30th September, 2013. The Board has reappointed him as Managing Director for the further period of five years w.e.f 30th September, 2013. The approval of the members in the ensuing Annual General Meeting would be sought for his reappointment.

During the year, Mr. Satish Pai was appointed as an Additional Director under Section 260 of the Companies Act, 1956, and as a Whole-time Director for a period of five years. The approval of the members in the ensuing Annual General Meeting would be sought for his appointment, subject to approval of Central Government.

**18. Awards and Recognitions**

Several accolades have been conferred upon your Company, in recognition of its contribution in diverse fields. A selective list:

- Renukoot Complex wins Greentech Safety Gold Award-2012 in the Mining & Metals category, for exemplary efforts towards Occupational Health and Safety, presented by Greentech Foundation, New Delhi.
- Renukoot Complex wins the Safety Innovation Award-2012, for implementing innovative safety management systems, presented by the The Institute of Engineers (India).
- Renukoot Complex wins the Greentech CSR Gold Award-2012, presented by Greentech Foundation, New Delhi. The award recognises the noteworthy efforts towards "Land and Watershed Management" carried out in various villages surrounding Renukoot, Renusagar and Mines Division - Jharkhand & Chattisgarh.

- Renukoot Complex wins the Greentech Environment Excellence Gold Award-2012 under the category of Mining & Metal Sector for its outstanding efforts towards Environment Management by Greentech Foundation, New Delhi.
- Renukoot Complex is conferred the Golden Peacock National Quality Award-2012, in the Mining & Metals sector, presented by the Institute of Directors, for its efforts towards "Quality", meeting international parameters.
- Renukoot Complex wins Greentech Platinum Award for Best HR Practices 2012-13, in the Best Strategy category, presented by Greentech Foundation, New Delhi.
- Renusagar Power Plant wins the Greentech Environment Excellence Gold Award-2012, for the fifth consecutive year, for its outstanding contribution towards Environment Management System, presented by Greentech Foundation, New Delhi.
- Renusagar Power Plant wins Greentech Safety Gold Award-2012, in the power Plant category, for exemplary efforts in Occupational Health and Safety, presented by Greentech Foundation, New Delhi.
- Renusagar Power Division wins the Safety Innovation Award-2012, in the Power Sector category, for outstanding achievement in safety management, presented by Institute of Directors.
- Renusagar was awarded the Greentech Training Excellence Gold Award-2012 and 3rd Annual Greentech HR Award-2013 for Training Excellence, by Greentech Foundation, Delhi.
- Dahej Harbour & Infrastructure Ltd. (DHIL), wins the Gujarat Star Award (Runners Up) 2011-12, as the "Dry Bulk/Break Bulk Handling Port of the Year", for its impressive performance and improvements in the areas of vessel turnaround time in port, increased productivity and accident-free operations.
- Dahej Copper Complex wins the Greentech Gold Environment Award-2012, for its outstanding achievement in Environment Management.

- Muri Alumina Plant wins the Greentech Gold Environment Award-2012, presented by Greentech Foundation, New Delhi.
- Hirakud Power Plant wins CII Odisha Award-2012 (2nd Runners Up), for Best Practices in Environment, Safety and Health.
- Taloja Rolling Plant wins the overall title for "Maharashtra Safety Awards-2011", competition organised by the National Safety Council - Maharashtra Chapter, in the Heavy Engineering category for its commendable safety performance, Scheme-I, Lowest Average Accident Frequency Rate.
- The Quality Circles from Renukoot earned Six Gold Medals and one Silver Medal at the Kanpur Chapter Convention.
- The Quality Circles of Renusagar earned "Par Excellence" awards at the national convention of Quality Circle Forum of India.
- Quality Circle of Birla Copper Dahej won the Bronze medal at Gujarat State Level Quality Circle Competition-2012, organised by Quality Circle Forum of India.
- Hirakud Quality Circle won the Best Analysis & Process Award at the 17th All Odisha Quality Circle Convention.
- Hirakud members earned the Certificate of Appreciation at the 12th CII National Supervisory Skill Competition in Repair & Maintenance Category.

#### Jharkhand & Chhattisgarh Mines Division

- National Safety Awards for 2009-10 and 2010-11 presented to Samri Mines Division during 2012.
- Overall Best in Mines Safety Week-2012 and "Minerals Exploration & Minerals Conservation Week-2012 Award" to Bagru Hill Bauxite Mines during 2012-13, for Ranchi region.
- Mr. D Bhattacharya, Managing Director, received the "Fray International Sustainability Award" for leadership in developing & applying new innovative business plans & operations for sustainability development of the Company in the environmental economic & social point of view.



**19. Environment Protection and Pollution Control**

Your Company is committed to sustainable development. A separate chapter in this report deals at length with your Company's initiatives and commitment to environment conservation.

**20. Auditors**

The observations made in the Auditors' Report are self-explanatory and do not call for any further comments under Section 217 (3) of the Companies Act, 1956.

M/s. Singhi & Company, Chartered Accountants and Auditors of the Company, retire, and being eligible, offer themselves for appointment.

**Cost Auditors**

For the Financial Year 2012-13 M/s R. Nanabhoy & Co. and M/s Mani & Co. were joint cost auditors of the Company. For timely completion of Company level audit as per the new cost audit rules and to avoid coordination and logistical issues, your directors have appointed a single cost auditor, M/s. R. Nanabhoy & Co.

In pursuance to Section 233 B (2) of the Companies Act, 1956, read with Ministry of Corporate Affairs, Cost Audit Branch Order dated 6<sup>th</sup> November 2012, your directors have appointed M/s. R. Nanabhoy & Co, cost accountants as Cost Auditors, subject to approval of the Central Government, to conduct cost audit of the Company, for the financial year 2013-14, pertaining to products or activities related to Aluminium and Aluminium Products, Inorganic Chemical and their Derivatives, Mineral Products, Miscellaneous Chemical Products, Copper and Copper Products, Pearl, Diamonds, Stones and Jewellery Articles, Mineral / Chemical Fertilizers - Others, and any other products as are covered under the subject Order of Ministry of Corporate Affairs.

The due date for filing Cost Audit Reports for the Financial Year 2011-12 was February 28, 2013 and the same was filed by the Cost Auditors on January 20, 2013.

**21. General Exemption under Section 212(8) of the Companies Act, 1956**

The Ministry of Corporate Affairs, Government of India vide its Circular No.5/12/2007-CL-III

dated 8th February, 2011 has granted general exemption under Section 212(8) of the Companies Act, 1956, from attaching the balance sheet, profit and loss account and other documents of the subsidiary companies to the balance sheet of the Company provided certain conditions are fulfilled. The Company has satisfied the conditions stipulated in the Circular and hence is entitled to the exemption. However annual accounts of the subsidiary companies and the related detailed information will be made available to the holding and subsidiary companies investor's seeking such information at any point of time. The annual accounts of the subsidiary companies are available for inspection by any shareholder's at the Registered office of the Company. The annual accounts of the subsidiary companies are also available for inspection at their respective registered office. Further, in line with the Listing Agreement and in accordance with the Accounting Standard 21 (AS-21), the Consolidated Financial Statements prepared by the Company include financial information of its subsidiaries.

**22. Appreciation**

Your Directors place on record their sincere appreciation for the assistance and guidance provided by the Honorable Ministers, Secretaries and other officials of the Ministry of Mines, Ministry of Coal, the Ministry of Chemicals and Fertilizers and various State Governments. Your Directors thank the Financial Institutions and Banks associated with your Company for their support as well.

Your Company's employees are instrumental in your Company scaling new heights, year after year. Their commitment and contribution is deeply acknowledged.

Your involvement as Shareholders is greatly valued. Your Directors look forward to your continuing support.

For and on behalf of the Board



Chairman

Mumbai

Dated 13<sup>th</sup> August, 2013

**ANNEXURE 'A' TO THE DIRECTORS' REPORT**

**Disclosure pursuant to the provisions of the Securities and Exchange Board of India (Employee Stock Option Scheme) Guidelines, 1999**

	Nature of Disclosure	Particulars
a)	Options Granted	3,545,550
b)	The pricing Formula	<p>Tranche-I The exercise price was determined by averaging the daily closing price of the Company's equity shares during the 7 days immediately preceding the date of grant and discounting it by 30%. (Exercise price - ₹ 98.30 Per option)</p> <p>Tranche-II The exercise price was the closing market price, prior to the date of grant. (Exercise price - ₹ 150.10 Per option)</p> <p>Tranche-III The exercise price was determined by averaging the daily closing price of the Company's equity shares during the 7 days immediately preceding the date of grant and discounting it by 30%. (Exercise price - ₹ 118.35 Per option)</p>
c)	Options vested/exercisable as at March 31, 2013	1,785,257
d)	Options Exercised during the year	40,760
e)	The total number of shares arising as a result of exercise of options	40,760
f)	Options Lapsed/Cancelled	86,360
g)	Variation in terms of options	Nil
h)	Money realised on exercise of options	(₹ Crore) 0.40
i)	Total number of options in force	1,984,453
j)	Employee-wise details of options granted:	
	i) Senior Managerial Personnel:	Mr. D Bhattacharya - 970,100
	ii) Any other employee who received a grant in any one year of options amounting to 5% or more of options granted during that year	Nil
	iii) Identified employees who were granted options during any one year, equal to or exceeding 1% of the issued capital (excluding outstanding warrants and conversions) of the Company at the time of grant.	Nil
k)	Diluted Earnings per Share	NA
l)	Difference between the employee compensation cost computed using intrinsic value of the stock options, and the employee compensation cost that shall have been recognised, if the fair value of the options was used.	₹ 0.23 crore

	The impact of this difference on profits and on EPS of the company		The effect of adopting the fair value on the net income and earnings per share for 2012-13 is as presented below				
			₹ Crores				
			Particulars		2012-13		
			Net Profit as Reported		1,699.20		
			Less: Dividend on Preference Shares (including Tax)		0.00		
			Net Profit attributable to Equity Shareholders		1,699.20		
			Add: Compensation Cost under ESOS as per intrinsic value included in the Net Profit		0.27		
			Less: Compensation Cost under ESOS as per fair value		-0.50		
			Proforma Net Profit		1,698.97		
			Weighted-average number of Basic Equity Shares Outstanding		1,914,567,153		
			Weighted-average number of Diluted Equity Shares Outstanding		1,914,662,748		
			Face Value of Equity Shares (in ₹)		1		
			Reported Earning per Share (EPS):				
			Basic EPS (in ₹)		8.88		
			Diluted EPS (in ₹)		8.87		
			Proforma Earning per Share (EPS):				
			Basic EPS (in ₹)		8.87		
			Diluted EPS (in ₹)		8.87		
			m)	i)	Weighted-average exercise prices and weighted-average fair values of options whose exercise price equals the market price of the stock	Options granted under Tranche-II Exercise price (₹) 150.10 Fair value (₹) 57.11	
				ii)	Weighted-average exercise prices and weighted-average fair values of options whose exercise price is less than the market price of the stock	Options granted under Tranche-I Exercise price (₹) 98.30 Fair value (₹) 65.78	Options granted under Tranche-III Exercise price (₹) 118.35 Fair value (₹) 102.96
iii)	Weighted-average exercise prices and weighted-average fair values of options whose exercise price exceeds the market price of the stock						
n)	A description of method and significant assumptions used during the year to estimate the fair values of options, including the following weighted average information: i) Risk-free Interest rate (%) ii) Expected Life (No. of Years) iii) Expected Volatility (%)  iv) Dividend Yield (%) v) The price of the underlying shares in the market at the time of options grant		8 5 Tranche-I 34% Tranche-II 37% Tranche-II 53% Tranche-I & II ₹ 170 Tranche-I ₹ 138.95 Tranche-II ₹ 150.10 Tranche-II ₹ 173.65  Tranche-III ₹ 135				

**ANNEXURE 'B' TO THE DIRECTORS' REPORT**

*[Statement of particulars under the Companies (Disclosure of particulars in the Report of the Board of Directors) Rules, 1988]*

**A. CONSERVATION OF ENERGY**

**"Last Man Standing; First Man Forward"** the mantra given by your Chairman, if deciphered, highlights the importance of Energy and its efficient usage in your Industry. Energy conservation and sustainable foot-print is intrinsic to your company's working. Energy conservation and its efficient usage presents itself as an opportunity to mitigate the high cost pressure in today's scenario. Your company is focused more aggressively than ever before, to set benchmark standards in utilization of energy, use of renewable and alternate forms of energy. Its definitive Energy policy along with robust Energy Management Organization structure, gives guideline to channelize efforts towards improving energy efficiency. Each Unit with its trained professionals follows a Bottom Up and Top Down approach to mobilize and implement energy saving measures. Walk-Through and detailed Energy Audits, Quality Circles, WCM Committees, Energy Conservation Month, Suggestion Scheme are some among many efforts at Plant level towards energy efficiency. Through Suggestion Scheme employees are encouraged, recognized and suitably rewarded to come up with energy savings ideas. All these measures ensure increased participation across the hierarchy.

Each Unit of your Company has dedicated Energy Cells with Energy Manager / Energy Auditor Certified by **"Bureau of Energy Efficiency"**. This workforce is responsible for planning energy conservation initiatives, track latest technological developments in the field of energy conservation and explore Renewable and Eco-friendly Green sources of energy. They review and recommend suggestions for implementing such initiatives with the objective of increasing Energy productivity and reducing the impact on environment. Renukoot Unit of your company has taken the first step to verify its Base-Line GHG emission by getting the **"ISO-14064-1:2006 GHG Verification Statement"**.

The Bureau of Energy Efficiency (BEE) under the aegis of Ministry of Power, Government of India has also notified **PAT** (Perform Achieve and Trade) reduction targets as regards SEC for all Units of Hindalco. Under this scheme companies achieving SEC lower than the set target would be eligible for tradable e-Certificates where as those unable to achieve would have to buy Certificates or incur penalties. To get e-Certificates and thereby move closer to our goal of attaining high Energy efficiency standards, the Company has put dedicated team to monitor and implement measures.

**a. ENERGY CONSERVATION MEASURES TAKEN****GENERAL MEASURES**

- i. Interlocking of Cooling Tower fan motor through temperature switch.
- ii. Installation of capacitor banks to improve power factor.
- iii. Installation of small PLC logo to optimize AC temp and running time.
- iv. Replacement of convectional light/ballast by CFL, LED/electronic ballast.
- v. Modification in lighting circuit, installation of occupancy sensor in toilets, department canteens for ON/OFF control of lights.
- vi. Installation of transparent sheet in roof to utilize the natural light.
- vii. Rationalization of motor HP, pump impeller size and stages.
- viii. Interlocking of auxiliary equipments with main equipment.
- ix. Regular walkthrough audit of Steam and compressed air lines to arrest the losses.
- x. Regular monitoring and benchmarking of Energy Intensive equipments.
- xi. Energy audit from external agencies.
- xii. Optimization of transformer load.



- xiii. Replacement of electrically operated exhaust fans with roof wind-ventilators.
- xiv. Replacement of Metallic Fan blades of Cooling Towers with FRP blades.
- xv. Application of Corrosion resistant coating in pumps and blowers.

#### 1. ALUMINA PLANTS:

- i. Installation of Pregnant liquor flashing unit in precipitation area to reduce steam consumption.
- ii. Power saving by conversion of idle lying slurry Geho (single-stage high pressure) pump into Liquor pump to stop running of 3-stage liquor pumping station in Digestion unit IV.
- iii. Gravity overflow line provided from Desilication Tank#3 to #4 to stop intermediate underflow pumping.
- iv. Motor rationalisation of Digestion unit I and III Blow-off Pump.
- v. Phasing out inefficient fluid coupling system with VFDs in phased manner (9 Nos. Fluid coupling replaced with VFDs.)
- vi. In Digestion unit III, waste heat from last flashing vessel arrested through providing an additional pipe line to heat sink in washer area.
- vii. Piping and condensate management system modified in Digestion unit III for better heater upkeep and heat recovery.
- viii. Cake-relay tank#2 piping modified to avoid running of agitator (Bypass line from Kelly press#2 to repulperP#3).
- ix. Replacement of old inefficient pumps (16 numbers) with efficient pumps.
- x. Increased Ball Mill loading to 110% from 97% resulting in reduced energy consumption.
- xi. Energy Efficient Glass Flake Coating in the Water Supply 945 KW Intermediate pump at River pump House to reduce friction losses.
- xii. Installation of dedicated Cooling Tower for special compressors.
- xiii. Use of Mechanical Seals for liquor pumps in 13A evaporator section.
- xiv. Fuel substitution from Furnace Oil to Natural Gas in Boilers and Kilns by replacing existing FO burners by dual fired efficient FO/NG Burners.
- xv. Reduction of steam consumption in Misc. Header by providing isolation.

#### 2. SMELTERS:

- i. Compressed air consumption reduction by providing regulators in tapping air Line in line-9, 10 and 11.
- ii. Reduced power consumption of alumina transfer system by replacing existing air slide fan with lower capacity fan.
- iii. Smaller size impeller installed in pot line-6 DSS ID-Fan to reduce power consumption.
- iv. Mechanical locking arrangement provided for centre punch holding in 400 pots to reduce compressed Air consumption.
- v. Replacement of pneumatic jack hammer, grinder and drill machine by electrically operated machine for reduction of outside pot-activity air consumption.
- vi. Installation of airlift tank in bath crushing area for alumina tanker unloading to reduce the compressed air consumption.
- vii. Increase in anode length to optimise current density.
- viii. Use of larger collector bar to reduce lining drop in new pots.
- ix. Increase in anode ring bus size to reduce voltage drop.

- x. Modification in furnace oil preheating system in Baking furnaces to reduce power consumption and better temperature control.
- xi. Twin-Zebra conductor provided on 132 KV Renusagar-Hindalco transmission lines TL #5 and #6 to reduce transmission losses.
- xii. 40 MVAR Capacitor Bank with harmonic filter banks installed at Rectifier for reduction in losses.
- xiii. Conventional air conditioning system replaced with inverter-type split air conditioning system at the guesthouse to reduce energy consumption.
- xiv. Modification of Metal transfer trolley from pneumatic drive to motorised drive.
- xv. Use of centrifugal blower in place of compressed air in selected areas.
- xvi. VFD provided in the auto crusher motor, Coldwell Pump-1 and 2 of Compressor Cooling Tower.

### 3. FABRICATION PLANTS:

- i. Installation of Sky light at Soaking pits.
- ii. Water used for Annealing Furnace#1 and 2 AC, Annealing Furnace#4 AC, BSL CTL line and Junker Furnace AC units were supplied from respective pumps. Now these pumps are removed and Cold water to the AC units is being supplied by connecting a pipe line in the water line of Cold well pumps. With this modification, 3 Cooling Tower fans for these units have also been removed.
- iii. Increased in load/Charge in Furnace#5 from 16 MT to 24 MT by modification of Loading Car Rake in Circle Final-Annealing Furnace.
- iv. Revamping of Annealing Furnace#1 to reduce heat losses in Plant 2.
- v. Change in SOP of AA 3105 alloy (about 200 MT) from inter-annealing route to partial-annealing route at low temperature to reduce power consumption.
- vi. Revised annealing practice in Annealing Furnace Plant#1 for AA3003, AA100 alloys from 430°C metal temp. to 400°C.
- vii. Increased net load/charge in Annealing Furnace PL-1 from 25 MT to 29 MT (width widening) by modification in Charging Car Rake.
- viii. Minimising of heat loss through chimney by optimising Damper opening practices in Plant-2 Annealing furnaces.
- ix. Reduction in operating time from 3 shifts to 2 shifts of Cut-to-Length Line by modification and practice change.
- x. Increase in number of slabs to 10 instead of 8 in Soaking Pit#7 by putting thinner spacer and utilizing the full height.
- xi. Revamping of Soaking Pit#2 to reduce heat losses.
- xii. Re-insulation of Batch Annealing Furnace No. 4 and replacement of old circulating-fan motor by energy efficient motor.
- xiii. Replacement of Old Circulating Pump Motor at New Remelt Furnace by Energy Efficient Pump Motor.
- xiv. Modification of Hydraulic Circuit system for operating Davy Cold mill with only two hydraulic pumps.
- xv. Reduction in heat loss through Remelt furnace door by minimising door gap.
- xvi. Fuel switching from Furnace Oil to LNG at Recycling, Remelt and TL burners.
- xvii. Reduction in Furnace Oil Consumption at Caster through better process control and optimisation.

**4. POWER PLANTS/CO-GENERATION UNITS:**

- i. Renovation and Modernisation (R&M) of Economiser by Installation of green Economiser in Spare Boiler and Boiler#1 for improving efficiency.
- ii. Installed Electronic-Governing system in TG#4 and retrofitting of Electronic Governor in 5.6 MW Turbine to minimize plant parameters variation.
- iii. Used self developed fuel additive for dozing inside the furnace to improve thermal efficiency in all Boilers by 1.00%
- iv. Installed control valve in soot blowing steam drain line to control steam flow as per requirement of steam temperature.
- v. Installed smaller size rotating elements in Cold Well Pumps of Unit Nos. 1, 8, 9 and 10 for about 120 days operation during winter season.
- vi. Efficiency improvement of 9 Nos. Cold Well pumps by erosion resistant coating.
- vii. Installed dry ash disposal system in place of wet system in Boiler#9.
- viii. Modified the Boiler Feed Pump impeller of TG#9 and 10 along with mechanical seals.
- ix. Replaced inefficient imported Boiler Feed Pump#5B with efficient indigenous pump.
- x. Operation of 3 Units (TG#4, 5 and 6) with two CW Pump during winter.
- xi. Modified PA duct opening in Spare Boiler Air Preheater.
- xii. Reduced Boiler#9 ESP hopper temperature setting from 150<sup>o</sup> C to 120<sup>o</sup> C to minimise the operating duration of hopper heaters.
- xiii. Installed industrial rain shed over crushed coal yard of CHP-III to avoid coal flow interruption during rainy season.
- xiv. Upgradation of Motor capacity of Boiler#4 PA Fan at Co-Generation Unit to make system run on one Fan.
- xv. Improvements through R&M to enhance the performance of Boiler#3 Rotary Air Preheater to reduce flue gas temperature at APH outlet by 22<sup>o</sup> C approx.
- xvi. Replacement of complete Ball assembly of Cogen-2 CW pumps to optimise Aux. power consumption.
- xvii. Installation of air canon in Boiler#3 and 4 coal bunker outlet to remove choking resulting saving in oil consumption.
- xviii. Increase in evaporation ratio by operation of de-aerator at higher temp.
- xix. Impeller trimming of four number water intake pumps.
- xx. Pressure optimisation of compressed air system.
- xxi. Installation of VFD in both PA Fans of Boiler#8
- xxii. Installation of 5 Nos. of VFD in Cooling Tower Fans.
- xxiii. Reducing Instrument air header pressure by 20% thereby reducing the number of air compressor in use.
- xxiv. Belt conveyer and discharge chute modified resulting in stopping of idle running of coal handling plant.
- xxv. Advanced Boiler process control implemented in Boiler#8 to improve efficiency.

**5. FOILS DIVISION:**

- i. Reduction in Remelting furnace fuel consumption through reduction in door opening time with improved scrap charging method, tighter excess air control and maintaining optimum fuel oil temperature.

- ii. Installation of VFD for Melting Furnace combustion and atomizing blowers to reduce fuel and power consumption.
- iii. Replacement of old blower motor of melting furnace with energy efficient motor.
- iv. Reduction in LT distribution losses through optimum voltage setting of 3 distribution transformers.
- v. 40 Nos. of energy meters installed in foil mill, conversion plant and FRP plant for better energy monitoring.

#### **6. COPPER DIVISION:**

- i. Variable Frequency Drive installed for PA FAN and ID FAN of Boiler-1.

#### **b. ADDITIONAL INVESTMENT AND PROPOSALS BEING IMPLEMENTED**

##### **1. ALUMINA PLANTS:**

- i. To install Process Heater Shell side acid cleaning system for improving heat recovery.
- ii. Installation of Pipe master at Mill-Pulp slurry heater for improved heater cleaning and in situ machining to enhance the reliability and maintainability of the heater.
- iii. Replacement of the old over-aged heater tubes with new tubes and installation of other heater upkeep facility to reduce steam consumption.
- iv. Introduction of new system of Precipitator tank cleaning by taking hot liquor in place of cold liquor to reduce steam consumption.
- v. Piping modification to take out 1.1 bar excess steam from Digestion unit-IV for use in other heat sink.
- vi. To Increase flashing stages in Digestion unit-II from 3 to 4 numbers for better heat recovery.
- vii. To modify vibrating screen of Hammer Mill#3 for increasing throughput.
- viii. To provide coating in vacuum water pumps to increase efficiency.
- ix. IWR cooling tower pump motor rating to be optimise in view of change in evaporation circuit.
- x. To install VFD and correct Drum filtrate and Washer#1 Over-flow tank Pump size.
- xi. To replace Drum-area Cloth-wash pump with multistage pump.
- xii. Relocate Additive-area Lime pump to 10% lime tank area in order to avoid intermittent pumping.
- xiii. POP (pump off slurry pump) in precipitation area to be replaced with Washer#1 O/F pump.
- xiv. To install VFD in ISC (inter stage cooling) slurry discharge pump (E).
- xv. To convert Ball Mill #2 and 3 from discharge-type to overflow-type to reduce specific power consumption.
- xvi. To take Ball Mill#2 and 3 discharge slurry on the DSM screen on SH Tank#4 to reduce pumping of Reject pump.
- xvii. To stop refrigeration unit of vanadium Plant by employing a new concept of spray cooling and taking advantage of ambient temperature during winters.
- xviii. Using VAM refrigeration unit in place of conventional air conditioning unit in central office.
- xix. Modification in precipitator air nozzles to reduce compressed air consumption.
- xx. Replacement of 250 HP motor for #45A alumina plant Compressor with EE motor.
- xxi. 75 HP VFD panel with VFDs installed for 45A Cooling Tower cold well pumps.
- xxii. Waste Heat recovery of SGAC (special grade alumina calcinations) through introduction of Hydrate drying system.
- xxiii. Upgradation of Liquor Decanter.



**2. SMELTERS:**

- i. To install Air-washer for centrifugal compressor to reduce specific power.
- ii. Redesigning of bag house of line-1 and 6 DSS to reduce pressure drop.
- iii. Mechanical locking arrangement for centre punch holding in next 626 pots.
- iv. Vacuum cruces nozzle modification for reducing compressed air consumption.
- v. Replacement of two running ID fans of DSS line-4 pilot plant with bigger size fan.
- vi. Installation of new design filter bag in pot line-4 pilot plant for reducing the pressure drop.
- vii. Installation of smaller size impeller of ID Fan in DSS Potline-5.
- viii. Installation of single ID fan in place of 2 ID fans in DSS line-1.
- ix. Direct conveying of alumina from conveyor to DSS primary silo in line-8.
- x. Replacement of old Vibrating screen with efficient screen in pot line-8.
- xi. Trial of new design Pot to run pot at higher amperage.
- xii. Horizontal replication of Project Gemini in four pot lines.
- xiii. Installation of state-of-the-art Cathode block pre-heater to reduce resistance by eliminating uneven heating before putting into new pots.
- xiv. Installation of 300 KW Solar Power Plant and Solar area-lights for utilisation of renewable energy sources.
- xv. Installation of power factor correction equipment to improve power factor at compressor feeders.
- xvi. Replacement of old 60 MVA regulating transformer of PL#2 with new 75 MVA transformer to minimise loss in transformer.
- xvii. Reduction in voltage drop in DC bus bar joints of Rectifier units by use of ECOCONTACT technique.
- xviii. Reduction in transmission loss by conductor replacement on transmission line#3 and 4 from GOAT to AL59.
- xix. Pot voltage reduction through multiple actions like Yoke, Clamp control.
- xx. Reducing Anode Effect frequency and duration through EPC software logic tuning.
- xxi. On line Pot shut and startup system in all Pot lines.
- xxii. Replacement of Line#2 and 3 Rectifier with efficient rectifier.
- xxiii. Arresting air ingress in pots and reduce power consumption of FTP ID fans.
- xxiv. Optimisation of excess air and pressure control system at Cast House-1, 2, 3 and Caster furnaces to reduce fuel consumption.
- xxv. Reduce furnace heat loss by improving insulation at Cast House-1, 2 and Caster.
- xxvi. Improvement in insulated-covers for launders and pouring doors at Cast House-1, 2, 3 & Caster.
- xxvii. Improvement in insulation of covers for the crucibles.

**3. FABRICATION PLANTS:**

- i. 90 T AC to be stopped for 6 months during winter season by providing dedicated AC for Thyrisor room.
- ii. To provide a dedicated panel AC on the Automax panel, Bronx CTL Control so that room AC temp. could be raised from 20° to 25° to save energy.

- iii. Removal of 90TAC Pump, Computer room AC pump and Aux cooling tower motors by supplying the water directly to respective AC unit from Cold Well pump Pipe line.
- iv. Removal of Office AC Pump, BSL Slitting Line AC Pump and Roll Former AC pump by removing their Cooling Towers and supplying the water to respective AC units directly from Cold Well pump.
- v. Installation of VFD in Caster Nitrogen Plant Reciprocation compressor.
- vi. To install VFD in Scrap Baller motor of old STL, Bronx and DCM Roll coolant pump AM#10 to synchronize the speed with line speed.
- vii. Installation of Sky light at Mecesa and Circle Packing Area.
- viii. To install VFD in Annealing furnace#1 for reducing speed during soaking time.
- ix. To install VFD for Extrusion Press#1 finished-product Saw-hydraulic motor, Extrusion Press#5 finished-product Saw-hydraulic motors and Run Out Table hydraulic motor to avoid the idle running.
- x. To make inter-locking arrangement for stoppage of Vapour Exhaust fans of DC#2 and 4 with casting station.
- xi. Installation of Aqua Cool Fanless cooling tower in place of ID-Fan Cooling Tower in Billet area.
- xii. Installation of DOC Hybrid system in S3 furnace of Cast House to reduce 30% fuel consumption.
- xiii. Change in SOP of AA 3105 alloy (about 500 MT) from inter-annealing route to partial-annealing route at low temperature to reduce power consumption.
- xiv. Installation of Emulsion Technology in Billet Casting Furnace to reduce FO consumption.
- xv. Revamping of 3 Nos. Soaking Pits to reduce power consumption.
- xvi. Revamping of Remelting Furnace and Annealing Furnace No. 7
- xvii. Installation of Energy Efficient Pump Motor in Hot-mill Roll Coolant System
- xviii. VFD for cutter drive in scalper, hot mill feed pump and sump pump in CM1.
- xix. Further control of Cold Mill Heat Exchanger pumps based on temperature/pressure using VFD.
- xx. Cycle time reduction in Soaking Pit through increased blower air circulation rate.
- xxi. Compressed air pressure reduction at CP with new air receiver installation.
- xxii. Revamping of Soaking Pit Furnace#4

#### **4. POWER PLANTS/CO-GENERATION UNITS:**

- i. Enhancement of Boiler Efficiency and reducing heat rate by modification of Super-heater of Boiler#3 and 4.
- ii. R&M of TG#1 and 2 including governing and excitation system for heat rate improvement.
- iii. Renovation and Modernization (R&M) of Economizer of Boiler#5,6,7 and 8 by installing Green Economiser for enhancing boiler efficiency thereby reducing Coal Consumption in Boilers.
- iv. Installation of wide range Coal Burners in all the Boilers.
- v. Installation of Waste Heat Recovery System.
- vi. Use of self-developed fuel additives in all boilers for improving efficiency.
- vii. Modification in Cooling Tower#2, 3, 6 and 7 for reducing cooling water temp by 1°C.
- viii. Installation of Electronic Governing System in TG#3.

- ix. Installation of smaller size rotating elements in CW Pump of Unit#2, 3 and 7 for operation during winter season for about 120 days.
- x. Replacement of inefficient and bigger size fan impeller of PA Fan of Boiler#5 and Spare, FD Fan of Boiler#3 and 4 with suitable size impeller.
- xi. Installation of dry ash disposal system in Boiler#10 in place of wet system.
- xii. Replacement of 17 sets of FRP Cooling Tower Fan blades with more efficient New Profile FRP blades.
- xiii. Modification of oil firing system of Spare Boiler by installation of HEA rod in oil gun.
- xiv. Construction of industrial rain shed over crushed coal yard of CHP-IV.
- xv. Installation of HP heater in Co-gen.-II to improve cycle efficiency.
- xvi. Installation of VFD in Boiler#2 PA Fan and B#1 both ID fans.
- xvii. Replacement of less efficient Boiler Feed Pump (Boiler#3 and 4) with efficient indigenous pump.
- xviii. Revamping of Cogen-2 condensing-cum-extraction Turbine (BTG-2), for heat rate improvement.
- xix. Implementation of Coordinated control system to improve power to steam ratio.
- xx. Use of aerodynamic exhaust fan to reduce auxiliary power consumption.
- xxi. Replacement of B#4 PA fan with high efficient fan to reduce Aux. Power consumption.
- xxii. Modification of one Cogen-1 CW pumping system for winter season to optimize auxiliary power consumption.
- xxiii. Heat recovery and recycling of Boiler blow down steam.
- xxiv. Installation of De-aerator Pressure control System.
- xxv. Optimisation of boiler feed pump for efficient operation.
- xxvi. Installation of VFD in Boiler PA fan of Unit#2, 3 and 5, VFD in place of Dynodrive at Unit#1.
- xxvii. Over hauling of TG-2 and 3.
- xxviii. Control of Coal moisture by putting another rain shed in coal yard.

#### **5. FOILS DIVISION:**

- i. Replacement of 3 Nos. of old pump motor sets of cooling tower with energy efficient sets of reduced rating.

#### **6. COPPER DIVISION:**

- i. Installation of variable frequency drive.

#### **c. IMPACT OF MEASURES IN (a) AND (b) ABOVE**

The various Energy Conservation measures undertaken by your Company have yielded encouraging results in most production centres. Efforts continue to further optimise energy productivity through ongoing and planned measures.

**d. TOTAL ENERGY CONSUMPTION AND ENERGY CONSUMPTION PER TON OF PRODUCTION  
(As per Form "A" below)**

FORM A			
<b>A. Power and Fuel Consumption</b>	<b>2012-13</b>	<b>2011-12</b>	
1 Electricity			
a) Purchased from SEB's			
Units (KWH in thousands)	3,17,355	3,47,139	
Total Amount (₹ in crore) (excluding Minimum Demand Charges )	184	204	
Rate/Unit (₹)	5.81	5.89	
b) Own Generation			
i) Through Steam Turbine/Generator			
Units (KWH in thousands)	97,14,967	97,89,805	
Cost/Unit (₹) (Coal and Fuel only)	1.83	1.65	
ii) Through Diesel Generator			
Units (KWH in thousands)	1,624	728	
Cost/Unit (₹)	17.77	15.62	
2 Steam Coal (for Generation of Steam)*			
Quantity (Tonnes)	93,21,661	88,80,428	
Total Amount (₹ in Crore)	2,014	1,727	
Average Rate (₹)	2,160	1,944	
3 Furnace Oil (Fuel Oil, L.D.Oil, HSD Oil)			
Quantity (KL)	1,70,730	1,98,594	
Total Amount (₹ in Crore)	706	694	
Average Rate (₹)	41,334	34,939	
4 Steam (Purchased)			
Quantity (Tonnes)	27,965	31,882	
Total Amount (₹ in Crore)	1	1	
Average Rate (₹)	530	185	

\* Coal includes other Sources of Energy.



**B Consumption per Unit of Production (per MT)**

		<b>Unit</b>	<b>2012-13</b>	<b>2011-12</b>
1	Aluminium Metal (including Alumina)			
	Electricity	kWh	16,312	15,882
	Furnace Oil	Litres	188	200
	Steam Coal	MT	1.553	1.630
2	Redraw Rods (including Alloy Rods)			
	Electricity	kWh	54	53
	Furnace Oil	Litres	20	20
3	Fabricated Products (Rolled and Extrusion)			
	Electricity	kWh	1,037	1,024
	Furnace Oil	Litres	67	66
4	Aluminium Foil			
	Electricity	kWh	1,255	1,119
5	Copper Cathodes			
	Electricity	kWh	1,636	1,532
	Furnace Oil	Litres	19	12
	Propane	Kg	-	0.11
	Naphtha	Kg	-	0.68
	RLNG	SCM	93	91
6	Copper Rods			
	Electricity	kWh	65	62
	RLNG	SCM	54	48
7	Di Ammonium Phosphate (DAP/NPK)			
	Electricity	kWh	176	186

**B. TECHNOLOGY ABSORPTION****Efforts made in Technology Absorptions****RESEARCH AND DEVELOPMENT (R&D)****FORM B****A. ALUMINIUM BUSINESS****(1) Specific Areas in which R&D has been carried out:****a. Process Improvement:**

- Cooling efficiency improvement in Cold Rolling Mill by improving pumps capacity, new nozzle design and spray optimisation.
- Process development for NDT&E of pipes and tubes of Thermal Power Plants.
- Process parameters optimisation for high Silica low grade bauxite.
- Studies and experimentation to add value to the recovered Vanadium.
- Bauxite beneficiation studies using mechanical processes.
- Designing of improved roll coolant system for sheet and foil rolling mills.
- Installation of state-of-the-art sheet ingot casting facilities using wagstaff LHC technology.
- Development/designing of new process for PG foils (new ID and Coil density).
- Liquid D-rake upgradation with Cable torque technology.

**b. Products Development:**

- Development of Bomb Shell in AA 6351 T6 for Ordnance factories.
- Development of AA 3003 H 14 FRP for Rail Tank application.
- Development of High elongation AA 5052 H 32 stock for various forming applications.
- Development of Muff Tube in AA 1060 'F' for heat transfer in Refineries, chemical and petrochemical plants.
- Development of Boat Stock AA 5052 H34 for overseas customer.
- Development of High Security Registration Plate Stock.
- Development of alloy having high corrosion resistance and conductivity for radiator fin application.
- Development of new product and process route for Al Sheet for power coating sheet.
- Development of 35 micron foil in AA 1235 alloy for air filter application.
- Design and development of aluminium alloy roofing profile for roof-on-roof application.
- Development of Inverted Front fork for bikes in AA 6082 T6 alloys.
- Development of series of Façade profile/false ceiling import substitution products.
- Development of series of architectural profile around 60 Nos. for doors and windows and construction segment.
- Development of alloys for radiator fin application having high corrosion resistance and conductivity.
- Development of Ceramic grade Alumina.

**c. Energy saving and Waste to Wealth Projects:**

- Improvement in process for Dross recycling for production of reduction grade Alumina.
- Preparation of alum liquor from rejected aluminium dross to use in the settling of ash pond, ETP outlet slurry and precipitation of cryolite from dugout material.
- Annealing power productivity improvement using PLC controller and VFD leading to cycle time reduction and TAT improvement.
- Cold air burner system for reduction in oil consumption.

- Natural gas usage in place of Furnace oil with dual fuel arrangement.
- Studies on recovery of values from bauxite residue.
- Development of modified AA 8011 alloy with homogenization.

**(2) Benefits Derived as a result of above improvement:**

- a. Increase in market share and profitability.
- b. Increased export volume.
- c. Improved plant operation and OEE.
- d. Energy saving and reduction in GHG emission.
- e. Enhancement in customer satisfaction.

**(3) Future Plan of Action:**

- a. To identify opportunities for process improvement and cost reduction.
- b. To work on energy reduction projects.
- c. Development of new and value added products.
- d. To explore possibility of entering in new market segment.
- e. To identify new waste to wealth projects.

**B. COPPER BUSINESS**

**(1) Specific Area in which R&D has been carried out:**

- a. Recycle of effluent from Gypsum back to PAP.
- b. Provision of burner port in FSF settler wall (SCF side) for operation of oxy fuel burner.
- c. Addition of Metallurgical coke during processing at PMR.
- d. Tellurium Recovery from Anode Slime, all pilot test completed and Commercial scale project planned this year.
- e. Water saving measures adopted, viz., Use of pit water taken from RVDF for neutralisation at WTP in place of fresh water and CPP cooling tower water for make up in smelter slag granulation.
- f. Process improvement in Refinery through injection of SO<sub>2</sub> at flash tank in Slime Treatment Area.

**(2) Benefits derived as a result of above improvement**

- a. Reduction in Phosphoric Acid loss in Gypsum, Improvement in Acid recovery
- b. Reduction in plant downtime and improvement in furnace operations.
- c. Reduction in Ag loss in Primary slag.
- d. Recovery of High Purity Tellurium.
- e. Reduction in fresh water intake.
- f. Improvement in Selenium Recovery.

**(3) Future Plan of Action:**

- a. Continuation of Slow Cooled Converter Slag Floatation Project.
- b. Commercial production and process stabilisation of Pure Tellurium Production from Anode Slime.
- c. To work for process improvement and cost reduction exercises.

**Expenditure on R&D**

(₹ Crore)

	2012-13	2011-12
a) Capital	1.13	2.40
b) Recurring	24.97	20.87
c) Total (a+b)	26.10	23.27
d) Total R&D Expenditure as % of Total Turnover	0.10%	0.09%

**Technology Absorption, Adaptation and Innovation****(i) Efforts in Brief**

The company has improved quality and fuel efficiency, reduced cost of production and introduced new products into the market through technology absorption.

**(ii) Benefit derived**

- Advancement of basic skill and knowledge.
- Conservation of natural resources.

**(iii) Details of technology Imported in the past 5 years**

Technology Imported for	Year of Import	Has technology been fully absorbed	If not fully absorbed, areas where this has not taken place, reason thereof and future plan of action
<b>ALUMINIUM</b>			
Anode Baking Furnace from M/s. Riedhammer for Renukoot Plant	2011-12	No	Project is in the process of commissioning.
Aluminium Smelting Technology from Aluminium Pechiney for Mahan Aluminium	2008-09	No	Project is partially commissioned.
Aluminium Smelting Technology from Aluminium Pechiney for Aditya Aluminium	2008-09	No	Project is in the process of commissioning.
Aluminium Smelting Technology from Chalieco (GAMI 235 kA) for Hirakud smelter	2009-10	No	Project is in the final stage of commissioning
Alumina Refinery Technology from Rio Tinto Alcan for Aditya Alumina Refinery Project	2008-09	No	Pre-Project activities in progress
<b>COPPER</b>			
Molecular Recognition Technology for Bismuth Recovery	2008-09	Yes	NA
Continuous Cast Rod Plant-II from Southwire, USA	2009-10	Yes	NA
3D TRASAR Technology for Reverse Osmosis plant from M/s NALCO, USA	2010-11	Yes	NA

**C. FOREIGN EXCHANGE EARNINGS AND OUTGO****a) Activities related to Exports**

Exports during the year were ₹ 7,571.55 Crore.

**b) Total Foreign Exchange used and earned**

Foreign exchange used ₹ 18,555.55 Crore.

Foreign exchange earned ₹ 7,572.30 Crore.



As per Clause 55 of the Listing Agreement, top 100 listed entities based on market capitalization at BSE Limited and National Stock Exchange of India Limited as on March 31, 2012 are required to include Business Responsibility Reports as part of Annual Report. However, in sync with National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business "Guidelines" and Securities and Exchange Board of India (SEBI) Circular dated 13th August, 2011, those listed entities which have been submitting sustainability reports to overseas regulatory agencies/stakeholders based on internationally accepted reporting frameworks need not prepare a separate report for the purpose of these guidelines but only furnish the same to their stakeholders along with the details of the framework under which their BR Report has been prepared and a mapping of the principles contained in these guidelines to the disclosures made in their sustainability reports.

Hindalco has adopted the Global Reporting Initiative (GRI) Framework and prepared Sustainability Report for FY11 and FY12. We have released Hindalco Sustainability Report covering Hindalco India Operations including Greenfield projects, along with its overseas subsidiaries, Aditya Birla Minerals Ltd. - Australia and Novelis Inc. The report for 2011-12 titled 'Enduring Growth for Global Leadership' has been assured as A+ rating based on Global Reporting Initiatives (GRI G 3.1) standards by an external independent assessing agency.

The Company shall publish a comprehensive Sustainability Report 2012-13 based on GRI framework. In line with the press release and FAQs dated 10th May, 2013 issued by SEBI, your Company's Sustainability Report will be hosted on its website [www.hindalco.com](http://www.hindalco.com). Any shareholder interested in obtaining a physical copy of the same may write to the Company Secretary at the Registered Office of your Company.

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

1. Corporate Identity Number (CIN) of the Company	L27020MH1958PLC011238	
2. Name of the Company	Hindalco Industries Limited	
3. Registered Address	3 <sup>rd</sup> Floor, Century Bhavan, Dr. Annie Besant Road, Worli, Mumbai: 400030	
4. Website	<a href="http://www.hindalco.com">www.hindalco.com</a>	
5. E-mail ID	<a href="mailto:anil.malik@adityabirla.com">anil.malik@adityabirla.com</a>	
6. Financial Year Reported	1 <sup>st</sup> April, 2012 to 31 <sup>st</sup> March, 2013	
7. Sector(s) that the Company is engaged in (industrial activity code-wise)	ITC Code 7601 7606 7605 740311 740710	Product Description Aluminium Ingots Aluminium Rolled Products Aluminium Redraw Rods Copper Cathodes Continuous Cast Copper Rods
8. List three key products/services that the Company manufactures/provides (as in the Balance Sheet):	(i) Aluminium Rolled Products (ii) Copper Cathodes (iii) Concast Copper Rods	
9. Total number of locations where business activity is undertaken by the Company	i. Number of International Locations (Provide details of major 5): <ul style="list-style-type: none"> <li>● USA</li> <li>● Australia</li> <li>● Europe</li> <li>● Brazil</li> <li>● South Korea</li> </ul>	

	ii. Number of National Locations: <ul style="list-style-type: none"> <li>• 2 Aluminium Units</li> <li>• 1 Copper Unit</li> <li>• 3 Chemical Units</li> <li>• 3 Power Units</li> <li>• 5 Rolled FRP</li> <li>• 2 Extrusions</li> <li>• 3 Foils</li> <li>• Cluster of mines in Jharkhand, Chattisgarh, Maharashtra, and Odisha.</li> <li>• Registered Office and Zonal Marketing Offices</li> </ul>			
10. Markets Served by the Company	Local ✓	State ✓	National ✓	International ✓

## Section B: Financial Details of the Company

1. Paid-up Capital (INR)	₹ 191.48 Crores
2. Total Turnover (INR)	₹ 26056.93 Crores
3. Total Profit After Tax (INR)	₹ 1699.20 Crores
4. Total Spending on Corporate Social Responsibility (CSR) as percentage of Profit After Tax (%)	The Company's total spending on CSR was ₹ 29.79 crores which is 1.48% of the average net profit for the last three years.
5. List of activities in which expenditure in 4 above has been incurred	a. Education b. Health Care c. Women empowerment d. Sustainable Livelihood e. Infrastructure Development

## Section C: Other Details

- Does the Company have any Subsidiary Company/ Companies?  
Yes, the Company has 63 (sixty three) subsidiaries - 13 (Thirteen) domestic and 50 (fifty) foreign.
- Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s):  
Hindalco Sustainability Report covers Hindalco India Operations including Greenfield Projects, along with overseas subsidiaries Aditya Birla Minerals Ltd. – Australia and Novelis Inc. Further, Novelis Inc., also publishes Sustainability Report based of Global Reporting Initiative (GRI) framework.
- Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]:  
At present, suppliers and distributors with whom the Company does business, do not participate in the Business Responsibility initiatives of the Company directly.

Section D: BR Information

1. Details of Director/Directors responsible for BR

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

DIN Number	00198912
Name	Mr. N.J. Jhaveri
Designation	Independent Director

b) Details of the BR head

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

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

P1	Businesses should conduct and govern themselves with Ethics, Transparency and Accountability.
P2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle.
P3	Businesses should promote the wellbeing of all employees.
P4	Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.
P5	Businesses should respect and promote human rights.
P6	Business should respect, protect, and make efforts to restore the environment.
P7	Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.
P8	Businesses should support inclusive growth and equitable development.
P9	Businesses should engage with and provide value to their customers and consumers in a responsible manner.

The mapping of the aforesaid principles to the disclosures made in the Sustainability Report 2012-13 will be made available on our website [www.hindalco.com](http://www.hindalco.com).

# FINANCIAL STATEMENTS



A Metals Powerhouse



**TO THE MEMBERS OF HINDALCO INDUSTRIES LIMITED**

We have audited the accompanying financial statements of HINDALCO INDUSTRIES LIMITED ("the Company"), which comprise the Balance Sheet as at 31<sup>st</sup> March, 2013, and the Statement of Profit and Loss and the Cash Flow Statement for the year then ended and a summary of significant accounting policies and other explanatory information.

**Management's Responsibility for the Financial Statements**

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flows of the company in accordance with the accounting principles generally accepted in India, including Accounting Standards referred to in Sub-Section (3C) of Section 211 of the Companies Act, 1956 ("the Act"). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

**Auditors' responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by the management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- a) in the case of the Balance Sheet, of the state of affairs of the Company as at 31<sup>st</sup> March, 2013;
- b) in the case of the Statement of Profit and Loss, of the profit for the year ended on that date; and
- c) in the case of the Cash Flow Statement, of the cash flows for the year ended on that date.

Report on other legal and regulatory requirements:

- 1) As required by the Companies (Auditor's Report) Order, 2003 ("the Order") issued by the Central Government of India in terms of Sub-Section (4A) of Section 227 of the Act, we give in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the Order.
- 2) As required by Section 227(3) of the Act, we report that:
  - a) We have obtained all the information and explanations, which, to the best of our knowledge and belief were necessary for the purpose of our audit.
  - b) In our opinion, proper books of account as required by law have been kept by the Company so far as appears from our examination of those books.
  - c) The Balance Sheet, the Statement of Profit and Loss and the Cash Flow Statement dealt with by this report are in agreement with the books of account.
  - d) In our opinion, the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement comply with the accounting standards referred to in Sub-Section (3C) of Section 211 of the Companies Act, 1956.
  - e) On the basis of written representations received from the directors as on 31<sup>st</sup> March 2013, and taken on record by the Board of Directors, none of the directors is disqualified as on 31<sup>st</sup> March 2013, from being appointed as a director in terms of clause (g) of Sub-Section (1) of Section 274 of the Companies Act, 1956.

**For SINGHI & CO.**

Chartered Accountants  
Firm Registration No.302049E

**(RAJIV SINGHI)**

Partner  
Membership No. 53518

Camp : Mumbai  
Dated : the 28<sup>th</sup> day of May, 2013.

**Annexure referred to in paragraph 1 under the heading "Report on other legal and regulatory requirements" of our report of even date**

Re: Hindalco Industries Limited ("the Company")

- I. (a) The Company has maintained proper records showing full particulars including quantitative details and situation of Fixed Assets.
- (b) Fixed Assets have been physically verified by the management according to a phased program designated to cover all items over a period of three years, which in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. Pursuant to the program, a portion of fixed assets has been physically verified by the management during the year and no material discrepancies between book record and physical inventory has been noticed.
- (c) No substantial part of fixed assets has been disposed of during the year, which has bearing on the going concern assumption.
- II. (a) Physical verification of inventory (except stocks in transit and stocks lying with third parties, confirmation for which has been obtained) have been conducted at reasonable intervals, during the year, by the management/outside agencies.
- (b) In our opinion, the procedures of physical verification of inventory followed by the management are reasonable and adequate in relation to the size of the Company and the nature of its business.
- (c) The Company has maintained proper records of inventory. No material discrepancies were noticed on physical verification of inventory as compared to book records.
- III. (a) The Company has not granted any loans, secured or unsecured to companies, firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956.
- (b) The Company has not taken any loans, secured or unsecured from companies, firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956.
- IV. On the basis of checks carried out during the course of audit and as per explanations given to us, we are of the opinion that there is adequate internal control system commensurate with the size of the Company and the nature of its business; for the purchase of inventory and fixed assets and for the sale of goods and services. Further, on the basis of our examination of the records of the Company and according to the information and explanations given to us, no major weakness has been noticed or reported in the internal controls.
- V. (a) In our opinion and according to the information and explanations given to us, the transactions that need to be entered into register maintained under Section 301 of the Companies Act, 1956 have been so entered.
- (b) As per the information and explanations given to us and the records of the Company examined by us, there are no contract or arrangements made for transactions exceeding Rupees 5,00,000 in respect of each party, for sale and purchase of goods and services in pursuance of Section 301 of the Company's Act, 1956.
- VI. The Company has not accepted any deposit from the public within the meaning of Sections 58A and 58AA of the Companies Act 1956 and the rules framed there under.
- VII. The Company has an internal audit system, which in our opinion is commensurate with the size and nature of its business.
- VIII. We have broadly reviewed the books of accounts maintained by the Company in respect of product, where pursuant to the rule made by the Central Government of India the maintenance of cost records has been prescribed under Section 209 (1) (d) of the Companies Act 1956 and are of the opinion that, *prima facie*, the prescribed records have been maintained. We have, however, not made a detailed examination of the records with a view to determine whether they are accurate or complete.
- IX. (a) According to the information and explanations given to us and on the basis of our examination of the books of account, the Company is generally regular in depositing undisputed statutory dues including Provident Fund, Investor Education and Protection Fund, Employees' State Insurance, Income Tax,

Sales Tax, Wealth Tax, Service Tax, Customs Duty, Excise Duty, Cess and other statutory dues with the appropriate authorities. According to the information and explanations given to us and the records of the Company examined by us, no undisputed statutory dues as above were outstanding as at 31<sup>st</sup> March, 2013 for a period of more than 6 months from the date they became payable.

- (b) According to the information and explanations given to us, the dues of Sales Tax, Income Tax, Customs Duty, Wealth Tax, Excise Duty, Service Tax and Cess which have not been deposited on account of any dispute and the forum where the dispute is pending as on 31<sup>st</sup> March 2013 are as under:

Name of the Statute	Nature of Dues	Amount (₹ in Crore)	Period to which the amount relates	Forum where the disputes are pending
Central Sales Tax Act and Local Sales Tax Act	Sales Tax	9.67	1986-1987, 1989-1991, 1992-1993, 1995-1996, 2003-2004, 2004-2005, 2006-2007	The High Court
		7.04	1994-1995, 1997-1998 to 2000-2001, 2001-2002 to 2008-2009	Tribunal
		63.44	1991-1992, 1994-1995 to 2011-2012	Asst. Commissioner/ Commissioner/Revisionary Authorities Level
The Central Excise Act, 1944	Excise Duty	155.31	1999-2000 to 2007-2008	The Supreme Court
		21.43	1994-1995, 2000-2001, 2007-2008 to 2011-2012	The High Court
		46.43	1988-1990, 1991-1992, 1993-1994, 1999-2000 to 2010-2011	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
		37.19	1987-1988, 1996-1997 to 2009-2010	Asst. Commissioner/ Commissioner/Revisionary Authorities Level
The Service Tax under the Finance Act, 1994	Service Tax	50.63	1996-1997 to 1999-2000, 2003-2004 to 2011-2012	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
		18.14	2001-2002, 2004-2005 to 2006-2007, 2008-2009 to 2011-2012	Asst. Commissioner/ Commissioner/Revisionary Authorities Level
The Customs Act, 1962	Customs Duty	5.29	2006-2007	Asst. Commissioner/ Commissioner/Revisionary Authorities Level
Adhoshanrachna Vikas Evam Parayavaran Upkar Adhiniyam, 2005	Chhattisgarh Development and Environment Cess	0.35	2005-2006 to 2011-2012	The Supreme Court
Shakti Nagar Special Area Development Authority	Cesson Coal	9.38	1997-1998 to 2011-2012	The Supreme Court
The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act & Rules ("BOCW Act")	Cess	100	2011-2012	The Supreme Court

- X. The Company does not have any accumulated losses and has not incurred cash losses in the current financial year and in the immediately preceding financial year.
- XI. The Company has not defaulted in repayment of dues to Financial Institutions or Banks or Debenture holders.
- XII. According to the information and explanations given to us, the Company has not granted any loans or advances on the basis of security by way of pledge of Shares, Debentures and other Securities.
- XIII. The provisions of any special statute applicable to chit fund/nidhi/mutual benefit fund/societies are not applicable to the Company.

- XIV. The Company is not in the business of dealing or trading in shares. The Company has maintained proper records of transactions and contracts in respect of Shares, Securities, Debentures and other Investments and timely entries have been made therein. The Shares, Securities, Debentures and other Investments have been held by the Company, in its own name except to the extent of exemption, granted under Section 49 of the Companies Act, 1956.
- XV. In our opinion and according to the information and explanations given to us, the terms and conditions on which the Company has given corporate guarantees for loans taken by its Subsidiary from Banks and Financial Institutions are not *prima facie* prejudicial to the interest of the Company.
- XVI. Based on information and explanations given to us and records of the Company examined by us, in our opinion, the term loans have been applied for the purpose for which they were obtained. Though unutilized funds which were not required for immediate use for capital expenditure have been temporarily invested in mutual funds / bank deposit.
- XVII. According to the information and explanations given to us and on the basis of our overall examination of the Balance Sheet and Cash Flow Statement, we report that no funds raised on short term basis have been used for long term investment of the Company.
- XVIII. During the year under Audit, the Company has not made preferential allotment of shares to parties and companies covered in the register maintained under Section 301 of the Companies Act 1956.
- XIX. During the year under audit, the Company has issued secured debentures and has created securities / charges in respect of the same.
- XX. The Company has not raised any money by Public Issues during the year.
- XXI. During the course of our examination of the books and records of the Company, carried out in accordance with the Generally Accepted Auditing Practice in India, and according to the information and explanations given to us, we have neither come across any instance of fraud on or by the Company, noticed or reported during the year, nor have we been informed of such cases by the Management.

**For SINGHI & CO.**  
Chartered Accountants  
Firm Registration No.302049E

**(RAJIV SINGHI)**  
Partner  
Membership No. 53518

Camp : Mumbai  
Dated : the 28<sup>th</sup> day of May, 2013.



		As at 31/03/2013	(₹ Crore) As at 31/03/2012
	Note No.		
<b>EQUITY AND LIABILITIES</b>			
<b>Shareholders' Funds</b>			
Share Capital	'2'	191.48	191.48
Reserves and Surplus	'3'	33,239.60	31,299.68
Money received against Share Warrants	'4'	541.31	541.31
		<b>33,972.39</b>	<b>32,032.47</b>
<b>Non-Current Liabilities</b>			
Long-term Borrowings	'5'	20,443.05	11,115.13
Deferred Tax Liabilities (Net)	'6'	1,191.14	1,224.56
Other Long-term Liabilities	'7'	974.28	953.10
Long-term Provisions	'8'	300.94	287.32
		<b>22,909.41</b>	<b>13,580.11</b>
<b>Current Liabilities</b>			
Short-term Borrowings	'9'	3,701.72	3,456.78
Trade Payables	'10'	3,051.52	4,659.77
Other Current Liabilities	'11'	1,924.09	998.61
Short-term Provisions	'12'	1,059.43	919.88
		<b>9,736.76</b>	<b>10,035.04</b>
		<b>66,618.56</b>	<b>55,647.62</b>
<b>ASSETS</b>			
<b>Non-Current Assets</b>			
Fixed Assets			
Tangible Assets	'13'	7,071.00	7,125.95
Intangible Assets	'14'	26.65	24.25
Capital Work-in-Progress		23,605.11	16,256.70
Intangible Assets under Development		0.01	0.24
Non-Current Investments	'15'	14,050.17	13,503.70
Long-term Loans and Advances	'16'	1,681.08	2,249.53
Other Non-Current Assets	'17'	34.51	7.81
		<b>46,468.53</b>	<b>39,168.18</b>
<b>Current Assets</b>			
Current Investments	'18'	6,431.96	4,583.40
Inventories	'19'	7,702.61	7,742.86
Trade Receivables	'20'	1,515.04	1,427.45
Cash and Bank Balances	'21'	1,497.82	722.30
Short-term Loans and Advances	'22'	2,272.42	1,647.65
Other Current Assets	'23'	730.18	355.78
		<b>20,150.03</b>	<b>16,479.44</b>
		<b>66,618.56</b>	<b>55,647.62</b>
<b>Significant Accounting Policies</b>	'1'		

The accompanying Notes are an integral part of the Financial Statements

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Praveen Kumar Maheshwari  
CFO

Camp: Mumbai

Dated: The 28th day of May, 2013

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

**STATEMENT OF PROFIT AND LOSS  
FOR THE YEAR ENDED 31ST MARCH, 2013**

			(₹ Crore)
	Note No.	Year ended 31/03/2013	Year ended 31/03/2012
<b>INCOME</b>			
Gross Revenue from Operations	'24'	28,069.78	28,296.96
Less: Excise Duty		2,012.85	1,700.18
<b>Net Revenue from Operations</b>		<b>26,056.93</b>	<b>26,596.78</b>
Other Income	'25'	983.09	615.79
<b>Total Income</b>		<b>27,040.02</b>	<b>27,212.57</b>
<b>EXPENSES</b>			
Purchases of Stock-in-Trade	'26'	0.38	205.98
Cost of Raw Materials Consumed	'27'	17,136.51	17,843.08
Changes in Inventories	'28'	127.94	(407.31)
Employee Benefits Expenses	'29'	1,200.80	1,113.35
Power and Fuel	'30'	3,073.04	2,870.67
Finance Costs	'31'	435.98	293.63
Depreciation and Amortization	'32'	686.95	689.97
Impairment Loss/(Reversal) (Net)	'33'	17.25	-
Other Expenses	'34'	2,314.54	1,866.25
<b>Total Expenses</b>		<b>24,993.39</b>	<b>24,475.62</b>
<b>Profit before Tax</b>		<b>2,046.63</b>	<b>2,736.95</b>
Tax Expenses:	'35'		
Current Tax		381.41	562.68
Deferred Tax		(33.98)	(62.93)
<b>Profit for the year</b>		<b>1,699.20</b>	<b>2,237.20</b>
<b>Earnings per Equity Share:</b>	'36'		
Basic (₹)		8.88	11.69
Diluted (₹)		8.87	11.68
<b>Significant Accounting Policies</b>	'1'		

The accompanying Notes are an integral part of the Financial Statements

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Praveen Kumar Maheshwari  
CFO

Camp: Mumbai

Dated: The 28th day of May, 2013

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

STANDALONE FINANCIAL STATEMENTS

	Year Ended 31/03/2013	( ₹ Crore) Year Ended 31/03/2012
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Profit before Tax	2,046.63	2,736.95
Adjustment for:		
Finance Costs	435.98	293.63
Depreciation and Amortization	686.95	689.97
Impairment Loss/(Reversal) (Net)	17.25	-
Employee Stock Option Scheme	0.27	1.29
Provisions/Provisions written-back (Net)	14.24	(39.92)
Unrealised Foreign Exchange (Gain)/Loss (Net)	6.03	52.38
Loss/(Gain) on Derivative Transactions (Net)	17.87	(3.34)
Investing Activities (Net)	(935.54)	(562.01)
Operating profit before working capital changes	2,289.68	3,168.95
Changes in working Capital:		
Inventories	40.24	(91.46)
Trade and other Receivables	(407.48)	(1,018.06)
Trade and other Payables	(1,638.03)	532.12
Cash generation from Operation	284.41	2,591.55
Payment of Direct Taxes	(636.75)	(469.48)
<b>Net Cash generated/(used) - Operating Activities</b>	<b>(352.34)</b>	<b>2,122.07</b>
<b>B. CASH FLOW FROM INVESTMENT ACTIVITIES</b>		
Purchase of Fixed Assets	(5,530.84)	(7,168.16)
Sale of Fixed Assets	20.69	11.20
Return of Capital from Subsidiary	-	66.86
Purchase/Sale of shares in Subsidiaries (Net)	(541.58)	(520.94)
Purchase/Sale of Investments (Net)	(1,454.91)	623.67
Proceeds/Repayment of Loans and Deposits (Net)	(1,249.09)	70.04
Interest Received	254.01	94.09
Dividend Received	259.65	456.28
<b>Net Cash Generated/(Used) - Investing Activities</b>	<b>(8,242.07)</b>	<b>(6,366.96)</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Proceeds from issue of Shares (Net of Expenses)	0.40	1.46
Proceeds against Share Warrants	-	541.31
Capital Subsidy Received	4.50	-
Proceeds from Long-term Borrowings	14,818.09	5,969.11
Repayment of Long-term Borrowings	(1.53)	(1.53)
Prepayment of Long-term Borrowings	(5,142.99)	-
Proceeds/Repayment of Short-term Borrowings (Net)	258.55	(433.58)
Finance Cost Paid	(1,519.85)	(1,019.18)
Dividend Paid (including Dividend Distribution Tax)	(331.01)	(324.03)
<b>Net Cash Generated/(Used) - Financing Activities</b>	<b>8,086.16</b>	<b>4,733.56</b>
<b>Net Increase/(Decrease) in Cash and Cash Equivalents</b>	<b>(508.25)</b>	<b>488.67</b>
Add: Opening Cash and Cash Equivalents	713.63	224.96
Closing Cash and Cash Equivalents	<b>205.38</b>	<b>713.63</b>

**Notes:**

- The Cash Flow Statement has been prepared under the indirect method as set out in Accounting Standard (AS) 3 "Cash Flow Statement" as specified in the Companies (Accounting Standard) Rules 2006.
- Figures have been regrouped/rearranged wherever necessary.

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants  
Firm Registration No. 302049E

**RAJIV SINGHI**

Partner  
Membership No. 53518

Praveen Kumar Maheshwari  
CFO

Camp: Mumbai  
Dated: The 28th day of May, 2013

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

**1. Significant Accounting Policies:****A. Accounting Convention**

The financial statements are prepared under the historical cost convention, on an accrual basis and in accordance with the generally accepted accounting principles in India, the applicable mandatory Accounting Standards as notified by the Companies (Accounting Standard) Rules, 2006 and the relevant provisions of the Companies Act, 1956 of India.

**B. Use of Estimates**

The preparation of financial statements require estimates and assumptions to be made that affect the reported amount of assets and liabilities on the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Difference between the actual results and estimates is recognized in the period in which the results are known/materialized.

**C. Fixed Assets**

- (a) Tangible Assets are stated at cost less accumulated depreciation and impairment loss, if any. Cost comprises of purchase price and any directly attributable cost of bringing the assets to its working condition for its intended use.
- (b) Intangible Assets are stated at cost less accumulated amortization and impairment loss, if any. Cost includes any directly attributable expenditure on making the asset ready for its intended use.
- (c) Machinery spares which can be used only in connection with an item of Tangible Asset and whose use is not of regular nature are written off over the estimated useful life of the relevant asset.
- (d) Certain directly attributable pre-operative expenses during construction period are included under Capital Work in Progress. These expenses are allocated to the cost of Fixed Assets when the same are ready for intended use.

**D. Depreciation and Amortization**

- (a) Depreciation on Tangible Assets, except leasehold land, has been provided using Straight Line Method at the rates and manner prescribed under Schedule XIV of Companies Act, 1956 of India. Leasehold lands are amortized over the period of lease on straight line basis.
- (b) Intangible assets, except mining rights, are amortized over their estimated useful lives on straight line basis. Mining Rights are amortized over the period of lease on straight line basis.

**E. Impairment**

An asset is treated as impaired when the carrying cost of the asset exceeds its recoverable value being higher of value in use and net selling price. Value in use is computed at net present value of cash flow expected over the balance useful life of the assets. An impairment loss is recognized as an expense in the Statement of Profit and Loss in the year in which an asset is identified as impaired. The impairment loss recognized in prior accounting period is reversed if there has been an improvement in recoverable amount.

**F. Leases**

Lease payments under an operating lease are recognized as expense in the Statement of Profit and Loss as per terms of lease agreement.

**G. Investments**

- (a) Long term investments are carried at cost after deducting provision, if any, for diminution in value considered to be other than temporary in nature.
- (b) Current investments are stated at lower of cost and fair value.



**H. Inventories**

- (a) Inventories of stores and spare parts are valued at or below cost after providing for cost of obsolescence and other anticipated losses, wherever considered necessary. Inventory of other items are valued 'At cost or Net Realizable Value, whichever is lower'. Cost is generally determined on weighted average cost basis and wherever required, appropriate overheads are taken into account. Net Realizable Value is the estimated selling price in the ordinary course of business less the estimated cost of completion and the estimated costs necessary to make the sale. However, materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be used are expected to be sold at or above cost.
- (b) Fair value hedges are mainly used to hedge the exposure to change in fair value of commodity price risks. The fair value adjustment remains part of the carrying value of inventory and enters into the determination of earnings when the inventory is sold.

**I. Foreign Currency Transactions**

Transactions in foreign currency are recorded at the rate of exchange prevailing on the date of transaction. Year end balance of foreign currency monetary item is translated at the year end rates. Exchange differences arising on settlement of monetary items or on reporting of monetary items at rates different from those at which they were initially recorded during the period or reported in previous financial statements are recognized as income or expense in the period in which they arise. Foreign currency monetary items those are used as hedge instruments or hedged items are accounted as per accounting policy on derivative financial instruments.

**J. Employee benefits**

Employee benefits of short term nature are recognized as expense as and when these accrue. Long term employee benefits and post employment benefits, whether funded or otherwise, are recognized as expense based on actuarial valuation at year end using the projected unit credit method. For discounting purpose, market yield of Government Bonds, at the balance sheet date, is used. Actuarial gains or losses are recognized immediately in the Statement of Profit and Loss.

**K. Employee Share Based Payments**

Equity settled stock options granted to employees pursuant to the Company's stock option schemes are accounted for as per the intrinsic value method prescribed by Employee Stock Option Scheme and permitted by the SEBI guidelines, 1999 and the Guidance Note on Share Based Payment issued by the Institute of Chartered Accountants of India (ICAI). The intrinsic value of the option being excess of market value of the underlying share immediately prior to date of grant over its exercise price is recognised as deferred employee compensation with a credit to Employees Stock Options Outstanding Account. The deferred employee compensation is charged to Statement of Profit and Loss on straight line basis over the vesting period of the option. In case of forfeiture stock option which is not vested, amortised portion is reversed by credit to employee compensation expense. In a situation where the stock option expires unexercised, the related balance standing to the credit of the employees Stock Options Outstanding Account are transferred to the General Reserve.

**L. Revenue Recognition**

Sales revenue is recognized on transfer of significant risk and rewards of the ownership of the goods to the buyer and stated at net of trade discount and rebates. Dividend income on investments is accounted for when the right to receive the payment is established. Export incentive, certain insurance, railway and other claims where quantum of accruals cannot be ascertained with reasonable certainty, are accounted on acceptance basis.

**M. Borrowing Cost**

Borrowing costs directly attributable to the acquisition or construction of qualifying assets are capitalized. Other borrowing costs are recognized as expenses in the period in which they are incurred. In determining the amount of borrowing costs eligible for capitalization during a period, any income earned on the temporary investment of those borrowings is deducted from the borrowing costs incurred.

**N. Taxation**

Provision for current income tax is made in accordance with the Income tax Act, 1961. Deferred tax assets and deferred tax liabilities are recognized at substantively enacted tax rates, subject to the consideration of prudence, on timing difference, being the difference between taxable income and accounting income that originate in one period and are capable of reversal in one or more subsequent periods.

**O. Derivative Financial Instruments**

- (a) The Company uses derivative financial instruments such as Forwards, Swaps, Options, etc. to hedge its risks associated with foreign exchange fluctuations. 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. Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated in a hedge relationship. 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.
- (b) For derivative financial instruments and foreign currency monetary items designated as Cash Flow hedges, the effective portion of the fair value of the derivative financial instruments are recognized in Hedging Reserve and reclassified to 'Revenue from Operations', 'Cost of Raw Materials Consumed' or 'Other Expenses' in the period in which the Statement of Profit and Loss is impacted by the hedged items or in the period when the hedge relationship no longer qualifies as cash flow hedge. In cases where the exposure gives rise to a non-financial asset, the effective portion is reclassified from Hedging Reserve to the initial carrying amount of the non-financial asset as a 'basis adjustment' and recycled to the Statement of Profit and Loss when the respective non-financial asset affects the Statement of Profit and Loss in future periods. The ineffective portion of the change in fair value of such instruments is recognised in the Statement of Profit and Loss in the period in which they arise. If the hedging relationship ceases to be effective or it becomes probable that the expected transaction will no longer occur, hedge accounting is discontinued and the fair value changes arising from the derivative financial instruments are recognized in Other Expenses in the Statement of Profit and Loss.
- (c) For derivative financial instruments designated as Fair Value hedges, the fair value of both the derivative financial instrument and the hedged item are recognized in 'Revenue from Operations', 'Cost of Raw Materials Consumed' or 'Other Expenses' in the Statement of Profit and Loss till the period the relationship is found to be effective. If the hedging relationship ceases to be effective or it becomes probable that the expected transaction will no longer occur, future gains or losses on the derivative financial instruments are recognized in 'Other Expenses' in the Statement of Profit and Loss.
- (d) If no hedging relationship is designated, the fair value of the derivative financial instruments is marked to market through the Statement of Profit and Loss and included in 'Other Expenses'.

**P. Research and Development**

Expenditure incurred during research and development phase is charged to revenue when no intangible asset arises from such research. Assets procured for research and development activities are generally capitalized.

**Q. Government Grants**

Government Grants are recognized when there is a reasonable assurance that the same will be received. Revenue grants are recognized in the Statement of Profit and Loss. Capital grants relating to specific fixed assets are reduced from the gross value of the respective fixed assets. Other capital grants are credited to Capital Reserve.

**R. Provisions, Contingent Liabilities and Contingent Assets**

Provision is recognized when there is a present obligation as a result of a past event that probably requires an outflow of resources and a reliable estimate can be made of the amount of the obligation. Disclosure for contingent liability is made when there is a possible obligation or a present obligation that may, but probably will not, require an outflow of resources. No provision is recognized or disclosure for contingent liability is made when there is a possible obligation or a present obligation and the likelihood of outflow of resources is remote. Contingent Asset is neither recognized nor disclosed in the financial statements.

(₹ Crore)

## 2. SHARE CAPITAL

### Authorized:

2,100,000,000 (Previous year 2,100,000,000)

Equity Shares of ₹ 1/- each

210.00

210.00

25,000,000 (Previous year 25,000,000)

Redeemable Cumulative Preference Shares of ₹ 2/- each

5.00

5.00

**215.00**

**215.00**

### Issued:

1,915,136,714 (Previous year 1,915,095,954)

Equity Shares of ₹ 1/- each #

191.51

191.51

**191.51**

**191.51**

### Subscribed and Paid-up:

1,915,129,317 (Previous year 1,915,088,557)

Equity Shares of ₹ 1/- each fully paid-up

191.51

191.51

Less: Face value of 546,249 (Previous year 546,249) Equity Shares forfeited

0.05

0.05

**191.46**

**191.46**

Add: Forfeited Shares (Amount originally Paid-up)

0.02

0.02

**191.48**

**191.48**

# Issued Equity Share Capital includes 7,397 Equity Shares (Previous year 7,397 Equity Shares) of ₹ 1/- each issued on Rights basis kept in abeyance due to legal case pending.

(a) Reconciliation of shares outstanding at the beginning and at the end of the reporting period:

	2012-13		2011-12	
	Numbers	₹ Crore	Numbers	₹ Crore
Equity Shares outstanding at the beginning of the period	1,914,542,308	191.46	1,914,397,914	191.44
Equity Shares allotted pursuant to exercise of ESOP	40,760	-	144,394	0.02
Equity Shares outstanding at the end of the period	<b>1,914,583,068</b>	<b>191.46</b>	<b>1,914,542,308</b>	<b>191.46</b>

(b) Rights, preferences and restrictions attached to Equity Shares:

The Company has one class of equity shares having a par value of ₹ 1/- per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

(c) Details of shareholders holding more than 5% equity Shares in the Company on reporting date:

	31/03/2013		31/03/2012	
	Number of Shares held	Percentage of Holding	Number of Shares held	Percentage of Holding
(i) IGH Holdings Private Limited	228,963,487	11.96	228,963,487	11.96
(ii) Turquoise Investment and Finance Limited	99,012,468	5.17	99,012,468	5.17
(iii) Morgan Guaranty Trust Company of New York (represents GDRs)	159,663,688	8.34	160,747,995	8.40
(iv) Life Insurance Corporation of India and its Associates	209,341,326	10.93	190,713,686	9.96

- (d) Shares reserved for issue under options:

The Company has reserved equity shares for issue against warrants allotted on preferential basis to the Promoter Group. The Company has also reserved equity shares for issue under the Employee Stock Option Scheme.

Please refer Note No. 4 on "Money received against Share Warrants" share warrants allotted to the Promoter Group and Note No. 40 on "Share Based Payment" for details of Employee Stock Option Scheme.

	As at	
	31/03/2013	31/03/2012
<b>3. RESERVES AND SURPLUS:</b>		
<b>Capital Reserve</b>		
Balance as at the beginning of the year	139.54	139.54
Add: Capital Subsidy received during the year - (a)	4.50	-
Balance as at the end of the year	<b>144.04</b>	<b>139.54</b>
<b>Capital Redemption Reserve</b>		
Balance as at the beginning of the year	<b>101.57</b>	<b>101.57</b>
<b>Business Reconstruction Reserve</b> (refer Note No. 38)		
Balance as at the beginning of the year	<b>8,580.39</b>	<b>8,580.39</b>
<b>Securities Premium Account</b>		
Balance as at the beginning of the year	2,754.35	2,752.32
Add: Premium on issue of shares under ESOS scheme	0.56	2.03
Less: Debenture Issue Expenses	(19.99)	-
Balance as at the end of the year	<b>2,734.92</b>	<b>2,754.35</b>
<b>Debenture Redemption Reserve</b>		
Created during the year	150.00	-
<b>Employees Stock Options Outstanding</b>		
Balance as at the beginning of the year	5.17	4.47
Add: Compensation for the year (refer Note No. 29)	0.27	1.29
Less: Transferred to Securities Premium Account on exercise of Options	(0.16)	(0.59)
Less: Transferred to General Reserve on unexercised Options expired	(0.32)	-
Balance as at the end of the year	<b>4.96</b>	<b>5.17</b>
<b>Hedging Reserve</b> (refer Note No. 45 (g))		
Balance as at the beginning of the year	(133.55)	(19.83)
Gain/(Loss) recognized during the year	222.28	(608.21)
(Gain)/Loss recycled during the year	332.98	494.49
Balance as at the end of the year	<b>421.71</b>	<b>(133.55)</b>
<b>General Reserve</b>		
Balance as at the beginning of the year	19,452.21	17,600.18
Add: Transferred from Employees Stock Option Outstanding	0.32	-
Add: Transferred from Surplus in the Statement of Profit and Loss	899.48	1,852.03
Balance as at the end of the year	<b>20,352.01</b>	<b>19,452.21</b>



#### Surplus in the Statement of Profit and Loss

Balance as at the beginning of the year	400.00	350.00
Add: Profit for the year	1,699.20	2,237.20
Less: Transferred to Debenture Redemption Reserve	(150.00)	-
Less: Dividend on Equity Shares - (b)	(268.05)	(296.76)
Less: Dividend Distribution Tax - (b) & (c)	(31.67)	(38.41)
Less: Transferred to General Reserve	(899.48)	(1,852.03)
Balance as at the end of the year	<b>750.00</b>	<b>400.00</b>
	<b>33,239.60</b>	<b>31,299.68</b>

- (a) Represents amount received from State government towards capital investment subsidy at Muri, Jharkhand.
- (b) Dividend on Equity Shares and Tax on Dividend include ₹ 0.01 crore (Previous year ₹ 0.01 crore) pertaining to previous year for Equity shares issued before the record date of dividend.
- (c) Tax on Dividend is net of ₹ 13.89 crore (Previous year ₹ 9.73 crore) being dividend distribution tax paid by a subsidiary.

#### 4. Money received against Share Warrants:

The Company has allotted 150,000,000 warrants on a preferential basis to the Promoter Group on 22nd March, 2012 entitling them to apply for and obtain allotment of one equity share of ₹ 1/- each fully paid-up at a price of ₹ 144.35 per share against each such warrant at any time after the date of allotment but on or before the expiry of 18 months from the date of allotment in one or more tranches. The Company has received ₹ 541.31 crore being 25% against these warrants. The entire amount so received has been utilised for various Greenfield and Brownfield projects expenditure.

#### 5. Long-term Borrowings:

	(₹ Crore)					
	Non-current Portion		Current Maturities*		Total	
	31/03/2013	31/03/2012	31/03/2013	31/03/2012	31/03/2013	31/03/2012
<b>Secured</b>						
Debentures - (a)	6,000.00	-	-	-	6,000.00	-
Term Loans:						
From Banks - (b), (c) & (d)	13,716.14	11,033.76	307.15	-	14,023.29	11,033.76
From Other Parties - (c), (d) & (e)	725.02	78.35	54.54	-	779.56	78.35
<b>Unsecured</b>						
Deferred Payment Liabilities - (f)	1.89	3.02	1.13	1.53	3.02	4.55
	<b>20,443.05</b>	<b>11,115.13</b>	<b>362.82</b>	<b>1.53</b>	<b>20,805.87</b>	<b>11,116.66</b>

\* Current maturities of long-term borrowings is disclosed under the head "Other Current Liabilities"

- (a) Debentures comprise of following:

	Amount	Redemption Date
30,000 9.55% Redeemable Non Convertible Debentures of ₹ 1 lac each	₹ 3,000 crore	April 25, 2022
15,000 9.55% Redeemable Non Convertible Debentures of ₹ 1 lac each	₹ 1,500 crore	June 27, 2022
15,000 9.60% Redeemable Non Convertible Debentures of ₹ 1 lac each	₹ 1,500 crore	August 2, 2022

All the above Debentures are secured by all the movable both present and future (except movable assets of Mahan Aluminium Project, Aditya Aluminium Project, Kalwa plant and Current Assets) and certain immovable properties of the Company.

- (b) Term Loans from Banks of ₹ 5,142.99 crore (as at March 31, 2012) have been prepaid by the Company on June 30, 2012.

- (c) Term Loans from Banks of ₹ 7,227.05 crore (Previous year ₹ 5,890.77 crore) and from Other Parties of ₹ 92.95 crore (Previous year ₹ 78.35 crore) are secured by a first ranking charge/mortgage/security interest in respect of all the movable assets (except Current Assets) and all the immovable properties of Mahan Aluminium Project, both present and future, and a second ranking charge/mortgage/security interest, in favour of the Security Trustee, in respect of the Current Assets. However, security creation is pending on 1,086.15 hectares of land due to non availability of approval from the appropriate authority.

Above loans carry interest at the State Bank of India's base rate plus 1.75% and are repayable in 42 quarterly instalments commencing from September 30, 2013 and ending on December 31, 2023. The repayment in each financial year in percentage is 4.25, 7.75, 9, 9, 10, 10, 10, 10, 10.75, 11 and 8.25 of the loan amount.

Post Commercial Operation Date of the Mahan Aluminium Project, the Company will have an option to prepay all or any portion of this Loan, without payment of Prepayment Penalty within 15 (fifteen) days after any annual Margin Reset Date.

- (d) Term Loans from Banks of ₹ 6,796.24 crore (Previous year ₹ Nil) and from Other Parties of ₹ 143.75 crore (Previous year ₹ Nil) are secured by a first ranking charge/mortgage/security interest in favour of the Security Trustee, in respect of all the movable and immovable properties both present and future and a second charge in respect of all the inventory related to Aditya Aluminium Project. However, security on 2,510.61 acres land is pending due to non availability of approval from the appropriate authority.

Above loans carries interest at the State Bank of India's base rate plus 1.25% and are repayable in 40 quarterly instalments commencing from June 1, 2015 and ending on March 1, 2025. The repayment in each financial year in percentage is 2.32, 4.20, 6.20, 8.60, 9, 11, 12.50, 15, 14 and 17.18 of the loan amount.

The Company will have an option to prepay all or any portion of this Loan, without payment of Prepayment Penalty within 30 (Thirty) days after any annual Interest Reset Date.

- (e) Term Loans from Other Parties include Foreign Currency Term Loans from Export Development Canada (EDC) of USD 100 million (Previous year USD Nil) are secured by a first charge on all movable assets of the Mahan Aluminium Project and a second charge on the current assets of the Company, both present and future.

Above loan carry interest at the LIBOR plus 1.25% and are repayable in 43 quarterly instalments commencing from June 30, 2013 and ending on December 31, 2023. The repayment in each financial year in percentage is 9.30, 9.30, 9.30, 9.30, 9.30, 9.30, 9.30, 9.30, 9.30, 9.30 and 7 of the loan amount.

Subject to the prevailing RBI ECB Regulations, the Company may prepay all or any part of the Loan at any time.

- (f) Deferred Payment Liabilities represent sales tax deferral which is payable in yearly instalment by FY 2018.

		(₹ Crore)	
		As at	
		31/03/2013	31/03/2012
6.	<b>Deferred Tax Liabilities (Net):</b>		
	Major components of Deferred Tax arising on account of temporary timing differences are given below:		
		(₹ Crore)	
		As at	
		31/03/2013	31/03/2012
	<b>Deferred Tax Liabilities</b>		
	Depreciation and Amortization Expenses	1,330.04	1,338.01
		<b>1,330.04</b>	<b>1,338.01</b>
	<b>Less: Deferred Tax Assets</b>		
	Employee's Separation and Retirement Expenses	71.92	69.81
	Expenses/Provisions Allowable	66.98	43.64
		<b>138.90</b>	<b>113.45</b>
		<b>1,191.14</b>	<b>1,224.56</b>
7.	<b>Other Long-term Liabilities:</b>		
	Trade Payables	11.53	1.92
	Derivative Liabilities (refer Note No. 45 (c))	-	45.81
	Liability for Capital Expenditure	954.04	896.84
	Security and other Deposits	2.15	1.43
	Other Payables	6.56	7.10
		<b>974.28</b>	<b>953.10</b>
8.	<b>Long-term Provisions:</b>		
	Provision for Employee Benefits	300.94	287.32
		<b>300.94</b>	<b>287.32</b>
9.	<b>Short-term Borrowings:</b>		
	<b>Secured</b>		
	From Banks:		
	Cash Credit, Export Credit etc. - (a)	79.85	164.05
		<b>79.85</b>	<b>164.05</b>
	<b>Unsecured</b>		
	From Banks:		
	Buyers Credit	2,284.47	2,664.43
	Packing Credit	1,297.40	599.79
	Payable under Trade Financing Arrangements - (b)	—	28.51
	Others	40.00	—
		<b>3,621.87</b>	<b>3,292.73</b>
		<b>3,701.72</b>	<b>3,456.78</b>

- (a) Cash Credit, Export Credit etc. granted under the Consortium Lending Arrangement are secured by a first pair-passu charge by way of hypothecation of entire stocks of raw materials, work-in-process, finished goods, consumable stores and spares and also book debts pertaining to the Company's Aluminium business. Working Capital Loan of State Bank of India for the Copper business is secured by a first pari-passu charge by way of hypothecation of stocks of raw materials, work-in-process, finished goods and consumable stores and spares of Copper business, both present and future.
- (b) Payable under Trade Financing Arrangements comprise of unsecured credit availed from Banks for payment to suppliers for raw materials purchased by the Company. The arrangements are interest-bearing and are normally payable within 180 days.

**10. Trade Payables:**

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
Micro, Small and Medium Enterprises (refer Note No. 47)	2.15	1.31
Others	3,049.37	4,658.46
	<b>3,051.52</b>	<b>4,659.77</b>

**11. Other Current Liabilities:**

Current maturities of Long-term Debts	362.82	1.53
Interest accrued but not due on Borrowings/Deposits	479.09	15.84
Unclaimed Dividends - (a)	7.02	7.43
Application/Call Money received due for refund - (a)	0.31	0.44
Advance from Customers	90.21	126.77
Derivative Liabilities (refer Note No. 45 (c))	89.99	207.53
Liability for Capital Expenditure	692.40	430.10
Security and other Deposits	20.15	24.36
Statutory dues payable	137.10	152.82
Other Payables	45.00	31.79
	<b>1,924.09</b>	<b>998.61</b>

- (a) These figures do not include any amount, due and outstanding, to be credited to Investor Education and Protection Fund except ₹ 0.07 crore (Previous year ₹ 0.07 crore) which is held in abeyance due to legal cases pending.

**12. Short-term Provisions:**

Provision for Employee Benefits	24.07	25.21
Proposed Dividends (including Dividend Distribution Tax)	313.60	344.89
Provision for Current Tax (Net of Advance Tax)	696.74	532.03
Other Provisions (refer Note No. 42)	25.02	17.75
	<b>1,059.43</b>	<b>919.88</b>



**13. Tangible Assets:**

(₹ Crore)

	ORIGINAL COST			DEPRECIATION			IMPAIRMENT			NET BOOK VALUE	
	As at 31st March, 2012	Additions	Disposals/ Adjustments	As at 31st March, 2013	Additions	Disposals/ Adjustments	As at 31st March, 2013	Recognised/ Reversal	Deductions/ Adjustments	As at 31st March, 2013	As at 31st March, 2012
Leasehold Land	44.55	4.25	-	48.80	6.66	0.61	-	-	-	41.53	37.89
Freehold Land	81.09	0.52	0.05	81.56	0.13	0.01	-	-	-	80.72	80.26
Buildings	1,280.22	43.18	1.25	1,322.15	359.80	35.39	0.91	2.61	-	15.19	907.84
Plant and Equipment	12,261.01	599.42	32.04	12,828.39	6,380.21	605.15	26.53	14.64	1.06	5,663.58	5,688.40
Furniture and Fixtures	108.51	5.06	1.12	112.45	71.73	5.30	0.98	-	-	36.40	36.78
Vehicles and Aircraft	396.86	10.77	43.83	363.80	99.24	24.19	98.06	-	-	285.74	297.62
Office Equipment	125.33	8.03	5.13	128.23	97.42	6.63	3.77	-	-	27.95	27.91
Railway Sidings	72.70	0.64	-	73.34	23.45	7.49	30.94	-	-	42.40	49.25
	14,370.27	671.87	83.42	14,958.72	7,038.64	684.77	57.56	17.25	1.06	7,071.00	7,125.95
Previous Year	14,183.53	261.65	74.91	14,370.27	6,404.88	688.18	54.42	-	12.28	7,125.95	7,560.69

(a) Leasehold Land includes land amounting ₹ 20.73 crore (Previous year ₹ 20.73 crore) for which registration is pending. (Net Book Value ₹ 18.69 crore; Previous year ₹ 18.90 crore)

(b) Freehold Land include ₹ 3.20 crore (Previous year ₹ 0.30 crore) towards alternate land made available for acquiring right to use the forest land, ownership of which vests with the state government authorities. (Net Book Value ₹ 3.14 crore; Previous year ₹ 0.27 crore)

(c) Buildings include:

i. ₹ 2.98 crore (Previous year ₹ 2.93 crore) being contribution for construction of road, the ownership of which vests with the state government authorities. (Net Book Value ₹ 0.45 crore; Previous year ₹ 0.45 crore)

ii. ₹ 16.36 crore (Previous year ₹ 16.36 crore) towards right to occupy and use of certain premises for which the Company has invested ₹ 13.18 crore (Previous year ₹ 13.18 crore) in Shares & Debentures of a company. (Net Book Value ₹ 12.36 crore; Previous year ₹ 12.64 crore)

(d) Plant and Equipment include ₹ 18.76 crore (Previous year ₹ 18.76 crore) being the amount spent for laying power line and water pipe line, the ownership of which vests with the state government authorities. (Net Book Value ₹ 7.68 crore; Previous year ₹ 8.61 crore)

(e) Railway Sidings include ₹ 9.13 crore (Previous year ₹ 9.13 crore) being railway siding not owned by the Company. (Net Book Value ₹ 5.69 crore; Previous year ₹ 6.31 crore)

(f) Company's share in Jointly owned assets has been grouped together with the relevant class of fixed assets. The proportion of the cost and net carrying amounts included in relevant class of assets are given below:

Leasehold Land	- ₹ 51.92 crore (Previous year ₹ 51.92 crore). (Net Book Value ₹ 51.92 crore; Previous year ₹ 51.92 crore)
Freehold Land	- ₹ 0.52 crore (Previous year ₹ 0.52 crore). (Net Book Value ₹ 0.43 crore; Previous year ₹ 0.43 crore)
Buildings	- ₹ 51.22 crore (Previous year ₹ 51.22 crore). (Net Book Value ₹ 41.76 crore; Previous year ₹ 42.61 crore)
Plant and Equipment	- ₹ 73.44 crore (Previous year ₹ 73.70 crore). (Net Book Value ₹ 46.15 crore; Previous year ₹ 50.27 crore)
Furniture and Fixtures	- ₹ 10.27 crore (Previous year ₹ 10.19 crore). (Net Book Value ₹ 5.28 crore; Previous year ₹ 5.82 crore)
Vehicles and Aircraft	- ₹ 24.95 crore (Previous year ₹ 60.84 crore). (Net Book Value ₹ 14.70 crore; Previous year ₹ 33.48 crore)
Office Equipment	- ₹ 10.42 crore (Previous year ₹ 10.14 crore). (Net Book Value ₹ 1.81 crore; Previous year ₹ 1.78 crore)

**14. Intangible Assets:**

(₹ Crore)

	ORIGINAL COST			AMORTISATION			IMPAIRMENT			NET BOOK VALUE		
	As at 31st March, 2012	Additions	Disposals/ Adjustments	As at 31st March, 2013	As at 31st March, 2012	Disposals/ Adjustments	As at 31st March, 2013	Recognised/ Reversal	Deductions/ Adjustments	As at 31st March, 2013	As at 31st March, 2012	
Mining Rights	38.94	3.72	-	42.66	19.17	1.89	-	21.06	-	-	21.60	19.77
Computer Software	36.35	3.01	0.09	39.27	33.24	2.19	(0.12)	35.55	-	-	3.72	3.11
Technology	32.31	0.27	-	32.58	30.94	0.31	-	31.25	-	-	1.33	1.37
	107.60	7.00	0.09	114.51	83.35	4.39	(0.12)	87.86	-	-	26.65	24.25
Previous Year	103.78	5.02	1.20	107.60	80.09	4.45	1.19	83.35	-	-	24.25	23.69

(a) Mining Rights are for 20/30 years and amortised proportionately.

(b) The useful life of Computer Software is considered 2-3 years and that of Technology is considered 4-6 years.

## 15. Non-Current Investments:

(₹ Crore)

	Face value	Numbers - As at		As at	
	per Unit	31/03/2013	31/03/2012	31/03/2013	31/03/2012
LONG TERM TRADE INVESTMENTS					
Investments in Equity Instruments					
Investment in Subsidiaries					
Utkal Alumina International Limited	₹ 10	2,047,164,068	1,517,164,068	2,157.43	1,627.43
Dahej Harbour & Infrastructure Limited	₹ 10	50,000,000	50,000,000	50.00	50.00
Birla Resources Pty Limited	-	650,000	650,000	1.79	1.79
Minerals & Minerals Limited	₹ 10	50,000	50,000	0.17	0.17
Hindalco-Almex Aerospace Limited	₹ 10	172,115,744	172,115,744	169.30	169.30
A V Minerals (Netherlands) B.V.	EUR 773.24	2,202,076	2,202,076	10,423.90	10,423.90
Tubed Coal Mines Limited	₹ 10	17,970,000	7,170,000	17.97	7.17
East Coast Bauxite Mining Company Pvt. Limited	₹ 10	7400	7400	0.01	0.01
Mauda Energy Limited	₹ 10	165,000	150,000	0.16	0.15
Aditya Birla Chemicals (India) Limited	₹ 10	12,004,987	12,004,987	12.45	12.45
Aditya Birla Minerals Limited	-	159,820,001	159,820,001	480.76	480.76
Hindalco Guinea SARL (incorporated during current year)	GNF 100000	100	0	0.01	-
Investment in Joint Ventures					
Mahan Coal Limited	₹ 10	27,000,000	22,000,000	27.00	22.00
Hydromine Global Minerals GMBH Limited	USD 100	45	45	0.02	0.02
Investment in Associate					
Aditya Birla Science & Technology Company Limited	₹ 10	9,800,000	9,800,000	9.80	9.80
Investment in Other Entities					
Sanjana Cryogenic Limited	₹ 10	780,000	780,000	3.12	3.12
MNH Shakti Limited	₹ 10	12,765,000	12,765,000	12.77	12.77
Aditya Birla Ports Limited	₹ 10	100,000	100,000	0.10	0.10
				13,366.76	12,820.94
OTHER LONG TERM INVESTMENTS					
Investments in Equity Instruments					
Investment in Subsidiaries					
Renuka Investments & Finance Limited	₹ 10	9,250,000	9,250,000	9.25	9.25
Renukeshwar Investments & Finance Limited	₹ 10	4,795,000	4,795,000	4.80	4.80
Suvas Holdings Limited	₹ 10	2,784,600	2,024,700	2.78	2.03
Lucknow Finance Company Limited	₹ 10	12,002,500	12,002,500	12.00	12.00
Investment in Associate					
IDEA Cellular Limited	₹ 10	228,340,226	228,340,226	228.34	228.34
Investment in Other Entities					
National Aluminium Company Limited	₹ 5	28,667,404	28,667,404	75.20	75.20
Aditya Birla Nuvo Limited	₹ 10	8,650,412	8,650,412	127.11	127.11
Grasim Industries Limited	₹ 10	2,299,059	2,299,059	72.54	72.54
Ultra Tech Cement Limited	₹ 10	1,313,748	1,313,748	12.50	12.50
Birla International Limited	CHF 100	2,500	2,500	0.53	0.53
Bharuch-Dahej Railway Company Limited	₹ 10	13,530,000	13,530,000	13.53	13.53

15. Non-Current Investments: (Contd.)

		(₹ Crore)			
	Face value	Numbers - As at		As at	
	per Unit	31/03/2013	31/03/2012	31/03/2013	31/03/2012
<b>Investments in Preference Shares</b>					
<b>Investment in Subsidiaries</b>					
Renuka Investments & Finance Limited - 15% Redeemable Cumulative	₹ 100	150	150		
Renukeshwar Investments & Finance Limited - 15% Redeemable Cumulative	₹ 100	150	150		
<b>Investment in Other Entities</b>					
Aditya Birla Health Services Limited - 3.50% Redeemable Cumulative	₹ 100	2,500,000	2,500,000	25.00	25.00
<b>Investments in Debentures or Bonds</b>					
7.90% Corporation Bank Bonds	₹ 1,000,000	300	300	30.00	30.00
6.85% Tax Free Unsecured Non-Convertible Bond of IIFCL	₹ 100,000	1000	1000	10.00	10.00
9.20 % HDFC Limited Bonds	₹ 1,000,000	349	349	35.25	35.35
8.30% Bond of National Highways Authority of India	₹ 1,000	24,724	24,724	2.47	2.47
<b>Investments in Government Securities</b>					
6.83% Government of India Bond, 2039				20.11	20.11
<b>Investments in Mutual Funds</b>					
Units of Morgan Stanley Fund - Growth Plan				2.00	2.00
				<b>683.41</b>	<b>682.76</b>
				<b>14,050.17</b>	<b>13,503.70</b>

- (a) Although the book/market value of certain investments (amount not ascertained) is lower than cost, considering the strategic and long term nature of the investments and asset base of the investee companies, in the opinion of the management such decline is temporary in nature and no provision is necessary for the same.
- (b) Aggregate amount of Quoted and Unquoted Investments, market value of Quoted Investments and aggregate provision for diminution in value of Investments are given below:

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
Aggregate amount of Unquoted Investments	12,941.44	12,394.87
Aggregate amount of Quoted Investments	1,108.73	1,108.83
Aggregate market value of Quoted Investments	5,025.76	4,713.49
Aggregate provision for diminution in value of Investments	0.64	0.53

**16. Long-term Loans and Advances:**

(Unsecured, Considered Good unless otherwise stated)

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
Capital Advances	711.53	1,397.68
Loans, Advances and Deposits to Related Parties - (a)	95.97	101.85
Security Deposits	73.88	55.08
Advances recoverable in cash or in kind		
Unsecured, Considered Good	275.27	239.46
Doubtful	0.02	-
	275.29	239.46
Less: Provision for doubtful amount	0.02	-
	275.27	239.46
Other Advances and Balances		
Prepaid Expenses	2.25	0.71
Others - (b)	522.18	454.75
	<b>1,681.08</b>	<b>2,249.53</b>

(a) Loans, Advances and Deposits to Related Parties include balance of ₹ 34.45 crore (Previous year ₹ 34.45 crore) with Trident Trust which represents 16,316,130 equity shares of ₹ 1/- each fully paid-up of the Company issued, pursuant to a Scheme of Arrangement approved by the Hon'ble High Courts at Mumbai and Allahabad vide their Orders dated 31st October, 2002 and 18th November, 2002, respectively, to the Trident Trust, created wholly for the benefit of the Company and is being managed by trustees appointed by it. The tenure of the Trust is up to 23rd January, 2017.

(b) Others include CENVAT credit receivable, VAT credit receivable, Service Tax credit receivable, etc. primarily relating to ongoing projects.

**17. Other Non Current Assets:**

Long Term Trade Receivables		
Doubtful	19.27	15.54
Less: Provision for doubtful amount	19.27	15.54
	-	-
Deposits with Bank exceeding 12 months maturity	0.03	0.28
Derivative Assets (refer Note No. 45 (c))	34.46	7.53
Other Receivables	0.02	-
	<b>34.51</b>	<b>7.81</b>



	Face value	Numbers - As at		As at	
	per Unit	31/03/2013	31/03/2012	31/03/2013	31/03/2012
<b>18. Current Investments:</b>					
<b>Investments in Debentures and Bonds</b>					
Investment in Associate					
9.45% NCD of IDEA Cellular Limited	₹ 100	1,000,000	-	10.00	-
<b>Investment in Other Entities</b>					
8.40% Non Convertible Debenture of Cairn India Limited	₹ 1,000,000	-	15.00	-	1.53
9.55% EXIM Bank Ltd Bonds	₹ 1,000,000	500	-	49.94	-
8.10% NCD of IRFC	₹ 1,000	29,785	-	3.16	-
9.41% NCD of IIFCL	₹ 1,000,000	135	-	14.18	-
9.05% NCD Rallis India Limited	₹ 1,000,000	350	-	34.90	-
9.61% NCD NHB	₹ 1,000,000	500	-	49.92	-
9.90% NCD IDFC	₹ 1,000,000	500	-	49.96	-
8.64% NCD of BIHAR SDL	₹ 100	1,183,500	-	11.84	-
8.69% NCD Damodar Valley Corporation	₹ 1,000,000	115	-	11.50	-
8.57% NCD MTNL	₹ 1,000,000	575	-	57.50	-
10.30% NCD of Sundaram Finance Limited	₹ 1,000,000	250	-	25.22	-
8.90% NCD of Sundaram Finance Limited	₹ 1,000,000	100	-	10.25	-
9.75% NCD of Sundaram Finance Limited	₹ 1,000,000	250	-	25.04	-
9.80% NCD of Sundaram Finance Limited	₹ 1,000,000	250	-	25.04	-
7.30% NCD of LIC Housing Finance Limited	₹ 1,000,000	50	-	4.95	-
8.40% NCD of LIC Housing Finance Limited	₹ 1,000,000	300	-	29.83	-
8.48% NCD of LIC Housing Finance Limited	₹ 1,000,000	300	-	29.90	-
8.75% NCD of LIC Housing Finance Limited	₹ 1,000,000	50	-	4.98	-
9.65% NCD of LIC Housing Finance Limited	₹ 1,000,000	350	-	35.90	-
9.70% NCD of LIC Housing Finance Limited	₹ 1,000,000	450	-	44.80	-
9.97% NCD of LIC Housing Finance Limited	₹ 1,000,000	250	-	24.50	-
8.15% NCD of Bajaj Auto Finance Limited	₹ 10,000,000	25	-	24.83	-
9.35% NCD of Bajaj Auto Finance Limited	₹ 1,000,000	250	-	27.97	-
8.12% NCD of REC Limited	₹ 1,000	20,817	-	2.25	-
7.93% NCD of REC Limited	₹ 1,000	6,047	-	0.65	-
7.22% NCD of REC Limited	₹ 1,000	5,020	-	0.50	-
7.38% NCD of REC Limited	₹ 1,000	4,671	-	0.47	-
8.84% NCD - PFC	₹ 100	2,500,000	-	25.10	-
8.90% NCD - PFC	₹ 100	2,500,000	-	24.98	-
8.94% NCD - PFC	₹ 100	2,000,000	-	19.99	-
9.55% NCD of HDB Financial Services Ltd	₹ 1,000,000	200	-	20.00	-
9.63% NCD of HDB Financial Services Ltd	₹ 1,000,000	250	-	25.00	-
10.47% NCD of M & M Financial Services	₹ 1,000,000	150	-	15.03	-
9.55% NCD of M & M Financial Services	₹ 1,000,000	250	-	25.00	-
9.89% NCD of M & M Financial Services	₹ 1,000,000	150	-	15.03	-

		(₹ Crore)			
	Face value	Numbers - As at		As at	
	per Unit	31/03/2013	31/03/2012	31/03/2013	31/03/2012
18. Current Investments: (Contd.)					
10.64% NCD of Cholamandalam Inv Fin Co. Limited	₹ 1,000,000	350	-	35.11	-
10.85% NCD of Cholamandalam Inv Fin Co. Limited	₹ 1,000,000	250	-	25.05	-
7.36% NCD - PFC	₹ 1,000	6,079	-	0.61	-
8.20% NCD - PFC	₹ 1,000	27,793	-	3.01	-
8.30% NCD - PFC	₹ 1,000	10,163	-	1.01	-
10.25% NCD Tata Sons Limited	₹ 1,000,000	50	-	5.05	-
9.78% NCD Tata Sons Limited	₹ 1,000,000	100	-	10.07	-
9.98% NCD Tata Sons Limited	₹ 1,000,000	100	-	10.10	-
7.34% HUDCO Bonds	₹ 1,000	100,000	-	9.92	-
7.51% HUDCO Bonds	₹ 1,000	50,000	-	5.00	-
9.65% NCD Tourism Finance Corporation of India	₹ 1,000,000	230	-	23.20	-
9.50% NCD Tourism Finance Corporation of India	₹ 1,000,000	150	-	15.00	-
9.60% NCD Tourism Finance Corporation of India	₹ 1,000,000	170	-	17.11	-
9.10% NCD HDFC Limited	₹ 1,000,000	500	-	49.91	-
9.60% NCD HDFC Limited	₹ 1,000,000	850	-	90.56	-
9.65% NCD HDFC Limited	₹ 1,000,000	200	-	21.02	-
8.99% IDBI Bank Bonds	₹ 1,000,000	125	-	12.50	-
Investments in Commercial Papers					
ICICI Securities Primary Dealership Limited	₹ 500,000	-	1000	-	49.57
IL & FS	₹ 500,000	500	-	23.23	-
Kotak Mahindra Prime Limited	₹ 500,000	627	-	29.97	-
L & T Finance Ltd	₹ 500,000	500	-	23.92	-
IL & FS Financial Services	₹ 500,000	340	-	16.16	-
Morgan Stanley India Capital Private Limited	₹ 500,000	500	-	24.32	-
Shapoorji Pallonji Co. Limited	₹ 500,000	1,000	-	48.88	-
PFC	₹ 500,000	1,000	-	47.82	-
Housing Development Finance Corporation Limited	₹ 500,000	1,500	1000	73.26	48.63
Aditya Birla Finance Limited	₹ 500,000	-	2060	-	100.58
Investments in Certificate of Deposits					
State Bank of Travancore	₹ 100,000	-	5000	-	48.39
Allahabad Bank	₹ 100,000	10,000	5000	98.43	48.73
State Bank of Bikaner and Jaipur	₹ 100,000	-	7500	-	69.93
Syndicate Bank	₹ 100,000	-	2500	-	23.15
Punjab National Bank	₹ 100,000	500	15000	4.66	136.46
United Commercial Bank	₹ 100,000	-	2500	-	24.06
HDFC Bank	₹ 100,000	-	2500	-	23.05
ICICI Bank	₹ 100,000	2,500	5000	23.92	46.21
IDBI Bank	₹ 100,000	2,500	10000	23.40	94.30
Andhara Bank	₹ 100,000	-	2500	-	23.40
Federal Bank	₹ 100,000	-	2500	-	23.51

		(₹ Crore)			
	Face value per Unit	Numbers - As at		As at	
		31/03/2013	31/03/2012	31/03/2013	31/03/2012
<b>18. Current Investments: (Contd.)</b>					
Axis Bank	₹ 100,000	5000	-	49.18	-
Corporation Bank	₹ 100,000	10000	-	91.61	-
State Bank of Mysore	₹ 100,000	7500	-	70.11	-
Central Bank of India	₹ 100,000	2500	-	23.28	-
State Bank of Hyderabad	₹ 100,000	2500	-	23.31	-
The Jammu and Kashmir Bank Limited	₹ 100,000	2500	-	23.00	-

**Investments in Mutual Funds**

Investments in Debt Schemes of Mutual Funds - (b)	4,432.97	3,760.69
	<b>6,265.77</b>	<b>4,522.19</b>

**Current portion of Long-term Investments**

Investments in Government Securities

7.95% GOI FCI Special Bonds, 2026	5.04	4.80
6.65% GOI FCI Special Bonds, 2023	18.92	17.90
7.00% GOI FCI Special Bonds, 2022	28.16	26.72
6.20% GOI FCI Special Bonds, 2022	12.50	11.79
8.33% GOI GS CG	56.12	-
8.20% GOI GS CG	45.45	-
	166.19	61.21
	<b>6,431.96</b>	<b>4,583.40</b>

- (a) Aggregate amount of Quoted and Unquoted Investments, market value of Quoted Investments and aggregate provision for diminution in value of Investments are given below:

		(₹ Crore)	
		As at	
		31/03/2013	31/03/2012
Aggregate amount of Unquoted Investments		5,312.79	3,561.10
Aggregate amount of Quoted Investments		1,119.17	1,022.30
Aggregate market value of Quoted Investments		1,120.89	1,049.21
Aggregate provision for diminution in value of Investments		7.33	10.74

- (b) Investments in Mutual Funds include units of ₹ 1.00 crore (Previous year ₹ 1.00 crore) being deposit as margin for derivative transactions.

## 19. Inventories:

(₹ Crore)

	As at 31/03/2013			As at 31/03/2012		
	Stock	Transit	Total	Stock	Transit	Total
Raw Materials	1,352.35	1,882.49	3,234.84	659.27	2,691.81	3,351.08
Work-in-Progress	3,442.06	-	3,442.06	3,481.10	-	3,481.10
Finished Goods	324.12	2.83	326.95	419.56	3.30	422.86
Stores and Spares	325.61	15.12	340.73	285.20	15.30	300.50
Coal and Fuel	223.80	134.23	358.03	89.10	98.22	187.32
	<b>5,667.94</b>	<b>2,034.67</b>	<b>7,702.61</b>	<b>4,934.23</b>	<b>2,808.63</b>	<b>7,742.86</b>

## 20. Trade Receivables:

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Outstanding for a period exceeding six months		
Unsecured, Considered Good	17.09	8.61
Doubtful	23.71	20.86
Outstanding for a period less than six months		
Secured, Considered Good	-	1.78
Unsecured, Considered Good	1,497.95	1,417.06
	1,538.75	1,448.31
Less: Allowance for doubtful amount	23.71	20.86
	<b>1,515.04</b>	<b>1,427.45</b>

## 21. Cash and Bank Balances:

## Cash and Cash Equivalents

## Balance with Banks:

Deposits with less than 3 months initial maturity	45.52	157.10
Current Accounts	90.59	144.53
Cheques and drafts on hand - (a)	68.86	411.72
Cash on hand	0.41	0.28
	<b>205.38</b>	<b>713.63</b>

## Other Balances

## Balance with Banks:

Earmarked Balances	8.11	8.66
Deposits with more than 3 months initial maturity	1,284.33	0.01
	1,292.44	8.67
	<b>1,497.82</b>	<b>722.30</b>

(a) Include ₹ 41.82 crore (Previous year ₹ Nil) remittances in transit.



22. **Short-term Loans and Advances:**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Loans, Advances and Deposits to Related Parties		
Unsecured, Considered Good	27.41	20.29
Inter Corporate Loans, Advances and Deposits		
Unsecured, Considered Good	15.00	50.00
Security Deposits		
Unsecured, Considered Good	21.85	26.12
Doubtful	0.25	0.25
	22.10	26.37
Less: Provision for doubtful amount	0.25	0.25
	21.85	26.12
Advances recoverable in cash or in kind		
Unsecured, Considered Good	1,439.25	959.14
Doubtful	13.17	12.80
	1,452.42	971.94
Less: Provision for doubtful amount	13.17	12.80
	1,439.25	959.14
Other Advances and Balances - Unsecured, Considered Good		
Balance with Government Authorities	41.35	34.42
Prepaid Expenses	21.27	16.21
Others - (a)	706.29	541.47
	<b>2,272.42</b>	<b>1,647.65</b>
(a) Others under head "Other Advances and Balances" mainly include CENVAT credit receivable, VAT credit receivable, Service Tax credit receivable, etc.		

23. **Other Current Assets:**

Accrued Export and Other Incentives	110.10	101.02
Accrued Interest	104.01	26.45
Derivative Assets (refer Note No. 45 (c))	485.70	206.82
Assets held for Sale	0.22	0.54
Other Receivables	30.15	20.95
	<b>730.18</b>	<b>355.78</b>

## 24. Revenue from Operations:

(₹ Crore)

	Year ended	
	31/03/2013	31/03/2012
Sale of Products - (a)	27,797.16	28,053.24
Other Operating Revenues	272.62	243.72
Gross Revenue from Operations	<b>28,069.78</b>	<b>28,296.96</b>
Less: Excise Duty	2,012.85	1,700.18
Net Revenue from Operations	<b>26,056.93</b>	<b>26,596.78</b>
(a) Details of Sale of Products are given below:		
Sale of Finished Goods:		
Aluminium Business:		
Alumina	905.78	833.98
Aluminium and Aluminium Products	8,400.50	8,633.85
Others	264.14	244.51
Copper Business:		
Copper and Copper Products - (i)	14,590.90	14,207.10
Precious Metals - (i)	2,436.10	2,278.99
Others - (ii)	1,199.23	1,657.00
	<b>27,796.65</b>	<b>27,855.43</b>
Sale of Traded Goods:		
Copper Cathode	-	181.78
Others	0.51	16.03
	<b>0.51</b>	<b>197.81</b>
	<b>27,797.16</b>	<b>28,053.24</b>

- (i) Sales of Continuous Cast Copper Rod and Copper Cathode are accounted for provisionally, pending finalization of price. Variations are accounted for in the year of settlement. Final price receivable from sale of Copper for which quotational price was not finalized in previous year, were realigned at year end rate based on LME Rate and reversal of Sale of ₹ 8.21 crore (Previous year reversal of sales of ₹ 8.86 crore) were accounted for. During the Year final price was settled at ₹ 47.27 crore (Previous year ₹ 13.20 crore) and further reversal of sales of ₹ 39.06 crore (Previous year further sales of ₹ 4.33 crore) was taken into account. As on 31st March, 2013, sale of Copper, Gold, Silver and Anode Slime/Dore Slag amounting to ₹ 126.92 crore (Previous year ₹ 737.22 crore) pending for price finalization were realigned at year-end rate of LME and reversal of sales of ₹ 1.84 crore (Previous year additional sales of ₹ 8.21 crore) was accounted for. Actual inflow or outflow is expected on finalization of price.
- (ii) Include sales of DAP including nutrient based subsidy of P&K ₹ 298.27 crore (Previous year ₹ 421.97 crore).

25. **Other Income:**

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
Interest Income		
On Long-term Investments	7.84	8.24
On Current Investments	70.52	35.04
On Others - (a)	253.21	68.35
Dividend Income		
On Long-term Investments - (b)	144.54	146.92
On Current Investments	115.11	309.36
Gain/(Loss) on sale of Investments (Net)		
On Long-term Investments	-	2.49
On Current Investments	396.46	(1.58)
Adjustments to the carrying amount of Investments (Net)		
On Long-term Investments	(0.11)	(0.11)
On Current Investments	3.41	(0.77)
Profit/(Loss) on Fixed Assets sold/discarded (Net)	(4.32)	2.97
Rent Income	4.82	4.38
Liabilities no longer required written back	40.55	48.58
Other Non-Operating Income (Net)	2.18	0.82
	<b>1,034.21</b>	<b>624.69</b>
Less: Transfer to Finance Costs - (c)	51.12	8.90
	<b>983.09</b>	<b>615.79</b>
(a) Interest Income on others include ₹ 146.38 crore (Previous year ₹ 2.00 crore) of interest received from Income Tax Department.		
(b) Dividend Income on long term investments include ₹ 130.24 crore (Previous year ₹ 130.24 crore) of dividend received from subsidiary companies.		
(c) Income derived from temporary deployment of surplus fund out of specific borrowing for various projects deducted from borrowing costs.		
26. <b>Purchases of Stock-in-Trade:</b>		
Copper Cathode	-	190.88
Others	0.38	15.10
	<b>0.38</b>	<b>205.98</b>
27. <b>Cost of Raw Materials Consumed:</b>		
Copper Concentrate - (a)	14,223.65	15,245.98
Bauxite	192.86	188.07
Caustic Soda	587.22	468.08
Calcined Petroleum Coke	432.97	427.70
Rock Phosphate	354.71	338.26
Others	1,346.09	1,175.01
	17,137.50	17,843.10
Less: Transfer to Capital Work-in-Progress	0.99	0.02
	<b>17,136.51</b>	<b>17,843.08</b>

- (a) Purchase of Copper Concentrate is accounted for provisionally pending finalisation of contents in the concentrate, price, and custom duty including interest. Variations are accounted for in the year of settlement. Final price payable on purchase of Copper Concentrate for which quotational price and quantity were not finalized in previous year, were realigned based on monthly average of LME & LMBA rate at the year end copper and precious metals respectively and accordingly provision for ₹ 141.51 crore (Previous year ₹ 3.54 crore) was made. During the year final price payable was settled at ₹ 10.78 crore (Previous year receivable of ₹ 58.66 crore) and accordingly further receivable of ₹ 130.73 crore (Previous year receivable of ₹ 62.20 crore) have been adjusted in raw material consumption. Further, receivable of ₹ 122.82 crore (Previous year payable of ₹ 141.51 crore) was provided on realignment of receipt of copper concentrate as on 31st March, 2013. Actual outflow is expected on finalization of quotational price and quantity in the next financial year.

## 28. Changes in Inventories:

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
<b>Opening Inventories</b>		
Work-in-Progress	3,481.10	3,182.98
Finished Goods	422.86	309.45
	<b>3,903.96</b>	<b>3,492.43</b>
<b>Less: Closing Inventories</b>		
Work-in-Progress	3,442.06	3,481.10
Finished Goods	326.95	422.86
	<b>3,769.01</b>	<b>3,903.96</b>
	134.95	(411.53)
Add: (Increase)/Decrease of Excise Duty on Inventories	(7.01)	4.22
	<b>127.94</b>	<b>(407.31)</b>

- (a) Details of inventories under broad head are given below:

	(₹ Crore)					
	Work-in-Progress			Finished Goods		
	31/03/2013	31/03/2012	31/03/2011	31/03/2013	31/03/2012	31/03/2011
Aluminium Business:						
Alumina	266.20	224.36	233.07	55.51	42.31	27.81
Aluminium and Aluminium Products	299.25	265.09	230.17	101.45	82.44	73.92
Others	372.59	301.56	250.17	8.98	1.73	1.80
Copper Business:						
Copper and Copper Products	1,428.15	1,231.10	1,454.24	70.03	169.68	169.28
Precious Metals	1,057.75	1,448.08	1,009.21	67.94	95.84	5.88
Others	18.12	10.91	6.12	23.04	30.86	30.76
	<b>3,442.06</b>	<b>3,481.10</b>	<b>3,182.98</b>	<b>326.95</b>	<b>422.86</b>	<b>309.45</b>

## 29. Employee Benefits Expenses:

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
Salaries and Wages	1,039.96	936.29
Contribution to Provident and other Funds	117.69	120.07
Employee Stock Option Scheme	0.27	1.29
Employee Welfare	111.29	101.62
	<b>1,269.21</b>	<b>1,159.27</b>
Less: Transfer to Capital Work-in-Progress	68.41	45.92
	<b>1,200.80</b>	<b>1,113.35</b>

30. **Power and Fuel:**

(₹ Crore)

	Year ended	
	31/03/2013	31/03/2012
Power and Fuel	3,121.82	2,881.74
Less: Transfer to Capital Work-in-Progress	48.78	11.07
	<b>3,073.04</b>	<b>2,870.67</b>

31. **Finance Costs:**

Interest Expenses - (a)	1,901.31	1,014.55
Other Borrowing Costs	81.79	12.85
	1,983.10	1,027.40
Less: Income on Specific Borrowing - (b)	51.12	8.90
	1,931.98	1,018.50
Less: Transfer to Capital Work-in-Progress	1,496.00	724.87
	<b>435.98</b>	<b>293.63</b>

(a) Interest Expenses include ₹ 0.07 crore (Previous year ₹ 0.10 crore) of interest paid to Income Tax Department.

(b) Income derived from temporary deployment of surplus fund out of specific borrowing for various projects deducted from borrowing costs incurred.

32. **Depreciation and Amortization:**

Depreciation and Amortization	689.16	692.63
Less: Transfer to Capital Work-in-Progress	2.21	2.66
	<b>686.95</b>	<b>689.97</b>

33. **Impairment Loss/(Reversal) (Net):**

Certain assets of copper business have been impaired as a result of uneconomical operation. Accordingly, an amount of ₹ 17.25 crore (Previous year ₹ Nil) has been recorded as impairment loss during the year.

34. **Other Expenses:**

Consumption of Stores and Spares	587.10	499.15
Repairs to Buildings	34.34	31.12
Repairs to Machinery	261.22	234.66
Rates and Taxes	19.13	15.02
Rent	31.97	22.53
Insurance	73.11	61.73
Payments to Auditors - (a)	3.27	2.88
Research and Development	24.97	20.87
Freight and Forwarding Expenses (Net)	504.58	469.75
Provision for Doubtful Loans, Advances and Receivables (Net)	6.97	8.65
Bad Loans, Advances and Receivables written off/(written back) (Net)	0.41	1.42
Prior Period Items (Net)	0.32	(1.58)
Donation - (b)	11.77	27.58
Directors' Fees and Commission	10.05	14.05



34. **Other Expenses:** (Contd.)

	Year ended	
	31/03/2013	31/03/2012
(Gain)/Loss on Change in Fair Value of Derivatives (Net)	96.99	(126.50)
Cost of own Manufactured Products Capitalized/Used	(103.50)	(91.85)
Miscellaneous Expenses - (c)	808.67	736.24
	2,371.37	1,925.72
Less: Transfer to Capital Work-in-Progress	56.83	59.47
	<b>2,314.54</b>	<b>1,866.25</b>
(a) Details of Payments to Auditors are as follows:		
Statutory Auditors:		
Statutory Audit Fees	1.76	1.60
Tax Audit Fees	0.29	0.28
Certification and management services	0.99	0.85
Out of pocket expenses	0.14	0.09
Cost Audit Fees and expenses	0.09	0.06
	<b>3.27</b>	<b>2.88</b>
(b) Donation includes ₹ 1.00 crore (Previous year ₹ 0.20 crore) paid to General Electoral Trust as political donation.		
(c) Miscellaneous Expenses include :		
i. ₹ 0.05 crore (Previous year ₹ 0.01 crore) paid to a firm of solicitors in which Director is a partner		
ii. ₹ Nil crore (Previous year ₹ 0.01 crore) paid as pension to a Director who was president of the Company before appointment as Director		

35. **Tax Expenses****Current Tax**

Current Tax for the year	381.41	562.68
Tax adjustments for earlier years (Net)	-	-
	<b>381.41</b>	<b>562.68</b>

**Deferred Tax**

Deferred Tax for the year	(33.98)	(62.93)
	<b>(33.98)</b>	<b>(62.93)</b>

36. **Earnings per Share (EPS)**

Profit for the period (₹ Crore)	1,699.20	2,237.20
Weighted average number of shares used in the calculation of EPS:		
Weighted average number of Basic Equity Shares outstanding	1,914,567,153	1,914,479,614
Shares deemed to be issued for no consideration in respect of Employee Stock Options	95,595	201,570
Weighted average number of Diluted Equity Shares outstanding	1,914,662,748	1,914,681,184
Face value of per share (₹)	1.00	1.00
Basic EPS (₹)	8.88	11.69
Diluted EPS (₹)	8.87	11.68

### 37. Segment Reporting

#### A. Primary Segment Reporting (by Business Segment):

- (a) The Company has two reportable segments viz. Aluminium and Copper which have been identified in line with the Accounting Standard 17 on Segment Reporting, taking into account the organizational structure as well as differential risk and return of these segments. Details of products included in each segments are as under:
- (i) Aluminium : Hydrate & Alumina, Aluminium and Aluminium Product
  - (ii) Copper : Continuous Cast Copper Rods, Copper Cathode, Sulphuric Acid, DAP & Complexes, Gold and Silver
- (b) Inter-segment transfers are based on market rates.
- (c) The details of the revenue, results, assets, liabilities and other information from operations by reportable business segments are under:

(₹ Crore)

	Year ended 31/03/2013			Year ended 31/03/2012		
	Aluminium	Copper	Total	Aluminium	Copper	Total
<b>REVENUE</b>						
External	8,776.15	17,280.78	26,056.93	9,036.88	17,559.90	26,596.78
Inter Segment	2.87	24.49	27.36	4.29	14.66	18.95
Total	<b>8,779.02</b>	<b>17,305.27</b>	<b>26,084.29</b>	<b>9,041.17</b>	<b>17,574.56</b>	<b>26,615.73</b>
<b>RESULTS</b>						
Segment Results	929.84	768.01	1,697.85	1,821.68	801.63	2,623.31
Unallocated Corporate Income			942.52			565.27
Unallocated Corporate Expenses			(157.76)			(158.00)
Finance Costs			(435.98)			(293.63)
Tax Expenses			(347.43)			(499.75)
Profit for the period			<b>1,699.20</b>			<b>2,237.20</b>
<b>OTHER INFORMATION</b>						
<b>Assets:</b>						
Segment Assets	34,766.51	8,478.95	43,245.46	26,622.38	9,373.80	35,996.18
Unallocated Corporate Assets			23,373.10			19,651.44
Total Assets			<b>66,618.56</b>			<b>55,647.62</b>
<b>Liabilities:</b>						
Segment Liabilities	2,824.39	2,563.17	5,387.56	2,608.61	4,255.29	6,863.90
Unallocated Corporate Liabilities			27,258.61			16,751.25
Total Liabilities			<b>32,646.17</b>			<b>23,615.15</b>
Capital Expenditure	7,292.06	50.75		8,394.18	35.91	
Depreciation and Amortization	492.69	171.42		494.74	172.48	
Impairment Loss/(Reversal) (Net)	-	17.25		-	-	
Other Non-Cash Expenses	5.36	2.02		1.63	8.49	

**B. Secondary Segment Reporting (by Geographical demarcation):**

- (a) The secondary segment is based on geographical demarcation i.e. India and Rest of the World.
- (b) The Company's revenue from external customers and information about its assets and others by geographical location are as under:

(₹ Crore)

	Year ended 31/03/2013			Year ended 31/03/2012		
	India	Rest of the World	Total	India	Rest of the World	Total
Revenue	18,453.74	7,630.55	26,084.29	18,700.11	7,915.62	26,615.73
Assets	42,672.45	573.01	43,245.46	35,503.85	492.33	35,996.18
Capital Expenditure	7,342.81	-	7,342.81	8,430.09	-	8,430.09

38. The Company had formulated a scheme of financial restructuring under Sections 391 to 394 of the Companies Act 1956 ("the Scheme") between the Company and its equity shareholders approved by the High Court of judicature of Bombay to deal with various costs associated with its organic and inorganic growth plan. Pursuant to this, a separate reserve account titled as Business Reconstruction Reserve ("BRR") was created during the year 2008-09 by transferring balance standing to the credit of Securities Premium Account of the Company for adjustment of certain expenses as prescribed in the Scheme. Accordingly, the Company has transferred ₹ 8,647.37 crore from Securities Premium Account to BRR and so far ₹ 66.98 crore adjusted against BRR.
39. For the year ended 31st March, 2013, the Board of Directors of the Company have recommended dividend of ₹ 1.40 per share (Previous year ₹ 1.55 per share) to equity shareholders aggregating to ₹ 313.60 crore (Previous year ₹ 344.89 crore) including Dividend Distribution Tax.
40. **Share Based Payment**

**Employee stock option scheme**

The shareholders of the Company has approved on 23rd January, 2007 an Employee Stock Option Scheme ("ESOS 2006"), formulated by the Company, under which the Company may issue 3,475,000 options to its permanent employees in the management cadre, in one or more tranches, whether working in India or out of India, including the Whole Time Directors of the Company. The shareholders have also approved giving discount up to 30% of the average price of the equity shares of the Company in the immediate preceding seven day period on the stock exchange. The ESOS 2006 is administered by the Compensation Committee of the Board of Directors of the Company ("the Committee"). Each option when exercised would be converted into one fully paid-up equity share of ₹ 1/- each of the Company. The options will vest in 4 equal annual instalments after one year of the grant. The maximum period of exercise is 5 years from the date of vesting. Further, forfeited/expired options are available to the Committee for grant. These options do not carry rights to dividends or voting rights till the date of exercise. Further, on 23rd September, 2011 the ESOS 2006 has been partially modified by which the Company may now issue 6,475,000 options.

However, under the ESOS 2006, so far the Committee has granted 3,545,550 options (Previous year 3,545,550 options) to its eligible employees in three tranches out of which 880,145 options (Previous year 706,901 options) have been forfeited/expired and are available to the Committee for grant as per term of the Scheme.

The compensation cost of stock options granted to employees have been accounted by the Company using the intrinsic value method. Accordingly, Employee benefits expenses includes ₹ 0.27 crore (Previous year ₹ 1.29 crore) being the amortization of intrinsic value for the year ending 31st March, 2013.

### Movement of Options Granted:

The movement of the options under ESOS 2006 for the year ended 31st March, 2013 are as under:

Particulars	Stock Options (Numbers)	Range of Exercise Price (₹)	Weighted Average Exercise Price (₹)	Weighted Average Remaining Contractual life (Years)
Outstanding at beginning of the year	2,198,457	98.30-150.10	124.11	3.99
Granted during the year	-	-	-	-
Forfeited during the year	(86,884)	118.35	118.35	-
Exercised during the year	(40,760)	98.30-98.30	98.30	-
Expired during the year	(86,360)	98.30-150.10	127	-
Outstanding at the end of the year	1,984,453	98.30-150.10	124.77	2.90
Exercisable at the end of the year	1,785,257	98.30-150.10	125.49	2.56

The movement of the options under ESOS 2006 for the year ended 31st March, 2012 are as under:

Particulars	Stock Options (Numbers)	Range of Exercise Price (₹)	Weighted Average Exercise Price (₹)	Weighted Average Remaining Contractual life (Years)
Outstanding at beginning of the year	2,348,478	98.30-150.10	122.63	4.92
Granted during the year	-	-	-	-
Forfeited during the year	(5,627)	98.30-98.30	98.30	-
Exercised during the year	(144,394)	98.30-150.10	100.95	-
Expired during the year	-	-	-	-
Outstanding at the end of the year	2,198,457	98.30-150.10	124.11	3.99
Exercisable at the end of the year	1,769,337	98.30-150.10	125.51	3.40

The weighted average share price at the date of exercise of stock options exercised during the year ended 31st March, 2013 and 31st March, 2012 was ₹ 117.41 and ₹ 149.92 respectively.

### Fair Valuation:

At grant date, the estimated fair value of stock options granted in Tranche I, Tranche II and Tranche III under ESOS 2006 was ₹ 65.78, ₹ 57.11 and ₹ 102.96 respectively. The fair valuation of stock options has been done by an independent valuer using Black and Scholes Model. For fair valuation, expected volatility is based on the historical share price volatility over the past 5 years. The details of stock options granted and the key assumptions taken into account for fair valuation are as under:

Particulars	Tranche I	Tranche II	Tranche III
Number of Option Granted	19,40,250	10,33,140	5,72,160
Grant Date	23.08.2007	25.01.2008	03.09.2010
Risk Free interest Rate (%)	8.00	8.00	8.00
Option Life (Years)	5	5	5
Expected Volatility	0.3391	0.3655	0.527
Expected Dividend Yield (%)	170.00	170.00	135.00
Share price at options grant date (₹ per Share)	138.95	150.10	173.65

Had the compensation cost for the stock options granted been recognized based on fair value at the date of grant (calculated using Black and Scholes Option Pricing Model), the proforma amount of net profit and earnings per share of the Company would have been as under:

(₹ Crore)

	Year ended	
	31/03/2013	31/03/2012
Reported Net Profit for the period	1,699.20	2,237.20
Add: Compensation cost under ESOS as per intrinsic value	0.27	1.29
Less: Compensation cost under ESOS as per fair value	(0.50)	(2.63)
Proforma Net Profit for the period	<b>1,698.97</b>	<b>2,235.86</b>

	Reported		Proforma	
	31/03/2013	31/03/2012	31/03/2013	31/03/2012
<b>Weighted average number of shares used in the calculation of EPS:</b>				
Weighted average number of Basic Equity Shares outstanding	1,914,567,153	1,914,479,614	1,914,567,153	1,914,479,614
Shares deemed to be issued for no consideration in respect of Stock Options	95,595	201,570	95,595	201,570
Weighted average number of Diluted Equity Shares outstanding	1,914,662,748	1,914,681,184	1,914,662,748	1,914,681,184
Face value of per share (₹)	1.00	1.00	1.00	1.00
<b>Reported Earnings per Share (EPS):</b>				
Basic EPS (₹)	8.88	11.69	8.87	11.68
Diluted EPS (₹)	8.87	11.68	8.87	11.68

41. Disclosure as required by Accounting Standard (AS) 15 (Revised) on "Employee Benefits":

A. In respect of Gratuity, a defined Benefit Scheme (based on actuarial valuation):-

(₹ Crore)

	31/03/2013	31/03/2012
<b>(a) Change in Obligations over the year ended 31 March 2013</b>		
Present value of Defined Benefit Obligations at the beginning of the year	462.57	420.25
Current Service Cost	28.48	28.56
Past Service Cost	-	-
Interest Cost	36.34	33.01
Curtailment Cost/ (Credit)	-	-
Settlement Cost/ (Credit)	-	-
Plan Amendments	-	-
Actuarial (Gain) or Loss	1.97	(3.50)
Benefits Paid	(16.51)	(15.75)
Present value of Defined Benefit Obligations at the end of the year	<b>512.85</b>	<b>462.57</b>



		(₹ Crore)
	31/03/2013	31/03/2012
(b) <b>Change in Plan Assets(Reconciliation of opening and closing balances)</b>		
Fair value of Plan Assets at the beginning of the year	286.32	246.28
Expected return on Plan assets	22.35	17.89
Actuarial Gain or (Loss)	-	-
Contributions	39.44	37.90
Benefits Paid	(16.51)	(15.75)
Fair value of Plan Assets at the end of the year	331.60	286.32
(c) <b>Reconciliation of fair value of assets and obligations</b>		
Fair value of Plan Assets at the end of the year	331.60	286.32
Present value of Defined Benefit Obligations at the end of the year	(512.85)	(462.57)
Amount recognised in Balance Sheet	(181.25)	(176.25)
(d) <b>Expense recognised during the year</b>		
Current Service Cost	28.48	28.56
Past Service Cost	-	-
Interest Cost	36.34	33.01
Curtailement Cost/ (Credit)	-	-
Settlement Cost/ (Credit)	-	-
Actuarial (Gain) or Loss	3.44	(0.80)
Expected return on Plan assets	(23.82)	(20.59)
	44.44	40.18
(e) <b>Investments details of Plan Assets:</b>		
Insurer Managed Funds	95.18%	94.27%
Government Securities	0.00%	0.00%
Corporate Bonds	0.00%	0.00%
Others	4.82%	5.73%
(f) <b>Principal Actuarial Assumptions:</b>		
Discount rate (based on the market yields available on Government bonds at the accounting date with a term that matches that of the liabilities)	8.00%	8.00%
Expected rate of return on assets	8.00%	8.00%
Salary increases taking into account inflation, seniority, promotion and other relevant factors.	6.00%	6.00%
The Company has various schemes (funded/unfunded) for payment of gratuity to all eligible employees calculated at specified number of days (ranging from 15 days to 1 month) of last drawn salary depending upon the tenure of service for each year of completed service subject to minimum service of five years payable at the time of separation upon superannuation or on exit otherwise.		

B. In respect of defined Contribution Schemes:

- (a) As required under Guidance Note on Implementation of Accounting Standard 15 (revised) issued by the ICAI in respect of exempted Provident Fund, the Company has ascertained shortfall in interest payable to the members of Provident Fund based on actuarial valuation and made appropriate provision in the books. The Company contributes 12% of salary for all eligible employees towards Provident Fund managed either by approved trusts or by the Central Government. The amount debited to statement of profit and loss during the year was ₹ 62.56 Crore (previous year ₹ 58.30 Crore). In view of typical nature of such Provident fund scheme involving defined benefit underpin in respect of interest payable to members as

declared by The Employees Provident Fund Organisation, the defined benefit obligation relating to interest shortfall is considered to be Other Long Term Employee Benefits.

- (b) The Company contributes a certain percentage of salary for all eligible employees in managerial cadre towards Superannuation Funds managed by approved trusts or by Life Insurance Corporation of India. The amount debited to Statement of Profit and Loss during the year was ₹ 12.52 Crore (previous year ₹ 11.92 Crore).

#### 42. Provisions:

The details of other provisions and its movement included in Note 12 are as under:

					(₹ Crore)
	As at 31/03/2012	Addition	Utilised	Unused Reversed	As at 31/03/2013
(a) Provision for claims against the Company	14.50	8.02	-	0.75	21.77
(b) Others	3.25	-	-	-	3.25
	17.75	8.02	-	0.75	25.02
Previous Year	17.75	-	-	-	17.75
				As at 31/03/2013	As at 31/03/2012
Non-current portion				-	-
Current portion				25.02	17.75

Provision for claims against the Company represents provision for claims of suppliers, contractors, customers, revenue authorities and others, where the Company anticipates probable outflow. The amount of provision is estimated by the Company considering the facts and circumstances of each case for which cash flow will be determined on settlement of these matters.

43. Gain or (loss) on foreign currency transaction and translation has been accounted for under respective head of accounts depending upon the nature of transaction. The details of net gain or (loss) included in various head of accounts are as under:

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
Revenue from Operations	(431.87)	(535.59)
Cost of Materials Consumed	(105.86)	(193.87)
Power and Fuel	(2.54)	(5.62)
Other Expenses	(14.04)	(83.34)
	<b>(554.31)</b>	<b>(818.42)</b>

#### 44. Operating Lease

The total of future minimum lease payment commitments under non-cancellable operating lease agreement for a period of twenty years expiring in 2022 to use railway tracks along with locomotives for transportation of materials are as under:

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
Not later than one year	0.40	0.40
Later than one year and not later than five years	1.60	1.60
Later than five years	1.67	2.07

#### 45 Derivative Financial Instruments

- (a) The Company has adopted Accounting Standard 30, "Financial Instruments: Recognition and Measurement" issued by The Institute of Chartered Accountants of India so far as it relates to derivative accounting.
- (b) In the ordinary course of business, the Company is exposed to risks resulting from changes in prices of commodity, exchange rate fluctuation and interest rate movements. It manages its exposure to these risks through derivative financial instruments. It uses derivative instruments such as forwards, futures, swaps and options to manage these risks. These derivative financial instruments reduce the impact of both favourable and unfavourable fluctuations. Except where noted, the derivative contracts are marked-to-market (MTM) and the related gains and losses are included in the Statement of Profit and Loss in the current accounting period.

The Company's risk management activities are subject to the management, direction and control of Risk Management Board (RMB). The RMB is composed of two directors including Managing Director, Chief Financial Officer and other officers and employees selected by the Managing Director. The RMB reports to the Board of Directors on the scope of its activities.

The decision of whether and when to execute derivative financial instruments along with its tenure can vary from period to period depending on market conditions and the relative costs of the instruments. The tenure is always linked to the timing of the underlying exposure, with the connection between the two being regularly monitored. The Company is exposed to losses in the event of non-performance by the counterparties to the derivative contracts. All derivative contracts are executed with counterparties that, in our judgment, are creditworthy. The credit levels are reviewed to ensure that there is not an inappropriate concentration of outstanding to any particular counterparty.

#### Commodity Price Risk

##### Copper and Precious Metals

This business is conducted under a conversion model. The prices of input and output are derived from the same benchmark and/or are linked to each other through a defined formula. The objective of risk management is to attempt to use derivatives to match the price fluctuations arising out of the timing mismatch in pricing the input and output so as to 'pass through' the change in input cost to customers to make the margins immune to the fluctuations in prices of the input and output.

##### Aluminium

This business is vertically integrated. The main raw material viz. bauxite (mostly mined from own mines) and other purchased raw materials do not have any linkage with the output price which is Aluminium LME prices. When the prices of input(s) and output(s) do not follow the above condition, then risk management attempts to use derivatives so as to protect the margins from adverse movements in prices on either side, i.e. from a rise in input cost or from a fall in output price.

As a condition of sale, customers often require the Company to enter into fixed price commitments. These commitments expose the Company to the risk of fluctuating aluminum prices between the time the order is committed and the time that the material is shipped. The Company may enter into derivative financial instruments to mitigate the risk arising out of the fixed price commitments. Consequently, the gain or loss resulting from movements in the price of aluminum on these contracts would generally be offset by an equal and opposite impact on the net sales and purchases being hedged.

#### Foreign Currency Exchange Risk

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. In case of conversion business, the objective is to match the exchange rate of outflows and related inflows through derivative financial instruments. With respect to Aluminium business where costs are predominantly in INR, the strengthening of INR against USD adversely affects the profitability of the business and benefits when INR depreciates against USD. The company enters into various foreign exchange contracts to protect profitability. The Company also enters into various foreign exchange contracts to mitigate the risk arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.

**Embedded derivatives**

Copper concentrate is purchased on future pricing model based on month's average LME (in case of copper) / LBMA (in case of gold and silver). Since the value of the concentrate changes with response to change in commodity pricing indices, embedded derivatives (ED) is identified and segregated in the contract. The ED so segregated, is treated like commodity derivative and qualify for hedge accounting. These derivatives are put into a Fair Value hedge relationship with inventory.

The objective of hedge designation of the embedded commodity derivative is to offset the volatility in the Statement of Profit and Loss due to change in value of un-priced inventory with response to LME / LBMA.

(c) The Asset and Liability position of various outstanding derivative financial instruments is given below:

₹ Crore

Particulars	Nature of Risk being Hedged	31st March, 2013			31st March, 2012		
		Liability	Asset	Net Fair Value	Liability	Asset	Net Fair Value
<b>Current</b>							
<b>Cash flow hedges</b>							
- Commodity contracts	All cash flow risk other than foreign currency	(1.79)	277.72	275.93	(11.69)	56.73	45.04
- Foreign currency contracts	Exchange rate movement risk	(41.95)	130.69	88.74	(157.42)	19.20	(138.22)
<b>Fair Value Hedge</b>							
- Embedded Derivatives*	Risk of change in Fair Value of unpriced inventory	(0.04)	191.05	191.01	(215.44)	15.75	(199.69)
<b>Non-designated hedges</b>							
- Commodity contracts		(35.50)	74.54	39.04	(18.92)	109.85	90.93
- Foreign currency contracts		(10.75)	2.75	(8.00)	(19.50)	5.29	(14.21)
<b>Total</b>		<b>(90.03)</b>	<b>676.75</b>	<b>586.72</b>	<b>(422.97)</b>	<b>206.82</b>	<b>(216.15)</b>
<b>Non - current</b>							
<b>Cash flow hedges</b>							
- Commodity contracts	All cash flow risk other than foreign currency	-	28.17	28.17	-	2.12	2.12
- Foreign currency contracts	Exchange rate movement risk	-	-	-	(45.81)	-	(45.81)
<b>Non-designated hedges</b>							
- Commodity contracts		-	6.29	6.29	-	5.41	5.41
- Foreign currency contracts		-	-	-	-	-	-
<b>Total</b>		<b>-</b>	<b>34.46</b>	<b>34.46</b>	<b>(45.81)</b>	<b>7.53</b>	<b>(38.28)</b>
<b>Grand Total</b>		<b>(90.03)</b>	<b>711.21</b>	<b>621.18</b>	<b>(468.78)</b>	<b>214.35</b>	<b>(254.43)</b>

\* Fair Value of ₹ Crore 191.01 is part of Trade Payables.

(d) The following table presents the outstanding position and fair value of various foreign exchange derivative financial instruments:

Particulars	Currency Pair	31st March, 2013			31st March, 2012		
		Average exchange rate	Notional Value (in Million)	Fair Value Gain/(Loss) (₹ Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/(Loss) (₹ Crore)
<b>Foreign currency forwards</b>							
<b>Cash flow hedges</b>							
Buy	EUR_INR	72.20	5.66	0.28	68.40	13.40	0.98
Buy	GBP_INR	83.04	0.04	-	-	-	-
Buy	USD_INR	55.51	7.97	0.59	50.41	29.92	3.03
Sell	USD_INR	57.60	815.94	85.80	49.77	764.50	(188.04)
<b>Total</b>				<b>86.67</b>			<b>(184.03)</b>
<b>Non-Designated</b>							
Buy	AUD_INR	58.54	1.71	(0.31)	53.63	2.52	(0.08)
Buy	CHF_INR	60.29	0.19	(0.03)	57.45	0.25	0.17
Buy	EUR_INR	72.73	22.64	(4.55)	69.24	35.26	0.86
Buy	GBP_INR	85.68	0.66	(0.10)	80.88	0.95	0.14
Buy	NOK_INR	9.69	2.37	(0.06)	8.90	3.16	0.09
Buy	USD_INR	54.85	166.19	(5.48)	51.80	187.27	(9.37)
Sell	USD_INR	55.04	14.47	0.49	51.64	53.83	(6.02)
<b>Total</b>		-	-	<b>(10.04)</b>	-	-	<b>(14.21)</b>
<b>Foreign currency Options</b>							
<b>Cash flow hedges</b>							
Sell	USD_INR	56.88	11.85	2.07	-	-	-
<b>Non-Designated</b>							
Sell	USD_INR	55.50	20.00	2.04	-	-	-
<b>Total</b>				<b>4.11</b>			<b>-</b>

(e) The following table presents the outstanding position and fair value of various commodity derivative financial instruments as at 31<sup>st</sup> March, 2013:

		Average Price (USD/Unit)	Quantity	Unit	Notional value (USD in millions)	Fair Value Gain/(Loss) (₹ Crore)
<b>Commodity Futures/Forwards</b>						
<b>Cash Flow Hedge</b>						
Aluminium	Sell	2,128.28	260,225	MT	553.83	272.35
Copper	Sell	7,829.63	2,350	MT	18.40	3.27
Gold	Sell	1,609.57	91,971	TOZ	148.03	5.94
Silver	Sell	31.28	1,457,256	TOZ	45.59	22.55
<b>Total</b>						<b>304.11</b>
<b>Non Designated hedges</b>						
Aluminium	Buy	1,914.14	38,425	MT	73.55	(6.00)
Aluminium	Sell	2,112.14	54,700	MT	115.53	63.11
Copper	Buy	7,724.13	41,350	MT	319.39	(40.40)
Copper	Sell	7,646.14	28,700	MT	219.44	14.47
Gold	Sell	1,652.52	3,942	TOZ	6.51	1.17
Silver	Buy	28.75	353,750	TOZ	10.17	(0.73)
Silver	Sell	28.88	339,507	TOZ	9.80	0.94
Coal	Buy	85.17	75,000	MT	6.39	(1.76)
Gold	Sell	*	*	TOZ	-	14.50
Silver	Sell	*	*	TOZ	-	0.03
<b>Total</b>						<b>45.33</b>
<b>Embedded derivatives</b>						
<b>Fair Value Hedge</b>						
Copper	Sell	7,902.95	93,042	MT	735.30	184.65
Gold	Sell	1,639.59	12,746	TOZ	20.90	2.92
Silver	Sell	30.87	256,761	TOZ	7.93	3.44
<b>Total</b>						<b>191.01</b>

\* Represent derivatives matured within 31st March, 2013 for which cash flow to happen on settlement date during April, 2013.



The following table presents the outstanding position and fair value of various commodity derivative financial instruments as at 31<sup>st</sup> March, 2012:

		Average Price (USD/Unit)	Quantity	Unit	Notional value (USD in millions)	Fair Value Gain/ (Loss) (₹ Crore)
<b>Commodity Futures/Forwards</b>						
<b>Cash Flow Hedge</b>						
Aluminium	Sell	2,396.22	15,325	MT	36.73	16.68
Copper	Sell	8,637.51	1,250	MT	10.80	1.19
Gold	Sell	1,702.33	99,503	TOZ	171.52	30.63
Silver	Sell	32.83	1,672,332	TOZ	53.73	(1.34)
<b>Total</b>						<b>47.16</b>
<b>Non Designated hedges</b>						
Aluminium	Buy	2,182.47	36,950	MT	80.84	(17.15)
Aluminium	Sell	2,338.91	52,175	MT	126.14	75.51
Copper	Buy	8,342.70	23,375	MT	195.36	22.39
Copper	Sell	8,445.79	2,825	MT	23.85	0.46
Gold	Buy	1,710.28	1,397	TOZ	2.40	(4.48)
Gold	Sell	1,663.41	41,752	TOZ	69.46	4.76
Silver	Buy	-	*	TOZ	-	(0.53)
Silver	Sell	32.41	278,664	TOZ	9.03	11.89
<b>Total</b>						<b>92.85</b>
<b>Commodity Options (Non Designated hedges)</b>						
Aluminium	Sell	-	*	MT	-	3.49
<b>Total</b>						<b>3.49</b>
<b>Embedded derivatives</b>						
<b>Fair Value Hedge</b>						
Copper	Sell	8,102.36	113,333	MT	918.27	(202.78)
Gold	Sell	1,689.66	40,362	TOZ	68.20	5.68
Silver	Sell	31.55	710,744	TOZ	22.43	(2.59)
<b>Total</b>						<b>(199.69)</b>

\* Represent derivatives matured within 31st March, 2012 for which cash flow to happen on settlement date during April, 2012.

- (f) The following table presents details of amount held in Hedging Reserve and the period during which these are going to be released and affecting Statement of Profit & Loss

₹ Crore

Hedge Instrument Type	Products/ Currency Pair	31st March, 2013			31st March, 2012		
		Closing Value in Hedging Reserve as at 31st March, 2013	Release		Closing Value in Hedging Reserve as at 31st March, 2012	Release	
			In less than 12 Months	After 12 Months		In less than 12 Months	After 12 Months
Commodity Forwards	Aluminium	284.37	256.86	27.51	54.41	52.43	1.98
	Copper	2.91	2.81	0.10	1.15	1.01	0.14
	Gold	19.06	19.06	0.00	39.90	39.90	-
	Silver	22.72	22.72	-	12.47	12.47	-
	<b>Total</b>	<b>329.06</b>	<b>301.45</b>	<b>27.61</b>	<b>107.93</b>	<b>105.81</b>	<b>2.12</b>
Debt		10.16	10.16	-	20.37	20.37	-
Liability for Copper Concentrate		(7.58)	(7.58)	-	(82.06)	(82.06)	-
Foreign currency Forwards	AUD_INR				(0.18)	-	(0.18)
	EUR_INR	0.37	0.29	0.08	2.40	3.55	(1.15)
	GBP_INR	(0.01)	(0.01)	-	-	-	-
	NOK_INR				(0.03)	-	(0.03)
	USD_INR	87.85	86.16	1.69	(181.98)	(136.20)	(45.78)
<b>Total</b>		<b>88.21</b>	<b>86.44</b>	<b>1.77</b>	<b>(179.79)</b>	<b>(132.65)</b>	<b>(47.14)</b>
Foreign currency Options	USD_INR	1.86	1.86	-	-	-	-
<b>Grand Total</b>		<b>421.71</b>	<b>392.33</b>	<b>29.38</b>	<b>(133.55)</b>	<b>(88.53)</b>	<b>(45.02)</b>

- (g) The following tables presents the amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2012-13:

₹ Crore

Item	Opening Balance	Net Amount recognised	Recycled			Closing Balance
			Net Amount to P&L	Net Amount added to	Total Amount recycled Non- Financial Assets	
Commodity	107.93	362.91	140.07	1.71	141.78	329.06
Forex	(241.48)	(140.63)	(482.73)	7.97	(474.76)	92.65
<b>Total</b>	<b>(133.55)</b>	<b>222.28</b>	<b>(342.66)</b>	<b>9.68</b>	<b>(332.98)</b>	<b>421.71</b>

The following tables presents the amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2011-12:

₹ Crore

Item	Opening Balance	Net Amount recognised	Recycled			Closing Balance
			Net Amount to P&L	Net Amount added to	Total Amount recycled Non-Financial Assets	
Commodity	(93.09)	212.32	11.30	-	11.30	107.93
Forex	73.26	(820.53)	(516.72)	10.93	(505.79)	(241.48)
<b>Total</b>	<b>(19.83)</b>	<b>(608.21)</b>	<b>(505.42)</b>	<b>10.93</b>	<b>(494.49)</b>	<b>(133.55)</b>

(h) The following table presents the amount of gain/ (loss) recycled from Hedging Reserve and reference of the line item in Statement of Profit & Loss where those amounts are included:

₹ Crore

Note No.	Schedule Line Item	2012-13	2011-12
24a	Aluminium and Aluminium Products	(16.26)	190.73
24a	Copper and Copper Products	(350.71)	(411.18)
24a	Precious Metals	24.31	(284.97)

(i) The adjustment as part of the carrying value of inventories arising on account of fair value hedges is as follows:

₹ Crore

	2012-13	2011-12
Copper	(184.55)	207.85
Gold	(2.92)	(5.33)
Silver	(3.45)	2.73
<b>Total</b>	<b>(190.92)</b>	<b>205.25</b>

### Sensitivities

The following table presents the estimated potential changes in the fair values of the foreign currency derivative financial instruments given a 10% changes in their respective indexes.

₹ Crore

Currency Pair	Change in Rate/Price	31st March, 2013			31st March, 2012		
		Change in Fair Value	Change in Profit & Loss	Change in Hedging Reserve	Change in Fair Value	Change in Profit & Loss	Change in Hedging Reserve
<b>Forwards</b>							
USD_INR	10%	329.35	(108.58)	437.93	311.82	86.38	225.44
EUR_INR	10%	38.13	33.76	4.37	62.83	54.05	8.78
GBP_INR	10%	1.11	1.07	0.04	1.48	1.48	-
NOK_INR	10%	0.01	0.01	0.01	0.01	-	-
CHF_INR	10%	0.00	0.00	0.14	0.14	-	-
AUD_INR	10%	1.94	1.94	-	2.51	2.51	-
<b>Options</b>							
USD_INR	10%	6.69	3.51	3.17	-	-	-
Debt	10%	513.15	89.48	423.67	565.63	304.15	261.48

The following table presents the estimated potential change in the fair values of the commodity derivative financial instruments, given a 10% change in their respective indexes (LME in case of Aluminium and Copper, LBMA in case of Gold and Silver).

₹ Crore

Types of Derivatives	Change in Rate/Price	31st March, 2013			31st March, 2012		
		Change in Fair Value	Change in Profit & Loss	Change in Hedging Reserve	Change in Fair Value	Change in Profit & Loss	Change in Hedging Reserve
Forwards	10%	353.23	(13.43)	366.66	101.25	(32.49)	133.74
Embedded derivatives	10%	395.48	395.48	-	532.56	532.56	-

#### 46 Contingent Liabilities and Commitments

(₹ Crore)

As at

31/03/2013                      31/03/2012

##### A Contingent Liabilities

- (a). Claims against the Company not acknowledged as debt:

Following demands are disputed by the Company and are not provided for:

- |   |        |        |
|---|--------|--------|
| <p>(i) Demand notice by Asstt. Collector Central Excise Mirzapur for excise duty on power generated by Company's captive power plant, Renusagar Power Company Limited (Since amalgamated).</p> <p>* Writ petition is pending with the Hon'ble High Court of Delhi. Earlier demand raised was quashed by the Hon'ble High Court of Delhi. The amount has been sequestered in the Aluminium Regulation account. According to the terms of settlement dated 05th December, 1983 between the Central Govt. and the Company, this amount will be reimbursed to the Company in the event the case is decided against the Company.</p> | 9.12   | 9.12   |
| <p>(ii) Demand of interest on past dues of the Aluminium Regulation account up to 31<sup>st</sup> December, 1987.</p> <p>* The demand is in dispute with Controller of Aluminium Regulation Account.</p>  | 6.33   | 6.33   |
| <p>(iii) Retrospective Revision of Water Rates by UP Jal Vidyut Nigam Limited (April 1989 to June 1993 &amp; Jan 2000 to Jan 2001).</p> <p>* Writ petition pending with Lucknow Bench of Hon'ble High Court of Allahabad. The demand has been stayed vide order dated 11<sup>th</sup> May, 2001.</p>  | 4.08   | 4.08   |
| <p>(iv) Transit fees levied by Divisional Forest officer, Renukoot, on Coal and Bauxite.</p> <p>* Appeal pending with the Hon'ble High Court of Allahabad and payment of transit fee has been stayed. According to the legal opinion received by the Company, the Forest department has no authority to levy such fees.</p>   | 134.38 | 111.78 |

## 46 Contingent Liabilities and Commitments (Contd.)

		(₹ Crore)	
		As at	
		31/03/2013	31/03/2012
The Company has filed a transfer application before the Hon'ble Supreme Court. The Hon'ble Supreme Court of India on while issuing notice on our Transfer Petition stayed the further proceedings of the Company's Writ Petition pending before the Hon'ble Allahabad High Court.			
(v) M.P Transit Fee on Coal demanded by Northern Coal Fields Limited.		23.43	23.05
* Company had challenged the demand towards MP transit Fee on Coal and filed Writ Petition before the Hon'ble Jabalpur High Court. The Hon'ble High Court has struck down the levy and also ordered for refund of the amount paid under protest. The State government has filed an Appeal against the order of the Hon'ble Supreme Court of India and the Hon'ble High Court's order has been stayed. The Counter affidavit in the matter has been filed. The rejoinder has also been filed by the state. To be listed along with the similar matter before Supreme Court of India.			
(vi) Imposition of Cess on Coal by Shaktinagar Special Area Development Authority.		9.38	7.56
* Writ petition pending before Allahabad High Court, Allahabad. Demand and levy stayed. However the company has moved a transfer petition before the Hon'ble Supreme court for the tagging the matter with CA no. 1883 of 06. The matter is tagged with ORISED.			
(vii) Demand of Royalty on Vanadium by District Mining officer, Lohardaga.		8.44	8.44
* Appeal is pending with the Hon'ble High Court of Allahabad. The demand has been stayed on certain conditions.			
(viii) The demand of Excise Duty on gold.		155.31	155.31
* Part of the demand was confirmed against which our ROM request is pending at CESTAT. Department's appeal is pending before the Hon'ble Supreme Court for the part of the demand and penalty that was dropped.			
(ix) Tax under MPGATSVA, 2005 @ 5% on basic price of coal w.e.f. 30 <sup>th</sup> September, 2005 by M.P. State Government.		60.76	56.91
* Writ petition has been filed before the Hon'ble High Court of Madhya Pradesh at Jabalpur. Demand has been stayed.			
(x) Demand raised on the assessment for entry tax with retrospective effect from the period November, 1999 to till date.		271.96	218.55
* The Hon'ble Allahabad High Court vide order dt. 23.12.2011 dismissed the Entry Tax Writ Petitions			



6 Contingent Liabilities and Commitments (Contd.)

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
alongwith other similar Petitions. An SLP was filed before Apex court declaring liability up to Nov'11 against the order of the Hon'ble Allahabad High Court which came up for hearing on 10.02.2012. The Apex court passed an interim order staying the judgement and order dated 23.12.2011 subject to the condition to deposit arrears of liability up to Nov'11, 50% in cash and balance by way of BG. The interim order also required to pay the liability after Nov'11 at applicable rate in cash. The Company is depositing entry tax amount on month to month basis under protest.		
(xi) Demand raised on assessment under CST Act and UP Sales Tax Act.	6.39	6.52
* Appeals have been filed with Sales Tax Tribunal and JC Appeal for different years.		
(xii) Revision of surface rent on land by Government of Jharkhand w.e.f. 16 <sup>th</sup> June, 2005.	22.56	18.05
* Matter is in dispute at Hon'ble High Court of Jharkhand.		
(xiii) Demand made by Nayab Tehsildar Kusmi / Collector under Chattisgarh as per Adhosanrachna Vikas evam Parayavaran Upkar Adhiniyam, 2005 @ 5% as environment tax on royalty plus 5% as development tax.	5.55	4.46
* The Writ petition which has been filed by the Company before Hon'ble High Court of Chhattisgarh at Bilaspur, has been transferred to the Hon'ble Supreme Court and tagged with other Civil Appeals.		
(xiv) Service tax paid on Goods Transport Agency and Business Auxiliary Services.	11.27	11.27
* Commissioner has confirmed the demand. Appeal is being filed at CESTAT New Delhi.		
(xv) M.P Transit fee on Bauxite.	1.30	1.30
* Writ petition pending with the Hon'ble High Court at Jabalpur.		
(xvi) Demand for Entry Tax relating to valuation dispute of 2004-05 to 2005-06, for which appeals have been filed.	1.18	1.18
* Appeal has been filed with Additional CCT, Sambalpur.		
(xvii) CST demand on reopening of assessments for 1999-00 to 2003-04.	8.81	8.81
* Appeals have been filed.		
(xviii) Demand of penalty on excess CENVAT Credit taken.	1.09	1.00
* Appeal pending with CESTAT, Mumbai.		
(xix) Demand for Sales Tax u/s 15B for A.Y. 2001-02 & 2002-03.	7.96	8.17
* Appeal is pending with J. C Appellate Authority, Baroda.		

## 6 Contingent Liabilities and Commitments (Contd.)

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
(xx) Service tax on insurance policy attributable to Renusagar. * Commissioner has confirmed the demand. Appeal is pending before the CESTAT, New Delhi.	3.97	3.20
(xxi) Demand of Interest on differential duty on account of final assessment of Bill of Entries. * Commissioner (Appeal) remanded back the case to Dy.Commissioner. Demand vacated	-	17.63
(xxii) Disallowance of CENVAT credit. * The matter is pending with CESTAT, Ahmedabad.	5.29	5.29
(xxiii) Demand for interest on claim with IFFCO, Kandla. * Appeal against Delhi High Court order being filed. Since provided in books	-	7.71
(xxiv) Demand raised on assessment under CST Act and APGST Act for various years. * Appeals have been filed with appropriate authorities.	6.55	6.55
(xxv) Demand for Service Tax on Consulting Engineer Services and Scientific & Tech Service. * Appeal pending with Commissioner (Appeals), Ahmedabad.	3.84	3.84
(xxvi) Excise duty on Dross * Company has challenged the letter issued by Excise department to pay Excise duty on dross before Hon'ble Allahabad High court.	16.16	17.30
(xxvii) Alleged Cenvat taken without receipt of Alumina Hydrate inside the factory * Appeal filed with Hon'ble CESTAT	3.46	3.46
(xxviii) Demand of Duty debited through DEPB Licenses * Since Adjusted	-	2.31
(xxix) Alleged Cenvat Availd on the Input services at capitive Mines * Appeal pending with CESTAT	36.07	-
(xxx) Cenvat of Service Tax Credit availd on Supplimentary Invoices * Pending with appropriate Authority	3.12	-
(xxxi) Clearence of Silver at Nil Rate of Duty under Notification No.5/2006 * Appeal pending before CESTAT.	8.96	-
(xxxii) Excess rebate has been sanctioned to the extend duty paid by supplementary invoices * Appeal pending with Commissioner of Customs (Appeals), Mumbai	7.65	-

6 Contingent Liabilities and Commitments (Contd.)

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
(xxxiii) Disallowance of CENVAT on input services.	5.40	-
*Appeals filed / to be filed before CESTAT		
(xxxiv) Service tax on reverse charge basis	31.10	-
Appeal and stay application filed at CESTAT Kolkata		
(xxxv) Other Contingent Liabilities in respect of Excise, Customs, Sales Tax etc. each being for less than ₹ 1 Crore.	13.33	13.82
* The demands are in dispute at various legal forums.		
	<b>894.20</b>	<b>743.00</b>
(b). Corporate Guarantees Outstanding (₹ 48.42 Crore (previous year ₹48.42 Crore) given on behalf of subsidiary companies)	88.98	88.98
(c). Other money for which the Company is contingently liable:		
i. Bills discounted with Banks	-	0.19
ii. Customs duty on Capital Goods and Raw Materials imported under EPCG Scheme/ Advance Licence, against which export obligation is to be fulfilled (excluding cenvatable portion).	359.09	263.55
iii. The Company has received a notice dated 24th March, 2007 from collector (Stamp) Kanpur, Uttar Pradesh alleging that stamp duty of ₹ 252.96 Crore is payable in view of order dated 18th November, 2002 of Hon'ble High Court of Allahabad approving scheme of arrangement for merger of Copper business of Indo Gulf Corporation Limited with the Company. The Company is of the opinion that it has a very strong case as there is no substantive/computation provision for levy/calculation of stamp duty on court order approving scheme of arrangement under Companies Act, 1956 within the provisions of Uttar Pradesh Stamp Act, moreover the properties in question are located in the State of Gujarat and thus the collector (stamp) Kanpur has no territorial jurisdiction to make such a demand. It is pertinent to note that the Company in 2003-04 has already paid stamp duty which has been accepted as per the provisions of the Bombay Stamp Act 1958 with regard to transfer of shareholding of Indo Gulf Corporation Limited as per the Scheme of Arrangement. Furthermore, the demand made is on an incorrect assumption. The Company's contention amongst the various other grounds made is that the demand is illegal, against the principles of natural justice, incorrect, bad in law and malafide. The Company has filed a writ petition before the Hon'able High Court of Allahabad, inter alia, on the above said grounds, which is pending determination.		
iv. Against the notifications issued by the State Electricity Regulatory Commissions of Uttar Pradesh and Odisha States under the provisions of Electricity Act, 2003 in respect of Renewable Purchase Obligation (RPO), the Company has filed writ petitions before jurisdictional high courts on the ground, inter alia, that RPO cannot be made applicable to captive users and the High Court(s) at Allahabad and Cuttack have granted stay on the applicability of the RPO. Pending disposal of these, no provision has been considered necessary at this stage.		
v. Pursuant to directions of Dispute Resolution Panel (DRP) disposing of the objections filed by the Company against the draft assessment order for AY 2008-09, the Assessing Officer has framed the assessment by making adjustment, inter alia, amounting to ₹ 270 Crore to total income on account of purported arms length fee of Corporate Guarantee provided to foreign banks for granting loan to wholly owned subsidiary AV Minerals B.V. at Netherlands. The Company has been advised, considering facts of the case no provision is deemed necessary. Appeal against the order has been filed before Hon'ble ITAT.		

- vi. For AY 2009-10, the Assessing Officer has made adjustment of ₹ 1,063 Crore, inter alia, by imputing guarantee fee of 11.84% and 9.79% on two corporate guarantees provided by the Company to foreign banks for granting loan to wholly owned subsidiary AV Minerals B.V. at Netherlands without giving cognizance to directions of Dispute Resolution Panel for earlier year on similar facts restricting the adjustment on account of purported arms length fee of Corporate Guarantee to 2.50% which has not been challenged by the department. The Company has been advised, considering facts of the case no provision is deemed necessary. Appeal against the order has been filed before CIT(A).

(₹ Crore)

As at

31/03/2013	31/03/2012
------------	------------

**B Commitments**

- (a) Estimated amount of contracts remaining to be executed on capital account and not provided for net of advances
- |          |          |
|----------|----------|
| 2,957.37 | 7,188.61 |
|----------|----------|
- (b) The Company, along with Aditya Birla Nuvo Limited, Grasim Industries Limited and Birla TMT Holdings Pvt. Limited (the Sponsors), being promoters of Idea Cellular Limited (Idea) has given the following undertakings to the Facility Agent:
- The Sponsors shall collectively continue to hold at least 33% of the equity capital of Idea till the end of FY 2015-16 and shall not without prior written approval of the Facility Agent, divest, transfer, assign, dispose of, pledge, charge, create any lien or in any way encumber 33% of shareholdings in Idea. Consequent upon the infusion of fresh equity capital of Idea, if the Sponsors' stake gets diluted from 40% to 33% in the equity capital of Idea, the Sponsors agree and undertake to obtain the prior consent of the Rupee Facility Agent and in other circumstances, the Sponsors agree and undertake to obtain the prior consent of the secured lenders representing 51% of the aggregate outstanding secured loans.
  - The Sponsors shall collectively continue to hold 26% of the equity capital of Idea after FY 2015-16 and shall not without the prior written approval of the Rupee Facility Agent, divest, transfer, assign, dispose of, pledge, charge, create any lien or in any way encumber 26% shareholdings in the capital of Idea.
  - Not without prior approval of the Facility Agent in writing divest shareholdings in the equity capital of Idea that may result in a single investor along with its affiliates holding more than 25% of the equity capital of Idea.
- (c) As the Sponsor, the Company has executed a Common Rupee Loan Agreement (CRLA) to avail financing of ₹ 4,906 Crore for project undertaken by Utkal Alumina International Limited (Utkal), a wholly-owned subsidiary of the Company. Under the CRLA, the Company has following obligations:
- To infuse base equity of ₹ 2,103 Crore in Utkal.
  - To ensure that debt: equity ratio in Utkal is always maintained at 70:30.
  - To hold minimum 51% equity shares in Utkal.
  - To bring funds for meeting cost overrun of the project.
  - If Utkal exercises its right or requires to replace any lender under the CRLA and to enable to bring other lender to replace such a lender within the permitted time, the Company is required to infuse funds for prepayment of the loan to such lender and for undrawn portion of such rupee lender.
- (d) The Company has issued a Corporate guarantee of ₹ 400 Crore for debt servicing of above loan for a period of six months as per requirement of loan agreement.

47. Information related to Micro, Small and Medium Enterprises, as defined in the Micro, Small and Medium Enterprises Development Act, 2006 (MSME Development Act), are given below. The information given below have been determined to the extent such enterprises have been identified on the basis of information available with the Company:

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
(a) Principal amount due	2.15	1.31
(b) Interest on Principal amount due	Nil	Nil
(c) Interest and Principal amount paid beyond appointment day	Nil	Nil
(d) The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed date during the year) but without adding the amount of interest specified under MSME Development Act.	Nil	Nil
(e) The amount of interest accrued and remaining unpaid at the end of the year.	Nil	Nil
(f) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the Small enterprise, for the purpose of disallowance as a deductible expenditure under section 23 of MSME Development Act.	Nil	Nil

48. Disclosure relating to amount outstanding at year end and maximum outstanding during the year of loans and advances, in nature of loan, required as per clause 32 of the Listing Agreement, are given below.:

(₹ Crore)

Particulars	As at 31/03/2013	Maximum Outstanding during 2013	As at 31/03/2012	Maximum Outstanding during 2012
(a). Subsidiary: Hindalco-Almex Aerospace Ltd.	-	-	-	70.00
(b). Associate: Aditya Birla Science & Technology Company Limited	57.94	57.94	57.94	57.94

49. The Company is one of the promoter members of Aditya Birla Management Corporation Private Limited (ABMCPL), a Company limited by guarantee which has been formed to provide common facilities and resources to its members, with a view to optimize the benefits of specialization and minimize cost for each member. The Company is one of the participants in the common pool and shares the expenses incurred by ABMCPL and accounted for under appropriate heads.

50. **Interests in Joint Ventures:**

The Company's interest, as a venture, in jointly controlled entities is given below:

Name of Entities	Country of Incorporation	Proportion of ownership interests as at	
		31/03/2013	31/03/2012
Mahan Coal Limited	India	50%	50%
Hydromine Global Minerals (GMBH) Limited	British Virgin Islands	45%	45%

The Company's interest in these Joint Ventures is reported as Long-term Investments and stated at cost. However, aggregate amount of the Company's share of each of the assets, liabilities, income, expenses, contingent liabilities and commitment related to its interests in these jointly controlled entities are given below:



		(₹ Crore)	
		Year ended/ As at	
		31/03/2013	31/03/2012
50.	<b>Interests in Joint Ventures: (Contd.)</b>		
	Income	0.22	0.07
	Expenses	0.95	1.65
	Assets	56.46	49.18
	Liabilities	3.26	2.63
	Contingent Liabilities	16.71	16.71
	Commitments (Net of advance)	1.02	0.07
51.	<b>Related Party Disclosures:</b>		
A	List of Related Parties:		
(a)	<b>Enterprises where control exists:</b>		
i.	<b>Subsidiaries:</b>		
	1 Hindalco Guinea SARL		
	2 Minerals & Minerals Limited		
	3 Aditya Birla Chemicals (India) Limited		
	4 Utkal Alumina International Limited		
	5 Suvas Holdings Limited		
	6 Renukeshwar Investments & Finance Limited		
	7 Renuka Investments & Finance Limited		
	8 Dahej Harbour and Infrastructure Limited		
	9 Lucknow Finance Company Limited		
	10 Hindalco-Almex Aerospace Limited		
	11 HAAL USA Inc. (dissoved w.e.f. 23rd April 2012)		
	12 Tubed Coal Mines Limited		
	13 East Coast Bauxite Mining Company Private Limited		
	14 Mauda Energy Limited		
	15 Birla Resources Pty Limited		
	16 Aditya Birla Minerals Limited		
	17 Birla Maroochydore Pty Limited		
	18 Birla Nifty Pty Limited		
	19 Birla Mt. Gordon Pty Limited		
	20 AV Minerals (Netherlands) B.V.		
	21 AV Metals Inc.		
	22 Novelis MEA Ltd (Dubai)		
	23 Novelis Inc.		
	24 Albrasilis - Aluminio do Brazil Industria e Comercia Ltda		
	25 Novelis do Brasil Ltda.		
	26 4260848 Canada Inc.		
	27 4260856 Canada Inc.		
	28 Novelis Cast House Technology Ltd.		
	29 Novelis No. 1 Limited Partnership		
	30 Novelis Sheet Ingot GmbH		
	31 Novelis Lamines France SAS		

- 32 Novelis PAE SAS
- 33 Novelis Aluminum Beteiligungs GmbH
- 34 Novelis Deutschland GmbH
- 35 Novelis Aluminum Holding Company
- 36 Novelis Italia SpA
- 37 Novelis (Shanghai) Aluminum Trading Company
- 38 Aluminum Company of Malaysia Berhad
- 39 Alcom Nikkei Specialty Coatings Sdn Berhad
- 40 Al Dotcom Sdn Berhad #
- 41 Novelis (India) Infotech Ltd.
- 42 Novelis de Mexico SA de CV
- 43 Novelis Korea Ltd.
- 44 Novelis AG
- 45 Novelis Switzerland SA
- 46 Novelis Europe Holdings Limited
- 47 Novelis UK Ltd.
- 48 Aluminum Upstream Holdings LLC (Delaware)
- 49 Eurofoil, Inc. (USA) (New York)
- 50 Logan Aluminum Inc. (Delaware)
- 51 Novelis Corporation (Texas)
- 52 Novelis Madeira, Unipessoal, Limited
- 53 Novelis Services Limited
- 54 Novelis Brand LLC (Delaware)
- 55 Novelis PAE Corp (Delaware)
- 56 Novelis South America Holdings LLC
- 57 Novelis (China) Aluminum Products Company Ltd.
- 58 8018227 Canada Inc.
- 59 8018243 Canada Limited
- 60 Novelis Acquisitions LLC (Delaware)
- 61 Novelis North America Holdings Inc. (Delaware)
- 62 Novelis Delaware LLC (Delaware)
- 63 Novelis Vietnam Company Ltd.

(b) **Other Related Parties:**

i. **Associates:**

- 1 Aditya Birla Science and Technology Company Limited
- 2 Idea Cellular Limited
- 3 Aluminum Norf GmbH
- 4 Consorcio Candonga
- 5 MiniMRF LLC (Delaware)
- 6 Deutsche Aluminum Verpackung Recycling GmbH
- 7 France Aluminum Recyclage SA

ii. **Joint Ventures:**

- 1 Mahan Coal Limited
- 2 Hydromine Global Minerals (GMBH) Limited

iii. **Trust of the Company:**

- 1 Trident Trust

iv. **Key Managerial Personnel:**

Mr. D. Bhattacharya - Managing Director

B The following transactions were carried out with the Related Parties in the ordinary course of business:

(a) **Subsidiaries, Associates and Joint Ventures:**

(₹ Crore)

Sl. No.	Transaction during the year	2012-13			2011-12		
		Subsidiaries	Associates	Joint Ventures	Subsidiaries	Associates	Joint Ventures
1	<b>Sales and Conversion</b>	<b>111.73</b>	-	-	<b>89.46</b>	-	-
	(a) Aditya Birla Chemicals (India) Limited	75.87	-	-	59.78	-	-
	(b) Hindalco - Almex Aerospace Limited	15.20	-	-	29.68	-	-
	(c) Utkal Alumina International Limited	20.66	-	-	-	-	-
2	<b>Services rendered</b>	<b>0.48</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	-
	(a) Dahej Harbour and Infrastructure Limited	0.01	0.02	-	0.03	-	-
	(b) Idea Cellular Limited	-	-	-	-	0.04	-
	(c) Utkal Alumina International Limited	0.47	-	-	-	-	-
	(d) Others	0.00	-	0.03	0.00	-	-
3	<b>Interest and dividend received</b>	<b>130.58</b>	<b>4.22</b>	-	<b>131.82</b>	<b>3.35</b>	-
	(a) Aditya Birla Science & Technology Company Limited	-	3.83	-	-	3.35	-
	(b) Aditya Birla Chemicals (India) Limited	0.60	-	-	0.60	-	-
	(c) Aditya Birla Minerals Limited	44.64	-	-	69.64	-	-
	(d) Hindalco - Almex Aerospace Limited	0.34	-	-	1.58	-	-
	(e) Dahej Harbour and Infrastructure Limited	85.00	-	-	60.00	-	-
	(f) Idea Cellular Limited	-	0.39	-	-	-	-
4	<b>Purchase of materials and Capital Equipments</b>	<b>2,914.36</b>	-	-	<b>2,070.52</b>	-	-
4.1	<b>Purchase of materials</b>	<b>2,900.72</b>	-	-	<b>2,036.32</b>	-	-
	(a) Aditya Birla Chemicals (India) Limited	381.64	-	-	241.49	-	-
	(b) Birla (Nifty) Pty Limited	1,971.84	-	-	1,678.55	-	-
	(c) Birla Mt Gordon Pty Limited	496.68	-	-	74.94	-	-
	(d) Minerals and Minerals Ltd.	7.10	-	-	12.81	-	-
	(e) Novelis Inc.	43.39	-	-	28.50	-	-
	(f) Others	0.07	-	-	0.03	-	-
4.2	<b>Purchase of Capital Equipments</b>	<b>13.64</b>	-	-	<b>34.20</b>	-	-
	(a) Novelis Inc.	13.64	-	-	34.20	-	-
5	<b>Services received</b>	<b>36.17</b>	<b>18.61</b>	-	<b>40.34</b>	<b>14.93</b>	-
	(a) Aditya Birla Science & Technology Company Limited	-	16.89	-	-	13.74	-
	(b) Dahej Harbour and Infrastructure Limited	31.53	-	-	28.97	-	-
	(c) Idea Cellular Limited	-	1.72	-	-	1.19	-
	(d) Novelis Inc.	4.08	-	-	10.83	-	-
	(e) Others	0.56	-	-	0.54	-	-

(₹ Crore)

Sl. No.	Transaction during the year	2012-13			2011-12		
		Subsidiaries	Associates	Joint Ventures	Subsidiaries	Associates	Joint Ventures
6	<b>Investments, Deposits, loans and advances made during the year</b>	<b>541.57</b>	<b>10.24</b>	<b>6.23</b>	<b>520.94</b>	<b>10.63</b>	<b>11.84</b>
	(a) Aditya Birla Science & Technology Company Limited	-	-	-	-	10.63	-
	(b) Mahan Coal Limited	-	-	5.00	-	-	10.13
	(c) Hydromine Global Minerals GMBH Limited	-	-	1.23	-	-	1.71
	(d) A V Minerals (Netherlands) B.V.	-	-	-	-	-	-
	(e) Utkal Alumina International Limited	530.00	-	-	379.00	-	-
	(f) Hindalco - Almex Aerospace Limited	-	-	-	138.94	-	-
	(g) Idea Cellular Limited	-	10.24	-	-	-	-
	(h) Tubed Coal Mines Ltd.	10.80	-	-	3.00	-	-
	(i) Others	0.77	-	-	-	-	-
7	<b>Investments, Deposits, loans and advances received back during the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>136.86</b>	<b>3.92</b>	<b>2.63</b>
	(a) Aditya Birla Science & Technology Company Limited	-	-	-	-	3.92	-
	(b) Mahan Coal Limited	-	-	-	-	-	2.63
	(c) Utkal Alumina International Limited	-	-	-	-	-	-
	(d) A V Minerals (Netherlands) B.V.	-	-	-	66.86	-	-
	(e) Hindalco - Almex Aerospace Limited	-	-	-	70.00	-	-
	(f) Others	-	-	-	-	-	-
8	<b>Guarantees and Collateral securities given</b>	<b>400.00</b>	<b>-</b>	<b>-</b>	<b>14.76</b>	<b>-</b>	<b>-</b>
	(a) Utkal Alumina International Limited	400.00	-	-	14.76	-	-
9	<b>Licence and Lease arrangements</b>						
	<b>Licence Fees :</b>	<b>0.01</b>	<b>-</b>	<b>-</b>	<b>0.01</b>	<b>-</b>	<b>-</b>
	(a) Dahej Harbour and Infrastructure Limited	0.01	-	-	0.01	-	-
10	<b>Outstanding balance as at 31st March</b>						
1	<b>Debit Balances</b>	<b>5.46</b>	<b>0.40</b>	<b>0.03</b>	<b>7.15</b>	<b>0.00</b>	<b>-</b>
	(a) Idea Cellular Limited	-	0.40	-	-	0.00	-
	(b) Aditya Birla Chemicals (India) Limited	5.10	-	-	1.26	-	-
	(c) Aditya Birla Minerals Limited	-	-	-	0.00	-	-
	(d) Utkal Alumina International Limited	0.14	-	-	1.44	-	-
	(e) Hindalco - Almex Aerospace Limited	-	-	-	4.39	-	-
	(f) Others	0.22	-	0.03	0.06	-	-

(₹ Crore)

Sl. No.	Transaction during the year	2012-13			2011-12		
		Subsidiaries	Associates	Joint Ventures	Subsidiaries	Associates	Joint Ventures
2	<b>Credit Balances</b>	<b>384.38</b>	<b>0.00</b>	-	<b>316.53</b>	<b>0.05</b>	-
	(a) Idea Cellular Limited	0.00	-	-	-	0.05	-
	(b) Aditya Birla Chemicals (India) Limited	19.07	-	-	15.08	-	-
	(c) Birla (Nifty) Pty Limited	253.42	-	-	267.70	-	-
	(d) Birla Mt. Gordon Pty Limited	98.83	-	-	-	-	-
	(e) Novelis Inc.	1.50	-	-	29.63	-	-
	(f) Dahej Harbour and Infrastructure Limited	2.48	-	-	2.62	-	-
	(g) Utkal Alumina International Limited	9.02	-	-	-	-	-
	(h) Others	0.06	-	-	1.50	-	-
3	<b>Investments, Deposits, loans and advances</b>	<b>13,342.96</b>	<b>306.32</b>	<b>57.79</b>	<b>12,801.38</b>	<b>296.08</b>	<b>51.57</b>
	(a) Aditya Birla Science & Technology Company Limited	-	67.74	-	-	67.74	-
	(b) Idea Cellular Limited	-	238.58	-	-	228.34	-
	(c) A V Minerals (Netherlands) B.V.	10,423.90	-	-	10,423.90	-	-
	(d) Aditya Birla Minerals Limited	480.76	-	-	480.76	-	-
	(e) Utkal Alumina International Limited	2,157.43	-	-	1,627.43	-	-
	(f) Mahan Coal Limited	-	-	27.00	-	-	22.00
	(g) Hydromine Global Minerals GMBH Limited	-	-	30.79	-	-	29.57
	(h) Others	280.87	-	-	269.29	-	-
4	<b>Guarantees and Collateral securities given</b>	<b>448.42</b>	-	<b>16.71</b>	<b>48.42</b>	-	<b>16.71</b>
	(a) A V Minerals (Netherlands) B.V.	-	-	-	-	-	-
	(b) Dahej Harbour and Infrastructure Limited	4.50	-	-	4.50	-	-
	(c) Utkal Alumina International Limited	426.88	-	-	26.88	-	-
	(d) Mahan Coal Limited	-	-	16.71	-	-	16.71
	(e) Others	17.04	-	-	17.04	-	-

STANDALONE FINANCIAL STATEMENTS



(₹ Crore)

	As at	
	31/03/2013	31/03/2012
(b) <b>Trident Trust:</b>		
Beneficiary Interest in the Trust	34.45	34.45
(c) <b>Key Managerial Personnel:</b>		
Managerial Remuneration (including perquisites) *	20.61	19.50
*Excluding gratuity, leave encashment provisions and compensation under Employee Stock Option Scheme.		

52. Additional information pursuant to paragraphs 5 (viii) of Part II of Schedule VI to the Companies Act, 1956 are follows:

A. C.I.F. value of imports by the Company (Excluding imported items purchased locally):

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Raw Materials	16,075.25	15,081.29
Coal and Fuel	401.19	259.03
Stores and Spares	72.43	89.62
Capital Goods	1,773.83	1,300.25
Trading Goods	-	204.70

B. Expenditure in foreign currency during the year:

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Technical Know-how and Professional or consultation fees	194.48	59.58
Interest	62.62	60.56
Others*	(24.25)	(160.34)

\* Includes cashflow arising on commodity derivatives.

C. Value of Raw Materials and Stores and Spares consumed during the year ended:

	Value (₹ Crore)		Percentage (%)	
	31/03/2013	31/03/2012	31/03/2013	31/03/2012
Raw Materials:				
Imported	15,293.00	16,090.26	89.24%	90.18%
Indigenous	1,843.52	1,752.82	10.76%	9.82%
	<b>17,136.52</b>	<b>17,843.08</b>		
Stores and Spares:				
Imported	47.84	42.27	8.15%	8.47%
Indigenous	539.26	456.87	91.85%	91.53%
	<b>587.10</b>	<b>499.14</b>		

## D. Remittance in foreign currencies on account of dividend:

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
Amount of Dividend remitted (₹ Crore)	29.97	30.76
Year to which dividend relates	2011-12	2010-11
Number of non-resident shareholders	483	494
Number of shares held	193,392,481	205,079,907

## E. Earnings in Foreign Exchange:

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
Export of Goods on F.O.B. basis	7,571.55	7,856.60
Other Income	0.75	0.04

53. Previous year figures have been reclassified/regrouped to conform to this year's classification.

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Camp: Mumbai

Dated: The 28th day of May, 2013

Praveen Kumar Maheshwari  
CFO

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

STATEMENT PURSUANT TO SECTION 212 OF THE COMPANIES ACT, 1956, RELATING TO SUBSIDIARY COMPANIES

(₹ Crore)

Name of the Subsidiary Company	Financial year of the Subsidiary ended on	Extent of the Holding Company's interest (%)	Net aggregate amount of the Profit/(Loss) of the Subsidiary, so far as it concerns the members of the Holding Company				Additional Informations under section 212 (5)
			Not dealt with in the Holding Company's Accounts		Dealt with in the Holding Company's Accounts		
			For the Financial Year of the Subsidiary	For the previous Financial Years since they become Subsidiary	For the Financial Year of the Subsidiary	For the previous Financial Year since they become Subsidiary	
1 Minerals & Minerals Limited	31.03.2013	100.00%	0.18	1.29	Nil	Nil	N.A.
2 Renuka Investments & Finance Limited	31.03.2013	100.00%	3.83	41.76	Nil	0.65	N.A.
3 Renukeshwar Investments & Finance Limited	31.03.2013	100.00%	2.20	28.70	Nil	0.10	N.A.
4 Suvas Holdings Limited	31.03.2013	51.00%	0.03	(0.04)	Nil	Nil	N.A.
5 Utkal Alumina International Limited	31.03.2013	100.00%	(98.57)	(31.45)	Nil	Nil	N.A.
6 Aditya Birla Chemicals (India) Limited	31.03.2013	54.65%	10.74	173.52	0.60	10.74	N.A.
7 Hindalco-Almex Aerospace Limited	31.03.2013	97.18%	(33.34)	(22.95)	Nil	Nil	N.A.
8 HAAL USA Inc \$	31.03.2013	97.18%	(0.09)	0.04	Nil	Nil	N.A.
9 Lucknow Finance Company Limited	31.03.2013	100.00%	2.13	12.34	Nil	Nil	N.A.
10 Dahej Harbour and Infrastructure Limited	31.03.2013	100.00%	47.88	348.45	85.00	60.00	N.A.
11 East Coast Bauxite Mining Company Private Limited	31.03.2013	74.00%	(0.00)	(0.01)	Nil	Nil	N.A.
12 Tubed Coal Mines Limited	31.03.2013	60.00%	(0.16)	(0.16)	Nil	Nil	N.A.
13 Mauda Energy Limited	31.03.2013	100.00%	(0.01)	Nil	Nil	Nil	N.A.
14 Aditya Birla Minerals Limited - Consolidated *	31.03.2013	51.00%	38.44	306.13	44.64	134.69	N.A.
15 Birla Resources Pty Limited *	31.03.2013	100.00%	(0.00)	(8.67)	Nil	Nil	N.A.
16 A V Minerals (Netherlands) B.V. *	31.03.2013	100.00%	(0.40)	(1856.95)	Nil	Nil	N.A.
17 A V Metals Inc # *	31.03.2013	100.00%	(0.01)	(15.71)	Nil	Nil	N.A.
18 Novelis Inc - Consolidated ## *	31.03.2013	100.00%	3393.61	(130.68)	Nil	Nil	N.A.
19 Hindalco Guinea SARL	31.03.2013	100.00%	0.00	0.00	Nil	Nil	N.A.

\* Translated at Average exchange rate.

\$ Dissolved w.e.f 23rd April 2012.

# Subsidiary of AV Minerals (Netherlands) B.V.

## Subsidiary of AV Metals Inc.

Note:

- As the Financial Year of the Subsidiary Companies coincide with the Financial Year of the Holding Company, Section 212 (5) of the Companies Act, 1956, is not applicable.

For and on behalf of the Board of  
Hindalco Industries Limited

Praveen Kumar Maheshwari  
Chief Financial Officer

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M. M. Bhagat – Director

Anil Malik  
Company Secretary

Dated: The 28th day of May, 2013.

# CONSOLIDATED FINANCIAL STATEMENTS

**To the Board of Directors of Hindalco Industries Limited**

We have audited the accompanying Consolidated Financial Statements of Hindalco Industries Limited ("the Company") its subsidiaries, joint venture and associates (collectively referred as Group) which comprise the Consolidated Balance Sheet as at 31<sup>st</sup> March 2013, and the Consolidated Statement of Profit and Loss and Consolidated Cash Flow Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

**Management's Responsibility for the Consolidated Financial Statements**

Management is responsible for the preparation of the consolidated financial statements that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Group in accordance with accounting principles generally accepted in India. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Consolidated Financial Statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

**Auditors' Responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Consolidated Financial Statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Consolidated Financial Statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Group's preparation and presentation of the Consolidated Financial Statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the Consolidated Financial Statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion and to the best of our information and according to the explanations given to us and based on the consideration of the report of the other auditors on the Financial Statements /Consolidated Financial Statements of the Subsidiaries, joint venture and associates as noted below, the consolidated financial statements, read with the comments and effects of the matter referred to paragraphs below on Emphasis of Matter, give a true and fair view in conformity with the accounting principles generally accepted in India and other recognised accounting principles:

- (a) in the case of the Consolidated Balance Sheet, of the state of affairs of the Company as at 31<sup>st</sup> March 2013.
- (b) in the case of the Consolidated Statement of Profit and Loss , of the profit for the year ended on that date; and
- (c) in the case of the Consolidated Cash Flow Statement, of the cash flows for the year ended on that date.

**Emphasis of Matter**

Attention is drawn to Note No. 45 of Notes to Consolidated Financial Statements regarding accounting policy of Novelis Inc a wholly owned subsidiary with respect to recognition of actuarial losses relating to pension and other post retirement benefit plans in the Actuarial Gain/(Loss) Reserve instead of Statement of Profit and Loss. Had the group followed the policy of recognition of actuarial losses on the aforesaid defined benefit plans in the Consolidated Statement of Profit and Loss as per the Accounting Standard (AS 15) on Employee Benefits, the employee benefits expenses would have been higher by ₹ 542.43 Crore (Previous Year ₹ 1,014.91 Crore), tax



expenses would have been lower by ₹ 159.38 Crore (Previous Year ₹ 299.88 Crore), the consolidated profit before taxes and minority interest would have been lower by ₹ 542.43 Crore (Previous Year ₹ 1,014.91 Crore), Actuarial Gain / (Loss) Reserve would have been ₹ Nil and Foreign Currency Translation Reserve would have been lower by ₹ 50.82 Crore (Previous Year ₹ 44.39 Crore). Our opinion is not qualified in respect of this matter.

#### Other Matter

- a) We did not audit the financial statements of 12 Indian subsidiaries whose financial statements reflect the Group's Share of total assets of ₹ 8,739.17 Crore as at 31<sup>st</sup> March, 2013, total revenue of ₹ 854.51 Crore and net cash flow amounting to ₹ 97.01 Crore for the year then ended. These financial statements and other financial informations have been audited by other auditors whose reports have been furnished to us and our opinion is based solely on the report of other auditors.
- b) The Consolidated Financial Statements of foreign subsidiaries namely Novelis Inc. and Aditya Birla Minerals Ltd and the Standalone Financial Statements of A V Minerals (Netherlands) B.V., A V Metals Inc., and Birla Resources Pty Ltd. considered in the consolidated financial statements have not been audited by us. These financial statements have been audited by other auditors as appointed under the respective laws.
- i) Of the above, certain foreign subsidiaries namely Novelis Inc (Group), A V Minerals (Netherlands) B.V and A. V. Metals Inc. whose consolidated financial statements/financial statements reflect Group's Share of total assets of ₹ 53,905.22 Crore as at 31<sup>st</sup> March, 2013 (net of investment of fellow foreign subsidiaries), total revenue of ₹ 53,600.46 Crore and net cash flow amounting to ₹ 59.62 Crore for the year then ended, have been considered in the consolidated financial statements, which have been prepared by the management of the Company and its subsidiaries in accordance with the generally accepted accounting principles in India and other recognized accounting policies and principles followed by the Company. These financial statements have been audited by a firm of Chartered Accountants and have been included in the consolidated financial statements of the Group on the basis of their Fit For Consolidation Report ("FFC") received from them and our opinion is based on the FFC report of the other auditors.
- ii) The consolidated financial statements and financial information reflects the Group's Share of total assets of ₹ 3,792.06 Crore as at 31<sup>st</sup> March, 2013 and total revenue of ₹ 2,808.42 Crore and net cash flow amounting to ₹ 104.55 Crore for the year then ended of foreign subsidiaries namely Aditya Birla Minerals Ltd (Group) and Birla Resources Pty Ltd. whose consolidated financial statements/ financial statements has been converted into Indian GAAP by the management to the extent possible and have been reviewed by us.
- c) The consolidated financial statements and financial information reflect the Group's proportionate Share of total assets of ₹ 26.64 Crore as at 31<sup>st</sup> March, 2013, total revenue of ₹ Nil and net cash flow amounting to ₹ 0.17 Crore for the year then ended, of a foreign Joint venture Hydromine Global Minerals (GMBH) Limited, which is based on financial statements audited by a firm of Chartered Accountants in accordance with Indian GAAP and our opinion is based on the report of the other auditor.
- d) The Company's share of profit in a associates aggregating to ₹ 71.10 Crore and the net carrying cost of investment as at 31<sup>st</sup> March, 2013 of ₹ 1,002.07 Crore have been accounted for based on audited financial statements audited by other auditors and our opinion is based on the report of the other auditors.

Our report is not qualified on these other matters.

**For SINGHI & CO.**

Chartered Accountants  
Firm Registration No.302049E

**(RAJIV SINGHI)**

Partner  
Membership No. 53518

Camp : Mumbai

Dated: the 28th day of May, 2013.

		As at 31/03/2013	(₹ Crore) As at 31/03/2012
<b>EQUITY AND LIABILITIES</b>			
<b>Shareholders' Funds</b>			
Share Capital	'7'	191.48	191.48
Reserves and Surplus	'8'	34,597.45	31,178.53
Money Received against Share Warrants	'9'	541.31	541.31
		<b>35,330.24</b>	<b>31,911.32</b>
<b>Minority Interest</b>		<b>1,759.27</b>	<b>1,709.05</b>
<b>Non Current Liabilities</b>			
Long-term Borrowings	'10'	49,856.85	37,127.21
Deferred Tax Liabilities (Net)	'11'	3,467.68	3,605.01
Other Long-term Liabilities	'12'	1,333.62	1,460.03
Long-term Provisions	'13'	5,690.68	5,288.76
		<b>60,348.83</b>	<b>47,481.01</b>
<b>Current Liabilities</b>			
Short-term Borrowings	'14'	6,442.06	3,731.34
Trade Payables		9,612.94	11,052.14
Other Current Liabilities	'15'	5,485.91	4,140.31
Short-term Provisions	'16'	1,610.36	1,377.07
		<b>23,151.27</b>	<b>20,300.86</b>
		<b>120,589.61</b>	<b>101,402.24</b>
<b>ASSETS</b>			
<b>Non Current Assets</b>			
Fixed-Assets			
Tangible Assets	'17'	21,489.65	19,871.36
Intangible Assets	'18'	16,435.26	15,428.91
Capital Work-in-Progress		33,749.20	22,598.15
Intangible Assets under Development		81.87	199.95
Non-Current Investments	'19'	5,806.18	5,691.46
Long-term Loans and Advances	'20'	3,170.09	3,773.68
Other Non-Current Assets	'21'	749.29	821.61
		<b>81,481.54</b>	<b>68,385.12</b>
<b>Current Assets</b>			
Current Investments	'22'	6,807.56	4,859.56
Inventories	'23'	14,331.68	13,246.03
Trade Receivables	'24'	8,952.28	8,017.17
Cash and Bank Balances	'25'	3,769.51	3,295.99
Short-term Loans and Advances	'26'	3,257.30	2,158.66
Other Current Assets	'27'	1,989.74	1,439.71
		<b>39,108.07</b>	<b>33,017.12</b>
		<b>120,589.61</b>	<b>101,402.24</b>

**Significant Accounting Policies**

'2'

The accompanying Notes are an integral part of the Financial Statements

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Praveen Kumar Maheshwari  
CFO

Camp: Mumbai

Dated: The 28th day of May, 2013

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

			(₹ Crore)
	Note No.	Year ended 31/03/2013	Year ended 31/03/2012
<b>INCOME</b>			
Gross Revenue from Operations	'28'	82,242.99	82,549.03
Less: Excise Duty		2,050.19	1,727.66
Net Revenue from Operations		<b>80,192.80</b>	<b>80,821.37</b>
Other Income	'29'	1,012.23	783.07
<b>Total Income</b>		<b>81,205.03</b>	<b>81,604.44</b>
<b>EXPENSES</b>			
Purchases of Stock-in-Trade		41.94	207.11
Cost of Materials Consumed	'30'	49,180.04	50,401.79
Changes in Inventories	'31'	(666.29)	663.29
Employee Benefits Expenses	'32'	6,525.61	6,248.85
Power and Fuel	'33'	5,200.13	4,762.68
Finance Costs	'34'	2,079.11	1,757.98
Depreciation and Amortization	'35'	2,821.92	2,645.17
Impairment Loss/(Reversal) (Net)	'36'	39.17	219.01
Other Expenses	'37'	12,074.60	10,353.62
<b>Total Expenses</b>		<b>77,296.23</b>	<b>77,259.50</b>
<b>Profit before Tax</b>		<b>3,908.80</b>	<b>4,344.94</b>
Tax Expenses:	'38'		
Current Tax		1,033.21	887.54
Deferred Tax		(147.47)	(101.30)
<b>Profit before Minority Interest and share in Associates</b>		<b>3,023.06</b>	<b>3,558.70</b>
Share in Profit/(Loss) of Associates (Net)		(15.76)	49.56
<b>Profit before Minority Interest</b>		<b>3,007.30</b>	<b>3,608.26</b>
Minority Interest		(19.59)	211.31
<b>Profit for the year</b>		<b>3,026.89</b>	<b>3,396.95</b>
<b>Earnings per Equity Share:</b>	'39'		
Basic (₹)		15.81	17.74
Diluted (₹)		15.81	17.74

**Significant Accounting Policies**

'2'

The accompanying Notes are an integral part of the Financial Statements

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Praveen Kumar Maheshwari  
CFO

Camp: Mumbai

Dated: The 28th day of May, 2013

Anil Malik  
Company SecretaryFor and on behalf of the Board of  
Hindalco Industries LimitedKumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

	Year ended 31/03/2013	(₹ Crore) Year ended 31/03/2012
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Profit before Tax	3,908.80	4,344.94
Adjustment for :		
Finance Costs	2,079.11	1,757.98
Depreciation and Amortization	2,821.92	2,645.17
Impairment Loss/(Reversal) (Net)	39.17	219.01
Employee Stock Option Scheme	0.27	1.29
Provisions/Provisions written-back (Net)	25.91	(154.43)
Unrealised Foreign Exchange (Gain)/Loss (Net)	48.44	121.87
Loss/(Gain) on Derivative transactions (Net)	(132.41)	262.05
Impact of Foreign Exchange translation (Net)	191.75	915.32
Write-off and Amortization of Fair Value Adjustments	(8.74)	30.34
Pre-operative/Incidental Expenditure Written-off	4.15	-
Prior Period Adjustments (Net)	65.51	5.40
Loss on Assets held for sale	(17.14)	-
Investing Activities (Net)	(827.39)	(524.62)
<b>Operating Profit before Working Capital Changes</b>	<b>8,199.35</b>	<b>9,624.32</b>
Changes in working Capital:		
Inventories	(799.49)	855.89
Trade and other Receivables	(1,249.87)	(1,007.54)
Trade and other Payables	(1,824.62)	(780.55)
<b>Cash Generation from Operation</b>	<b>4,325.37</b>	<b>8,692.12</b>
Payment of Direct Taxes	(1,347.80)	(1,090.13)
<b>Net Cash Generated/(used) - Operating Activities</b>	<b>2,977.57</b>	<b>7,601.99</b>
<b>B. CASH FLOW FROM INVESTMENT ACTIVITIES</b>		
Purchase of Fixed Assets	(11,871.13)	(12,511.88)
Sale of Fixed Assets	160.76	111.16
Purchase/Sale of Shares in Subsidiaries (Net)	(50.65)	(1,852.19)
Purchase/Sale of Investments (Net)	(1,562.23)	508.18
Proceeds/Repayment of Loans and Deposits (Net)	(925.23)	(17.66)
Interest Received	323.17	198.72
Dividend Received	160.26	343.41
<b>Net Cash Generated/(Used) - Investing Activities</b>	<b>(13,765.05)</b>	<b>(13,220.26)</b>

	Year ended 31/03/2013	(₹ Crore) Year ended 31/03/2012
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Proceeds from Issue of Shares (Net of Expenses)	8.33	3.46
Proceeds against Share Warrants	-	541.31
Capital Subsidy Received	4.50	5.25
Proceeds from Long-term Borrowings	18,026.05	9,475.75
Repayment of Long-term Borrowings	(612.55)	(139.55)
Prepayment of Long-term Borrowings	(5,142.99)	-
Proceeds/Repayment of Short-term Borrowings (Net)	2,065.12	(385.06)
Finance Cost Paid	(3,672.82)	(2,853.11)
Dividend Paid (including Dividend Distribution Tax)	(397.74)	(411.00)
<b>Net Cash Generated/(Used) - Financing Activities</b>	<b>10,277.90</b>	<b>6,237.05</b>
<b>Net Increase/(Decrease) in Cash and Cash Equivalents</b>	<b>(509.58)</b>	<b>618.78</b>
Add : Opening Cash and Cash Equivalents	2,729.49	2,165.68
Add : Foreign Exchange variation on Cash and Cash Equivalents	(35.73)	(54.97)
<b>Closing Cash and Cash Equivalents</b>	<b>2,184.18</b>	<b>2,729.49</b>

**Notes:**

- The Cash Flow Statement has been prepared under the indirect method as set out in Accounting Standard (AS) 3 "Cash Flow Statement" as specified in the Companies (Accounting Standard) Rules 2006.
- Figures have been regrouped/rearranged wherever necessary.

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Praveen Kumar Maheshwari  
CFO

Camp: Mumbai

Dated: The 28th day of May, 2013

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director



## 1. Principles of Consolidation

The Consolidated Financial Statements (CFS) relate to Hindalco Industries Limited (the Company), its Subsidiaries and its interest in Joint Ventures and Associates (the Group). The CFS have been prepared in accordance with Accounting Standard 21 on "Consolidated Financial Statements" (AS 21), Accounting Standard 23 on "Accounting for Investments in Associates in Consolidated Financial Statements" (AS 23) and Accounting Standard 27 on "Financial reporting of interests in Joint Ventures" (AS 27) and are prepared on the following basis:

- (a) The financial statements of the Company and its Subsidiaries are combined on a line-by-line basis by adding together the book values of like items of assets, liabilities, income and expenses, after fully eliminating inter-group balances and inter-group transactions including unrealized profits/losses in period end assets, such as inventories, fixed assets etc. The difference between the Company's cost of investments in the Subsidiaries, over its portion of equity at the time of acquisition of shares is recognized in the consolidated financial statements as Goodwill or Capital Reserve, as the case may be. Minority Interest's share in net profit/loss of consolidated subsidiaries for the year is adjusted against the income of the Group in order to arrive at the net income attributable to equity shareholders of the Company. Minority Interest's share in net assets of consolidated subsidiaries is presented in the Consolidated Balance Sheet separate from liabilities and the equity of the Company's shareholders. Minority Interest in the consolidated financial statements is identified and recognized after taking into consideration:
  - (i) The amount of equity attributable to minorities at the date on which investments in a subsidiary is made.
  - (ii) The minorities' share of movement in equity since the date parent-subsidiary relationship came into existence.
  - (iii) The losses attributable to the minorities are adjusted against the minority interest in the equity of the subsidiary.
  - (iv) The excess of loss over the minority interest in the equity, is adjusted against General Reserve of the Company.
- (b) In case of foreign subsidiaries, being non-integral foreign operations, revenue items are translated at the average rates prevailing during the period. Assets, liabilities and equity are translated at the closing rate. Any exchange difference arising on translation is recognized in the "Foreign Currency Translation Reserve".
- (c) Investments in Associates are accounted for using equity method in accordance with AS 23. For this purpose investments are initially recorded at cost. Any Goodwill/Capital Reserve arising at the time of acquisition are identified and carrying amount of investment are adjusted thereafter for the post acquisition share of profits or losses. Adjustment for any change in equity that has not been included in the Profit and Loss Account are directly made in the carrying amount of investments without routing it through the Consolidated Profit and Loss Account. The corresponding debit/credit are made in the relevant head of the equity interest in the Consolidated Balance Sheet.
- (d) Interests in jointly controlled entities, where the Company is a direct venturer, are accounted for using proportionate consolidation in accordance with AS 27. The difference between costs of the Company's interests in jointly controlled entities over its share of net assets in the jointly controlled entities, at the date on which interest is acquired, is recognized in the CFS as Goodwill or Capital Reserve as the case may be.
- (e) The CFS are prepared by using uniform accounting policies for like transactions and other events in similar circumstances and necessary adjustments required for deviations, if any and to the extent possible, are made in the CFS and are presented in the same manner as the Company's separate financial statements except otherwise stated elsewhere in this schedule.

## 2. Significant Accounting Policies

### A. Accounting Convention

The financial statements are prepared under the historical cost convention, on accrual basis and in accordance with the generally accepted accounting principles in India, the applicable mandatory Accounting Standards as notified by the Companies (Accounting Standard) Rules, 2006 and the relevant provisions of the Companies Act, 1956 of India.

In the absence of any specific guidance being available under generally accepted accounting principles in India on accounting for business combination through purchase of shares (to the extent not covered under Accounting Standard 14 on 'Accounting for Amalgamations' and under Accounting Standard 10 on 'Accounting for Fixed Assets'), the Company has adopted the principles of International Financial Reporting Standards 3 (IFRS 3 - Accounting for Business Combinations), effective from financial year ended 31st March 2008. Accordingly, the aggregate of consideration (purchase price and transaction costs) paid by the acquirer company has been allocated to the assets acquired and liabilities assumed of the acquiree company, at their acquisition-date fair values.

**B. Use of Estimates**

The preparation of financial statements require estimates and assumptions to be made that affect the reported amount of assets and liabilities on the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Difference between the actual results and estimates are recognized in the period in which the results are known /materialized.

**C. Fixed Assets**

- (a) Tangible Assets are stated at cost less accumulated depreciation and impairment loss, if any. Cost comprises of purchase price and any directly attributable cost of bringing the assets to its working condition for its intended use.
- (b) Intangible Assets are stated at cost less accumulated amortization and impairment loss, if any. Cost includes any directly attributable expenditure on making the asset ready for its intended use.
- (c) Machinery spares which can be used only in connection with an item of Tangible Asset and whose use is not of regular nature are written off over the estimated useful life of the relevant asset.
- (d) Certain directly attributable pre-operative expenses during construction period are included under Capital Work in Progress. These expenses are allocated to the cost of Fixed Assets when the same are ready for intended use.

**D. Depreciation and Amortization**

- (a) Depreciation on Tangible Fixed Assets are provided using straight line method based on estimated useful life or on the basis of depreciation rates prescribed under respective local laws.
- (b) Mining Rights and leasehold land are amortized over the period of lease on straight line basis.
- (c) Intangible assets, other than Goodwill, are amortized over their estimated useful lives on straight line basis.
- (d) Depreciation on assets acquired under finance lease is spread over the lease term.

**E. Impairment**

An asset is treated as impaired when the carrying cost of the asset exceeds its recoverable value being higher of value in use and net selling price. Value in use is computed at net present value of cash flow expected over the balance useful life of the assets. An impairment loss is recognized as an expense in the Statement of Profit and Loss in the year in which an asset is identified as impaired. The impairment loss recognized in prior accounting period is reversed if there has been an improvement in recoverable amount.

**F. Leases**

- (a) Lease payments under an operating lease are recognized as expense in the profit and loss account as per terms of lease agreement.
- (b) Finance leases prior to 1st April, 2001: Lease rental recognized as expense in the profit and loss account as per terms of lease agreement.
- (c) Finance leases on or after 1st April, 2001: The lower of the fair value of the assets and the present value of the minimum lease rental is recorded as fixed assets with corresponding amount shown as unsecured Loan. The principal component in the lease rental is adjusted against the lease liability and the interest component is charged to profit and loss account as interest cost.

**G. Investments**

- (a) Long term investments are carried at cost after deducting provision, if any, for diminution in value considered to be other than temporary in nature.
- (b) Current investments are stated at lower of cost and fair value.

#### H. Inventories

- (a) Inventories of stores and spare parts are valued at or below cost after providing for cost of obsolescence and other anticipated losses, wherever considered necessary. Inventory of other items are valued 'At cost or Net Realizable Value, whichever is lower'. Cost is generally determined on weighted average cost basis and wherever required, appropriate overheads are taken into account. Net Realizable Value is the estimated selling price in the ordinary course of business less the estimated cost of completion and the estimated costs necessary to make the sale. However, materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be used are expected to be sold at or above cost.
- (b) Fair value hedges are mainly used to hedge the exposure to change in fair value of commodity price risks. The fair value adjustment remains part of the carrying value of inventory and enters into the determination of earnings when the inventory is sold.

#### I. Foreign Currency Transactions

Transactions in foreign currency are recorded at the rate of exchange prevailing on the date of transaction. Year end balance of foreign currency monetary item is translated at the year end rates. Exchange differences arising on settlement of monetary items or on reporting of monetary items at rates different from those at which they were initially recorded during the period or reported in previous financial statements are recognized as income or expense in the period in which they arise. Foreign currency monetary items those are used as hedge instruments or hedged items are accounted as per accounting policy on derivative financial instruments.

#### J. Employee benefits

Employee benefits of short term nature are recognized as expense as and when these accrue. Long term employee benefits and post employment benefits, whether funded or otherwise, are recognized as expense based on actuarial valuation at year end using the projected unit credit method. For discounting purpose, market yield of government bonds, at the balance sheet date, is used except in case of Novelis Inc. for which such discounting is done on the basis of high quality country-specific corporate bond yield. Actuarial gains or losses are recognized immediately in the Statement of Profit & Loss except in case of Novelis Inc. for which such gains or losses are accounted directly in Reserves and Surplus as it is not considered practicable to adopt a common accounting policy due to potential volatility caused by periodic changes in the assumptions underlying the computation of the actuarial liabilities.

#### K. Employee Share Based Payments

Equity settled stock options granted to employees pursuant to the Company's stock option schemes are accounted for as per the intrinsic value method prescribed by Employee Stock Option Scheme and permitted by the SEBI guidelines, 1999 and the Guidance Note on Share Based Payment issued by the Institute of Chartered Accountants of India (ICAI). The intrinsic value of the option being excess of market value of the underlying share immediately prior to date of grant over its exercise price is recognised as deferred employee compensation with a credit to Employees Stock Options Outstanding Account. The deferred employee compensation is charged to Statement of Profit and Loss on straight line basis over the vesting period of the option. In case of forfeiture stock option which is not vested, amortised portion is reversed by credit to employee compensation expense. In a situation where the stock option expires unexercised, the related balance standing to the credit of the employees Stock Options Outstanding Account are transferred to the General Reserve.

#### L. Revenue Recognition

Sales revenue is recognized on transfer of significant risk and rewards of the ownership of the goods to the buyer and stated at net of trade discount and rebates. Dividend income on investments is accounted for when the right to receive the payment is established. Export incentive, certain insurance, railway and other claims where quantum of accruals cannot be ascertained with reasonable certainty, are accounted on acceptance basis.

#### M. Borrowing Cost

Borrowing costs directly attributable to the acquisition or construction of qualifying assets are capitalized. Other borrowing costs are recognized as expenses in the period in which they are incurred. In determining the amount of borrowing costs eligible for capitalization during a period, any income earned on the temporary investment of those borrowings is deducted from the borrowing costs incurred.

**N. Taxation**

Provision for current income tax is made in accordance with local laws. Deferred tax liabilities and assets are recognized at substantively enacted tax rates, subject to the consideration of prudence, on timing difference.

**O. Derivative Financial Instruments**

- (a) The Company uses derivative financial instruments such as Forwards, Swaps, Options, etc. to hedge its risks associated with foreign exchange fluctuations. Risks associated with fluctuations in the price of the Company's products are minimized by undertaking appropriate hedging transactions. Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated in a hedge relationship. 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.
- (b) For derivative financial instruments and foreign currency monetary items designated as Cash Flow hedges, the effective portion of the fair value of the derivative financial instruments are recognized in Hedging Reserve and reclassified to 'Revenue from Operations', 'Cost of Raw Materials Consumed', 'Finance Costs' and 'Other Expenses' in the period in which the Statement of Profit and Loss is impacted by the hedged items or in the period when the hedge relationship no longer qualifies as cash flow hedge. In cases where the exposure gives rise to a non-financial asset, the effective portion is reclassified from Hedging Reserve to the initial carrying amount of the non-financial asset as a 'basis adjustment' and recycled to the Statement of Profit and Loss when the respective non-financial asset affects the Statement of Profit and Loss in future periods. The ineffective portion of the change in fair value of such instruments is recognised in the Statement of Profit and Loss in the period in which they arise. If the hedging relationship ceases to be effective or it becomes probable that the expected transaction will no longer occur, hedge accounting is discontinued and the fair value changes arising from the derivative financial instruments are recognized in Other Expenses in the Statement of Profit and Loss.
- (c) For derivative financial instruments designated as Fair Value hedges, the fair value of both the derivative financial instrument and the hedged item are recognized in 'Revenue from Operations', 'Cost of Raw Materials Consumed', 'Finance Costs' or 'Other Expenses' in the Statement of Profit and Loss till the period the relationship is found to be effective. If the hedging relationship ceases to be effective or it becomes probable that the expected transaction will no longer occur, future gains or losses on the derivative financial instruments are recognized in 'Other Expenses' in the Statement of Profit and Loss.
- (d) For derivative financial instruments designated as Net Investment Hedges in Foreign Operations, gains and losses on derivative instruments are included, net of taxes, to the extent the hedges are effective, in the Foreign Currency Translation Reserve. The ineffective portion of net investment hedges in foreign operations, if any, are recognized as gains or losses and included in 'Other Expenses'.
- (e) If no hedging relationship is designated, the fair value of the derivative financial instruments is marked to market through Statement of Profit and Loss and included in 'Other Expenses'.

**P. Research and Development**

Expenditure incurred during research and development phase is charged to revenue when no intangible asset arises from such research. Assets procured for research and development activities are generally capitalized.

**Q. Government Grants**

Government Grants are recognized when there is a reasonable assurance that the same will be received. Revenue grants are recognized in the Statement of Profit and Loss. Capital grants relating to specific fixed assets are reduced from the gross value of the respective fixed assets. Other capital grants are credited to Capital Reserve.

**R. Provisions, Contingent Liabilities and Contingent Assets**

Provision is recognized when there is a present obligation as a result of a past event that probably requires an outflow of resources and a reliable estimate can be made of the amount of the obligation. Disclosure for contingent liability is made when there is a possible obligation or a present obligation that may, but probably will not, require an outflow of resources. No provision is recognized or disclosure for contingent liability is made when there is a possible obligation or a present obligation and the likelihood of outflow of resources is remote. Contingent Asset is neither recognized nor disclosed in the financial statements.

3. The list of subsidiaries, joint ventures and associates which are included in the CFS of the Group and the Group's effective ownership interest therein are as under:

Name of the Company	Relationship	Country of Incorporation	Group's proportion of Ownership Interest	
			31/03/2013	31/03/2012
Minerals & Minerals Limited	Subsidiary	India	100.00%	100.00%
Aditya Birla Chemicals (India) Limited	Subsidiary	India	54.65%	54.65%
Utkal Alumina International Limited	Subsidiary	India	100.00%	100.00%
Suvas Holdings Limited	Subsidiary	India	51.00%	51.00%
Renukeshwar Investments & Finance Limited	Subsidiary	India	100.00%	100.00%
Renuka Investments & Finance Limited	Subsidiary	India	100.00%	100.00%
Dahej Harbour and Infrastructure Limited	Subsidiary	India	100.00%	100.00%
Lucknow Finance Company Limited	Subsidiary	India	100.00%	100.00%
Hindalco-Almex Aerospace Limited	Subsidiary	India	97.18%	97.18%
HAAL USA Inc. #	Subsidiary	USA	-	97.18%
Tubed Coal Mines Limited	Subsidiary	India	60.00%	60.00%
East Coast Bauxite Mining Company Private Limited	Subsidiary	India	74.00%	74.00%
Mauda Energy Limited	Subsidiary	India	100.00%	100.00%
Birla Resources Pty Limited	Subsidiary	Australia	100.00%	100.00%
Aditya Birla Minerals Limited - (a)	Subsidiary	Australia	51.00%	51.00%
AV Minerals (Netherlands) B.V.	Subsidiary	Netherland	100.00%	100.00%
AV Metals Inc.	Subsidiary	Canada	100.00%	100.00%
Novelis Inc. - (b)	Subsidiary	Canada	100.00%	100.00%
Hindalco Guinea SARL ##	Subsidiary	South Africa	100.00%	-
Mahan Coal Limited	Joint Venture	India	50.00%	50.00%
Hydromine Global Minerals (GMBH) Limited	Joint Venture	British Virgin Islands	45.00%	45.00%
Idea Cellular Limited	Associate	India	6.89%	6.90%
Aditya Birla Science & Technology Company Limited	Associate	India	49.00%	49.00%

# Dissolved on 23rd April, 2012. Group's proportion of voting power was 100%.

## Incorporated during FY 2012-13.

- (a) For the purpose of consolidation, the consolidated financial statements of Aditya Birla Minerals Limited reflecting consolidation for following entities as at 31st March, 2013 prepared in accordance with International Financial Reporting Standards have been restated, where considered material, to comply with Generally Accepted Accounting Principles in India. Disclosures in respect of these foreign subsidiaries are given to the extent of available information.

Name of the Company	Relationship	Country of Incorporation	Group's proportion of Ownership Interest	
			31/03/2013	31/03/2012
Birla Maroochydore Pty Limited #	Subsidiary	Australia	51.00%	51.00%
Birla Nifty Pty Limited #	Subsidiary	Australia	51.00%	51.00%
Birla Mt. Gordon Pty Limited #	Subsidiary	Australia	51.00%	51.00%

# Group's proportion of voting power is 100%.



- (b) For the purpose of consolidation, the consolidated financial statements of Novelis Inc. reflecting consolidation for following entities as at 31st March, 2013 have been prepared in accordance with Generally Accepted Accounting Principles in India and other recognized accounting practices and policies followed by the Company.

Name of the Company	Relationship	Country of Incorporation	Group's proportion of Ownership Interest	
			31/03/2013	31/03/2012
Albrasilis - Aluminio do Brasil Industria e Comercia Ltda	Subsidiary	Brazil	99.99%	99.99%
Novelis do Brasil Ltda.	Subsidiary	Brazil	99.99%	99.99%
4260848 Canada Inc.	Subsidiary	Canada	100.00%	100.00%
4260856 Canada Inc.	Subsidiary	Canada	100.00%	100.00%
8018227 Canada Inc	Subsidiary	Canada	100.00%	100.00%
8018243 Canada Limited	Subsidiary	Canada	100.00%	100.00%
Novelis Cast House Technology Ltd.	Subsidiary	Canada	100.00%	100.00%
Novelis No. 1 Limited Partnership	Subsidiary	Canada	100.00%	100.00%
Novelis (China) Aluminum Products Co. Limited *	Subsidiary	China	100.00%	-
Novelis (Sanghai) Aluminum Trading Company *	Subsidiary	China	100.00%	-
Novelis Foil France SAS **	Subsidiary	France	100.00%	100.00%
Novelis Lamines France SAS	Subsidiary	France	100.00%	100.00%
Novelis PAE SAS	Subsidiary	France	100.00%	100.00%
Novelis Aluminium Beteiligungs GmbH	Subsidiary	Germany	100.00%	100.00%
Novelis Deutschland GmbH	Subsidiary	Germany	100.00%	100.00%
Novelis Sheet Ingot GmbH *	Subsidiary	Germany	100.00%	-
Novelis Aluminium Holding Company	Subsidiary	Ireland	100.00%	100.00%
Novelis Italia SpA	Subsidiary	Italy	100.00%	100.00%
Novelis Luxembourg SA **	Subsidiary	Luxembourg	-	100.00%
Aluminum Company of Malaysia Berhad	Subsidiary	Malaysia	59.15%	58.24%
Alcom Nikkei Specialty Coatings Sdn Berhad #	Subsidiary	Malaysia	59.15%	58.24%
Al Dotcom Sdn Berhad #	Subsidiary	Malaysia	59.15%	58.24%
Novelis (India) Infotech Ltd.	Subsidiary	India	100.00%	100.00%
Novelis de Mexico SA de CV	Subsidiary	Mexico	100.00%	100.00%
Novelis Korea Ltd.	Subsidiary	South Korea	99.99%	99.24%
Novelis AG	Subsidiary	Switzerland	100.00%	100.00%
Novelis Switzerland SA	Subsidiary	Switzerland	100.00%	100.00%
Novelis Europe Holdings Limited	Subsidiary	UK	100.00%	100.00%
Novelis UK Ltd.	Subsidiary	UK	100.00%	100.00%
Aluminum Upstream Holdings LLC (Delaware)	Subsidiary	USA	100.00%	100.00%
Eurofoil, Inc. (USA) (New York)	Subsidiary	USA	100.00%	100.00%
Logan Aluminium Inc. (Delaware) ##	Subsidiary	USA	40.00%	40.00%
Novelis Corporation (Texas)	Subsidiary	USA	100.00%	100.00%
Novelis Madeira, Unipessoal, Limited	Subsidiary	Portugal	100.00%	100.00%

Name of the Company	Relationship	Country of Incorporation	Group's proportion of Ownership Interest	
			31/03/2013	31/03/2012
Novelis Services Limited	Subsidiary	UK	100.00%	100.00%
Novelis Brand LLC (Delaware)	Subsidiary	USA	100.00%	100.00%
Novelis PAE Corp (Delaware)	Subsidiary	USA	100.00%	100.00%
Novelis South America Holdings LLC	Subsidiary	USA	100.00%	100.00%
Evermore Recycling LLC **	Subsidiary	USA	-	55.80%
Novelis Acquisitions LLC (Delaware)	Subsidiary	USA	100.00%	100.00%
Novelis North America Holdings LLC (Delaware)	Subsidiary	USA	100.00%	100.00%
Novelis Delaware LLC (Delaware)	Subsidiary	USA	100.00%	100.00%
Novelis Vietnal Company Limited *	Subsidiary	Vietnam	100.00%	-
Novelis MEA Limited (Dubai) *	Subsidiary	UAE	100.00%	-
Consortio Candonga	Associate	Brazil	50.00%	50.00%
France Aluminium Recyclage SA	Associate	France	20.00%	20.00%
Aluminium Norf GmbH	Associate	Germany	50.00%	50.00%
Deutsche Aluminium Verpackung Recycling GmbH	Associate	Germany	30.00%	30.00%
MiniMRF LLC (Delaware)	Associate	USA	50.00%	50.00%

# Group's proportion of voting power is 100%.

## Subsidiary on account of management control.

\* Acquired/Incorporated during FY 2012-13.

\*\* Disposed/Dissolved during FY 2012-13.

- The consolidated accounts for the year ended 31st March, 2012 include ₹ 62.02 crore being share of profit of the Group in Idea Cellular Limited relating to the year ended 31st March, 2011 which due to non availability of account at that time was not included in the consolidated accounts of the Group for the year ended 31st March, 2011. Consequently, consolidated net profit of the previous year was higher by the said amount and hence current year consolidated net profit is not comparable to that extent.
- Accounting Policy in respect of "Environment and Rehabilitation Expenditure" followed by the Company's Australian subsidiaries namely Aditya Birla Minerals Limited, Birla Maroochydore Pty Limited, Birla Nifty Pty Limited, Birla Mt. Gordon Pty Limited and Birla Resources Pty Limited are different from the accounting policies followed by the Company. The difference between the accounting policy followed and the amount involved is given below:

Accounting Policy		2012-13		2011-12	
Parent	Subsidiary	₹ Crore	Proportion	₹ Crore	Proportion
The cost of reclamation of mined out land, forestation are treated as part of Other Expenses when cost incurred.	Provision for estimated future cost of environmental and rehabilitation using net present value are made and capitalized as mine properties and amortized over remaining life of the mine. Any change in net present value at Balance Sheet date is considered as finance cost.	297.45	100%	246.88	100%

Further, in view of different sets of environment in which foreign subsidiaries operate in their respective countries, provision for depreciation is made to comply with local laws and by use of management estimate. It is practically not possible to align rates of depreciation of such subsidiaries with those of the Company. However on review, the management is of the opinion that provision of such depreciation is adequate.

6. **Interests in Joint Ventures:**

The Group's interests in jointly controlled entities are accounted for using proportionate consolidation. The aggregate amount of each of the assets, liabilities, income, expenditure, contingent liabilities and commitments related to the Group's interests in its jointly controlled entities included in these CFS are given below:

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
<b>BALANCE SHEET</b>		
<b>Equity and Liabilities</b>		
<b>Shareholders' Funds</b>		
Share Capital	27.02	22.02
Reserves and Surplus	(3.37)	(3.92)
	<b>23.65</b>	<b>18.10</b>
<b>Share Application Money pending allotment</b>	29.55	28.45
<b>Non Current Liabilities</b>		
Long-term Provisions	0.02	0.01
	<b>0.02</b>	<b>0.01</b>
<b>Current Liabilities</b>		
Short-term Borrowings	0.60	0.36
Trade Payables	0.01	0.01
Other Current Liabilities	2.53	2.21
Short-term Provisions	-	-
	<b>3.14</b>	<b>2.58</b>
	<b>56.36</b>	<b>49.14</b>
<b>Assets</b>		
<b>Non Current Assets</b>		
Fixed Assets		
Tangible Assets	10.82	10.06
Intangible Assets	0.01	0.01
Capital Work-in-Progress	38.71	34.74
Long-term Loans and Advances	1.18	0.38
	<b>50.72</b>	<b>45.19</b>
<b>Current Assets</b>		
Cash and Bank Balances	5.12	3.55
Short-term Loans and Advances	0.47	0.34
Other Current Assets	0.05	0.06
	<b>5.64</b>	<b>3.95</b>
	<b>56.36</b>	<b>49.14</b>

**STATEMENT OF PROFIT AND LOSS**

	Year ended	
	31/03/2013	31/03/2012
<b>Income</b>		
Other Income	0.22	0.07
<b>Total Income</b>	<b>0.22</b>	<b>0.07</b>
<b>Expenses</b>		
Employee Benefits Expenses	0.01	0.01
Finance Costs	0.01	-
Depreciation and Amortization	0.03	0.01
Other Expenses	0.90	1.63
<b>Total Expenses</b>	<b>0.95</b>	<b>1.65</b>
Profit before Tax	(0.73)	(1.58)
Current Tax	0.07	0.02
<b>Profit/(Loss) for the year</b>	<b>(0.80)</b>	<b>(1.60)</b>

	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
<b>Contingent Liabilities and Commitments</b>		
Contingent Liabilities - Guarantees	16.71	16.71
Capital Commitments (Net of Advances)	1.02	0.07
<b>7. Share Capital:</b>		
<b>Authorized:</b>		
2,100,000,000 (Previous year 2,100,000,000)		
Equity Shares of ₹ 1/- each	210.00	210.00
25,000,000 (Previous year 25,000,000) Redeemable		
Cumulative Preference Shares of ₹ 2/- each	5.00	5.00
	<b>215.00</b>	<b>215.00</b>
<b>Issued:</b>		
1,915,136,714 (Previous year 1,915,095,954)		
Equity Shares of ₹ 1/- each #	191.51	191.51
	<b>191.51</b>	<b>191.51</b>
<b>Subscribed and Paid-up:</b>		
1,915,129,317 (Previous year 1,915,088,557)		
Equity Shares of ₹ 1/- each fully paid-up	191.51	191.51
Less: Face value of 546,249 (Previous year 546,249)		
Equity Shares forfeited	0.05	0.05
	<b>191.46</b>	<b>191.46</b>
Add: Forfeited Shares (Amount originally Paid-up)	0.02	0.02
	<b>191.48</b>	<b>191.48</b>

# Issued Equity Share Capital includes 7,397 Equity Shares (Previous year 7,397 Equity Shares) of ₹1/- each issued on Rights basis kept in abeyance due to legal case pending.

Reconciliation of shares outstanding at the beginning and at the end of the reporting period:

	2012-13		2011-12	
	Numbers	(₹ Crore)	Numbers	(₹ Crore)
Equity Shares outstanding at the beginning of the period	1,914,542,308	191.46	1,914,397,914	191.44
Equity Shares allotted pursuant to exercise of ESOP	40,760	-	144,394	0.02
Equity Shares outstanding at the end of the period	1,914,583,068	191.46	1,914,542,308	191.46

<b>8. Reserves and Surplus:</b>		
	(₹ Crore)	
	As at	
	31/03/2013	31/03/2012
Capital Reserve	572.96	541.56
Capital Redemption Reserve	101.57	101.57
Securities Premium Account	3,352.31	3,345.74
Debenture Redemption Reserve	150.64	-
Actuarial Gain/(Loss) Reserve (refer Note No. 45)	(1,193.28)	(759.42)
Stock Options Outstanding Account	6.43	7.58
Foreign Currency Translation Reserve	1,257.22	801.76
Hedging Reserve (refer Note No. 41)	431.61	(204.47)
Special Reserve	10.81	10.03
Business Reconstruction Reserve (refer Note No. 44)	6,664.93	6,664.93
Business Restructuring Reserve	-	1.16
General Reserve	20,389.23	19,485.78
Surplus in the Statement of Profit and Loss - (a)	2,853.02	1,182.31
	<b>34,597.45</b>	<b>31,178.53</b>

(a) Allocations and Appropriations in Surplus in Statement of Profit and Loss are as under:

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Balance as at the beginning of the year	1,182.31	14.03
Adjustment on Acquisition, disposal and change in holding interest in Group Companies	(0.12)	(6.65)
Add: Profit for the year	3,026.89	3,396.95
Less: Dividend on Equity Shares	(268.05)	(296.76)
Less: Dividend Distribution Tax - (i)	(34.77)	(62.04)
Less: Transfer to Special Reserve	(0.78)	(1.04)
Less: Transfer to Debenture Redemption Reserve	(150.64)	-
Less: Transfer to General Reserve	(901.82)	(1,862.18)
	<b>2,853.02</b>	<b>1,182.31</b>

(i) Dividend Distribution Tax also include tax of on dividend paid/proposed by the Group Companies.

9. **Money received against Share Warrants:**

The Company has allotted 150,000,000 warrants on a preferential basis to the Promoter Group on 22nd March, 2012 entitling them to apply for and obtain allotment of one equity share of ₹ 1/- each fully paid-up at a price of ₹ 144.35 per share against each such warrant at any time after the date of allotment but on or before the expiry of 18 months from the date of allotment in one or more tranches. The Company has received ₹ 541.31 crore being 25% against these warrants. The entire amount so received has been utilised for various greenfield and brownfield projects expenditure.

10. **Long-term Borrowings:**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
<b>Secured</b>		
Bonds/Debentures/Notes	6,000.00	-
Term Loans:		
From Banks	28,342.96	23,454.65
From Other Parties	725.02	78.35
	<b>35,067.98</b>	<b>23,533.00</b>
<b>Unsecured</b>		
Bonds/Debentures/Notes	13,571.25	13,089.01
Term Loans		
From Banks	968.16	302.90
Deferred Payment Liabilities	1.89	3.02
Long term maturities of Finance Lease obligations	247.57	199.28
	<b>14,788.87</b>	<b>13,594.21</b>
	<b>49,856.85</b>	<b>37,127.21</b>



11. **Deferred Tax Liabilities (Net):**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Major components of deferred tax arising on account of temporary timing differences are given below:		
<b>Deferred Tax Liabilities</b>		
Depreciation and Amortization Expenses	4,990.73	5,073.72
Inventory Valuation Reserves	496.64	474.69
Other Timing Differences	548.71	628.02
	<b>6,036.08</b>	<b>6,176.43</b>
<b>Less: Deferred Tax Assets</b>		
Unabsorbed Business Losses	523.99	669.75
Employee's Separation and Retirement Expenses	72.01	141.66
Provision for Doubtful Debts, Loans and Advances	1,684.56	1,536.16
Other Timing Differences	287.84	223.85
	<b>2,568.40</b>	<b>2,571.42</b>
	<b>3,467.68</b>	<b>3,605.01</b>

12. **Other Long-term Liabilities:**

Trade Payables	11.53	1.92
Derivative Liabilities (refer Note No. 41)	157.60	235.75
Liability for Capital Expenditure	1,023.67	1,109.68
Security and other Deposits	4.40	3.68
Other Payables	136.42	109.00
	<b>1,333.62</b>	<b>1,460.03</b>

13. **Long-term Provisions:**

Provision for Employee Benefits	4,421.04	3,916.26
Provision for Claims against Company	101.75	179.98
Provision for Assets Retirement Obligations	77.52	74.47
Provision for Restructuring	4.65	6.99
Provision for Rehabilitation	276.17	204.02
Provision for Tax contingencies	777.17	872.25
Other Provisions	32.38	34.79
	<b>5,690.68</b>	<b>5,288.76</b>

14. **Short-term Borrowings:**

(₹ Crore)

	<b>As at</b>	
	<b>31/03/2013</b>	<b>31/03/2012</b>
<b>Secured</b>		
Loans repayable on demand		
From Banks	106.22	25.64
From Other Parties	-	-
From Banks:		
Cash Credit, Export Credit etc.	79.85	164.05
Others	1,718.62	-
	<b>1,904.69</b>	<b>189.69</b>
<b>Unsecured</b>		
Loans repayable on demand		
From Banks		
From Other Parties	27.89	-
	65.23	159.52
From Banks:		
Payable under Trade Financing Arrangements	-	28.51
Buyers Credit	2,284.47	2,664.43
Packing Credit	1,297.40	599.79
Others	862.38	89.40
	<b>4,537.37</b>	<b>3,541.65</b>
	<b>6,442.06</b>	<b>3,731.34</b>
<b>15. Other Current Liabilities:</b>		
Current maturities of Long-term Debts	607.17	157.92
Current maturities of Finance Lease obligations	44.64	25.43
Interest accrued but not due on Borrowings/Deposits	1,009.91	353.77
Unclaimed Dividends	7.31	12.33
Application/Call Money received due for refund	0.31	0.44
Advance from Customers	236.82	238.92
Derivative Liabilities (refer Note No. 41)	602.00	731.62
Liability for Capital Expenditure	1,408.39	1,181.01
Security and other Deposits	28.75	30.07
Statutory dues payable	461.25	453.18
Other Payables	1,079.36	955.62
	<b>5,485.91</b>	<b>4,140.31</b>

16. Short-term Provisions:

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Provision for Employee Benefits	234.23	210.81
Proposed Dividends (including Dividend Distribution Tax)	315.06	359.40
Provision for Current Tax (Net of Advance Tax)	800.60	563.57
Provision for Claims against Company	2.41	3.42
Provision for Restructuring	171.82	133.44
Provision for Rehabilitation	-	16.53
Provision for Warranties	2.06	1.47
Other Provisions	84.18	88.43
	<b>1,610.36</b>	<b>1,377.07</b>

17. Tangible Assets:

(₹ Crore)

	Cost		Accumulated Depreciation		Accumulated Impairment		Net Carrying Amount	
	31/03/2013	31/03/2012	31/03/2013	31/03/2012	31/03/2013	31/03/2012	31/03/2013	31/03/2012
Leasehold Land	127.97	106.12	13.06	11.11	-	-	114.91	95.01
Leasehold Improvements	220.84	36.42	48.58	25.60	1.13	-	171.13	10.82
Freehold Land	1,195.53	1,076.24	23.64	16.15	46.54	43.63	1,125.35	1,016.46
Buildings	6,128.89	5,339.20	2,030.55	1,626.28	15.88	12.56	4,082.46	3,700.36
Plant and Equipment	30,732.99	27,629.56	15,317.88	13,188.26	266.70	242.65	15,148.41	14,198.65
Furniture and Fixtures	817.12	832.56	473.55	469.77	-	-	343.57	362.79
Vehicles and Aircraft	503.76	504.89	171.56	141.94	-	-	332.20	362.95
Office Equipment	336.88	207.89	222.47	144.92	0.34	-	114.07	62.97
Railway Sidings	87.19	86.55	35.40	27.25	-	-	51.79	59.30
Rehabilitation Assets	11.00	5.13	5.24	3.08	-	-	5.76	2.05
	<b>40,162.17</b>	<b>35,824.56</b>	<b>18,341.93</b>	<b>15,654.36</b>	<b>330.59</b>	<b>298.84</b>	<b>21,489.65</b>	<b>19,871.36</b>

18. Intangible Assets:

(₹ Crore)

	Cost		Accumulated Amortisation		Accumulated Impairment		Net Carrying Amount	
	31/03/2013	31/03/2012	31/03/2013	31/03/2012	31/03/2013	31/03/2012	31/03/2013	31/03/2012
Goodwill on Consolidation	11,839.74	11,066.49	-	-	-	-	11,839.74	11,066.49
Brands/Trademarks	779.17	747.15	234.57	176.11	-	-	544.60	571.04
Computer Software	676.27	318.66	301.39	225.37	-	-	374.88	93.29
Mining Rights	2,067.99	1,753.18	1,184.43	933.17	-	-	883.56	820.01
Technology	961.90	910.16	396.80	307.67	-	-	565.10	602.49
Licences	22.36	22.36	4.10	1.86	-	-	18.26	20.50
Favorable Contracts	748.11	703.67	513.13	418.76	-	-	234.98	284.91
Customer Relationship	2,495.28	2,367.92	727.72	575.36	-	-	1,767.56	1,792.56
Rehabilitation Assets	297.44	246.88	90.86	69.26	-	-	206.58	177.62
	<b>19,888.26</b>	<b>18,136.47</b>	<b>3,453.00</b>	<b>2,707.56</b>	<b>-</b>	<b>-</b>	<b>16,435.26</b>	<b>15,428.91</b>

19. **Non-Current Investments:**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Long-term Investments in Equity Instruments		
Associates - (a)	5,275.73	5,193.10
Others	355.56	356.26
Long-term Investments in Preference Shares	45.03	25.00
Long-term Investments in Debentures and Bonds	107.75	94.99
Long-term Investments in Government Securities	20.11	20.11
Long-term Investments in Mutual Funds	2.00	2.00
	<b>5,806.18</b>	<b>5,691.46</b>

(a) Investments in Associates include ₹ 4,209.97 crore (Previous year ₹ 3,943.19 crore) towards goodwill arising on the acquisition of these Associates.

20. **Long-term Loans and Advances:**

(Unsecured, Considered Good unless otherwise stated)

Capital Advances	1,833.68	2,573.22
Loans, Advances and Deposits to Related Parties - (a)	139.70	156.34
Inter Corporate Loans, Advances and Deposits	-	26.78
Security Deposits	74.77	55.84
Advances recoverable in cash or in kind		
Unsecured, Considered Good	566.09	340.00
Doubtful	0.02	-
	566.11	340.00
Less: Provision for doubtful amount	0.02	-
	<b>566.09</b>	<b>340.00</b>
Other Advances and Balances		
Advance Income Tax (Net of Provision for Taxation)	28.86	19.25
Balance with Government Authorities	-	143.44
Prepaid Expenses	2.58	1.98
Others - (b)	524.41	456.83
	<b>3,170.09</b>	<b>3,773.68</b>

(a) Loans, Advances and Deposits to Related Parties include balance of ₹ 34.45 crore (Previous year ₹ 34.45 crore) with Trident Trust which represents 16,316,130 equity shares of ₹ 1/- each fully paid-up of the Company issued pursuant to a Scheme of Arrangement approved by the Hon'ble High Courts at Mumbai and Allahabad vide their Orders dated 31st October, 2002 and 18th November, 2002, respectively, to the Trident Trust, which is created wholly for the benefit of the Company and is being managed by trustees appointed by it. The tenure of the trust is up to 23rd January, 2017.

(b) Others include CENVAT credit receivable, VAT credit receivable, Service Tax credit receivable, etc. primarily relating to ongoing projects.

21. **Other Non-Current Assets:**

(₹ Crore)

	<b>As at</b>	
	<b>31/03/2013</b>	<b>31/03/2012</b>
Long Term Trade Receivables		
Doubtful	19.27	15.54
Less: Provision for doubtful amount	19.27	15.54
Deposits with Bank exceeding 12 months maturity	1.95	27.45
Inventories (Work-in-Progress)	432.04	402.69
Interest Accrued	0.16	1.98
Derivative Assets (refer Note No. 41)	38.87	16.02
Unamortized Expenses	91.11	86.64
Other Receivables	185.16	286.83
	<b>749.29</b>	<b>821.61</b>
22. <b>Current Investments:</b>		
Investments in Government Securities	287.57	198.78
Investments in Debentures and Bonds		
Associates	10.00	-
Others	1,105.81	3.22
Investments in Certificate of Deposits	430.93	614.43
Investments in Mutual Funds	4,807.06	3,981.92
<b>Current portion of Long-term Investments</b>		
Investments in Government Securities	166.19	61.21
	<b>6,807.56</b>	<b>4,859.56</b>
23. <b>Inventories:</b>		
Raw Materials	4,950.54	5,045.06
Work-in-Progress	6,185.66	5,462.14
Finished Goods	1,737.75	1,589.67
Stock-in-Trade	1.05	-
Stores and Spares	1,099.31	962.12
Coal and Fuel	357.37	187.04
	<b>14,331.68</b>	<b>13,246.03</b>
24. <b>Trade Receivables:</b>		
Outstanding for a period exceeding six months		
Unsecured, Considered Good	41.95	24.93
Doubtful	37.86	41.46
Outstanding for a period less than six months		
Secured, Considered Good	63.58	102.34
Unsecured, Considered Good	8,846.75	7,889.90
Doubtful	7.72	7.99
	<b>8,997.86</b>	<b>8,066.62</b>
Less: Provision for doubtful amount	45.58	49.45
	<b>8,952.28</b>	<b>8,017.17</b>



25. **Cash and Bank Balances:**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
<b>Cash and Cash Equivalents</b>		
Balance with Banks:		
Deposits with less than 3 months initial maturity	1,034.09	1,243.22
Current Accounts	1,080.70	1,073.58
Cheques and drafts on hand	68.88	411.80
Cash on hand	0.51	0.89
	<b>2,184.18</b>	<b>2,729.49</b>
<b>Other Balances</b>		
Balance with Banks:		
Earmarked Balances	8.25	8.81
Margin Money Account	5.18	10.20
Deposits with more than 3 months initial maturity	1,571.90	547.49
	<b>1,585.33</b>	<b>566.50</b>
	<b>3,769.51</b>	<b>3,295.99</b>
<b>26. Short-term Loans and Advances:</b>		
Loans, Advances and Deposits to Related Parties		
Unsecured, Considered Good	226.90	187.63
Inter Corporate Loans, Advances and Deposits		
Unsecured, Considered Good	53.26	72.69
Security Deposits		
Unsecured, Considered Good	30.09	33.11
Doubtful	0.25	0.25
	<b>30.34</b>	<b>33.36</b>
Less: Provision for doubtful amount	0.25	0.25
	<b>30.09</b>	<b>33.11</b>
Advances recoverable in cash or in kind		
Unsecured, Considered Good	1,905.66	1,244.83
Doubtful	13.17	12.80
	<b>1,918.83</b>	<b>1,257.63</b>
Less: Provision for doubtful amount	13.17	12.80
	<b>1,905.66</b>	<b>1,244.83</b>
Other Advances and Balances - Unsecured, Considered Good		
Advance Income Tax (Net of Provision for Taxation)	26.78	0.97
Balance with Government Authorities	259.47	34.74
Prepaid Expenses	48.51	43.07
Others	706.63	541.62
	<b>3,257.30</b>	<b>2,158.66</b>

(a) Others under head "Other Advances and Balances" mainly include CENVAT credit receivable, VAT credit receivable, Service Tax credit receivable, etc.

27. **Other Current Assets:**

Accrued Export and Other Incentives	111.63	102.25
Accrued Interest	111.57	46.31
Derivative Assets (refer Note No. 41)	1,260.52	811.32
Assets held for Sale	45.59	132.48
Unamortized Expenses	1.50	1.50
Other Receivables	458.93	345.85
	<b>1,989.74</b>	<b>1,439.71</b>

28. **Revenue from Operations:**

	Year ended	
	31/03/2013	31/03/2012
Sale of Products	81,725.04	82,096.53
Sale of Services	30.66	24.14
Other Operating Revenues	487.29	428.36
Gross Revenue from Operations	<b>82,242.99</b>	<b>82,549.03</b>
Less: Excise Duty	2,050.19	1,727.66
Net Revenue from Operations	<b>80,192.80</b>	<b>80,821.37</b>

29. **Other Income:**

Interest Income		
On Long-term Investments	8.97	9.72
On Current Investments	82.57	45.62
On Others	295.60	170.27
Dividend Income		
On Long-term Investments	16.79	20.77
On Current Investments	143.61	315.17
Gain/(Loss) on sale of Investments (Net)		
On Long-term Investments	1.68	10.82
On Current Investments	407.35	2.58
Adjustments to the carrying amount of Investments (Net)		
On Long-term Investments	(0.11)	(0.11)
On Current Investments	3.41	(0.77)
Profit/(Loss) on Fixed Assets sold/discarded (Net)	(51.26)	(34.69)
Rent Income	11.12	16.50
Liabilities/Provisions no longer required written back	40.88	164.68
Other Non-Operating Income (Net)	133.11	77.94
	<b>1,093.72</b>	<b>798.50</b>
Less: Transfer to Capital Work-in-Progress/Finance Costs - (a)	81.49	15.43
	<b>1,012.23</b>	<b>783.07</b>

(a) Include ₹ 81.22 crore (Previous year ₹ 14.76 crore) income derived from temporary deployment of surplus fund out of specific borrowing for various projects deducted from borrowing costs.

30. **Cost of Materials Consumed:**

	Year ended	
	31/03/2013	31/03/2012
Raw Materials	49,170.42	50,392.97
Packing Materials	10.68	8.84
	<b>49,181.10</b>	<b>50,401.81</b>
Less: Transfer to Capital Work-in-Progress	1.06	0.02
	<b>49,180.04</b>	<b>50,401.79</b>

31. **Changes in Inventories:**

	(₹ Crore)	
	Year ended	
	31/03/2013	31/03/2012
<b>Opening Inventories</b>		
Work-in-Progress	5,864.83	5,805.72
Finished Goods	1,589.67	1,775.73
Stock-in-Trade	-	-
	<b>7,454.50</b>	<b>7,581.45</b>
<b>Less: Closing Inventories</b>		
Work-in-Progress	6,617.70	5,864.83
Finished Goods	1,737.75	1,589.67
Stock-in-Trade	1.05	-
	<b>8,356.50</b>	<b>7,454.50</b>
	(902.00)	126.95
Add: Inventories on acquisition of Business	-	8.81
Add: Increase/Decrease of Excise Duty on Inventories	(5.52)	5.41
Add: Foreign Currency Translation Adjustments	241.23	522.12
	<b>(666.29)</b>	<b>663.29</b>
<b>32. Employee Benefits Expenses:</b>		
Salaries and Wages	5,473.42	5,085.69
Contribution to Provident and other Funds	223.94	314.31
Employee Stock Option Scheme	0.27	1.29
Employee Welfare	1,032.56	982.98
	<b>6,730.19</b>	<b>6,384.27</b>
Less: Transfer to Capital Work-in-Progress	204.58	135.42
	<b>6,525.61</b>	<b>6,248.85</b>
<b>33. Power and Fuel:</b>		
Power and Fuel	5,251.03	4,774.21
Less: Transfer to Capital Work-in-Progress	50.90	11.53
	<b>5,200.13</b>	<b>4,762.68</b>
<b>34. Finance Costs:</b>		
Interest Expenses	4,198.12	2,792.21
Other Borrowing Costs	129.53	48.68
(Gain)/Loss on foreign currency transactions and translation (Net)	-	1.10
	<b>4,327.65</b>	<b>2,841.99</b>
Less: Income on Specific Borrowing (refer Note No. 29 (a))	81.22	14.76
	<b>4,246.43</b>	<b>2,827.23</b>
Less: Transfer to Capital Work-in-Progress	2,167.32	1,069.25
	<b>2,079.11</b>	<b>1,757.98</b>
<b>35. Depreciation and Amortization:</b>		
Depreciation and Amortization	2,831.26	2,650.69
Less: Transfer to Capital Work-in-Progress	9.34	5.52
	<b>2,821.92</b>	<b>2,645.17</b>
<b>36. Impairment Loss/(Reversal) (Net):</b>		
The Group has carried out impairment test of various assets and identified impairment loss amounting to ₹ 39.17 crore (Previous year ₹ 219.01 crore) as a result of uneconomical operation.		

37. Other Expenses:

(₹ Crore)

	Year ended	
	31/03/2013	31/03/2012
Consumption of Stores and Spares	2,907.52	2,548.79
Repairs to Buildings	160.95	129.46
Repairs to Machinery	1,684.62	1,563.90
Rates and Taxes	125.32	101.28
Rent	168.45	162.83
Insurance	175.30	155.49
Payments to Auditors	34.99	43.76
Research and Development	275.09	230.25
Freight and Forwarding Expenses (Net)	3,101.78	2,489.82
Provision for Doubtful Loans, Advances and Receivables (Net)	(3.61)	3.03
Bad Loans, Advances and Receivables written off/(written back) (Net)	26.18	5.92
Pre-operative/Incidental Expenditure written off	4.15	-
Prior Period Items (Net)	65.50	3.80
Donation	19.65	35.51
Directors' Fees and Commission	21.41	17.25
(Gain)/Loss on on assets held for sale	(17.14)	-
(Gain)/Loss on Change in Fair Value of Derivatives (Net)	(127.31)	(688.47)
Cost of own Manufactured Products Capitalized/Used	(103.50)	(91.86)
Tolling Expenses	758.61	488.58
Miscellaneous Expenses	3,180.27	3,499.48
	<b>12,458.23</b>	<b>10,698.82</b>
Less: Transfer to Capital Work-in-Progress	383.63	345.20
	<b>12,074.60</b>	<b>10,353.62</b>

38. Tax Expenses

**Current Tax**

Current Tax for the year	1,060.28	925.04
Less: MAT Credit Entitlement	9.82	3.33
	<b>1,050.46</b>	<b>921.71</b>
Tax adjustments for earlier years (Net)	(17.25)	(34.17)
	<b>1,033.21</b>	<b>887.54</b>

**Deferred Tax**

Deferred Tax for the year	(147.47)	(101.30)
	<b>(147.47)</b>	<b>(101.30)</b>

The Tax Expenses, Current as well as Deferred, are aggregate of the amount of tax expenses appearing in the separate financial statements of the Parent and its subsidiaries as well as joint ventures.

39. Earnings per Share (EPS)

Profit for the period (₹ Crore)	3,026.89	3,396.95
Weighted average number of shares used in the calculation of EPS:		
Weighted average number of Basic Equity Shares outstanding	1,914,567,153	1,914,479,614
Shares deemed to be issued for no consideration in respect of Employee Stock Options	95,595	201,570
Weighted average number of Diluted Equity Shares outstanding	1,914,662,748	1,914,681,184
Face value of per share (₹)	1.00	1.00
Basic EPS (₹)	15.81	17.74
Diluted EPS (₹)	15.81	17.74

## 40. Segment Reporting

## A. Primary Segment Reporting (by Business Segment):

- (a) The Group has three reportable segments viz. Aluminium, Copper and Others which have been identified in line with the Accounting Standard 17 on Segment Reporting, taking into account the organizational structure as well as differential risk and return of these segments. Details of products included in each segments are as under:
- Aluminium : Hydrate & Alumina, Aluminium and Aluminium Product.
  - Copper : Continuous Cast Copper Rods, Copper Cathode, Sulphuric Acid, DAP & Complexes, Gold and Silver.
  - Others : Caustic and Others.
- (b) Inter-segment transfers are based on market rates.
- (c) The details of the revenue, results, assets, liabilities and other information from operations by reportable business segments are follows:

(₹ Crore)

Particulars	Year ended 31/03/2013				Year ended 31/03/2012			
	Aluminium	Copper	Others	Total	Aluminium	Copper	Others	Total
<b>REVENUE</b>								
External	62,190.88	17,518.21	483.71	80,192.80	62,058.76	18,364.33	398.28	80,821.37
Inter Segment	67.73	24.49	322.53	414.75	60.34	14.66	216.26	291.26
Total	62,258.61	17,542.70	806.24	80,607.55	62,119.10	18,378.99	614.54	81,112.63
<b>RESULTS</b>								
Segment Results	4,387.95	740.32	132.28	5,260.55	4,495.24	1,119.35	82.97	5,697.56
Unallocated Corporate Income				892.52				566.11
Unallocated Corporate Expenses				(165.16)				(160.75)
Finance Costs				(2,079.11)				(1,757.98)
Tax Expenses				(885.74)				(786.24)
Share in Profit/(Loss) of Associates				(15.76)				49.56
Minority Interest				19.59				(211.31)
Profit for the period				3,026.89				3,396.95
<b>OTHER INFORMATION</b>								
<b>Assets:</b>								
Segment Assets	91,463.64	11,888.21	1,417.61	104,769.46	74,851.55	12,454.21	1,232.09	88,537.85
Unallocated Corporate Assets				15,820.15				12,864.39
Total Assets				120,589.61				101,402.24
<b>Liabilities:</b>								
Segment Liabilities	17,257.67	2,694.18	180.71	20,132.56	16,224.00	4,613.47	87.84	20,925.31
Unallocated Corporate Liabilities				63,367.54				46,856.56
Total Liabilities				83,500.10				67,781.87
Capital Expenditure	13,506.17	401.65	181.68		12,794.89	162.44	844.42	
Depreciation and Amortization	2,223.35	515.36	60.37		2,145.56	427.88	54.02	
Impairment Loss/ (Reversal) (Net)	21.92	17.25	-		219.01	-	-	
Other Non-Cash Expenses	27.95	2.04	3.33		6.11	8.56	0.08	



**B. Secondary Segment Reporting (by Geographical demarcation):**

- (a) The secondary segment is based on geographical demarcation i.e. India and Rest of the World.  
(b) The Group's revenue from external customers and information about its assets and others by geographical location are follows:

(₹ Crore)

	Year ended 31/03/2013			Year ended 31/03/2012		
	India	Rest of World	Total	India	Rest of World	Total
Revenue	19,195.41	61,412.14	80,607.55	19,280.38	61,832.25	81,112.63
Assets	51,287.91	53,481.55	104,769.46	41,943.47	46,594.38	88,537.85
Capital Expenditure	9,562.80	4,526.70	14,089.50	10,969.84	2,831.91	13,801.75

**41. Derivative Financials Instruments and Risk Management:**

- (a) The Company has adopted Accounting Standard 30, "Financial Instruments: Recognition and Measurement" issued by The Institute of Chartered Accountants of India so far as it relates to derivative accounting.  
(b) In the ordinary course of business, the Company is exposed to risks resulting from changes in prices of commodity, exchange rate fluctuation and interest rate movements. It manages its exposure to these risks through derivative financial instruments. It uses derivative instruments such as forwards, futures, swaps and options to manage these risks. These derivative financial instruments reduce the impact of both favourable and unfavourable fluctuations. Except where noted, the derivative contracts are marked-to-market (MTM) and the related gains and losses are included in the Statement of Profit & Loss in the current accounting period.

The Company's risk management activities are subject to the management, direction and control of Risk Management Board (RMB). The RMB is composed of two directors including Managing Director, Chief Financial Officer and other officers and employees selected by the Managing Director. The RMB reports to the Board of Directors on the scope of its activities.

The decision of whether and when to execute derivative financial instruments along with its tenure can vary from period to period depending on market conditions and the relative costs of the instruments. The tenure is always linked to the timing of the underlying exposure, with the connection between the two being regularly monitored.

The Company is exposed to losses in the event of non-performance by the counterparties to the derivative contracts. All derivative contracts are executed with counterparties that, in our judgment, are creditworthy. The credit levels are reviewed to ensure that there is not an inappropriate concentration of outstanding to any particular counterparty.

**Commodity Price Risk**

**Copper and Precious Metals**

This business is conducted under a conversion model. The prices of input and output are derived from the same benchmark and/or are linked to each other through a defined formula. The objective of risk management is to attempt to use derivatives to match the price fluctuations arising out of the timing mismatch in pricing the input and output so as to 'pass through' the change in input cost to customers to make the margins immune to the fluctuations in prices of the input and output.

**Aluminium**

This business is vertically integrated. The main raw material viz. bauxite (mostly mined from own mines) and other purchased raw materials do not have any linkage with the output price which is Aluminium LME prices. When the prices of input(s) and output(s) do not follow the above condition, then risk management attempts to use derivatives so as to protect the margins from adverse movements in prices on either side, i.e. from a rise in input cost or from a fall in output price.

As a condition of sale, customers often require the Company to enter into fixed price commitments. These commitments expose the Company to the risk of fluctuating aluminum prices between the time the order is committed and the time that the material is shipped. The Company may enter into derivative financial instruments to mitigate the risk arising out of the fixed price commitments. Consequently, the gain or loss resulting from movements in the price of aluminum on these contracts would generally be offset by an equal and opposite impact on the net sales and purchases being hedged.

#### ***Natural Gas***

The Company purchases natural gas on the open market in Europe, Asia and South America which exposes the Company to market price fluctuations. The Company mitigates the future exposure to natural gas prices through the use of forward purchase contracts.

#### ***Electricity***

The Company has entered into an electricity swap in North America to fix a portion of the cost of electricity requirement in North America.

#### ***Foreign Currency Exchange Risk***

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. In case of conversion business, the objective is to match the exchange rate of outflows and related inflows through derivative financial instruments. With respect to Aluminium business where costs are predominantly in INR, the strengthening of INR against USD adversely affects the profitability of the business and benefits when INR depreciates against USD. The company enters into various foreign exchange contracts to protect profitability.

The Company enters into various cross currency swaps to manage the exposure to fluctuating exchange rate arising from loans given to and net investments made in various European subsidiaries.

The Company also enters into various foreign exchange contracts to mitigate the risk arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.

#### ***Interest Rate Risk***

The Company is exposed to changes in interest rates due to financing, investing and cash management activities. The Company enters into interest rate swap contracts to manage its exposure to changes in the benchmark LIBOR interest rate arising from various floating rate debts.

#### ***Embedded derivatives***

Copper concentrate is purchased on future pricing model based on month's average LME (in case of copper)/LBMA (in case of gold and silver). Since the value of the concentrate changes with response to change in commodity pricing indices, embedded derivatives (ED) is identified and segregated in the contract. The ED so segregated, is treated like commodity derivative and qualify for hedge accounting. These derivatives are put into a Fair Value hedge relationship with inventory.

The objective of hedge designation of the embedded commodity derivative is to offset the volatility in the Statement of Profit and Loss due to change in value of un-priced inventory with response to LME/LBMA.

#### ***Net Investment Hedges***

For derivative instruments that are designated as hedges of net investment in foreign operations, gains and losses on derivative instruments are included (net of taxes), to the extent the hedges are effective, in Cumulative Translation Adjustment (CTA). The ineffective portions of hedges of net investments in foreign operations, if any, are recognised as gains or losses and included in 'Other Expenses' in the Statement of Profit & Loss.

(c) The Asset and Liability position of various outstanding derivative financial instruments is given below:

(₹ Crore)

Particulars	Nature of Risk being Hedged	31st March, 2013			31st March, 2012		
		Liability	Asset	Net Fair Value	Liability	Asset	Net Fair Value
<b>Current</b>							
<b>Cash flow hedges</b>							
- Commodity contracts	All cash flow risk other than foreign currency	(4.08)	452.98	448.90	(38.20)	145.49	107.29
- Interest rate contracts	Exchange rate movement risk	(2.10)	-	(2.10)	-	0.32	0.32
- Foreign currency contracts	Exchange rate movement risk	(77.57)	195.86	118.29	(188.55)	80.71	(107.84)
<b>Fair value Hedges</b>							
- Commodity contracts		(6.58)	-	(6.58)	(30.25)	2.72	(27.54)
- Embedded derivatives *		(0.04)	191.05	191.01	(215.44)	15.75	(199.69)
<b>Net Investment Hedges</b>							
- Foreign currency contracts	Exchange rate movement risk			-	-	11.51	11.51
<b>Non-designated hedges</b>							
- Commodity contracts		(435.55)	490.80	55.25	(391.48)	425.19	33.70
- Foreign currency contracts		(76.12)	120.88	44.76	(81.48)	129.65	48.17
- Interest rate contracts		-	-	-	(1.66)	-	(1.66)
<b>Total</b>		<b>(602.04)</b>	<b>1,451.57</b>	<b>849.53</b>	<b>(947.06)</b>	<b>811.32</b>	<b>(135.74)</b>
<b>Non - current</b>							
<b>Cash flow hedges</b>							
- Commodity contracts	All cash flow risk other than foreign currency	(0.72)	28.18	27.46	-	2.12	2.12
- Interest rate contracts	Exchange rate movement risk	(2.28)	-	(2.28)	-	0.67	0.67
- Foreign currency contracts	Exchange rate movement risk	(42.58)	2.00	(40.58)	(79.40)	5.08	(74.32)
<b>Fair value Hedges</b>							
- Commodity contracts	All cash flow risk other than foreign currency	(3.57)	0.00	(3.56)	(0.61)	0.20	(0.41)
<b>Non-designated hedges</b>							
- Commodity contracts		(108.40)	8.22	(100.18)	(153.78)	6.86	(146.92)
- Foreign currency contracts		(0.05)	0.47	0.42	(1.97)	1.08	(0.89)
- Interest rate contracts		-	-	-	-	-	-
<b>Total</b>		<b>(157.60)</b>	<b>38.87</b>	<b>(118.72)</b>	<b>(235.75)</b>	<b>16.02</b>	<b>(219.74)</b>
<b>Grand Total</b>		<b>(759.64)</b>	<b>1,490.44</b>	<b>730.80</b>	<b>(1,182.81)</b>	<b>827.34</b>	<b>(355.48)</b>

\* Fair Value of ₹ Crore 191.01 is part of Trade Payables.

- (d) The following table presents the outstanding position and fair value of various foreign currency derivative financial instruments:

Foreign currency forwards	Currency Pair	31st March, 2013			31st March, 2012		
		Average exchange rate	Notional Value (in Million)	Fair Value Gain/(Loss) (₹ Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/(Loss) (₹ Crore)
<b>Cash flow hedges</b>							
Buy	AUD_INR				54.05	0.04	(0.00)
Buy	CHF_EUR	0.83	12.46	(0.79)	-	-	-
Buy	EUR_INR	72.20	5.66	0.29	68.40	14.99	0.98
Buy	GBP_INR	83.04	0.04	-	-	-	-
Buy	USD_INR	55.51	7.97	0.59	50.41	29.92	3.03
Buy	BRL_USD	0.50	366.77	12.10	0.54	469.22	19.58
Buy	EUR_USD	1.33	45.94	3.77	1.40	85.65	(6.41)
Buy	EUR_KRW	1,520.03	15.02	(4.61)	1,516.37	75.23	5.43
Buy	USD_CAD	0.98	27.28	0.05	0.99	94.01	1.64
Buy	USD_KRW	1,124.50	451.11	(22.99)	1,131.37	252.17	(18.07)
Sell	USD_INR	57.60	815.94	85.80	49.77	764.50	(188.04)
Sell	BRL_USD				-	-	-
Sell	USD_AUD	1.02	77.00	1.44	1.04	7.04	(0.29)
<b>Total</b>				<b>75.65</b>			<b>(182.16)</b>
<b>Net investment hedge</b>							
Buy	USD_EUR				0.73	31.17	4.21
Buy	USD_KRW				1,120.06	92.06	7.30
				-			<b>11.51</b>
<b>Non-Designated</b>							
Buy	AUD_INR	58.54	1.75	(0.31)	53.63	2.52	(0.08)
Buy	CHF_INR	60.29	0.19	(0.03)	57.45	0.25	0.17
Buy	EUR_INR	72.73	23.11	(4.75)	69.24	35.26	0.86
Buy	GBP_INR	85.68	0.66	(0.10)	80.88	0.95	0.14
Buy	NOK_INR	9.69	2.37	(0.06)	8.90	3.16	0.09
Buy	USD_INR	54.85	166.19	(5.48)	51.80	187.27	(9.37)
Buy	GBP_EUR	1.19	29.31	(3.12)	1.18	106.81	6.41
Buy	KRW_USD	0.90	98.60	15.44	0.00	425.55	(2.51)
Buy	USD_EUR	0.76	161.79	8.58	0.74	424.36	29.74
Buy	GBP_USD	1.52	29.69	(0.28)	1.58	3.61	(0.24)
Buy	USD_CHF	0.94	24.59	1.07	0.91	47.07	(1.09)
Buy	CAD_USD	0.98	4.76	0.25	1.02	16.07	0.21
Buy	USD_BRL	2.07	133.93	26.25	1.82	305.25	35.02
Buy	JPY_USD	0.01	0.30	0.02	-	-	-
Buy	CHF_GBP	0.70	6.71	(0.22)	0.69	2.75	0.00
Buy	CHF_EUR	0.82	25.48	0.11	0.84	78.19	(6.04)
Buy	EUR_KRW	1,493.39	6.66	0.01	1,518.33	4.49	(0.04)
Buy	CNY_USD	0.16	53.33	5.26			
Sell	USD_INR	55.04	14.59	0.49	51.64	53.83	(6.02)
<b>Total</b>				<b>43.13</b>			<b>47.28</b>
<b>Foreign currency Options</b>							
<b>Cash flow hedges</b>							
Sell	USD_INR	56.88	11.85	2.06			
<b>Non-Designated</b>							
Sell	USD_INR	55.50	20.00	2.05			
<b>Total</b>				<b>4.11</b>			<b>-</b>

- (e) The following table presents the outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2013:

Commodity Futures/Forwards		Average Price (USD/Unit)	Qty	Unit	Notional Value (USD in millions)	Fair Value Gain/ (Loss) (₹ Crore)
<b>Cash Flow Hedge</b>						
Aluminium	Sell	2,015.18	470,566	MT	948.27	401.06
Natural Gas	Buy	3.83	2,400,000	MMBtu	9.20	4.87
Aluminium	Buy	1,875.25	4,771	MT	8.95	(2.85)
Gold	Sell	1,609.57	91,971	TOZ	148.03	5.93
Silver	Sell	31.28	1,457,256	TOZ	45.59	22.55
Copper	Sell	8,237.54	12,350	MT	101.73	44.80
<b>Total</b>						<b>476.36</b>
<b>Fair Value Hedge</b>						
Aluminium	Buy	1,875.25	21,810	MT	40.90	(10.14)
<b>Total</b>						<b>(10.14)</b>
<b>Non Designated hedges</b>						
Aluminium	Buy	1,885.28	148,936	MT	280.79	(84.35)
Aluminium	Sell	1,939.65	201,212	MT	390.28	176.31
Copper	Buy	7,724.13	41,350	MT	319.39	(40.40)
Copper	Sell	7,716.35	32,400	MT	250.01	29.22
Gold	Sell	1,652.52	3,942	TOZ	6.51	1.17
Silver	Buy	28.75	353,750	TOZ	10.17	(0.73)
Silver	Sell	28.88	339,507	TOZ	9.80	0.94
Electricity	Buy	32.33	919,072	MWh	29.71	(148.71)
Natural Gas	Buy	3.69	3,340,000	MMBtu	12.31	8.85
Gold	Sell		*			14.50
Silver	Sell		*			0.03
Coal		85.17	75,000	MT	6.39	(1.76)
<b>Total</b>						<b>(44.93)</b>
<b>Embedded derivatives</b>						
<b>Fair Value Hedge</b>						
Copper	Sell	7,902.95	93,042	MT	735.30	184.65
Gold	Sell	1,639.59	12,746	TOZ	20.90	2.92
Silver	Sell	30.87	256,761	TOZ	7.93	3.44
<b>Total</b>						<b>191.01</b>

\* Represent derivatives matured within 31st March, 2013 for which cash flow to happen on settlement date during April, 2013.



The following table presents the outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2012:

Commodity Futures/Forwards		Average Price (USD/Unit)	Qty	Unit	Notional Value (USD in	Fair Value Gain/ (Loss) (₹ Crore)
<b>Cash Flow Hedge</b>						
Aluminium	Sell	2,116.87	159,000	MT	336.58	88.35
Aluminium	Buy	2,087.00	16,375	MT	34.17	(9.41)
Gold	Sell	1,723.74	99,503	TOZ	171.52	30.63
Silver	Sell	32.13	1,672,332	TOZ	53.73	(1.34)
Copper	Sell	8,637.69	1,250	MT	10.80	1.19
<b>Total</b>						<b>109.41</b>
<b>Fair Value Hedge</b>						
Aluminium	Buy	2,087.00	31,360	MT	65.45	(27.94)
<b>Total</b>						<b>(27.94)</b>
<b>Non Designated hedges</b>						
Aluminium	Buy	2,110.95	155,390	MT	328.02	(65.09)
Aluminium	Sell	2,168.20	212,457	MT	460.65	139.89
Copper	Buy	8,357.86	23,375	MT	195.36	22.39
Copper	Sell	8,710.89	18,925	MT	164.85	32.43
Gold	Buy	1,716.33	1,397	TOZ	2.40	(4.48)
Gold	Sell	1,663.71	41,752	TOZ	69.46	4.76
Silver	Buy	-	*	TOZ	-	(0.53)
Silver	Sell	32.41	278,664	TOZ	9.03	11.89
Electricity	Buy	32.33	1,169,728	MWh	37.82	(205.91)
Natural Gas	Buy	4.36	6,600,000	MMBtu	28.76	(52.06)
<b>Total</b>						<b>(116.71)</b>
<b>Commodity Options</b>						
<b>Cash Flow Hedge</b>						
Aluminium	Sell	-	*	MT	-	3.49
<b>Total</b>						<b>3.49</b>
<b>Embedded Derivatives</b>						
<b>Fair Value Hedge</b>						
Copper	Sell	8,102.36	113,333	MT	918.27	(202.78)
Gold	Sell	1,689.66	40,362	TOZ	68.20	5.68
Silver	Sell	31.55	710,744	TOZ	22.43	(2.59)
<b>Total</b>						<b>(199.69)</b>

\* Represent derivatives matured within 31st March, 2013 for which cash flow to happen on settlement date during April, 2012.

- (f) The following table presents the outstanding position and fair value of various interest rate derivative financial instruments:

Interest rate swaps	Fixed Leg	As of 31st March, 2013			As of 31st March, 2012		
		Average Price (USD / Unit)	Notional Value (USD in Millions)	Fair Value (₹ Crore)	Average Price (USD / Unit)	Notional Value (USD in Millions)	Fair Value (₹ Crore)
<b>Cash flow hedges</b>							
3M-CD-3200	Pay fixed	4.11%	95.32	(4.38)	4.62%	43.94	0.99
<b>Non-Designated Hedges</b>							
1M USD Libor	Pay fixed				1.97%	220.00	(1.66)
<b>Total</b>			<b>95.32</b>	<b>(4.38)</b>		<b>263.94</b>	<b>(0.67)</b>

- (g) The following table presents details of amount held in Hedging Reserve and the period during which these are going to be released and affecting Profit & Loss Account

(₹ Crore)

Hedge Instrument Type	Products/ Currency Pair	31st March, 2013			31st March, 2012		
		Closing Value in Hedging Reserve as at 31st March, 2013	Release		Closing Value in Hedging Reserve as at 31st March, 2012	Release	
			In less than 12 Months	After 12 Months		In less than 12 Months	After 12 Months
		Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)
Commodity Forwards	Aluminium	414.43	377.44	36.99	162.06	160.08	1.98
	Gold	19.06	19.06	0.00	39.90	39.90	-
	Silver	22.72	22.72	-	12.47	12.47	-
	Copper	17.74	17.63	0.11	1.15	1.01	0.14
	Electricity	(107.81)	(29.40)	(78.41)	(128.52)	(27.54)	(100.98)
	Natural Gas	5.85	5.32	0.53	-	-	-
	<b>Total</b>	<b>371.99</b>	<b>412.77</b>	<b>(40.78)</b>	<b>87.06</b>	<b>185.92</b>	<b>(98.86)</b>
Debt		10.16	10.16	-	20.37	20.37	-
Liability for Copper Concentrate		(7.58)	(7.58)	-	(82.06)	(82.06)	-
Interest rate swaps	3M-CD-3200	(4.36)	-	(4.36)	0.98	-	0.98
	<b>Total</b>	<b>(4.36)</b>	<b>-</b>	<b>(4.36)</b>	<b>0.98</b>	<b>-</b>	<b>0.98</b>
Foreign currency Forwards	AUD_INR	-	-	-	(0.18)	-	(0.18)
	EUR_INR	0.37	0.29	0.08	2.40	3.55	(1.15)
	GBP_INR	(0.01)	(0.01)	-	-	-	-
	NOK_INR	-	-	-	(0.03)	-	(0.03)
	USD_INR	87.85	86.16	1.69	(181.98)	(136.20)	(45.78)
	USD_EUR	(12.24)	5.66	(17.90)	(12.95)	-	(12.95)
	USD_BRL	9.54	26.74	(17.20)	(9.38)	5.65	(15.04)
	USD_CAD	0.59	0.60	(0.01)	2.84	2.86	(0.02)
	EUR_KRW	(3.91)	-	(3.91)	5.43	-	5.43
	USD_KRW	(22.21)	(0.65)	(21.56)	(36.88)	(25.69)	(11.18)
	EUR_CHF	(0.96)	(0.96)	-	-	-	-
	USD_AUD	0.52	0.52	-	(0.09)	(0.09)	-
	<b>Total</b>	<b>59.54</b>	<b>118.35</b>	<b>(58.81)</b>	<b>(230.82)</b>	<b>(149.92)</b>	<b>(80.90)</b>
Foreign currency Options	USD_INR	1.86	1.86	-	-	-	-
	<b>Grand Total</b>	<b>431.61</b>	<b>535.56</b>	<b>(103.95)</b>	<b>(204.47)</b>	<b>(25.69)</b>	<b>(178.78)</b>

- (h) The following tables presents the amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2012-13:

(₹ Crore)

Item	Opening Balance	Net Amount recognised	Recycled			CTA	Closing Balance
			Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount recycled		
Commodity	87.06	570.26	280.62	1.80	282.42	(2.91)	371.99
Forex	(292.51)	(252.73)	(577.46)	(36.26)	(613.72)	(4.51)	63.98
Interest	0.98	(5.34)	-	-	-	-	(4.36)
<b>Total</b>	<b>(204.47)</b>	<b>312.19</b>	<b>(296.84)</b>	<b>(34.46)</b>	<b>(331.30)</b>	<b>(7.42)</b>	<b>431.61</b>

The following tables presents the amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2011-12:

(₹ Crore)

Item	Opening Balance	Net Amount recognised	Recycled			CTA	Closing Balance
			Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount recycled		
Commodity	(72.81)	71.91	(87.07)	-	(87.07)	0.89	87.06
Forex	183.22	(954.99)	(496.77)	22.00	(474.77)	4.49	(292.51)
Interest	-	0.92	-	-	-	0.06	0.98
<b>Total</b>	<b>110.41</b>	<b>(882.16)</b>	<b>(583.84)</b>	<b>22.00</b>	<b>(561.84)</b>	<b>5.44</b>	<b>(204.47)</b>

- (i) The following table presents the amount of gain/(loss) recycled from Hedging Reserve and reference of the line item in Profit & Loss Account where those amounts are included:

(₹ Crore)

Schedule Line Item	Note No.	2012-13	2011-12
Net Sales	28	(275.45)	(493.29)
Raw Materials Consumed	30	105.31	(98.63)
(Gain)/Loss in change in Fair value of derivatives (net)	37	126.70	(8.07)

- (j) The adjustment as part of the carrying value of inventories arising on account of fair value hedges is as follows:

(₹ Crore)

	2012-13	2011-12
Copper	(184.55)	207.85
Gold	(2.92)	(5.33)
Silver	(3.45)	2.73
<b>Total</b>	<b>(190.92)</b>	<b>205.25</b>

### Sensitivities

The following table presents the estimated potential changes in the fair values of the foreign currency derivative financial instruments given a 10% changes in their respective indexes.

₹ Crore

Currency Pair	Change in Rate/Price	31st March, 2013			31st March, 2012		
		Change in Fair Value	Change in Profit & Loss Account	Change in Hedging Reserve	Change in Fair Value	Change in Profit & Loss Account	Change in Hedging Reserve
<b>Forwards</b>							
USD_INR	10%	329.41	(108.51)	437.93	311.82	86.38	225.44
EUR_INR	10%	38.77	34.40	4.37	64.89	56.11	8.78
GBP_INR	10%	1.11	1.07	0.04	1.48	1.48	-
NOK_INR	10%	0.01	0.01	-	0.01	0.01	-
CHF_INR	10%	0.00	0.00	-	0.14	0.14	-
AUD_INR	10%	1.98	1.98	-	2.55	2.55	-
CHF_USD	10%	48.66	48.73	(0.07)	28.13	26.49	1.65
GBP_USD	10%	28.04	28.08	(0.04)	12.89	12.14	0.75
CAD_USD	10%	10.90	1.71	9.19	19.59	(3.78)	23.38
KRW_USD	10%	187.72	33.84	153.88	39.32	18.75	20.57
BRL_USD	10%	241.99	64.95	177.04	218.19	80.95	137.23
EUR_USD	10%	157.46	128.90	28.55	196.17	145.10	51.08
USD_AUD	10%	82.46	57.14	25.32	59.34	56.99	2.35
EUR_KRW	10%	10.20	3.14	7.06	33.73	1.79	31.94
EUR_CHF	10%	17.85	12.00	5.84	33.08	31.15	1.93
EUR_GBP	10%	13.79	13.81	(0.02)	45.19	42.55	2.64
GBP_CHF	10%	2.67	2.67	(0.00)	0.97	0.91	0.06
CNY_USD	10%	26.27	26.31	(0.04)	-	-	-
JPY_USD	10%	0.18	0.18	(0.00)	-	-	-
<b>Options</b>							
USD_INR	10%	6.69	3.51	3.17	-	-	-
<b>Debt</b>	10%	513.15	89.48	423.67	565.63	304.15	261.48

The following table presents the estimated potential change in the fair values of the commodity derivative financial instruments, given a 10% change in their respective indexes (LME in case of Aluminium and Copper, LBMA in case of Gold and Silver, NYMEX NYISO Zone, a Peak Rate in the case of Electricity).

₹ Crore

Types of Derivative	Change in Rate/Price	31st March, 2013			31st March, 2012		
		Change in Fair Value	Change in Profit & Loss Account	Change in Hedging Reserve	Change in Fair Value	Change in Profit & Loss Account	Change in Hedging Reserve
Forwards	10%	669.44	84.01	585.43	262.30	23.40	238.90
Options	10%	-	-	-	-	-	-
Embedded derivatives	10%	395.48	395.48	-	532.56	532.56	-

The following table presents the estimated potential change in the fair values of the interest rate derivative financial instruments, given a 10% change in their respective indexes (USD Libor in case of Interest rate swaps)

₹ Crore

Types of Derivative	Change in Rate/Price	31st March, 2013			31st March, 2012		
		Change in Fair Value	Change in Profit & Loss Account	Change in Hedging Reserve	Change in Fair Value	Change in Profit & Loss Account	Change in Hedging Reserve
1M USD Libor	100 bps	-	-	-	-	-	-
3M-CD-3200	100 bps	10.04	-	10.04	5.26	0.02	5.24

**42. Gain or loss on foreign currency transaction and translation:**

Gain or loss on foreign currency transaction and translation has been accounted for under respective head of accounts depending upon the nature of transaction. The detail of net (gain)/loss included in various heads of accounts are as under:

	Year ended	
	31/03/2013	31/03/2012
Revenue from Operations	430.77	535.59
Cost of Materials Consumed	93.04	198.01
Power and Fuel	2.54	5.62
Finance Costs	(0.98)	-
Other Expenses	(38.46)	137.36
	<b>486.91</b>	<b>876.58</b>

43. For the year ended 31st March, 2013, the Board of Directors of the Company have recommended dividend of ₹ 1.40 per share (Previous year ₹ 1.55 per share) to equity shareholders aggregating to ₹ 313.60 crore (Previous year ₹ 344.89 crore) including Dividend Distribution Tax.

44. Pursuant to a court approved scheme of financial restructuring under Sections 391 to 394 of the Companies Act 1956, Business Reconstruction Reserve (BRR) was established during 2008-09 for adjustment of certain specified expenses. Accordingly, certain expenses have been adjusted against the BRR both in standalone and in consolidated financial statements. During previous year, an amount of ₹ 500.47 crore (net of deferred tax of ₹ 35.86 crore) has been adjusted in consolidated financial statements towards exiting of certain businesses. Had this adjustment not been done, Net Profit for the previous year would have been lower to that extent.

45. In accordance with the accounting policy for accounting of actuarial gains or losses relating to pension and other post retirement employee benefit plans of Novelis Inc., a wholly-owned subsidiary, the Company has recognised actuarial losses (net of deferred tax) in the 'Actuarial Gain/(Loss) Reserve' under Reserves and Surplus. Had the Company followed the practice of recognition of actuarial gains/losses on the aforesaid defined benefit plans in the Statement of Profit and Loss, Employee Benefits Expenses would have been higher by ₹ 542.43 crore (Previous year ₹ 1,014.91 crore), Tax Expenses (Deferred Tax) would have been lower by ₹ 159.38 crore (Previous year ₹ 299.88 crore), Net Profit for the year would have been lower by ₹ 383.05 crore (Previous year ₹ 715.03 crore), Actuarial Gain/(Loss) Reserve would have been ₹ Nil (Previous year ₹ Nil) and Foreign Currency Translation Reserve would have been lower by ₹ 50.82 crore (previous year ₹ 44.39 crore).

**46. Contingent Liabilities and Commitments**

	As at	
	31/03/2013	31/03/2012
A. Contingent Liabilities not provided in respect of followings:		
(a) Claims against the company not acknowledged as debt	1,032.76	855.00
(b) Guarantees	119.31	55.23
(c) Other money for which the Company is contingently liable:		
i. Bills discounted with Banks		
ii. Customs duty on Capital Goods and Raw Materials imported under Advance Licence/EPCG Scheme, against which export obligation is to be fulfilled.	359.09	263.55



- iii. The Company has received a notice dated 24th March, 2007 from collector (Stamp) Kanpur, Uttar Pradesh alleging that stamp duty of ₹ 252.96 crore is payable in view of order dated 18th November, 2002 of Hon'ble High Court of Allahabad approving scheme of arrangement for merger of Copper business of Indo Gulf Corporation Limited with the Company. The Company is of the opinion that it has a very strong case as there is no substantive/computation provision for levy/calculation of stamp duty on court order approving scheme of arrangement under Companies Act, 1956 within the provisions of Uttar Pradesh Stamp Act, moreover the properties in question are located in the State of Gujarat and thus the collector (stamp) Kanpur has no territorial jurisdiction to make such a demand. It is pertinent to note that the Company in 2003-04 has already paid stamp duty which has been accepted as per the provisions of the Bombay Stamp Act 1958 with regard to transfer of shareholding of Indo Gulf Corporation Limited as per the Scheme of Arrangement. Furthermore, the demand made is on an incorrect assumption. The Company's contention amongst the various other grounds made is that the demand is illegal, against the principles of natural justice, incorrect, bad in law and malafide. The Company has filed a writ petition before the Hon'able High Court of Allahabad, inter alia, on the above said grounds, which is pending determination.
- iv. Against the notifications issued by the State Electricity Regulatory Commissions of Uttar Pradesh and Odisha States under the provisions of Electricity Act, 2003 in respect of Renewable Purchase Obligation (RPO), the Company has filed writ petitions before jurisdictional high courts on the ground, inter alia, that RPO cannot be made applicable to captive users and the High Court(s) at Allahabad and Cuttack have granted stay on the applicability of the RPO. Pending disposal of these, no provision has been considered necessary at this stage.
- v. Pursuant to directions of Dispute Resolution Panel (DRP) disposing of the objections filed by the Company against the draft assessment order for AY 2008-09, the Assessing Officer has framed the assessment by making adjustment, inter alia, amounting to ₹ 270.00 crore to total income on account of purported arms length fee of Corporate Guarantee provided to foreign banks for granting loan to wholly owned subsidiary AV Minerals B.V. at Netherlands. The Company has been advised, considering facts of the case no provision is deemed necessary. Appeal against order has been filed before Hon'ble ITAT.
- v. For AY 2009-10, the Assessing Officer has made adjustment of ₹ 1,063.00 crore, inter alia, by imputing guarantee fee of 11.84% and 9.79% on two corporate guarantees provided by the Company to foreign banks for granting loan to wholly owned subsidiary AV Minerals B.V. at Netherlands without giving cognizance to directions of Dispute Resolution Panel for earlier year on similar facts restricting the adjustment on account of purported arms length fee of Corporate Guarantee to 2.50% which has not been challenged by the department. The Company has been advised, considering facts of the case no provision is deemed necessary. Appeal against order has been filed before Hon'ble CIT (A).

(₹ Crore)

	As at	
	31/03/2013	31/03/2012

#### B. Commitments

- (a) Estimated amount of contracts remaining to be executed on capital account and not provided for (Net of Advance paid)
 

	5,049.09	10,469.96
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- (b) The Company, along with Aditya Birla Nuvo Limited, Grasim Industries Limited and Birla TMT Holdings Pvt. Limited (the Sponsors), being promoters of Idea Cellular Limited (Idea) has given the following undertakings to the Facility Agent:
  - (i) The Sponsors shall collectively continue to hold at least 33% of the equity capital of Idea till the end of FY 2015-16 and shall not without prior written approval of the Facility Agent, divest, transfer, assign, dispose of, pledge, charge, create any lien or in any way encumber 33% of shareholdings in Idea. Consequent upon the infusion of fresh equity capital of Idea, if the Sponsors' stake gets diluted from 40% to 33% in the equity capital of Idea, the Sponsors agree and undertake to obtain the prior consent of the Rupee Facility Agent and in other circumstances, the Sponsors agree and undertake to obtain the prior consent of the secured lenders representing 51% of the aggregate outstanding secured loans.

- ii. The Sponsors shall collectively continue to hold 26% of the equity capital of Idea after FY 2015-16 and shall not without the prior written approval of the Rupee Facility Agent, divest, transfer, assign, dispose of, pledge, charge, create any lien or in any way encumber 26% shareholdings in the capital of Idea.
- iii. Not without prior approval of the Facility Agent in writing divest shareholdings in the equity capital of Idea that may result in a single investor along with its affiliates holding more than 25% of the equity capital of Idea.
- (c) As the Sponsor, the Company has executed a Common Rupee Loan Agreement (CRLA) to avail financing of ₹ 4,906.00 crore for project undertaken by Utkal Alumina International Limited (Utkal), a wholly-owned subsidiary of the Company. Under the CRLA, the Company has following obligations:
  - i. To infuse base equity of ₹ 2,103.00 crore in Utkal.
  - ii. To ensure that debt: equity ratio in Utkal is always maintained at 70:30.
  - iii. To hold minimum 51% equity shares in Utkal.
  - iv. To bring funds for meeting cost overrun of the project.
  - v. If Utkal exercises its right or requires to replace any lender under the CRLA and to enable to bring other lender to replace such a lender within the permitted time, the Company is required to infuse funds for prepayment of the loan to such lender and for undrawn portion of such rupee lender.
47. The Company is one of the promoter members of Aditya Birla Management Corporation Private Limited (ABMCPL), a Company limited by guarantee which has been formed to provide common facilities and resources to its members, with a view to optimize the benefits of specialization and minimize cost for each member. The Company is one of the participants in the common pool and shares the expenses incurred by ABMCPL and accounted for under appropriate heads.

#### 48. Leases:

##### A. Operating Lease

Future obligations towards minimum lease payment commitments under non-cancellable operating leases are as under:

	As at	
	31/03/2013	31/03/2012
Not later than 1 year	143.97	123.77
Later than 1 year and not later than 5 years	377.05	337.13
Later than 5 years	308.78	289.59

##### B. Finance Lease

Future obligations towards minimum lease payment commitments under the finance leases taken on or after 1st April, 2001 are as under:

	As at 31/03/2013		As at 31/03/2012	
	Payment	Present value	Payment	Present value
Not later than 1 year	57.08	42.13	39.04	24.85
Later than 1 year and not later than 5 years	219.97	184.75	146.81	106.09
Later than 5 years	68.43	65.33	103.78	93.77

49. **Related Party Disclosures:**

A. List of Related Parties:

(a) **Associates:**

Aditya Birla Science and Technology Company Limited  
Idea Cellular Limited  
Aluminium Norf GmbH  
Consortio Candonga  
MiniMRF LLC (Delaware)  
Deutsche Aluminium Verpackung Recycling GmbH  
France Aluminium Recyclage SA

(b) **Joint Ventures:**

Mahan Coal Limited  
Hydromine Global Minerals (GMBH) Limited

(c) **Trust:**

Trident Trust

(d) **Key Managerial Personnel:**

Mr. D. Bhattacharya - Managing Director

B. Disclosure of transactions in the ordinary course of business between the Group and its Related Parties during the year and status of outstanding balances at year end:

(a) **Associates and Joint Ventures:**

(₹ Crore)

	2013		2012	
	Associates	Joint Ventures	Associates	Joint Ventures
<b>Transactions during the year ended 31st March:</b>				
Service Received	1,347.07	-	1,222.58	-
Purchase of Goods	-	-	-	-
Service Rendered	0.02	0.03	0.04	-
Interest and Dividend Received	6.31	-	13.04	-
Equity Contribution	-	-	-	-
Loans, Advances and Deposits given	10.24	0.13	10.63	2.30
Loans, Advances and Deposits received back	-	-	3.92	2.63
Guarantee Given	2.96	-	4.41	-
<b>Outstanding balances as at 31st March:</b>				
Trade and other Receivables	5.40	0.03	-	-
Trade and Other Payables	256.76	-	262.49	-
Investments, Loans, Advances and Deposits	4,851.08	3.07	4,829.04	2.96
Guarantee Given	2.96	16.71	4.41	16.71

(b) **Trust:**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Beneficiary Interest in Trust	34.45	34.45

(c) **Key Managerial Personnel:**

(₹ Crore)

	As at	
	31/03/2013	31/03/2012
Managerial Remuneration (including perquisites) *	21.45	20.24

\* Excluding gratuity, leave encashment provisions and compensation under Employee Stock Option Scheme.

50. Figures of previous year have been reclassified/regrouped wherever necessary.

As per our report annexed.

**For SINGHI & CO.**

Chartered Accountants

Firm Registration No. 302049E

**RAJIV SINGHI**

Partner

Membership No. 53518

Camp: Mumbai

Dated: The 28th day of May, 2013

Praveen Kumar Maheshwari  
CFO

Anil Malik  
Company Secretary

*For and on behalf of the Board of  
Hindalco Industries Limited*

Kumar Mangalam Birla – Chairman  
D. Bhattacharya – Managing Director  
M.M. Bhagat – Director

## FINANCIAL INFORMATION RELATING TO SUBSIDIARY COMPANIES FOR THE YEAR ENDED 31ST MARCH, 2013

₹ Crore											
Name of the Subsidiary Company	Country	Capital	Reserves	Total Assets	Total Liabilities	Investments** (Excluding Investment in subsidiaries)	Turnover/ Revenues	Profit/ (Loss) Before Tax	Provision for Tax	Profit/ (Loss) After Tax	Proposed Dividend
1 Minerals & Minerals Limited	India	0.05	1.47	2.92	1.40	-	6.99	0.27	0.09	0.18	-
2 Renuka Investments & Finance Limited	India	9.25	45.08	54.74	0.41	44.60	4.71	4.32	0.49	3.83	-
3 Renukeshwar Investments & Finance Limited	India	4.80	30.79	35.58	(0.01)	29.28	2.32	2.32	0.12	2.20	-
4 Suvas Holdings Limited	India	5.46	(0.03)	5.44	0.01	-	0.10	0.09	0.04	0.05	-
5 Utkal Alumina International Limited	India	2,047.16	(130.09)	7,042.91	5,125.84	164.23	0.05	(97.11)	(1.46)	(98.57)	-
6 Aditya Birla Chemicals (India) Limited	India	23.39	353.76	1,456.07	1,078.92	6.51	813.42	45.74	26.09	19.65	2.34
7 Hindalco-Almex Aerospace Limited	India	177.12	(65.47)	114.17	2.52	6.18	38.79	(34.31)	-	(34.31)	-
8 HAAL USA Inc***	USA	0.00	0.00	0.00	-	-	-	(0.09)	-	(0.09)	-
9 Lucknow Finance Company Limited	India	12.00	14.48	27.32	0.84	15.06	3.16	2.65	0.52	2.13	-
10 Dahej Harbour and Infrastructure Limited	India	50.00	227.81	298.80	20.99	197.73	80.94	58.66	10.78	47.88	-
11 East Coast Bauxite Mining Company Private Limited	India	0.01	(0.02)	0.01	0.02	-	-	(0.00)	-	(0.00)	-
12 Tubed Coal Mines Limited	India	29.95	(0.54)	29.97	0.56	-	0.04	(0.26)	(0.01)	(0.27)	-
13 Mauda Energy Limited	India	0.17	(0.02)	0.15	-	-	-	(0.01)	-	(0.01)	-
14 Aditya Birla Minerals Limited*	Australia	2,547.15	133.66	2,743.79	62.97	-	96.35	94.57	(5.69)	100.26	-
15 Birla Nifty Pty Limited^*	Australia	494.06	1,671.44	2,732.14	566.64	-	2,088.94	177.82	35.47	142.35	-
16 Birla Maroochydore Pty Limited^**	Australia	56.52	(105.26)	75.52	124.26	-	-	(38.22)	11.46	(26.75)	-
17 Birla Mt Gordon Pty Limited^**	Australia	135.65	(1,014.68)	457.50	1,336.53	-	737.12	(203.78)	63.29	(140.49)	-
18 Birla Resources Pty Limited*	Australia	3.67	0.01	3.75	0.07	-	0.26	(0.00)	-	(0.00)	-
19 A V Minerals (Netherlands) B.V.*	Netherlands	12,139.51	(2,270.97)	9,868.55	-	-	-	(0.40)	-	(0.40)	-
20 A V Metals Inc**	Canada	9,866.28	(20.83)	9,845.57	0.12	-	-	(0.01)	-	(0.01)	-
21 Novelis Inc.##	Canada	0.00	254.88	28,243.74	27,988.86	0.00	4,245.58	82.00	38.12	43.88	-
22 4260848 Canada Inc. @*	Canada	670.49	(9.07)	669.34	7.93	0.00	0.00	115.40	5.79	109.61	-
23 4260856 Canada Inc. @*	Canada	1,005.70	(7.02)	998.68	0.00	0.00	0.00	172.75	8.64	164.12	-
24 Novelis No. 1 Limited Partnership@*	Canada	0.00	368.81	368.81	0.00	0.00	0.00	0.00	-	0.00	-
25 Novelis Brand LLC (Delaware)@*	USA	0.01	313.79	643.66	329.86	0.00	0.00	75.93	-	75.93	-
26 Novelis South America Holdings LLC@*	USA	0.01	0.00	0.01	0.00	0.00	0.00	0.00	-	0.00	-
27 Aluminum Upstream Holdings LLC (Delaware)@*	USA	0.01	(0.01)	0.00	0.00	0.00	0.00	(0.00)	-	(0.00)	-
28 Novelis (India) Infotech Ltd. @*	India	25.63	(0.40)	30.79	5.56	0.00	0.00	(1.89)	(1.78)	(3.67)	-
29 Novelis Corporation (Texas)@*	USA	9,124.42	(5,513.37)	15,573.99	11,962.93	2.35	20,139.33	965.74	367.27	598.47	-
30 Novelis de Mexico SA de CV@*	Mexico	0.04	0.21	0.39	0.14	0.00	0.00	0.00	-	0.00	-
31 Novelis do Brasil Ltda. @*	Brazil	1,008.91	1,997.83	8,011.89	5,005.15	105.89	7,528.47	680.83	223.86	456.97	-
32 Novelis Madeira, Unipessoal, Lda@*	Portugal	0.03	126.88	392.99	266.07	0.00	1,167.50	51.81	2.42	49.39	-
33 Novelis Korea Limited@*	Korea	571.03	2,593.37	6,345.17	3,180.77	0.00	8,880.30	501.37	78.80	422.56	-
34 Aicom Nikkei Specialty Coatings Sdn Berhad@*	Malaysia	21.50	36.68	87.52	29.34	0.00	215.51	(0.13)	0.18	0.05	-
35 Aluminum Company of Malaysia Berhad@*	Malaysia	235.73	77.80	374.73	61.21	0.00	506.74	(0.01)	0.00	(0.01)	-
36 Al Docom Sdn. Berhad@*	Malaysia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-
37 Novelis UK Ltd. @*	England	1,385.70	(877.87)	973.69	465.87	0.00	1,671.83	47.23	(213.21)	260.44	-



## FINANCIAL INFORMATION RELATING TO SUBSIDIARY COMPANIES FOR THE YEAR ENDED 31ST MARCH, 2013 (contd.)

₹ Crore

	Name of the Subsidiary Company	Country	Capital	Reserves	Total Assets	Total Liabilities	Investments** (Excluding Investment in subsidiaries)	Turnover/ Revenues	Profit/ (Loss) Before Tax	Provision for Tax	Profit/ (Loss) After Tax	Proposed Dividend
38	Novelis Services Limited@*	Wales	0.05	6.16	152.15	145.94	0.00	287.38	36.97	31.36	5.61	-
39	Novelis Deutschland GmbH@*	Germany	775.94	95.81	4,328.11	3,456.37	488.30	14,396.45	583.09	0.09	583.00	-
40	Novelis Aluminium Beteiligungs GmbH@*	Germany	0.17	0.16	0.33	0.00	0.00	0.00	(0.00)	(0.00)	(0.00)	-
41	Novelis Switzerland SA@*	Switzerland	28.60	582.87	1,452.65	841.18	0.00	2,730.25	240.45	30.35	210.09	-
42	Novelis Laminés France SAS@*	France	21.57	20.33	43.76	1.96	0.00	4.71	0.46	0.18	0.28	-
43	Novelis Italia SPA@*	Italy	668.07	(184.29)	1,043.66	559.87	0.00	1,423.88	(26.62)	(4.12)	(30.74)	-
44	Novelis Aluminium Holding Company@*	Ireland	20.88	2,219.36	6,121.71	3,881.47	0.00	594.27	280.85	144.96	135.89	-
45	Novelis Cast House Technology Ltd.@*	Canada	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-
46	Eurofoil Inc. (USA) (New York)@*	USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-
47	Novelis PAE Corporation (Delaware)@*	USA	1.76	0.18	1.94	0.00	0.00	0.00	0.00	-	0.00	-
48	Novelis PAE SAS@*	France	28.11	62.43	268.30	177.75	0.00	143.14	6.37	0.23	6.13	-
49	Novelis Europe Holdings Limited@*	Wales	1,105.69	98.14	1,203.82	0.00	0.00	0.39	(146.53)	-	(146.53)	-
50	Novelis AG (Switzerland)@*	Switzerland	5.72	1,202.00	5,260.66	4,052.94	0.00	377.83	(97.98)	(3.04)	(101.03)	-
51	Logan Aluminium Inc. (Delaware) @ *	USA	0.00	(207.35)	879.34	1,086.68	0.00	2,113.21	2.72	0.69	2.03	-
52	ALBRASILIS - Alumínio do Brasil Industria e Comércio Ltda@*	Brazil	0.01	(0.01)	0.00	0.00	0.00	0.00	0.00	-	0.00	-
53	Novelis North American Holdings@*	USA	0.00	782.04	9,944.91	9,162.87	0.00	0.00	868.01	(301.41)	1,169.42	-
54	8018227 Canada Inc.@*	USA	0.00	(1,002.32)	958.78	1,961.11	0.00	0.00	41.34	7.37	33.97	-
55	8018243 Canada Limited@*	USA	0.00	3,849.18	3,849.98	0.80	0.00	0.00	0.01	-	0.01	-
56	Novelis Delaware LLC@*	USA	0.00	3,697.73	3,697.73	0.00	0.00	0.00	221.08	-	221.08	-
57	Novelis Acquisitions LLC@*	USA	(9,123.63)	0.00	(9,123.63)	0.00	0.00	0.00	(868.01)	-	(868.01)	-
58	Novelis Sheet Ingot GmbH (Germany)	Germany	0.17	0.00	173.84	173.66	0.00	0.00	4.46	-	4.46	-
59	Novelis MEA Ltd (Dubai)	UAE	4.95	(2.57)	7.07	4.69	0.00	0.00	(2.57)	-	(2.57)	-
60	Novelis (Shanghai) Aluminium Trading Company	China	19.35	(2.28)	24.46	7.39	0.00	0.00	(3.01)	0.75	(2.26)	-
61	Novelis (China) Aluminium Products Co. Ltd.	China	143.49	(3.66)	141.23	1.40	0.00	0.00	(4.82)	1.21	(3.62)	-
62	Novelis Vietnam Company Limited (Vietnam)	Vietnam	5.40	(1.34)	18.61	14.55	0.00	0.00	(1.78)	0.43	(1.35)	-
63	Hindalco Guinea SARL	South Africa	0.01	-	0.01	(0.00)	-	-	(0.00)	-	(0.00)	-

\* Balance Sheet items are translated at closing Exchange rate, and Profit/(Loss) items are translated at average exchange rate.

\*\* Investment in shares, debentures, bonds and others.

\*\*\* Subsidiary of Hindalco-Almex Aerospace Limited.

^ Subsidiary of Aditya Birla Minerals Limited.

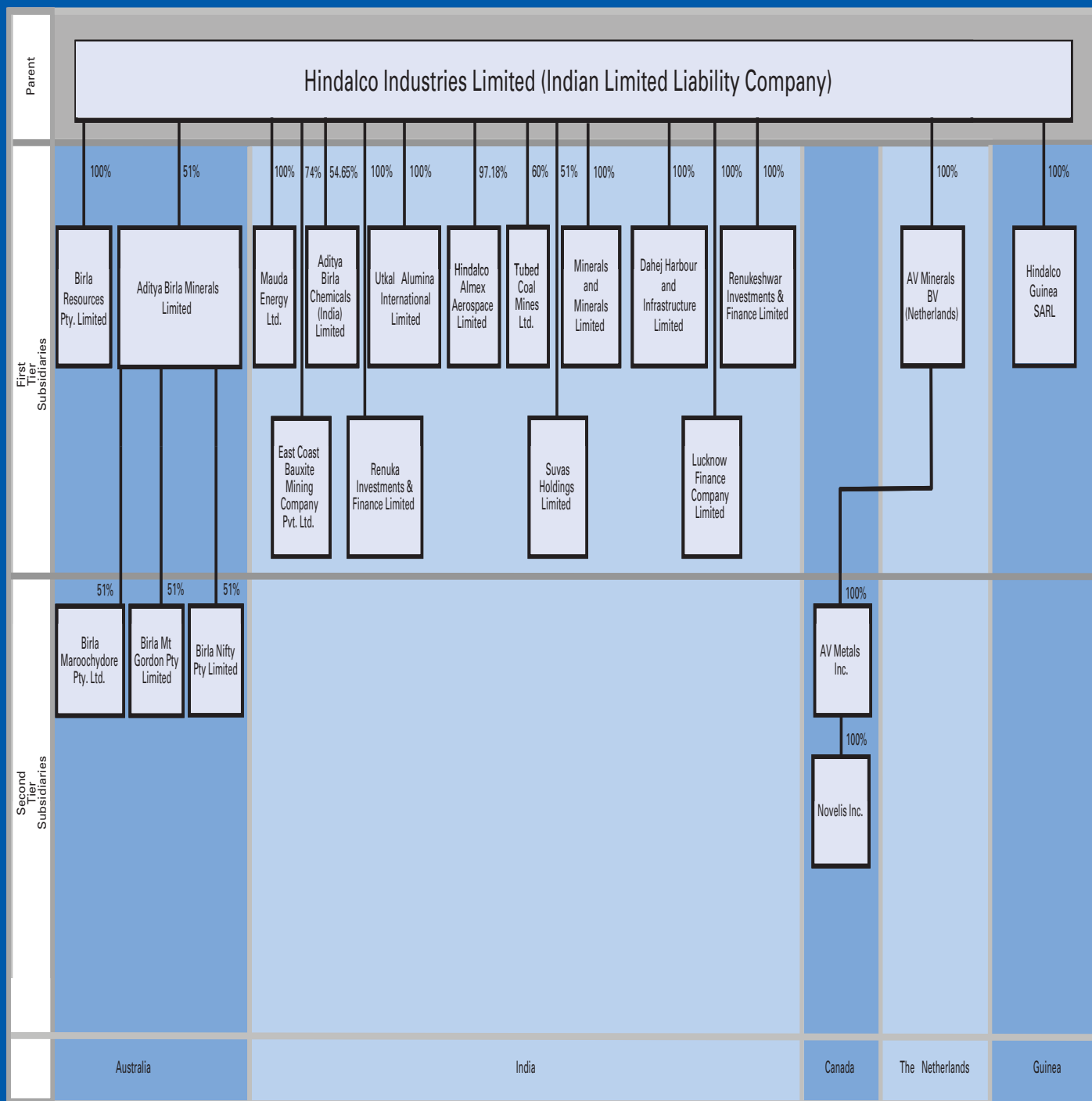
# Subsidiary of AV Minerals (Netherlands) B.V.

## Subsidiary of AV Metals Inc.

@ Subsidiary of Novelis Inc.

Note : The Ministry of Corporate Affairs, Government of India, vide its Circular No. 5/12/2007-CL-III dated 8th February, 2011, has granted general exemption under Section 212(8) of the Companies Act, 1956, from attaching the balance sheet, profit and loss account and other documents of the subsidiary Companies to the balance sheet of the Company provided certain conditions are fulfilled. However, annual accounts of the subsidiary companies and the related detailed information will be made available to the holding and subsidiary companies investor's seeking such information at any point of time. The annual accounts of the subsidiary companies are available for inspection by any shareholder's at the Registered Office of the Company. The annual accounts of the subsidiary company is also available for inspection at their respective registered office.

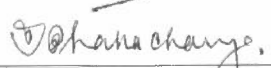
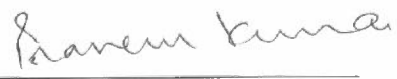


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**FORM A**

**In pursuant to Clause 31 of the Listing Agreement**

1.	Name of the Company	Hindalco Industries Ltd
2.	Annual Financial Statements for the year ended	31 <sup>st</sup> March, 2013
3.	Type of Audit observation	Un-qualified
4.	Frequency of observation	Whether appear first time/repetitive/since how long period : N.A.
	<ul style="list-style-type: none"><li>• CEO/Managing Director :</li><li>• CFO :</li><li>• Auditor :</li><li>• Audit Committee Chairman :</li></ul>	<p> D. BHATTACHARYA</p> <p> PRAVEEN KUMAR MAHESHWARI</p> <p> RAJIV SINGHI, PARTNER OF SINGHI &amp; COMPANY</p> <p> M. M. BHAGAT</p>





# BUILDING A SUSTAINABLE FUTURE

SUSTAINABILITY REPORT OF  
HINDALCO INDUSTRIES LIMITED 2012-13



# BUILDING A SUSTAINABLE FUTURE

At Hindalco, our underlying objective of Sustainability reporting is to bring about improvements and become more transparent in our communication on issues that matter and are relevant to us as well our stakeholders. Our sustainability strategy is based on an approach and commitment to sustainable development for the present and for the future. As a responsible corporate, our efforts are aligned towards doing business in a way that ensures employee development, increases the economic wealth for the communities around us and environmental conservation.

Our key focus areas have been value-creation for our employees, community, customers and other stakeholders. Our road map on sustainability

is developed on our objectives of reducing our emissions, ensuring employee safety, conserving natural resources, efficient waste management in a way that ensures sustainable development for the present as well for the future generation. At Hindalco, we channel our efforts in developing products through innovation and technology that not only ensure customer satisfaction but also cater towards overall sustainability

This is the third report covering the period April 2012 to March 2013, based on Global Reporting Initiative (GRI) G3.1 guidelines and India's National Voluntary Guidelines.

This report reflects our values and empowers our sustainability strategy to laying a foundation for sustainable future.



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# ADITYA BIRLA GROUP



## Sustainability Vision

By 2017, the Aditya Birla Group endeavours to become the leading Indian conglomerate for sustainable business practices across its global operations, balancing its economic growth with environmental and societal interests.

**Kumar Mangalam Birla**

*Chairman  
Aditya Birla Group*





## MD's Desk

It has been a long tradition in Hindalco to operate our businesses as Trustees with deep rooted obligation to synergize growth with responsibility. Proud of this legacy, we continue to operate as a responsible corporate citizen in every country and location where we operate.

Our approach in driving Sustainability is through consideration of social, ethical and environmental aspects in all that we do. Sustainability provides an important foundation for the Company and safeguards our future viability.

## Business Overview

The global economy became more challenging in FY13 for the Metals industry. The year was characterized by financial market instability, weak trends in key economies of China and the US; and sovereign debt issues in Europe. Demand growth faltered and prices on the London Metals Exchange (LME) were subdued. Many international aluminium companies trimmed production volumes and cost control became a priority area. While the price of crude oil continued to remain elevated, depreciating rupee resulted in an additional burden and coal prices continued to increase in India. Under these conditions, we focused our efforts on measures to improve efficiency. We also continued to implement our ambitious expansion programme. Copper business delivered a robust performance in FY13.

Notwithstanding the recent challenges for the Aluminium industry, its long-term prospects remain promising. Aluminium is the fastest growing metal. The recent trend of deepening use of Aluminium in automobiles, driven by the light-weighting of vehicles, is very encouraging. The trend of urbanization is also expected to drive the metal's growth in emerging markets. Our expansion projects, when juxtaposed against these trends, are expected to drive the Company towards greater heights in the coming years.

## Energy & Environment

In FY13, our focus continued on improving the control of our material risks and achievement of our key sustainability targets. Our overarching goal for environmental management is to minimize, and eliminate, the impact of our operations on the environment. We recognize that the efficient and responsible use of natural resources is critical to the sustainability of our environment.

We will continue to focus to enhance economic value, conserving natural resources, reducing our greenhouse gas emissions, improving our energy usage efficiency and community development including our employees' health and safety.



Energy conservation has been a matter of great focus in Hindalco. All five power units of Hindalco are conducting energy conservation projects; these units have not only moved towards meeting the targets, but have surpassed those. In Greenfield aluminum smelters, we have gone for the best-in-class technology with the lowest guaranteed specific energy consumption per ton of molten metal. These plants are under ramp-up and will soon take significant strides in lowering the energy intensity in Hindalco. These efforts in energy conservation have been recognized; Renukoot facility has received the 'National Energy Conservation Award' from Ministry of Power, Government of India.

Hindalco has initiated its efforts to meet a part of energy needs through renewable resources and has a multi-pronged program for the same. Solar power plants are being set up in Alupurum – Kerala and Hirakud – Odisha; waste heat is used for power generation in Dahej; and co-generation power plants, which are treated on par with renewable power, are installed in four units of Hindalco.

## Value from Waste

Our new initiative 'Value from Waste' is another example of proactively tackling environment related issues. Our plant initiated a major program to develop the use of Phosphogypsum and slag waste generated in its process into the Group's cement business. After appropriate upgradation of phosphogypsum,





today, this phosphogypsum has not only provided an essential ingredient for cement, but also saved the country from the large scale mining of natural gypsum.

Recycling is a growing source of material in aluminum and copper sectors; Hindalco has set up a recycled aluminium processing plant, and has also started a world scale can-stock plant in India, both of which will lead to the use of recycled aluminum, which offers potential for lowering the specific resource consumption. The Copper business has started importing copper scrap and procuring scrap from its direct customers for processing in a remelt furnace and has a capacity to process 10% of its copper capacity through recycling.

Water is a key resource and many regions in India face the risk of serious water shortage. We have targeted zero process discharge of liquid effluent in all our plants and have set up waste water treatment and recycling facilities. In addition, all Greenfield projects have put up rain water harvesting facilities, and have in-house water reservoirs to store the plant's water requirement for the year, so that the dependence on surface water is minimized. These efforts have already led to meeting of 7 to 15% of water demand through recycled water in our plants.

Hindalco is uniquely positioned, to contribute to global sustainability, by reducing the environmental impact of its customers. Aluminization in automotive sector is an important trend that is leading to light-weighting of automobiles. One percent increase in aluminium content of cars can lead to saving of 0.6% of fuel consumption by an average car. While Novelis is spearheading the activity worldwide by working with the global automobile industries, Hindalco has worked on the ambitious project of Aluminium Railway wagons that delivered a demonstration wagon with 4 T reductions in the tare weight of wagon that offers scope for carrying 4 T extra loads per wagon and/or reducing the fuel consumption per wagon. The other initiatives on aluminization of two-wheelers, tankers, and aluminium bus body, which when fructified can lead to a significant contribution to the transportation industry in the country through fuel saving and CO<sub>2</sub> emission reduction, are in progress.

## Product Sustainability

Aluminium has also been promoted as a sustainable material for the construction sector, building on its light weight, high corrosion resistance and decorative appeal. Hindalco market development team has launched the first of its kind quality doors and windows in the architectural product range under the brand 'Eterna', and has been supplying the base material for Aluminium composite panels which replace the organic paints used for building exteriors. The use of ACPs also helps in maintaining building insulation, helping reduce the air conditioning requirements.

## People and Safety

We will only be successful when our workforce returns home safe and healthy every day. People safety is one of the focus areas for us and we give utmost importance to this. Our operating facilities continued to have persons and committees responsible for Safety and Occupational health performance. We have started a practice of focusing on specific safety issues at various operating units. Employees are encouraged to take on initiatives to improve performance on those specific issues.

Our short and long term goal is to attract, develop and retain the best industry talent. We have a robust, developed and institutionalized Talent Management Process. Efforts are taken to retain talent by offering diverse opportunities and incentives. We have two flagship programs: Employee Integration Program for young managers and General Management Program for the experienced managers identified from the talent pool and having the potential to move into positions of higher responsibility.

## Community Development

Hindalco believes in the trusteeship concept in its business and care for people, our employees, immediate neighbours of our manufacturing plants and society at large, as a part of our projects & operations.

Bonding with communities beyond the business is the work that we do under the aegis of Aditya Birla Centre for Community Initiatives and Rural Development. Our work on the social front is focused on education, health care, sustainable livelihood, infrastructure development and social issues. Out of 660 villages in which we work, we have earmarked 105 villages for the transformation into model villages. For FY13, our CSR spend was ₹29.79 crore. In addition, we mobilized ₹65.40 crore through various schemes of the government. The ethos of giving and caring, which forms the very essence of inclusive growth, is part of our Group's DNA.

The objective of this report is to regularly review our performance and publicly report our progress. This Report signifies our approach to stakeholder engagement and commitment to transparent reporting. It also serves as a public reference, providing a collation of performance data and statements of key issues and related management approaches. I hope that our stakeholders find this report useful and that the report reinforces the commitment of everyone in the Company to our long-term goals of Sustainability.

*D Bhattacharya*

D. Bhattacharya



# Vision & Policy



# OUR FIVE KEY VALUES DRIVE EVERYTHING WE DO



**INTEGRITY**  
Honesty in every action



**COMMITMENT**  
Deliver on the promise



**PASSION**  
Energized action



**SEAMLESSNESS**  
Boundary less in letter and spirit



**SPEED**  
One Step Ahead Always



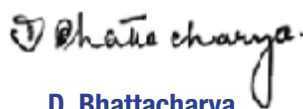
## SUSTAINABILITY VISION

By 2017, Hindalco endeavours to become a leading metals Company for sustainable business practices across the Global Operations, balancing its economic growth with environmental and societal interests



## Corporate Sustainability Policy

We, at Hindalco Industries Ltd, a leading non-ferrous metals business globally, will strive for excellence in sustainable processes, products and practices to create long term value for all our stakeholders, while conserving resources, protecting environment, nurturing our people and enhancing societal wellbeing.



**D. Bhattacharya**  
Managing Director

21-11-2012

**HINDALCO INDUSTRIES LIMITED**







# **We at Hindalco**





# Aditya Birla Group



## Overview

A US \$40 billion corporation, the Aditya Birla Group is in the League of Fortune 500. It is anchored by an extraordinary force of over 136,000 employees belonging to 42 different nationalities. The Group has been ranked Number 4 in the global 'Top Companies for Leaders' survey and ranked Number 1 in Asia Pacific for 2011. 'Top Companies for Leaders' is the most comprehensive study of Organizational leadership in the world conducted by Aon Hewitt, Fortune Magazine, and RBL (a strategic HR and Leadership Advisory firm). The Group has topped the Nielsen's Corporate Image Monitor 2012-13 and emerged as the Number 1 corporate, the 'Best in Class'.

Over 50 per cent of the Aditya Birla Group's revenues flow from its overseas operations. The Group operates in 36 countries – Australia, Austria, Bangladesh, Brazil, Canada, China, Egypt, France, Germany, Hungary, India, Indonesia, Italy, Ivory Coast, Japan, Korea, Laos, Luxembourg, Malaysia, Myanmar, Philippines, Poland, Russia, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Turkey, UAE, UK, USA, and Vietnam.

## ABG – The Global Scenario

A metals powerhouse, among the world's most cost-efficient aluminium and copper producers.

Hindalco-Novelis is the largest aluminium rolling company. It is one of the three biggest producers of primary aluminium in Asia with the largest single location copper smelter

No.1 in viscose staple fibre

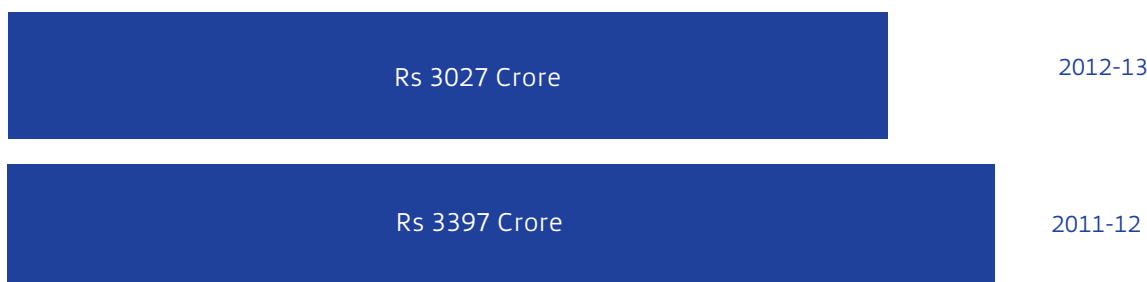
No.1 in carbon black

The fourth-largest producer of insulators

The fourth-largest producer of acrylic fibre

Among the top 20 cement producers

Among the best energy-efficient fertilizer plants

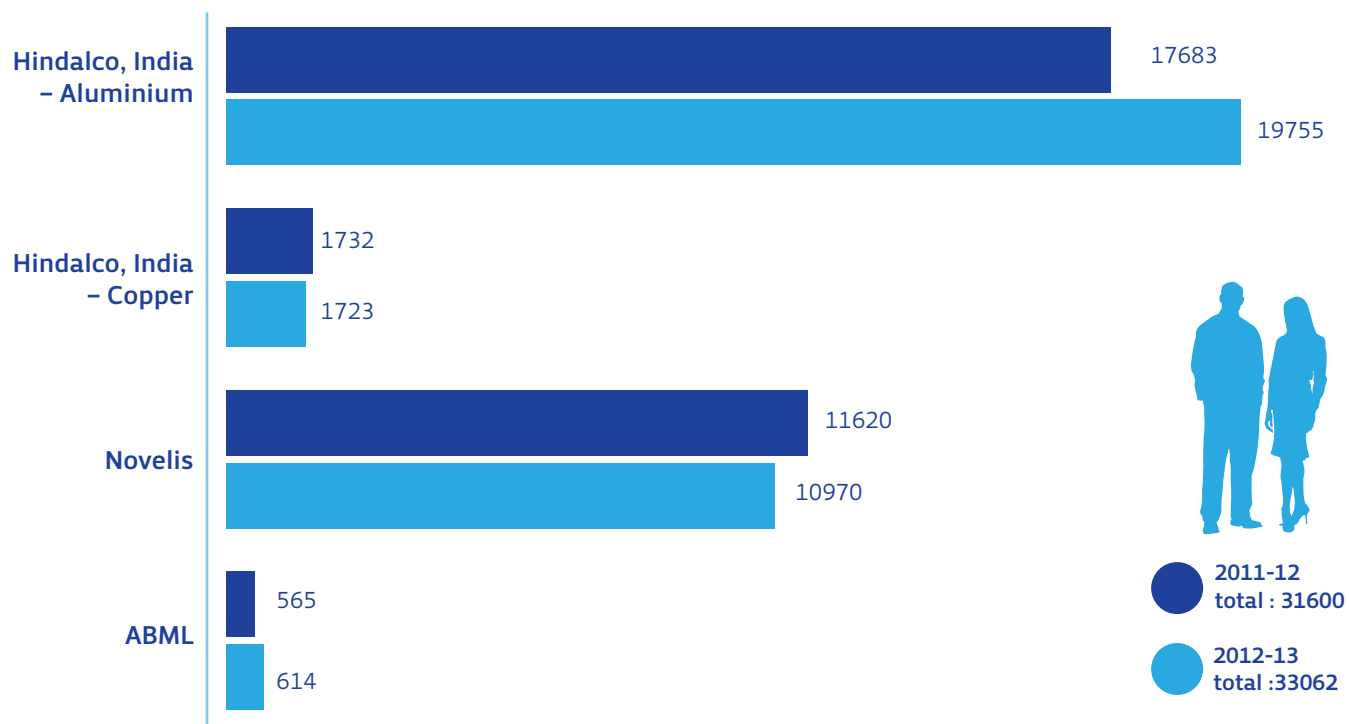


## Hindalco-Net profit

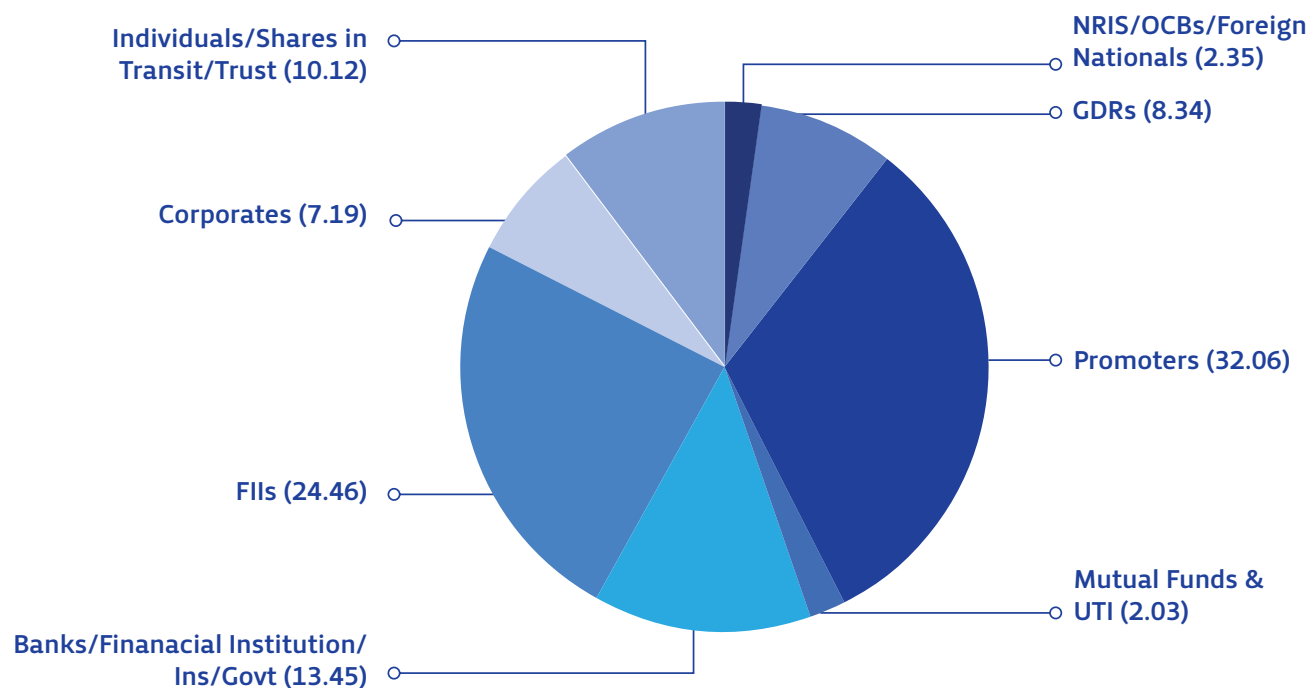
Source- Annual report 2012-13 Page no 38



## Break -up of Manpower Strength



## Shareholding Pattern 2012-13



Source- Annual report 12-13 Page no 38

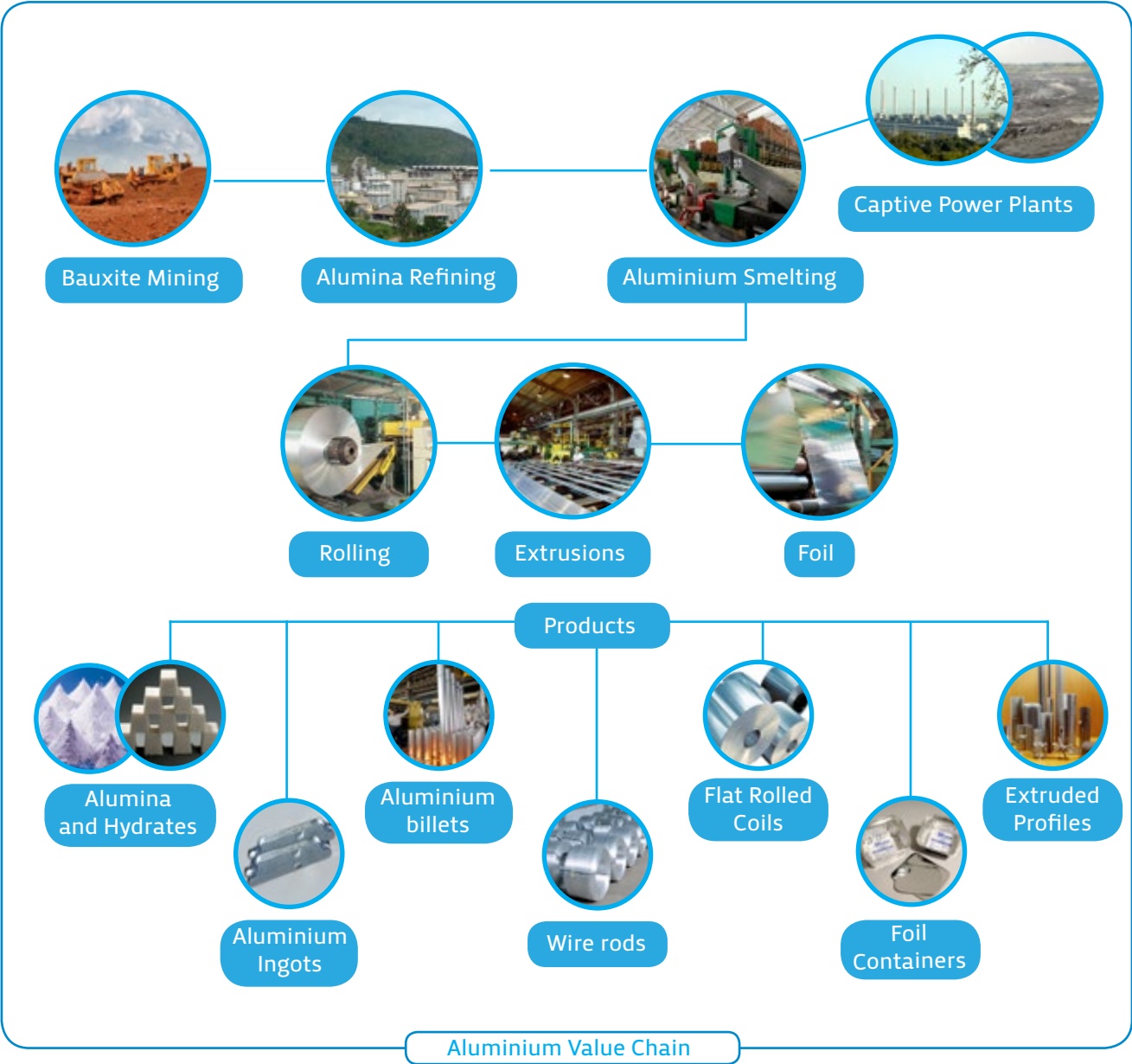
# Hindalco, India - Operations

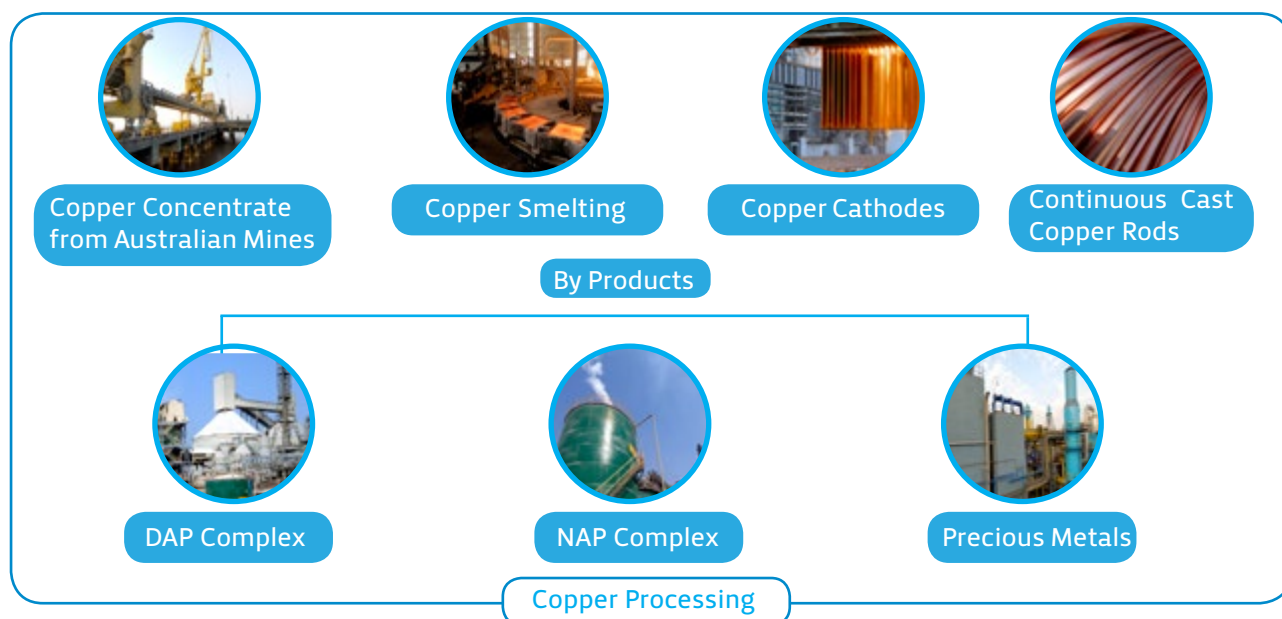
An industry leader in aluminium and copper, Hindalco Industries Limited, the metals flagship company of the Aditya Birla Group is the world’s largest aluminium rolling company and one of the biggest producers of primary aluminium in Asia. Its copper smelter is the world’s largest custom smelter at a single location.

Our aluminium units across the globe encompass the entire gamut of operations, from bauxite mining, alumina refining and aluminium smelting to downstream rolling, extrusions, foils, along with captive power plants and coal mines. Our major products include standard and speciality grade alumina and hydrates, aluminium ingots, billets, wire rods, flat rolled products, extrusions and foil.

Our copper unit, Birla Copper, produces copper cathodes, continuous cast copper rods and other by-products, such as gold, silver and DAP fertilisers.

Our units are ISO 9001:2000, ISO 14001:2004 and OHSAS 18001 certified. Several units (Taloja, Kollur, Alupuram, Belur & Silvsassa) have gone a step further with an integrated management system (IMS), combining ISO 9001, ISO 14001 and OHSAS 18001 into one business excellence model. We have been accorded the Star Trading House status in India. Hindalco’s aluminium metal is accepted for delivery under the High Grade Aluminium Contract on the London Metal Exchange (LME). Our copper quality standards are also internationally recognised and registered on the LME with Grade A accreditation.





## Hindalco, India - Aluminium

Business Category	Installed Capacity	Performance in 2012-13	Sustainability Aspects
Alumina	1.5 Million T Renukoot (0.7), Belgaum (0.35), Muri (0.45), Bauxite Mines at Maharashtra, Jharkhand Odisha and Chhattisgarh	1.32 Million T	Cost competitiveness, Value-added special products
Aluminium Metal (Primary)	562 KT Renukoot (345), Hirakud (217) Conductor Redraw Plant at Renukoot (56.4 KT)	542 KT	Cost competitiveness, Value-added special products
Captive Power Generation	1224 MW Renusagar (742), Hirakud (368) Renukoot Cogen (84), Muri (30)	9714967 MWH	Efficient Power Generation, Managing cost of Inputs
Flat Rolled Products	205 KT Renukoot (80), Belur (45), Taloja (50), Mouda (30)	231 KT	
Aluminium Extrusions	31 KT Renukoot (23), Alupuram (8)	34.1 KT	---
Aluminium Foils and Converted Products	34 KT Silvassa (30), Kollur (4)	15.8 KT	Development of packaging solutions to Industries

## Hindalco, India - Copper

Business Category	Installed Capacity	Performance in 2012-13	Sustainability Aspects
<b>Copper and Other products</b>	Copper Cast Rods : 142.2 KT Sulphuric Acid : 1, 670 KT Phosphoric Acid : 180 KT Fertilizers (DAP and Complexes) : 400 KT	Copper Cathode : 314.9 KT Copper Cast Rods : 145.4 KT Sulphuric Acid : 1049.4 KT Phosphoric Acid : 100.1 KT Fertilizers (DAP and Complexes): 209.5 KT	Value added Products Waste to Wealth

Yeongju Plant, South Korea



## Novelis – Aluminium

Novelis is the world's largest manufacturer of rolled aluminium, producing an estimated 14% of the world's total aluminium rolled products. The company serves customers in sectors including automotive, beverage can, and high-end specialties such as electronics and architecture. Novelis is also the largest recycler of aluminium worldwide.

Novelis is almost entirely an aluminium converter,

rather than an aluminium producer. We are also an aluminium recycler. These semi-finished aluminium products are used in the manufacture of finished goods such as cars and packaging for beverages and food.

In FY13, 43% of the aluminium that went into our products was recycled aluminium and have aligned our efforts to achieve 80% by 2020.

Business Category	Installed Capacity	Performance in 2012-13	Sustainability Aspects
<b>Novelis</b>	26 Plants across 4 continents	FRP Shipments 2786 KT	automotive, beverage can, and high-end specialties such as electronics and architecture



## Message from Novelis CEO

In early 2011, Novelis laid out an ambitious vision aimed at strengthening the long-term competitiveness of our business through sustainability and innovation. Our intent was to transcend the incremental approach by radically transforming our company – and, in the process, lead the way in our industry. At the heart of this vision is our unprecedented goal to use 80% recycled aluminium in our products by 2020. When we achieve it, we will cut the embedded carbon in our products in half. Working toward this goal is requiring us to embrace an entirely new way of thinking and operating. We call it the ethos of disruption. I am confident that by bringing our industry-leading research and technology capabilities to bear, we will find the disruptive innovations required to get there. And, I am more firmly convinced than ever that our commitment to sustainability will be the key value driver for our company going forward. In the 21st century, there is no business as usual.

Thank you for taking time to learn about Novelis' sustainability efforts. We welcome your feedback and partnership as we work to make our sustainability vision a reality.



**Phil Martens**

**President and  
Chief Executive Officer**

## ABML

Aditya Birla Minerals Limited (ASX: ABY) is a copper mining company in Australia with operations in Western Australia and Queensland. ABY conducts copper mining and exploration activities at the Nifty Copper Operations (BNCO) located in the Great Sandy Desert, Western Australia and the Mt Gordon Copper Operations (BMGO) near Mt Isa, Queensland.

Copper concentrates produced from its copper mines are shipped to Hindalco Industries Limited's (Hindalco) copper smelter in India. Hindalco is a group company of Aditya Birla Group. One of India's largest industrial conglomerates. Hindalco has a 51% shareholding in ABY and is Asia's largest integrated aluminium producer and growing copper producer.



Aditya Birla Minerals Limited



Aditya Birla Minerals Limited

### Performance in 2012-13

**Total Ore Mined : 2.27 Million Tonnes**

**Total Copper Produced : 69291 MT.**

## Message from CEO and MD, ABML

ABML continues to reduce its carbon footprint by making efforts to reduce energy and carbon based products usage across its operations. Our Nifty Operations improved its energy efficiency, measured as a unit of ore processed. Actual energy used was lower across ABML in 2012-2013 with lower per unit consumption at Nifty and the decision to place Mt Gordon Operations into Care & Maintenance. Approximately 136,000 tonnes of carbon equivalent emissions were released by ABML during 2012-13, and it paid a Carbon Tax bill under the Climate Change legislation in Australia.

We are pleased with our efforts on recycling all the waste oil generated at ABML. A number of community forums were also held during the year to improve our stakeholder communications and engagement with the communities in which we operate.

With community support and that of our employees we will continue to operate successfully and sustainably in the future.



**Sunil Kulwal**

**CEO and Managing Director**

## Growth Plans in Aluminium - India

Location	Expansion Details	Capacity	Status
Hirakud, Odisha	Smelter Expansion	52 KT	Under Commissioning
	Captive Power Plant	100 MW	
	Rolling Plant	135 KT	Partially Commissioned
Rayagada, Odisha (Tubal Alumina)	Alumina Refinery	1500 KT	Under Commissioning
	Captive Power Plant	90 MW	
Bargawan, Madhya Pradesh (Mahan Aluminium)	Aluminium Smelter	360 KT	First Metal tapped, commissioning being undertaken in phased manner
	Captive Power Plant	900 MW	
Lapanga, Odisha (Aditya Aluminium)	Aluminium Smelter	360 KT	2013
	Captive Power Plant	900 MW	



Mahan Aluminium

## Growth Plans in Aluminium - Overseas

Location	Expansion Details	Capacity	Status
North America – Oswego, USA	Automotive Sheet Finishing plant	200 KT	Mid CY 2013
Europe – Nachterstedt, Germany	Recycling Expansion	250 KT	Mid CY 14
Asia – Ulsan and yeoungiu – South Korea	Rolling Expansion	350 KT	Mid CY 2013
Asia –yeoungiu – South Korea	Recycling Expansion	265 KT	Commissioned
Asia – Changzhou, China	Automotive Sheet Finishing plant	120 KT	Mid CY 2014
South America – Pinda – Brazil	Rolling Expansion	220 KT	Commissioned
	Can Coating Line	100 KT	Mid CY 2013
	Recycling Expansion	190 KT	End CY 2013



Aditya Aluminium





# Governance



At Hindalco, we leverage strategic long term thinking and adherence to Corporate Governance principles to drive success and create value for our stakeholders. The corporate leadership at Hindalco has world class experience and expertise, with decades of industrial leadership. Our focused management team is globally aligned to ensure strong operational performance with the Executive Directors being responsible for day to day decision making within our global operations and a Board of Directors providing supervision, counsel and guidance for overall direction of the Company over long term. We not only adhere to prescribed Corporate Governance practices as per Clause 49 of the Listing Agreement but go beyond and adopt emerging best practices. We endeavour to meet our legal/social obligations in every country where we have presence, directly or indirectly.

## The Board:

In 2012-13, the Board of Hindalco consisted of eleven Directors – ten Non-Executive Directors out of which seven are Independent Directors.

**Non-Executive Directors** – Mr Kumar Mangalam Birla, Mrs Rajashree Birla, Mr Chaitan Manbhai Maniar, Mr Madhukar Manilal Bhagat, Mr Kailash Nath Bhandari, Mr Askaran Agarwala, Mr N. J. Jhaveri, Mr Ram Charan, Mr Jagdish Khattar, Mr Meleveetil Damodaran

**Executive Director** – Mr D. Bhattacharya - Managing Director

The board sets the tone from the top, and has established a set of broad governance principles, which delegate management authority to the chief executive within defined limits. The board reviews key group risks and how they are managed.

## Reviewing all matters as per requirement of Clause 49 of the listing agreement



## The Board Committees

The Board Committees play a crucial role in the governance structure of the Company and have been constituted to deal with specific areas/activities which concern the Company and need a closer review. The board delegates some of its oversight and monitoring activities to its committees, composed of Directors and in cases, the Executives responsible for such operations. The Board committees are set up under the formal approval of the Board to carry out clearly defined roles as a part of good governance practices. The minutes

of all Committee meetings are placed before the Board for noting. During the year the Board had constituted Corporate Social Responsibility Committee to align them with the requirements of Companies Bill, 2012, and is led by Smt. Rajashree Birla. The Board also inducted Mr N. J. Jhaveri: Independent Director in the Sustainability Board in line with the requirement of Clause 55 of the Listing Agreement on Business Responsibility Reporting.

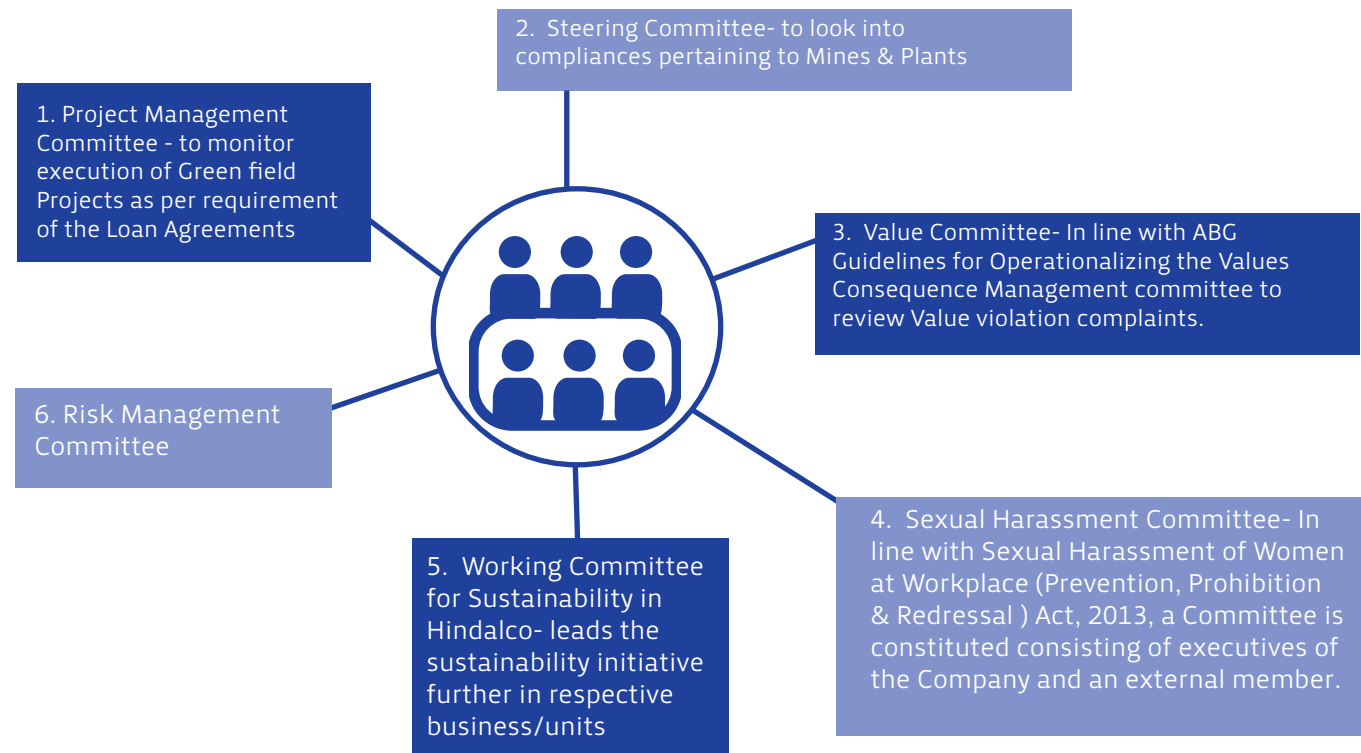


The Committees are as follows:

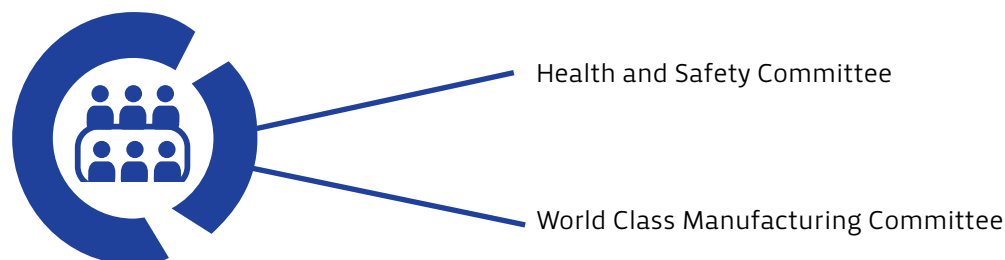
A. Board Committees



B. Committees Consisting of Executives



C. Committees in Operational Units



Further, the board and the committees as guided in certain areas by consultants, experts and counsels on matters refer to them for external opinion.

## Our Governance Framework

The Board works within a clear framework described in its governance principles which flow from Clause 49 of the Listing Agreement. These describe the board's role, how it operates, how it relates to executive management and the main tasks of its committees. These are available on the corporate governance section of our Annual Report. The company maintained a **Directors' and Officers' Liability Insurance Policy** throughout 2012-13. During the year, a review of the terms and scope of the policy was undertaken. The Companies Act 1956 permits the company to advance costs to directors for their defence in investigations or legal actions. Although their defense costs may be met, neither the company's indemnity nor insurance provides cover in the event a director is proved to have acted fraudulently or dishonestly.

The Company permits the Executive Director to take up external board appointment, subject to reporting the same to the Company. Fees received for an external appointment may be retained by the executive director. Non-executive Directors may serve on a number of external boards, provided they continue to be in compliance with the limit specified by Clause 49.

**The Independence of directors is judged on the following norms:**

- a. Such director does not have any material pecuniary relationships or transactions with the company, its promoters, its directors, its senior management or its holding company, its subsidiaries and associates which may affect independence, apart from receiving director's remuneration.
- b. Is not related to promoters or persons occupying management positions at the board level or at one level below the board.
- c. Has not been an executive of the company in the immediately preceding three financial years
- d. Is not a partner or an executive or was not a partner or an executive during the preceding three financial years, of any of the following:
  - a. The statutory audit firm or the internal audit firm that is associated with the company;
  - b. The legal firm and consulting firm that have material association with the company.
- e. Is not material supplier, service provider or customer or a lessor or lessee of the company, which may affect the independence of the director.
- f. Is not a substantial shareholder of the company

i.e. owning two percent or more of the block of voting shares.

g. Is not less than 21 years of age.

Remuneration of the Managing Director is recommended by the Board subject to approval of shareholders. Remuneration to non executive Directors is by way of commission out of profits for each financial year; such limit is determined by the Board within the limit approved by the shareholders. The amount of commission payable is determined after assigning weightage to attendance, type and other responsibilities assumed at the meetings of the Board/Committee. Details of all payments to directors appear in the annual report. New board members are subject to election by shareholders at the first annual general meeting following their appointment as Additional Directors.

## Governance Practices

### 1. Board

- a. Governance Principles
- b. Board Committees
- c. Executive Committees
- d. Group Plans/Policies

Through these committees and principles the Board follows a set of control measures.

### 2. Integration/Values

Our Company values reflect our capabilities and aspirations. These values ensure ethics and integrity are reflected in the way we do our business. Hindalco has adopted The Code of Conduct for Board of Directors and Senior Executives which clearly defines how values are to be incorporated in the day to day operations and control.

### 3. Certificates

We have a practice of obtaining certification at regular intervals from various executives regarding compliance with regulations, policies, laws etc. with a specific mention on the remediation plan on deviations, if any. This enables the Company to focus on areas demanding special attention.

The business Heads go through a rigorous exercise to confirm that our internal controls are operating effectively throughout the company and that our businesses are compliant with our financial and non financial policies, standards and mandated practices.

Our respective departments design, implement and monitor systems, policies, procedures and guidance



to improve and sustain all aspects of our performance. These control processes are subject to internal audits Purpose is to imbibe sensitivity towards the essence of compliances which in our system are non negotiable.

As trustees of shareholders, the Board believes it is its responsibility to protect and enhance their wealth. Their primary expectations remain centered around continued profitability and sustainable growth, communication and investor servicing.

Our Chairman addresses at the Annual General Meeting once a year, the forum for face to face interaction. The Board encourages open dialogue with all shareholders individuals, corporate's and foreign investors.

An exclusive email-id hilinvestor@adityabirla.com has also been provided to the shareholders for direct interaction.

We adhere to the corporate governance code as set out in Clause 49 of the Listing Agreement and subscribe to the provisions to avoid conflict of interest. The Company maintains registers wherein interest of Directors both executive, and non executive with respect to directorship that they hold in other companies, membership in committees, contracts the company proposes to enter in which they may be interested etc are noted.

Further the senior management is also required to confirm on an annual basis that no material transaction has been entered into by them which could have potential conflict with the interests of the company and such confirmations are placed before the Board.

The Aditya Birla Group Code of Conduct, for dealing in listed securities of Group Companies prohibits purchase/sale of securities of the Companies by all concerned of the group companies during the restricted period. It is intended to serve as a guideline to all concerned, which they should imbibe and practice, both in letter and spirit, while dealing in listed securities of the Group Companies.

The Company always has a system based approach to business risk management. Backed by strong internal control systems, the current management framework of the company consists of the following elements:

## Our system of internal control Risk management System

The Board has robust systems for internal audit and corporate risk assessment and mitigation. 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 behaviors are all components of Hindalco's system of internal control. Management of risk and operational performance is one of the elements of the 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 Company has an online based software the Enterprise Risk Manager wherein all units and corporate functions are identified as Risk Centres. Each one identifies the risks associated to the, root causes of risks and devise mitigation plans to counter or manage risks. The software depicts the criticality of risks based on impact & likelihood rating of risk and effectiveness of the mitigation plan. The same is updated on a quarterly basis and new entries are added to enlarge the scope. The key risks identified as well as their management are reported in a specific and consistent manner which enables efficient business planning, appropriate intervention and ultimately board oversight.

The Business Review Committee comprising of the Chairman of the Board 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 are 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 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. In addition to the risk and currency fluctuation inherent in its operations, Hindalco has got significant exposure to commodity prices. Our financial performance is significantly impacted by fluctuations in the prices of Aluminium, Alumina exchange rates and interest rates. We have taken a very structured approach to the identification and quantification of each such risk and have in place a comprehensive risk management policy.

The company's risk management and reporting structure is as follows:

- A special team is formed from the different departments of the Company for undertaking a special audit of the Risk Management Departments on periodical basis. The report of all such audit is also reviewed by the Risk Management Board on periodic basis. As per the Master Circular No./6/2007-08 dated 2nd July, 2007, of Reserve bank of India, Exchange Control Department, it is mandatory for the Board of Directors to draw a Risk Management Policy, laid down clear guidelines for concluding all the transactions and also a periodical review of operations and annual audit of transaction and the same is incorporated in the system of ERM.

## Steering Committees for Compliance

Steering Committees comprising of executives with requisite expertise were formed to oversee compliance of statutory obligations by Plants and Mines. The Managing Director effectively monitors the functioning on a monthly basis for all Units. Audit on Compliance is also carried out by external agencies.

## Compliance Management System:

To monitor and manage compliances in an effective manner the company proposed to implement a compliance management software during 2013-14.

The tool once implemented, will automate the monitoring of compliances. The lapses due to manual oversight could be done away with to a large extent. The Steering Committee will be responsible for overseeing effective implementation of the Tool across all Units, Mines and Corporate Offices. Monthly reports through the software will be circulated to the respective business heads highlighting the concern areas.

## Sustainability Structure

The grounding of sustainability is supported by commitment from the apex level management. We embrace a top-down approach that boosts efforts and ensures an efficient functioning, aligned to sustainable development of our firm. The Sustainability Board ensures formulation and implementation of our sustainability strategy. The Board reviews the sustainability performance of the Company.



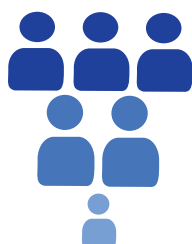
### Sustainability Board

The Board monitors the progress on Sustainability initiatives and reports the same to the Managing Director on quarterly basis.



### Working Committee (WCSH)

The Committee leads the sustainability initiative further in respective business/units by providing requisite training in each unit and preparing the annual sustainability report



### Unit Level Teams

The Unit level teams coordinate the data management within the unit and provide information to WCSH.





# Materiality Issues

## Roadmap and Synergy with Stakeholders





## A. Materiality Issues

The Hindalco Sustainability Board, based on the feedback from operating units, reviewed the materiality issues affecting the business and stakeholders. These issues were then discussed with the respective businesses for their inputs and incorporation in their initiatives and targets.

Along with our subsidiaries Novelis and ABML, we are present in major activities along the value – chain process. The materiality assessment is done considering the sustainability issues across the value chain.

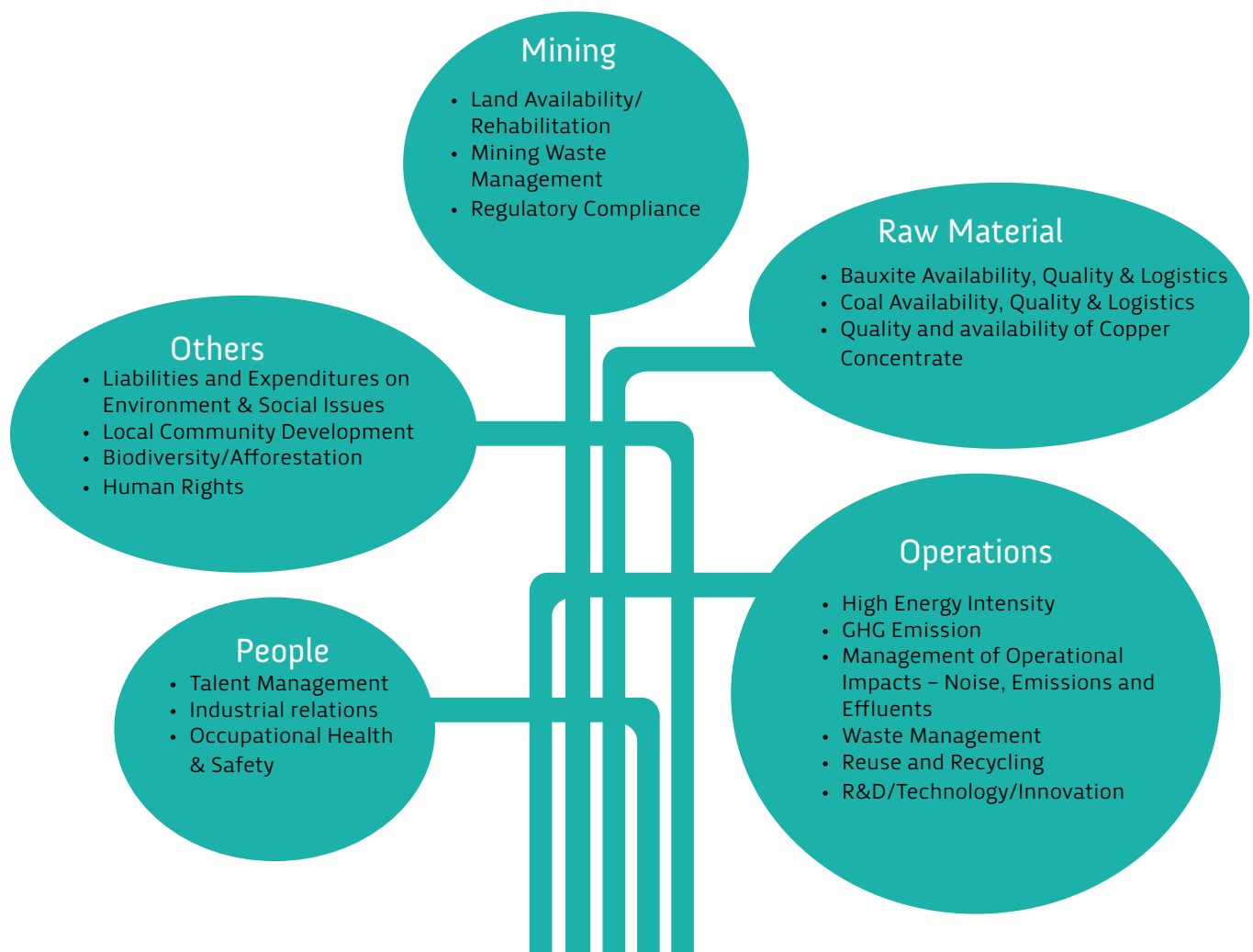
## B. Sustainability Strategy & Roadmap

Aluminium as a light metal, with ease of processing, and with its unique combination of properties such

as electrical conductivity, low density, malleability, surface properties, good corrosion resistance and infinite recyclability, offers excellent opportunities for improving the environmental performance of its consumer sectors, especially over the life cycle of the products, thus contributing to the improved sustainability.

However, production of Aluminium using Bayer and Hall Herault processes has been a subject of concern due to its environmental footprint, arising out of the need for large scale mining of Bauxite and Coal, high electrical energy requirement, high GHG emission, generation of environmentally serious waste and potential consumption of land for Red Mud and Fly Ash Management. Despite being the most abundant metal on the earth's crust, large stretches of bauxite are often under the cover of thick forests.

The balance between the production and application processes, covering all steps from mine to market, has posed as a challenge and an opportunity that the global aluminium industry has successfully built on.



Sector	Issues	Way Forward
Mining	Land Availability and Rehabilitation Mining Waste Management Regulatory Compliance	Mining Development and Closure Plan Land Acquisition R&R Plan and implementation Mining Policies System for Afforestation Value from Waste
Raw Material	Bauxite Availability, Quality & Logistics Coal Availability, Quality & Logistics Quality and availability of Copper Concentrate	Technology selection/upgradation Process modification Explore possibility getting consistent quality raw material
Operations	High Energy Intensity GHG Emission Management of Operational Impacts – Noise, Emissions and Effluents Waste Management Reuse and Recycling R&D/Technology/Innovation	Energy Conservation Initiatives Environment Management System Focus on 3R Concept in process Plan for Value from Waste R&D Objectives and Clear work plan
People	Talent Management Industrial relations Occupational Health & Safety	Human resources Policies and Guidelines Reward & Recognition System Focus on Management of Occupational Health & Safety System
Others	Liabilities and Expenditures on Environment& Social Issues Local Community Development Biodiversity/Afforestation Human Rights	ABF Foundation focus areas Code of Conduct Plan for Biodiversity Policies and Guidelines for Human Rights

With this background, we have developed sustainability strategy and roadmap to address these challenges.

Implementation of actions in line with the roadmap is in progress. The Sustainability Board reviews the status of actions during their regular board meetings.

## C. Synergy with Stakeholders

Our Business model addresses engagement with key stakeholders like Customers, Employee,

Communities, Suppliers, Regulators, Investors, Shareholders and Industry associations on different economic, environment and social issues. This helps in consolidating our material risks and opportunities.

In the year 2012-13, we have once again initiated the process of stakeholder engagement using methodologies like survey, Face-to-Face Meetings, high-level meetings with Government representatives etc.

Details on the survey will be included in our next report.





# **Sustainability Performance Value to Customers**



At Hindalco, we support a holistic view of economic sustainability and agree that it is not just about the financial performance of our organization. Instead, economic sustainability should reflect the degree to which the wealth generated and resulting financial resources are used to contribute to society.

Its consolidated revenues at nearly USD 15 billion (₹80,193 crore) and EBITDA at USD 1.6 billion

the Metals Business, the Company would have posted even better results.

Novelis has pension and other postretirement plans (OPEB) in 10 countries (Canada, France, Germany, Italy, Malaysia, South Korea, Switzerland, UK, US and Brazil). Most of these pension schemes are defined contribution plans for new hires since 2005 and mostly defined benefit plans for employees who joined prior

Parameter	Hindalco USD Mio	AMBL USD Mio	Novelis USD Mio
Economic value generated	2012-13	2012-13	2012-13
Revenues-			
a) Net sales by business	4,798.7	520.9	9,812.0
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)	181.8	4.03	
c) Revenues from sale of assets include physical assets and intangibles	(0.8)	0.04	21
<b>Economic value distributed</b>	<b>2012-13</b>	<b>2012-13</b>	<b>2012-13</b>
Operating costs- Payments to suppliers, non-strategic investments, royalties, and facilitation payments	805.0	441.2	8,477.0
Employee wages and benefits Total monetary outflows for employees (current payments, not future commitments)	221.1	90.66	818.0
Payments to providers of capital - All financial payments made to the providers of the organization's capital	NA	NA*	97.0
-Dividends to all shareholders	57.8	16.31	Nil
-Interest payment made to providers of loans	80.3	2.19	271.0
-Any other-short term borrowing	NA	NA*	332.0
Payments to government	NA		
-Tax (corporate, income, property, etc.)	117.3	NA*	121.0
-Related penalties paid at the international, national, and local levels.	NA	NA*	
Community investments- Voluntary contributions and investment of funds in the broader community (includes donations)	5.5	0.01	2.76
Economic Value Retained	230.1	NA*	Adjusted EBITDA: \$961 million FY13 Net Income attributable to common shareholder: \$202 million

(8,849 crore), is indeed a notable feat in the current context. But for the subdued growth in the global economy, the depressed state of metal prices, and the relatively high energy prices, which impacted the different segments within

to 2005. The programs vary by country reflecting the national pension policy. OPEB plans include retiree medical US, Canada and Brazil and retiree life insurance plans in the US and Canada.

\*NA- Not Available

This March 31, 2013 disclosure, included in our 2013 Annual Report (Form 10-K), is prepared based on US GAAP. Any deficit in a funded pension plan is generally funded between 5 and 15 years, depending on the country's statutory funding requirements. Pension plans in France, Germany, Italy and Malaysia and OPEB plans in the US and Canada and Brazil are unfunded.

As of March 31, 2013 there were 6,865 active employees, 4,702 retirees, and 2,179 terminated vested employees in the pension plans.

before retirement. Our other postretirement benefit obligations include unfunded healthcare and life insurance benefits provided to retired employees in Canada, the U.S. and Brazil. During fiscal year 2014, we expect to contribute \$29 million to our funded pension plans, \$10 million to our unfunded pension plans and \$20 million to our savings and defined contribution pension plans.

In India, we are governed by

- Government Rules and Regulations

Novelis Data				
W2013 ASC 715 Year-End Disclosures: Pension and OPEB (USD in millions)	Unfunded Pension	Funded Pension	OPEB Plans	Pension and OPEB
Plan Liability (PBO)	\$206	\$1,375	\$234	\$1,815
31-Mar-13				
Plan Assets		\$1,066	-	\$1,066
31-Mar-13				
Funded % 31-Mar-2013	0%	78%	0%	59%

As of March 31, 2013 there were 10,970 Employees employed by Novelis. Our pension obligations relate to funded defined benefit pension plans that we have established in the United States, Canada, Switzerland, the United Kingdom and South Korea, unfunded defined benefit pension plans in Germany, and unfunded lump sum indemnities payable upon retirement to employees in France, Malaysia, and Italy. Pension benefits are generally based on the employee's service and either on a flat rate for years of service or on the highest average eligible compensation

- Labour Management Agreement in case of Unionized Employees.

Provident Fund and Pension/Superannuation are defined contribution schemes and only gratuity is a defined benefit scheme for our purpose.

Employee Benefits of short term nature are recognized as expenses as and when these accrue. Long term Employee Benefits and Post Employment benefits, whether funded or otherwise, are recognized as expenses based on actuarial valuation at the year-end

Sr. No.	Defined Benefit Plan Obligations	2012-13 (USD Mio)	2011-12 (USD Mio)
1	Present value of Defined Benefit Obligations at the beginning of the year	85.2	82.38
2	Current Service Cost	5.2	5.5
3	Past Service Cost	NA	NA
4	Interest Cost	6.7	6.4
5	Curtailment Cost/(Credit)	NA	NA
6	Settlement Cost/(Credit)	NA	NA
7	Plan amendments	NA	NA
8	Actuarial (Gain) or Loss	0.4	(0.7)
9	Benefits paid	(3.0)	(3.1)
10	Present value of Defined Benefit Obligations at the end of the year	94.4	90.6



**Financial Implications of Climate Change-** There have been significant regulatory responses to tackling the problem of human induced climate change in several geographies where we operate. In India, the Prime Minister's commitment to reduction in Greenhouse Gas (GHG) intensity by 25% by the year 2020 and the National Action Plan on Climate Change (NAPCC) as also the 9 Missions are of significance.

However, the Company has made investments in wind power, and is also making plans for investments in solar power to offset RPO targets that have been set. Excess RPOs generated would be sold and would be taken care of through procurement from the market. Hindalco Risk Management committee has planned to address and assess this factor in the current year, and includes Climate Change as a risk factor and prepared a mitigation plan. Novelis in USA and ABML are also being subjected to relevant carbon taxes as applicable in the respective geographies.

We continue to participate in the export promotion schemes of the Government of India for our Aluminum and Copper products. This year we have received ₹4.5 crore (0.8 Mil US\$) as subsidy on capital expenses.

We do not have any policies on preferential sourcing from local suppliers. We conduct business with suppliers who are globally competitive, best in quality and service delivery. We work closely with suppliers and provide appropriate inputs for their capacity building.

Currently, we do not measure the percentage of our

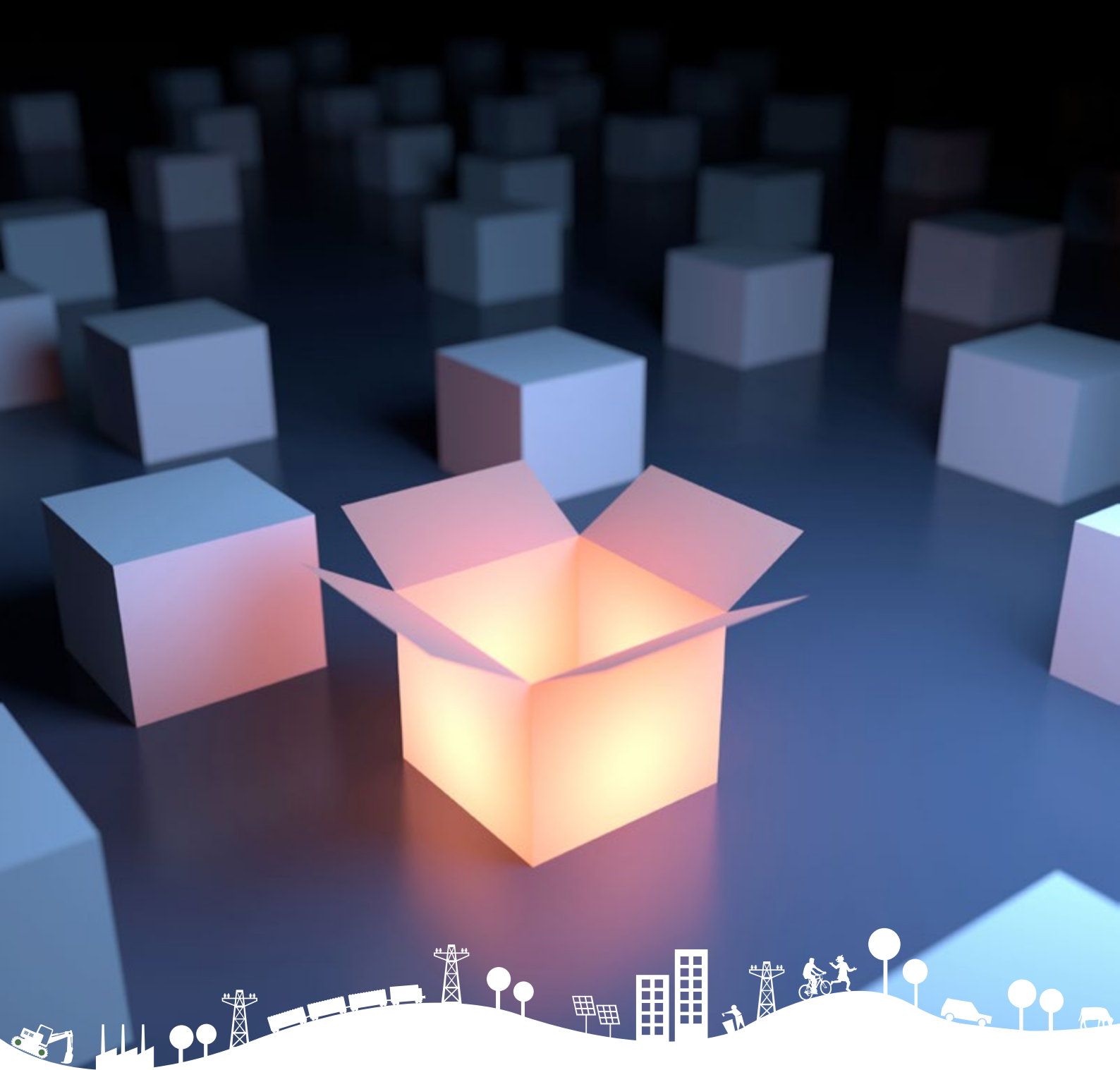
procurement budget that is spent on local suppliers, however we source a reasonable amount of our goods and services from local suppliers. We are putting in place systems for recording such data; this data is expected to be recorded from FY2015. Our supplier selections are based on ability to meet specification requirements, pricing, product and service quality, payment terms and lead-time.

In the mining sector, we do not undertake any artisanal mining. Likewise, we do not have any policies for local hiring and proportion of senior management staff from the local community at locations of significant operations.

Our recruitments are based on requirements of the position. We consider education, training in relevant fields and experience while recruiting people, who best fit our requirements. In significant locations of operation, we do not maintain data on proportion of facility's total workforce from the local community (workforce is employees and supervised workers); however, plans are being made for collecting this data in the future. While recruiting workforce, we abide by the regulations stipulated by the local authorities.

**Community Investment** -For the year 2012-13, our CSR spend was ₹29.79 crore (Mil US \$ -5.49) – which is 1.48% of the average net profit for the last 3 years. In addition, we mobilised ₹ 65.40 crores (Mil US\$- 12.04) through the various schemes of the Government, acting as catalysts for the community.





**Sustainability Performance**

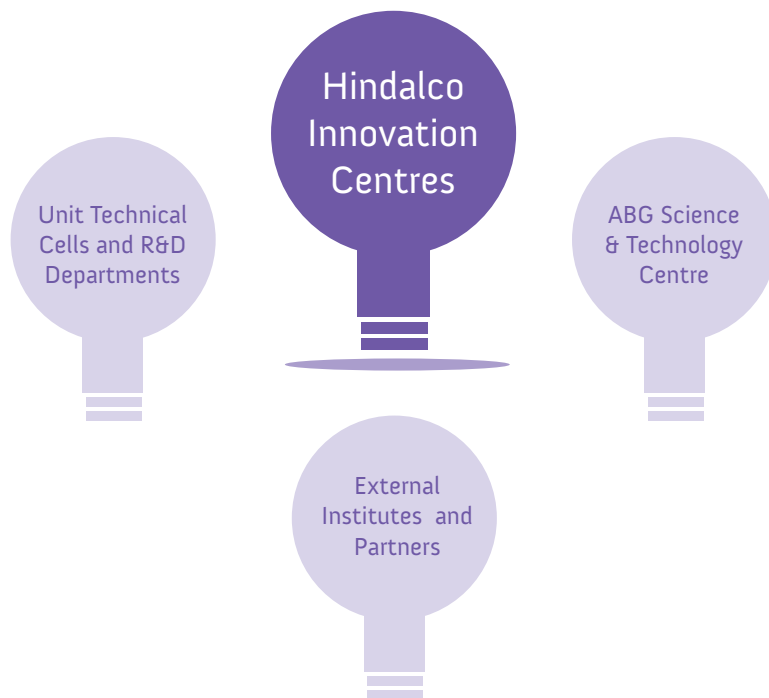
# **Technology & Innovation**



Based on the intent to build technological competencies to support short, medium and long term business objectives, the company has developed a matching organization structure as outlined below. While Unit Technical/R&D teams focus on improvements in technology through tracking, in-house process development and engineering improvement, interaction with supplier interaction, engagement with consultants, as well as reward programs; Research-intensive assignments are chartered to the Aditya Birla science & Technology Centre (ABSTC), for which the corporate team at Hindalco Innovation Centre (HIC) coordinates the work, or the units engage with suitable external domain experts. For development of key competencies in metals and mineral engineering R&D, along with experimental facility, software tools etc. Hindalco India Operations has been spending approx. 25 – 30 Crores every year on R&D.

## Management of Technology

Hindalco units have vintage technology from multiple sources and different levels of technology even for making the same products e.g. FRP from Renukoot, Talaja, Belur, Mouda, are in fact the same class of product, based on different technology and equipment. Alumina at Renukoot, Muri and Belgaum is produced based on technologies of different origins. In the copper plant, 3 competing technologies operate simultaneously under the same roof. Sustenance in these products & processes are achieved through adding value, upgrading processes, having state of art equipment, reducing costs, conserving energy & reducing environmental pollution, developing new products, and promoting new applications. Technology strategy and development in Hindalco is therefore tuned to its business strategy as elaborated with a few examples below. Accordingly, the motto of Technology function in Hindalco is “Technology & Innovation for Business Excellence”.



## Technology Focus Areas

- New products
- Process Improvements
- Cycle Time Reduction
- Cost Reduction
- Production Efficiency
- Environment Protection



## Technology is managed to support the delivery of strategy

Strategy	Technologies to support delivery of strategy	Specifics of Technology support
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	<ol style="list-style-type: none"> <li>1. Technologies for low cost Alumina production</li> <li>2. Technologies for cost efficient and environmentally superior aluminium smelting</li> <li>3. Technology for efficient, low cost, environmentally superior thermal power (CFBC technology)</li> </ol>	<ol style="list-style-type: none"> <li>1. Alumina: -Use of high silica bauxite (in-house project in HIC-Alumina), Double digestion technology (RTA as collaborator).</li> <li>2. Al smelter- Debottlenecking of existing pot lines to higher kA (collaboration with tech. provider); High kA pot line at Hirakud (GAMI), 360KA Prebaked, point feed technology from Pechiney established at Greenfield smelter at Mahan and under installation at Aditya, for Greenfield smelters</li> </ol>
To be a market leader and low cost downstream player as a hedge against the cyclic nature of the upstream Al commodities business	<ol style="list-style-type: none"> <li>1. Technologies for Beverage Can Body Stock - The single largest Aluminium sheet application in the world and a high potential high growth market in India and developing countries.</li> <li>2. Technologies for Aluminium Lithographic sheet.</li> <li>3. Technology for Al. packaging foil.</li> </ol>	<ol style="list-style-type: none"> <li>1. Project 'BlueFox' with state of art rolling mill facility for hard alloys/ wider size FRP commissioned at Hirakud. (technology partner Novelis for the largest Can body stock producer in the world).</li> <li>2. project 'Ajanta' set up at Mouda-Nagpur for the largest capacity single location Al-foil plant in the world, based on integration of continuous cast coil line + Revamped Novelis mills + balancing facility</li> <li>3. Development of Technologies for improving the quality, reliability and range of Lithographic sheets at Taloja, partnering with Novelis</li> </ol>
Sustainable development	<ol style="list-style-type: none"> <li>1. Reduction in GHG emissions</li> <li>2. Reduction of specific energy consumption</li> <li>3. Conservation of ecosystem</li> <li>4. Conservation of natural resources</li> <li>5. Recycling</li> </ol>	<ol style="list-style-type: none"> <li>1. State of the art 360KA smelter technology for Greenfield smelters from Pechiney-world leader in Aluminium smelter technology with one of the lowest established specific power consumption.</li> <li>2. Use of Phospo Gypsum (a waste) for Agriculture &amp; Cement.</li> <li>3. Proprietary technology developed for recovery of copper from Dahej effluent and from Dahej hazardous waste.</li> </ol>
Creation of superior stakeholder value by exceeding customer expectations profitably	<ol style="list-style-type: none"> <li>1. Identifying customer needs</li> <li>2. Developing appropriate products</li> </ol>	<ol style="list-style-type: none"> <li>1. Increased aluminization of automobile sector identified as a growth area based on the customer's needs for fuel efficiency and lower emission.</li> <li>2. Joint development projects set up with Indian passenger car majors (Tata Motors/ M&amp;M/ TVS); 2-wheeler majors (Bajaj), Bus-end users (MSRTC) and Bulk transport (Indian Railways) for part/ solution development</li> <li>3. Proof of concept ready in sample cases (brake disk for Bajaj, aluminium joining technology for MSRTC, hoods for Tata Motors, coated Al HVAC parts for Blue Star)</li> </ol>

## Intellectual Property

Investment in technology over the past few years has resulted in both improved process performance, and in intellectual property for Hindalco. The statistics of Hindalco's patents and patent applications covering units, HICs and joint patents with ABSTC, through

chartered projects shows an upward trend, with 3 patents granted in Al Semifab, 2 in Alumina, and 9 patents filed jointly with Aditya Birla science & Technology Centre, covering Alumina/ Al Smelter/ Semifab and copper.



## Culture of Continuous Improvement & Innovation

Platforms and Forums for continuous Improvement & Innovation	
Annual Business Plan/ Strategic Business Objective	Conference/Seminar/Vendor Visit
Loss Cost Tree	Daily Coordination Meeting
Cost of Quality	Senior Management Committee Meeting
Employees/Customer Suggestion	Monthly Performance Review Meeting
Overall Equipment Effectiveness (OEE Analysis)	Voice of Customer (VoC)
Energy Mapping	Suggestion from outside agencies
Benchmarking/ Best in class comparison	Breakdown & Tripping Analysis
Inter Unit Visit	Waste (Muda) Identification & elimination

A continuous improvement environment is promoted at all levels through multiple schemes, viz., (a) Kaizens by small groups, (b) Quality Circle, (c) Suggestion Plan Scheme, (d) Suggestion Mela. In addition, multiple platforms are provided to employees to understand the issues and focus on different aspects of the issues based on their understanding and domain expertise.

**POLESTAR:** This initiative by Hindalco management provides an opportunity to have a critical relook at the business in view of the ever-changing global economics and encourages the management team in each business to capture value, minimize cost and improve performance.

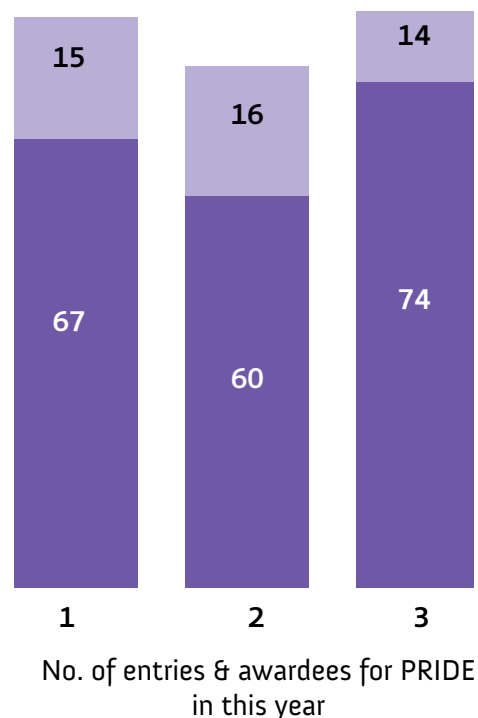
## Management System to Support Innovation

Hindalco has created and institutionalized various platforms to support and encourage innovation. Some examples are given below:

**Renusagar Power** - Young engineers are provided opportunities to interact with the unit Leadership and encouraged to take up Innovative projects. A specific forum for such interaction is the Think Tank Meeting chaired by the unit head.

**Taloja** - A tool has been created for objective assessment of ideas valuing various facets of innovation.

**PRIDE:** 'Performance Recognition in Delivering Excellence' is a platform institutionalized at Hindalco for displaying efforts to deliver excellence in all areas of work.



Criteria	Imagination /	Recurring Benefit	Team Effort/ Individual	Tangibility Benefit	Return on Investment	Total
	Ingenuity/	One Time				
Remarks	25	20	20	20	15	100



## Examples of Market Development Initiatives

Hindalco's Market Development Cell continues its focus on introducing new applications and products in the transport and automotive segment.

### Transportation:

**Passenger Vehicles :** Hindalco Market development & technology team has been working with OEMs and their vendors in providing 'green' solutions to the automotive and transport segment. Though the passenger vehicles market did not grow well this year, the OEMs have always been exploring ways and means of developing light weight solutions to the passenger cars by developing components that could replace steel with Aluminium. Some of the components which the OEMs are working on with us would include : Aluminium coolant tubes, stone guard frames, Aluminium Hood, Door frames and roof.

Coolan Tube



Hood



Roof



Door



**Commercial Vehicles :** Apart from developing load bodies for the various commercial vehicles, Hindalco market development is also working on developing Aluminium Fuel Tank and Air Tank. A weight reduction of 50% (Weight of steel fuel tank of 400 Ltrs. capacity 67 kgs whereas in Aluminium the weight is only 30 kgs) for the same capacity fuel tank.

Air Tank



FuelTank



## Aluminium Structural Bus Design

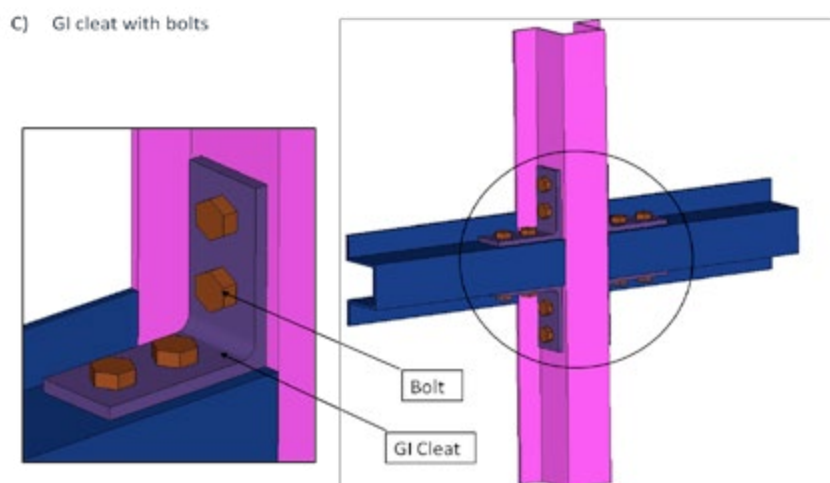
Hindalco development team has been closely working with Maharashtra State Road Transport Corporation (MSRTC) in improving the existing Aluminium bus body structural design currently being used for bus body construction by the corporation.

MSRTC has been facing certain issues in some of their buses in terms of certain failures at the structural joints at the time of accidents. Hindalco development team with the help of ABSTC, studied and suggested certain modifications in the present design of the joints.

The new joint designs, probably for the first time in the world, use a combination of rivets and structural adhesives for bus body application. These joint designs are expected to improve:

- a) Static joint strength to improve the crash resistance of the structure (verified at joint level)
- b) Dynamic joint strength to overcome the rattling and water leaking issues with conventional aluminum bus body joint design (to be verified during road trials)
- c) Reduce fabrication complexity due to large number of rivets and bolts (verified during module fabrication)

Appreciating the new design, MSRTC officials have obtained permission from the Mumbai head office to fabricate one full bus body structure using these designs. They have sought Hindalco's support in fabricating one trial bus as per our new design and make trail runs to establish the results before they could incorporate with these changes in all their bus body fabrication.



It is indeed an encouraging development. Hitherto, MSRTC wanted to give up making Aluminium bus bodies and switch over to steel bodies seeing such failures in their Aluminium buses. Having observed the improvement in our proposed design, MSRTC has gained confidence in continuing to use aluminium bus bodies with our revised structural joint designs.

## Foil and Packaging

Foil and Packaging Business of Hindalco is committed to enduring business practice, both in the sphere of manufacturing & application. Business is embarking on growth, with a focus to align operations towards environmental harmony & sustainability. The recently set up facility at Mouda meets the technology requirements to roll wider width foil as per international standards. While commissioning contemporary and efficient Foil Rolling Mills, emphasis has been on using food grade ingredients, reduced energy consumption, lower rolling oil usage, minimal waste generation and appropriate recycling & disposal of waste. These mills are equipped with in line vacuum distillation unit to reprocess used Rolling oil lowering generation of waste oil. The mills are capable of producing 6.3 mic foil, currently being imported, thus lowering the Aluminium content per square meter of packaging. The mills equipped with contemporary technologies like automatic flatness control enable to produce foil with better yield in the process and also at the customers end. The modern Automatic Gauge Control would lead to closer gauge control of foil, leading to higher yield at the point of usage.

Regular audits are conducted to establish challenging norms for energy consumption. Increasing switch over to Continuous Caster route, where aluminum scrap is recycled, is also a step in that direction. A new Twin Chamber melting furnace installed enables to recycle aluminum foil with reduced melt loss and low fuel consumption. Use of organic solvents has been of concern in Foil coating & conversion Plants. With a view to avoid emission of hazardous volatile organic compounds from solvent-based inks and adhesives, water-based solutions are used in the lamination process, which makes it more environment friendly.

Product development and using innovative measures have been a priority. Kollur plant developed capability to produce foil for making Cold Form (Alu-Alu) Blister laminate, with the recent development of AA8079 alloy, which was being imported in a substantial manner. Development of alternate alloy AA8021 also for this end use, is in development stage.



Aluminium foil produced by Hindalco is subject to food-grade use, examples being use of Aluminium House Foil for wrapping food (Freshwrap & Superwrap), use of aluminium in packaging of tablets and capsules, use of aluminium in confectionary etc. Silvassa Plant, where confectionery products are made is BRC IOP certified in accordance with international and customer's standard. We ensure that there is no unintended detrimental impact of our products at the point of use. 100% of the aluminium that is used in such applications are completely safe and is in accordance to regional and international food safety standards. We also ensure that, all such products are compliant to the relevant health and safety standard. In the reporting period, there were no instances of non-compliance to applicable laws and regulations relating to use of our products. Largest consumption of



aluminum foil continues to be for environment-friendly packaging solutions, replacing plastics in most cases. Aluminium based packaging materials offer excellent scope for a sustainable business over the life cycle of many packaging applications.

## Product Responsibility

As a responsible manufacturer, we ensure that our operations (both Copper and Aluminium) have minimal socio-environmental impacts. While manufacturing, we comply with all applicable legal regulations and proactively go beyond the requirements where techno-economically feasible.

We produce products for special applications also. While doing so, we ensure that appropriate guidance is provided to all users. Our products meet London Metal Exchange Standard requirements also.

All our operations have strong Quality, Environment and OHS Management System to ensure that

- We meet all Customer Requirements
- All product-specific (Food Grade, Pharmaceutical Grade, Material for pressure applications) requirements are met
- Traceability of our products throughout their manufacturing cycle
- Proper and safe handling of Raw Materials, Inprocess Materials, Finished Goods, Waste materials
- Environment-friendly storage and disposal of wastes

In 2012-13, there were no instances of non-compliance to applicable laws and regulations relating to the use of our products.





# **Sustainability Performance For Cleaner Tomorrow**





## A. Focus Area

Our Environmental program and commitment includes actions to implement comprehensive environmental management system, energy conservation, emission reduction, waste management and reduction, water conservation, and enhanced environmental performance in the Greenfield plants and projects.

## B. Environment Management System

We continually improve environmental performance through technological interventions, introduction of greener technologies & equipment, applications of state of art environment monitoring systems, procedures & best practices, and well defined targets. While growing in capacity, through the installation of Greenfield and brown field expansion, we have ensured minimal impact on its environment and best utilization of resources by conservation and maximizing reuse/recycle. In all units and projects, adequate mitigation measures in the areas of water, air, energy and waste have been installed.

Most of the Manufacturing Sites are certified for Environment Management System viz., ISO-14001:2004. Plant level environment management cell works in close coordination with corporate environment team and corporate compliance monitoring cell to ensure implementation of pollution prevention measures and to comply with all regulatory requirements on a continuous basis. Design, development and implementation of Integrated Management System covering QMS, EMS and OHSAS are currently in progress at Nagpur and Hirakud FRP Plant.

## C. Environment Policy and Plan

In line with the guidelines provided by the Ministry of Environment and Forests (MoEF) for adaptation of Corporate Environmental Responsibility, a revised environmental policy has been developed for implementation across the organization. A robust compliance assurance system is under implementation across all units and operations.

## Water

The availability of water for industrial and domestic use has become a global issue, with the growth of the economy and subsequent up gradation of life styles, leading to increase in demand for water from different sectors. Water has been a focus area in our company, and various manufacturing units have adopted zero-discharge concept, putting up state of art facilities to increase processing, reuse and recycle of waste water.

At **Renukoot** complex, industrial and domestic effluent streams are treated to get water quality as per the local Pollution Control Board norms. Total treated industrial effluent and partial domestic effluent is recycled back to process and horticulture use. At our Renusagar power division, Effluent Treatment Plant (ETP), Sewage Treatment Plant (STP) and Ash Water Recovery Treatment Plant (AWRTP) are in operation to treat all the effluent generated. Zero Process Discharge concepts have been established at Renukoot, Renusagar and Bauxite Mines Operations.

**Dahej** Complex has installed an additional Sewage Treatment Plant based on Membrane Bio-Reactor technology. This new technology is capable of generating good quality treated water, that is recycled to the process units, as well as utilized for gardening purposes.

**Muri** Alumina refinery plant is totally dependent on the water from the Subarnarekha River, in Jharkhand, for its operations. Due to changing rainfall pattern, in summer season, the water level in the river goes down and it becomes very critical to operate the alumina refinery. To overcome the critical water availability and to ensure smooth operation of the plant, projects were identified and implemented to conserve fresh water. Projects like recycling of treated water from ETP in Plant, utilization of treated water from the sewage treatment plant water for dust suppression, in place of fresh water, has reduced the water consumption from 12.91 m<sup>3</sup>/T of alumina in FY 10 to 7.42 m<sup>3</sup>/MT of Alumina in FY 13. In addition, rain water harvesting project has been implemented to recharge the ground water and to help raise the ground water table in the region.



Rain Water Harvesting Units



Dust Suppression System by Using STP treated water

**Hirakud Complex** has installed a 500 kilo litres per day Sewage Treatment Plant (STP) for treatment of all sewage water coming from the smelter and Captive Power Plant. An additional 250 kilo litres per day Effluent Treatment Plant has been installed for treatment of excess fluoride contaminated waste water. All the treated water is recycled/reused in the smelter process. In all, we will be recycling 17000

and re-use. In the smelter complex, a drainage network has been established to collect all rain water runoff to the effluent treatment plant and to use the treated water for process and horticulture.

Construction of water reservoirs and rain water harvesting facilities have been a feature in all the Greenfield projects of our company. At our Mahan



Recycling of waste water by effluent treatment in Mahan Plant

kilo litres per month of waste water in the smelter after treatment. The quality of treated water is monitored using online fluoride analyzers, to ensure safety of reuse.

At the Greenfield project at **Mahan Aluminium**, all waste water generated from the operation is treated at state of art effluent treatment plant for recycle

(aluminium) project, rain water harvesting is carried out which fulfilled water requirement during last phase of construction as well as during the commissioning of the power plant.





Rain water conservation through reservoir in Mahan Plant

## Energy Management

Energy management is one of key focus area of product manufacturing at Hindalco. Our efforts in energy management are focused on enhancing energy efficiency. Significant amount of our power requirements are met through our captive power plants. The energy produced by CPP utilized for our aluminum and copper plants.

The regulations on energy conservation (Perform-Achieve-Trade) from Bureau of Energy Efficiency, Ministry of Power, and the regulations on the use of renewable power (RPO), are applicable to some of our units as per the prevailing guidelines. Hindalco has proactively taken steps to convert this liability into an opportunity for improving our energy intensity. Five of Hindalco's units (Renukoot, Hirakud, Dahej, Muri) which have captive power plants, as well as 3 units which have open access power supply agreements, have the renewable power obligation, that mandates sourcing of certain percentage of their electric power consumption to be sourced from specified renewable power sources. While Hindalco respects the spirit behind the renewable power obligation regulation, we challenged the applicability of the same to our CPP units, under Electricity Act-2003, that mandates cogen power (simultaneous generation of steam and power, that provides an energy efficient alternative to separate generation), to be encouraged. The honourable Allahabad High Court has given a decision in favour of Hindalco allowing us to off-set the renewable power obligation with equivalent cogen power generation. Thus for those units of Hindalco, which have cogen power plants (viz. Renukoot/Muri/Dahej/Utkal), RPO will not be applicable. We have also

initiated pilot projects on solar power at Alupurum and Hirakud, and are at advanced stages of a joint sector project on hydel power to partly meet our renewable power obligation.

Hindalco is extremely concerned with energy efficiency: we are implementing energy-saving programmes at all our processes, which will make it possible to reduce actual consumption of water, heat and electrical energy. In addition, modern energy-saving technologies are being installed.

In Novelis FY13, the plants undertook a variety of specific initiatives, to drive down energy use and GHG emissions. It has been estimated that energy conservation initiatives resulted in energy savings of 420,000 gigajoules (GJ), which is equivalent to about 1.5% of our total energy use in FY13. ABML has a structured approach for identification, recording and acting on energy conservation opportunities and ABML saved 156,321 GJ energy in this reporting year, which is almost 6 % improvement compared to last reporting year.

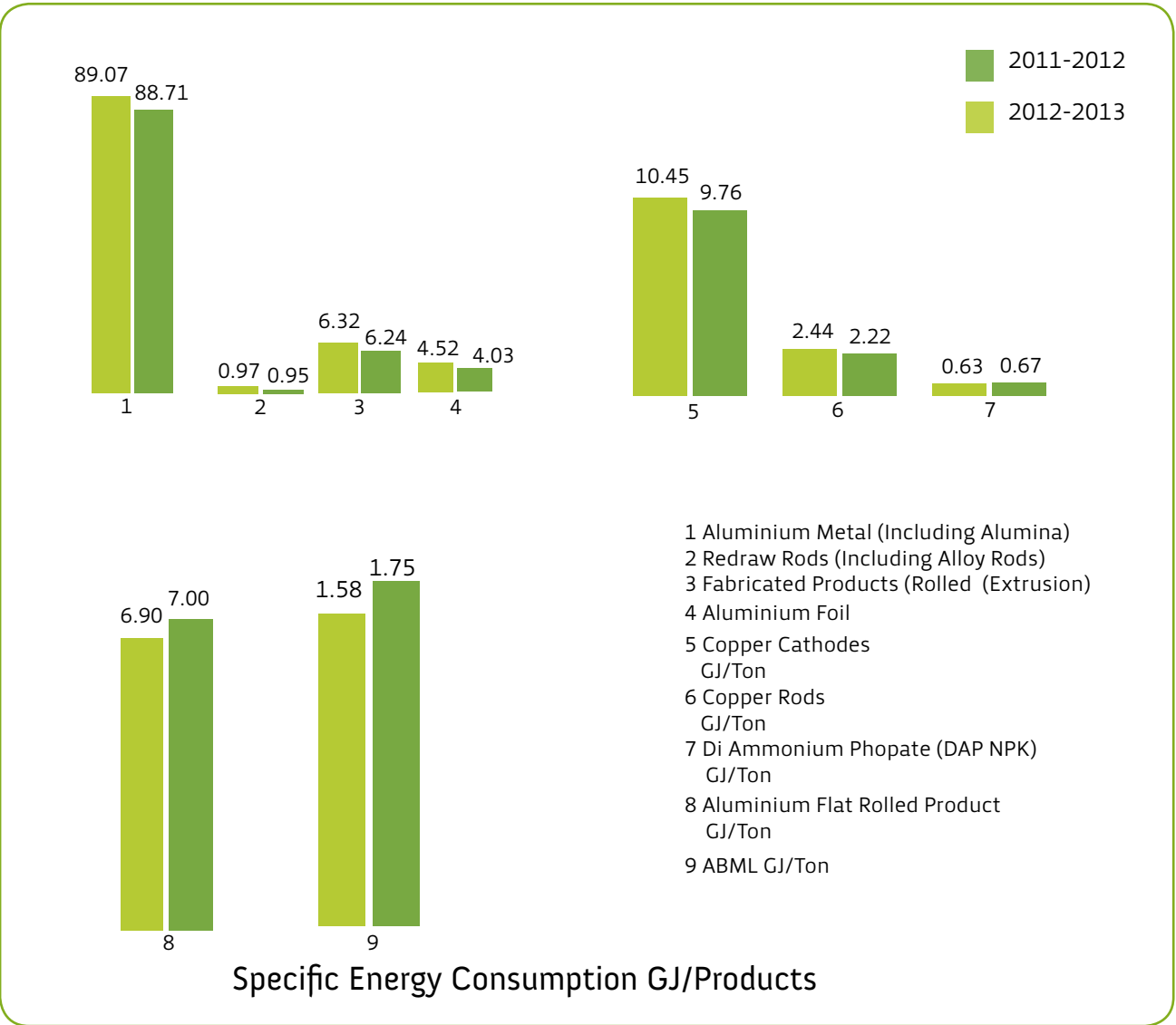
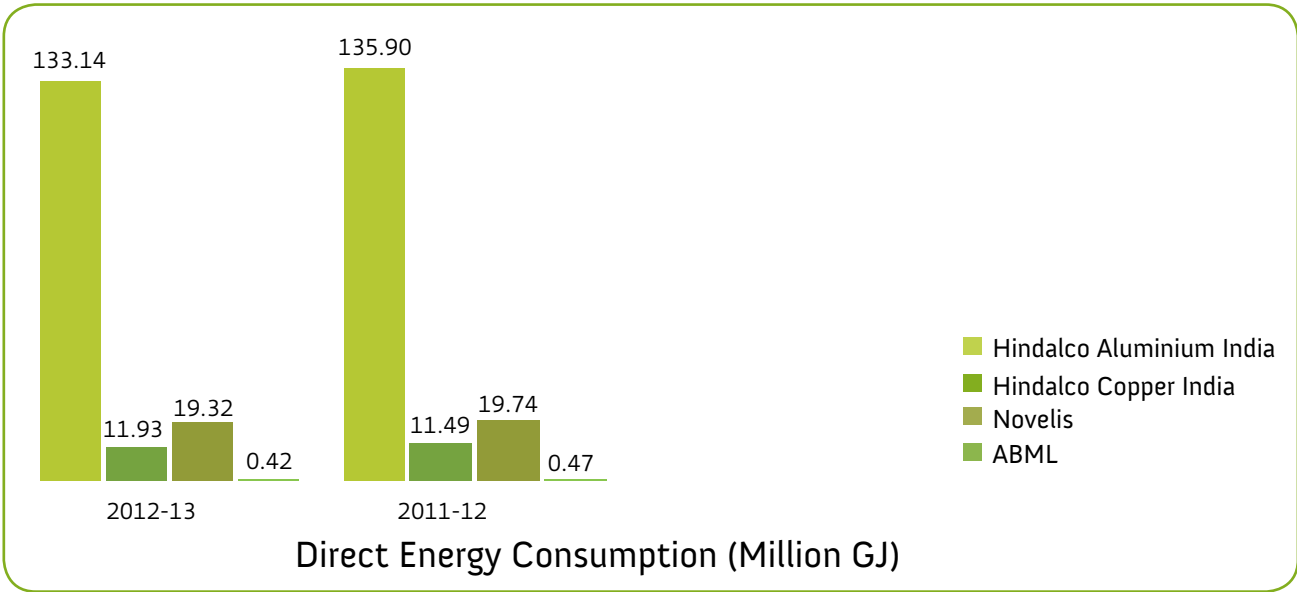
## Direct Energy

We use several sources of energy in our production facilities. Our total direct energy consumption in the year 2012-13 was 164.80 million Giga-Joules (this includes energy use at ABML and Novelis as well). Out of this, Hindalco Aluminium was the most significant consumer, accounting for 133.14 million GJ (about 80.79%), owing to its integrated operations which includes generation of power based on coal. The specific consumption



of energy (GJ/ton of processed products) in each of the processes at Hindalco India has slightly increased whereas, Novelis has been consistent

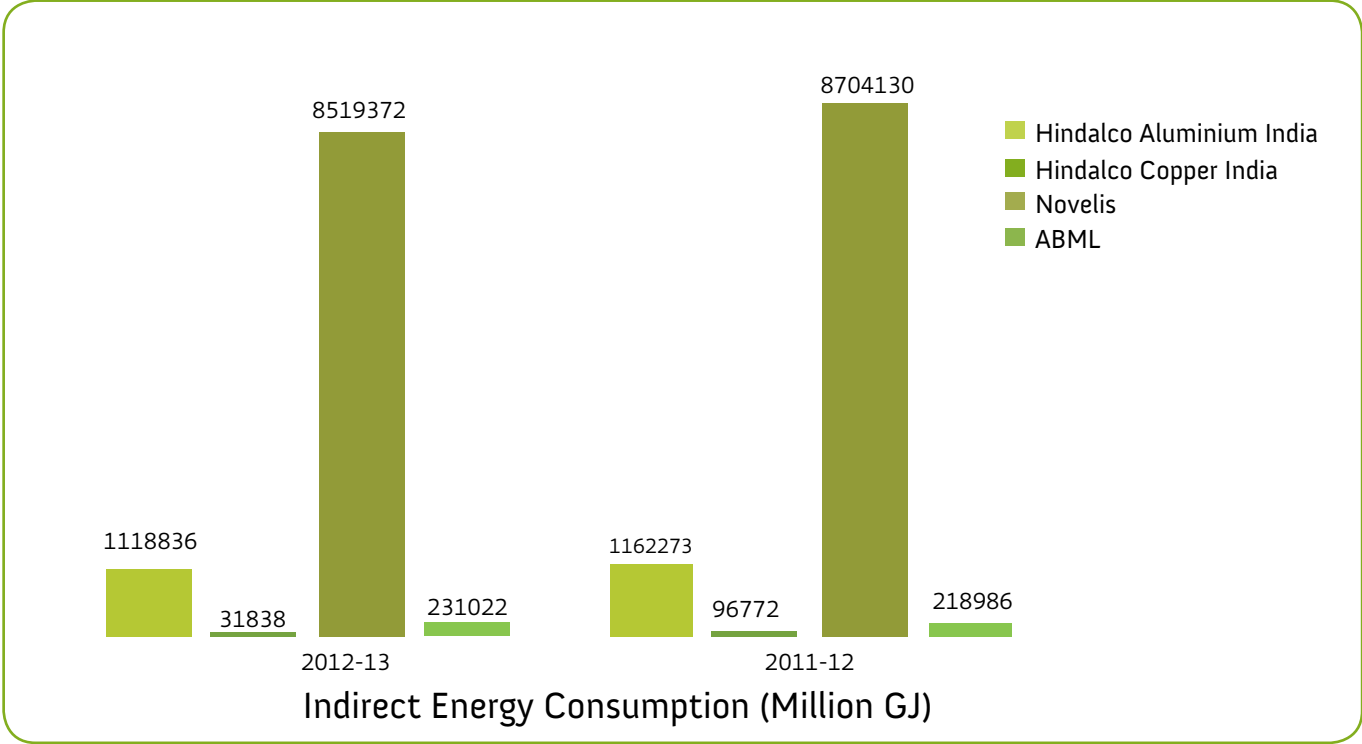
decreasing sp.energy consumption over the past few years. Data for the last two years is presented in the table below:



## Indirect Energy

Electricity sourced from the grid and process steam purchased (utilized in Alumina production process) comprise of indirect energy consumption. In the reporting year, our indirect energy consumption was 9.90 million GJ (Hindalco, Novelis and ABML). Novelis accounted for 86.04% of the total; this is because,

the production process at Novelis is substantially dependent on electric power. A substantial portion of the power consumed by Novelis, however, is based on renewable sources (hydro). It is also to be noted that there has been a reduction of about 2.17% in the indirect energy consumption of Novelis (2012 consumption – 8.70million GJ).



**Hindalco's Initiatives to contribute to Energy Conservation of its customers:**

The unique combination Aluminium properties offer an excellent opportunity to improve the sustainability of our customers, and Hindalco has a number of project initiatives in this direction, at different stages of development and implementation:

Aluminization of 4-wheelers: Hindalco Market development & technology teams worked with Indian automakers to develop aluminium components to replace steel. Replacement of steel by 1 kg of aluminium has the potential to reduce CO<sub>2</sub> emissions by 17 kg over the life time of car. Components under development & testing include: panels/closures, steering tube, fuel tank, extrusion parts for chassis and fuel tanks.

Hindalco has developed an Al-based brake-disk for two wheelers, with a leading 2-wheeler company, using a proprietary metal-matrix composites technology. Prototypes have been made and tested at the customer's lab and offers potential reduction upto 4 kg, with consequent improvement in fuel efficiency of the two wheeler.

Aluminium bus body is another project, that offers potential for energy efficiency through light weighting. Hindalco contributed through its proprietary technology for Al-joints to improve the reliability of aluminium chassis for a project for a state transport bus unit. This project is at advanced stages of fabrication.

A propriety alloy developed for improvement in electrical conductivity of aluminium cables is important for reduction in transmission losses in power distribution. A similar project has been initiated in copper conductors as well.

## Combating climate change impacts

We have monitored our impact on the environment as part of a holistic approach to value creation. Our climate change mitigation strategy is an integral part of the overall business strategy, including

reducing the environmental impact of our production activities as well as taking advantage of business opportunities by enabling our customers to do the same.

Climate change poses several risks at an enterprise level; these risks are now being recorded in our





risk management system across facilities and at the corporate level. The foremost risk is due to increasing regulations in this space in countries where we operate. These may be in form of permits, targets related to energy efficiency, absolute GHG emission reduction etc. In order to mitigate these risks, we would need to invest capital and resources in projects so as to enhance our operational performance and also account for additional financial liabilities arising out of such regulations related to climate change mitigation strategy.

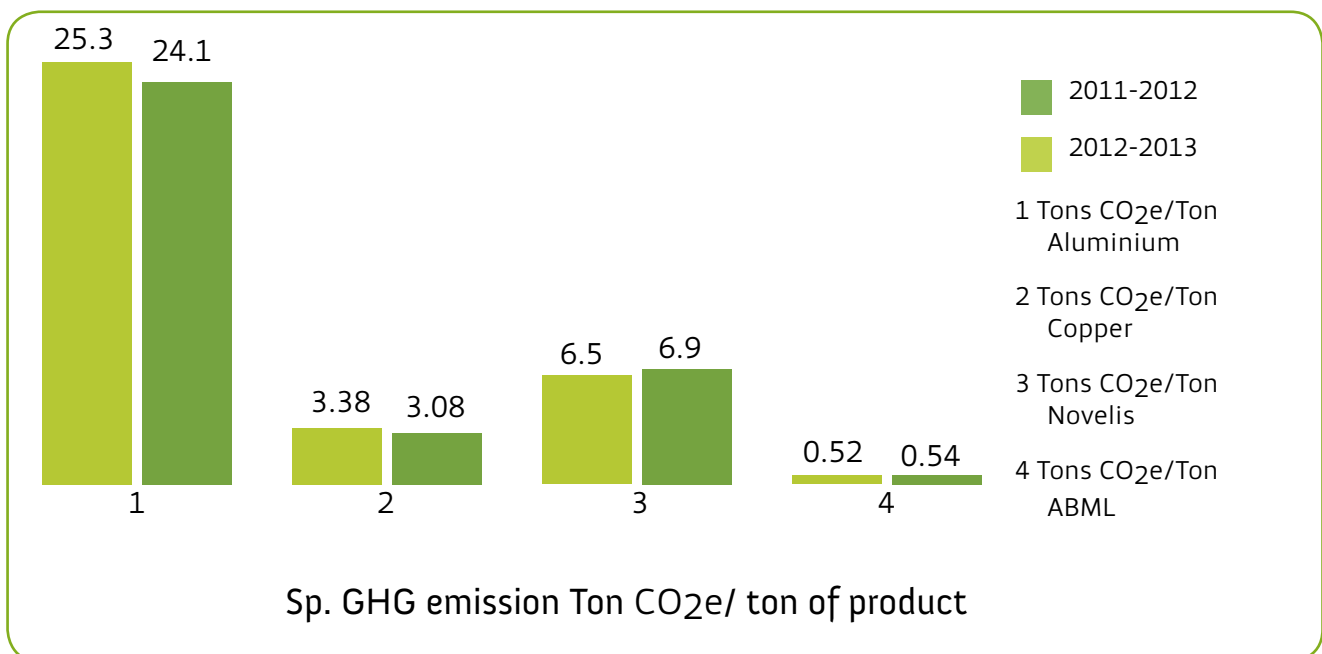
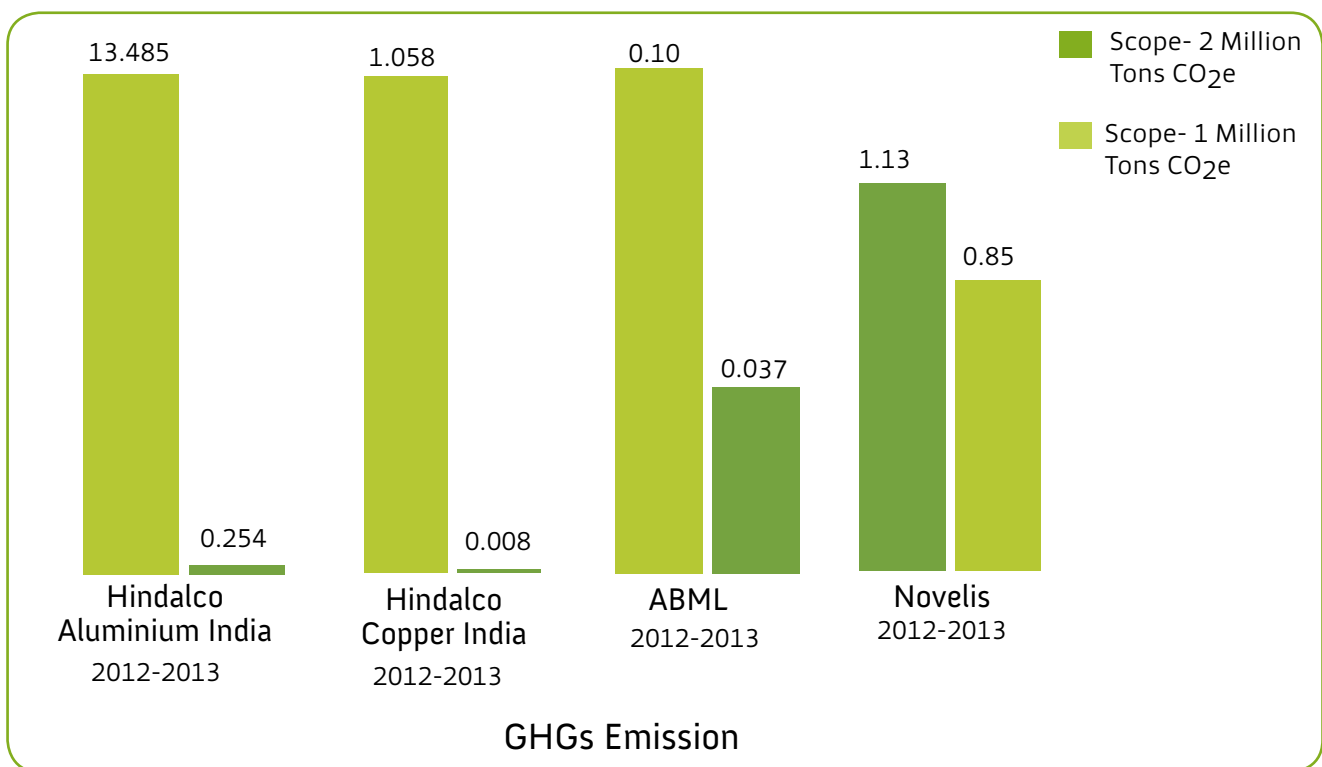
The recognition of these risks and opportunities has been a significant driver of our business strategy. We see supplying sustainable low carbon products that benefit society, and using energy-efficient

processes in our operations, as fundamental to our long-term growth.

**Greenhouse Gas Emissions-** Greenhouse gases (GHGs) are generated by various sources in our operations, including:

The power production process, which accounts for almost 76 per cent of our GHG emissions; refining and smelting accounts 10 % and 9% and rest of all from other activity like electricity purchased and mobile sources. we are tracking CO<sub>2</sub> only from scope 1 and scope 2, only Novelis is tracking Scope 3 CO<sub>2</sub> emission.

Our specific emission (tones CO<sub>2</sub>e per tone of processed product) and absolute emission has been reported in the table below:



## Air Pollution Management

All our Aluminium pot-lines are equipped with state of art efficient dry scrubbing system, which ensure quality of emissions well below prescribed standard. Advanced electro-static precipitators installed in our calciners and boilers ensure the quality of particulate emission from stacks well below prescribed standard of the respective local Pollution Control Boards. The use of state of art fume treatment plant and wet scrubbing system in anode baking furnaces in the aluminium potlines at Renukoot maintain the baking furnace stacks within the prescribed limits. A state of art facility for anode baking furnaces is also planned at Renukoot to replace the old anode baling furnaces, leading to further improvement in air emission quality.

In the Greenfield Aluminium smelter complex at **Mahan**, state of art air pollution control facilities such as bag filters, dust suppression systems, electro static precipitator, gas treatment center, fume treatment Centre etc have been installed , and commissioned.

A contemporary design of dry scrubber has been commissioned to capture any fluorides & other pollutants from pot room off gases. In the captive power plant at Mahan, Electrostatic Precipitators are provided to capture particulate emission from the Power plant, and to maintain the quality of stack off-gases. All the major stacks are equipped with online monitoring system to ensure effective monitoring .

In the remelt and recycling furnaces at our Taloja Plant. The use of furnace oil has been replaced by Piped natural gas, that has been available at site during this year. Piped natural gas as a cleaner fuel, has helped in both lowering the emission and improving the net energy requirement of the plant.

In line with the revised notification from Ministry of Environment & Forests, the company's plants and projects have been provided for Ambient Air Quality Monitoring stations, to monitor the quality of ambient air within the neighborhood, thus ensuring protection from any detrimental effect of our operations to the surrounding.



Air pollution control and management in Mahan Plant

## Waste Management through Value Addition

Metal manufacturing businesses are resource intensive and resources are getting depleted day by day. In these trying times, we have adopted the innovative approach of developing waste as an additional resource of value.

**Renukoot** Plant has established the practice of upgrading all solid wastes in an environment-friendly manner. Spent -pot-lining waste from the Aluminium Pot Lines is processed to recover cryolite and carbon for reuse; sludge from the effluent treatment plant is processed to make soil conditioner for the plantation; sludge from sewage treatment plant is utilized as manure in the company's horticulture activities. Renukoot and Renusagar power plants have facilities for dry ash collection facilities in all the Boilers. Hundred percent of the fly ash generated in Renukoot and Renusagar is sold to cement plants; while dumped ash is used for making fly ash bricks used for in-house construction activities. The process has been ready at

our Renukoot plant to recover the alumina from the dross generated during handling of molten metal.

**Dahej** copper plant uses discarded slag from its copper smelter for road building, as well as an alternative to river sand in sand-blasting, construction activities etc. Waste phosphogypsum from the phosphoric acid plant is sold to cement plants or used as soil conditioning, thus saving the mined natural gypsum. Copper plant has started recovering valuable minor metals such as bismuth, selenium, tellurium, from process sludge. In addition, technology is under development for recovering copper from effluent, creating significant value.

**Taloja** plant is developing a technology for cost effective recovery of oil vapours, that are otherwise lost from rolling mill stacks.

Disposal of the bauxite residue after recovery of alumina, in red mud ponds, is an established practice in aluminium industry worldwide. In the **Muri** alumina facility, the red mud disposal area has become a constraint, bringing up the need for a new red mud pond. Muri Plant has successfully completed a study on



utilization of Red Mud in Cement Industries. Based on the study, 14430 MT of Red Mud was sent to a large local cement producer for use in their process as raw material.

For management of hazardous waste, Hirakud has constructed and put in use 5600M3 capacity of Secured Land Fill (SLF) for scientific disposal of hazardous waste generated in the processes such as sludge from effluent treatment plant, fluoride contaminated dust, ladle cleaning residues, used bag filters from fume

treatment plant, fluoride laden dust from pot cleaning, Shot blasting dust/resins/fullers earth etc. Hirakud unit has also entered into an agreement with a Government recognized waste disposal facility in Sukinda, Jajpur, Odisha. for waste management and safe disposal of Hazardous waste, as per the prevailing regulations.

Mouda Plant has installed a Vacuum Distillation Unit for capture, reprocessing and reuse of spent rolling oil, thus recovering value as well as protecting the environment.



Vacuum distillation unit at Mouda

## Mining

Mining requires a special emphasis to ensure complete protection of environment in all aspects, including land reclamation, dust suppression, water management, etc. In the various bauxite mines of Hindalco, any dust generated during mining is suppressed by sprinkling of water on haul roads. Rain water is harvested specifically for use in dust suppression, so that ground water in the mine area to be saved. Garland drains are provided around the mining pits to prevent the rainwater entering into our mine pits. Check Dams

are constructed to recharge water and to improve the water table in the region.

The company has an established practice of reclaiming the mined-out land systematically by laying topsoil to conserve the land in its original state. The reclaimed land is used for afforestation as well as for agricultural purposes. The total number of trees planted in Samri Mines during the year 2012-13 is 18200 and in Lohardaga, 50,000 saplings have been planted during last 3 years through TERI (The Energy and Resource Institute, New Delhi) & most of the saplings that are planted are of medicinal varieties.



Fugitive dust management in Mines

## Biodiversity conservation and Green Belt development

We constantly monitor our operation near the marine environment around the Submarine outfalls, for discharging treated effluents as well as their jetty installations for Hindalco Industries Ltd. (Unit: Birla Copper) to ensure that no adverse impact on marine biodiversity and ecosystem.

We are continuing our efforts to restore greenery to the quarry slopes that were formed during the quarrying process toward restoring the previous natural plant environment insofar as possible. The vegetation that we plant is based on the plants native to that location, usually a mountainous area, and we strive to create harmony with the surrounding environment.



## Hindalco - Bauxite Mines - Lohardaga & Samri – Buffer Zone

Orsa , Chiro & Kukud Bauxite mines have in their 10 km buffer zone – two protected areas namely, Mahuadanr Wolf Sanctuary & Palamau Tiger project. Environmental Clearance for both mining leases has been obtained. Wild Life Conservation Plan is prepared and the same is recommended by Chief Wild Life Warden for approval from Govt. of Jharkhand.

Nearest Wolf Sanctuary: Mahuadanr Wolf Sanctuary located at an aerial distance of 6.0 KM toward NE direction from ML boundary of Samri, 9.8 KM toward East direction from ML boundary of Tatijharia and 3.2 KM toward SE direction from ML boundary of Tatijharia/Size of the Lease, Samri – 2146.746 Ha. Tatijharia-1218.762 Ha. & Kudag Lease – 377.116 Ha/Wildlife management plan – Applied in 2008; approval is in process and the file has been moved from office of Conservator of Forest Ambikapur to CCF wildlife Raipur.

## A. Green Belt Development

In Mahan site, 500 hectares of land has been assigned for green belt development and over 15000 plants of local variety have been planted.



Greenbelt development and reforestation in Mines

Dahej has a fully developed green belt spanning 117 hectares, with over 3 lakh plants with a remarkable survival rate of over 85%.

In Muri, tree plantation has been done in 4 new areas in and around the plant premises. Total number of saplings planted in these areas is approximately 9800.

Hirakud Plant has planted 25,800 saplings in Smelter in SLF area, Road side, School area, and in ash mound area. In addition, 15,700 saplings have been planted in Talabira Coal Mines area.

## Recycling

Recycling of aluminium and copper greatly reduces energy and environmental impacts.

Aluminium recycling requires 95 percent less energy than virgin metal. Our downstream units in India and Novelis manufacturing facilities in several countries have dedicated Aluminium recycling and remelting facilities. We recycle process scrap from customers and scrap collected from the market together with our own process scrap. In India, we also foresee an enhanced generation of aluminium scrap in the near future.

Novelis invested close to \$500 million to nearly double their recycling capacity to approximately 2 million metric tons per year by 2015. In FY13, Novelis began operations at a new facility in Yeongju, South Korea, the largest fully integrated beverage can recycling system in Asia, and broke ground on a plant in Nachterstedt, Germany, that will be the largest aluminum recycling facility in the world

Novelis promotes recycling awareness and infrastructure supporting a broad range of consumer recycling education, awareness and policy initiatives to increase recycling rates, such as Every Can Counts and the Curbside Value Partnership, and helping to develop infrastructure through collection program in Brazil and our recently launched program in Vietnam.

With the focus provided by the Chairman of the company, Hindalco endeavours to become one of the leading Indian conglomerate for sustainable business practices in the world of non-ferrous metals, across its global operations, balancing its economic growth with environmental and societal interests.

Entity	% of Total Production
Hindalco, India – Aluminium	4.18 %
Hindalco, India – Copper	4.70 %
Novelis	43%



**Sustainability Performance**

**Managing  
Talent**





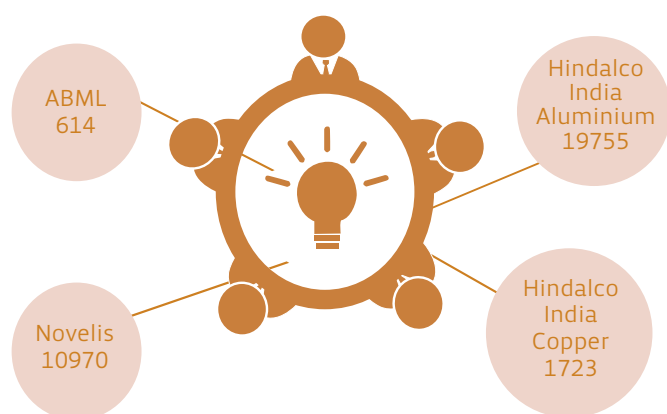
## Workforce Demographics and Diversity

Our Worldwide Employee Strength (India, ABML and Novelis) in 2012-13 was 33062. Hindalco is a multi-ethnic and multi-competency group operating in 11 countries having 51 Units with a workforce comprising of over 15 nationalities.

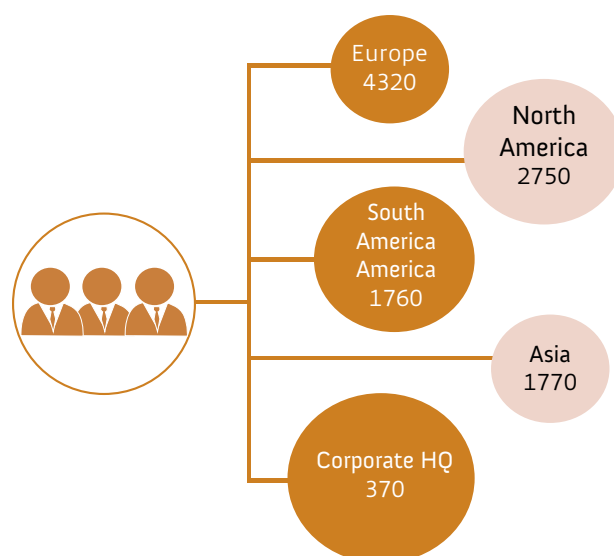
We continue to take steps to promote the diversity in commensurate with our Industry nature.

The voluntary employee turnover rate for Hindalco, India – Aluminium & Copper was 5.14% whereas for ABML, it was 8.8 %.

Our specific job requirements necessitate the need of employing contractual workforce for various functions as well as for ongoing projects.



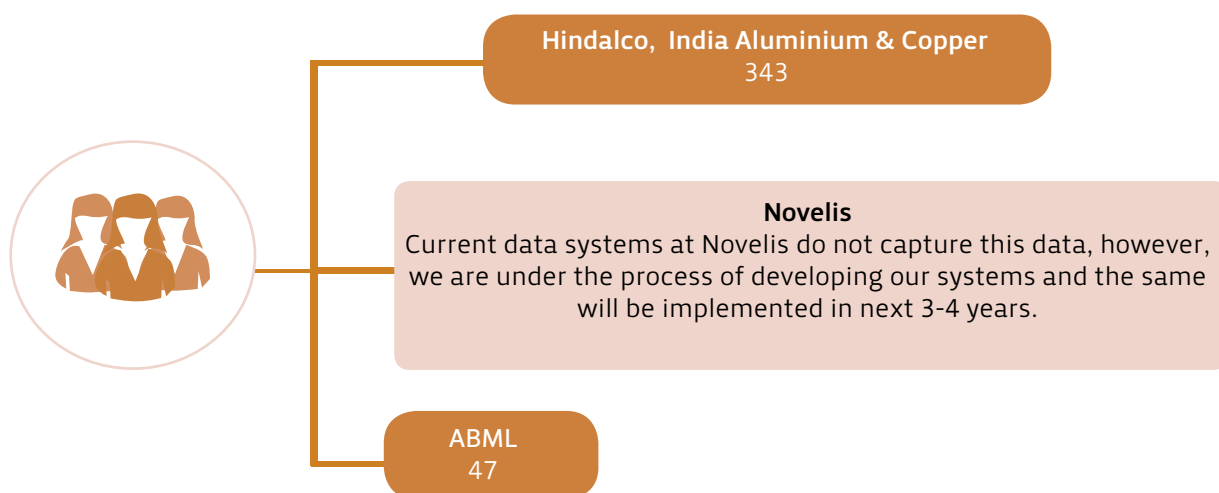
Break-up of Manpower Strength



Novelis – Region-wise breakup of Employees

Category of Employees			
Sr. No.	Unit	Percentage of Management and Supervisor Cadre Employees	Percentage of Unionised Cadre Employees (covered by LTA)
1.	Hindalco, India – Aluminium	30.09	69.91
2.	Hindalco, India – Copper	26.52	73.48
3.	Novelis	37.0	63.0
4.	ABML	45.0	55.0

## No. of Female Employees



## Break-up of Employees – Age-wise

Sr. No.	Age Group	Hindalco, India – Aluminium	Hindalco, India – Copper	ABML
1.	Age above 50 years	4827	107	134
2.	Age between 40 and 50 years	7117	350	162
3.	Age between 30 and 40 years	5201	706	203
4.	Age below 30 years	2636	558	115

## Employees Joined in 2012-13

Sr. No.		Hindalco, India – Aluminium & Copper	ABML	Novelis
1.	Management Staff	684	212	Current data systems at Novelis do not capture this data, however, we are under the process of developing our systems and the same will be implemented in next 3-4 years.
2.	Unionised Staff	195	202	
3.	Total	879	414	

## Employer Employee Partnership Relationship

At Hindalco, we firmly believe that people are our key asset and the business strategy is planned and executed in partnership with our people. Our people are involved as a partner in the entire process of running the organization in a structured manner, which includes strategy formulation, communication, action planning, deliverables, execution and results.

The sustained success of Hindalco is pivoted on the commitments and contributions of its people. Aligned to the strategic objective of propelling Hindalco among top 5 Global metal majors, we have already embarked on ambitious ₹50000 Cr projects. Accordingly, we have

identified and taken as KRAs for senior leaders and managers. Hindalco has been successful in managing employee relations, which continues to be a key to our success. Championing employee cause through proactive actions is another focus area. Long-term wage agreements and annual bonus settlements at units are landmarks towards achieving business results and industrial relations. These have resulted in developing a relationship of trust, faith and credibility. Our Long Term Settlements cover aspects such as compensation and wages, health & safety (Safe Work Practices and use of PPEs), productivity



Annual Compensation Review Process	Performance Differentiation	Sector Benchmarking	Peer Bench marking
Compensation Budgeting	Analytics	Short Term Incentive Plans	Long Term Incentive Plans
Deferred Compensation	PRIDE	Perquisites & Benefits	Capability Building – Reward Professional
Global Mobility	Talent Augmentation	Non Monetary Recognition	Governance

aligned our recruitment in line with our requirements pertaining to manpower as well as imparting induction training to assimilate them within the Hindalco family. Our people have enabled the continual expansion of capacity, the successful induction of new technology, the introduction of innovative practices for sustained success, and the introduction of best practices that span our entire operations.

What we have today is a result of greater focus on integrating and aligning our people initiatives with business functions and goals.

We have in place HR Alignment & Integration at the Business Level. HR Vision, Mission, Objectives and Strategy have been formulated in alignment with Business Vision and Mission. Strategic HR areas are

improvements, cost reduction, outsourcing of identified processes. These are discussed by means of a charter of demands from unions and management. In 2012-13, we have started focussing on behavioural based safety aspects.

We strongly prohibit child labour and ensure there are no occurrences of child labour or forced labour. We abide by all applicable laws wherein we have our operations.

Unfortunately, due to labour unrest issues, there was one lockout (longer than 7 days; from 23 February 2013) at Silvassa Operation in Hindalco India. However, there was no such strike or lock-out in ABML and Novelis.



## Minimum Notice Period regarding Operational Changes, including whether it is specified in collective Agreements

Hindalco, India Operations	Novelis	ABML
<p>The minimum notice period for significant operational changes usually varies by location depending upon local regulations, customs and significance of issue.</p> <p>For Unionized Employees, Notice of Change is also applicable in case of any change of nature of job this is carried out as per local regulations</p> <p>For separation, minimum Notice Period for Management Staff is 3 months. However, in case of unionized employees, it varies from location to location. Notice period is followed as per the provisions of the Labour management Agreement.</p>	<p>The minimum notice period for significant operational changes usually varies by location depending upon local regulations, customs and significance of issue.</p> <p>In Germany, this ranges from 1 to 7 months dependent on change. In France, Italy, UK 2 months, 1 month in Brazil, 3 months in Switzerland.</p> <p>The Notice Period/provision for consultation is usually determined by local regulations/ customs.</p>	<p>Minumim Notice of Change for operational changes : 7 days</p> <p>Minimum Notice Period for Resignations/ Terminations : 4 Weeks</p>

**Communication:** We believe that communication is a key for effective and successful employer and employee relationship. Across our locations, the two way communication process has been institutionalized and further, we are continuously working towards improving it. At our locations, information sharing is a part of our business strategy, where we believe that the more we communicate and share, the better we perform. Few of the tools which are used in communication/information sharing are :

- Open door policy related to grievance handling that enables employees to approach their Managers for prompt redressal of grievances.
- Structured communication meets at the unit, department and functional level.
- HR awareness sessions across the locations during roll outs of new policies
- Group HR Portal Poornata is a widely used medium across the organization for all the HR policies and related issues.
- Other forms of communication viz; Notice boards, Display boards, Newsletters at the Unit and department level.
- Seniors interface with the junior level employees to discuss daily performance issues, success stories, and other business challenges. Skip level meetings are also held.

- Mass media communications like Cable Television/ DTH that are managed by the company at some of our units have a wider reach and instant recall value. At a business level, we have two quarterly journals namely, 'E-metal' and 'Full Circle' and a marketing newsletter, 'AI Track' to share business/ related information with our employees

## Employee and Family Well being

We believe it's our responsibility to ensure employee health and well being and have initiated various policies and practices within the organization. The aim is to ensure that everyone is encouraged to lead a healthy lifestyle and support is provided at times of crisis. Family plays an important role in the life of a person; we are continuously working towards improving the lives of the family members through various initiatives. We ensure that family members of employees have a comfortable stay in our townships and basic amenities are made available. Across our township locations, we provide the following facilities : Aditya Birla Public School, club house, multigeneration park, digital theatre, temple, hospital and medical facilities, sports, library, concierge services, multipurpose hall etc. Initiatives such as "Add more to life" at Dahej, Mahan, Hirakud, Utkal and Renukoot, and "Wellness Drive" at Renukoot, Renusagar, Dahej and Hirakud are carried out to foster employee as well as family well being.

At our units, ladies clubs are formed through which we organise vocational courses, summer camps, medical camps, various competitions, yoga classes, sports competition that encourage women to participate in activities and further promote harmony within the township.

## Performance Management

The Performance Management System acts as a business driver, which supports the business in achieving the desired results. Performance Management is both a strategic and an integrated approach in delivering successful results in organizations by improving the performance and developing the capabilities of teams and individuals.

Performance culture is institutionalized with performance planning, business focused KRAs and goal setting together with periodic performance feedback for the entire management cadre.

In case of unionized staff, we have annual performance evaluation system.

Performance linkage to reward has been strengthened with a customized compensation package in place together with variable pay over the last few years. We have robust online goal setting process for all management cadre employees which helps them to achieve desired organizational objectives.

The effectiveness of the Performance Management System is achieved through following steps:

- Annual Planning and Budgeting exercise at organizational level
- Communication of the Business goals at the function/unit level
- Cascading down of business/function/department goals into individual KRAs & Goals
- Individual KRA and Goal Setting by mutual consent between the individual and his immediate superior
- It is ensured that the individual goals are in line with the business goals

- Mid-year review, course correction and gap meeting if any
- Annual Performance review, feedback and counseling.

## Compensation and Benefits

Our compensation programmes are structured to support our core business strategy which ensure that employees who deliver their best performance against their goals are rewarded accordingly. We also benchmark with other companies in our industry sector in order to be fair and competitive in employee remuneration. We also recognize the performance of both individual and business unit while rewarding. Wages, benefits and bonuses for employees that are covered under unions are determined by collective bargaining agreements at their respective locations.

We encourage our employees to deliver their best at all times not only by means of compensation but also by offering them opportunities that groom them and further develop their capabilities especially in the present competitive market.

We transparently communicate the revision in compensation to managers and supervisors through communication sessions at each location, followed by issue of individual letters.

Our wage structure for all our employees ensures that we are above the minimum wages as required under statutory provisions. We also ensure that various labour laws on compensation such as, Provident Fund and Minimum Wages are adhered. We follow equality through our organization and do not differentiate on the basis of gender when it comes to employee compensation.

Another major initiative undertaken is the integration of the payroll i.e., 'Project Synergy' where we will have a single payroll from the current multiple payrolls and this will help all the locations/units in terms of increased employee satisfaction

Annual Performance Review				
Sr. No.		Hindalco – India – Aluminium & Copper	ABML	Novelis
1.	Percentage of employees covered under Annual performance Review	100 (Both male and Female Employees)		52 % We will report on gender in future reports when the data is available, which is expected in the next 3-4 years.



## Details of Benefits

### A. Hindalco – India – Aluminium and Copper

Sr. No..	Benefits	Staff & Workmen	Temporary/Casual workmen	Contractor's workmen
1	Canteen facilities	Provided	Provided	Canteen Allowance
2	Mediclaime Insurance for self and family	Provided (For Management Staff only)	Under ESI Scheme	Not provided
3	Company Colony	Provided	Not provided	Not provided
4	Nishchint	Provided (For only Management Staff)	Not provided	Not provided
5	Group Personal Accident Insurance	Provided (For Mgt staff and Non-ESI Workmen)	Group Insurance in lieu of EDLI Scheme	Not provided
6	Medical reimbursement	Provided for Non-ESI workmen.	Not provided	Not provided
7	Scholarship for higher education	Provided	Not provided	Not provided
8	Housing Loan	Provided	Not provided	Not provided

**B. Novelis** - Benefits vary by location depending upon local requirements. Most benefits are available only to full time employees. Only some benefits are available to part time employees. Temporary employees are not eligible for benefits. Stock options are only available to Senior Managers.

**C. ABML** - Benefits are provided to employees as per legislated standards prevailing in Australia.

In Hindalco India Operations, number of Employees availed Maternity Leave in 2012-13 (Management and Workman) : 14. In ABML, it was 2. Retention rate after parental leave in Hindalco India was 100 % whereas it was 50 % in ABML.

qualified and experienced training professionals that are well equipped to impart training in technical as well as skill development programs that are a part of the learning plan specifically designed for every unit of our operations. External faculties also impart training on certain aspects as well. Employees are also sent for external trainings based on the training needs identified and specific job requirements.

The learning and development process followed by us is as follows :

1. Competency mapping of employees
2. Identification of GAP between required and actual competency level
3. Training Need Identification
4. Plan for Training of Employees
5. Conduct Training programme
6. Effectiveness Evaluation of training provided
7. Updation of competency matrix based on evaluation.

The Programmes are mix of functional, technical, behavioural, leadership and training etc. A group of internal and external trainers are used for conducting the programmes. Apart from the structured classroom training, opportunities are provided to our identified young talent, key & critical position holders & identified successors, to work in value added projects, cross functional assignments etc.

## Learning and Development

The Learning and Development function is well integrated with the overall HR function and the Business Objective. The annual learning and development plan across the locations is prepared in alignment to the business objectives and is based on the training needs identified specific to the individual.. Across locations, we have a full fledged learning and development centre with infrastructure that supports training requirements. We have professionally



As per the training needs identified, we send people to Gyanodaya (Learning Centre of the Group). We also take support from experienced/retired employees provide necessary knowledge & specific skills to our people.

The effectiveness of the training programs are monitored through on the job performance, pre & post tests, feedback from immediate superiors, performance review etc. Based on type & nature of training (skill/ knowledge). We conduct mentoring for new employees including graduate engineer trainees by identified mentors for overall development. The training mandays vs. targets are monitored at unit level and to further ensure that the training programmes are organized as per the plan. To support learning programmes, we are utilizing E-learning services provided by the Group. Across the plants, we have Management/Technical libraries that contain the latest management/technical journals, books and research papers both in physical form as well as in soft form in our Library, we have dedicated personnel to maintain the services and offer highest value to all our customers and employees.

To substantiate learning and development, we have knowledge sharing sessions/shop floor meets across our plants wherein daily sessions are held to discuss productivity, production and function/department related issues. Results, goals and objectives of the plant, unit and business are shared with all levels of employees to increase their awareness and further motivate them for greater successes.

In our existing plants, in order to continuously reinforce the knowledge of new technologies we adequately impart training to our people on a regular basis through both the method of class room as well as on-the-job. For the same, we are utilizing the services of our technology partners, machine and equipment providers.

The broad based effectiveness of the competency management is assessed through the findings of the employee engagement survey to understand the effectiveness of employee development initiatives. Further, for all the learning events, we have an event

wise evaluation where we take feedback from the participants on various parameters like programme content, faculty, duration, impact etc.

Few of our units provide a myriad of opportunities to employees across grades for their learning and development, one such initiative is “learning avenues to all”, wherein the following levels of education are provided through tie ups with professional institutes:

- AdityaGyan Path – An initiative that helps workmen of non core areas to acquire requisite knowledge into the core area
- ITI Level training – This involves unskilled workmen, and putting them through 8 weeks of rigorous ITI level training.
- ITI To Diploma Engineering – Experienced ITI workmen undergo 4 months training in technical aspects.
- BS process /power Engineering from BITS Pilani –technical diploma & BSc. holders to graduate in engineering discipline.
- MBA from IMT/Symbiosis – Platform for our executives to further hone their managerial expertise
- On line MBA from Universities 21 for managers
- Workers Development Programme- 7 days training for awareness among workmen on different aspects like overall Aluminium, Operation, Marketing, Finance, Environment, HR, CSR, Yoga etc.

Our Functional Heads have participated in the Group’s P&L Leadership Programme – The Cutting Edge. The Objective of this programme is to prepare our high-performing functional heads to take on P&L Roles.

Similarly, our executives have also gone through “Step Up” and “Turning Point” programmes. These aim primarily to prepare departmental heads and functional heads for their next stage of career development.

Sr. No.	Parameter	Hindalco, India-Copper	Hindalco, India-Aluminium	ABML	Novelis
		<b>2012-13</b>	<b>2012-13</b>	<b>2012-13</b>	<b>2012-13</b>
1	Number of Employees	1723	19755	614	10970
2	Numbers of Man-hours of Training	69558	1235986	Data not recorded	228348
3	No. of Mandays (1 Manday = 8 manhour) of training per employee	5.1	7.8	Data not recorded	2.6

## Employee Engagement Survey

People related initiatives are planned, designed and developed based upon the input from the employee engagement and other surveys across locations. For the management cadre employees, we are taking input from the survey results of employee engagement survey titled 'Vibes' earlier known as Organisation Health Survey (OHS). For supervisory and operative category, we use unit/location specific survey findings. In the 'Vibes' the overall satisfaction level was at 78%

for the Aluminium business while it was 74% for the Copper business. Our ongoing thrust on the business objective linked to performance management supported by the learning and development initiatives and wellness drive has started to yield results in the form of overall satisfaction levels. The Management staff across Aditya Birla Group participate in Employee Engagement Survey, conducted once in 2 years

### Percentage of total workforce represented in formal joint management - worker health and safety committee that help monitor and advise on OHS programmes –

We have a formal Joint EOH & S Committee for Safety, Hygiene and Pollution Control at our facilities having representation from both Management and Operatives. This committee receives information on EOH&S through interaction, observations and formal inspections. The Committee meets at a defined frequency to discuss on issues related to EOH&S, actions to be taken for improving EOH & S Performance.

This committee is often supported by the Departmental Safety Committee. Points discussed and actions planned in the Joint EOH&S Committee Meetings are communicated to all concerned.

In our Plants, percentage of total workforce represented in formal joint management - worker health and safety committee varies between 1 and 15 % depending upon the number of committees in place,

### Education, Training and Risk Control Programmes in place to assist Workforce Members, their families or community Members regarding series diseases

1. We conduct periodic medical check-up for our employees to identify both occupational and life style disease.
2. Based on the Medical reports, further consultations with concerned specialists are conducted to ensure appropriate medical treatment to the affected employees. Records of all such examinations are maintained at OHC/Dispensary/HR Departments.
3. Awareness programmes are conducted for employees and family members and the community for prevention and management of life style diseases such as heart problems, hypertension, diabetics and communicable diseases such as, malaria, TB and HIV Aids. In addition, information on managing health is disseminated by Occupational Health Centre through e.mails.
4. Health and Hygiene regulations as stipulated by the regulatory authorities for our facilities are complied with.
5. Positive topics such as Yoga/Meditation are also introduced to the employees and their families to ensure sound health.
6. Novelis maintains several education and training programmes relative to occupational disease. Programs include but are not limited to : 360 wellness intervention, exercise/health care club reimbursement, onsite medical clinic. Counseling is offered to the employees through the NOHERA process and/or Health 360. NOHERA, contains measured workplace and employee exposures to all type of agents (chemical, physical, ergonomic and biological). The data is compared to company specific OELs and if the results are > 50 % of the OEL, actions are taken to mitigate the risk.
7. In our company, all high risks (Occupational Health related) are controlled in order to reduce the residual risk to an acceptable level.





# **Sustainability Performance**

# **Creating a Safer Workplace**



Our first and foremost fundamental priority as a company is to protect the health and safety of our employees, contractors and visitors.

## Hindalco, India – Operations

Hindalco, India – Operations have set up a strong corporate structure for monitoring and improving safety systems and performance across all locations, in line with Corporate Safety Policy. Safety performance is closely monitored by our senior management. Hindalco's Safety Board has CEO – Aluminium Business, all business heads, select Functional Heads (Chief People Officer, Head – Corporate Projects, Head – Technology and Corporate Safety Officer) as members. Functions of safety board – Monitor Safety Performance, initiate, support new corporate safety initiatives, suggest actions to reward/reprimand actions with respect to safety and to standardize good safety practices across Hindalco. The safety board meeting is held every month to ensure effective monitoring and discuss safety measures.

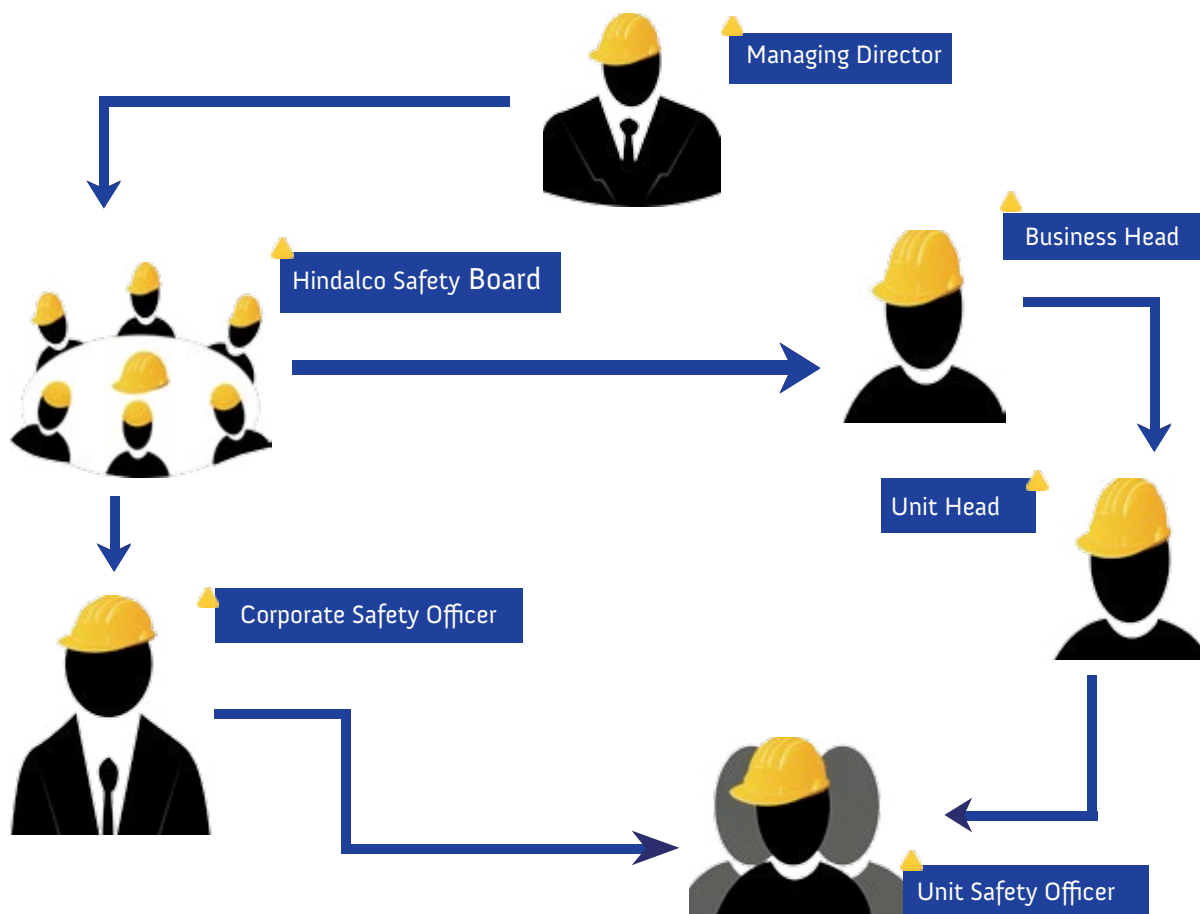
## Common Safety Practices of Hindalco – Initiated by Hindalco Safety Board

### Monthly Conference Call of Safety Officers

Monthly discussions with Safety officers on performance, actions-initiated, abnormalities identified /eliminated and other issues.

We, the employees of HINDALCO INDUSTRIES LIMITED Solemnly affirm that we for the benefit of Ourselves, Our company, Our society and Our nation will follow all the Environment, Health and Safety rules of our company and will do everything possible to prevent all types of incidents, accidents and losses.

## Hindalco's Safety Organization





## Safety Themes – Monthly Basis

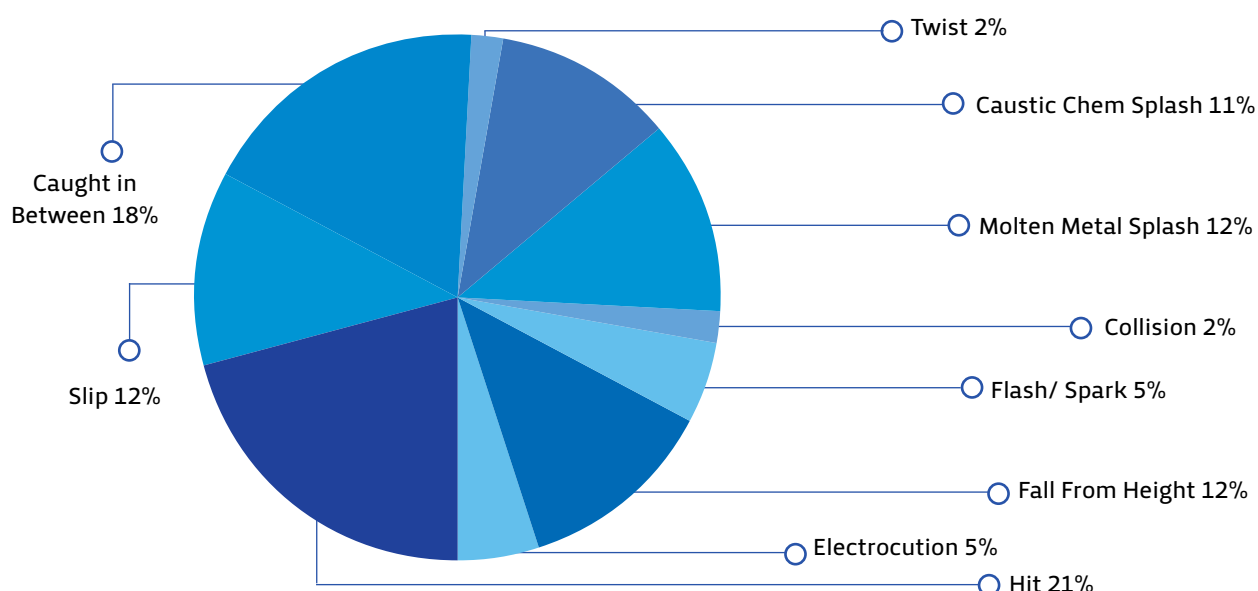
Month	Theme	Month	Theme
January 2012	Spot the Hazard	August 2012	Home & Off the job safety
February 2012	Housekeeping for Safety	September 2012	Fire Safety
March 2012	Safety in Material Handling	October 2012	Personal Protective Equipment (PPE)
April 2012	Emergency Preparedness	November 2012	Electrical Safety
May 2012	Work Permits System	December 2012	Portable power tools / Hand tools
June 2012	Road/Driving Safety	January 2013	Road & Driving Safety
July 2012	Contractor's Safety	February 2013	Spot the Hazard
		March 2013	Material Handling

**Hindalco Corporate Safety** has undertaken a systematic study to identify common types of accidents in Hindalco, and initiated multiple actions viz.,

1. Correction in systems and processes such as revised work permit
2. Safety audits of plants using Inter-unit Resource or external experts, as required

3. Enabling training programmes
4. Regular communications on safety
5. Sharing of incident investigation reports with all safety officers.

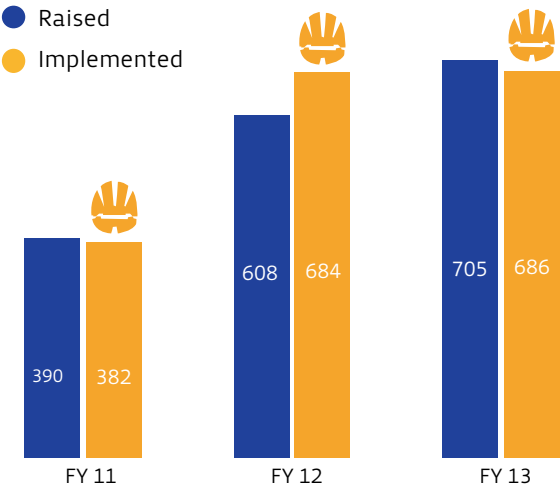
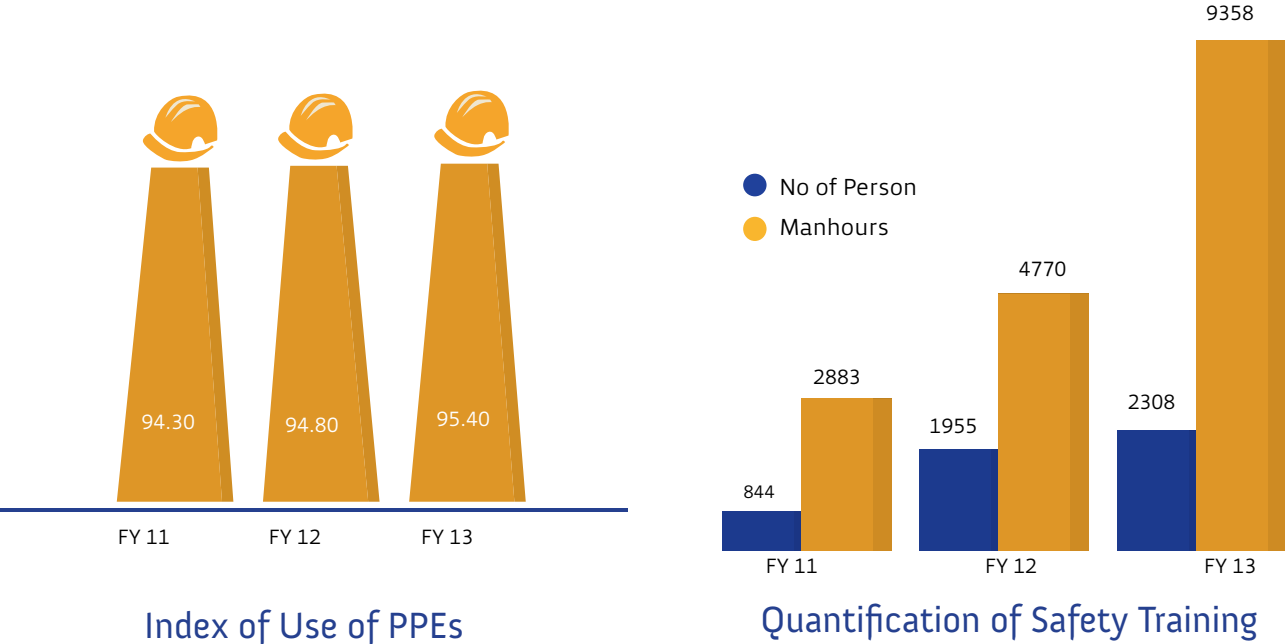
## Common types of accidents in Hindalco



**Hindalco Units** — Have set up matching systems and processes including organized workplace, ergonomic design of workplace, equipment & process safety analysis, regular employee health check-up,

quantification of safety e.g. use of personal protective equipment (PPEs), safety training hours and number of safety observations.

Quantification of safety inputs and performance



No of unsafe conditions monitored & corrected

Fatal Accidents

During the reporting period 16 fatalities occurred including contract employees. The management at Hindalco has taken “Zero-Harm” as the objective for Safety at Hindalco, supported by inclusion of safety

as KPIs for all unit managers, department heads and function heads starting 2013.



## A. Aluminium

ATTRIBUTES	PERMANENT EMPLOYEE			
	2009-10 (APR-MAR)	2010-11 (APR-MAR)	2011-12 (APR-MAR)	2012-13 (APR-MAR)
Total no. of lost time accidents (Reportable Accidents)	51	70	34	18
Total no. of fatal accidents	1	2	2	5
Total no. of man-days lost	7387	19661	12961	30770
Accident Frequency Rate	1.05	1.42	0.75	0.387
Accident Severity Rate	151.48	400.02	295.53	660
Total no. of Minor Injuries (Non-reportable Accidents)	72	68	146	106
Total no. of Near Misses	968	1224	2056	2185

## B. Copper

ATTRIBUTES	PERMANENT EMPLOYEE			
	2009-10 (APR-MAR)	2010-11 (APR-MAR)	2011-12 (APR- MAR)	2012-13 (APR-MAR)
Total no. of lost time accidents (Reportable Accidents)	0	1	1	0
Total no. of fatal accidents	0	0	0	0
Total no. of man-days lost	0	16	3	0
Accident Frequency Rate	0.00	0.26	0.26	0.00
Accident Severity Rate	0.00	4.18	0.79	0.00
Total no. of Minor Injuries (Non-reportable Accidents)	17	8	15	51
Total no. of Near Misses	1	0	5	109

## C. Greenfield Projects

ATTRIBUTES	PERMANENT EMPLOYEE			
	2009-10 (APR-MAR)	2010-11 (APR-MAR)	2011-12 (APR- MAR)	2012-13 (APR-MAR)
Total no. of lost time accidents (Reportable Accidents)	0	0	0	1
Total no. of fatal accidents	0	0	0	1
Total no. of man-days lost	0	0	0	6000
Accident Frequency Rate	0.00	0.00	0.00	0.34
Accident Severity Rate	0.00	0.00	0.00	2058
Total no. of Minor Injuries (Non-reportable Accidents)	0	4	0	0
Total no. of Near Misses	0	24	25	18



## D. Hindalco India - Aluminium, Copper & Greenfield Operations

ATTRIBUTES	CONTRACT EMPLOYEE		
	2012-13	2011-12	2010-11
Total no. of lost time accidents (Reportable Accidents)	25	50	46
Total no. of fatal accidents	8	8	10
Total no. of man-days lost	48931	48891	61205
Accident Frequency Rate	0.18	0.34	0.49
Accident Severity Rate	360.18	331.94	650.21
Total no. of Minor Injuries (Non-reportable Accidents)	352	463	654
Total no. of Near Misses			
Total Man-hours worked (in Mio)	135.85	147.29	94.13

## Novelis

Aluminum manufacturing presents an array of safety risks. With mobile equipment, aluminum scrap with sharp edges and materials at extremely high temperatures, the opportunity for injury is ever-present. That's why Novelis makes every effort to keep our employees safe – by “engineering out” safety hazards whenever possible, implementing first-rate safety programs, training on safety procedures and behaviors and requiring the use of personal protective equipment and machine safeguarding instruments.

We manage the safety of people at Novelis in a way that is integrated into our overall Environment, Health and Safety (EHS) management system. We have safety processes in place at all of our operations, and we collect and track global safety data for our employees and contractors using the Novelis Injury and Illness Recordkeeping System (NIRS).

Over the last few years, we have improved our recordable case rate (an aggregate measure of injuries, illnesses and fatalities), though we did not meet our internal target for FY13. Our recordable case rate for FY13 was 0.60 cases per 200,000 hours worked, up from 0.59 in FY12. Our ultimate goal for this metric is zero.

To help prevent accidents – such as the unfortunate fatality that occurred at our Ulsan plant in FY13 – we are working to implement a more risk-based approach that focuses on effectively identifying and controlling the potential hazards that pose the greatest risk of a serious injury. We are seeking out new and innovative safety technologies.

In our Warren, USA, and Yeongju, South Korea, plants, for instance, we are testing various technologies for forklifts, such as radar devices that alert the forklift

driver when a person is nearby, as well as sensors and speed detectors that help to avoid high speeds and blind spots.

As part of our One Novelis effort, we have also launched ‘Together We Are Safe’, a global safety program that aims to build on the best practices and improve on the practices already in place which would further become a part of the global Novelis Standard. Together We are Safe includes training for all plant employees and further ensures quality and consistency in our EHS communications across all facilities.

The Novelis facility in Terre Haute, for example, has gone more than six years without a lost time injury or illness.

During the reporting period, our Santo Andre plant had operated for more than three years with no recordable cases and four years with no lost time injuries or illnesses. At our Santo Andre location, our employees have worked hard to make safety a top priority, including conducting weekly safety inspections, implementing a “Stop and Think” program, and putting a strong focus on training employees to improve their skills.

Our plant in Bresso has also long been a model for employee safety. The plant has earned six of Novelis’ annual, internal Global EHS Awards – the most of any Novelis facility. Bresso’s leaders say their record is due to unrelenting vigilance about safety and a high level of involvement of all employees. The plant holds frequent department meetings on safety, conducts analysis of near misses, runs regular safety training sessions and conducts planned inspections and both internal and external audits.

In FY13, three plants received our internal global EHS Awards, which recognize sites that meet rigorous safety criteria. Our plants in Ohle and Kingston each earned a Platinum award, while our plant in Yeongju earned a Gold award. In order to encourage safe practices, we award sites based on their performances. In addition, the plants receive funding from Novelis for community grants to drive safety awareness in their

communities. Platinum winners are awarded \$5,000, while Gold winners receive \$2,500. This money can be used to support any safety-related organization of the plant's choosing. In the past, beneficiaries have included fire departments, nonprofit organizations for accident victims and their families, and safety education programs.

Unfortunately, during FY13 a Novelis contractor lost his life doing work for our company. In March 2013, Gab-hee Han died after being hit by a forklift at the Ulsan plant in South Korea. Mr Han had worked at the plant as an independent contractor for seven years. The tragic accident took place in the finishing line area as Mr Han was walking through the plant and stepped off the designated area.

The incident is under investigation by the Novelis EHS team as well as the Korean Ministry of Labor. And, we are taking corrective action steps at all of our plants to help prevent these types of accidents in the future – steps such as increasing barriers between forklift and pedestrian areas, increasing designation of walkway areas and installing reverse-direction cameras on forklifts. Tragic accidents like this serve as an important reminder of the need to be continually vigilant about keeping safety the top priority for those who run and work in our plants.

ATRIBUTES	Novelis consolidated Safety Performance		
	2010-11 (APR-MAR)	2011-12 (APR-MAR)	2012-13 (APR-MAR)
Novelis Employee Injury or Illness Rate, cases/200000 Hours	0.76	0.59	0.6
Occupational Disease Rate (ODR), cases/200000 Hours	NA	NA	NA
Novelis Employee Lost Days Rate (LDR), cases/200000 Hours	54.21	110.15	10.79
Novelis Employee Lost Time Injury Rate , cases/200000 Hours	0.16	0.22	0.20
Absentee Rate (AR), cases/200000 Hours	NA	NA	NA
Novelis Fatalities, cases	1.00	2.00	0.00

## ABML

Aditya Birla Minerals has a strong commitment to the health and safety of all of its employees and contractors and has built - in safe working practices for all activities undertaken. The OH&S department that oversees the implementation of the program was further strengthened to focus on training staff to improve skill levels, ensure safe working practices and enable risk management by conducting safety audits and systems compliance.

## Nifty Health and Safety

The Nifty operational Lost Time Injury Frequency Rate (LTIFR) performance is 4.5 per million man hours worked and continues to maintain below the current industry frequency rate for underground Metaliferrous Mining operations.

Attributed to this continued safety performance includes the maintaining of a strong Leadership Team which is focused and committed at achieving





safe production outcomes. Dedicated and focused Safety officers for both the surface and underground operational areas are maintained. Additionally, the procurement and engagement of an OH&S Superintendent further compliments the team and provides for an increased OH&S representation and support to all departments.

An OH&S complex incorporating medical facilities and offices for the OH&S Department has been completed and is suitably located to provide an expanded customer support function for our operation. The implementation of our operations safety focus theme “Don’t Walk Past”, “Take5” and “JSEA” Risk Management Program has been integrated within the site induction processes.

Safety initiatives achieved during the past twelve months included; critical incident management training for the Leadership Team, implementation of a behavioral reward program and safety focused theme evenings for employees.

The site emergency response functionality has undergone a review as well as optimization process that includes skill enhancement of OH&S personnel to support and strengthen our site capabilities. This has allowed for continuous site coverage with the focus on eliminating the requirement for external contractor coverage. Mutual Aid Agreements have been reviewed with local mining operations and government agencies (LEMAC) to provide mutual support in the event of an unforeseen incident.

The Emergency Response Team entered and participated in their second rescue competition at the Mining Emergency Response Competition (MERC) held in Perth Western Australia with some very encouraging results, 1st place in First Aid, 1st place in Rope Rescue, 2nd place in Hazchem skills with a very strong overall result of 3rd place at the end of the competition. The competition provided the opportunity to evaluate our skill sets and provided valuable key learning’s. BNCO is dedicated to skill enhancement of employees to meet national standards that fall under the Australian Skills Quality Authority. In 2012-2013 the training team

consisted of a training coordinator, two underground training officers and two concentrator/paste Plant training officers.

Throughout the 2012-2013 financial year, BNCO has rolled out a wide range of Nationally Accredited on site courses including, but not limited to, safe working at heights, confined space entry, senior first aid, Tele-handler, and Skid Steer. This initiative has been of great cost benefit to the company and increased safety, knowledge and morale across the site. This has assisted in promoting safety awareness by using nationally accredited training pathways which, in turn, gives the highly skilled employees the opportunity to assist in increasing production and meeting targets. Currently the Nifty operation has 92 registered Australian Apprentices who are completing qualifications such as Certificate II, III and IV in Underground Metaliferrous Mining, Certificate II, III and IV in Resource Processing, Certificate IV and Diploma levels in Engineering (Mechanical, Electrical and Fabrication), Certificate III in Electro-technology – Electrician, Certificate III in Mechanical (Plant Mechanic) and Certificate III in Engineering – Mechanical Trade (Mechanical Fitter).

During the year, there were 4 LTIs and 16 medically treated injuries. The operation implemented take-5 and hazard reporting system which helped in reduction of incidences.

During the year, a number of proactive steps were taken to improve the health & safety culture of MGO. Online incident control (INX) was implemented to improve reporting & recording of incidences. We initiated a monitoring mechanism for efficient training management. To improve document management, document control software was installed.

The Mines Department carried out a 3 yearly audit of the mines in the month of June’12. All action points were completed on a timely manner.

ATTRIBUTES	ABML consolidated Safety Performance		
	2010-11 (APR-MAR)	2011-12 (APR-MAR)	2012-13 (APR-MAR)
Total no. of lost time accidents (Reportable Accidents)	--	22	41
Total no. of fatal accidents	--	0	0
Total no. of man-days lost	--	133	96
Total Recordable Injury Frequency Rate (TRIFR)	--	13.80	19.70
Lost Time Injury (LTI) Rate	--	3.80	6.70
Total no. of Minor Injuries (Non-reportable Accidents)	--	307	313
Total no. of Near Misses	--	40	50



# **Sustainability Performance**

## **Community Engagement**

### **- Towards Inclusive Growth**





## A. Inclusive Growth

*“An India, free from poverty. An India, of inclusive growth. An India, where every person realises his or her optimal potential. An India, where every human being lives a life of dignity. An India, that can hold her head high in the hegemony of nations”*

### Mrs Rajarshee Birla, Chairperson

Aditya Birla Centre for Community Initiatives and Rural Development

## B. CSR Committee

We have constituted a CSR Committee at the Board level with Mrs. Rajashree Birla, Chairperson, Mr Askaran Agarwala, Director, Mr N. Jhaveri,

Independent Director and Dr. (Mrs.) Pragnya Ram, Group Executive President, Corporate Communications and CSR, who has been inducted as a permanent invitee. This committee is in line with Companies Bill, which has been passed by the Lok Shaba in December 2012.

## C. CSR Activities

CSR activities are carried out under the umbrella of the Aditya Birla Centre for Community Initiatives and Rural Development, which is led by the Director Mrs. Rajashree Birla.

## Activities in India – Operating facilities

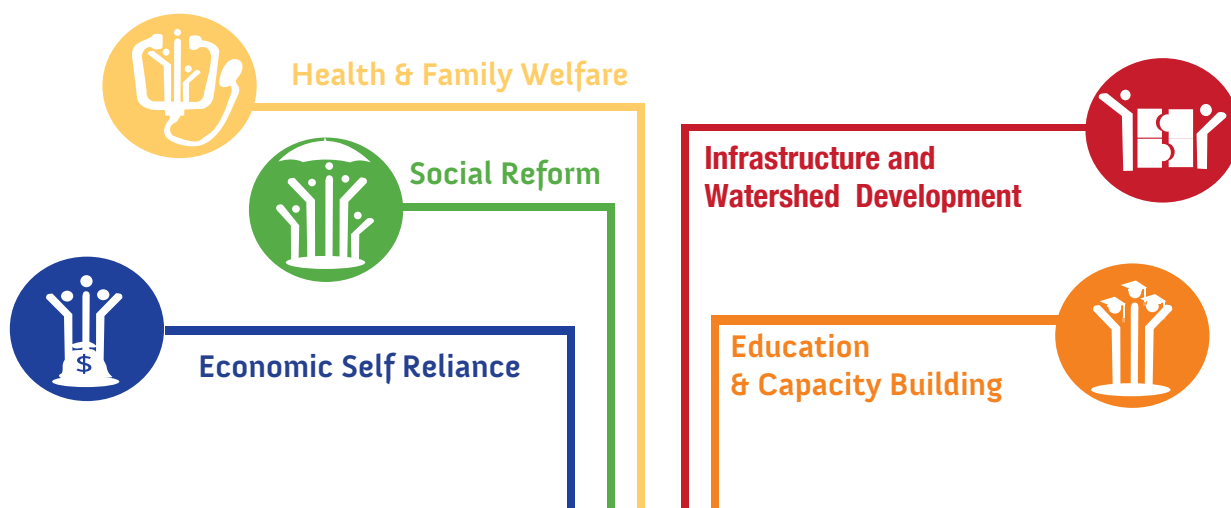
Our CSR activities are concentrated in 660 villages and 10 urban slums, in proximity to our 21 operating plants spread across 11 states in India. We reach out to a rural populace of 32 Lakh.

## 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 weaker sections of the society and raise the country’s human development index.”

## Our CSR Focus

We are working in Five 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.





## Achievements

### a) Health care

- Medical Camps - 2382 number of camps conducted wherein 179888 patients were treated.
- Eye camps - Hundreds of Villagers were checked and 2876 patients were operated upon and provided with intraocular lenses

- Camps for Tuberculosis, Malaria and Dental - 76398 Patients
- AIDS Awareness Programme - 7573 Adults participated
- Subsidized Medical care - 2.51 Lakh people benefitted from the general health check-ups and treatments at Hindalco's Hospital



Community health care programs

### b) Mother and Child Care

- Immunization against Polio - 4, 87,465 children.
- Programme on Sexually transmitted diseases and reproductive tract infection - 6729 people participated.
- Family Planning camps - 25 Camps organized; Operations for 2499 Women and Men.

the girl child. Under the Sarva Shiksha Abhiyan and the Rashtrya Madhyamik Shiksha Abhiyan's - Kasturba Gandhi Balika Vidyalayas (KGBV), we have the girl child. Under the Sarva Shiksha Abhiyan and the Rashtrya Madhyamik Shiksha Abhiyan's - Kasturba Gandhi Balika Vidyalayas (KGBV), we have been able to enlist 120 rural girls, who had earlier abandoned studies, to rejoin the learning stream. We have successfully enrolled them at the KGBVs.

### c) Education

- Education of Girl Child - Working closely with the district authorities, we foster the education of



Community welfare services



Engaging communities and helping hands

- We run four Aditya Bal Vidya Mandir Schools in the villages in Uttar Pradesh. We have 1,000 students studying at these schools.
- Merit Scholarships – accorded to 11000 students
- Career Counselling programme - Our career counselling programmes saw an active participation of 7,849 students. Subsequently, many of them joined ITIs, while some of them opted for vocational training at our various units.
- The Government's Balwadi and Anganwadi projects at various places are running successfully. Through Balwadis, we support 14000 preschoolers who have taken their first steps towards informal learning processes. At our local schools, most of which are attached to our plants, more than 22,500 students are provided with quality education.
- Midday Meals - We support the delivery of the midday meals programmes in schools at Dahej and Hirakud.
- Adult literacy programme - 1400 learners benefitted

#### d) Sustainable Livelihood

At the **Aditya Birla Rural Technology Park**, more than 360 programmes were organised. The thrust continued to be on training programmes like repair and maintenance of diesel pump sets, repair of electric and electronic goods, hand pumps, making of rexine bags, soft toys, ropes, tailoring and knitting, ways to enhance agricultural output, veterinary science and dairy products.

Through these Sustainable Livelihood Projects, we enabled skill development for 7793 youths.

On the agricultural front, we have reached out to 47,478 farmers, helping them to earn better. Training in crop diversification, floriculture, integrated pest management and post harvest technology has been a value addition to their skills.

Over 42 farmers from the Silli Block of Ranchi district of Jharkhand were taken for an exposure visit to Namkum Lakh Research Centre, Ranchi to understand the process of making items from lac.

**Safe Drinking Water and Sanitation** - Work on construction of check dams, ponds, digging bore wells and setting up potable water systems continued this year. Over a 100 low cost toilets were constructed. This year, these projects have made a qualitative difference to 39,135 families engaged in agriculture.

Our initiatives towards development of farmers is aligned towards the following objectives : to ensure cost optimization through economies of scale in the procurement of inputs, to realise better margin through collective marketing of agricultural produces, to avail all the facilities and services under different schemes and to enrich knowledge by exchanging ideas and information. We promoted 11 farmer clubs in 11 peripheral villages in Odisha. These clubs have been promoted in line with NABARD guidelines, involving the agriculture, horticulture, veterinary departments along with financial institutions. It is proposed to federate the members of these clubs to a producer's company.

Under the social forestry programme and with the help of the forest department we ensured the distribution of seedlings and saplings to 100,000 farmers.



Developing Habitat for Humanity



## e) Self Help Groups

Across Hindalco over 2,200 Self Help Groups empowered 26,000 households economically and socially. Most of the SHGs have been linked with the economic schemes of NABARD and the District Industries Centre. At the various centres, women engaged in a series of activities like tailoring, weaving, knitting crafting, bamboo baskets, san sutli (rope) vermin compost, rearing saplings, mushroom cultivation, making pickles and spices, vegetable cultivation and fruit vending, grocery shops etc that enable income generation for them.

To enhance livelihoods of families of our project peripheral villages, we have initiated commercial broiler poultry farming involving 14 farmers of 5 villages in Odisha. These farmers have formed



Women empowerment through Self Help Groups

an association “Maa Manikswari Kukuda Palan Sangha“, for facilitating backward and forward linkages. It has also established one retail outlet for maximizing profit.

## f) Infrastructure Development

This year, we conducted various initiatives to enable infrastructure development. We have contributed in improving road infrastructure; set up potable water systems, bio gas plants, community centres, animal sheds & helped in providing street lights and electricity along with low cost housing. Through these initiatives, we have, managed to reach out to 3,88,432 people. At some locations, we support the local population in maintaining their panchayat meeting halls, community halls and school buildings.



Developing community centers and housing

## g) Espousing Social Causes

In partnership with the Govt. district authorities, village panchayats, like minded NGOs and the community, we organised dowry less/widow remarriage programme at Renukoot wherein 156 widows benefited.



Widow remarriage program

## D. Investment

For the year 2012-13, our CSR spend was ₹ 29.79 crore. In addition, we mobilised ₹ 65.40 crores through the various schemes of the Government, acting as catalysts for the community.

Through our involvement with the underprivileged sections of the community, we have helped lower the level of poverty in the villages and the urban slums, in proximity to our plants.

### Greenway Smart Stove (Smokeless Chulha)

M/s Greenway Grameen Infra Pvt. Ltd conducted a workshop and demo on new Greenway Smart Stove for villagers around the Renukoot plant in Uttar Pradesh.

Objective of Greenway Stove is to provide eco & health-friendly heating system for cooking food.

#### Benefits :

- Diversion of smoke from cooking area.
- Multiple health benefits like - minimal inhalation of carcinogenic fumes.
- Reduce probability of catching fire as exposure to intense heat is minimized.
- Capacity of chulha : 20,000 hours.
- Time saving due to cooking with the smartly designed stove structure.
- Saving of 65% fuel every day, reduction up to 60% of firewood, because heat loss is minimum by the closed design
- Made with the stainless steel with multiple layers enclosed, which reduces the rusting tendency of the material.
- The Greenway Smart Stove supports different materials that can be used a fuel source like wood, agro-waste, cow-dung, and charcoal.







# Awards



## Key Awards & Recognitions

### 1. Quality

Renukoot Complex conferred the Golden Peacock National Quality Award 2012, in the mining & metals sector, presented by the Institute of Directors, for its efforts towards “Quality” meeting international parameters.

The Quality Circles from Renukoot earned Six Gold Medals and one Silver Medal at the Kanpur Chapter Convention.

The Quality Circles of Renusagar earned “Par Excellence” awards at the national convention of Quality Circle Forum of India.

Quality Circle of Birla Copper Dahej won the Bronze medal at Gujarat State Level Quality Circle Competition 2012, organized by Quality Circle Forum of India.

Hirakud Quality Circle won the Best Analysis & Process Award at the 17th All Odisha Quality Circle Convention.

### 2. Environment

Renukoot Complex wins the Greentech Environment Excellence Gold Award 2012 under the category of Mining & Metal Sector for its outstanding efforts towards Environment Management by Greentech Foundation New Delhi.

Renusagar Power Plant wins the Greentech Environment Excellence Gold

Award 2012 for the fifth consecutive year, for its outstanding contribution towards Environment Management System, presented by Greentech Foundation New Delhi.

Dahej Copper Complex wins the Greentech Gold Environment Award 2012 for its outstanding achievement in environment management.

Muri Alumina Plant wins the Greentech Gold Environment Award 2012 presented by Greentech Foundation, New Delhi.

### 3. Occupational Health & Safety

Renukoot Complex wins Greentech Safety Gold Award 2012 in the Mining & Metals category, for exemplary efforts towards Occupational Health & Safety, presented by Greentech Foundation, New Delhi.

Renukoot Complex wins the Safety Innovation Award-2012, for implementing innovative safety management systems, presented by The Institute of Engineers (India).



Renusagar Power Plant wins Greentech Safety Gold Award 2012 in the power Plant category, for exemplary efforts in Occupational Health & Safety, presented by Greentech Foundation, New Delhi.

Taloja Rolling Plant wins the overall title for “Maharashtra Safety Awards - 2011” competition organized by the National Safety Council - Maharashtra Chapter, in the Heavy Engineering category for its commendable safety performance, Scheme-I, Lowest Average Accident Frequency Rate.

Renusagar Power Division wins the Safety Innovation Award-2012, in the Power Sector category, for outstanding achievement in safety management, presented by Institute of Directors

## 4. CSR

Renukoot Complex wins the Greentech CSR Gold Award 2012 presented by Greentech Foundation, New Delhi. The award recognizes the noteworthy Efforts towards “Land & Watershed Management” carried out in various villages surrounding Renukoot, Renusagar and Mines Division-Jharkhand & Chhattisgarh.

## 6. Others

Renukoot Complex wins Greentech Platinum Award for Best HR Practices 2012-13, in the best strategy category, presented by Greentech Foundation, New Delhi.

Renusagar was awarded the Greentech Training Excellence Gold Award 2012 and 3rd Annual Greentech HR Award 2013 for Training Excellence, by Greentech Foundation, Delhi.

Dahej Harbour & Infrastructure Ltd (DHIL), wins the Gujarat Star Award (Runners Up) 2011-12, as the “Dry Bulk /Break Bulk handling Port of the Year” for its impressive performance and improvements in the areas of vessel turnaround time in port, increased productivity and accident-free operations.

Hirakud Power Plant wins CII Odisha Award 2012 (2nd Runners Up), for Best Practices in Environment, Safety & Health.

Hirakud members earned the Certificate of Appreciation at the 12th CII National Supervisory Skill Competition in Repair & Maintenance Category.

## 5. Mines

National Safety Awards for 2009-10 & 2010-11 presented to Samri Mines Division during 2012.

Overall Best in Mines Safety week-2012 & “Minerals Exploration & Minerals Conservation week 2012 Award” to Bagru Hill Bauxite Mines during 2012-13 for Ranchi region.





# DATA TABLE

## Material consumption

Materials	Units	2011-12	2012-13
<b>ABML</b>			
ORE Tonnes (Mined at Site)	Tonnes	27,90,694	33,78,922
Grinding Media - Ball Mill	Tonnes	1,798	2,469
Grinding Media - SAG Mill	Tonnes	3,453	3,907
Caustic Soda	Tonnes	214	36
Lime	Tonnes	12,348	8,642
Cement /Mincem	Tonnes	40,725	59,368
Emulsion/ANFO (Explosives)	Tonnes	1,079	1,827
<b>Novelis</b>			
Aluminium	Tonnes	28,89,000	28,74,000
Alumina	Tonnes	95,000	96,000
Alloying Elements	Tonnes	31,000	32,400
Coatings	Tonnes	19,000	20,000
Paper	Tonnes	21,000	0
<b>Hindalco, India – Aluminium &amp; Copper</b>			
Bauxite	Tonnes	42,21,292	40,72,458
Copper concentrate	Tonnes	11,49,781	11,37,216
Aluminium Fluoride (Cryolite)	Tonnes	9,729	7,767
Caustic Soda	Tonnes	2,01,540	1,88,943
Calcined Petroleum Coke	Tonnes	1,58,245	1,43,613
Pitch	Tonnes	39,660	34,165
Rock Phosphate	Tonnes	3,74,146	3,28,050
Ammonia	Tonnes	58,531	47,973
Coal (for generation of Steam)	Tonnes	48,482	12,75,597
Furnace Oil (Fuel Oil, LDO, HSD)	Tonnes	1,98,594	1,43,160
Steam, purchased	Tonnes	31,882	27,965

## Recycled materials

Business	Units	2011-12	2012-13
Hindalco, India – Copper	Tonnes	14,747	14,801
Hindalco, India – Aluminium	Tonnes	7,744	9,653
Novelis	Tonnes	10,94,000	12,04,000



## Water withdrawals

Business	Units	2011-12	2012-13
Hindalco, India – Copper	Cubic meter	96,33,371	85,74,394
Hindalco, India – Aluminium	Cubic meter	5,61,21,965	4,04,08,438
Novelis	Cubic meter	92,15,908	85,37,929
ABML	Cubic meter	28,41,736	18,77,902

## Quantity of water recycled

Business	Units	2011-12	2012-13
Hindalco, India – Copper	Cubic meter	6,94,022	6,92,896
Hindalco, India – Aluminium	Cubic meter	85,49,868	88,79,691
Novelis	Cubic meter	0	0
ABML	Cubic meter	14,79,622	0

## Percentage of recycled water in consumption

Business		2011-12	2012-13
Hindalco, India – Copper	%	7.2	8.08
Hindalco, India – Aluminium	%	15.2	21.97
Novelis	%	0	0
ABML	%	52.1	0

## Quantity of effluent discharged

Business	Units	2011-12	2012-13
Hindalco, India – Copper	Cubic meter	32,881	33,613
Hindalco, India – Aluminium	Cubic meter	18,768	7,27,010
Novelis	Cubic meter	55,91,287	58,03,310
ABML	Cubic meter	NIL	NIL

## Air Emission

	Tonnes 2012-13		
	Novelis	Hindalco India- Copper	Hindalco India- Aluminium
Hydrogen Chloride	182	NA	NA
Methyl Ethyl Ketone (MEK)	3	NA	NA
NOx	1414	18	373
PAH's	0	NA	NA
Particulate materials	2045	156	4392
SO <sub>2</sub>	91	521	8830
Toluene	6	NA	NA
Total Fluorides	93	0.04	72.60
VOC	1813	NA	NA
POP	NA	NA	NA

## Waste generation and disposal

	Tonnes 2012-13		
	Novelis	Hindalco India- Copper	Hindalco India- Aluminium
Hazardous waste	60,091	1,19,199	48,098
Non-Hazardous waste	1,75,100	13,25,098	18,27,223



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## **Independent assurance statement to Hindalco Industries Limited 2012-13 Sustainability Report**

To the management of Hindalco Industries Limited

KPMG was engaged by Hindalco Industries Limited ('Hindalco') to provide limited assurance on its Sustainability Report ('the Report') for the financial year 2012-13.

### **Scope of the assurance engagement**

Assurance has been provided for the sustainability data and information presented by Hindalco in its 2012-13 Report. Our scope of assurance includes:

- Data and information for the period of 01 April 2012 to 31 March 2013 based on Global Reporting Initiative (GRI) G3.1 Guidelines and Metals and Mining Sector Supplement
- Data and information pertaining to Hindalco (Aluminium and Copper) India operations and Aditya Birla Minerals Limited

### **Limitations in conducting the assurance**

Our assurance process was subject to the following limitations:

- Verification of claims was limited to data and information presented in the Report for the period 01 April 2012 to 31 March 2013. Data and information in the Report outside this reporting period was not subject to verification.
- Any statement/remarks/comments indicating intention, opinion, belief and / or aspiration by Hindalco were excluded from the scope of assurance.
- The information on financial and energy performance related indicators have been sourced from the Hindalco's FY 2012 – 13 annual report
- The scope of assurance excludes data and information pertaining to Novelis Inc.

### **Assurance standards and guidelines used**

We conducted the assurance in accordance with

- Limited Assurance requirements of International Federation of Accountants' (IFAC) International Standard on Assurance Engagement (ISAE) 3000, Assurance Engagements Other than Audits or Reviews of Historical Financial Information, and
- Type 2, Moderate level assurance requirements of AA1000 Assurance Standard 2008 by AccountAbility.
  - o Under this standard, we have reviewed the nature and extent of adherence to the AA1000 AccountAbility Principles and the quality of publicly disclosed information as part of the Report limited to performance indicators/information required by GRI G3.1 Guidelines and Metals and Mining sector supplement.

### **Independence requirements**

We conducted our engagement in compliance with the requirements of the IFAC Code of Ethics for Professional Accountants, which requires, among other requirements that the members of the assurance team (practitioners) as well as the assurance firm (assurance provider) be independent of the assurance client, including not being involved in the writing of the Report. The Code also includes detailed requirements for practitioners regarding integrity, objectivity, professional competence and due care, confidentiality and professional behavior. KPMG has systems and processes in place to monitor compliance with the Code and to prevent conflicts regarding independence.





### Assurance process

The assurance work was executed by KPMG's multi-disciplinary team comprising of experts who have prior experience of working on sustainability report assurance engagements. Our work was planned and executed to obtain all the evidence, information and explanations that were considered necessary in relation to the above scope.

As part of the verification process, we have conducted;

- Site visits to following manufacturing facilities of Hindalco:
  1. Hindalco Aluminium – Renukoot and Renuagar
  2. Hindalco Aluminium – Mouda
  3. Hindalco Aluminium - Belgaum
  4. Hindalco Copper – Dahej
  5. Greenfield project - Mahan
  6. Bauxite Mines - Kolhapur
- Telephonic interviews for Aditya Birla Minerals Limited
  7. Birla Nifty Copper operations and Birla Mt. Gordon Operations, Australia

Our work included the following procedures involving a range of evidence-gathering activities as explained below:

- Interaction with the Hindalco's Sustainability Board, Sustainability Working Committee members and Senior Management at the corporate office and unit level
- Review of the stakeholder consultation processes and the methodology used for determining the material issues;
- Assessment of Report contents to check consistency with the requirements of the GRI G3.1 guidelines (principles and performance indicators), ISAE 3000 Assurance standard and AA1000 Assurance Standard 2008;
- Evaluation of the existence and operation of the systems and methods used to collect, process and aggregate the performance data presented in the Report;
- Testing the reliability of underlying data and information for the performance data within the scope of our assurance.

### Our conclusions

Based on our review, nothing has come to our attention that causes us to believe that the information in the Report, in all material aspects, is not fairly represented in line with our findings given below:

- As per AA1000AS 2008 principles:
  - **Principle of Inclusivity:** The Company engages with various stakeholder groups on an ongoing basis and takes into account views from both internal as well as external stakeholders while finalizing selected sustainability related initiatives. The process of engagement with key stakeholders can be further strengthened by documenting the expectations and areas of concerns of its key stakeholders and company's response to them
  - **Principle of Materiality:** The determination of material issues is carried out through consultation with the sustainability board, senior management at the corporate as well as at individual unit level. The materiality assessment process can be improved upon by institutionalizing a structured materiality assessment that incorporates stakeholder's views and considers the dynamic external business environment that may affect the prioritization of issues.







- **Principle of Responsiveness:** Hindalco through this report has responded to the material issues through disclosure of relevant performance indicators and management approach. For some of the performance indicators, Hindalco has provided commitments for reporting it in subsequent years.
- Nothing has come to our notice for us to believe that the data is not reliable. Data transcription and calculation errors were detected but the same was resolved during the assurance process
- The company has self declared GRI application level A + for its sustainability report. Based on our review of standard disclosures, disclosures on core performance indicators and the progress made on commitments to disclose on partial disclosures in the previous year report, nothing has come to our attention that causes us to believe that the report does not meet the GRI G3.1 A+ application level requirement

#### Other key observations and recommendations

The following is an excerpt from the observations and recommendations reported to the management of Hindalco. These do not, however, affect our conclusions regarding the Report, and they are consistent with the management action plans

- The company is in the process of implementing its commitments made in the FY 11 -12 sustainability report
- The company has further enhanced awareness on sustainability among its key coordinators at the site through various capacity building programs
- Hindalco can consider disclosing goals and targets for its key material issues
- The company may consider improving its reporting timelines and may consider releasing the sustainability report along with annual financial report

#### Responsibilities

The Management of Hindalco is responsible for development of the Report and its contents. Hindalco is responsible for the identification of stakeholders and material issues, defining commitments with respect to sustainability performance, establishing and maintaining appropriate performance management and internal control systems from which reported information is derived.

Our responsibility is to express our conclusions in relation to the scope mentioned above. This limited assurance statement is made solely to Hindalco in accordance with the terms of our engagement. Our work has been undertaken so that we might state to Hindalco those matters we have been engaged to state in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Hindalco for our work, for this statement, or for the conclusions we have reached. By reading this assurance statement, the stakeholders acknowledge and agree to the limitations and disclaimers mentioned above.

**Santhosh Jayaram**  
Technical Director  
KPMG, India  
24 April 2014



**AA1000**  
Licensed Assurance Provider  
000-25



# GRI Content Index

Profile Disclosure	Description	Status	Report Section
1. Strategy and Analysis			
1.1	Statement from the most senior decision-maker of the organization.	F	MD's Desk Page no-3 & 4.
1.2	Description of key impacts, risks and opportunities.	F	Sustainability Vision and Policy on Page No. 7. Chapter on Materiality issues, Roadmap and Synergy with Stakeholders - Page Nos. 22 to 25. Sustainability Roadmap developed and approved by MD, where all risk and opportunities are addressed.
2. Organizational Profile			
2.1	Name of the Organization.	F	Hindalco Industries Limited
2.2	Primary brands, products, and/or services.	F	Chapter - We at Hindalco, Page No. 11.
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries and joint ventures.	F	Chapter- We at Hindalco , Page No. 12 & 13.
2.4	Location of organization's headquarters.	F	Back Cover of the report
2.5	Number of countries where the organization operates.	F	Chapter - We at Hindalco, Page Nos. 12 to 14
2.6	Nature of ownership and legal form.	F	Chapter- Governance, Page No. 18. Please refer our Annual Report for additional information (Page No. 38)
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/ beneficiaries).	F	Chapter - We at Hindalco, Page Nos. 12 to 14
2.8	Scale of the reporting organization.	F	Chapter - We at Hindalco, Page Nos. 12 to 14. Details on Shareholding pattern can be found on Page No. 38 of Hindalco Annual Report 2012-13.
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	F	Chapter- We at Hindalco Page No. 8. Details on Shareholding pattern can be found on Page No. 38 of Hindalco Annual Report <a href="http://www.hindalco.com/investors/downloads/Hindalco_Annual_Report_2012-13.pdf">http://www.hindalco.com/investors/downloads/Hindalco_Annual_Report_2012-13.pdf</a>
2.10	Awards received in the reporting period.	F	Chapter - Awards, Page No. 71.
3. Report Parameters			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	F	Front Cover
3.2	Date of most recent previous report (if any).	F	Sustainability Report- 2011-12 <a href="http://www.hindalco.com/investors/downloads/hindalco_sustainability_report2012.pdf">http://www.hindalco.com/investors/downloads/hindalco_sustainability_report2012.pdf</a>
3.3	Reporting cycle (annual, biennial, etc.)	F	Annual reporting based on Financial Year Data
3.4	Contact point for questions regarding the report or its contents.	F	Back cover of the Report.
3.5	Process for defining report content.	F	Materiality issues, Roadmap and Synergy with Stakeholders on Page No 23.



Profile Disclosure	Description	Status	Report Section
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).	F	Chapter- Business Responsibility Report on Page No. 92 and Chapter - We at Hindalco on Page No. 8 to 16.
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	F	Chapter - We at Hindalco on Page No. 8 to 16. We have also started capturing data for the new plants Aditya and Mahan.
3.8	Basis for reporting on joint ventures, subsidiaries, etc.	F	Chapter - We at Hindalco on Page No. 8 to 16.
3.9	Data measurement techniques etc	F	All data collected are subjected to a set of defined procedures , internal control system and checking. Data reported in this report are 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.
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).	F	None
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	F	No Significant Changes
3.12	Table identifying the location of the Standard Disclosures in the report.	F	GRI Index
3.13	Policy and current practice with regard to seeking external assurance for the report.	F	This report is third party assured report. Assurance carried out by M/S KPMG.

#### 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.	F	Chapter- Governance, Page No. 17.
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	F	Chapter- Governance, Page No. 17.
4.3	For organizations that have a unitary board structure, For organizations that have a unitary board structure, highest governance body that are independent and/ or non-executive members.	F	Chapter- Governance, Page No. 17.
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	F	Chapter- Governance, Page No. 17. We do not have formal work council with representation from Employees at the Board Level. The working relationships is carried out at various levels across the organization through our employee engagement programme.
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).	F	Chapter- Governance, Page No. 17.
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	F	Chapter- Governance, Page No. 17.



Profile Disclosure	Description	Status	Report Section
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.	F	Chapter- Governance, Page No. 17.
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.	F	Chapter- Hindalco Sustainability Vision and Policy on Page No. 5.
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.	F	Chapter- Governance, Page No. 17.
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	P	Chapter- Governance, Page No. 17. Independent director is a part of the sustainability board. Our current report only states about the sustainability structure and role of Sustainability Board Members. Information on Formal Evaluation of Governance Body's own performance will be included in 2014-15 Report.
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	F	Precautionary approach is embedded in the New Project Design considerations by constantly evaluating and adopting latest available technologies.
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	F	The Aditya Birla Group is a member of Global Compact an international forum that operates under the aegis of the United Nations. The Group is also member of World Business Council for Sustainable Development (WBCSD). The forum's vision is to usher in a "more sustainable and global economy". The Aditya Birla Group has re-articulated its values so as to drive the organizational thinking and processes be they related to people, manufacturing, environment or community responsibility
4.13	Memberships in associations etc.	F	The Company has Memberships with various industrial and commercial fraternities like- IAI (Member), AAI (Founder Member), TERI-BCSD (Member), CII (Active Member of western region on Sustainability and Green business), FICCI. The Company prefers to be part of policy development processes and hence, actively participates in all related forums.
4.14	List of stakeholder groups engaged by the organization.	F	Chapter on Materiality issues, Road-map and Synergy with Stakeholders - Page No. 23.
4.15	Basis for identification and selection of stakeholders with whom to engage.	F	Chapter on Materiality issues, Road-map and Synergy with Stakeholders - Page No. 23.
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	F	Chapter on Materiality issues, Road-map and Synergy with Stakeholders - Page No. 23.
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.	F	Mechanism established, Survey in progress; details of the survey will be included in the HSR 13-14 Report.



Profile Disclosure	Description	Status	Report Section
Disclosure of Management Approach			
DMA EC	Disclosure on Management Approach EC	F	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 respective sections. Please refer to chapter Value to Customers on Page No. 26.
DMA EN	Disclosure on Management Approach EN	F	Please refer to Chapter - For a Cleaner Tomorrow on Page No. 38.
DMA LA	Disclosure on Management Approach LA	F	Please refer to Chapter - Managing Talent on Page No. 48.
DMA HR	Disclosure on Management Approach HR	F	Please refer to Chapter - Managing Talent on Page No. 48.
DMA SO	Disclosure on Management Approach SO	F	Please refer to Chapter - Community Engagement - Towards Inclusive Growth on Page No. 65.
DMA PR	Disclosure on Management Approach PR	F	Please refer to Chapter - Technology and Innovation on Page No. 30.
Economic			
Economic Performance			
EC1	Direct economic value generated and distributed.	F	Please refer to chapter on Value to Customers on Page No. 26. The economic value distributed which has an amount on community investments includes donations. The Economic value given on Page No. 27 does not include the land use agreements amount. We are operating and extracting minerals in Australia only. Australia is neither member nor candidate for EITI.
EC2	Financial implications and other risks and opportunities for the organization's activities due to opportunities for the organization's activities due to climate change.	F	Please refer to chapter on Value to Customers on Page No. 26.
EC3	Coverage of the organization's defined benefit plan obligations.	F	Please refer to chapter on Value to Customers on Page No. 26.
EC4	Significant financial assistance received from government.	F	Please refer to chapter on Value to Customers on Page No. 26.
Market Presence			
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	F	In Hindalco, standard entry level wages are either equal to or more than limit prescribed by the local authorities.
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	F	Please refer to chapter on Value to Customers on Page No. 26.





Profile Disclosure	Description	Status	Report Section
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	F	Please refer to Chapter on Managing Talent on Page No. 48. We have initiated process through HR and Finance Dept. Details will be to be included in HSR 2013-14
Indirect Economic Impact			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	F	Please refer to chapter on Value to Customers on Page No. 26.
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	P	Not being monitored now; we are in the process of evaluating the significant indirect economic impacts.
Environmental			
Material			
EN1	Materials used by weight or volume.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table on Page No. 74.
EN2	Percentage of materials used that are recycled input materials.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table on Page No. 74
Energy			
EN3	Direct energy consumption by primary energy source.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
EN4	Indirect energy consumption by primary source.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
EN5	Energy saved due to conservation and efficiency improvements.	P	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38. We have initiated energy conservation measures in our Plants leading to almost 8 % reduction in indirect energy consumption.
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	F	Chapter on Sustainability Performance -Technology & Innovation on Page No. 30 & and Chapter on For a Cleaner Tomorrow on Page No. 38.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	P	Some of the initiatives taken are : Through Integrated Management System, we promote Quality improvement and energy efficiency in our outsourced process. Video Conferencing facilities are being used to reduce business related travel. Details are in Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
Water			
EN8	Total water withdrawal by source.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table Page No. 75.



Profile Disclosure	Description	Status	Report Section
EN9	Water sources significantly affected by withdrawal of water.	P	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table Page No. 75.
EN10	Percentage and total volume of water recycled and reused.	P	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table Page No. 75.
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.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	P	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38. Areas of high biodiversity value outside protected areas will be included in HSR 2013-14.
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38
EN13	Habitats protected or restored.	N	-
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	P	We conduct biodiversity study of marine ecosystem at Dahej Gujarat every alternate year. Accordingly, in this year also, we conducted the study to assess the marine ecosystem impact. Results are very positive.
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.	F	For all our Bauxite and Coal Mines, we have Mining Plan and Mine Closure Plan. These plans are approved by the competent authority in the regulatory bodies. These plans also include aspects of Biodiversity Management.
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	P	We have initiated to assess IUCN Red List Species, Habitats in the areas affected by our Mines.
Emissions, Effluents and Waste			
EN16	Total direct and indirect greenhouse gas emissions by weight.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
EN17	Other relevant indirect greenhouse gas emissions by weight.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
EN19	Emissions of ozone-depleting substances by weight.	P	Novelis-1.69 tonnes. We have initiated to capturing the data for ODS for Hindalco copper-0.707 tonnes. Data from Aluminium Operations will be included in HSR 2013-14.



Profile Disclosure	Description	Status	Report Section
EN20	NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions by type and weight.	P	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table on Page No. 75. Currently, we have emission data measured in Unit Volume. Data on No <sub>x</sub> , SO <sub>2</sub> and other significant emissions, by Type and Weight will be included in HSR 2013-14. Data capturing is in progress.
EN21	Total water discharge by quality and destination.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table on Page No. 75.
EN22	Total weight of waste by type and disposal method.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38 and Data Table on Page No. 75.
MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
EN23	Total number and volume of significant spills.	F	Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
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.	P	Nil Chapter on Sustainability Performance – For a Cleaner Tomorrow on Page No. 38.
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.	P	We have carried out Marine Study at Dahej. There were no impact identified. For Novelis/ABML – currently, do not have aggregated data for their operation.
Products and Service			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	P	We have initiated through Hindlaco product development team, for more detail please refer chapter on sustainability performance - For Cleaner Tomorrow on Page no 38. Details on this to be included in HSR 2013-14.
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	P	We have initiated through Hindlaco product development team, Details will be incorporated on this in HSR 2013-14
Compliance			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	F	None
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.	N	NA



Profile Disclosure	Description	Status	Report Section
Overall			
EN30	Total environmental protection expenditures and investments by type.	P	Novelis- data Not available. Hindalco India - The capital expenditure incurred against Non Return Based - EOHS for the period 2012-13 ₹12.95 Cr. System for capturing data on Revenue expenses on Environment initiated. Data to be included by 2014-15 HSR.
Social: Labor Practices and Decent Work			
Employment			
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	P	Chapter on Sustainability Performance – Managing Talent on Page No. 49. Contract Manpower -37135 Gender wise data on Contract Labour will be included in the HSR 13-14
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	P	Chapter on Sustainability Performance – Managing Talent on Page No. 49.
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	F	Chapter on Sustainability Performance – Managing Talent on Page No. 49.
LA15	Return to work and retention rates after parental leave, by gender.	N	None. Chapter on Sustainability Performance – Managing Talent on Page No. 49.
LA4	Percentage of employees covered by collective bargaining agreements.	F	Chapter on Sustainability Performance – Managing Talent on Page No. 49.
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	P	Chapter on Sustainability Performance – Managing Talent on Page No. 49. Details on this will be included in HSR 2013-14.
MM4	Number of strikes and lock-outs exceeding one week's duration, by country.	F	Chapter on Sustainability Performance – Managing Talent on Page No. 49.
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.	P	As per the Factory Act we have equal representation i.e. 50 % management and 50% workers representative India, and Novelis employees are represented in formal safety committees.
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region and by gender.	F	Chapter on Performance Highlights – Creating a Safer Workplace on Page No. 57.
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	F	Chapter on Performance Highlights – Creating a Safer Workplace on Page No. 57.



Profile Disclosure	Description	Status	Report Section
LA9	Health and safety topics covered in formal agreements with trade unions.	P	Chapter on Performance Highlights – Creating a Safer Workplace on Page No. 57. More details will be included in HSR 2013-14.
Training and Education			
LA10	Average hours of training per year per employee by gender, and by employee category.	P	Chapter on Sustainability Performance – Managing Talent on Page No. 49. Training details related to ABML and Gender-wise and Employee Category-wise will be included in HSR 13-14 report.
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	F	Chapter on Sustainability Performance – Managing Talent on Page No. 49.
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	P	Chapter on Sustainability Performance – Managing Talent on Page No. 49.
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.	P	Chapter on Sustainability Performance – Managing Talent on Page No. 49. Details of employees age-wise and minority group-wise will be included in HSR-13-14 Report.
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	As a part of Policy, there is no differentiation between salary and remuneration of men and women in all categories.
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.	P	Currently we don't have policy, This year, initiated the process for including human rights clauses in all major Capex contracts. We will include information in HSR 13-14 report .
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	P	Currently we don't have policy, This year, initiated the process for including human rights clauses in all major Capex contracts. We will include information in HSR 13-14 report .
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.	P	All new employees are briefed about Group Values, Code of Conduct upon start of their employment. Details will be included in HSR 13-14 report.
Non-discrimination			
HR4	Total number of incidents of discrimination and corrective actions taken.	F	No incidence of discrimination reported.





Profile Disclosure	Description	Status	Report Section
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.	P	<p>We are not operating in countries of significant risk or where unions are illegal, and recognize the right of all employees to choose to or not belong to a union and to seek to bargain collectively.</p> <p>The ABG/Novelis Code of Conduct establishes Guidelines for ethical Behaviour that are applicable to all employees. The Guidelines include provisions to promote a desirable work environment and a mechanism to report violations. We will include information in HSR 13-14 report.</p>
Child Labour			
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the effective abolition of child labour.	F	<p>There are no Company operations, and to the best of our knowledge, no significant suppliers identified as having significant risk of child labor, both in type of operations as well as countries or geographical areas with operations considered at risk.</p> <p>However, we will plan to conduct risk assessment at significant Suppliers and the information will be included in HSR 13-14 report.</p>
Forced and Compulsory Labour			
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 labour.	F	There are no operations identified as having significant risk for incidents of forced Labour. We do not operate in countries considered to be of significant risk. Also, no issues have been identified requiring corrective measures.
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.	P	All Security Personnel, at the time of joining, are trained on Organizations Policies and procedures. Records of these trainings will be captured and will be reported in the HSR 14-15 report.
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.	F	Hindalco, India and Novelis: Nil. ABML – One. Site details: Maroochydyore Site.
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	F	There have been no violations involving rights of Indigenous People.
Assessment			
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	N	<p>None-Novelis</p> <p>Hindalco India- We do not have formal Human Rights reviews and/or impact assessment done is being planned. Planned to include details in the HSR 14- 15 report.</p>



Profile Disclosure	Description	Status	Report Section
Remediation			
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.	N	Novelis- Nil.  Hindalco- We planned to establish the formal grievance mechanism for human rights related issues. Details will be included in the HSR-13-14 reports.
Social			
Local Communities			
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	F	Chapter on Sustainability Performance – Community Engagement Towards Inclusive Growth on Page No. 65.
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.	F	Hindalco, India and ABML – None. Novelis: Two.
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.	F	Hindalco, India and ABML – None. Novelis: As mentioned in MM6.
Artisanal and Small-Scale Mining			
MM8	Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.	F	None.  We do not have operating sites adjacent to artisanal and small scale mining.
Resettlement			
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	F	Hindalco, India – Regular Operations – Nil. However in case of Greenfield Projects, R&R process was implemented as per Local Laws. In additions, CSR activities were carried in Greenfield project sites viz., Mahan Aluminium, Aditya Aluminium and Utkal Alumina. Similar R&R Plans are being made for upcoming Greenfield Projects.
Closure Planning			
MM10	Number and percentage of operations with closure plans.	F	In Hindalco, India – Mines, Closure Plan is made for all mines as per national and local regulatory requirements. The Mine Closure Plans are submitted to the regulatory authorities as per stipulations. Novelis – Number and percentage of operations with Closure Plan: Novelis has only one mining area, in Our Preto, Brazil, which is currently all inactive. ABML-Nifty – Closure Plan has been drafted for Mt Gordon: Yet to commence Closure Planning Maroochydhore – Not Applicable as of now.
SO9	Operations with significant potential or actual negative impacts on local communities.	F	We take all necessary steps to mitigate negative impacts on local communities due to our operations at various locations.  In addition, during our community assessment, we collect information on this for planning mitigation measures, as applicable.
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	F	Mitigation measures implemented as per plan identified in each location.

Profile Disclosure	Description	Status	Report Section
Corruption			
SO2	Percentage and total number of business units analyzed for risks related to corruption.	F	The total number of Business Units analyzed for risks related to corruption: 100%.  All the Company's operating units are included in the Enterprise Risk Assessment. Corruptions, violations of FCPA, violations of Company's Code of Conduct are all the factors considered.
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	P	The Company's Code of Conduct and Group Values are the primary vehicle for training in anti-corruption policies and procedures.  All Management employees were given copy of Company Code of Conduct upon start of their employment, and new management employees. Details will be included in HSR-15-16 Report.
SO4	Actions taken in response to incidents of corruption.	F	There is no recorded incidence of corruption.
Public Policy			
SO5	Public policy positions and participation in public policy development and lobbying.	P	Chapter on Governance on Page No. 17.  We are the founder member of Aluminium Association of India and Subscriber of International Aluminium Association where we actively participate for best practices sharing.  We are also member of TERI BCS and CII Western Region Sustainability Committee.
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	F	There is no financial and in-kind contribution to political parties.
Anti-competitive Behavior			
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	F	Nil
Compliance			
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	F	Novelis- NSA was assessed in some tax cases in which fines were imposed. However, the individual values involved were not significant and in most cases we filed defense against the assessments.  Hindalco India- Nil  ABML-Nil
Product Responsibility			
MM11	Programs and progress relating to materials stewardship.	P	Chapter on Performance Highlights – Technology & Innovation on Page No. 30.  We have planned LCA in this year, we already taken Capex approval for the same.



Profile Disclosure	Description	Status	Report Section
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.	P	Chapter on Performance Highlights – Technology & Innovation on Page No. 30. We are in the process of evaluating impacts of extracting bauxite. Novelis- When new products are conceived, health and safety impacts through the life cycle are evaluated as part of our R&D process. The basis of our product development in terms of health and safety considerations are dictated by local/ country regulations, and all pertinent regulations specific to H&S are considered. Evidence to this is that Novelis has not received a notice of legal non-compliance of any applicable requirement. R&D Novelis utilizes an internal approval process (Novelis Alloy Request) for all R&D related alloy changes. The request take into consideration several product compliance consideration such as but not limited to; 1) CONEG, 2) RoHS, 3) IMDS (automotive), 4) other regulatory driven chemistry limitations. Where proposed compositions exceed limitations, efforts are taken to reformulate preparations in order to sustain compliance. Thus far in FY2013 we've processed 45 Alloy Chemistry Requests. All of which were completed so that 100% of the chemistries complied with legal requirements. General Information: Dispose of waste and residues in accordance with local authority requirements. "Disposal Methods: Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Recover and reclaim or recycle, if practical. Aluminum in the form of particles may be reactive. Its hazardous characteristics, including fire and explosion, should be determined prior to disposal. The lubricant that has been washed off the aluminum sheets must be disposed of in accordance with federal, state or local regulations." Details will be included in HSR-15-16 Report.
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.	F	There are no incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle.
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.	F	All product and service information provided as per regulatory and packaging requirements.
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	F	Nil



Profile Disclosure	Description	Status	Report Section
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	P	<p>Hindalco India - Customer Satisfaction Survey is currently carried out only for Rolled products. Information on Customer Satisfaction data across all businesses, will be incorporated in HSR 13-14 report.</p> <p>Novelis-</p> <p>Invitations: 202</p> <p>Replies: 50</p> <p>Response rate: 24.8%</p> <p>NPS : 7.5 (Scale of 1 to 10)</p> <p>POSITIVES</p> <ul style="list-style-type: none"> <li>• EMPLOYEES</li> <li>• PRODUCT QUALITY</li> </ul> <p>AREAS FOR IMPROVEMENT</p> <ul style="list-style-type: none"> <li>• CUSTOMER SERVICE</li> <li>• DELIVERY</li> <li>• COMMUNICATION</li> <li>• PRICE</li> </ul>
Marketing Communications			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	F	<p>Ensure the protection of Company's legitimate business interests, including corporate opportunities, assets and confidential information.</p> <p>Deter wrongdoing.</p> <p>As and when needed, the organization reviews its compliance with these standards and codes.</p> <p>We also do not sell any products that are banned in markets.</p>
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.	F	Nil
Customer Privacy			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	F	Nil
Compliance			
PR9	Monetary value of significant fines for non compliance with laws and regulations concerning the provision and use of products and services.	F	Nil

	Core Indicator		Additional Indicator
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N.B.: F - Full  
P - Partial  
N - Not Reported





# Business Responsibility Report

As per Clause 55 of the Listing Agreement, top 100 listed entities based on market capitalization at BSE Limited and National Stock Exchange of India Ltd as on March 31, 2012 are required to include Business Responsibility Reports as part of Annual Report. However, in sync with National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business "Guidelines" and Securities and Exchange Board of India (SEBI) Circular dated 13th August, 2011, those listed entities which have been submitting sustainability reports to overseas regulatory agencies/stakeholders based on internationally accepted reporting frameworks need not prepare a separate report for the purpose of these guidelines but only furnish the same to their stakeholders along with the details of the framework under which their BR Report has been prepared and a mapping of the principles contained in these guidelines to the disclosures made in their sustainability reports.

Hindalco has adopted the Global Reporting Initiative (GRI) Framework and prepared Sustainability Report for FY11 and FY12. We have released Hindalco Sustainability Report covering Hindalco India Operations including Greenfield projects, along with its overseas subsidiaries, Aditya Birla Minerals Ltd- Australia and Novelis Inc. The report for 2011-12 titled 'Enduring Growth for Global Leadership' has been assured as A+ rating based on Global Reporting Initiatives (GRI G 3.1) standards by an external independent assessing agency.

The Sustainability Report 2012-13 is based on GRI framework. In line with the press release and FAQs dated 10th May, 2013 issued by SEBI, your Company's Sustainability Report is hosted on its website [www.hindalco.com](http://www.hindalco.com). Any shareholder interested in obtaining a physical copy of the same may write to the Company Secretary at the Registered Office of your Company.

1	Corporate Identity Number (CIN) of the Company	L27020MH1958PLC011238			
2	Name of the Company	Hindalco Industries Limited			
3	Registered address	3rd Floor, Century Bhavan, Dr. Annie Besant Road, Worli, Mumbai: 400030			
4	Website	www.hindalco.com			
5	E-mail id	anil.malik@adityabirla.com			
6	Financial Year reported	1st April,2012 to 31st March,2013			
7	Sector(s) that the Company is engaged in (industrial activity code-wise)	ITC Code	Product Description		
		7601	Aluminium Ingots		
		7606	Aluminium Rolled Products		
		7605	Aluminium Redraw Rods		
		740311	Copper Cathodes		
		740710	Continuous Cast Copper Rods		
8	List three key products/services that the Company manufactures/provides (as in balance sheet):	(i)	Aluminium Rolled Products		
		(ii)	Copper Cathodes		
		(iii)	Concast Copper Rods		
9	Total number of locations where business activity is undertaken by the Company	i. Number of International Locations (Provide details ofmajor 5) : • USA • Australia • Europe • Brazil • South Korea ii. Number of National Locations: • 2 Aluminium Units • 1 Copper Unit • 3 Chemical Units • 3 Power Units • 5 Rolled FRP • 2 Extrusions • 3 Foils • Cluster of mines in Jharkhand, Chattisgarh, Maharashtra, and Odisha. • Registered Office and Zonal Marketing Offices			
10	Markets served by the Company	Local	State	National	International
		√	√	√	√

## Section B: Financial Details of the Company

1	Paid-up Capital (INR)	₹191.48 crore
2	Total Turnover (INR)	₹26056.93 Crore
3	Total Profits after taxes (INR)	₹1699.20 Crore
4	Total Profits after taxes (INR)	The Company's total spending on CSR was ₹29.79 Crore which is 1.48% of the average net profit for the last three years,
5	List of activities in which expenditure in 4 above has been incurred	a. Education b. Health Care c. Women empowerment d. Sustainable Livelihood e. Infrastructure Development

## Section C: Other Details

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

Yes, the Company has 63 (sixty three) subsidiaries - 13 (Thirteen) domestic and 50 (Fifty) foreign.

### 2. Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s):

Hindalco Sustainability Report covers Hindalco India Operations including Greenfield Projects, along with overseas subsidiaries Aditya Birla Minerals Limited- Australia and Novelis Inc. Further Novelis Inc. , also publishes Sustainability Report based of Global Reporting Initiative (GRI) framework.

### 3. Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]:

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

## Section D: BR Information

### 1. Details of Director/Directors responsible for BR

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

DIN Number	00198912
Name	Mr N.J. Jhaveri
Designation	Independent Director

#### b) Details of the BR head

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

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



The mapping of the aforesaid principles to the disclosures made in the Sustainability Report are as under:

Principle No	Description		Reference to Sustainability Report
Principle 1	Business should conduct and govern themselves with Ethics, Transparency and Accountability		
	1	Businesses should develop governance structures, procedures and practices that ensure ethical conduct at all levels; and promote the adoption of this principle across its value chain. Businesses should communicate transparently and assure access to information about their decisions that impact relevant stakeholders.	Please refer chapter -Governance on Page no-18.
	2	Businesses should not engage in practices that are abusive, corrupt, or anti-competition.	Please refer chapter -Governance on Page no-18.
	3	Businesses should truthfully discharge their responsibility on financial and other mandatory disclosures.	Please refer chapter -Governance on Page no-19.
	4	Businesses should report on the status of their adoption of these Guidelines as suggested in the reporting framework in this document.	Please refer chapter -Governance on Page no-21.
	5	Businesses should avoid complicity with the actions of any third party that violates any of the principles contained in these Guidelines	Please refer chapter -Governance on Page no-21.
Principle 2	Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle		
	1	Businesses should assure safety and optimal resource use over the life-cycle of the product – from design to disposal – and ensure that everyone connected with it- designers, producers, value chain members, customers and recyclers are aware of their responsibilities.	Please refer chapter -Technology & Innovation on Page no- 31,37.
	2	Businesses should raise the consumer's awareness of their rights through education, product labelling, appropriate and helpful marketing communication, full details of contents and composition and promotion of safe usage and disposal of their products and services.	Please refer chapter -Technology & Innovation on Page no- 36,37.
	3	In designing the product, businesses should ensure that the manufacturing processes and technologies required to produce it are resource efficient and sustainable.	Please refer chapter -Technology & Innovation on Page no- 32.
	4	Businesses should regularly review and improve upon the process of new technology development, deployment and commercialization, incorporating social, ethical, and environmental considerations.	Please refer chapter -Technology & Innovation on Page no- 33.
	5	Businesses should recognize and respect the rights of people who may be owners of traditional knowledge, and other forms of intellectual property.	Please refer chapter -Technology & Innovation on Page no- 32.
	6	Businesses should recognize that over-consumption results in unsustainable exploitation of our planet's resources, and should therefore promote sustainable consumption, including recycling of resources.	Please refer chapter -Technology & Innovation on Page no- 37.



Principle No	Description		Reference to Sustainability Report
Principle 3	<b>Businesses should promote the wellbeing of all employees</b>		
	1	Businesses should respect the right to freedom of association, participation, collective bargaining, and provide access to appropriate grievance Redressal mechanisms.	Please refer chapter -Managing Talent on Page no- 49.
	2	Businesses should provide and maintain equal opportunities at the time of recruitment as well as during the course of employment irrespective of caste, creed, gender, race, religion, disability or sexual orientation.	Please refer chapter -Managing Talent on Page no- 49.
	3	Businesses should not use child labour, forced labour or any form of involuntary labour, paid or unpaid.	Please refer chapter -Managing Talent on Page no- 51.
	4	Businesses should take cognizance of the work-life balance of its employees, especially that of women.	Please refer chapter -Managing Talent on Page no- 52,54.
	5	Businesses should provide facilities for the wellbeing of its employees including those with special needs. They should ensure timely payment of fair living wages to meet basic needs and economic security of the employees.	Please refer chapter -Managing Talent on Page no- 53,54.
	6	Businesses should provide a workplace environment that is safe, hygienic humane, and which upholds the dignity of the employees. Business should communicate this provision to their employees and train them on a regular basis.	Please refer chapter -Managing Talent on Page no- 54.
	7	Businesses should ensure continuous skill and competence upgrading of all employees by providing access to necessary learning opportunities, on an equal and non-discriminatory basis. They should promote employee morale and career development through enlightened human resource interventions.	Please refer chapter -Managing Talent on Page no- 54,55.
Principle 4	8	Businesses should create systems and practices to ensure a harassment free workplace where employees feel safe and secure in discharging their responsibilities.	Please refer chapter -Managing Talent on Page no- 56.
	<b>Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.</b>		
	1	Businesses should systematically identify their stakeholders, understand their concerns, define purpose and scope of engagement, and commit to engaging with them.	Please refer chapter -Materiality issues,Road-map and Synergy with Stakeholders on Page no- 25.
	2	Businesses should acknowledge, assume responsibility and be transparent about the impact of their policies, decisions, product & services and associated operations on the stakeholders.	Please refer chapter -Materiality issues,Road-map and Synergy with Stakeholders on Page no- 24,25.
	3	Businesses should give special attention to stakeholders in areas that are underdeveloped.	Please refer chapter -Materiality issues,Road-map and Synergy with Stakeholders on Page no- 25.
Principle 5	4	Businesses should resolve differences with stakeholders in a just, fair and equitable manner.	Please refer chapter -Materiality issues,Road-map and Synergy with Stakeholders on Page no- 25.
	<b>Businesses should respect and promote human rights</b>		
	1	Businesses should understand the human rights content of the Constitution of India, national laws and policies and the content of International Bill of Human Rights. Businesses should appreciate that human rights are inherent, universal, indivisible and interdependent in nature.	Please refer GRI Content Index on Page no- 86.
	2	Businesses should integrate respect for human rights in management systems, in particular through assessing and managing human rights impacts of operations, and ensuring all individuals impacted by the business have access to grievance mechanisms.	Please refer GRI Content Index on Page no- 86,87.



Principle No		Description	Reference to Sustainability Report
Principle 5	3	Businesses should recognize and respect the human rights of all relevant stakeholders and groups within and beyond the workplace, including that of communities, consumers and vulnerable and marginalized groups.	Please refer GRI Content Index on Page no- 86.
	4	Businesses should, within their sphere of influence, promote the awareness and realization of human rights across their value chain.	Please refer GRI Content Index on Page no- 86,87.
	5	Businesses should not be complicit with human rights abuses by a third party.	Please refer GRI Content Index on Page no- 87.
Principle 6	<b>Business should respect, protect, and make efforts to restore the environment</b>		
	1	Businesses should utilize natural and manmade resources in an optimal and responsible manner and ensure the sustainability of resources by reducing, reusing, recycling and managing waste.	Please refer chapter -For A Cleaner Tomorrow on Page no- 39,40.
	2	Businesses should take measures to check and prevent pollution. They should assess the environmental damage and bear the cost of pollution abatement with due regard to public interest.	Please refer chapter -For A Cleaner Tomorrow on Page no- 45,46.
	3	Businesses should ensure that benefits arising out of access and commercialization of biological and other natural resources and associated traditional knowledge are shared equitably.	Please refer chapter -For A Cleaner Tomorrow on Page no- 45,46.
	4	Businesses should continuously seek to improve their environmental performance by adopting cleaner production methods, promoting use of energy efficient and environment friendly technologies and use of renewable energy.	Please refer chapter -For A Cleaner Tomorrow on Page no- 43-47.
	5	Businesses should develop Environment Management Systems (EMS) and contingency plans and processes that help them in preventing, mitigating and controlling environmental damages and disasters, which may be caused due to their operations or that of a member of its value chain.	Please refer chapter -For A Cleaner Tomorrow on Page no- 39.
	6	Businesses should report their environmental performance, including the assessment of potential environmental risks associated with their operations, to the stakeholders in a fair and transparent manner.	Please refer chapter -For A Cleaner Tomorrow on Page no- 39.
	7	Businesses should proactively persuade and support its value chain to adopt this principle.	Please refer chapter -For A Cleaner Tomorrow on Page no- 43.
Principle 7	<b>Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.</b>		
	1	Businesses, while pursuing policy advocacy, must ensure that their advocacy positions are consistent with the Principles and Core Elements contained in these Guidelines.	Please refer GRI Content Index on Page no- 89.
	2	To the extent possible, businesses should utilize the trade and industry chambers and associations and other such collective platforms to undertake such policy advocacy.	Please refer GRI Content Index on Page no- 89.





Principle No	Description		Reference to Sustainability Report
Principle 8	<b>Businesses should support inclusive growth and equitable development</b>		
	1	Businesses should understand their impact on social and economic development, and respond through appropriate action to minimise the negative impacts.	Please refer chapter -Community Engagement - Towards Inclusive Growth on Page no- 66.
	2	Businesses should innovate and invest in products, technologies and processes that promote the wellbeing of society.	Please refer chapter -Community Engagement - Towards Inclusive Growth on Page no- 67,68,70.
	3	Businesses should make efforts to complement and support the development priorities at local and national levels, and assure appropriate resettlement and rehabilitation of communities who have been displaced owing to their business operations.	Please refer chapter -Community Engagement - Towards Inclusive Growth on Page no- 68,69.
	4	Businesses operating in regions that are underdeveloped should be especially sensitive to local concerns.	Please refer chapter -Community Engagement - Towards Inclusive Growth on Page no- 66.
Principle 9	<b>Businesses should engage with and provide value to their customers and consumers in a responsible manner</b>		
	1	Businesses, while serving the needs of their customers, should take into account the overall well-being of the customers and that of society.	Please refer chapter -Technology & Innovation on Page no- 31,32.
	2	Businesses should ensure that they do not restrict the freedom of choice and free competition in any manner while designing, promoting and selling their products.	Please refer chapter -GRI Content Index on Page no- 89.
	3	Businesses should disclose all information truthfully and factually, through labelling and other means, including the risks to the individual, to society and to the planet from the use of the products, so that the customers can exercise their freedom to consume in a responsible manner. Where required, businesses should also educate their customers on the safe and responsible usage of their products and services.	Please refer chapter -GRI Content Index on Page no- 90.
	4	Businesses should promote and advertise their products in ways that do not mislead or confuse the consumers or violate any of the principles in these Guidelines.	Please refer chapter -GRI Content Index on Page no-90.
	5	Businesses should exercise due care and caution while providing goods and services that result in over exploitation of natural resources or lead to excessive conspicuous consumption.	Please refer chapter -GRI Content Index on Page no- 89
	6	Businesses should provide adequate grievance handling mechanisms to address customer concerns and feedback.	Please refer chapter -GRI Content Index on Page no- 90.



## Glossary

AAI	Aluminium Association of India	INR	Indian Rupee
ABML	Aditya Birla Minerals Limited	ISO 9001	Quality Management Systems — Requirements
ABSTC	Aditya Birla Science Mumbai & Technology Centre	ISO-14001	Environmental Management Systems — Requirements with guidance for use
AIMM	Australasian Institute of Mining and Metallurgy	KFA	Key Focus Area
APSRTC	Andhra Pradesh State Road Transport Corporation	KRA	Key Result Area
ASCI	Advertising Standards Council of India	KTPA	Kilo tonne per annum (1000 tonne per annum)
BEE	Bureau of Energy Efficiency	LME	London Metal Exchange
BESCO	Bharathiya Electric Steel Company	m <sup>3</sup>	Cubic meter
BNPL	Birla Nifty Pty Ltd	MCDR	Mineral Conservation and Development Rules 1988
BRDC	Belgaum Research and Development Centre	MSRTC	Maharashtra State Road Transport Corporation
CART	Collaborate - Alleviate - Resolve - Together	MT	Metric Tonne
CCL	Centre for Creativity Leadership	MtCO <sub>2</sub> e	Million Tonne of Carbon Dioxide Equivalent
CDM	Clean Development Mechanism	MTPA	Metric Tonne per annum
CII	Confederation of Indian Industry	MW	Mega Watt
CO	Carbon Monoxide	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
CO <sub>2</sub>	Carbon Dioxide	NCO	Nifty Copper Operation
CPO	Chief People Officer	NGO	Non-governmental Organization
CFO	Chief Financial Officer	NIPM	National Institute of Personnel Management
CTO	Chief Technology Officer	NORPAR	Normal Paraffin
CRM	Customer Relationship Management	NOX	Oxides of Nitrogen such as Nitrogen Dioxide
CSMM	Customer Satisfaction Management and Measurement	NPK	Sodium, Phosphorus and Potassium
CSR	Corporate Social Responsibility	OHSAS	Occupational Health and Safety Assessment Series (standards for Occupational Health and Safety Management System)
CTC	Central Technical Cell	18001	Project Affected People
CY	Calendar year	PAP	Perform-Achieve-Trade
DAP	Di-Ammonium Phosphate	PAT	Per Fluoro Carbon
DAC	Development Assessment Centre	PFC	Plaster of Paris
DEPB	Duty Entitlement Pass Book	POP	Quality Control
DMS	Dry Mud Stacking	QC	Quality, Cost, Delivery, Innovation and Productivity
DP	Displaced People	QCDIP	Research Designs and Standards Organization
EAFA	European Aluminium Foil Association	RDSO	Renewable Energy
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization	RE	Renewable Energy Certificate
EHS	Environment, Health and Safety	REC	Red Mud Pond
EIA	Environmental Impact Assessment	RMP	Reverse Osmosis
ESP	Electrostatic Precipitator	RO	Renewable Purchase Obligation
EUR	Euro	RPO	Rehabilitation and Resettlement
ETP	Effluent Treatment Plant	R&R	Securities and Exchange Board of India
FICCI	Federation of Indian Chambers of Commerce & Industry	SEBI	Self Help Group
FO	Furnace Oil	SHG	Oxides of Sulphur such as Sulphur Dioxide
FRP	Flat Rolled Products	SOX	Spent Pot Lining
FY	Financial year	SPL	The Energy and Resources Institute
GHG	Greenhouse Gas	TERI	Taloja Research and Development Centre
GJ	Giga Joules	TRDC	Tonne Carbon Dioxide Equivalent
GRI	Global Reporting Initiative	TCO <sub>2</sub> e	The Works Partnership
GSRTC	Gujarat State Road Transport Corporation	TWP	United States Dollar
Ha	Hectare	USD	United Nations Framework Convention on Climate Change
HIC	Hindalco Innovation Centre	UNFCCC	Village Development Committees
HDPE	High Density Poly Ethylene	VDC	World Class Manufacturing
HR	Human Resource	WCM	
IAI	International Aluminium Institute		
ICDC	Indian Copper Development Centre		
ICPCI	International Copper Promotion Council India		
IDP	Individual Development Plan		
IIT	Indian Institute of Technology		
IMRB	Indian Market Research Bureau		
IMS	Integrated Management System		

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,

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