

# Sustainable Development Report 2011

**ACC Limited** 



### **ABOUT US**

ACC Limited is among India's most respected manufacturers of cement and ready mixed concrete. Established in 1936, its operations are spread throughout the country. In all its 75 years, ACC has been a pioneer and trend-setter responsible for many breakthroughs in cement and concrete. Among the first companies in India to include commitment to environment protection as a corporate objective, ACC has been acknowledged for environment friendly measures taken at its plants and mines. As part of its Social Responsibility, ACC undertakes a wide range of activities in community and rural development.

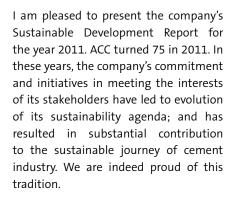
www.acclimited.com



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Safety for us is synonymous with "License to Lead". The fundamental attributes of safety are imbibed in our leadership team. We have a fairly well developed Occupational Health and Safety (OH&S) programme that is based on Holcim's "Safety Pyramid" which demands relentless effort to attain a safety culture of zero-harm and is strengthened with regular training and awareness programmes focusing on the safety of employees and contractors' workmen. In the last few years we have conducted wide-ranging programmes at all our plants, covering a variety of occupational themes. In projects and logistics, wherein a large number of outside agencies are involved, we have initiated efforts to usher in comprehensive safety measures. We will diligently continue with our endeavours to strengthen our processes in this most vital subject in order to recognize and avert all controllable risks.

On the environmental front, we are committed to contain the direct and indirect emissions of Green House Gases (GHG) from our operations. The company has carried out a study on its carbon footprint and developed a carbon strategy. We have set both short-term

and long-term reduction targets, with an action plan on all CO<sub>2</sub> emission reduction levers like clinker factor, specific thermal energy and specific electrical energy among others. In the last two decades the company has managed to cut down its carbon footprint by as much as 31 per cent to 550 kg of CO<sub>2</sub> per tonne of cement today. A major factor responsible for this achievement is the fact that about 90 percent of ACC's production today comprises of blended cements, a low carbon variety. We aim to pursue our carbon strategy rigorously and target a reduction of 5% in specific CO<sub>2</sub> emissions by 2016.

As a member of the Cement Sustainability Initiative (CSI) of World Business Council for Sustainable Development (WBCSD), ACC made a valuable contribution in developing the Low Carbon Technology road map 2050 for the Indian Cement Industry.

Our Alternative Fuels and Raw Materials (AFR) portfolio includes biomass, industrial waste and municipal solid waste. The processes to enhance AFR usage and to reduce dependence on fossil fuels have been developed, beginning with the formation of a nucleus team. By setting up full-fledged waste preprocessing platforms at three of our plants, we are taking a big step ahead to facilitate the increased usage of AFR.

We firmly believe that communities around our operations are our key stakeholders. In 2011, the company reached out to more than half million people across the country through various developmental initiatives in



education, health, creation of means of livelihood and rural infrastructure support. We gratefully acknowledge the active support and participation of the local communities, Government and NGOs in making our community development initiatives a success.

We are deeply inspired by the Holcim Foundation for Sustainable Construction to advance the cause of sustainable construction in the country. This offers us the opportunity to participate in the promotion of low-cost housing, a subject of immense social relevance. We have also initiated programmes for the development of trade skills necessary for construction. Keeping in mind the overall developments in the construction domain, we will work with other interested parties to make some meaningful contribution in these areas.

We received several awards in 2011. In particular, the awards for safety and environment friendly practices have encouraged us to a large extent. Kymore and Tikaria plants received the Safety Innovation Award 2011 from The Institution of Engineers' (India). Four of our plants won the India Manufacturing Excellence Awards 2011 instituted by Economic Times and Frost & Sullivan. It was gratifying that the DAV managed school at our Gagal plant won the IMC Ramakrishna Bajaj National Quality Certificate of Merit and Performance Excellence trophy. Another feather in our cap was the receipt of ISO 9001-2008 certification by our Secretarial and Share processes.

The long term provides us significant opportunities for growth. We intend to

maintain our market share; and as a step in this direction, we have announced setting up of a new project at Jamul in Chhattisgarh. The Jamul project will add incremental capacity of about 4 Million tonnes of cement by 2015. In addition, other proposals for debottlenecking all across ACC are under evaluation.

We have embarked on a journey Institutionalizing Excellence in organization, with leadership development as its prime focus. The Excellence Journey is essentially about energizing teams, building capabilities and enabling a more robust improvement process to perform to our potential. We are working to renew and enhance all our people processes and boost the skills of our teams to equip them to respond promptly to customer needs and the future challenges of the market place. The Excellence programme progressing well and showing improvements and traction in most areas.

Sustainability will drive a large part of our growth and the journey of excellence. We continue to develop our Sustainability Journey drawing from the rich experience of our parent company Holcim. The entire ACC family is actively involved and aligned to our sustainability commitment and we are dedicated to it whole-heartedly.

We welcome your feedback and suggestions.

### **Kuldip Kaura**

CEO & Managing Director

"In the last two decades, the company has managed to cut down its carbon footprint by as much as 31 per cent to 550 kg of CO2 per tonne of cement today."



# **ORGANIZATIONAL PROFILE**

#### A NATIONWIDE REACH

From its extraordinary beginning out of a merger of ten cement companies in 1936, the journey of ACC Limited has been eventful. First christened The Associated Cement Companies Limited, it adopted the simpler name of ACC in 2006. ACC is associated with the Holcim Group of Switzerland since 2006; the group today owns 50.3 % of the company's total equity. Headquartered in Mumbai, the company's operations span the country with 17 cement factories, 50 ready mixed concrete plants, 21 sales offices and several zonal offices. ACC's workforce is made up of about 9000 persons. The organization's structure is divided into three autonomous geographical regions - north, east and southwest - each defined with profit accountability and decentralised decision-making with overall management headed at the corporate level by the Chief Executive Officer and Managing Director.

### A SUCCESSFUL BRAND

ACC is recognized as the cement that was used to build some of the country's finest masterpieces, among the most enduring of which are Mumbai's Marine Drive and the mighty Bhakra Dam. Yet it is also the most preferred brand of cement used to construct homes for the masses of India in its cities, towns and villages. Numerous iconic landmarks of the nation and millions of homes dotted across the country stand as solid testimony to the trust the brand has earned from generations of satisfied customers. More than 50,000 sales outlets catered by 9000 authorized dealers make ACC cement available to a nationwide spread of customers.

#### **A TRENDSETTER**

ACC led the industry in producing environment-friendly blended cements - Portland Slag Cement and Portland Pozzolana Cement - that utilize industrial wastes from steel plants and from thermal power stations. Its innovative efforts in research and product development have helped the company make several breakthroughs in cement and concrete. Recognized for building India's first indigenous cement plant at Chaibasa Jharkhand, it was also first in India to launch commercial distribution of Bulk cement and Ready Mix Concrete, two value added products that have together changed the pace of large construction projects in the country. ACC has increased capacity considerably in the last few years. In its platinum jubilee year, the company proudly commissioned the world's largest plant at Wadi in Karnataka.

### A GREEN AGENDA

Being among the first companies in to include environment conservation as a corporate objective, ACC maintains a strong focus on sustainable development with conservation of natural resources being integrated into all activities of its value chain from mining to sales. The company pursues exacting standards in safety, quality, energy efficiency, clean mining techniques, emission controls and environment management. ACC offers solutions for waste management to several industrial organizations and corporations through co-processing of wastes in its cement kilns.

### A SOCIAL VOLUNTEER

In partnership with the rural community living around its operations, ACC has a wide range of social volunteering practices designed to improve the quality  $of their \, lives. \, These \, include \, efforts \, in \, rural \,$ health, livelihood creation, education, vocational guidance and technical knowledge advancement programmes. Notable among the contributions are two treatment centres for patients of HIV/AIDS, the adoption of seven government-run technical schools and the operation of two technical institutes for students from remote places.



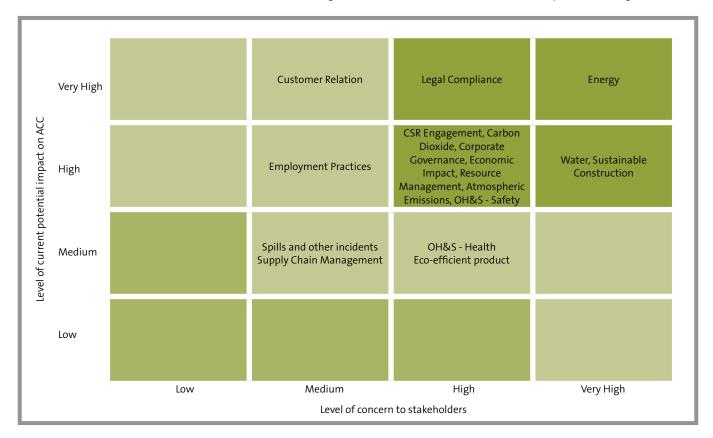


- 1.2 Sustainability Issues & Organization
- 1.3 Key Performance Data



# **SUSTAINABILITY ISSUES AND ORGANIZATION**

Since 2008-2009, the organization's sustainability agenda is based on a matrix of issues and subjects related to those of its operations identified as being of concern to internal and external stakeholders on account of their perceived significant economic, environmental and social impacts. Our last report explained how these issues were mapped and prioritized. The following chart depicts the organization's materiality matrix framework and displays subjects rated in terms of the level of concern to stakeholders against the level of their current or future impact on the organization.



These processes are assigned to appropriate functional departments and integrated into individual job descriptions and the company's performance management system.

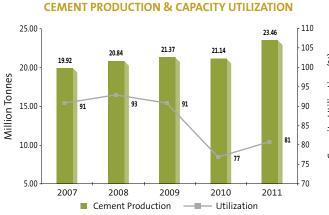
# SUSTAINABLE DEVELOPMENT COUNCIL

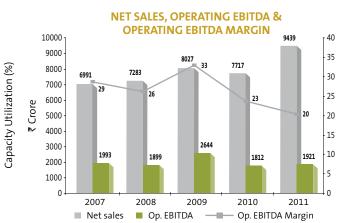
Implementation of the organization's sustainability performance agenda is endorsed by a high level team of executives called Sustainable Development Council or SD Council headed by the chief executive and comprising representatives from the key functions relating to sustainable development. A smaller core group of the SD Council meets more often to coordinate and advise the council from time to time on target setting and reporting. Plant level SD Councils at each of our plants further strengthen the process.

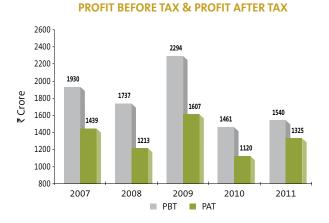
SOCIAL PERFORMANCE THE ROAD AHEAD ASSURANCE STATEMENT **ANNEXURES** 

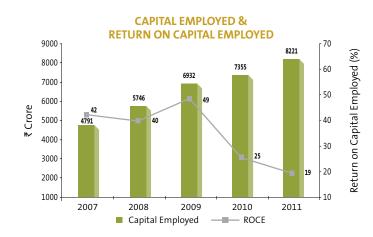


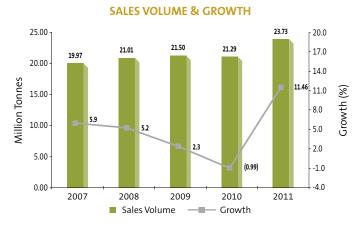
# **KEY PERFORMANCE DATA**

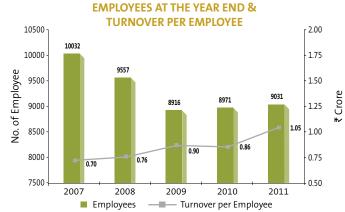












Op. EBITDA Margin (%)

1.4 Awards Received in 2011

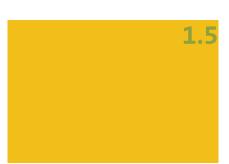




# **AWARDS RECEIVED IN 2011**

- IMC Ramkrishna Bajaj National Quality (RBNQ) Awards - Certificate of Merit and Performance Excellence Trophy to ACC Gagal and Gagal DAV Sr Sec. Public School
- **Confederation of Indian Industry (CII)** Best Environmental Practices award to ACC Damodhar
- **Confederation of Indian Industry (CII) Energy award** to ACC Wadi
- Safety Innovation Award 2011 from The Institution of Engineers' (India) to ACC Kymore and Tikaria
- India Manufacturing Excellence Awards 2011 - Gold Certificates of Merit to ACC Lakheri, Gagal, Wadi and Silver to Jamul by The Economic Times and Frost & Sullivan
- **Association Business** Communicators of India (ABCI) awards for Accelerate (ACC intranet portal), Annual Report, Parivar and Screensavers
  - ISO 9001 2008 Certification received by our Secretarial & Share processes

- 4th Global Initiative for Restructuring **Environment & Management (GIREM) Award** for Company of the Year 2011
- Dun & Bradstreet Rolta Corporate Award 2010 - ACC named as leader in Cement category
- Greentech CSR Platinum award **2011** in cement sector by Greentech Foundation to ACC Damodhar
- Greentech **Environment Award** 2011 by Greentech Foundation to Alternative Fuels & Raw Materials; Gold Category in cement sector to ACC Lakheri
- Greentech Safety Award 2010 by Greentech Foundation to ACC Chaibasa, Chanda, Gagal, Lakheri, Madukkarai and Tikaria. Tikaria won the award in platinum category while Lakheri bagged Gold and Chaibasa, Madukkarai, Jamul, Sindri and Wadi won in Silver category
- Golden Peacock Award for Eco-Innovation by World Environment Foundation



# REPORTING PARAMETERS **AND METHODOLOGY**

This Sustainable Development Report is the third in print form since the company released its first report for 2007. An electronic version of this entire Report is simultaneously uploaded on the company's website www.acclimited.com in the section called "Sustainability".

### **ACCOUNTING YEAR:**

ACC follows the calendar year January to December for the purpose of reporting its financial accounting and performance. The sustainability performance in this report follows the same period.

### **REPORTING CYCLE:**

ACC publishes printed versions of its sustainability report in a two year cycle. An electronic version of the report is uploaded on the company's website in the intervening year to serve as a web update.



#### **REPORT BOUNDARIES:**

The scope of this report is limited to the company's cement business covering all its cement plants. ACC's Ready Mix Concrete business and the company's other subsidiary companies are not addressed in the Report. Cement accounts for more than 95 per cent of the company's business; hence it is reasonable for the reader to assume this Report is largely representative of the Company as a whole.

### **REPORTING FRAMEWORK:**

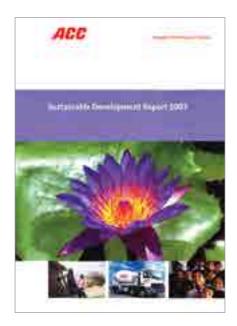
Preparation of this report is guided by GRI Reporting Framework version G-3 of the Global Reporting Initiative (GRI) Guidelines while chapter headings in many cases reflect material issues identified by our stakeholders. Similarly performance indicators have been placed in the context of these chapters and do not appear in the same sequence as listed in GRI guidelines. The GRI content index at the end of this report shows all indicators in sequence with reference to the chapter in which each indicator appears. We regret any inconvenience to readers by this regrouping.

### **DATA COLLATION:**

Every effort has been taken to ensure that information and data included in this report is based on published or verified material that allows for frank disclosure. In some cases information was collected specifically for the purpose of this report. A representative sample of the process of data collation was made available for verification by the external assurance team.

1.5 Reporting Parameters & Methodology

**1.6** Stakeholder Engagement



### **UN GLOBAL COMPACT:**

This report also serves the purpose of being read as a Communication On Progress (COP) required by signatories to the UN Global Compact.

### **CURRENCY AND UNITS:**

In India, large monetary numbers are expressed as lakhs or crores. One Lakh (or lac) refers to one hundred thousand while one crore is equal to ten million. All financial values are expressed in Indian Rupees and abbreviated as INR or Rs or indicated by the symbol ₹ officially adopted since 2010. The term 'tonne' (sometimes written as 'ton') refers to a metric tonne or one thousand kilograms. Figures representing capacity of cement plants refer to annual capacity unless otherwise indicated.

### ADDITIONAL INFORMATION:

Readers are invited to visit the company's website at www.acclimited.com for more information on the company, its financial performance, products and subsidiary companies. Details of the Cement Manufacturing Process are available on the Company's website. Additional information may also be made available on request.

### **AUTHORSHIP:**

This Report is edited and published the company's Corporate Communications Department. The basic manuscript was compiled by the Corporate Social Responsibility Department based on inputs collated from functional departments. The final report was read and approved by a team of senior executives of the company. All photographs in the report depict genuine activities of the company and are from the company's own collection.

### **ASSURANCE:**

Ernst & Young Private Limited, an independent and professional assurance provider, was retained to review and provide assurance for this report.



# **STAKEHOLDER ENGAGEMENT**

Engagement with our key stakeholders is a regular and ongoing phenomenon. Indeed, stakeholder engagement is key to our sustainability strategy. Our stakeholders help us identify the sustainability priorities for our business. Stakeholder engagement provided opportunities to keep our business practices aligned with the needs and expectations of stakeholders. It also

helped to drive long term sustainability initiatives.

The engagement takes different shapes and follows different approaches. Changes in the business environment as well as in stakeholder needs and expectations make engagement with them an increasingly complex process.

Stakeholders Sample	Mode of Engagement
Investors	Investors are addressed and provided clarifications at the Annual General Meeting (AGM)
Government / Regulatory Authorities	Interaction with Government / Regulatory authorities through industry and trade associations and various other fora regarding regulatory and public policy framework.
Customers	Various mechanisms to capture needs and expectations of customers like dealers' meet, customer satisfaction survey, customer complaint handling system
Employees	We strive to create an environment where employees are inspired, engaged and aligned with the company's Vision. Employee engagement done through one to one interactions, Engagement for Result Survey (EFR), Union meets, discussion on internal portal, internal feedback mechanisms
Suppliers	They are seen as a critical associates to our value chain. Regular interaction is done with suppliers through vendors meet
Communities	Village Development Committee meets, Community Advisory Panel Meets, Self Help Group Meets.
NGOs	One to one meet with NGOs around plant sites
Media	Press Release, one to one interactions
Academic Institutions	Supporting students meets

1.7 Corporate Governance



# **CORPORATE GOVERNANCE**

Since its inception, ACC has demonstrated an unwavering commitment to high ethical standards in business dealings. The corporate philosophy is embedded in a legacy of fair practices with all stakeholders. The strong sense of values and robust business practices together with its performance in sustainable development and the on-going efforts in community welfare has won the company acclaim as a responsible corporate citizen and a respected name in the Indian corporate world.

### **GOVERNANCE & ORGANIZATION STRUCTURE**

As a listed company, ACC has complied with the requirements of Corporate Governance laid down under Clause 49 of the Listing Agreement with Stock Exchanges. The Company is professionally managed and functions under the overall superintendence, directions and control of its Board of Directors. Day to day management is vested in the Chief Executive Officer and Managing Director.

#### **BOARD OF DIRECTORS**

The Board of Directors is made up of executive and non- executive directors. These individuals are selected based on a judgement of their expertise in an area of relevance to the company and their ability to provide advice and guidance on matters of organizational strategy or those concerning economic, environment and social aspects. The Board functions democratically while playing a pivotal role in ensuring good governance. Its role, functions, responsibility and accountability are all clearly defined. In addition to the principal role of setting corporate strategies and goals and monitoring corporate performance, the Board directs and guides the management's activities towards these goals and seeks accountability with a view to create long term sustainable growth that translates into progress, prosperity and fulfilment of stakeholders' aspirations. The Board sets high standards for corporate behaviour and ensures compliance with laws and regulations.



ASSURANCE STATEMENT SOCIAL PERFORMANCE THE ROAD AHEAD ANNEXURES

#### **COMMITTEE OF DIRECTORS**

The Board has constituted five committees viz. Audit Committee, Compliance Committee, Compensation Committee, Capex Committee and Shareholders'/ Investors' Grievance Committee each of which operates within a mandated framework.

#### **AUDIT COMMITTEE**

The Audit Committee comprises four independent directors of the company. All members of this committee are financially literate and in compliance with Clause 49 of the Listing Agreement, the Chairman of the Committee is an Independent Director. Acting as a link between statutory auditors, internal auditors and the Board of Directors, the terms of reference of this committee conform to guidelines of the Listing Agreement with Stock Exchanges read with Section 292(A) of the Companies Act, 1956. The terms broadly include review of the following:

- approval of the annual internal audit plan,
- review of the financial reporting system and internal control systems,
- discussions on quarterly, half yearly and annual financial results,
- direct and indirect taxation,
- review of the performance of statutory, internal and cost auditors,
- recommendations for appointment of statutory and cost auditors and their remuneration.
- business risk management and its mitigation plan,
- Management Discussion & Analysis of the company's operations,
- internal audit report,

- appointment, removal and terms of remuneration of the chief internal auditor and
- any significant related party transactions.

The Audit Committee comprises four independent directors of the company, all financially literate individuals. In compliance with Clause 49 of the Listing Agreement, the Chairman of the Committee is an Independent Director. The committee has a self assessment process for appraising its own performance, which has been in place since 2009. Feedback from members is obtained through a structured questionnaire grouped into the themes concerning the composition, structure and meetings of the Audit Committee, understanding business and risk management, overview of the financial reporting process, internal control over financial reporting and an overview of internal and external audit.

### SHAREHOLDERS' / INVESTORS' **GRIEVANCE COMMITTEE**

This committee which was constituted in 1962 deals with matters concerning the company's shareholders and investors relating inter alia to the following issues:

- Transfer / transmission of shares / debentures
- Issue of duplicate share certificate
- Issue and allotment of rights/bonus shares / shares against Employee **Stock Options**
- Review of shares dematerialized and all other related matters
- Monitoring expeditious redressal of investors' grievances
- Non receipt of Annual Report and declared dividend.

#### **COMPENSATION COMMITTEE**

The Compensation Committee reviews the overall compensation policy, service agreement and other employment conditions of the CEO & Managing Director with a view to retaining and motivating the best managerial talents. Its recommendations to the ACC Board in this regard are made after an evaluation of the remuneration paid by comparable organizations. The committee also reviews the performance of the CEO & Managing Director and accordingly recommends the quantum of annual increment/ performance incentive to be paid to him.

### **COMPLIANCE COMMITTEE**

The Compliance Committee was constituted to conduct a regular review of the company's compliance with various laws and regulations and also to understand and report to the Board the implications of major legislative and regulatory developments that may significantly affect the Company.

### **CAPEX COMMITTEE**

The aim of the Capex Committee is to undertake a detailed examination of the company's large project proposals. The Committee comprises six members, five of who are non executive members. The committee's terms of reference are as below:

- to evaluate the financial viability of all expansion capex proposals exceeding a pre-determined ceiling
- to monitor projects with regard to the committees expenditure and time-schedules
- to discuss post audit evaluation of above completed projects

- 1.7 Corporate Governance
- 1.8 Memberships

- to evaluate acquisition proposals and make appropriate recommendations to the Board
- such other duties relating to capex projects as may be assigned to the committee from time to time by the Board

### **MANAGING COMMITTEE**

Comprising of the CEO & Managing Director and other Senior Executives, committee looks into the implementation of strategic policies laid down by the Board, business processes and day-to-day operational activities of the Company.

### **INTERNAL AUDIT**

The Company has an Internal Audit department which functions independent the executive of management. The Chief Internal Auditor directly reports to the Chairman of the Audit Committee.

### **CLARITY OF ROLES AND RESPONSIBILITIES** AT FUNCTION LEVEL

The heads of all major functions namely, purchase, finance, human resources and projects report directly to the chief executive officer thereby ensuring independence and proper segregation of duties.

### **CODE OF BUSINESS CONDUCT & ETHICS**

The company has a comprehensive Code of Business Conduct & Ethics which clearly explains the behaviours expected of individuals as well as the actions to be taken in the event of nonadherence. Each permanent employee of the Company has been given a copy of this Code of Business Conduct & Ethics and has agreed to adhere to all the clauses in it. All Board members and senior management personnel affirm compliance with the code on an annual basis. The Annual Report of the company contains a declaration to this effect signed by the CEO and the CFO.

Adequate segregation of duties at process level

At the process level, the Company has implemented SAP and adequate segregation of duties has been ensured among all users. A system / tool is also in place for periodic review at a transaction level and also has situations mitigation plans for any conflicts.

### **AVOIDANCE OF CONFLICT OF INTEREST**

The organization's commitment extends beyond compliance with the law to include the belief that the best way to deliver value to our customers, employees, shareholders and the community is through good governance and being fair, honest and ethical in business practices and personal behaviour at work. More details of the company's governance is available on the Company's website at www.acclimited.com.

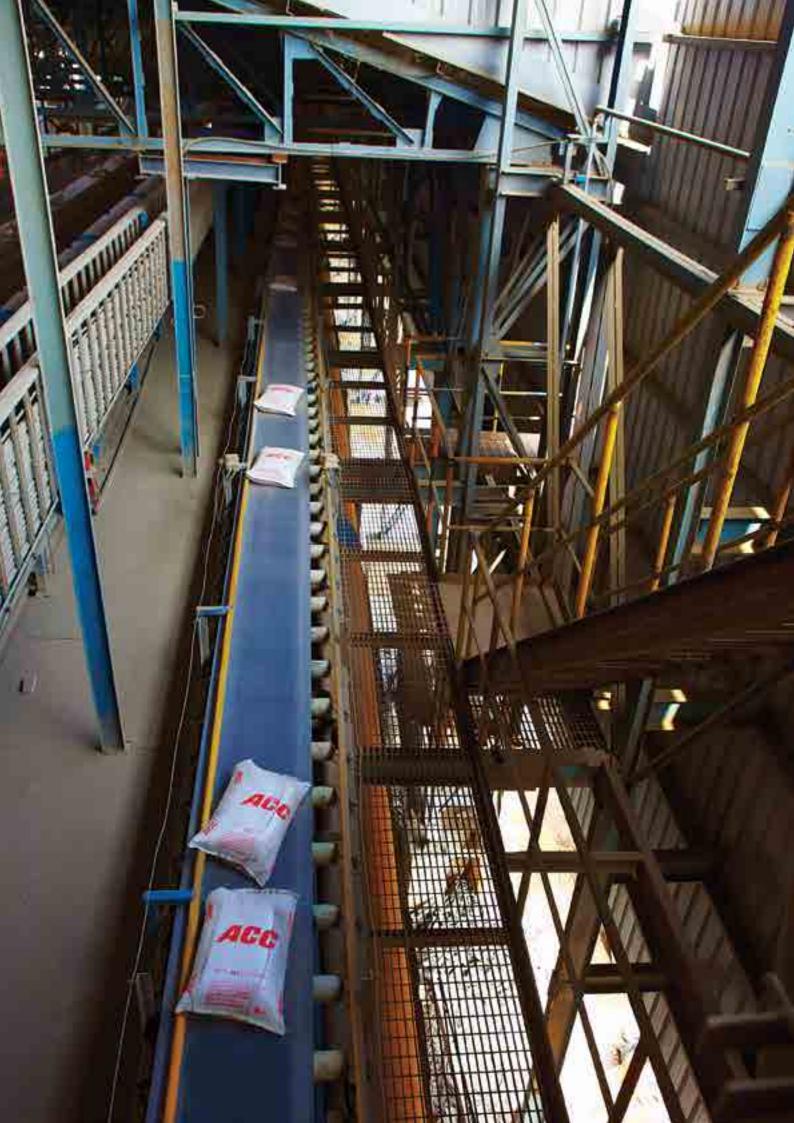




# **MEMBERSHIPS**

1.	All India Organization of Employers (AIOE)
2.	Bombay Chamber of Commerce & Industry (BCCI)
3.	Bombay First
4.	Bombay Management Association
5.	British Safety Council (BSC)
6.	Confederation of Indian Industry (CII)
7.	Council for Fair Business Practices (CFBP)
8.	Employers Federation of India
9.	Federation of Indian Chambers of Commerce & Industry (FICCI)
10.	Federation of Indian Mineral Industries (FIMI)
11.	Indian Geological Congress
12.	Indian Merchants' Chamber (IMC)
13.	Indian Roads Congress
14.	Indo American Chamber of Commerce
15.	Indo American Society
16.	National Safety Council (NSC)
17.	PHD Chamber of Commerce and Industry (PHDCCI)
18.	The Energy & Resources Institute Business Council for Sustainable Development (TERI-BCSD)

 $\textbf{19.} \ \ \textit{The Institute of Company Secretaries of India - Centre for Research \& Training}$ 





Cement is recognized as the most important building material in construction. The cement industry plays an influential part in building the country's housing and infrastructure and thus contributing value to society.

The company is aware that its economic performance leads to direct and indirect impacts on all its stakeholders, ranging from employees, customers, suppliers,

associates, governments and the communities in which it operates.

As the company's operations grow, all of these stakeholder groups also benefit as a direct result of this progress and create value to the local and national economy. The company's growth flows through the value chain, creating job opportunities and expansion in the business of suppliers, distributors, contractors and customers.

products that are environmentally sensitive and eco-efficient and achieve manufacturing and sales excellence to maximise value. ACC acknowledges its responsibility to contribute to the long-term sustainability of the communities in which it operates, particularly with regard to the challenges involved in mitigating the effect of climate change.

ECONOMIC PERFORMANCE





# **ECONOMIC IMPACT**

In the last three years the organization has shown a steady appreciation in the economic value generated and distributed among its major stakeholder groups. It has sought to advance its financial performance both to facilitate internal resource generation for investment and for the wellbeing of stakeholders. The company has

strengthened the range and quality of customer services appreciably in the last year, with a view to offer increased value to the customer. The name ACC already enjoys a high level of brand equity in the Indian market and an important target for the sales, logistics and production teams has been to enhance it further.

EC1: Direct economic value generated and distributed

(In Rs crore)	2011	2010	2009
Revenue generated	9852	8074	8268
Suppliers	6854	5360	4884
Royalties	138	117	98
Employees	509	439	423
Investors	526	573	432
Taxes to Govt.	706	383	753
Community investments	22	13	11



The health of the organization may be deduced from the following chart showing economic value added and its enterprise value.

(in Rs Crore)

			(III Its crore)
	2011	2010	2009
Capital Employed	8,221	7,355	6,932
Avg. Capital Employed	7,788	7,144	6,339
Net Operating Profit after Taxes	1,325	1,120	1,607
Cost of Capital	950	821	694
ECONOMIC VALUE ADDED	375	299	913
Return on Capital Employed (%)	17.01	15.68	25.35
Weighted Average Cost of Capital (%)	12.20	11.49	10.95
EVA / Average Capital Employed (%)	4.81	4.19	14.40
Market Capitalization	21,345	20,194	16,362
(As at December, 31)			
Add: Debts	511	524	567
Less: Cash and Cash Equivalents	2,832	2,288	1,876
ENTERPRISE VALUE	19,024	18,430	15,053
EV / Yr. End Capital Employed (Times)	2.31	2.51	2.17

### **CLIMATE CHANGE**

ACC is deeply committed to playing a responsible role in contributing to mitigating the economic, social and environmental impacts of climate change. This is a company that is acknowledged as a pioneer in the manufacture of blended cements which has established a viable means of disposing significant quantities of two industrial wastes to replace and thus conserve the conventional mineral components. Slag, a waste of steel and aluminum processes, is now fully utilized to become a by-product in making Portland Slag Cement. Portland Pozzolana Cement remains the main avenue for utilization of the mammoth quantities of waste fly ash

thrown out by thermal power plants. Global environment groups have recognized the initiative of utilizing fly ash and slag in cement production as being significant in reducing carbon emissions. The company has registered two projects under the scheme for Clean Development Mechanism (CDM).

# EC2: Financial implications and other risks and opportunities for the organization's activities due to climate change.

The first CDM project is in respect of flyash utilization in cement manufacture. Verification of this project for the year 2004-05 was completed in 2011 and its technical review is currently under way.

ACC's wind energy farm of capacity 9 MW in Tamil Nadu was registered as a CDM project in September 2009 as a renewable energy project. Verification period 2009-2010 was for the completed in 2011 for which the earned 21181 Certified company Emission Reduction (CER) points. Verification for the year 2010-2011 is in progress.

Work on registering the company's second windmill project in Rajasthan under the CDM scheme is under process. While project validation visit has been completed, the report is under technical review before its final submission to UNFCCC for registration.



Since 2005 the company has made significant progress of monitoring and reporting its carbon dioxide (CO<sub>2</sub>) emissions. The figures below show a distinct trend in reduction of CO<sub>2</sub> emissions.

	2011	2010	2009
CO <sub>2</sub> per ton of clinker	840.63	845	844
CO <sub>2</sub> per ton of OPC equivalent cement **	872.8	870	806
CO <sub>2</sub> per ton of Cement	550.28	551.76	545.80

<sup>\*\*(</sup>Wadi I is treated as the ACC representative number).

The numbers above are excluding site power generation.

- 1. Due to market conditions % blended cements has come down & which has adversely effected Specific Net CO<sub>2</sub> emissions / Tonne of Cement reduction during the years 2010 & 2011.
- 2. Calcination emission factor of 525 kg/T of clinker is considered while calculating the specific CO2 emissions per ton of cement.

The study of the company's carbon footprint was successfully completed. It addressed total CO<sub>2</sub> emissions i.e. Scope-I, II & III covering the manufacture of cement and ready mixed concrete, the bulk cement terminal and the corporate and regional offices. It also included validation of emissions in the year 2009-2010 and helped formulate a carbon strategy. The study is ample proof of a strong commitment to abatement of GHG gases through continuous improvement in thermal electrical energy efficiencies, promoting the utilization of alternative raw materials and alternative fuels, continuous up-gradation of technologies and other activities towards sustainable growth.

### EC3: Coverage of the organization's defined benefit plan obligations

ACC is reputed to be a good employer which fosters a strong sense of belonging among its employees. With relatively low attrition rates, long service in the organization is a common phenomenon. The organization in turn has a tradition of celebrating long Service through awards to appreciate the efforts and loyalty of long serving employees. Retirement benefits are transparent and made known to all employees right from the stage of recruitment. Employee benefits in this respect are carefully planned and reviewed from time to time as described below.

- a) Defined Contribution Plan: ACC has a defined policy regarding contribution to Officer's Superannuation Fund, ESIC and Labor Welfare Fund. Employees are also given a onetime option to opt for cash-out facility under Officer's Superannuation Fund.
- b) Defined Benefit Plan and Other Long Term Benefits: Retirement benefits comprise gratuity, additional gratuity, provident fund, post retirement medical benefit schemes, medical benefits under voluntary retirement scheme and other long term benefits in the form of leave encashment, silver jubilee and long service awards. They are determined using projected unit credit method as at Balance Sheet date. Actuarial gains or losses are recognized immediately in the Profit and Loss Account.
- c) Short term compensated absences are provided based on past experience of leave availed.

Payments made under the Voluntary Retirement Scheme are charged at once to the Profit and Loss Account.

### EC4: Significant financial assistance received from government

During the year 2011 the company received excise duty exemption on cement at its Gagal units I and II; the Gagal Unit I also received 80IC benefits. Sales tax (VAT) benefits were received at Chanda, Gagal unit I and Chaibasa.

# EC5: Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operations

All Permanent workmen are governed by the National Wage Settlement. Wages payable as per the said settlement are significantly higher than the local minimum wage applicable. All contract workers undertaking jobs which are of a temporary nature are paid as per the government notification on wages.

## EC6: Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation

With a countrywide network of plants, several of which are located in remote backward districts, the company's procurement practices show evidence of supporting locally-based sources and ancillary businesses. The procurement practices are described at length in a later chapter of this report.

# EC7: Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.

ACC is an equal opportunity employer and makes no discrimination on the basis of tribe, caste, community, race, color or gender. It follows a policy of hiring and promoting individuals on merit for each position compatible with the job requirement and treats the country as local. Recruitment procedures are explained at greater length in a subsequent chapter on employment practices later in this report.

EC8: Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.

ACC supports the creation of roads, local infrastructure and provision of drinking water to enhance the quality of life of the communities living in the neighborhood of its Examples operations. of such development are amply narrated in chapter titled Community Development in a subsequent section of this report.

EC9: Understanding and describing significant indirect economic impacts, including the extent of impacts

Portland cement is an essential construction material and

manufacture contributes significantly to economic activity. Consequently the value chain of the company is extended and involves several stakeholder groups on whom it has direct and indirect impacts - from investors, employees, dealer network, customers and suppliers to the communities around its plants as well as local governments and other bodies. Cement plays an important role in the construction sector. The company's operations directly and indirectly influence job creation in the value chain through dealers, suppliers, distributors, contractors and customers. This report also describes several examples of the organization's volunteering activities and support to government schemes in the fields of education, health, disaster relief and building infrastructure which impact countless lives.







# **CUSTOMER RELATIONS**

### **CUSTOMER RELATIONSHIP MANAGEMENT**

As part of its objective to become a "Customer Centric Organization", ACC is rolling out a Customer Relationship Management (CRM) software package across the organization. It is an initiative designed to facilitate improvement of relationships with our customers. The two main beneficiaries of the CRM project are our end-consumers and our channel partners.

CRM is being rolled out in a phased manner; it has become operational in the states of Madhya Pradesh, Delhi, Rajasthan and in part of Uttar Pradesh. It is expected to be launched all across ACC in the coming year.

ACC has always taken pride in providing quality products and technical services to its end consumers. The services offered to customers include on-site services, right product guidance, knowledge sharing sessions, good construction practices, complaint redressal and site demonstrations. Through the usage of CRM software, ACC personnel would be able to plan and deliver these services in a

more organized manner and in real-time. We expect this to bring about noticeable improvement in our relationship with end-consumers.

ACC has a vast network of channel partners spread across the country from metros to small villages. The CRM software would enable the company's sales force to be up-dated with realtime information on all commercial transactions with the network. This would help considerably in improving the quality of interaction between the sales force and channel partners. It will also result in quicker resolution of issues pertaining to deliveries, payments, branding and any other support.

### **WEB SALES**

The company has introduced Web sales, to enable its dealer network to be able to book their orders through the internet. An ACC Dealer can now book orders on line for cement delivery and also check his financial transactions. The online process enables the dealer to transact business and view financial statements online at his convenience without the need to visit an ACC office. This new



process incorporates an inbuilt sms or text messaging system that informs the dealer of the order status. In turn the dealer will now be able to keep the end consumer informed of when delivery will be received at site. The web sales initiative is being expanded across ACC in phases.

### **ACC CONCRETE CLUB**

This is a long term engagement program with influencers which provides a platform for the Influencer community to share and exchange knowledge within their group through online and offline forums. Also this platform gives ACC the opportunity to further strengthen the relations. Architects, Consultants and Engineers on our database are kept informed about current practices followed in the world of construction and sustainable development. An online discussion forum helps them in sharing best practices currently operational in the field.

Workshops and training programs are organized for Contractors and Masons for skill up-gradation and to help them replicate best construction practices. This initiative was first started in South-West region. Considering its popularity among the influencers community, it has been decided to rollout similar programs across India.

### **MASON LOYALTY PROGRAM**

The Mason is an integral part of the cement buying and usage process, particularly in smaller towns. They play an important role in building of a cement brand. ACC has always worked closely with the mason community.

A loyalty program for the mason community in Orissa was launched in which all masons associated with ACC were enrolled. The key objective of the program was to make the mason feel part of a larger group and engage with them on a one-on-one basis. All the masons enrolled in the program were covered under a Group Insurance Policy. The scheme was well received and has now been rolled out across Eastern Region.

### **CUSTOMER SATISFACTION**

ACC conducts Channel satisfaction surveys and Brand Equity measurement on a national basis every year. These researches were carried out in 2011 independently by The Nielsen Company. Channel satisfaction is measured through a eQ score where ACC's score was reflective of a very good performance, across its channel partners, namely wholesale and non wholesale dealers and retailers. Our brand performance is measured through the Brand Equity Index. The study revealed ACC as a strong Brand. ACC's brand equity index at 4.9 was found to be the strongest among its major competitors. In fact it is higher than the brand equity index for most consumer durables, which is considered exceptional for a product like cement.

We plan to conduct this research again

during 2012. We aim to pursue sustained improvement and growth in customer and channel satisfaction. (PR5)

### PACKAGING MATERIALS AND RECYCLING

Most of the cement trade in India is dominated by a huge retail market comprising a large population of small customers who are supplied in 50 kilograms bags made of thermoplastic material. Our laws do not permit direct reuse or recycling of cement bags. Because of the nature of this material, there is an efficient demand for picking up discarded cement bags for recycling into other plastic based products or even as roofing shelter for the poor.

We promote the sale of cement in bulk to large consumers as a more environmentfriendly alternative. The quantity of bulk cement sold during 2011 was 936007 tonnes. Paper bags which are biodegradable are another alternative. In 2011 we used 30,39,000 paper sacks.

Elsewhere in this report we have described the company's waste management services through the co-processing of industrial and other wastes plastics in our cement kilns. This includes the disposal of plastic wastes and scrap. (EN27)





# **SUPPLY CHAIN MANAGEMENT**





During the years 2010 and 2011, various initiatives were taken to make the company's Central Procurement function the best in class in the domestic cement industry and to pursue a goal to transform it into a world class procurement organization. The company was guided by several of the best procurement practices of its promoters, the Holcim Group. To facilitate deeper involvement of all internal stake holders "Project: Procure!" was launched. The project team was led by a top level steering committee.

### WHAT IS PROCURE!

Procure! is a standard methodology borrowed from Holcim which is designed to implement effective and efficient procurement within organizations the Holcim Group. Procure! consists of five main work streams: Organization, Sourcing, Process, Supplier Relation Management (SRM) and Reporting. It is conducted in five Phases: Preparation, Analysis and Scoping, Implementation, Rollout and Certification.

### **PURPOSE OF PROCURE**

The main purpose of Procure! is to implement efficient standards, methodologies, processes, organizations, information systems and applications to guide and monitor procurement activities. This involves:

- Aligning the evolution of the procurement function.
- Standardizing the business processes.
- Optimizing ERP usage.
- Supporting a strong local platform to manage suppliers and ensure lowest 'Total Cost of Ownership'

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Holcim has instituted a "Project: Procure" certification scheme for all operating plants for which periodical assessment is done for certification of each plant. Implementation of this process started in 2010 and will be completed in a phased manner by 2012.

### **CSR PRINCIPLES IN PROCUREMENT:**

Holcim seeks to engage in long-term relationships with suppliers who commit to demonstrate social responsibility, adhere to international standards such as SA8000 (Social Accountability) and ISO 14000 and who have systems in place to comply with relevant local provisions.

The corporate and operating company procurement departments strive to assess and contract suppliers whose practices comply with the criteria of the SA8000 and ISO 14000 standards as well as with local legal provisions. In cases where suppliers are not able to meet these minimum requirements, we engage in a dialogue with them and adopt mechanisms to help improve our suppliers' standards. In cases of persistent non-compliance or obvious violation, we decide to terminate these relationships.

Generally, any supplier could pose a risk to Holcim through non-compliance with SA8000, ISO 14000 or local legal provisions. Thus, the procurement departments in its operating companies are required to continuously assess and monitor their active and relevant supplier base.

Process Assessments of compliance with SA8000, ISO 14000 and local legal provisions is an integral part of the supplier qualification process, and must take place prior to engaging in any active business relationship.

The assessment is required to be performed by the suppliers themselves as a "Self-Assessment", based on integrating checklist SA8000, management environmental and legal compliance requirements. The Self-Assessment, as well as related documents and evidence of compliance are stored in the respective supplier file at the company.

Re-assessment of qualified suppliers' compliance with these requirements takes place within the regular schedule of supplier requalification. However, in any cases of violation or obvious non-compliance by the supplier, reassessment must be immediate.

### **CONTRACTUAL AGREEMENT OF** COMPLIANCE

ΑII agreements with suppliers, such as purchase orders, purchase agreements, service agreements and frame agreements have to refer to the supplier's compliance with SA8000, environmental management and legal compliance requirements. With its signature or order confirmation, the supplier accepts and agrees to adhere to these requirements.

### **OH&S HOLCIM CONTRACTOR CONTROL:**

As per Holcim, the procurement group is obliged to ensure that any third party service providers meet the minimum requirements of OH&S. The aim is:

to help reduce the number of contractor-related incidents.

to define elements of the contractor management program that operating companies must have when working with contractors.

#### **SELF CERTIFICATION BY SUPPLIERS**

A standard questionnaire on CSR & OH&S is sent to suppliers while seeking requests for quotations (RFQ) in which appropriate clauses are incorporated based on the nature of the order. It is made mandatory for new suppliers to provide these details. This incorporates self certification by suppliers. The forms are checked for compliance by the concerned Procurement Managers. We also have clauses pertaining to CSR and OHS which are included in all the Purchase Orders / Agreements. Most of our Vendors have been covered on all Plants basis.

During the year, we have not encountered any human rights problems (viz. incidences of child labor, forced or compulsory labor, overtime without pay etc) in the supply chain. We have also not cancelled any supplier contracts due to non-compliance with our policies. (HR2)

### **LOCAL SUPPLIERS**

According to our nomenclature all suppliers operating from within the territory of India are treated as National or Local Suppliers. The total on all suppliers during the year 2011 was Rs. 7511 Crores of which the expenditure on National Suppliers (Local) was Rs. 6998 Crores representing a share of 93.16 per cent. Wherever viable, our plants encourage vendors located in the proximity of our plants. (EC6)





# **ECO EFFICIENT PRODUCT**

ACC believes responsible cement manufacturers are gradually transforming Portland cement towards a state of eco-efficiency as defined by the World Business Council for Sustainable Development (WBCSD) as being the delivery of "competitively priced goods and services that satisfy human needs and bring quality of life while progressively reducing environmental impacts of goods and resource intensity throughout the entire life-cycle to a level at least in line with the Earth's estimated carrying capacity."

According to the WBCSD, eco-efficiency is characterized by the following seven critical aspects:

- Reduction in the material intensity of goods or services;
- Reduction in the energy intensity of goods or services;
- Reduced dispersion of toxic materials;
- Improved recyclability;
- Maximum use renewable resources;
- Greater durability of products;
- Increased service intensity of goods and services.

ACC has been a trend setter in the manufacture of environment-friendly cements such as Portland Slag Cement and Portland Pozzolana Cement. Blended cements such as these consume less clinker which is made from limestone a non renewable mineral - and instead replace the mineral component with industrial waste materials namely slag and fly-ash generated by other industries. Consequently blended cements consume less energy leading to a lower overall carbon footprint. ACC has earned the distinction of being the highest producer of blended cements in the industry and the biggest user of industrial wastes namely, fly ash and slag.

Blended cements are not just environment friendly; they also have certain properties which render them superior and more durable as compared to ordinary cements.

ACC promotes the consumption of alternative fuels and raw materials in making cement. Industrial, municipal agro wastes and biomass



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substitute coal in part as a fuel. Though thermal substitution is still at a modest level, ACC extends waste management services to waste generators through co-processing these wastes in cement kilns. Opportunities are encouraged among the rural poor to cultivate biomass

in energy plantations on barren unproductive lands and thus secure sustainable livelihoods.

ACC makes continuous efforts to make more efficient use of resources at its plants by enhancing productivity and minimizing energy consumption.

EN1: Materials used by weight or volume

Raw Material	Unit	2011	2010	2009
Limestone	Million Tonnes	22.69	18.729	19.166
Gypsum	Million Tonnes	1.14	1.075	1.113
Others <sup>1</sup>	Million Tonnes	1.51	-	-

Raw Material (Recycled waste material)	Unit	2011	2010	2009
Alternative Raw Materials	Million Tonnes	0.18	0.273	0.257
Slag	Million Tonnes	2.68	2.286	2.06
Flyash	Million Tonnes	3.98	3.879	4.456

Additives	Unit	2011	2010	2009
Additives <sup>2</sup>	Million Tonnes	0.018	1.652	2.096

Associated materials	Unit	2011	2010	2009
Lubricating Oil	Tonnes	890	921	1102
Grease	Tonnes	211	208	209

Packaging Materials	Unit	2011	2010	2009
Weight of Bags	Tonnes	29523	29131	29094
Consumed				

<sup>1.</sup> The group 'Others' was earlier shown as a part of the group additives.

ACC aspires to be environmentally responsible and more profitable, while creating more value with lowering its environmental impact.

<sup>2.</sup> Accounting of the group 'Additives' was changed as advised by the assurance provider





ACC is deeply committed to conserve mineral and energy resources, prevent pollution of any sort and preserve biodiversity. It seeks excellence in its environmental performance through unrelenting efforts in the reduction of green house gases and stringent control of atmospheric emissions. The main thrust is in the following:

- a) Improving the clinker factor by promoting blended cements
- b) Pursuing improvements in energy efficiency
- c) Promoting clean green technologies and use of renewable energy
- d) Promoting the use of alternative fuels and raw materials
- e) Adopting clean and efficient mining operations
- f) Development of green belts and rehabilitation of used mines

ACC also supports the cause of sustainable construction. In doing all of these, the company recognizes the direct and indirect role it can play as a responsible cement manufacturer in mitigating the considerable impacts of climate change.



# **ENERGY**

Several energy conservation and efficiency measures were undertaken in various departments of the cement plants. These measures helped us to improve the thermal and electrical energy efficiency of the Plants. In 2011, the overall electrical energy showed a reduction of 2.07 % while thermal energy was lower by 1.15 % as compared to 2010.

Some of the measures taken in the area of energy efficiency and conservation were noteworthy. For instance at Madukkarai, thermal imaging of the kiln served as an effective tool to reduce thermal energy losses. It helped to evaluate the effectiveness of kiln repairs and to identify newer potential areas for improvement.

EN3: Direct energy consumption by primary energy source

Energy Consumption	Unit	2011	2010	2009
Coal + Pet Coke consumption in Kiln	ŢJ	48983	42086	43675
Diesel Oil consumption in Kiln	TJ	62	56	34
Alternative Fossil fuels* consumed in Kiln	ΙŢ	111	331	148
Alternative Bio-mass consumed in Kiln	ΙŢ	156	123	113
Diesel Oil consumption for Onsite vehicle movement	ŢJ	554	550	403
Fuels for drying of raw materials#	ŢJ	1262	-	-
Coal for onsite power generation	ŢJ	24515	23767	24642
Diesel Oil consumption for Onsite power generation	ΙŢ	35	63	21
Biomass for Onsite Power generation#	ΤJ	60	-	-

<sup>\*</sup>As per WBCSD protocol - Alternative fossil fuel comprises waste oil, waste tyres, plastics, solvents, impregnated

<sup>#</sup> Started reporting from this year as advised by SD assurance provider



SOCIAL PERFORMANCE THE ROAD AHEAD ASSURANCE STATEMENT **ANNEXURES** 

# Specific energy consumption

Energy Consumption	Unit	2011	2010	2009
Specific power consumption up to & including clinker production	KWH / Tonne of Clinker	73.61	76.17	76.85
Specific power consumption up to & including cement grinding	KWH / Tonne of Cementitious Material	86.35	88.26	88.52
Specific power consumption including cement grinding, colony, auxiliaries	KWH / Tonne of Cementitious Material	88.93	90.85	90.93
Specific total power consumption including cement grinding, colony, auxiliaries & packing	KWH / Tonne of Cementitious Material	90.93	92.86	92.40
Specific thermal energy consumption	GJ / Tonne of Clinker	3.101	3.137	3.12

# EN4: Indirect energy consumption by primary source

Electrical Energy Purchased	Unit	2011	2010	2009
Electricity Purchased	MWH / Annum	701929	588514	585343

# EN5: Energy saved due to conservation and efficiency improvements

(Partial List of Major Energy Conservation Initiatives in 2011 and the savings has been annualized)

Initiatives	Unit	Energy Savings
Stopping of Water pump (55 KW) at Mines by replacing the other pump motor (17 KW) with 25 KW motor at Wadi	Lakh KWH	2.37
Restricting Bag House Fan 1 speed at 550 rpm, except during the stoppage of Raw Mill 1 at Wadi	Lakh KWH	11.88
Installation of VVFD and avoiding damper operation for Raw Mills 4 & 5 at Wadi	Lakh KWH	15.84
Optimization of VRM and Ball mill circuit by increasing the screw conveyor RPM and taking the Ball mill dust collector product as the final product at Gagal	Lakh KWH	9.9
Conversion of Raw Mill 1 & 2 Separator Dust Collector fan from HT to LT and install LV VFD at Gagal	Lakh KWH	2.37

**3.1** Energy **3.2** CO<sub>2</sub> Emissions



Initiatives	Unit	Energy Savings
Arresting of False air leakages in Coal Mill 2 Bag house at Wadi	Lakh KWH	8.91
Reduced pressure drop in down comer duct for kiln Preheater at Lakheri	Lakh KWH	2.64
Taking the SPRS of Calciner String Fan into line at Wadi	Lakh KWH	19.8
Running of Coal mill 1 continuously to feed coal for SLC and Kiln at Wadi	Lakh KWH	13.20
Bag house 2 Fan to run in auto mode with fan outlet draft setpoint @ 5 mm WG at Wadi	Lakh KWH	15.84
Optimization of Bag house 2 fan operation by taking PID loop of RA fan speed with Bag house DP. at Wadi	Lakh KWH	7.92
Replacement of W G Fans with High efficiency Fans for k-3 at Wadi	Lakh KWH	31.68
Thermal imaging of Kiln and pre-heater was carried out to identify major thermal loss areas & rectified during subsequent shutdown at Madukkarai	Lakh Kcal	97.129
Reduced pressure drop in down comer duct for Calciner String at Lakheri	Lakh KWH	6.24
Attending to cooler old panel, plate gaps, side casting gap and under grates at Lakheri	Lakh Kcal	5000
Avoiding idle running of VRPM 2 Fan by replacing the defective IGBT in VVFD Panel at Wadi	Lakh KWH	3.30
Re-grading of grinding media in second chamber of close circuit cement mill at Lakheri	Lakh KWH	11.48
Optimization of all the three FK Pumps and compressors running with hopper level interlock at Wadi	Lakh KWH	8.71
Installation of higher capacity FK pump for transferring the Dry flyash into the bin of G-2 cement mills at Gagal	Lakh KWH	5.94

### **GREEN ENERGY**

The wind energy farms installed in Tamil Nadu, Rajasthan and Maharashtra generated 38.9 million units of energy during 2011 as compared to 38.7 million units generated during 2010, marking a modest increase in the green energy produced by the company. The wind energy farm in Tamil Nadu was registered as a CDM project in September 2009 as a renewable energy project. While work on registering the company's second windmill project in Rajasthan under the CDM scheme is under process.

EN6: Initiatives to provide energy-efficient or renewable energy-based products

Non Conventional Energy (in Million Units)				
	2011	2010		
Wind Power generated at Tamil Nadu	21.55	21.69		
Wind Power generated at Rajasthan	13.73	13.69		
Wind Power generated at Maharashtra	3.61	3.05		

Waste Heat Recovery: At the Gagal plant, a Waste Heat Recovery power generation unit of capacity 7.3 MW is under execution. It is expected to go on stream by the end of 2012 and generate about 45 million units of power.

# CO<sub>2</sub> EMISSIONS

ACC views climate change as a major challenge and recognizes that the cement industry is one among the major generators of global CO<sub>2</sub> emissions and can play a critical role in controlling these emissions. ACC's approach to the reduction of its carbon footprint has been primarily by promoting blended cements, which reduce the share of clinker in cement, enhancing energy efficiency in cement manufacturing process, adopting greener technologies, using renewable energy sources, by promoting the use of alternative fuels and raw materials and using less carbon intensive transportation for raw materials and finished products.

ACC actively participates in CO<sub>2</sub> reduction mechanisms that are based on sectoral intensity goals, policies enabling waste and biomass sourcing and harmonizing standards for Cement and Concrete. ACC supports the view that climate change policies should also encourage practices that demonstrate energy efficiency, promote renewable energy, research and development, utilization of blended cement in Government funding projects among others.

ACC is in the process of aligning its performance in this respect with Holcim's Global CO<sub>2</sub> reduction commitments. Holcim is a participant in the `Getting

The Numbers Right' (GNR) system, WBCSD's global database of CO2 and energy performance system based on voluntary disclosure by members. This means that ACC's emission numbers are part of GNR database. To meet this requirement, the company has decided to adopt a multi dimensional approach outlined here.

- Monitoring and Reporting
- Changing the Raw Material Consumption i.e., the way Cement is produced
- Focus on blended cements
- Continuous technological upgradation to enable reduction of Thermal and **Electrical Energy**
- Adopting energy efficiency measures
- Continuous improvement through the use of Alternative Fuels and Raw Materials
- Enhancing its Renewable Energy portfolio
- Enhancing its Waste Heat Recovery (WHRS) portfolio

### MONITORING AND REPORTING

ACC has been monitoring its CO<sub>2</sub> emissions since 2005. The company has also been a participant in the Carbon Disclosure Project CDP since 2009.





### EN16: Total direct and indirect greenhouse gas emissions by weight

CO <sub>2</sub> Emissions from Cement Production (Excluding onsite power generation)				
Parameter	Unit	2011	2010	2009
Absolute Gross CO <sub>2</sub> Emissions	Million Tonnes of CO <sub>2</sub>	13.46	11.46	11.88
Absolute Net CO <sub>2</sub> Emissions	Million Tonnes of CO <sub>2</sub>	13.45	11.43	11.87
Specific Net CO₂ emissions	Kg CO <sub>2</sub> /Tonne of Cement	550.28	551.76	545.80

Note: The above figures are calculated as per the WBCSD protocol

CO <sub>2</sub> Emissions from Clinker Production (Excluding onsite power generation)				
Absolute Gross CO <sub>2</sub> Emissions	Million Tonnes of CO <sub>2</sub>	13.46	11.46	11.88
Specific Net CO <sub>2</sub> Emissions	Kg CO <sub>2</sub> / Tonne of Clinker	840.63	845.08	843.45

CO <sub>2</sub> Emissions from Onsite Power Generation (CO <sub>2</sub> emexported)	issions are corrected duly takir	ng the credits o	1 account of the	power
Absolute CO <sub>2</sub> Emissions	Million Tonnes of CO <sub>2</sub>	2.296	2.282	2.191

CO <sub>2</sub> Emissions from Purchased Electricity (Combined Margin Emission Factor was used for calculating the CO <sub>2</sub> Emissions)				
Absolute CO <sub>2</sub> Emissions	Million Tonnes of CO <sub>2</sub>	0.625	0.491	0.493

Note: (1) Due to market conditions percentage of blended cements has come down and which has adversely affected Specific Net CO<sub>2</sub> emissions / Tonne of Cement reduction during the years 2010 & 2011.

## EN18: Initiatives to reduce greenhouse gas emissions and reductions achieved

Overall CO <sub>2</sub> Reductions Achieved				
Parameter	Unit	2011	2010	2009
On Account of Thermal Savings¹	Tonnes of CO <sub>2</sub>	22983	Nil	59961
On Account of Electrical Savings <sup>2</sup>	Tonnes of CO <sub>2</sub>	78849	Nil	18775
On Account of Clinker Factor Improvement	Tonnes of CO <sub>2</sub>	Nil	Nil	170592

Note: (1) CO<sub>2</sub> emission reductions on account of thermal energy is calculated by using simple mathematical equation. (2) Combined Margin Emission Factor (CO<sub>2</sub> Baseline Database for the Indian Power Sector - User Guide - Version 7.0 - Jan 2012 - by Central Electricity Authority) was used for calculating the CO<sub>2</sub> emissions on account of electrical savings.

### **CHANGING THE RAW MATERIAL** CONSUMPTION

ACC has taken continuous steps to improve the clinker factor by promoting the use of industrial wastes like Fly ash from Thermal Power stations and Slag from Steel Industry. As explained in an earlier chapter, the utilization of these materials enables the safe disposal of two pollutants which would otherwise pose greater environmental problems. The use of these materials replaces a natural mineral resource like limestone and proportionately reduces the need for mining operations. This practice simultaneously replaces clinker produced from limestone and to that extent avoids its costly manufacturing process, thus saving on the use of coal and diesel. The most significant benefit of reducing clinker factor through all these is a direct reduction in CO<sub>2</sub> emissions.

EN 2: Percentage of materials used that are recycled input materials

Parameter	Unit	2011	2010	2009
Alternative Raw Materials Used	%	21.23	23.09	23.25
Thermal Substitution Rate*	%	0.53	1.1	0.59
Clinker Factor	%	65.46	65.29	64.71

<sup>\*</sup>The above mentioned data is based on Kiln consumption only

Constraints like availability of Flyash, Slag, Alternative fuels coupled with lack of regulatory support in the area of Alternative fuels posed hurdles in achieving the consistent progress in the areas of TSR and Clinker Factor.

Enhancing the use of Alternative Raw materials: As per CSI / WBCSD CO<sub>2</sub> Protocol, the default calcination factor is 525 Kg CO<sub>2</sub> per tonne of clinker. This means that every 1% improvement in the use of alternative raw materials represents reduction of 5 Kg CO<sub>2</sub> per tonne of clinker. Realizing the importance of this lever, ACC is actively pursuing efforts to utilize alternative raw materials like marble slurry and calcium sludge which are industrial wastes.

Parameter	Unit	2011	2010	2009
Alternative Raw Materials	Million Tonnes	0.18	0.273	0.257
Slag	Million Tonnes	2.68	2.286	2.06
Flyash	Million Tonnes	3.98	3.879	4.456

Considering the limitations on the availability of lime stone, ACC has made vigorous efforts to utilize low quality lime stone.

#### **TRANSPORT**

Transport and logistics play an important role in cement business from influencing the decision of where to locate cement plants and grinding units to optimize transportation costs by choice of mode of transport, warehousing, routes and markets. Rail transportation in large rake-load quantities is preferred for longer leads. Rail transportation is also acknowledged to be more environmentfriendly as it has a lower carbon footprint than road transport. ACC is taking steps to maintain or increase its rail coefficient i.e. the share of movement by rail as compared to road. While the share of rail movement in total cement industry is 38-40%, ACC despatches 45% of its cement by rail.

The company has started the movement of flyash by rail from the Raichur Thermal

Power plant to its Wadi plant in captive special purpose rakes owned by ACC.

Improvements are also being sought in road transport. The company encourages its transporters to acquire multi axle trucks to replace smaller trucks as these larger vehicles are more fuel efficient. Steps are also being implemented to reduce the turnaround time of trucks at all plants which will enable leaner logistics through the use of fewer vehicles.

Bulk cement distribution is another environment-friendly practice promoted by ACC. This form of transportation and handling is of particular relevance to large consumers. Bagged cement by far still comprises the largest share of total cement despatches in the country.





## **ATMOSPHERIC EMISSIONS**

The process of cement manufacture is prone to both gaseous and particulate emissions. These are classified as Stack Emissions and Fugitive Emissions. ACC has incorporated various measures to monitor and control these emissions.

#### **STACK EMISSIONS**

The pyro process that takes place inside a cement kiln involves highly intense thermal reactions that release gaseous emissions mainly of CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>x</sub>. Continuous Emission Monitoring Systems (CEMS) were installed in most of the Kiln stacks and Opacity monitors in most of its other process stacks. During the Year 2011, CEMS were installed in the kiln stacks at Wadi II, Kymore Line II, Lakheri, Jamul, Bargarh and Chanda plants enabling progress towards continuous online reporting from its Kiln Stack emissions. The company has decided to align with the standards of Holcim at all its new installations which will now have to ensure that outlet emissions are kept less than 30mg/Nm3.

Continuous steps are afoot to upgrade Air Pollution Control equipment at all plants to meet the requirements of changing emission norms. For instance new Pulse jet Bag houses were commissioned to serve kiln lines at Kymore and Wadi, for cement mill at Madukkarai and cooler ESPs were upgraded at Kymore while Flyash dryer bag house is under execution at Gagal. These measures enabled stack emissions to improve to 47.63 mg/Nm3 during the year 2011.

**SO<sub>2</sub>** and **NO<sub>X</sub>** Emissions: With CEMS in place, ACC is able to track SO<sub>2</sub> and NO<sub>X</sub> emissions in real time on a continuous basis and enhance the accuracy of reporting. It is now also able to identify base line emissions and deviations from expected regulatory norms with a view to take corrective measures where necessary.

Ozone Depleting Substances: Cement Industries does not emitting ozone depleting substances.



EN20: NO<sub>X</sub>, SO<sub>2</sub> and other significant air emissions by type and weight\*

Parameter	Unit	2011	2010	2009
$NO_X$	gm / Tonne of Clinker	1582.89	1172.01	1226.92
SO <sub>2</sub>	gm / Tonne of Clinker	68.35	119.33	115.33
Dust	gm / Tonne of Clinker	74.04	83.30	85.41
NO <sub>X</sub>	gm / Tonne of Cementitious Material	1058.11	747.16	803.40
SO <sub>2</sub>	gm / Tonne of Cementitious Material	45.69	76.07	75.52
Dust	gm / Tonne of Cementitious Material	49.49	53.10	55.93
NO <sub>X</sub>	Tonnes	25174.05	15849.74	17289.09
SO <sub>2</sub>	Tonnes	1087.03	1613.76	1625.11
Dust	Tonnes	1177.46	1126.52	1203.53

 $<sup>^*</sup>$  The emission figures reported in the above table are only for kiln stacks. It must also be noted that the trend is not  $strictly\ comparable;\ whereas\ the\ new\ CEMS\ enabled\ more\ accurate\ numbers\ for\ emissions\ in\ 2011,\ the\ emission$ figures for earlier years were based upon spot measurements.

**Fugitive** Dust: The cement manufacturing process entails inherent opportunities for emission of dust arising out of leakage of materials from transfer points, un-skirted material handling systems, seepage from open storage in open yards, muddy roads and spillage on the roads. This leakage can spread to surrounding areas affecting the ambient air quality. ACC has been taking continuous efforts to minimize such fugitive emissions.

Notable steps were taken during 2011 which includes the installation of Continuous Ambient Air Quality Monitoring System (CAAQMS) at the Lakheri, Tikaria, Sindri and Damodhar plants. Various fugitive measures were put in place at Kymore, Lakheri and Chaibasa. High power road sweepers were deployed at Kymore, Lakheri, Wadi-I and Bargarh.







ORGANIZATION & STRATEGY

## **MINERAL RESOURCES MANAGEMENT**



The management of ecosystems and biodiversity is a key area of focus. Environmental Impact Assessment studies conducted at all operational units including mines, show that no reportable changes have occurred to natural habitats in these areas. As and when required, closure plans are prepared for rehabilitation of relevant areas and approval is obtained from the Indian Bureau of Mines, a regulatory body under the Ministry of Mines, Government of India. Mined out areas are then rehabilitated such that they are restored to their original state or one which is considered to be healthy for the ecosystem.



SOCIAL PERFORMANCE THE ROAD AHEAD ASSURANCE STATEMENT ANNEXURES

## EN12: Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas

All locations of ACC have Environment Clearances from Ministry of Environment and Forest, Government of India. Environment Impact Assessment studies conducted so far have neither identified any significant environmental impacts due to the company's operations nor reported changes to natural habitats due to these activities.

#### EN13: Habitats protected or restored

Each of the company's quarries is worked and rehabilitated as per the approved mine plan including its progressive mine closure plan. Through all these activities, the company seeks to ensure least damage to nearby habitats.

Afforestation in mined out and other areas has enjoyed special attention through the company's long history. The table below shows details of afforestation undertaken at all locations with captive mines in 2011 as well as on a cumulative basis.

#### **AFFORESTATION AT ACC**

	Within Mining Lease			
Period	Area (Ha)	Number of Trees		
In 2011	38.12	94,381		
Cumulative (upto end 2011)	991.12	2,951,751		

#### EN14: Strategies, current actions, and future plans for managing impacts on biodiversity

A Progressive Mine Closure Plan is included in the Mining Plan as well as Scheme of Mining for all mines. There is a practice to keep these plans validated from time to time and resubmitted for approval to IBM as and when required. It is also a practice to submit financial assurance in terms of bank guarantee for the area put to use for mining operations

during the plan period.

**EN15:** Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

No such endangered species of any Schedule I fauna have been reported in any of the Environmental Impact Assessment studies conducted at the company's plant locations.





# **ALTERNATIVE FUELS AND RAW MATERIALS**

In 2011, ACC re-launched its Waste Management services under the brand name of "Geocycle" encompassing all activities concerning the utilization of Alternative Fuels and Raw Materials (AFR) in cement plants across the country. This is the Holcim group's umbrella brand for extending co-processing solutions for the management of wastes using cement kilns.

#### **KEY INITIATIVES AND AGHIEVEMENTS:**

- 15 new streams added as AFRs for co processing.
- Energy Substitution: 1.61 % and Materials Substitution: 1.12%.
- 5 third party emission monitoring trial burns conducted across ACC.

#### **MUNICIPAL SOLID WASTES**

The company has ongoing partnerships with several municipalities for disposal of municipal solid wastes (MSW). In 2011 ACC signed a memorandum of understanding with the Department of Environment of the Government of Goa for disposal of non-recyclable combustible waste generated in the state through co-processing in its cement kilns. The MOU was signed by Mr Michael D'Souza, Director of Environment in the presence of Mr Aleixo Sequeira, Minister for Environment and Mr V.K. Jha, Secretary Environment and Mr Pramod Kamat, Law Secretary of the Government of Goa

#### **CO-PROCESSING OF PLASTIC WASTE**

Early in its AFR journey, the company recognized an opportunity for coprocessing of this non-recyclable portion of plastic waste as alternate fuel in the cement manufacturing process. ACC entered into collaboration with Indian Centre for Plastics in Environment (ICPE) to demonstrate through trial burns that

non-recyclable plastic waste can be co-processed in kiln environmentally safe way. The growing use of plastics has made the disposal of waste plastic quite vexatious. While most plastic wastes can be recycled, a significant fraction of plastic waste is not economical to recycle. Such material is not picked up by waste collectors and ends up in public spaces and dump yards. Polythene and plastic wrappers strewn across streets or lying in open places are not merely an eyesore but pose a serious threat to the ecosystem and to human health.

The MoU with Goa, valid for a term of 3 years, envisages a mechanism for collection and segregation of plastic matter from non-biodegradable solid waste for disposal through co-processing at ACC's Wadi Cement plant in Karnataka. Regular co-processing of this waste is being carried out at Wadi since October 2011. ACC has agreed to provide these services free of cost.

SOCIAL PERFORMANCE THE ROAD AHEAD ASSURANCE STATEMENT ANNEXURES

Biomass and Biomass Residues: Despite the growing dependence on fossil fuels, large sections of India have long relied on biomass as an important source of energy. Biomass and biomass residues continue to represent an enormous renewable energy source even for Indian industry, if they are obtained in an environmentally and socially sustainable manner. ACC has an on-going energy plantation programme in place at several of its plants.

The communities around the company's plants play a key role in sourcing this energy source. The AFR team has incorporated a Sustainable Livelihood Initiative (SLI) as part of the energy plantation program. The AFR and CSR teams have joined hands to engage with the local community to devise effective means for biomass procurement that are compatible with local agricultural practices. Accordingly Biomass residues from traditional crops are procured directly from the community.

#### BENEFITS OF ENERGY PLANTATION:

- Increase in green cover around villages.
- Biomass cultivation as sustainable livelihood.

Energy Plantations: This is implemented as community based projects in which villagers are motivated to use their barren and vacant lands around their fields and houses to cultivate energy plantations. The plants chosen at each location are such hardy species that require comparably fewer inputs and minimal irrigation after monsoon. This has enabled the company's cement plants to utilise a varied number of biomass streams that are locally available.

This initiative of procuring locally available biomass offers positive social and economic benefits to the community, providing a sustainable livelihood and income stream by way of cultivating, collecting and transporting biomass. For ACC this inter-dependence ensures a continual supply of alternative fuel.

In this manner, ACC has put concerted efforts in the procurement of Biomass for use as alternative fuel in its cement plants, utilizing about 20,000 tonnes of these materials in 2011 as compared to the usage of 17614 tonnes in 2010.

Occupational Health and Safety: An important consideration in ACC's AFR policy is to manage co-processing operations in its plants in a responsible manner that ensures all aspects of Occupational Health and Safety. Suitable measures have taken to avoid significant spills. There are proper standards for qualifying, sourcing, transporting and co-processing the AFRs at plants. Appropriate checks are provided at various points in the valuechain to ensure that all compliances are met at every step. An ongoing ACERT implementation plan has been put into place in all locations where co-processing is carried out to reinforce all provisions of OH&S in all the processes.

#### EN2: Percentage of materials used that are recycled input materials.

ACC co-processed 2.65 lakh tonnes of alternative raw materials and 0.47 lakh tonnes of alternative fuel in its kilns. The captive power plants and slag dryers consumed 43.05% more alternative resources as compared to the previous year.

Parameter	Unit	2011	2010	2009
a. Alternative Raw Materials Used	%	21.23	23.09	23.25
b. Thermal Substitution Rate*	%	0.53	1.1	0.59
c. Clinker Factor	%	65.46	65.29	64.71

<sup>\*</sup>The above mentioned data is based on Kiln consumption only

- a. Percentage of Alternative raw materials used: Ratio between the total quantities of alternative raw materials used to the total amount of materials gone into the Cement manufacturing.
- b. Thermal Substitution rate: Ratio between the total amount of energy used from alternative fuels to the total amount of energy used from all the sources
- c. Clinker factor: Percentage share of Clinker used to manufacture cement.

Stakeholder Engagement: Communicating transparently with all stakeholders is a key element of ACC's AFR policy. The AFR team maintains a continuous process of interaction with all internal stakeholders as well as with external stakeholders, such as regulatory authorities, waste generators and the communities around plants. Stakeholders' meets promoting co-processing in cement kilns as an option for waste management are organised periodically in different states in association with the respective State Pollution Control Board (SPCB) officials, CPCB, GTZ and Holcim.





## **WATER AND WASTE MANAGEMENT**

Zero Water Discharge: ACC is committed to Zero Discharge of water in all its operations. Continuous steps are taken to comply with this commitment at all plant locations. These steps include treatment, recycling and reuse of water.

Water Footprint: A study was conducted in 2011 to assess the organization's overall water footprint. This has given new meaningful insights in the current nature of water consumption in all plant

locations. In addition the learning has also identified areas for improvement, estimates for specific water consumption per tonne of cement produced and the scope for conservation. Following the water footprint study, plans are now being drawn to strengthen the system of reporting on water management parameters at all plant locations. Efforts are also afoot to be aligned with the requirements of the Holcim group's water protocol.

EN8: Total water withdrawal by source\*

Source of Water	Unit	2011	2010	2009
Surface Water	Million M <sup>3</sup>	8.85	5.46	7.17
Harvested Rain Water	Million M <sup>3</sup>	7.66	5.10	5.90
Municipal Water Supplies	Million M <sup>3</sup>	0.016	0.061	0.012
Ground Water	Million M <sup>3</sup>	1.23	1.41	0.89

<sup>\*</sup>Partial quantities are based on meter reading where available while the rest is calculated.

The above numbers apply to water withdrawal at the plant, captive power plant, colony as well as in nearby communities. No significant impact reported on the water sources affected by withdrawal of water.



SOCIAL PERFORMANCE THE ROAD AHEAD ASSURANCE STATEMENT **ANNEXURES** 

Water Treatment: ACC has systems in place for treating water rejects from the plant operations. The water thus treated is recycled back to the system which helps to reduce fresh water requirement.

Sewage treatment plants treat sewage generated in the residential townships and the treated sewage is channeled for green belt development. New sewage treatment plants were installed at Jamul and Chanda.

EN10: Percentage and total volume of water recycled and reused\*

Water Treated and Reused	Unit	2011	2010	2009
Total Quantity of Water Treated and Reused Annually	%	11.45	16.46	11.34
Total Quantity of Water Treated and Reused Annually	Million M <sup>3</sup>	2.03	1.98	1.59

<sup>\*</sup>Estimated

#### **WASTE MANAGEMENT**

Hazardous wastes generated at cement plants mainly comprise spent oils, lubricants and grease. Such waste is handled and disposed off as per

prevailing relevant rules. Some of the waste is co-processed in cement kilns while the rest is sold to authorized recyclers.

EN22: Total weight of waste by type and disposal method

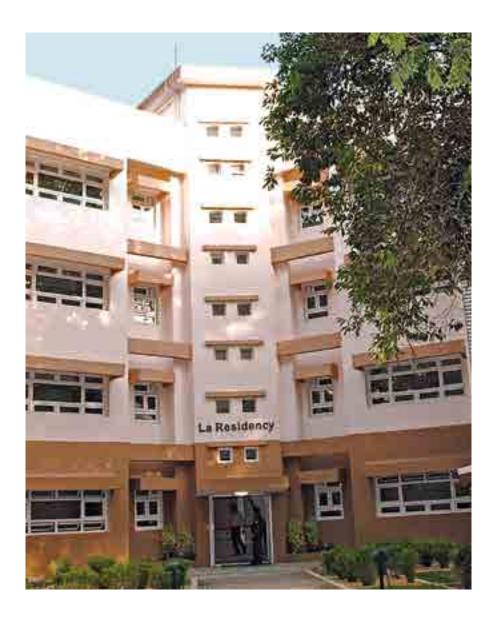
	Unit	2011
Hazardous Waste		
Waste Oil	Litres	1,71,276
Grease	Kgs	76,955
Non Hazardous Waste*		
Steel Scrap <sup>1</sup>	Tonnes	8,650
Other wastes <sup>2</sup>	Tonnes	782
Filter Bags	Numbers	22,296

(1) Steel scrap includes Castings, waste steel, MS Drums, Wrappers scrap, Iron Scrap, Grinding Balls, HC Lining plates, Table liners, HC Grinding media etc., (2) Others includes waste cement bags, conveyor belts, wood, copper, plastic bags, electrical cables, empty glass bottles, Aluminium, tyres, paper, PVC drums, HDPE wrapper etc., (#) Started reporting from the Year 2011 onwards



# **SUSTAINABLE CONSTRUCTION**

ACC is inspired by the Holcim Foundation for Sustainable Construction to advance the cause of sustainable construction in the country. The third cycle of the prestigious Holcim Global Awards for Sustainable Construction was promoted by the company in India. The contest closed in April 2011 with India turning out the highest number of entries compared to the rest of the world. Four entries from India were adjudged winners in different categories. ACC's corporate communications and regional teams gave wide publicity to the winners from India and their outstanding projects through seminars and media coverage.



#### **PROMOTION OF CONCRETE ROADS**

ACC The partnership of and Confederation of Indian Industry continued to spread awareness of the advantages of concrete as road-building material through technical seminars in state capitals. The experience in the cities of Mumbai, Surat, Indore and Hyderabad were showcased as successful case studies. Seminars, knowledge sharing and training programmes were held in Patna, Mandi, Delhi, Jabalpur, Gwalior, Bhopal, Indore, Bangalore, Lucknow, Allahabad, Aligarh, Basti, Azamgarh and Mau. In all 31 training programmes were organized covering about 2450 engineers, masons and supervisors from road building sector.

#### **GREEN BUILDINGS**

The company expanded the list of its environment-friendly buildings. The first two successful accomplishments completed in 2009-10 include the corporate headquarters Cement House (LEED Gold) and the La Residency hostel building (pre-certified LEED Platinum). The new Central Control room building of the Chanda plant in Maharashtra which was commissioned at the end of 2010 received LEED Platinum certification during the year. It is the first such building set in an industrial complex. Inspired by these examples, simple experiments in making buildings energy-efficient were also implemented at Kudithini, Thondebhavi and Gagal plants but these were not certified.

#### AFFORDABLE HOUSING

In February 2011, ACC signed a memorandum of understanding with the Industrial Design Centre of IIT Bombay in February 2011 to conduct research on sustainable construction for Indian habitats. A seminar on the theme was organized which was inaugurated by renowned architect Mr Charles Correa and attended by a host of stakeholders from the building and construction industry. The IIT team has since then tabled interim reports highlighting the essential living requirements of different socio-economic groups and the status of various government and other schemes in the area of affordable housing. The team has also recommended two optimal designs for affordable houses for the rural and urban scenarios.

#### MADHYA PRADESH HOUSING PROJECT

ACC has joined hands with Institute for Infrastructure and Human Resource Development (IIHRD), Vidisha to render significant support in facilitating the construction of affordable houses under schemes implemented by the government of Madhya Pradesh. The company's team worked with Government Departments to support the identification of potential villages and beneficiaries, issues relating to quality and selection of raw material, training beneficiaries and other assistance in construction including external painting. Till the end of 2011, the team has thus participated in the creation of 156 such housing units located in Hoshangabad, Jabalpur, Vidisha, Betul and Narsinghpur.







ACC is passionate about its people. The core organizational values are Strength, Performance and Passion. Its people processes have been realigned towards making the organization more customercentric and more responsive to changing needs. The company seeks to enhance the engagement of employees, make them feel successful and increase their self-worth by developing a learning culture that fosters internal growth and by rewarding innovativeness and creativity. The company values diversity and practices the principles of an equal rights employer through non-discrimination.

ACC's policy for Occupational Health & Safety demands that all its plants and offices provide and maintain a safe working environment for employees who constitute its most valuable assets. This commitment is facilitated by co-operation, communication and competence applied consistently with all employees throughout all operations. Believing that safety is a continuous process and not just a compliance requirement, the goal is to make continuous efforts to transform the safety culture within ACC.

The communities living around the company's operations are its key

stakeholders. The organization believes that their development is essential for the overall growth of our business itself. Hence engaging and supporting these communities to meet their aspirations is a responsibility shared by all plant operations.

The company is committed to the creation of value for all its stakeholders in the communities in which it operates. The company seeks to earn their trust and goodwill by demonstrating ethical governance practices and actions that have a positive impact on economic and environmental dimensions of society.





## COMMUNITY **ENGAGEMENT**

"Engaging and supporting the local communities in the development process is a responsibility shared by all plant operations as we believe the development of these Communities is essential for the overall growth of our business itself." A plant head

- Community participation in decision making through Community Advisory Panels (CAP) and Village Development Committees (VDC)
- Synergy with Government through its schemes
- ACC's Education initiatives benefitted 21,900 children

The key stakeholders of the company are the communities living around its operations. The company actively assists these communities in identifying, prioritizing meeting developmental aspirations through periodic needs assessment surveys. In consultation with the local communities, a detailed five year action plan is developed for each plant location that meets the needs assessed in the survey. This is further broken down into yearwise plans based on the priorities decided by the community. How the plans are implemented is continuously monitored to ensure that this responds to the needs expressed by the communities.

focus of ACC's community engagements activities is in four areas:

- A. Providing education for society's future
- B. Supporting sustainable community development
- Building infrastructure for livable neighborhoods
- Other relevant development issues

#### NEEDS ASSESSMENT SURVEYS

surveys are conducted professionals who use participatory rural appraisal (PRA) techniques that involve large representative samples of all the villagers. The typical techniques include methods such as focus group discussions, resource mapping and issue prioritization. Need assessments such as these have helped keep the organization aligned with the community's key concerns

The assessment exercises are facilitated by the regional and plant CSR teams in partnership with reputed NGOs and educational institutions. Some

4.1 Community Engagement

of these agencies also help in plan implementation. Close monitoring of implementation is critical and this is achieved using scientifically designed like program performance tools monitoring indicators and Social Engagement Score Card. ACC has a new method in place for evaluating its performance in community engagement through a measurement and tracking system.

#### **COMMUNITY ADVISORY PANELS**

Community Advisory The Panel (CAP) has proved to be effective in all aspects of executing a successful community engagement plan. The CAP is an informal team made up of relevant local stakeholders and opinion leaders such as panchayat representatives, villagers, district officials and union representatives among others. The panels have proven to be valuable in presenting stakeholder views and ensuring appropriate delivery of plan initiatives. CAP meetings typically focus on activities like planning, sharing of information on various aspects and project implementation. Wherever needed, CAP meetings are facilitated by respective local ACC Active teams. engagement and support of the CAP at each plant location has enabled the company to strengthen the participation of the local community in village development initiatives.

Village development committees (VDC) are another effective group. These committees constituted in several villages around many plant locations have been useful in design and execution of village specific interventions. Meetings with these representative bodies helps

#### COMMUNITY/ADVISORYPANELS- FOCUSAND KEYISSUES

#### **BARGARH**

Drinking water problem, Pond deepening, Skill development for self employment, marketing support for community enterprise, technical and financial support for agriculture

#### CHAIBASA

Construction of road, drains, renovation of ancient tribal worship places,

#### **CHANDA**

Drinking Water, Vocational Training, Agriculture development, Health

#### **DAMODHAR**

#### **GAGAL**

Infrastructure and Skill building training

#### **JAMUL**

Community Development, Infrastructure Development, Micro Enterprise

#### KUDITHINI

Health, Drinking Water, Houses for flood victims, Skill Development

#### **KYMORE**

Unemployment among the youth, Crisis of Drinking water, Girls literacy level.

#### **LAKHERI**

Water and Livelihood

#### **MADUKKARAI**

#### SINDRI

Water, Health, Livelihood

#### **THONDEBHAVI**

#### **TIKARIA**

Education, Water, Health, Livelihood

#### WADI



"We consider education as the key for the empowerment of people. We believe that if we are able to create an opportunity for the communities around us to have access to good quality education, their children will grow up to become self reliant responsible citizens contributing in nation building."

A teacher at an ACC school



to review the progress of community projects, obtain timely feedback from stakeholders, gain recognition for the efforts made and most importantly to take corrective measures as and when required to ensure that resources are utilized more effectively and optimally.

ACC's participatory approach regular village interactions have encouraged local communities and local administration to enrich the partnership through joint scheme implementation and "shram daan" or voluntary labour.

In 2011, the company reached out to more than half a million people through its various initiatives with the active support of the local community, Government and NGOs.

#### A. PROVIDING EDUCATION FOR **SOCIETY'S FUTURE**

The company's initiatives in respect of education benefited 21,900 children in neighborhood communities.

has established ACC schools all its locations, where children of employees and those from surrounding communities are provided good quality education. Management of these schools

is outsourced to reputed educationists like the DAV or the best locally available institution, thereby ensuring that the schools maintain high standards of education. Since most plants are situated in remote hinterlands, the ACC schools are at once the most accessible and invariably among the best in the region.

The schools are supported by providing funds and infrastructure for initial construction, meeting a part of the teachers' salaries and upgradation activities. Apart from an ongoing subsidy support to schools with which ACC has an agreement, support is also extended to other government schools in the vicinity. Meritorious students from weaker sections of the community are encouraged through the grant of scholarships. This year 111 students were awarded scholarships in Kymore. Support is also provided to poor learners by way of coaching classes. The Kymore and Lakheri plants provided bridging education support to total 483 students from the neighborhoods this year.

All schools supported by ACC offer basic computer education as part of their curriculum since computer technology has become essential in almost every



sphere of life. The schools around Gagal, Kymore and Lakheri plants provided computer education to 4502 students. Education for girl children and adult education programmes receive special emphasis.

#### **Industrial Training**

ACC had adopted seven Government-run Industrial Training Institutes (ITI) under a Public Private Partnership scheme (PPP) in a joint initiative with the Ministry of Labour and Employment, Government of India. The institutes thus chosen are all located in the vicinity of an ACC plant such as Vijayraghavgarh near Kymore, Bundi near Lakheri, Bilaspur near Gagal and one each at Wadi, Bargarh and Chaibasa. The company's support focuses on enhancing the skills and employability of the students passing out of these institutes by upgrading the quality of education offered there. In all, the institutes catered to 783 male trainees and 99 females making a total of 882 trainees.

ACC also runs two technical training institutes of its own, both of which enjoy considerable repute as centres providing technical training. The Sumant Moolgaokar Technical Institute (SMTI) at Kymore was first established in 1949 to train young men in specialized trades to become artisans, foremen and first line supervisors. It had its own independent curriculum and certification. Since 2008 the institute works with a revised objective of complementing the education received by engineering diploma trained candidates. In 2011 SMTI trained 142 young men through an 18 month course as Diesel Mechanic Cum Fitter and Electrical Instrumentation. The other institute managed by the company is the ACC Cement Technology Institute (ACTI) which offers specialized technical training to young engineering graduates. ACTI trained 49 students during the year with both class room and practical

trainings in operation and maintenance of cement plants.

#### **B. SUPPORTING SUSTAINABLE COMMUNITY DEVELOPMENT**

The thrust in this respect comprises health, promoting women's empowerment and creating livelihoods. These initiatives benefitted 1,30,886 beneficiaries.

#### **Promoting Health**

ACC makes medical and health services available to the population around its operations through health camps and mobile vans. Most of these plant sites are situated in remote parts of the country, with little access to adequate healthcare and medical services. The company supports the local administration in promoting national health campaigns on important issues such as malaria, prevention and immunization and DOTS.

Special initiatives in healthcare and nutrition are taken for women and children in coordination with Health authorities. Communities are mobilised to participate in programmes for immunization, anti natal care, post natal care and birth spacing methods. IFA tablets were provided to prevent anemia among pregnant mothers and adolescent girls.

General health camps are orgainsed around all plant neighbourhoods to help deal with a range of issues from basic hygiene to serious problems like cataract. Funds generated through registration fees at these health camps are handed over to village development committees who are encouraged to utilize them in village development related projects.

In 2011, health related projects in Kymore, Gagal, Lakheri, Tikaria and Chaibasa benefitted 55,127 people. Other support activities included health and accidental insurance for SHG members and drivers in the company's supply chain, subsidized ambulance facility to villagers for their emergency needs and subsidized hospitalization of villagers.

#### **ACTFID and AYUSHMAN TRUST**

ACC is proud that it was recognized as the first company in the corporate sector to help combat the scourge of HIV/AIDS through the establishment of two Anti Retroviral Treatment centres for patients of HIV/AIDS in two states suffering the country's highest prevalence of the disease. The company established the ACC Ayushman Trust at Wadi in Karnataka and the ACC CMC Trust for Infectious Diseases (ACTFID) at Vellore in Tamil Nadu in association with Christian Medical College. ACC extended support to ACTFID and Ayushman trusts in 2011 in their on-going endeavour.

	ACTFID	AYUSHMAN
Number of patients counseled (PLHIV)	9270	1215
Number of patients counseled for HIV test	9542	1034
Number of patients tested for HIV positive	278	69
Number of patients tested for CD 4	2650	629
Number of patients of pre ART	271	172
Number of patients on ART	244	188



#### **PLHIV Support Group Meeting**

The major components of the support group meeting consist of Self help group, counseling towards Positive living and Adherence, crisis intervention and removal of myths and misconception.

#### **Children Living with HIV/AIDS**

A special care and support programme was started at ACTFID with the support of ATMA (American Tamil Medical Association) for children initiated on free anti retro viral therapy (ART) to address the issues in caring for CLHIV. So far the ACTFID centre has registered 57 children for free ART and initiated ART for 34 children of those. These children are benefited through individualized Child counseling, promotion of adherence through life style integration of ART, Life skill education, nutritional supplement, educational support, travel reimbursement, tour and chats in addition to ART care which consist of prevention and management of OI's.

#### **CASE STUDY:**

#### Spreading Awareness of HIV/AIDS

ACC Madukkarai collaborated with Tamil Nadu State AIDS Control Society to spread awareness of HIV/AIDS in the Madukkarai Panchayat. The first part of the program was a survey to assess the migrant population in Madukkarai Panchayat. Awareness programmes that targeted 60 migrant workers per month were conducted in association with labour contractors. The sessions also addressed personal hygiene and good health practices. The turnout was successful. At the end of eight months, 600 contract employees were covered in the program.

#### Folk Media Campaign

This was an initiative that sought to generate awareness about HIV/AIDS in the common public using the medium of folk arts with street plays, local song and dance forms called Villu Pattu, Karakattam and Oyil Attam. The seven day campaign covered all 8500 families of Madukkarai Panchayat. The messages highlighted the importance of blood tests during pregnancy, safe sex, how to lead a healthy and happy married life and care facilities for HIV infected persons provided by district health authorities.

#### Testing for HIV

One of the measures of success of the program is the number of those who volunteer to undertake blood tests HIV. 458 contract employees volunteered to test their blood for HIV. The medical team that conducted the programme was astonished to see the large turnout. The official test reports confirmed that none of the contract workers infected. Madukkarai hopes was to achieve the same result with all employees and contract workers in the next year as well to remain a "Zero HIV Plant".

#### Women's empowerment

A variety of initiatives is pursued to promote skill building and income generating schemes for local women groups. Women SHG are imparted relevant training in their selected livelihoods and supported in the establishment of micro enterprises. Sewing and tailoring centre at Gagal benefitted more than 102 women in 2011. ACC AHEAD (Association for Health, Education and Development). the volunteering wing of the companies ladies clubs at all plants, set up in 2008, continued to support social volunteering and community programmes with special emphasis on empowering women. The group has been successful in creating livelihood opportunities for numerous community women in the areas of tailoring, embroidery, knitting, making masala, pickles, fancy bags, gloves and in making, disposable cups and plates.

#### **CASE STUDY:**

#### **Empowering Women**

In April 2010 a vocational and literacy center was started in a school in the ACC Gagal Township. It was based on the findings of a need assessment survey conducted around the plant in 2008-09. The survey showed that the illiterate village women had spare time which they could gainfully utilize to improve the quality of their life. Most of them were wives of contract laborers whose income was barely sufficient for subsistence. There were girls and other women from surrounding areas who were somewhat better off but who also wanted to acquire skills which could earn them money. Members of the local unit of ACC AHEAD decided to help.

The vocational courses short listed were cutting, tailoring and embroidery which were identified as basic needs that could be adopted with ease and find ready local clientele. ACC AHEAD helped identify a suitable trainer certified by a Craft Training Institute and a teacher for the literacy classes. A six month curriculum was designed in which each trainee underwent an exam after six months to get a certificate. Volunteers of ACC AHEAD actively participated in enrolling local women and guided them in selecting a course of their liking. The classes at both centres also include basic health check-up, awareness talks on health and nutrition with help from ACC's Safety Officer and doctor. They created general awareness about possible domestic safety hazards such as fire prevention, safety tips for using LPG, lanterns etc.

Sixty women were enrolled in the very first batch, thirty of who also opted to undergo the literacy course. Since then three batches of women have undergone training. In all 102 women have been trained in cutting tailoring and embroidery while 30 women attended the literacy classes and have become

literate. Nine women formed a self help group in the center itself putting in three hours of work each day. In the first month of their toils they earned ₹ 900 on an average. In a span of one year this work now fetches them ₹ 2500 per month. This group of women who till recently were illiterate and totally dependent on their husbands today earn money and are able to maintaining their accounts. Another group of 15-20 women are now stitching clothes catering to people from nearby areas. The training they received now helps them save about ₹ 5000-6000 per year.

Initial working capital was provided to the women but as the business flourishes, the women are able to generate enough money to buy raw material. The women are gradually learning the tasks of managing production and marketing. The company itself is a buyer of products like cotton gloves while employees are also encouraged to buy products from the self help groups. Plans are afoot to expand this effort and promote other vocations and income generating livelihoods so that more women in the surroundings are empowered both economically and socially.

#### Sustainable Livelihood Project

We believe in empowerment of people and assisting them in sustainability of their livelihood as that will make the community self reliant increase their self respect. ACC's various initiatives in this direction this year benefitted 18,671 people. The population impacted by us this year through our activities was impacted due to livelihood generation in both on-farm and off- farm initiatives.

#### **CASE STUDY**

#### Goat Rearing - a time tested livelihood

Chaibasa in Jharkhand is predominantly a tribal area with a large number of small and marginal farmers. Like farmers elsewhere in the country, they often get

into the trap of moneylenders and many lose their land for small sums of money. They are then forced to migrate to other places searching for other jobs where they continue to be helpless. Research has shown that, in earlier generations, farmers resorted to rearing goats to cope with hard times. Whenever needed they would sell their goats for ready cash. Thus for small farmers, the livestock they owned proved to be valuable short-term assets.

Recognizing this, ACC Chaibasa decided to promote this time tested source of revenue. Landless and marginal farmers were identified in neighbouring villages with the help of the Gram Sabha. These farmers were then trained on scientific methods of goat-rearing and assisted to build sheds to shelter the animals from cold and insanitary conditions. These measures helped to multiply and improve the livestock. The result was better returns.

#### C. BUILDING INFRASTRUCTURE FOR LIVEABLE NEIGHBORHOODS

ACC plays a vital role in facilitating the creation and maintenance of basic infrastructure around all its operations such as roads, safe drinking water, deepening of ponds and repairs to village buildings. We make every possible effort to make these basic necessities available to our neighborhood communities.

### A UNIQUE INITIATIVE AT LAKHERI

Differently abled people in economically weaker sections demonstrate that with a little support they are capable of standing on their own feet to lead a life of dignity.

In collaboration with the Bundi District Collectorate and two local NGOs, ACC Lakheri steered a programme to support disabled people in the adjoining villages of Kanwarpura , Balwan and Chahincha. First a survey identified that there were 42 people in the villages who were assessed with different disabilities like physical handicap, mental retardation, lack of hearing and vision.

Further interactions helped identify their skills and aptitudes. Both the Individuals and their families were motivated to select appropriate trades and gainful activities for them to perform. Each of the target individuals was provided training and development inputs for the relevant skill sets. Training cum production centers were established in the three villages. The individuals were further organized into Self Help Groups.

Following two months of intensive training, the groups were assisted in sourcing raw material and establishing market linkages. All three groups have since started operations under their own micro enterprises. The group in village Balwan is making carry bags, the Kanwarpura village group produces meenakari work while the team from Chahincha village makes soaps. The groups have their own bank accounts and manage their small businesses on their own. The NGOs continue to provide them valuable sales and market support.



Wherever needed, NGO partners join in to ensure quality execution of the projects. Efforts are also taken to bring benefits of government schemes for the welfare of village communities.

In 2011, each plant contributed in the creation of water harvesting structures and installation of hand pumps for drinking water. Community toilets and toilets for individual households were constructed to promote sanitation among neighboring communities. 76 houses were constructed and handed over to flood affected people in Karnataka and Bihar. Construction of 310 household toilets and 4 community toilets were also completed as a step in strengthening rural sanitation. In the vicinity of the Wadi plant almost all cement concrete road have been constructed by ACC. A length of 3.5 km was completed around Wadi in 2011.

Infrastructure development programmes in Kymore, Lakheri, Gagal, Tikaria, Wadi, Kudithini, Madukkarai, Jamul, Sindri, Chanda and Damodhar benefited more than 80,335 persons.

#### D. OTHER RELEVANT DEVELOPMENT **ISSUES**

meetings stakeholder and engagement surveys often throw up needs other than the three primary focus areas of education, community development and infrastructure. The following table lists some significant activities undertaken in this respect during the year 2011.

ACC in our area has been working really well in uplifting the rural populace of the district. They have done a good job in sectors like forestry, environment management, rural development etc. The plant management is cordial and shares the vision and aspirations of the local people and administration. Their effort in developing Root Zone Technology for sewage treatment deserves appreciation.

We in the district administration would like to partner with  ${\cal ACC}$  in popularisation of RZ Technology in the district. Critical investments in other infrastructure development areas is also welcome on their part, especially in Health Care, Education and Rural Development.

I am sure that ACC will continue to strive in developing this area as its people prosper with their positive interventions.

**Deputy Commissioner** District Bilaspur (H.P)



Description	Direct beneficiaries
Support to government in promoting local sports and culture in Gagal	500
Greenery development along the National Highway near Gagal	950
Promotion of smokeless chulha in Lakheri	25 Families
Awareness on Road Safety among Drivers in Thondebhavi	50



## **EMPLOYMENT PRACTICES**

ACC's Human Resource systems and processes are aligned to change the organization towards becoming customer centric, developing a learning culture to foster internal growth, becoming more responsive to changing needs and synergizing HR professionals to achieve excellence. Several initiatives taken in respect of HR in 2011 showed that the organization is passionate about its people. A survey conducted in 2011 by the publication Business World, nominated ACC as the second most respected company in Cement Industry. Its people practices were rated among the best.

Here are some themes that highlight the work done by ACC HR in the past few years:

#### **WE VALUE:**

The core organizational values are stated as Strength, Performance and Passion. The company strives to increase

diversity and employee engagement and practices the principles of an equal rights employer through non-discrimination based on caste, community, race, color and gender. The tradition of presenting Long Service Awards is maintained to appreciate the efforts and loyalty of long serving employees. A new rewards and recognition scheme called ACC Gaurav was launched to recognize exemplary performances by individuals.

#### WE LISTEN:

An annual Employee For Results (EFR) survey is conducted that provides opportunities for employees to raise their concerns. Inputs from the survey are processed and suitable actions are taken based on the feedback received. The intranet portal allows employees the freedom to interact and share feedback through discussion boards, share knowledge, best practices, download information and to connect with others across organization.





#### **WE NURTURE:**

The Learning and Development team conducted 55,144 man-days of formal training in 2011. The subjects covered included Project Management, Personal Effectiveness, Quality Tools, Finance for non-finance executives, Shopfloor management, Negotiation and conflict management and Holcim Competency based programs. Last year a robust Graduate Induction training program was developed for Graduate Engineer Trainees. The organization has academic alliances with reputed institutions such as IIM Ahmedabad, Wigan and Leigh, School of Inspiration Leadership (Soil), NMIMS and Welingkar School of Business.

#### WE EXCEL:

Innovativeness creativity and are promoted through the unique ongoing scheme of awards called Innovate to Excel which encourages innovativeness among individuals and teams.

#### **WE CARE:**

Long term wage Settlements and Settlement related to Performance Based Award Scheme emphasise the organization's approach towards its core workers. Care for employees is also demonstrated through schemes that promote employee education, health and opportunities for social engagement.

#### **WE CREATE SELF-WORTH:**

The Strategic Talent Management Initiative seeks to identify a talent pool based on performance and potential and provide systematic investment

in talent development. To pre-empt possible threats, care is taken to ensure succession planning for critical positions.

#### INSTITUTIONALIZING EXCELLENCE

In January 2012 this year, the company launched a new programme designed to enhance overall performance levels. Called 'Institutionalizing Excellence' it also addresses excellence in people processes seeking to enhance the engagement of people, make people feel successful and increase their self-worth. The programme calls for some re-engineering of people policies, mainly recruitment and on-boarding, talent development, career management, productivity improvement and workmen development.

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LA 1 : Total Workforce	by employment type.	employment contr	act and reason

	Top Management	Senior Management	Middle and FML	Others	Total (2011)	Total (2010)	Total (2009)
	(AJB 21 & above)	(AJB 18-20)	(AJB 1	1 -17)			
Male FTEs*	33	170	3362	5193	8758	8702	8702
Female FTEs		5	215	53	273	212	214
Total FTEs	33	175	3577	5246	9031	8914	8916

## LA 2: Total number and rate of employee turnover (resignations) by age group, gender and region (Management Staff and Workmen) Resignations of employees by gender and age in the last three years are shown here separately.

Region	Female	Male	Total
Total (2009)	17	304	321
Total (2010)	17	426	443
Total (2011)	24	413	437

	Under 30 yrs	30-50 yrs	>50 yrs	Total
Number of FTEs* leaving the company	174	221	42	437

\*FTEs: Full Time Equivalents

#### LA 3: Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations

ACC categorizes both the Full time equivalents (FTEs) engaged on core jobs and the Sub contract FTE engaged on non- core jobs alike in respect of benefits arising out of various statutes. Benefits to full time equivalents which are not available to temporary or part-time employees include accommodation in Housing Colony, certain loan facilities, recreation and Club facility and Long Service Awards.

### LA 4: Percentage of employees covered by collective bargaining agreements

All workmen are covered by collective bargaining agreements which form around 60% of the total workforce. The key parties involved

in the collective bargaining process are employers and workers who bargain on wages, allowances, benefits, working conditions, Condition of Service.

#### LA 5: Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements

As per section 9A of the Industrial Disputes Act 21 days notice is required to be given to effect change. Changes can be brought if there is a settlement/agreement between the Company and its recognized Union without giving 21 days notice.

LA 10: Average hours of training per year per employee by employee category

Learning and Development Data					
Level	Total Mandays	Total Man - Hours	Average Training hours per person		
(AJB 21 and Above)	102.77	822.00	25		
(AJB 18 - 20)	1092.38	8736.39	50		
(AJB 11 - 17)	32439.96	259401.14	74		
Non Mgmt Staff	19691.01	157446.60	30		

### LA 11: Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

Learning is encouraged at ACC. In terms of the company's study Policy 3 full-time employees were granted and availed of Study Leave facility. Numerous external programme are organized for ACC employees. These not only help in upgrading their skills at work but also serve as durable learning inputs to enrich and enhance their potential. Here are some topics covered in such external programmes.

High Impact Presentations	Emerging Leader Booster Program	Centralized Training Program on Life Saving Skills
Advance Logistics	Public-Private-Partnerships for Accelerated Infrastructure Development	Training Program on Railway Operations & Commercial Matters
Inner Engineering	Basic Laboratory on Human Process (BLHP)	International Conference on Roads & Highways
Managing GEN-Y @ Workplace	Leadership, Creativity & Innovation in Potential Management	Sustainable Water Management- Rainwater Harvesting & Water Audit
Scaffolding Safety	In time and on Budget-Managing Projects Effectively	3rd Annual Talent Acquisition & Retention Summit 2011
MS Excel 2007	Fair Employers Finish First	Commercial & Operational issues of Bulk Transportation of Railways
Crucial Conversation	Advanced Contract drafting & negotiation and Dispute Management	

 $In ternal \textit{Training focused on building various Functional, Leadership and Behavioral competencies designed for Individual development$ appropriate for different levels. A sample of themes in each category is summarized here.

Leadership: In all 557 employees were covered under Holcim Leadership Competency Programs. 888 employees under Short Training Modules for Young Talent in ACC while 42 Employees were covered under several Holcim International Programs like Senior Leadership program, Senior Management Program, Raw Materials Management Seminar, Cement Manufacturing Course,

Technical Development Program for Process Performance Engineers, etc, globally. The topics comprised Analysis & Problem Solving, Business & Financial Acumen, Communication, Develop Human Capital, Engage and Inspire, Manage Execution, Conflict Resolution and Negotiation Skills, Self Starter Program, Shop floor Management, Quality Improvement Tools, Personal

Effectiveness, Finance for non-finance, Project Management Approach. A total of 86 employees attended training on '7 Habits of Highly Effective People'.

**Functional:** These included Induction programmes for Management Trainees, BSc Trainee, lateral entrants and Executive Development Programs for Management Trainees. In addition



there were workshops for Sales and Service Excellence for sales & marketing personnel, OH&S workshops, workshops for AFR personnel, various programmes for Finance personnel and several IT related Workshops on MS office suite and SAP modules.

Behavioral: These programmes focused on developing personal skills such as improving Interpersonal relationships, Team Negotiation, Building, Housekeeping, Health and Hygiene, Stress Management and Hazardous work activities.

Other Initiatives: In addition, various forums were organized in the ACC Academy that covered the subjects of Mind Mapping, Isha Kriya, Ergonomics, Digital Marketing and Stock Analysis.

#### LA 12: Percentage of employees receiving regular performance and career development reviews

100% of Management Staff received regular performance and career development reviews. There is also a comprehensive tool called the Development Discussion Document (DDD) which captures leadership, technical/functional development needs and gaps. It also helps in identifying key contributions made by an individual and their career aspiration. The document captures timelines, actions and support needed for the Individuals development from immediate manager and the organization can take.

be above 18 years of age. Additionally, security guards present at all our entry points permit entry only to adults and ensure that there are no individuals entering the factory is less than 18 years of age.

HR 7: Operations identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of forced or compulsory

The company has a well defined recruitment and selection process which does not condone forced or compulsory labour. None of the workplaces have forced or compulsory labour.

#### EC 5: Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operations

All Permanent workmen are governed by the National Wage Settlement based on which the wage level is significantly higher than the local minimum wage applicable. All contract workers undertaking jobs which are of a temporary nature are paid as per the government notification on wages.

#### EC 7: Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.

ACC is an equal opportunity employer and makes no discrimination on the basis of tribe, caste, community, race, color or gender. Hire and promotion of individuals is based on merit for each position compatible with the job requirement, treating the entire country as a local community.

#### LA 14: Ratio of Basic Salary of men to women by Employee Category

The following table shows the ratio of compensation as per different grades of employee category based on figures for end December 2011.

Grade	Ratio of Male to Female Basic Salary
AJB 21 and Above	NA
AJB 18 to 20	1.42
AJB 11 to 17	1.01
NMS	0.99

#### HR 4: Total number of incidents of discrimination and actions taken

There were no incidents reported of discrimination.

HR 5: Operations identified in which the right to exercise freedom of association or collective bargaining may be at significant risk, and actions taken to support these rights

Employees in the workmen category are governed by a Collective Bargaining Process. Employees in this category at all Cement Manufacturing Units are represented by a collective body i.e Union. There is no identified operation in which the right to exercise freedom of association/collective bargaining is at significant risk.

#### HR 6: Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor

The company's policies do not permit the engagement of child labour. All contracts and agreements with contractors and third parties clearly mention that all employees associated with ACC should





## **OCCUPATIONAL HEALTH AND SAFETY**

ACC is committed to the delivery outstanding performance in Occupational Health and Safety matters through a policy of co-operation, communication and competence applied consistently and continually throughout its operation. The policy is to provide and maintain a safe working environment for employees who are our most valuable assets.

To achieve the highest levels of safety performance, consistent implementation of sensible disciplines like Cardinal Rules, Safety Observation Tours (SOT's), OH&S Pyramid, Fatality Prevention Elements (FPE's) and Job Safety Assessments are ensured through the continuous involvement and participation of each employee.

ACC believes that each and every incident can be avoided and recognizes that it is not enough to work only towards internal performance improvements but also to establish standards that are

adopted by the contractors with whom the company works. With the aim of making ACC a safer workplace, a project named 'Suraksha Bandhan' was launched in November 2009 for addressing contractor safety management issues across the organization with a focus on category 3 contractors. Sustained efforts have been made through effective coordination of project objectives and active support from all members of ACC.

Occupational Health & Safety is a continuous process and not just a compliance requirement. The aim is to achieve faster and more accurate feedback on the cause of incidents in order to improve prevention and prevent recurrence. In recent years, many good initiatives have been taken for the improvement of OH&S performance in ACC e.g. Zone Ownership concept, Hazard identification and risk assessment workshops across all sites, visible safety leadership, Housekeeping concepts, etc.





#### **TRAINING**

Visible Safety Leadership programs were conducted across business units by Senior Line Managers and OH&S professionals. Through practical exercises and interactive sessions leaders were explained the importance of leading safety visibly in the field thereby playing a role model for their subordinates. Hazard identification and risk assessment workshops have been continued at sites to develop anticipation capability amongst the employees by enhancing their observation of hazards.

OH&S trainings are conducted across various levels of employees, contractors and third parties engaged inside plants and mines. Plant personnel are coached on various OH&S tools like Contractor Field Audits (CFA's), Safety Observation Tours (SOT's), Hazard Identification and Risk Assessment (HIRA), etc. for enabling them to perform effectively in safety. Plant personnel are also trained for conducting internal OH&S audits. Every year third party OH&S audits are conducted at all plants and mines by external accreditation agencies for checking OH&S compliance and to measure the extent of implementation of the various OH&S Directives.

The year 2011 was an eventful year for OH&S as the concept of 'Safety Scorecard' was initiated for the first time to evaluate Safety Leadership demonstrated by the various business units in terms of the current OH&S programs and initiatives. In order to drive more accountability, Safety Scorecard was considered as an organizational KPI and a performance measure for each management staff across ACC.

#### **LOGISTICS**

A logistics task force has been formed to have more emphasis on the issues of vehicle and traffic safety inside and outside the business units. This task force addresses all such issues across ACC.

#### **PROJECTS**

The design safety aspects are reviewed from time to time particularly for project work to ensure the technical integrity of our plants and equipments. Shut down protocols have been developed to address all applicable OH&S aspects during plant shut downs. Safety procedures for commissioning have been established for projects.

#### **SAFETY CULTURE**

During the year 2011 various efforts were made to transform the safety culture within ACC. The concept of Safety Champions was successfully established to involve and engage line managers in safety by way of execution of small term safety projects in deputed site in the same region.

Proven OH&S practices demonstrated by various business units compiled by Corporate OH&S for onward communication across ACC for replication and horizontal implementation at all sites. The proven practice replication is being monitored by OH&S for ensuring compliance.

Goal Statement: To achieve zero fatality and sustain LTIFR of <2 by 2013.

#### LA 6: Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programs.

100%. Each plant has a site central safety committee comprising of equal representatives from the management as well as workers. The committee is headed by the Director Plant and meets every month to discuss various safety issues. This forum enable the workmen to participate in the decision making process pertaining to Occupational Health and Safety issues of the plant.

#### LA 7: Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work related fatalities by region.

With consistent efforts in making workplaces safer, the Lost Time Injury Frequency Rate (LTIFR) have been maintained below the long term target of 2 and even lower than the values achieved in the last year. In 2011 there were 3 fatalities. However, sustained efforts are made to attain the target of zero fatal injuries. Similarly, there has been a significant reduction in the number of LTI cases during 2011. However, constant efforts are being made to investigate LTI cases to avoid their reoccurrence.

	2011	2010	2009
Fatality	3	8	7
LTIFR (Own and subcontracted employees)	0.31	0.65	0.35
LTISR (Own employees)	12.39	29.84	13.58
Occupational Diseases	No Case	No Case	No Case
Lost time injuries	18	32	18

 $Note: The\ indicators\ are\ based\ on\ the\ definitions\ given\ by\ Cement\ Sustainability\ Initiative\ (CSI)\ of\ the\ World$ Business Council for Sustainable Development (WBCSD) which records lost time injuries when the injury results in person not being able to perform work for more than one day.

#### LA9: Health and safety topics covered in formal agreements with trade unions.

Health and safety forms the part of the standing orders signed by the unions. Issues of personal protective equipments, adherence to the established OH&S procedures, etc. have been made mandatory. Union representatives also participate in the OH&S decision-making process. They also actively participate in site OH&S systems, in planned inspections, internal audits and incident investigations.



## **FAIR BUSINESS PRACTICES**

ACC is counted among Indian organizations known for ethical standards in business transactions and demonstrating respect for transparency accountability. Among Company's avowed commitments is the creation of value for its stakeholders and fulfillment of their aspirations through ethical governance practices and actions that generally have a positive impact on economic and environmental dimensions of society. All this has earned it the trust and goodwill of all its stakeholders - customers, investors, associates, employees, government and the communities in which it operates.

#### **INTERNAL CONTROL SYSTEMS**

The company has a well structured Internal Control System that is commensurate with the size, scale and complexity of its operations. The control system is subjected to regular review and assessment for its effectiveness. Wherever necessary it is reinforced with new, revised or additional standard operating procedures and incorporated with tighter internal and information technology (IT) controls.

In 2011, a major initiative was implementation of the Governance, Risk and Compliance Module (GRC) which is expected to contribute significantly in enhancing the IT Governance framework with tighter access controls. The Company is also implementing a tool for automating and e-monitoring legal compliance.

#### ASSESSMENT OF RISKS RELATED TO CORRUPTION

Regular internal audits and checks, based on a well structured risk assessment approach, were performed by the Internal Audit Department to ensure that internal control systems were in place and that responsibilities were being discharged effectively. Potential fraud risk areas, their probability and impact are a vital input for the risk assessment. In 2011, 167 key controls were tested at 13 locations. The testing methodology and documentation is reviewed and validated by the Company's external auditors. The Audit Committee of the Board also reviewed the adequacy and efficacy of internal control systems. (SO<sub>2</sub>)

#### FRAUD RISK MANAGEMENT

A Fraud Risk Management (FRM) Policy was adopted in January 2009. The company has a Fraud Risk Management committee chaired by the Company Secretary and with the Head Legal and Chief Internal Auditor as members to review and take appropriate action on suspected cases of fraud or misconduct. Anyone with knowledge of any incident of misconduct or fraud can communicate with the committee in confidence through a dedicated e-mail/Fax and hotline or by letter. Awareness of the FRM policy has been spread across all units of the company in multiple ways such as display of posters at prominent locations in units, uniform screensavers on all company computers and workshops for management staff. The FRM policy has also been uploaded in the intranet portal. (SO3)

#### CORRUPTION

There were no reports of incidents of corruption by employees. There were also no cases where contracts were not renewed based on any allegations of corruption. (SO4)



#### **PUBLIC POLICY POSITIONS AND LOBBYING**

Lobbying platform	Significant lobbying issues	ACC's core position
State Pollution Control Board of Jharkhand, Chhattisgarh, Bihar, Orissa, Himachal Pradesh, Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, Uttar Pradesh, Punjab, Haryana and Tamil Nadu	Authorization for co-processing of hazardous wastes at ACC-Cement Works.	ACC has got permits for co-processing of paint sludge and off specification rubber and permits for conducting co-processing trials of other wastes applied for.  Some of the states where TSDFs are not operating, SPCBs are encouraging the industries to opt for the waste management services offered by ACC.
Central Pollution Control Board and Ministry of Environment and Forest	Exemption of co-processing trials of certain wastes at ACC works for which trial is already conducted.	Work in Progress
Forest Department	Collection of biomass wastes from the periphery of the forests in cognizance of the Forest Protection Committees as a Sustainable Livelihood Initiative	Various biomass wastes as pine needles, bamboo debris, dead woods are being used at our works under allegiance of DFOs
FICCI, ASSOCHAM, CII and CMA	Inclusion of co-processing in cement kiln in the Hazardous Waste Legislation and for creating awareness on co-processing amongst industries	Utilization of high calorific value hazardous wastes is recognized in the new HWM Rules 2008
National Safety Council	Creating awareness on co-processing amongst industries and safety related issues while handling hazardous wastes.	NSC has facilitated ACC for creating awareness amongst industries on coprocessing by publishing our article and advertisement in their esteemed annual publication.
Municipalities of Shimla, Goa, Coimbatore, Kullu, Cuttack, Jabalpur, Katni, and Bhopal	Facilitating co-processing of non- recyclable fraction of plastics from municipal solid wastes.	Non-recyclable plastic wastes are being co-processed at some of our works
TERI, CII, NCBM	Environment norms and regulations	On-going effort to create awareness about updating existing environment norms and frame new regulations to meet the needs of changing times.
Central Pollution Control Board (CPCB) and Ministry of Environment and Forest (MOEF)	To frame regulations for $SO_X$ and $NO_X$ for Indian Cement Industry	
CPCB and State Pollution Control Board (SPCB)	For continuous upgradation of dust emissions	
Bureau of Energy Efficiency (BEE), Government of India	India's Energy Conservation Strategy as part of the Indian Government's voluntary commitment to the global community at the recently concluded Durban meet	Co-chaired Sector Expert Committee for Cement to finalise the Perform, Achieve and Trade (PAT) scheme for India's Energy Conservation Strategy



#### **PARTNERSHIPS & DISCLOSURES**

- (a) Technology Road map for Low Carbon Economy for Indian Cement Sector: ACC is working closely with members of the Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD) as well as a host of external stakeholders with technical expertise recommended by the Confederation of Indian Industry (CII) and the National Council for Cement and Building Materials (NCBM) in the development of a technology road map for a low carbon economy for the Indian cement sector. The exercise is part-funded by International Finance Corporation (IFC). Twenty-six papers were developed as part of the road map explaining opportunities to drive the industry towards a low carbon economy.
- (b) Carbon Disclosure Project (CDP): ACC has participated in this project since 2009. This is an international platform where organizations voluntarily disclose their performance in respect of aspects such as corporate

governance, climate change strategy, targets and initiatives, climate change communication methodology, climate change risks and opportunities, emissions measurement methodology, details of CO<sub>2</sub> emissions, energy portfolio, emissions performance, and emissions trading. ACC has consistently improved its CDP score since it first participated. In the India CDP Disclosure 2011, the company ranked first in the material sector and an overall third in the country. Details of this report are available at https://www.cdproject. net/CDPResults/CDP-2011-India-200-Report.pdf. (SO5)

#### **CONTRIBUTIONS TO POLITICAL PARTIES**

The company did not make any financial or in-kind contributions to any political parties during the year 2011. (SO6)

#### ANTI-COMPETITIVE, ANTI-TRUST AND **MONOPOLY PRACTICES**

There are four matters against ACC under the Monopolies and Restrictive Trade Practices Act and two under

the Competition Act, in which the company is arraigned with other cement manufacturers and the Cement Manufacturers' Association. In two matters, the company had appealed in the Supreme Court against the orders of the MRTP Commission and these appeals are pending hearing. The Competition Commission of India published an order on June 21, 2012 against eleven cement manufacturers including ACC and the Cement Manufacturers' Association imposing a penalty of half of the profit for the year 2009-10 and 2010-11. For ACC the amount works out to ₹ 1147.59 crores. The company is deeply aggrieved by this verdict and is preparing to appeal against the order before the competent authority. The company strongly believes that the penalty thus sought to be imposed on it is unjust and harsh and that the allegations in the order appear to be based on presumptions that are not supported by facts or evidence. Enquiry is in progress before the concerned body in the remaining matters. In all these matters, ACC maintains that it has always operated independently and has never been a part of any cartel as alleged. (SO7)





## **PRODUCT** RESPONSIBILITY

Appropriate efforts are taken to ensure that health and safety issues related to our products are understood and responded to over different life stages of the product. These stages have been defined and include development of product concept, R&D, certification, manufacturing & production, marketing & promotion, storage, distribution & supply, product application, use of buildings, disposal, reuse and recycling. Employees at our manufacturing units undergo periodic health check-ups.

At all our units, safety parameters are tracked on a regular basis through a well established monitoring mechanism.

On the product application side, our Customer Services teams conduct training programmes for masons that include guidelines of proper usage of cement with a focus on safety and health risks. During the year, 9415 masons across the country were trained on health and safety related issues.

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.

		Product Life Cycle							
	Development of product concept	R&D	Certification	Manufacturing & Production	Marketing & Promotion	Storage Distribution & Supply	Use & Service (Product Application)	Use & Service (Usage of buildings)	Disposal, Reuse or Recycling
Risk				Exposure to dust		Exposure to dust, improper handling of cement	Chemical/ Dust; disposal of empty packaging		
Status/ Comments				Dust control systems in place at plants.  Lung function test, audiometry, ECG, X-ray, etc. carried out twice a year for high exposure risk employees & once a year for all others at the manufacturing units.		Safety & house keeping at w/h monitored through SOTs.  Periodic safety observation tours & warehouse safety audits conducted.  Training proposed for unloading labour at w/h for precautions during handling.	Mason training modules cover safety and health risks through practical training, PPE distribution and site compliance. Carried out mason health check ups at site.		

PR2: Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes

	Incidents of non compliance with regulations resulting in fine or penalty	Incidents of non compliance with regulations resulting in warnings	Incidents of non compliance with voluntary codes			
Status	No non-compliance	No non-compliance				
Comments/ Update	production; LTI for d	incidents/ near misses for manufacturing & LTI for distribution being tracked eporting at plants undertaken comprehensiv				

ACC manufactures Portland Slag Cement (PSC), Portland Pozzolana Cement (PPC) and Ordinary Portland Cement (OPC) as per the prevailing specifications of Bureau of Indian Standard (BIS). Cement bags display requisite information about the grade of cement, year and week of manufacture, weight, lot number and Maximum Retail Price (MRP) according to the rules prescribed in Standard of Weights and Measures Act. Test certificates are shared on a regular basis. During the year, there were no incidents of non-compliance with any regulations or voluntary codes concerning product information or labeling. (PR3 & PR4)

ACC conforms to guidelines of the Advertising Standards Council of India, a self regulatory voluntary organization of the advertising industry. There have been no issues related to complaints of non-adherence to laws, standards, and voluntary codes from any sources in its internal or external environment concerning the company's marketing communications, advertising, promotions or sponsorships. (PR6 & PR7)

The company has a service guideline that clearly emphasizes the need to maintain confidentiality of all internal customer related data and information. A secure general complaint registration system that can be accessed only by authorized personnel helped ensure the company

received no complaints with regard to breaches of customer privacy or loss of customer data during the year under review. (PR8)

ACC has compliances in place for laws and regulations concerning the production and sale of products and services such as the Competition Act, Bureau of Indian Standards and Weights & Measures and has not evidenced any incidence of fines or non-compliances in these respects. (PR9)







# THE ROAD AHEAD

#### **SUSTAINABILITY ROADMAP 2009-13**

GOAL 2013	PLAN
ENERGY (ALTERNATIVE FUELS & RAW MATERIALS) Increase Thermal Substitution Rate (TSR)	<ul> <li>a) Stakeholder alignment on the co-processing technology through interactive meets. Recognition of co-processing as preferred technology in waste management rules.</li> </ul>
to 4.12% by 2013 from the base of 0.6% in 2009.	b) Awareness generation and capacity build-up through training programs.
	c) Communication plan to align all the stakeholders on benefits of AFR co-processing.
ENERGY (FOSSIL FUELS AND ENERGY FFICIENCY)	a) To conduct Energy Audits at all our plants and identify potential areas
5% reduction in specific power consumption per tonne of cement by	b) Installation of Waste Heat Recovery Systems
2013 from a base of 91 KHW in 2009  Increase the % share of Renewable	c) Installation / Acquisition of Wind farms and hydro power plants.
Energy capacity to total Captive Power capacity from 6% in 2009 to 15% by	d) Installation of Energy Management Systems
2013	e) Use of Variable Frequency Drives for major electrical machines.
	f) Optimization through effective load management.
	g) Encouraging innovation in energy conservation
LEGAL COMPLIANCE	a) Rollout VCCE (Value Creation in competitive Environment) initiative to create
To be the most respected cement company in India and one of the most	awareness and ensure compliance to competition law
reputed corporate entities	b) Conduct Fair Competition Review every year
	c) Impart Fair Competition Training to all relevant employees
	d) Regularly monitor and review compliance to competition law

#### SUSTAINABLE CONSTRUCTION

To promote usage of blended cement in all forms of construction, as green

To position ACC as a responsible company that promotes sustainable construction.

To maintain lead rank in share of blended cement to total cement production. (in 2009 ACC produced 91% blended cement against industry average of 75%)

- a) Development of communication modules having a mix of films, presentations and support materials suitable for different stakeholder groups
  - b) Regularly monitor improvement in awareness
  - c) Sponsor researchers in usage of blended cement
  - d) Promote approval for composite cement

#### **WATER, WASTE MANAGEMENT & TRANSPORT**

Zero discharge of effluents 10% reduction in specific water consumption per tonne of cement on the base of 2010-11

- a) Install monitoring systems for water and establish baseline consumption
- b) Install Waste Water treatment plants
- c) Water harvesting initiatives at plants, mines, colonies and nearby communities
- d) Install Air Cooled condensers for CPP instead of conventional water cooling towers in water deficit locations
- e) Usage of recycled water for Mill Sprays
- f) Supplying good drinking and irrigation water to nearby villages as part of CSR activity
- g) Promote innovation in water saving projects









SHALL S. Strong Park, LAS. CTHHE

#### Independent Assurance Statement

#### The Management and Beard of Directors

**ACC Limited** Mumbal, India:

#### OUR ENGAGEMENT

Ernst & Young Pvl. Ltd. (EV) was retained by ACC Limited (the Company) to provide an independent assurance on its Corporate Sustainability Report for the year ended December 31, 2011, The Company's management is responsible for engagement with stakeholders, identification of key issues and the collection and presentation of the information contained in the report. EY's responsibility, as agreed with the inanepersent of The Company is to provide independent assurance on the report content as described in the level of assurance. Our responsibility in performing our assurance extinities is to the inavagement of the Company only and in accordance with the barms of reference agreed with the Company. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any dependence that any such third porty may place on the Report is entirely at its own risk. The assurance report should not be taxen as a best for interpreting the Company's overall performance, except for the aspects multitioned in the scope below.

#### LEVEL OF ASSURANCE

Our assurance engagement was planned and performed in accordance with (ISAE 30002) and to meet the requirements of a Type 2 moderate assurance engagement as defined by AA1000AS (2008). The assurance principles of inclusivity, Materiality and Responsiveness, as outlined in AA1000AS (2008), and 68t-G3 quidelines were used as criteria against which we reviewed the Report.

#### SCOPE AND LIMITATIONS

The scape of the assurance covers sites and indicators considered relevant to the Company and include:

- Data and information related to the Company's unclaimability performance for the period 1 January 2011 to 31 December 2011;
- The Company's internal protocols, processes, and controls related to the collection and collection of sustainability performance data:
- Sustainability specific data and information releded to atternate fuels and raw materials, energy, waste management, sefely, community initiatives and training:
- Visits to 3 sample plants (details as per like 'Approach' sections where our nors comprised review of the above mentioned indicators for these plents.
- Review at the selected siles and corporate office of key indicators (materials, energy, all amounts), mater and wade management, workforce, safety, community Witletives and trainings on a sample basis.

#### Exclasions

The assurance scope excludes:

- Aspects of the Report other than those mentioned under "Scope and Limitations":
- Data and information outside the defined reporting period (1. January 2011 to 31 December 2011);
- The Company's statements that expension of opinion, helief, approxime, amount aim or future intention provided by the
- "Economic performance indicators" instuded in the Report.

#### OUR APPROACH

as order to form our conclusions we undertook the following key steps:

1. Reviewed ACC's approach to stakeholder engagement and processes for determining material issues through interviews with tissue extres at the corporate office and at the 3 plants visited. Relevant associated documentation was also reviewed:

A sympler firm of Free & Young Okthol Emiled Rept. Office: 22 Comm. Stone. Hock: "C", N" Foor, Kolium - 700-018

<sup>\*</sup> international Federation of Accountants' international Standard for Assurance Engagements Other than Audits or Reviews of Historical

AA1000A5 (2006) - The record edition of the AA1000 assurance standard from the institute of Social and Etnical Accountabilities.



- 2. Interviewed select key personnel of the Company to understand the current processes in place for capturing sustainments performance data as per GRI 2006 (GRI G3) and Holsim Droup (Gross) quidelines and progress made during the reporting period.
- 3. Reviewed processes and supporting evidence for collecting, compiling, and reporting select indicators of the corporate and site levels.
- 4. Virits to cement plants at Chalbasa (Jharshalut), Kymore Ottothya Pradesh) and Thordethan (Karnstaka) to review the local systems and processes in place for managing and reporting on the Company's sustainability activities, information pertaining to workforce, training and selected claims made in the Report was reviewed centrally at the Corporate Office.

#### **OUR CONCLUSIONS**

On the basis of our review scope and methodology, our conclusions are the following:

- inclusivity: We are not aware of any matters that would lead us not to conclude that the Company has applied the inclusivity principle in developing its approach to austainability or of key stakeholder groups that have been excluded from dialogue.
- Materiality: Barring supects of the Report Insted in "Extrasions" we are not aware of any material aspects concerning the Company's sustainability performance which have been excluded from the Report. Nothing has come to our attention that causes up not to believe that the Company has applied its processes for determining material issues to be included in the Report.
- Responsiveness: We are not aware of any matters that would lead us not to conclude that the Company has applied the responsiveness. principle for engaging with its stakeholders on material aspects covering its sustainability performance.
- Reliability of performance information; Nothing has come to our attention that causes us not to believe that the data relating to key indicators, have been presented fairly, in material respects, in keeping with the GRI G3 and Group reporting principles and criteria.

#### OBSERVATIONS AND OPPORTUNITIES FOR IMPROVEMENT

Key additional specific observations have been outlined below. These observations do not affect our conclusions on the Report set out above.

- The Company has defined its reporting countary as its Manufacturing locations. Regional office, Head office and Thuse Office. However, during the Corporate Assurance it was observed that the Environment indicators data comprises of only Manufacturing locations, Ano, for the Social indicators date, the boundary is not limited to Manufacturing locations. Regional office, Head office and There office, but also includes Sales Units. RMC business and other Zonar offices. The Company may consider a consistent reporting boundary across all aspects reported.
- The Company has increased its efforts to employ alternate fuels and has materials and has articulated its plans to double the use of by 2015. It may consider streamining its infernal accounting practices to ensure complete coverage of afternate fuels and attenue raw materiats used during the manufacturing process.
- While the Congany has taken up community development plans based on libraril community needs assessment, the systems for capturing key actions and outcomes need to be further strengthened.

#### OUR ASSURANCE TEAM AND INDEPENDENCE

Dur assurance team, comprising of multidisciplinary professionals, has been drawn from our climate change and sustainability network and underfaces similar engagements with a number of significant indian and international businesses. As an assurance provider, EY is required to comply with the independence requirements set out in international Federation of Accountants (IFAC) Code of Ethics's for Professional Accountants. EY's independence policies and procedures ensure compliance with the Code,

#### for Ernst & Young Private Limited

Scorpta Dan Partner

31 December 2012, Mumbai



<sup>1</sup> Informational Federation of Accountants (IFAC) Code of Ethics for Professional Accountants. This Code extensions whical requirements for professional economaris. The quidence related to network firms was updated in July 2006.



# GRI CONTENT INDEX

GRI No	Description	Chapter
1	Strategy & Analysis	1.2
1.1	Statement of Chairman & CEO	-
1.2	Description of key impacts risks and opportunities	1.2
2	Organizational Profile	1.1
2.1	Name of the organization	1.1
2.2	Primary brands, products, services	1.1
2.3	Operational structure	1.1
2.4	Location of organization's headquarters	1.1
2.5	Number of countries where organization operates	1.1
2.6	Nature of ownership and legal form	1.1
2.7	Markets served	1.1
2.8	Scale of reporting organization	1.1
2.9	Significant changes during reporting period	1.1
2.10	Awards received	1.4
3	Report Parameters	1.6
	Report profile	1.5
3.1	Reporting period	1.5
3.2	Date of most recent previous report	1.5
3.3	Reporting cycle	1.5
3.4	Contact point for questions	1.5
	Report Scope and Boundary	1.5
3.5	Process for defining report content	1.5
3.6	Boundary of Report	1.5
3.7	Limitations	1.5
3.8	Basis for reporting on joint ventures, subsidiaries, etc	1.5
3.9	Data measurement techniques and assumptions	1.5
3.10	Explanation of the effect of re-statements	1.5
3.11	Significant changes in reporting	1.5
	GRI Content Index	7.1
3.12	Table identifying location of standard disclosures	7.1
	Assurance	-
3.13	Policy and current practice regarding external assurance	1.5

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GRI No	Description	Chantor
	Description	Chapter
EC2	Financial implications and other risks and opportunities due to climate change	2.1
EC3	Coverage of the organization's defined benefit plan obligations	2.1
EC4	Financial assistance received from Government	2.1
EC5	Ratio of standard entry level	2.1
	Wage to local minimum wage	
EC6	Policy practices and proportion of locally based suppliers	2.1
EC7	Procedures for local hiring	2.1
EC8	Development and impact of infrastructure investment	2.1
EC9	Significant indirect economic impacts	2.1
	ENVIRONMENTAL	3
	Management Approach	3
	Goals and Performance	3
	Policy	3
	Organizational Responsibilities	3
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EN4	Indirect energy consumption by primary source	3.1
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EN6	Initiatives to provide energy efficient or renewable energy products	3.1
EN7	Initiatives to reduce indirect energy consumption	3.1
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EN9	Water source significantly affected by withdrawal of water	3.6
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EN 11	Biodiversity	3.4
to 15		
EN16	Total direct and indirect GHG emissions by weight	3.2
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EN23	Number and volume of significant spills	-
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THE ROAD AHEAD



GRI No	Description	Chapter
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HR5	Freedom of association and collective bargaining	4.2
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	PRODUCT RESPONSIBILITY	4.5
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PR7	Non-compliance with regulations concerning marketing communications	2.2
PR8	Number of substantiated complaints regarding breach of customer privacy	2.2
PR9	Value of fines for non-compliance with laws concerning the provision and use of products	4.5

# **UN GLOBAL COMPACT PRINCIPLES**

ACC signed the United Nations Global Compact in 2006. The table below lists the ten principles of the UNGC and indicates the relevant chapter of this report where the organization's activity with respect to each principle is addressed. To that extent, this table and the report also serve as a Communication on Progress (COP) required to be disclosed by signatories of the UNGC.

UN Global Compact Principle	Chapter	
Human Rights		
Businesses should support and respect the protection of internationally proclaimed human rights; and	4.2, 4.4	
2. Make sure that they are not complicit in human rights abuses.		
Labour Standards		
<ol> <li>Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;</li> </ol>	4.2, 4.4	
4. The elimination of all forms of forced and compulsory labour;		
5. The effective abolition of child labour; and		
6. The elimination of discrimination in respect of employment and occupation.		
Environment		
<ol> <li>Businesses should support         <ul> <li>a precautionary approach to</li></ul></li></ol>	1.2, 1.6, 2.4, 3.1 to 3.7	
8. Undertake initiatives to promote greater environmental responsibility; and		
9. Encourage the development and diffusion of environmentally friendly technologies.		
<b>Anti-corruption</b>	1.8, 4.5	
10. Businesses should work against corruption in all its forms, including extortion and bribery		



## **GLOSSARY**

Absolute gross emissions - Total amount of CO<sub>2</sub> emitted from cement production activities

Absolute net emissions - Gross emissions minus credits for indirect savings such as by use of waste as fuel

Alternative fuels and raw materials (AFR) - Inputs to clinker production derived from waste streams contributing energy and/or raw material.

**ASSOCHAM** - The Associated Chambers of Commerce and Industry of India, A prominent umbrella body of the Chambers of Commerce of India, providing a forum for dialogue between business and government

Bag House - air pollution control equipment that removes particulates from air or gas released in manufacturing processes

**Biodiversity** - refers to the variety of life on earth - the different animals, plants and micro-organisms, their genes and the ecosystems of which they are a part.

Capacity building - The process of creating an enabling environment for social development with appropriate policy and legal framework, human resource development, community participation and strengthening of local systems, institutions and bodies in which all stakeholders participate.

Carbon Disclosure Project organization based in the United Kingdom that assists corporations to disclose their greenhouse gas emissions and work out a reduction strategy and plan.

Castor - a type of tree which produces the castor bean that yields castor oil. This oil is one of hard oils, where the oil content in the seed is relatively high. Castor oil's numerous chemical derivatives are "renewable sources, bio-degradable and eco-friendly."

**CDM** - Clean Development Mechanism is a flexible scheme provided in the Kyoto Protocol that assists countries and business entities in achieving compliance with their quantified emission limitation and reduction commitments.

**Cement** - Cement is a building material made by grinding calcined limestone and clay to a fine powder. It acts as the binding agent when mixed with sand, gravel or crushed stone and water to make concrete.

**Cementitious material** - A substance which when mixed with water forms a paste that subsequently sets and hardens at room temperature.

**CER** - Certified Emission Reduction, a type of tradable carbon credit issued in lieu of emission reduction achieved by projects qualifying under the Clean Development Mechanism (CDM)

CII - Confederation of Indian Industry, is a non-government, not-for-profit, industry-led and industry-managed organization, that facilitates dialogue with industry and government.

Clinker - An intermediate product in cement manufacture that is produced by decarbonizing, sintering, and fastcooling ground limestone.

**Clinker factor** - The percentage of clinker in cement

Community Advisory Panel - A group of persons selected to represent the target community whose views are considered as being representative of the community in matters concerning its social needs and development schemes.

Community needs assessment - A  $systematic \, process \, to \, acquire \, an \, accurate$ understanding of a community's needs and priorities in the context of its economic and social development.

Concrete - A building material produced by mixing Portland cement, water and aggregates comprising sand and gravel or crushed stone. Cement acts as a binder. The average cement content in concrete is about 15%.

Co-processing - the act of adapting an existing industrial process in a single combined operation, whereby certain so-called 'waste' materials may be put to use as alternative fuel or raw material in cement kilns, dryers and captive power plants.

#### Corporate social responsibility (CSR) -

The commitment of business to contribute to sustainable development, working with employees, their families, the local community, and society at large to improve their quality of life. In some cases, we have used this term to refer to community development and engagements.

**Eco-efficiency** - Reduction in the resource intensity of production, i.e. the input of materials, natural resources and energy compared with the output: essentially, doing more with less.

FICCI - The Federation of Indian Chambers of Commerce and Industry, an association of business organizations in India.

THE ROAD AHEAD

Fly ash - Waste particulate residue from thermal power plants or incineration plants. Because of its fineness, it exits with flue gases and must be eliminated by filters.

Focus group - A form of qualitative research, which involves interviews and interaction with a representative sample of community or population segment.

Fossil fuels - Non-renewable carbonbased fuels traditionally used by the cement industry, including coal and

Global Reporting Initiative (GRI): An International framework recommended reporting progress against Sustainable Development G3 refers to the guidelines launched in October 2006. A newer version G3.1 was announced in April 2011.

**Green Building** - A Building which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building.

GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit or German Technical Cooperation, an international cooperation enterprise specializing in technical cooperation for sustainable development.

**HGRS** - Holcim Group Support Services

IUCN - the International Union for Conservation of Nature, an international organization working for natural resource conservation

Jatropha - a genus of plants and trees whose fruit and seeds contain oil and hence serve as replacement fuels. They are amenable to bio-diesel production.

Kiln - Large industrial oven for producing clinker used in the manufacture of cement. In this report, "kiln" always refers to a rotary kiln.

**LEED™ Rating System** - Leadership in Energy and Environmental Design is a self assessing system designed for rating new and existing commercial, institutional, and high-rise residential buildings. It evaluates environmental performance from a "whole building" perspective over a building's life cycle, providing a definitive standard for what constitutes a green building.

*Limestone* - a sedimentary rock composed of calcium carbonate used as the main input in cement manufacture

Lost time injury - A work-related injury after which the injured person cannot work for at least one full shift/full working day.

Materiality - Topics and indicators that reflect the organization's significant economic, environmental, and social impacts, or that would substantially influence the assessment and decisions of stakeholders. According to GRI guidelines, Materiality is the threshold at which an issue or indicator becomes sufficiently important that it should be reported.



Millennium Development Goals - A UN Declaration signed in 2000 comprising eight International Human Development Goals to be achieved by 2015.

NAPCC - National Action Plan on Climate Change, a document released in June 2008 outlining India's strategy to meet the challenge of climate change

NOx - a generic term for Nitrogen oxide, usually refers to it as an air pollutant.

and Occupational health safety (OH&S) - Policies and activities to promote and secure the health and safety of employees, subcontractors, third parties and visitors.

Ordinary Portland Cement (OPC) -Cement that consists of approximately 95 % ground clinker and 5 % gypsum.

Photovoltaic Cell - An electronic component which generates electrical tension (or voltage) when exposed to light and can therefore be used to produce electricity. These cells produce a constant current with an average voltage of 0.5V.

Portland Pozzolana Cement (PPC) -Cement obtained by intergrinding a pozzolanic material such as fly-ash with clinker and gypsum.

Portland Slag Cement (PSC) - Cement obtained by inter-grinding slag with clinker and gypsum.

Ready mix concrete (RMX) - concrete that is specifically manufactured for delivery to the construction site in a freshly mixed and plastic or unhardened

Slag - a non-metallic product consisting essentially of glass containing silicates, alumino-silicates of lime and other bases and is obtained as a waste byproduct in the manufacture of pig iron in a blast furnace or electric furnace. Granulated slag is used in the manufacture of Portland Slag Cement.

 $SO_X$  - a term for sulphur oxides, usually referring to their air pollutant properties. Specific gross emissions - The gross amount of CO<sub>2</sub> emitted per tonne of cement

Specific net emissions - The net CO<sub>2</sub> emissions per tonne of cement.

Stakeholder - individuals or groups whose actions significantly affect or can be affected by an organization's activities, products or services.

**Stakeholder dialogue** - A structured way to solicit feedback from a company's stakeholders, typically by inviting them to comment on specific issues or problems.

**Stakeholder engagement** - the process by which an organization involves its stakeholders, that is, the people who

may be affected by its decisions or can influence the implementation of its decisions.

Sustainable construction - building in a way that is socially, economically, environmentally, functionally, aesthetically balanced to meet today's needs and to provide and conserve resources for future generations.

Sustainable development - The ability to plan for and continually meet the needs of the present day without compromising the ability of future generations to meet their own needs.

**Sustainability reporting** - the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development.

TERI - The Energy & Resources Institute, a global think tank and research institute that works in the areas of energy, environment and sustainable development.

UN Global Compact (UNGC) - A UN initiative to encourage global businesses to adopt ten principles covering Human Rights, Labour Standards, Environment and Anticorruption.

