

Directors' Report & Management Discussion And Analysis

TO THE MEMBERS OF
ACC LIMITED

The Directors take pleasure in presenting the Seventy Sixth Annual Report together with the Audited Accounts, for the year ended December 31, 2011. The Management Discussion and Analysis has also been incorporated into this report.

1. FOREWORD

2011 was a challenging year for the national economy, industrial production slowed down and the overall performance of the cement sector was also below expectation.

The cement sector saw a demand growth of ~ 6% in 2011 over 2010, whereas the Company ended the year 2011 with a growth of ~11.5% in sales volumes. The successful ramp up of expansion projects at Wadi and Chanda during 2011, helped the Company with the much needed volume and took the Company's total sales to 23.73 million tonnes. The cement sector witnessed major escalations in cost of raw materials especially in respect of coal. Hikes in petroleum costs led to increased freight costs. Owing to increased input costs, the cement sector's profitability margins declined.

In 2012, cement consumption is expected to be robust. Economic development will accelerate as India plans to invest ~ USD 1 trillion in infrastructure in the twelfth Five Year Plan period and the cement industry is well placed to meet this demand. However, prices are expected to remain under pressure across regions in view of steep escalations in the cost of major inputs.

2. HIGHLIGHTS OF PERFORMANCE

- Cement despatches were 23.68 million tonnes during the year as compared to 21.17 million tonnes during 2010;
- Consolidated income for the year under review was ₹ 10428 crore, an increase of 21% as compared to ₹ 8619 crore in 2010;
- Consolidated profit before tax increased in 2011 to ₹ 1505 crore against ₹ 1415 crore in 2010;
- Consolidated profit after tax was higher in 2011 at ₹ 1301 crore against ₹ 1078 crore in 2010.

3. FINANCIAL RESULTS

	Consolidated		Standalone	
	₹ Crore		₹ Crore	
	2011	2010	2011	2010
Sale of product and services (net of excise duty) and Other Income	10428.45	8619.38	9852.20	8074.26
Profit before Tax	1505.29	1415.41	1540.42	1461.45
Provision for tax	215.45	341.36	215.16	341.44
Profit after tax	1300.80	1077.53	1325.26	1120.01
Balance brought forward from previous year	3175.45	3040.37	3381.41	3203.85
Profit available for appropriations	4476.25	4117.90	4706.67	4323.86
Appropriations:				
Interim Dividend	206.52	187.75	206.52	187.75
Proposed Final Dividend	319.17	384.88	319.17	384.88
Dividend Distribution Tax	85.28	95.10	85.28	95.10
Previous Year Dividend Distribution Tax	(1.49)	(0.93)	(1.49)	(0.93)
General Reserves	250.00	250.00	250.00	250.00
Debenture Redemption Reserve	25.00	25.00	25.00	25.00
Amortization Reserves	0.65	0.65	0.65	0.65
Surplus carried to the next year's account	3591.12	3175.45	3821.54	3381.41

4. DIVIDEND

Your Directors are pleased to recommend a final dividend of ₹ 17 per Equity share of ₹ 10 each. The Company had distributed an interim dividend of ₹ 11 per Equity share in August 2011. The total dividend for the year ended December 31, 2011 would accordingly be ₹ 28 per Equity share as

against the total dividend of ₹ 30.50 per Equity share for the year ended December 31, 2010 which included the payment of one-time "Special Dividend" of ₹ 7.50 for the Platinum Jubilee Year. The total outgo for the current year amounts to ₹ 610.97 crore, including dividend distribution tax of ₹ 85.28 crore, as against ₹ 667.73 crore, including dividend distribution tax of ₹ 95.10 crore in the previous year.

5. ECONOMIC SCENARIO AND OUTLOOK

The year under review ended with softening of inflation and interest rates which augured well for better growth prospects of the economy. This trend would benefit infrastructure, construction and real estate sectors which would in turn spur demand growth in the cement sector.

The economy is expected to grow at a healthy pace in the medium to long term due to its strong fundamentals and steady domestic consumption.

A normal monsoon, coupled with improving rural incomes and investments in infrastructure should give a boost to cement demand in 2012.

6. CEMENT INDUSTRY OUTLOOK AND OPPORTUNITIES

During 2011, the Cement Industry added ~30 million tonnes of capacity taking its installed capacity to 290 million tonnes. Subdued demand conditions led to capacity utilization falling below 80%. The demand for cement is expected to grow at 10% over 2011 and capacity addition to increase at around 8% year-on-year. A lower utilization rate coupled with increase in cost of raw materials and increasing logistics costs are likely to keep overall prices under pressure in all regions. Pressure on costs will continue to mount mainly on account of increases in the cost of domestic coal and owing to the volatility in costs of imported coal.

7. CEMENT BUSINESS – PERFORMANCE AT A GLANCE

	2011	2010	Change %
Production - million tonnes	23.46	21.21	10.61
Sales volume - million tonnes*	23.73	21.29	11.46
Sale value - ₹ Crore	9438.66	7717.33	22.30
Operating EBITDA %	20.35%	23.49%	

* includes sale to ACC Concrete Ltd. and trading sales.

8. MODERNISATION

Operations of the state-of-the-art kiln at Wadi and the cement grinding plants at Kudithini and Thondebhavi stabilized during the year. The new clinkering unit at Chanda in Maharashtra also stabilized its operations during the year. The cement mill at Chanda was successfully commissioned during the year under review and commercial operations have commenced in January 2012 after appropriate ramping up.

9. SUSTAINABLE DEVELOPMENT

9.1 Alternative Fuels and Raw Materials (AFR)

The Company continued in its endeavour to promote co-processing as an effective waste management solution for a number of industries. Several new waste streams were added during the year under review including from industrial sectors such as petroleum, pulp & paper and packaging. The use of biomass as a renewable source of energy registered a significant increase during the year. Special efforts were taken to serve the waste management needs of society by co-processing segregated combustibles from municipal solid waste (MSW) of a number of cities and townships in the proximity of our larger cement plants. The Holcim group's global waste management brand, Geocycle, was unveiled in India. Consequently, all activities of the Company's AFR Department relating to promotion and advocacy of waste management through co-processing in cement kilns would hereafter be carried out under the Geocycle banner.

9.2 Renewable Energy

ACC has been pursuing the scope of widening the usage of renewable energy in applications where currently fossil based energy is being used.

a) **Waste Heat Recovery System:** The Company has under implementation, a project at the Galgal plant to produce power

through waste heat recovery. This waste heat recovery system is capable of generating ~45 million units of power per year of green energy, thereby reducing ~37,000 tonnes of CO₂ per year.

- b) **Wind Energy:** Wind power generation during the year under review from the total installed capacity of 19 MW was 38.89 million units. The wind power generated has been used to substitute part of the fossil-based energy usage at Madukkarai, Lakheri, Thane Office and the Bulk Cement Terminal at Kalamboli.
- c) **Rain water harvesting:** Rain water harvesting was taken up in barren and vacant land available in limestone mines, factory and colony areas across the Company.
- d) **Solar Energy:** Solar energy is generated throughout the year from 27 KW capacity of PV panels installed at ACC Corporate Office, Thane Office and at the Chanda Control room.

10. COMMUNITY DEVELOPMENT

The Company continued to engage with the local communities by encouraging their active involvement in various development and welfare schemes. Community Advisory Panels at plant locations enabled a participatory approach in setting priorities for their own development schemes. Local entrepreneurship was promoted through Self Help Groups (SHG) for creating opportunities for sustainable livelihood among unemployed youth through skill development, vocational guidance, training in computer operation and applications, bridge education and scholarship programmes. Our plants also assisted local communities with projects in the areas of drinking water, water conservation

and management, rain water harvesting, health and family planning camps and insurance schemes for truck drivers associated with our plants.

Our plants engaged with Village Support Groups and NGO's to enhance the reach and effectiveness of our schemes. The effectiveness of our programmes was assessed through Social Engagement Surveys carried out at different plant locations based on feedback from stakeholders.

11. OCCUPATIONAL HEALTH & SAFETY (OH&S)

The Company strived to achieve ZERO HARM standards at the workplace through specific initiatives and programmes addressing critical areas of operations. "Safety Champions" were identified amongst line managers and given specific assignments. "Visible Safety Leadership" programmes were held during the year to inculcate safety leadership amongst line managers. Best safety practices were selected and shared among all plants. Third party audits and safety audit training programmes for Internal Auditors were conducted during the year. Hazard identification and risk assessment workshops have been enhanced to engage all categories of employees including contract workers. Safety induction training for contract workers is now a regular practice at all sites.

12. HUMAN RESOURCES

During the year under review, efforts were on across the organization in promoting leadership, cross-functional collaboration, innovativeness and various improvement projects. This led to a new journey of "institutionalizing excellence" embracing all core processes including manufacturing, marketing, logistics and other processes. People processes such as talent/career management, productivity improvement, communication and providing quality of life to employees are being examined afresh. Employees continued to receive adequate training

inputs to ensure skills enhancement and job enrichment. An Employee Rewards and Recognition Scheme 'Gaurav' was introduced during the year.

Industrial Relations at all Units were cordial. A four year wage settlement was concluded with the unions during the year under review.

13. FINANCE

Your Company's cash and cash equivalent as at December 31, 2011 was ₹ 2832 crore. The Company continues to focus on judicious management of its net working capital. Receivables, inventories and other working capital parameters are kept under strict check through continuous monitoring. The Company's debt program continues to enjoy 'AAA' rating from CRISIL. During the year under review, the consortium arrangement for meeting working capital requirements was discontinued and the Company opted for multiple banking arrangements.

14. SHARE CAPITAL

The validity of the various Stock Option Schemes have since expired and all unexercised Stock Options have lapsed. Accordingly, no new equity shares have been issued during the year. As required by SEBI (Depositories & Participants) Regulations, 1996, an audit of the Share Capital of the Company has been undertaken on a quarterly basis and the auditor's certificate is submitted to BSE Limited and The National Stock Exchange of India Limited.

15. FIXED DEPOSITS

Despite efforts to identify and repay unclaimed deposits, the total amount of fixed deposits matured and remaining unclaimed as on December 31, 2011 was ₹ 0.07 crore.

16. MERGER OF ENCORE CEMENT AND ADDITIVES PRIVATE LIMITED, LUCKY MINMAT LIMITED AND NATIONAL LIMESTONE COMPANY PRIVATE LIMITED

During the year under review, your Company made an application to the Honorable High Court of Judicature at Bombay for approval to a Scheme of Amalgamation of three of the Company's wholly owned subsidiaries viz. Encore Cement and Additives Private Limited, Lucky Minmat Limited and National Limestone Company Private Limited. The amalgamation process is currently in progress. The amalgamation of the said three subsidiaries would enable the Company to utilize the resources of the said subsidiaries to further augment its cement business and would also go towards reducing the overheads and other common expenses.

17. SUBSIDIARY COMPANIES

17.1 ACC Concrete Limited (ACCCL)

The sales volumes of ACC Concrete Limited (ACCCL) were in line with the previous year. Despite this, sales revenue increased by 12.9%. The market in the Company's main serviceable areas grew by 3% from 19 million cubic metres to 19.7 million cubic metres with the total Ready Mixed Concrete (RMX) market growing by ~7%. However, this growth was witnessed in the first half year with the latter part of the year showing signs of stagnation. During the year under review, the Company continued to focus on consolidating its position by increasing volumes from its existing plants and through on-site projects and franchised operations.

Operational EBITDA losses were reduced to ₹ 5.05 crore in 2011 from a level of ₹ 7.88 crore in 2010 through systematic management of costs and productivity improvement.

During the year under review, the Company increased its Authorised, Subscribed and Paid-Up Share Capital from ₹ 200 crore to ₹ 250 crore by the issue and allotment of 5,00,00,000 Equity Shares of the face value of ₹ 10 each for cash at par to ACC Limited.

The outlook for the construction sector in 2012 still remains moderate and RMX volumes are expected to come from infrastructure, industrial and retail sectors, while demand from commercial and residential sectors is expected to be low.

The Company is making vigorous efforts to extend its customer focus by providing a total solution concept and leveraging the cement sales network.

17.2 Bulk Cement Corporation (India) Limited (BCCI)

During the year under review, BCCI handled a cement volume of 9.34 lakh tonnes as compared to 9.18 lakh tonnes achieved in 2010. The profit after tax for the year 2011 is ₹ 68.35 lakhs as against ₹ 38.83 lakhs in the year 2010.

17.3 Audited Statements of Accounts of the Company's Subsidiaries

As required under Section 212 of the Companies Act, 1956, the audited statements of account, along with the report of the Board of Directors relating to the Company's subsidiaries; ACC Concrete Limited, ACC Mineral Resources Limited, Bulk Cement Corporation (India) Limited, Encore Cement and Additives Private Limited, Lucky Minmat Limited and National Limestone Company Private Limited, together with the respective Auditors' Reports thereon for the year ended December 31, 2011 are annexed.

18. DIRECTORS

The Board has appointed Mr Ashwin Dani as an Additional Director of the Company with effect from December 15, 2011. Mr Dani holds office upto the date of the forthcoming Annual General Meeting (AGM) of the Company and his candidature for appointment as a Director has been included in the Notice convening the forthcoming AGM of the Company.

Mr D K Mehrotra who was on the Board of Directors since October 14, 2005, resigned as Director of the Company with effect from July 28, 2011. The Board has placed on record its warm appreciation of the valuable services rendered by Mr Mehrotra during his tenure as a Director of the Company.

In accordance with the provisions of the Companies Act, 1956, and in terms of the Memorandum and Articles of Association of the Company, Mr Paul Hugentobler, Mr S M Palia, Mr Markus Akermann and Mr M L Narula retire by rotation and are eligible for reappointment.

Mr Markus Akermann has, however, expressed his desire not to seek re-election at the AGM. The Board has placed on record its warm appreciation of the valuable services rendered by Mr Akermann during his tenure as Director of the Company since May 2005.

It is proposed to appoint Mr Bernard Fontana, Chief Executive Officer, Holcim Limited, as a Director of the Company in place of Mr Akermann. The relevant Resolution for the appointment of Mr Fontana has been included in the Notice convening the forthcoming AGM of the Company.

19. INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY

The Internal Control System of the Company is well structured and is commensurate with the size, scale and complexity of its operations. It is being

constantly assessed and strengthened with new / revised standard operating procedures, tighter internal and information technology (IT) controls. The major initiative in 2011 was the implementation of the Governance, Risk and Compliance Module (GRC) which would go a long way in enhancing the IT Governance framework with tighter access controls. The Internal Audit Department, based on risk assessment, continued to perform regular internal audits and checks to ensure that internal control systems were properly in place and that responsibilities were being discharged effectively. The Audit Committee of the Board also reviews the adequacy and efficacy of the internal control systems and gives its suggestions for strengthening them wherever required.

20. BUSINESS RISK MANAGEMENT

Your Company has robust Business Risk Management (BRM) practices to identify, evaluate business risks and opportunities. The business risks and opportunities so identified are integrated into the business plan and a detailed action plan to mitigate the identified business risks is thereafter drawn up and its implementation monitored.

The key business risks identified by the Company and its mitigation plans are as under:

Fuel Risks:

Availability of fuel at reasonable rates is one of the main concerns of the Company as it uses large quantities of coal annually to meet its kiln and captive power generation requirements. The year 2011 witnessed a steep hike in the price of coal which adversely impacted the profitability of the Company. During the current year, coal prices are expected to further rise sharply. This, coupled with limited production of fuel in the country, is expected to result in higher input costs for a fuel intensive industry like cement. Further, the availability of

linkage coal is gradually dwindling. The Company is trying to mitigate its fuel risk by increased usage of alternative fuels and optimization of coal mix. It has initiated steps and is in the process of developing its own coal blocks which would partly go to meet its coal requirements.

Project Risks:

The Cement Industry is capital intensive in nature. Its Compound Annual Growth Rate (CAGR) for the next five years is expected to be ~10%. In the execution of large projects which are highly capital intensive in nature, there could be exposure to time and cost overruns. To mitigate these risks, the Company has strengthened its project management team as well as its project accounting and governance framework. Whilst the Company continues to draw on Holcim's expertise, a separate organizational structure at project sites with defined roles and accountability will be put in place for large projects.

Competition Risks:

The Cement Industry is becoming intensely competitive with the foray of new entrants and some of the existing players adopting inorganic growth strategies. To mitigate this risk, the Company is leveraging its newly created capacities to increase market share, enhance brand equity and visibility, enlarge product portfolio and service offerings. It would also leverage on its infrastructure, commercial and institutional sales team to offer better value to large customers.

People Risks:

With the industry growing at a fast pace and demand for experienced and trained manpower outstripping supply, the ability to retain existing talent and attract new professional talent assumes crucial importance. The Company is creating long term plan for 'Cadre Building' in different streams,

and has initiated a process for potential identification and talent management.

21. AWARDS

During the year under review, your Company received many awards and felicitations conferred by reputable organizations for achievements in different areas such as Safety, Manufacturing Excellence and Environment Management.

22. ENHANCING SHAREHOLDERS VALUE

We are happy to report that the Company's has received ISO 9001:2008 Certification from Det Norske Veritas AS Certification Services (DNV) for the processes of the Secretarial & Compliance Division, Share Department and ISD support. The ISO 9001:2008 certification certifies the robustness of quality management processes.

Your Company believes that its Members are among its most important stakeholders. Accordingly, your Company's operations are committed to the pursuit of achieving the high levels of operating performance and cost competitiveness, consolidating and building for growth, enhancing the productive asset and resource base and nurturing overall corporate reputation. The Company is also committed in creating value for its other stakeholders by ensuring that its corporate actions positively impact the socio-economic and environmental dimensions for the society for a sustainable growth and development.

23. DIRECTORS' RESPONSIBILITY STATEMENT

To the best of their knowledge and belief and according to the information and explanations obtained by them, your Directors make the following statement in terms of Section 217(2AA) of the Companies Act, 1956:

- that in the preparation of the annual accounts for the year ended December 31, 2011, the

applicable accounting standards have been followed along with proper explanation relating to material departures, if any;

- that such accounting policies as mentioned in Note 1 of the Notes to the Accounts have been selected and have been applied consistently and judgement 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 as on December 31, 2011, and of the profit of the Company for the year ended on that date;
- that proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956, for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- the annual accounts have been prepared on a going concern basis.

24. AUDIT

Messrs S R Batliboi & Associates, Chartered Accountants, who are the Statutory Auditors of the Company and who hold office upto the date of the Annual General Meeting, have expressed their inability to continue as Auditors of the Company. Messrs S R Batliboi & Associates, Chartered Accountants, have been the Auditors of the Company since 2005, first as Joint Auditors and thereafter as the Auditors of the Company. The Board has placed on record its appreciation of the services rendered by the Auditors.

The Members are requested to appoint Messrs S R Batliboi & Co., Chartered Accountants, as Auditors of the Company for the current year and to authorize the Directors to fix their remuneration as per Item 6 of the Notice concerning the Annual General Meeting of the Company.

Messrs S R Batliboi & Co. have confirmed their eligibility under Section 224(1B) of the Companies Act, 1956, for appointment as Auditors.

Members' attention is invited to the observation made by the Auditors to point (xxi) of their 'CARO Report' issued pursuant to the Companies (Auditor's Report) Order, 2003 (CARO Report) which is self explanatory.

As per the requirement of the Central Government and in pursuance of Section 233 B of the Companies Act, 1956, your Company carries out an audit of cost records relating to cement each year. Subject to approval of the Central Government, your Directors have appointed Messrs N I Mehta & Co., Cost Auditors, to audit the cost accounts of the Company for the financial year 2011.

25. CORPORATE GOVERNANCE

As per Clause 49 of the Listing Agreement with the Stock Exchanges, a separate section on corporate governance practices followed by the Company, together with a certificate from the Company's Auditors confirming compliance, is set out in the Annexure forming part of this Report.

26. CONSOLIDATED FINANCIAL STATEMENTS

The Consolidated Financial Statements of the Company prepared in accordance with relevant Accounting Standards viz. AS 21, AS 23 and AS 27 issued by the Institute of Chartered Accountants of India forms part of this Annual Report.

27. ENERGY TECHNOLOGY AND FOREIGN EXCHANGE

The information on conservation of energy, technology absorption and foreign exchange earnings and outgo stipulated under Sec 217(1)(e) of the Companies Act 1956, are given in Annexure 'A' to the Directors' Report.

28. PARTICULARS OF EMPLOYEES

Information in accordance with the provisions of Section 217(2A) of the Companies Act, 1956, read

with the Companies (Particulars of Employees) Rules, 1975 as amended, is given in Annexure 'B' to the Directors' Report.

29. ACKNOWLEDGEMENTS

Your Directors are thankful to the various Central and State Government Departments and Agencies for their continued help and cooperation. The Directors are grateful to the various stakeholders – customers, members, banks, dealers, vendors and other business partners for the excellent support received from them during the year. Your Directors wish to place on record their sincere appreciation to all employees for their commitment and continued contribution to the Company.

30. CAUTIONARY STATEMENT

Statements in the Directors' Report and the Management Discussion & Analysis describing the Company's objectives, expectations or forecasts may be forward-looking within the meaning of applicable securities, laws and regulations. Actual results may differ materially from those expressed in the statement. Important factors that could influence the Company's operations include global and domestic demand and supply conditions affecting selling prices of finished goods, input availability and prices, changes in government regulations, tax laws, economic developments within the country and other factors such as litigation and industrial relations.

For and on behalf of the Board of Directors

N S Sekhsaria
Chairman

Mumbai
February 09, 2012

Annexure 'A' to Directors' Report (Para 27)

Section 217(1)(e) of the Companies Act, 1956, read with the Companies (Disclosure of Particulars in the Report of Board of Directors) Rules, 1988.

A: CONSERVATION OF ENERGY

(a) Energy conservation and efficiency measures undertaken in various areas of the cement plants:

- Conversion of Separator Dust Collector fan in Raw Mill 1 & 2 from HT to LT and installing LT Variable Voltage Variable Frequency Drive (VVVFD) at Galgal plant;
- Replacement of Waste Gas Fans with High Efficiency Fans for Line K-3 at Wadi plant;
- Installation of higher capacity Fuller-Kinyon (FK) pump for transferring the dry flyash into the bin of cement mills at Galgal plant;
- By carrying out optimization of Cement Mill #3 at Bargarh, the output rate was increased from 90 to 107 TPH. Eliminating FK pump and installation of mechanical conveying system for transportation of Pozzolona Portland Cement was also carried out at Bargarh plant;
- Thermal imaging of kiln and pre heater was carried out to identify major thermal loss areas and subsequent rectification was carried out at Madukkarai plant;
- Optimization of VRM and ball mill circuit and taking the ball mill dust collector product as final product at Galgal plant;
- Computational Fluid Dynamics (CFD) studies were carried out to improve flow distribution and to reduce pressure drop of VRM cyclones at Chaibasa and Bargarh plants and Pre-heater cyclones at Lakheri and Galgal plants;
- Variable Voltage Variable Frequency Drives (VVVFD) were installed for Raw Mills 4 & 5 drives at Wadi plant; Kiln and Cement Mill drives at Jamul; Positive Displacement (PD) blower at Lakheri;
- 3 nos. Filter drums & Cake Besta Feeder DC drives were replaced with new generation AC motor and drive, and 4 nos. Vacuum pump's motor RPM were optimized for Filtration Department of Madukkarai plant;
- Compressed Air pipe lines were modified & interconnected to a common header for cement mill section to reduce the number of operating compressors at Jamul;
- 3 nos. Air cooled condenser fans and auxilliary cooling tower fan were replaced with FRP fan blade assembly for 15 MW CPP at Madukkarai plant;
- Boiler Feed Pump for 15 MW CPP was replaced at Tikaria plant;
- Microprocessor based multi-step capacity controllers were installed at Jamul and Tikaria plants for various reciprocating compressors to optimize the operating pressure within a narrow band;
- Detailed Energy Audit was conducted at Thondebhavi plant, and detailed compressed air audit was conducted for Jamul plant. Study to measure fan efficiency was conducted at Jamul, Madukkarai, Chaibasa, Wadi and Bargarh plants;
- Energy Monitoring System was installed at Wadi and Chanda plant;
- 330 ton Shredding machine was installed for increased use of biomass in Hot Air Generator at Sindri Plant;
- Capacitor banks have been added to the system across ACC plants to improve plant power factor;
- Replacement of conventional lamps with Compact Fluorescent Lamps for plant and colony lighting was done across ACC plants.

Green power –

- The Wind Farm installed at Rajasthan generated 13.73 million units of green energy during 2011, as compared to 13.69 million units generated during 2010;
- The Wind Farm installed at Tamil Nadu generated 21.55 million units of green energy during 2011, as compared to 21.96 million units generated during 2010:

- The Wind Farm installed at Maharashtra generated 3.61 million units of green energy during 2011. The units of green energy generated since the inception of the windfarm in April 2010 and upto December 2010 was 3.05 million units.

Alternative fuels –

In 2011, the Company co-processed different types of alternative fuels totaling 29860 tonnes.

(b) Additional Proposals being implemented for further conservation of energy

- At Gagal, 7.3 MW Waste Heat Recovery Power Generation is under execution and is expected to go on stream by end of 2012, generating approx 45.48 million units of power per annum.

(c) Impact of the above measures for reduction of energy consumption and consequent impact on cost of production -

The measures stated in points (a) and (b) above would further improve the thermal and electrical energy efficiency of the plants. During the year 2011, electrical energy reduced by 2.07 % and thermal energy reduced by 1.15 % over 2010.

Form A Power and Fuel Consumption

	Current Year			Previous Year		
	Lakh Units (Kwh)	Total Cost (₹ Lakhs)	₹ Per Unit	Lakh Units (Kwh)	Total Cost (₹ Lakhs)	₹ Per Unit
1 Electricity (Gross)						
a) Purchased	6917	33625	4.86	5865	25202	4.30
b) Own Generation :						
i) Through Diesel Generator	30	531	17.40	73	915	12.52
ii) Through Steam Turbine / Generator	17614	65521	3.72	17399	49216	2.83

	Current Year			Previous Year		
	Quantity (Lakh Tonnes)	Total Cost (₹ Lakhs)	Average Rate (₹ / Tonne)	Quantity (Lakh Tonnes)	Total Cost (₹ Lakhs)	Average Rate (₹ / Tonne)
2 Coal (for kiln)*	24.30	122764	5053	21.10	84635	4012

* Does not include other fuel / alternative fuels used in kiln.

Consumption per unit of production

	@ Standard	Current Year	Previous Year
a) Electricity Kwh/T* of Cement			
Semidry / Dry process	98-110	84	87
b) Furnace Oil K Ltrs/T of Cement	-	-	-
c) Coal for kiln K.cal/Kg of clinker			
Semidry / Dry process	720-990	742	750

@ Source : Publication of Confederation of Indian Industries

* Excludes non-process power consumption.

(B) TECHNOLOGY ABSORPTION**Research & Development (R&D)****1. Specific areas in which R&D is carried out by the Company**

- a) Improving quality of blended cement through innovative processing utilizing industrial by-products for improved quality performance of ACC Plants
- b) Conservation of resources through maximizing the use of low-grade limestone for cement manufacture
- c) Development of application oriented cements with decreased CO₂ emissions
- d) Development of new products or discovering new methods of analysis
- e) Productivity research for increased efficiency in use of resources
- f) Recycling of wastes and research for efficient use of scarce materials
- g) Characterization of industrial wastes and looking into possibilities of environment friendly co-processing of wastes in cement manufacture, leading to thermal substitution and conservation of natural resources
- h) Development and use of cement grinding aid and accelerators for PPC & PSC for improved performance in concrete and reduced clinker factor in blended cements
- i) Development of cements tailored for specific market clusters and application segments
- j) Quality Benchmarking exercise for different market clusters of ACC products

2. Benefits derived as a result of above R&D

- a) Effective use of marginal quality raw materials and fuels with improved clinker quality
- b) Increased absorption of blending materials like fly ash and slag in blended cements
- c) Effective replacement of the costlier natural gypsum by a cheaper by-product phospho gypsum without affecting the quality of cement
- d) Maintain a lead position in all the market clusters of the country
- e) Launch of special high performance products like F2R, Concrete+, Coastal+ for specific market segments / market climatic conditions
- f) Effective use of SPC at each stage of cement manufacture for improving consistency of operations and consistency in product quality
- g) Fuel efficiency

3. Future plan of action

- a) Exploratory research works on the above specific areas
- b) Focus on development of products aimed at enhancing use of cement in various applications and development of application oriented cement based cementitious material
- c) Use of waste / by-products in cement manufacture as alternative materials
- d) Improve product quality particularly with respect to long term durability and reduction in cost of manufacture

4. Expenditure on R & D

					₹ Lakhs
a) Capital	..	..	..	..	72
b) Recurring (Gross)	..	..	..	..	558
c) Total	..	..	..	..	630
d) Total R&D expenditure as percentage of total turnover	..	..	..	..	0.07

(C) FOREIGN EXCHANGE EARNINGS & OUTGO

					₹ Lakhs
Foreign exchange earned	..	..	..	..	1384
Foreign exchange used	..	..	..	..	4194

Annexure 'B' to Directors' Report (Para 28)

Employed for Full Year

Sr. No.	Name	Remuneration Gross (₹)	Designation & Nature of Duties	Qualification	Date of Commencement of Employment	Total Experience (Years)	Age	Last Employment
1	A. K. SAXENA	9207120	PRESIDENT - WADI CEMENT CLUSTER	Diploma, BE	18-Nov-85	26	49	Lohia Starlinger Pvt Ltd
2	ATUL KHOSLA	8797420	PRESIDENT - PROJECTS	ME	18-Jul-07	29	53	Lafarge India Pvt Ltd
3	B SHERDIWALA	7177153	PRESIDENT - HUMAN RESOURCES	BSc, M.A, M PHIL, LLB	19-Mar-84	28	54	NIL
4	BHARAT PAREKH	6931752	HEAD - CAPEX (CPO)	BE	10-Jul-08	34	58	Aditya Birla Group
5	BURJOR DORAB NARIMAN	8476996	COMPANY SECRETARY & HEAD COMPLIANCE	Bcom, FCS	14-Dec-09	37	57	Bombay Dyeing & MFG Company Ltd
6	J V B SASTRY	6462384	DIRECTOR - LOGISTICS	Bcom, M.Com	24-Jun-88	32	52	Coromandel Fertilisers Ltd
7	J.DATTAGUPTA	11971066	CHIEF COMMERCIAL OFFICER	B.Tech (IIT)	10-Aug-76	36	58	NIL
8	JOYDEEP MUKHERJEE	6530972	DIRECTOR - SALES	BSc, PG Diploma, PG	21-Jun-07	24	45	Hindalco
9	KULDIP K KAURA	47689532	CEO & MANAGING DIRECTOR	BE	5-Aug-10	41	64	Vedanta Resources PLC
10	M.K. MISHRA	7219455	DIRECTOR - PLANT	BE	10-Feb-85	27	51	Lakshmi Cement
11	P N IYER	8535869	DIRECTOR - SALES	Bcom, PGDBA	2-Jan-09	30	56	NMDC
12	R S RATHORE	7395062	DIRECTOR - PLANT	BE	26-Jul-80	34	55	Rajasthan Ind.Minerals Dev.Corporation
13	R VASUDEVAN	6733372	SR. VICE PRESIDENT	B Tech , PG Diploma	7-Dec-77	35	59	Planning Commission Government of India
14	RAJIV KUMAR	6599731	DIRECTOR - SALES	Bcom, MBA	2-Jun-89	25	49	ABC India Ltd
15	RAJIV PRASAD	18680942	CHIEF EXECUTIVE - NORTH REGION	BE, PG Diploma	27-Nov-09	22	50	Halonix Limited
16	RAKESH SINHA	6048077	DIRECTOR - PLANT	BE	24-Dec-09	30	55	The India Cement Ltd
17	RAMIT BUDHRAJA	12801677	CHIEF EXECUTIVE - SOUTH WEST REGION	B.Tech, MBA	1-May-06	25	51	Holcim Ltd
18	SA KHADILKAR	6129749	DIRECTOR - QUALITY & PRODUCT DEVELOPMENT	B Sc , MSc Chemistry	1-Apr-81	34	56	Morarjee Mills (Piramal Organic Chemicals)
19	SHAKTI ARORA	13518078	CHIEF CENTRAL PROCUREMENT OFFICER	BE, MBA	13-Jul-09	29	51	Mahindra & Mahindra Limited
20	SUNIL NAYAK	13822241	CHIEF FINANCIAL OFFICER	B.Com, FCA, FCS, AICWA, LLB, GAMP (ISB/Kellogg)	14-Aug-08	29	52	Clariant Chemicals India Limited
21	VIVEK CHAWLA	12461255	CHIEF EXECUTIVE - EAST REGION	BE Mining	3-Jan-94	18	51	Grasim Ind.Ltd

Employed for Part of the Financial Year

Sr. No.	Name	Remuneration Gross (₹)	Designation & Nature of Duties	Qualification	Date of Commencement of Employment	Total Experience (Years)	Age	Last Employment
1	GEOFFREY DEAN CURRIE	6,632,699	DIRECTOR - OH & S	Bachelor of Business - (ECO)	18-Apr-11	15	43	Cement Australia
2	T N TIWARI	5,427,421	CHIEF PUBLIC AFFAIRS OFFICER	BSc, B Tech	7-Aug-72	40	63	NIL

NOTES :-

- (I) Gross Remuneration shown above is subject to tax and comprises salary, allowances, incentive, monetary value of perquisites and Company's contribution to Provident Fund and Officer's Superannuation Fund.
- (II) In addition to the above remuneration, employees are entitled to Gratuity in accordance with the Company's rules.
- (III) All the employees have adequate experience to discharge the responsibility assigned to them.
- (IV) The nature of employment in all cases is contractual.

For and on behalf of the Board of Directors

N. S. Sekhsaria
Chairman