ACC

Strength. Performance. Passion.

# Sustainable Development Report 2009

## ACC Limited

# About us

ACC Limited is India's foremost cement manufacturer with a countrywide network of factories and marketing offices. Established in 1936, ACC has been a pioneer and trend-setter in cement and concrete technology. Among the first companies in India to include commitment to environment protection as a corporate objective, ACC has won accolades for environment-friendly measures taken at its plants and mines, and has often been felicitated for its acts of good corporate citizenship.

www.acclimited.com


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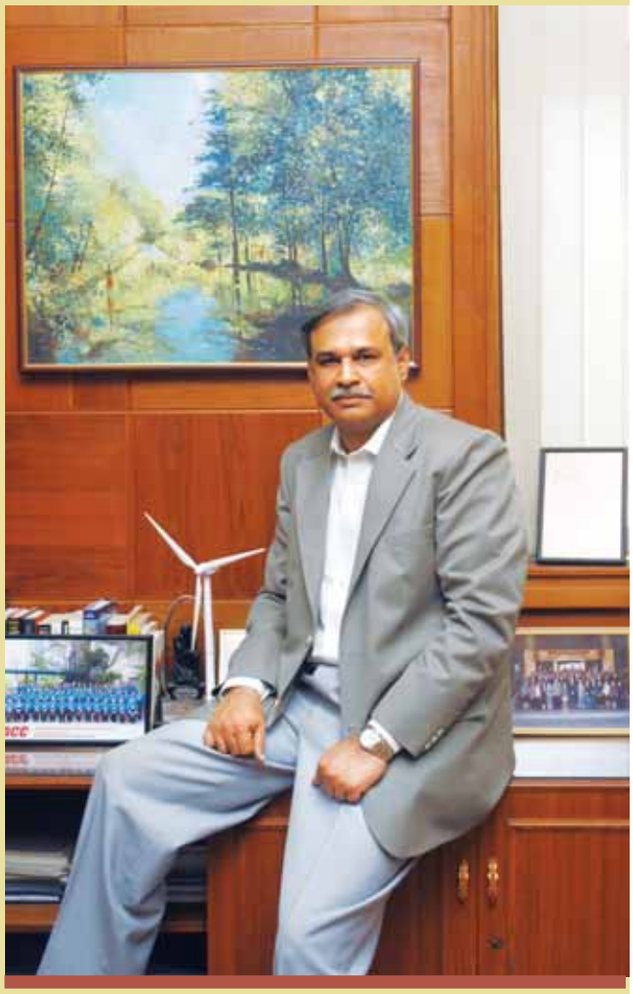
# Contents

# Foreword



I am pleased to present our Corporate Sustainable Development report for the year 2009. This may be read as a sequel to the first report that covered the year 2007 and the web update we had published for the year 2008.

As before, this report is written in self-appraisal mode imbued with a sense of humility but touched with pride in ACC's tradition of inflexibly good governance and a visible concern for well-being of the natural world, our nation and its people.

In 2008, we re-articulated our Vision Statement expressing the aspiration "to be one of the most respected companies in India, recognized for challenging conventions and delivering on our promises". Accordingly we formulated a business strategy to transform the organisation through engagement with all its principal stakeholders - in particular to be recognized as a leading champion of sustainable development not only in the cement industry but on a wider scale. At a stroke, the Triple Bottom Line framework became central to the organisation's agenda.

Two other purposeful steps helped consolidate this position. The first was adoption of the principle of materiality to identify and converge on issues seen to be critical not only because of their direct financial impact on the organisation but also stemming from their environmental and social impacts. The second was fixing accountability to stakeholders by functional positions and internally integrating the relevant organisational goals with individual performance targets.

I note with satisfaction that we have achieved much of the goals we had set for ourselves while drafting the first report. We made major strides in all three dimensions of the Triple Bottom Line – notably in cost management, energy efficiency, wind energy, environment management, usage of alternative fuels and raw materials, green buildings and community engagement initiatives.

Occupational health and safety has come to occupy overriding priority in our scheme of things. But even as we were implementing a series of improvement programmes, we were aggrieved to suffer fatalities at some plants. We have, evidently, many arduous miles to traverse before we can say that we have a matured safety culture.

The two unique anti retroviral (ART) centers managed by our Trusts at Wadi in Karnataka and Vellore in Tamil Nadu now function as established and efficient clinics that combat the national scourge of HIV/AIDS. It is humbling to realise that these facilities save so many valuable lives.

We were proud winners of CNBC-TV18's India Business Leaders Award in the category India Corporate Citizen of the Year 2008, the *Jamnalal Bajaj Uchit Vyavahar Puraskar* for the year 2008 from the Council for Fair Business Practices and the Gold Shield of The Institute of Chartered Accountants of India for financial reporting in 2008. The latter singled us out as being best in the 'Manufacturing and Trading Enterprises' category in terms of compliance with accounting standards, statutory guidelines and other relevant pronouncements. We remain infused with the same values in the transparent disclosures we make here in this Report.

The confidence that we got in streamlining our processes encouraged us to put ourselves to the test with external assurance. For this purpose, we retained Ernst & Young Private Limited, one of the country's leading professional assurance service providers. Their comments form a part of this report.

We went beyond the conventional ISAE3000 standard and subjected ourselves to the AA1000AS (2008) standard, which is as yet done by few other companies in India. We were impressed by this sustainability standard's strong demand for accountability on material issues and responsiveness to stakeholders. E&Y assessed us for Type 2 level of sustainability assurance engagement which evaluates not only accountability principles but also adherence to these principles evidenced by our performance information. Four sets of our indicators met with moderate assurance namely, alternative fuels and raw materials, energy consumption, carbon emissions and community initiatives.

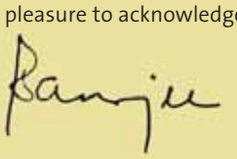
As we look back with satisfaction at what we have accomplished in the last two years, the course of action we need to take is clear. We can easily recognize that with a Sustainability agenda we have the means to improve productivity and efficiency, reduce business risks and failures and create a rewarding platform for innovation. I see in this subject a winning approach to shaping corporate reputation in the market place. Given the intimate association of cement business with the earth's natural resources, I am confident that the pursuit of sustainability will drive operational excellence and competitiveness in the Indian cement industry in the years to come.

The fortunes of cement industry are strongly correlated with GDP growth. Commensurate with the promising prospects projected for the national economy, we believe that growth of overall demand for cement will also be encouraging in the next decade, driven by strong pulls from infrastructure and steady accretion in housing construction. Demand for cement is likely to grow at 9 to 10 per cent, with some analysts foreseeing an even faster rate. Even considering heightened competition from significant capacity additions, the industry will see bright days ahead.

Of course there are also pitfalls ahead of us and some unfinished agenda. In a fast deteriorating world, we recognize there is extensive work to be done by way of protecting the earth from which we draw so much wealth. Industry needs to find urgent ways of eliminating the use of fossil fuels, step up the use of alternative fuels and raw materials and of renewable energy such as from the sun. I feel more has to be done to find solutions for affordable construction. There is no sign yet of a viable substitute for cement. Indeed I wonder if we will find a building material more workable and sustainable than cement.

I thank all my colleagues who participated with avid interest in making this report possible; in particular I appreciate the passion and commitment with which our young employees have adopted this subject and wonder if it is perhaps because it concerns them more than us. I cannot end without acknowledging the continuous guidance we have received from the outstanding "best" practices of the Holcim Group of which we are a part.

Readers who have a query or wish to share their feedback on any of the contents of this report are welcome to write to me at sumit.banerjee@acclimited.com. It will be my pleasure to acknowledge and respond to each communication I receive.



**Sumit Banerjee**
Managing Director
June 5, 2010 — World Environment Day

***"I note with satisfaction that we have achieved much of the goals we had set for ourselves while drafting the first report. We made major strides in all three dimensions of the Triple Bottom Line – notably in cost management, energy efficiency, wind energy, environment management, usage of alternative fuels and raw materials, green buildings and community engagement initiatives"***

# 1.1 Organisation Profile

**An All India Footprint**
For more than seven decades, ACC Limited (popularly known as ACC) has been India's leading manufacturer of cement. Today its operations span the country with 16 modern cement factories that have a total installed capacity of 26 million tonnes of cement per annum, 20 sales offices, and several zonal offices. As on December 31, 2009 the company had a workforce of 8916 persons.

**ACC – India's first name in cement**
ACC's brand name is synonymous with cement and enjoys a high level of equity in the Indian market. An extensive network of about 9000 dealers makes ACC cement available countrywide through a chain of more than 50,000 sales outlets. The company leads the industry in the manufacture of environment-friendly blended cements namely Portland Slag Cement and Portland Pozzolana Cement that utilize industrial wastes such as slag from steel plants and waste fly ash from thermal power stations.

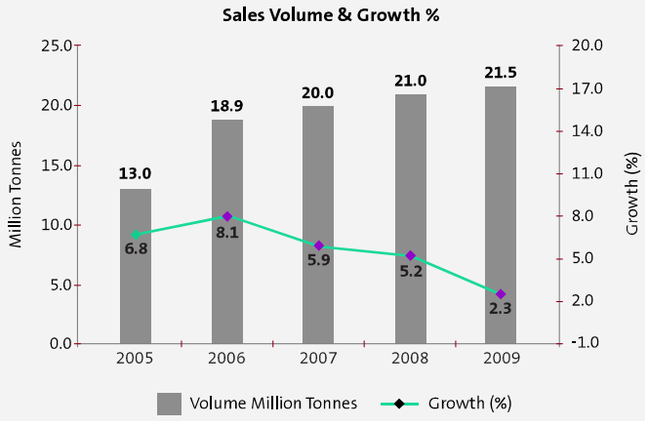
**Pioneer and Trend-setter**
ACC has a unique track record of innovative research and product development that helped it make several breakthroughs in the manufacture of cement and concrete. ACC was first in India to offer distribution of cement in Bulk and Ready Mix Concrete, two value added products that have together changed the pace and quality of large construction projects in the country.

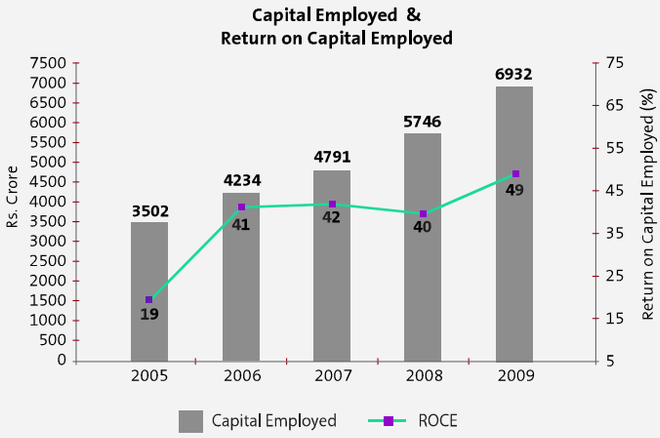
**A Green Company**
With a vigourous agenda for sustainable development, the company strives to meet exacting standards in safety, quality, energy efficiency, clean mining techniques, emission controls and environment management. ACC actively promotes the use of alternative fuels and raw materials and offers total solutions for waste management through co-processing in its cement kilns.

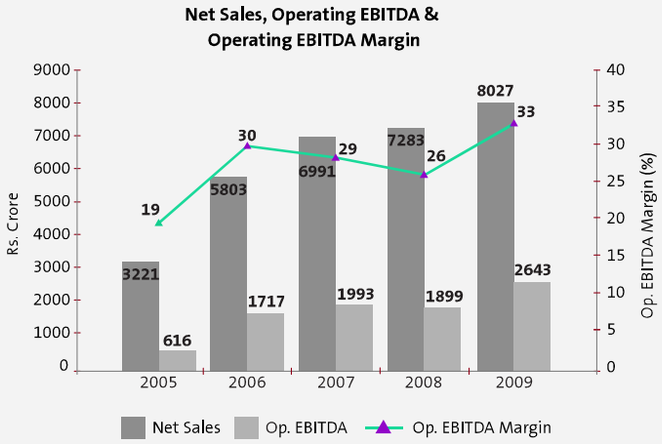
**A Good Corporate Citizen**
Formerly called The Associated Cement Companies Limited, the organisation's name was derived from its establishment in 1936 as a historic merger of ten of the country's cement companies. Since then ACC has made significant contributions to the nation building process by way of quality products, services and knowledge sharing. Its commitment to sustainable development, its high ethical standards in business dealings and its on-going efforts in community welfare programmes have won the company acclaim as a responsible corporate citizen.

ACC is now closely associated with the Holcim Group of Switzerland which owns 46.20% of the company's total equity.

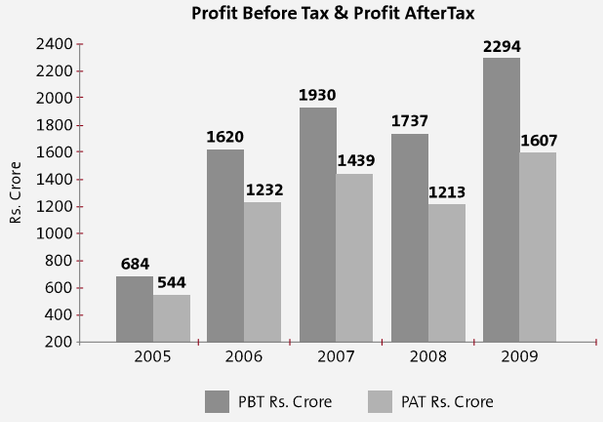
# Key Performance Data

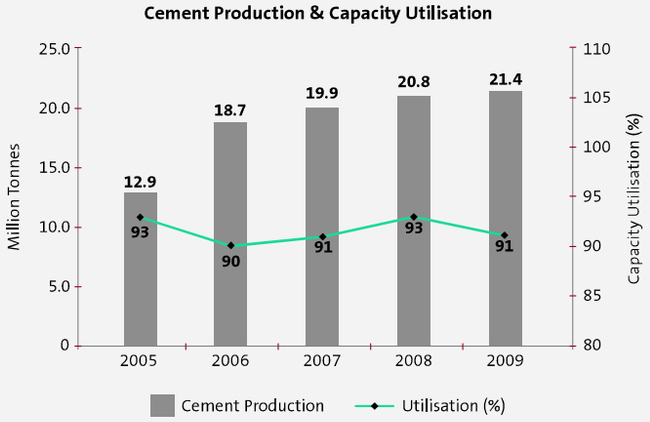






# 1.2 The Road So Far

Here is how we fared against the commitments we made in the Road Map set out for 2009 in our first Sustainable Development Report. The unfinished tasks will be carried out in 2010.

## Strategy

| | |
|---|---|
| **Organisation:** To strengthen CSR and environment management functions | Achieved |
| **Policy:** To formulate and adopt policies for | |
| • Human Rights | Not Achieved |
| • Charities and Donations | Partially Achieved |
| **Coordination :** Constitution of CSR/SD committee to coordinate reporting and target setting in CSR & SD matters | Achieved |
| **Materiality :** Validate internal matrix for external stakeholders using third party verification | Achieved |
| **Data:** To streamline CSR/SD Data collation and reporting | Achieved |
| **Sustainability Report :** To release next report in 2010 for the year 2009 | Achieved |

## Economic

| | |
|---|---|
| Vendor appraisal for sustainability performance | Partially Achieved |
| Sustainable Construction : To establish Centre for Excellence in Sustainable Housing and Rural Infrastructure in partnership with Development Alternatives | Achieved |

## Environment

| | |
|---|---|
| Electrical Energy: Reduce 2.5% in specific energy consumption over the year 2007 | Achieved |
| Continuous Emission Monitoring System: To install online measurement of $SO_X$, $NO_X$ and VOC in one of the plants and review its performance | Achieved |
| Emissions: To measure and report every year | Achieved |
| • $CO_2$: to reduce 2.5% in specific $CO_2$ emissions over the year 2007· | |
| • Dust: To maintain emissions less than statutory norms and reduce specific dust emissions by 2.5% over the year 2007· | |
| • $SO_x$: Norm of 500mg/Nm³ proposed by Central Pollution Control Board (CPCB) draft resolution accepted. | |
| • $NO_x$: Norm of 1000mg/Nm³ proposed by CPCB draft regulations accepted | |
| Emissions: Heavy metals, dioxins & furans: To maintain emissions below CPCB/State Pollution Control Board regulations· | |
| • Fugitive air emission: Improve ambient air quality as per new statutory norms· | Partially Achieved |
| • To reduce respirable particulate matter to 150µg/m³ in ambient air | Achieved |
| Kiln ESP's to be converted to BagHouses/New Bag House for 5 kilns in 2008 | Achieved |
| To provide waste management solution through co-processing from all ACC plants to surrounding industries | Achieved |
| Total waste co-processed of 0.4 million tonnes by 2009 including biomass, waste derived fuels, fuel rejects, industrial non hazardous and hazardous waste | Achieved |
| To install infrastructure for co-processing waste materials in all the plants | Achieved |
| Plantation for bio-mass – to plant 5 lakh trees | Achieved |
| Launch of Geocycle brand for waste management services | Partially Achieved |
| Maintain leadership in utilization of fly-ash, slag and phospho-gypsum | Achieved |
| Biodiversity: To assess our impact on flora and fauna around plants and mines | Partially Achieved |
| Water Management: achieve zero waste and self sufficiency | Partially Achieved |

## Social

| | |
|---|---|
| OH&S: Zero fatality | Not Achieved |
| 2008: LTIFR -0.76 & LTISR- 28.95 * 2009 : LTIFR -0.61 & LTISR – 23.16 | Achieved |
| Community Needs Assessment – To be completed at all plants by 2009 | Achieved |
| Improve Quality of Life for employees, particularly at plant townships | Partially achieved |
| Measurement effectiveness of 70% of CSR programmes using Holcim's Social Engagement Scorecard model | Achieved |
| Partnerships with NGOs: to identify and engage for issues such as livelihood generation, capacity building and women empowerment | Achieved |
| Training: To impart sustainability training and awareness to key persons | Achieved |
| Human Resources: to strengthen employment practices | Achieved |
| Sustainable livelihood generation: to identify and facilitate plant-wise opportunities in vocational guidance and income generating schemes | Achieved |
| HIV/AIDS programme: to strengthen awareness programmes at all plants and measure effectiveness and coverage | Achieved |

# 1.3 Reporting Parameters & Methodology

This is the second Corporate Sustainable Development Report published in print form by ACC Limited. The first Sustainable Development Report released in June 2008 covered the year 2007. A web update for the year 2008 was made available on the company's website www.acclimited.com as an electronic report. A soft copy of this entire Report is uploaded on this website under 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 same period has been used for reporting its sustainability performance.

### Reporting Cycle

The Company has adopted a two-year cycle for releasing print versions of its sustainability performance. In the intervening year, an electronic version of a report is made available on the company's website as a web update.

### Report Boundaries

The scope of our reporting on various parameters is limited to the company's cement business but covers all plants of the Company. ACC's Ready Mix Concrete business which was reorganized into a wholly owned subsidiary company in January 2008 has not been addressed in this Report. Similarly the report does not include information pertaining to the company's other subsidiary companies. Since cement comprises more than 95 per cent of ACC's business, it is reasonable to assume that this Report is broadly representative of the Company as a whole.

### Reporting Framework

This report has been prepared in accordance with the GRI Reporting Framework of the Global Reporting Initiative (GRI) Guidelines referred to as G-3 which was released in October 2006. Wherever necessary, we have supplemented additional information, achievements and experiences as relevant from our internal sources.

### Regrouping GRI Performance Indicators

Our report focuses on issues identified as being material to our sustainability agenda and these processes are described in the dimension of the Triple Bottom Line framework which according to us is nearest in relevance. We have linked and regrouped each of the GRI performance indicators to one of these internal processes. Hence it is possible some indicators may not appear in the same sequence as listed in GRI guidelines. We regret any inconvenience caused to readers by this regrouping.

### Identifying Process Owners

In 2008 we undertook an exercise of materiality mapping which was critical in charting our agenda for sustainable development as it narrowed our focus on sustainable development issues of concern to our stakeholders that were also seen to have significant impact on the organisation in financial, environmental and social terms. These issues were linked to specific business processes in the organisation and assigned to respective Functional Heads along with the related set of indicators of the Global Reporting Initiative (GRI). Henceforth these critical aspects will likely comprise the central theme and basis of all our sustainability reporting in the years to come.

### Data collation

The Company now has a robust management information system and database based on an SAP ERP system that went live in February 2007. We have been able to overcome the difficulties in collecting information that we faced while compiling our first report. All the data used in this report was collated from regular monitoring reports sent by Process owners, Units, Functional departments or by reference to our database and consolidated into company totals wherever required. In some cases we collected information specifically for the purpose of sustainability reporting. 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. A representative sample of the process of data collation was made open for scrutiny and verification by the external assurance team.

### UN Global Compact

ACC is a signatory to the United Nations Global Compact. Wherever possible and relevant we have attempted to include reference in the report to aspects that address specific UN Global Compact principles. Hence this report will also serve the purpose of being read as a detailed "Communication On Progress" (COP) as required by signatories to the UN Global Compact.

### Stakeholder Views

We have included in this report certain comments and views of different stakeholders on our business processes and achievements. These are abridged extracts based on opinions and communications specifically invited by us for inclusion in the report in a spirit of transparency and sincerity. The comments are not based on a study of this Report.

### Currency and units

All financial values are expressed in Indian Rupees. Large numbers may be expressed in terms called *lakhs* or *crores*; these are Indian words commonly used and accepted in the Indian sub-continent. One Lakh (sometimes spelt as *lac*) refers to one hundred thousand or one tenth of a million while one crore is equal to ten million. India follows the metric system of measurement. The term 'tonne' (sometimes written as 'ton') refers to a metric tonne or one thousand kilograms. Figures representing capacity of cement plants invariably refer to annual capacity unless otherwise indicated.

### Additional Information

Readers are invited to visit the pages of our 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 also available on the Company's website. Additional information may also be made available on request.

### Authorship

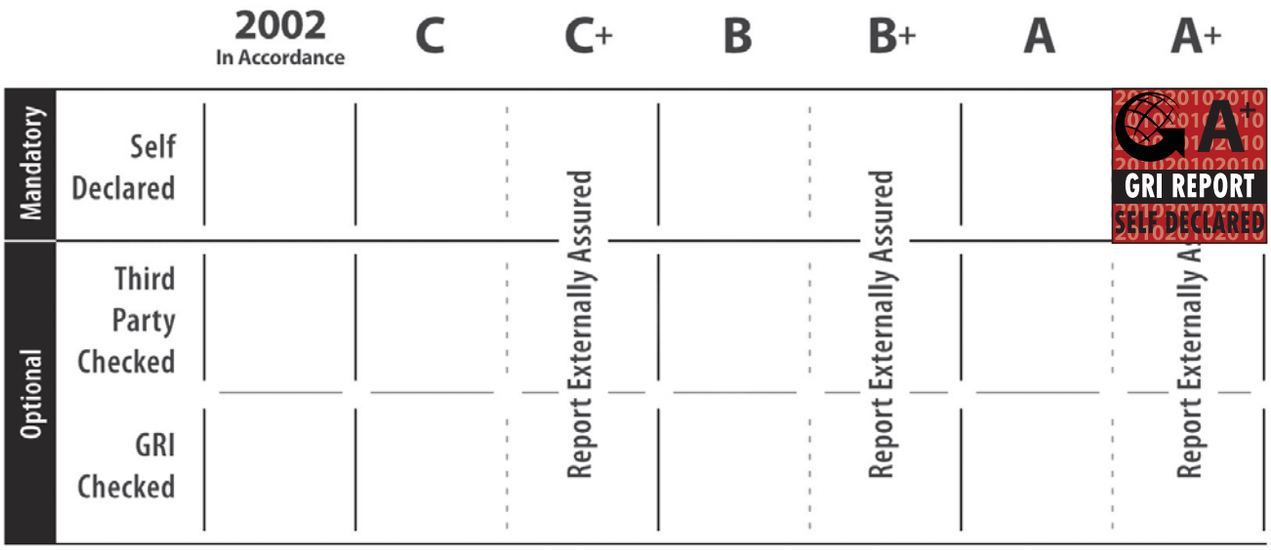
This Report is edited and published by ACC's Corporate Communications Department. It is based on a manuscript compiled by the company's Corporate Social Responsibility Department from inputs provided by functional departments and each of the process owners identified for the respective material aspects. The final report was then approved by a team of senior executives of the company. All photographs used in the report reflect genuine activities of the company and were taken for the purpose of this report or for general internal communication.

### Assurance

We retained Ernst & Young Private Limited, an independent and professional assurance provider, to review and endorse our sustainability reporting process for the first time. This has been done not only to add credibility to our report but also with the object of providing us an occasion for learning and development to strengthen our approach to this vital subject.

With this report, we hope we have built a strong foundation and basis for sound sustainability performance management and reporting, with accountability to our stakeholders.

## Report Application Levels




## This Report is a Self-Assessed Application Level A+ Report

# 1.4 Materiality Mapping

When we made the first beginning in sustainable development reporting in 2007, we had straw polled a cross-functional group within the organisation and drawn up a preliminary matrix of subjects relevant to the organisation that were perceived to be of concern to stakeholders and that have significant economic, environmental and social impacts.

These were largely similar to a set of issues identified by the Holcim Group as being imperatives for Sustainable Development. The topics include Sustainable construction, Supply chain management, Spills & other incidents, Resource management, OH&S - safety, OH&S - health, Legal compliance, Energy, Employment practices, Economic impact, Eco-efficient products, Customer relations, CSR or Community engagement, Corporate governance, $CO_2$, Atmospheric emissions, Water, waste management & transport and other issues. These stem out of group aspirations, the WBCSD Cement Sustainability Initiative, peer group reporting and international sustainability reporting guidelines. In view of our close association with the Holcim group, we decided to adopt this set of issues so that our approach and reporting are congruent with those in the group.

We retained an independent agency SustainAbility, (a strategy consultancy and think tank working on the sustainability agenda), to help us gauge the views and influences of external stakeholders. Our aim was to converge on and prioritize issues seen to be critical not only because of their direct financial impact on the organisation but also stemming from their environmental and social impacts. This would then secure an unbiased understanding of external expectations and provide guiding inputs in our sustainability Journey.

In consultation with us, SustainAbility interviewed 20 stakeholders in a consultative mode. These were drawn from between opposite ends of our supply chain to represent business organisations, customers, financial analysts, government officials, international organisations, NGOs, suppliers and trade union representatives.

ACC sincerely thanks the following organisations who consented to be interviewed for this process. We respect their views and have been guided by them.

- CRISIL – India's leading Ratings, Research, Risk and Policy Advisory company
- Actis Advisors – Leading Private equity investor in emerging markets
- Boston Consulting Group – Global Management Consulting firm and world's leading advisor on business strategy
- Confederation of Indian Industry - Premier Industry Body In India
- Cement Manufacturer's Association
- Toxics Link – a leading environmental NGO
- Development Alternatives – a non-profit organisation with a mission to promote sustainable national development
- Oxfam- An International Development organisation
- Partners In Change – a non-profit organisation working for awareness of corporate social responsibility as well as advocacy and capacity building in India.
- Professional Assistance for Development Action – A voluntary organisation
- Lawyers Initiative for Forest and Environment – A global network of environmental lawyers working on environmental democracy
- Infosys Technologies– A reputed Indian Corporation
- India Bulls Realty – One of the largest listed real estate companies in India
- Siemens India – A leading Indian Multi-National Corporation
- Hindustan Unilever Limited – India's largest FMCG company

### *A Stakeholder's View*

*When SustainAbility was asked by ACC to facilitate a conversation with its external partners and communities ("stakeholders") and develop a list of priority issues, we were both Interested and intrigued. Interested because materiality through stakeholder engagement has been a key area for us in the last 23 years. Intrigued because very few companies in India take this exercise seriously. In fact, we do not know of any Indian cement company that has done so, which is significant for an industry with such wide social and environmental footprint.*

*SustainAbility presented the results to ACC's Sustainable Development Council in 2009, including its Managing Director, Mr Sumit Banerjee. SustainAbility's findings and recommendations were accepted and discussions during and after the presentation indicated a wide ownership of the process of stakeholder engagement, and a commitment to substantially improve ACC's performance overtime. The report consolidating the feedback was signed off by the Sustainable Development Council and sent to each stakeholder who participated in this study.*

*This process was not without its limitations; representativeness of stakeholders, commitment and scope of issues are items that should be improved overtime. However, the quality of information from the stakeholders provided sufficient guidance to ACC on what its focus areas should be going forward.*

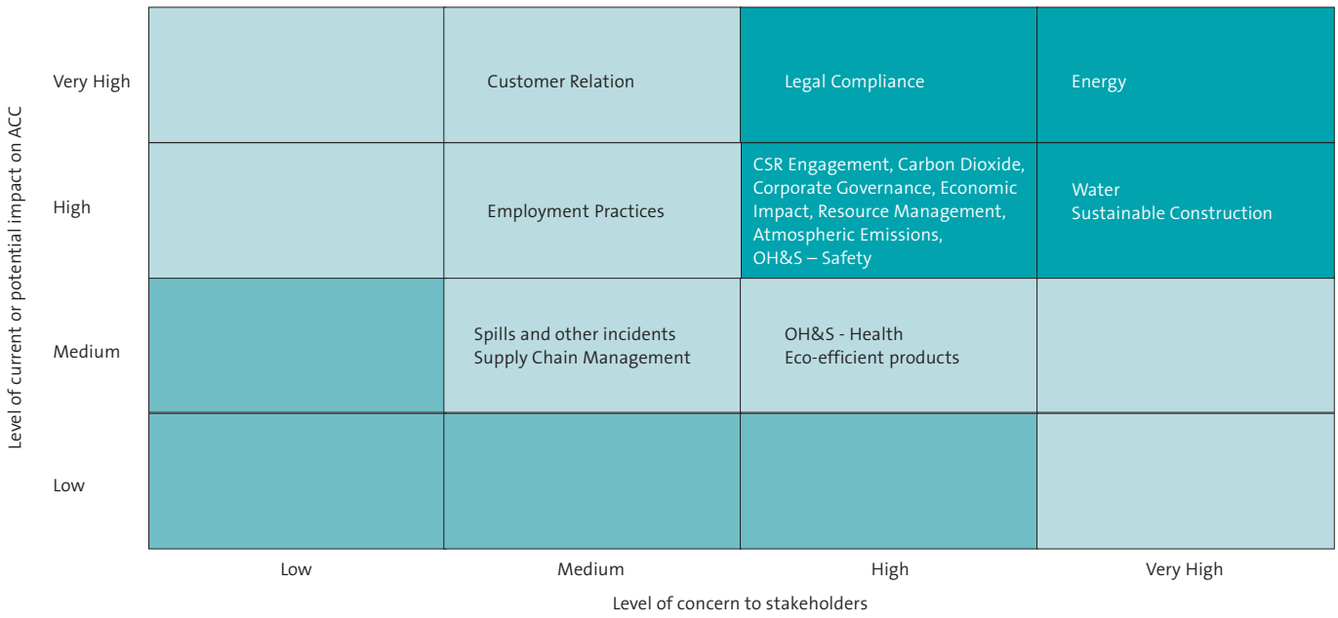
*We look forward to see how ACC evolves over time, in its relationship with external partners, and actual environmental and social performance in India's rapidly developing economy.*

*Shankar Venkateswaran*
*Director*
*SustainAbility in India*

- EEL India Limited – A leading material handling company
- Central Pollution Control Board (CPCB) – A statutory organisation, constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.
- Indian National Cement Workers Federation – Industrial Labour body affiliated with the Indian National Trade Union Congress
- United Nations Development Programme (UNDP)
- Swiss Development and Cooperation Agency.

## Materiality matrix

The survey finally presented the following matrix of themes displaying subjects in terms of the level of concern to stakeholders against the level of their current or future impact on the organisation.




*We expanded the original basket of sustainable development issues of the Holcim group to include Community around Mines and Community Health which were shown in the survey as also being aspects with a significant potential impact on the organisation.*

# 1.5 Institutionalising Sustainable Development

Sustainable Development has become an integral part of the organisation. This was achieved in a few sequential steps. In the first stage, the issues identified in the materiality mapping exercise were linked to specific processes within the organisation and assigned to respective functional heads together with the set of related indicators of the Global Reporting Initiative (GRI) and principles of the UN Global Compact. This was done at the corporate and functional level. In the next step, ownership of the processes was further cemented by integrating it with the company's performance management system.

### Sustainable Development Council

A high level team of executives had been constituted in 2008 to enable effective coordination of the organisation's triple bottom line performance called the Sustainable Development Council or SD Council. It is headed by the Managing Director and comprises representatives from functions relating to the main pillars of sustainable development. In 2009 the SD Council was energised with a fixed calendar of meetings. A core group of the SD Council was also formed made up of six functions at the corporate level and mandated to advise the SD Council from time to time. The core group met 6 times during the year.

In January 2009, Plant level SD Councils were created at each of our plants and the process was strengthened. The total membership of these Councils as of December 2009 is 114 and they include members covering nearly the entire plant organisation. These include a host of departments - Civil, Commercial, Corporate Social Responsibility, Energy and Environment, Alternate Fuel and Raw Materials, Engineering, Finance, Health Services, Horticulture, Human Resources, Logistics, Mechanical Maintenance, Mining, Operations, Power House, Process, Procurement, Production, Safety, Security, Stores and Training.

The external materiality exercise which was carried out late in 2008 by SustainAbility International was discussed at the SD Council meeting in March 2009, when each SD Council member went through the materiality results and assumed ownership of individual processes. The various issue owners then made a detailed business plan for addressing each process for a 4 year

### Our Sustainable Development Organisation

| | | |
|---|---|---|
| **Corporate Level** | **Managing Committee Group**<br>SD Core Group and Company Secretary, Head – OH&S and Chief Internal Auditor | **Corporate SD Council** |
| | **SD Core Group**<br>Chief Knowledge Officer, Director-AFR Business, Head – CSR, Head – Geological Support, Head – Mining Support, Director – Environment | |
| **Plant Level** | **Plant SD Council at each of 12 plants**<br>Director Plant and senior members of Plant Management teams | |

### Materiality Issues & Ownership

| Process / Issue | Process Owner *(by Designation/Function)* |
|---|---|
| Sustainable Development at ACC | Sustainable Development Council |
| Stakeholder Engagement | Head - Corporate Social Responsibility |
| Institutionalisng Sustainable Development | Head - Corporate Social Responsibility |
| Public Policy Positions - Lobbying | Chief Public Affairs Officer |
| Energy( Fossil and Energy Efficiency) | Director - Energy and Environment |
| Energy (AFR) | Director - AFR Business |
| Sustainable Construction | Chief Commercial Officer |
| Water and Waste Management | Director - Energy and Environment |
| Legal Compliance | Chief Executive |
| CSR Engagement | Head - Corporate Social Responsibility |
| Community around Mines | Head - Geological Support |
| Corporate Governance | Chief Internal Auditor |
| $CO_2$ emissions | Director - Energy and Environment |
| Atmospheric Emissions | Director - Energy and Environment |
| Economic Impact | Chief Financial Officer |
| Employee safety | Head - OH&S |
| Resource Management | Head - Mining Support |
| Customer Relations | Chief Commercial Officer |
| Supply Chain Management | Chief Central Procurement Officer |
| Employment Practices | Chief People Officer |
| Employee Health | Chief People Officer |
| Community Health | Head - Corporate Social Responsibility |
| Spills | Director - AFR Business |
| Eco Efficient Products | Chief Project Implementation Officer |

period upto 2013. The challenges, opportunities, goals and execution plan for selected issues are provided in this report in the chapter titled 'The Road Ahead'.

### Ensuring Accountability and Commitment

In a decisive step, ownership of the processes highlighted in the materiality mapping was integrated into individual job descriptions and the company's performance management system. This involved linking the relevant targets of the organisation with individual performance, goals and targets and making these an essential part of our management control system. Sustainable Development parameters and actions were incorporated into the target sheets of senior and top managers of the company, particularly those who were also SD Council members – either at the plant or at the corporate level. This redefined perspective to Sustainable Development made each of the issue owners at corporate and plant level assume accountability for the issue in terms of its implication, interpretation, targets on the issue, their execution, reporting and securing assurance.

### Sustainability Training

In the last year, a large group of management staff in the company has received training in the essentials of sustainable development reporting with internal as well as external faculty.

It began with ACC's Top Management meet held late in 2008, when senior and top management were exposed to the business drivers for Sustainable Development. This was followed up with a workshop to interpret GRI indicators in Sustainability Reporting Guidelines. In a few instances, specialist organisations were invited to provide an understanding on select issues like Human Rights and Biodiversity.

In order to deepen the understanding of GRI at the plant levels, we arranged sustainability training for members of the Plant level SD Councils. By December 2009, 116 members were trained; investing 2392 manager hours of time using GRI certified training material and by GRI certified trainers. Subsequently, the trainees have provided independent feedback to GRI Netherlands so as to retain accountability of the Training activity.

Thanks to the Global Reporting Initiative and its essential materiality mapping exercise, we have successfully enmeshed what seemed to be an onerous and indefinite task of grappling with sustainable development into the folds of our organisation structure, in a manner that embraces nearly the whole team.

## *A Stakeholder's View*

***Capacity Building and Training in Sustainability Reporting***

***The Global Reporting Initiative (GRI) is a network-based organisation that pioneered the development of the world's most widely used sustainability reporting framework.***

***ACC decided to enter into the process of completing a sustainability report using the GRI Framework and in order to enable people down the line to understand the new horizon of Sustainable Development and the reporting process; it chose to conduct GRI Training Programmes across its plant locations.***

***A series of GRI training programmes were conducted by Insight Associates (GRI Certified Training Partner in India) for ACC's multiple plants based personnel across the country in one calendar year. The programmes saw participation of members from the Plant Sustainable Development (SD) council with a mix of people from all the functions. The Programme concludes with an online feedback from participants on the content and quality of the training and the trainers.***

***116 participants successfully completed the GRI Certified Training Programmes given by Insight Associates for ACC. This would help ACC institutionalize the spirit of sustainability into its people over time and I wish them the best.***

***Enrique Torres***
***Training Development Manager***
***Global Reporting Initiative, Amsterdam, The Netherlands***

## *A Stakeholder's View*

***Capacity Building for SD Reporting***

***Insight Associates, have been a part of ACC's SD journey since last one year whilst ACC is trying to bring all its Cement Manufacturing Units under one Sustainability language and practice. We initiated our own journey of imparting training on GRI Reporting Framework with ACC Limited, and we are happy to have been able to help a sincere, forward-looking company such as this, in marching towards its sustainability goals. We have, so far imparted training on GRI reporting framework to nine CMUs at ACC reaching 116 manager. During our training across the nine CMUs, we have been witness to the sincerity, sense of purpose, curiosity to learn and commitment for improvement that its employees, SD leaders and senior management demonstrate across the units.***

***ACC's vision is ambitious and therefore, challenging. While the organisation is on its way forward on its SD journey, its initiatives so far, both in terms of action and reporting, especially on Environmental and Social front are quite appreciable. In view of its vision to be recognized as a leading champion of sustainable development and marching ahead on its journey has laid down a clear road map, encompassing a multitude of wide-ranging programmes with distinct goal, adequate funds and quantifiable targets***

***The cement industry is highly vulnerable to SD scrutiny, owing to its high contribution to $CO_2$ levels, the raw material being exhaustible in supply and the heavy dependence on fossil fuels for processing. These factors make an SD journey challenging and daunting at times. We are confident of the commitment of the management to the journey and we are proud to be a part of their journey, which proved to be learning process for us as well.***

***Sheela Mistry***
***Founder,CEO, Insight Associates,***
***Sustainability Wing***

# 1.6 Sustainability Issues - A Snapshot

Sustainable Development at ACC is rooted in strategic business issues that acquire their importance from the level of concern to stakeholders and their potential impact on the organisation. Here is how we fared on this front in 2009.

| Issue | Highlight | |
|---|---|---|
| Corporate Governance | Fraud Risk Management came into effect. 64% managers attended workshops | Up |
| Economic Impact | Economic value distributed rose by 4.19% over the last year | Up |
| Atmospheric Emissions | While NOx reduced by 8.4%, Dust reduced by 29.5% | Up |
| $CO_2$ | Specific net $CO_2$ emissions from cement production declined by 3.43% compared to previous year | Up |
| Energy | Specific Fuel consumption from cement production declined by 10.18% compared to previous year. About 40 million units of wind power generated during year | Up |
| Eco-Efficient Products | Fly ash consumption rose by 11.6% compared to the previous year | Up |
| Employment Practices | All non management staff constituting around 61% of total number of our employees covered by collective bargaining agreements | Up |
| CSR Engagement | 60027 persons belonging to socio economically weaker sections covered under various community initiatives. Committed to build 160 houses as our disaster response in Karnataka and Bihar floods | Up |
| Legal Compliance | 9415 masons participated in health/safety programmes | Up |
| OH&S –Health | National Family and Welfare Programme, DOTs, HIV/AIDS awareness programme, eye camps, immunization programme, etc organized at our various plant sites during the year | Static |
| OH&S –Safety | 1st August 2009 saw a planned safety shut down of all our plants impacting production. This was a cost to the company taken up in order to impress the paramount importance of Safety to all employees of the company. LTIFR (own and sub contracted employees) declined by 22% compared to last year | Up |
| Resource Management | Exposure to the issue of biodiversity, identification of an IUCN member for mapping this at one of our sites | Up |
| Spills and other incidents | 1 significant spill at our Lakheri plant during the year | Down |
| Supply Chain Management | 8.11% of the supply chain expenditure was spent on purchases within 25kms from plant, | Up |
| Sustainable Construction | Four instances of green buildings were initiated, two of which comprised renovation of existing structures. Cement House became India's first old building to be awarded green building status and received Gold Shield from Indian Green Buildings Council (IGBC). La Residency, a hostel project at Thane is a pre-construction platinum rated LEED project. The other two greenfield projects include a sustainable township at our new plant Kudithini, Bellary and the other is the Central Control Room Building at Chanda plant, the first of its kind for an industrial complex. | Up |
| Water, waste management and transport | Amount of rain water harvested is 73.09% of water extracted from all other sources - increased by 7.5% from previous year | Up |
| Customer Relations | ACC'S Brand Equity Index stood at 5.2 in the Nielsen conducted assessment in 2008, indicating a strong brand in all our relevant markets. | Up |
| Community around mines | Draft Resettlement and Rehabilitation Policy developed | Static |

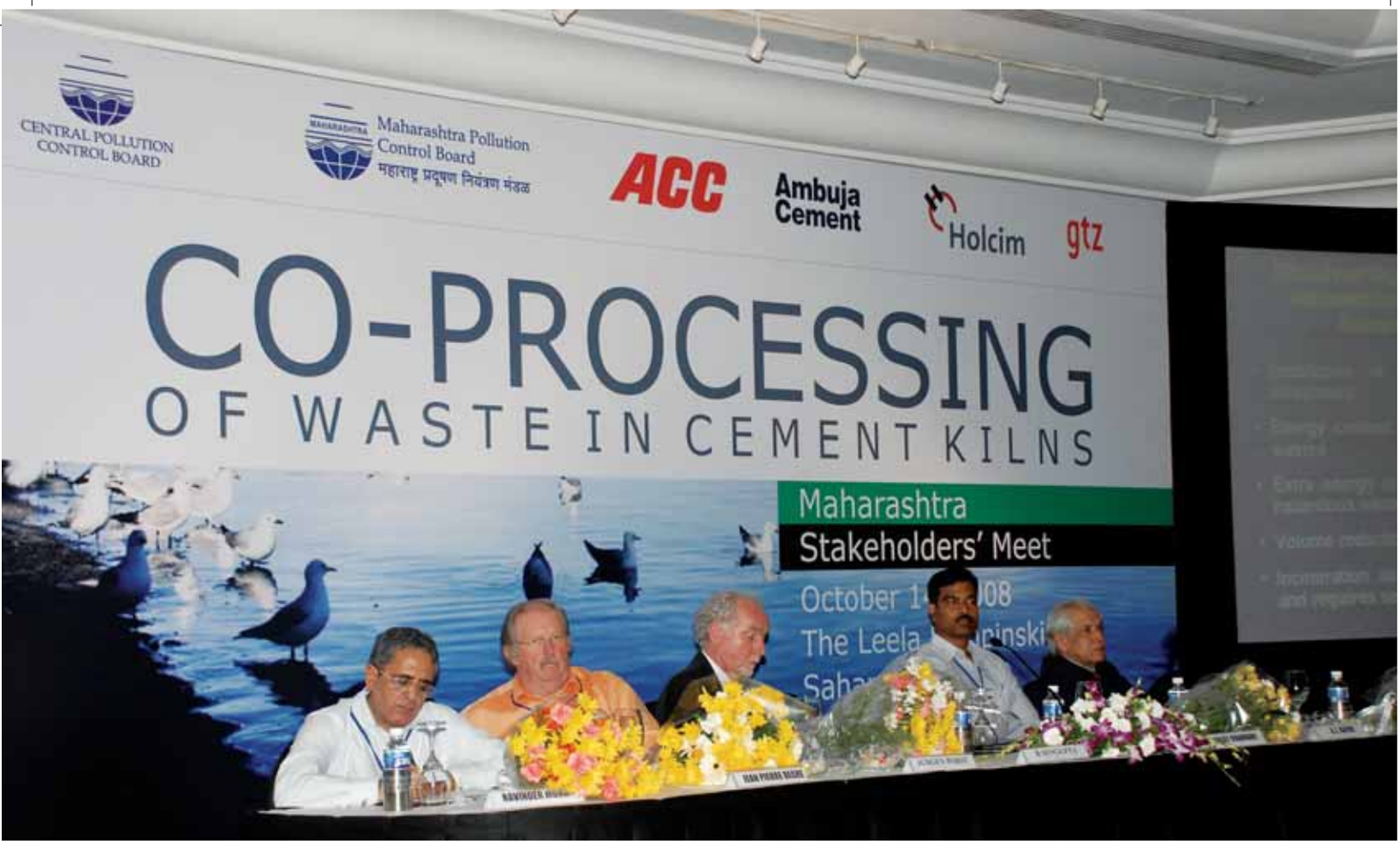
Up Down Static

# 1.7 Stakeholder Engagement

At ACC, we believe that Sustainable Development is an outcome of value creation brought about by multi stakeholder orientation and actions. We are committed to dialogue with the communities living around the locations where we operate and with other stakeholders to provide information about our activities and listen to their concerns. We use different approaches and forums to engage with our stakeholders.

Our stakeholder engagement begins with reporting on our performance and the challenges we face with regard to sustainability issues. It includes mapping stakeholder concerns vis-à-vis impacts on our performance, based on which materiality of issues gets defined for pursuing meaningful action. SustainAbility International who conducted our materiality mapping exercise had made certain recommendations. We have tracked our progress on this during the year.

| Recommendation | Action taken / Next steps |
|---|---|
| **Communication and Engagement** | |
| Simplify stakeholder engagement | We have initiated this by soliciting feedback from stakeholders on the various SD issues |
| **Refine stakeholder sample** | **Stakeholder specific engagements** |
| **Stakeholder** | **Modes Of Engagements** |
| Employees | Engaging for Results surveys, Internal customer Feedback surveys, Union meets |
| Investors | Annual General Body meeting |
| Customers | Dealers' meets, Customer complaint handling system |
| Government/Regulators | Departmental meets |
| NGOs | One-on-one meets with NGOs around plant sites, stakeholder meets for national issues like the NAPCC, engagement with IUCN and its member NGOs |
| Communities | Village Development Committee meets, Community Advisory Panel meets, Self Help group meets |
| Media | Press releases, One-on-one meets |
| Industry Peers | Industry Association meets |
| Academic Organisations | Reporting and disclosure, supporting students meets |
| **Evolve reporting** | **Would be undertaken in 2011** |
| **Simplify and clarify materiality criteria** | **Would be undertaken in 2011** |
| **Management and Performance** | |
| Be more visible | Would be undertaken in 2010 |
| Influence Industry | As observed by SustainAbility in the context of the materiality mapping..... "infact, we do not know of any other Indian cement company that has done so, which is significant for an industry with such wide social and environmental footprint" |
| Extend value chain management | Initiated as regards Resettlement and Rehabilitation aspect of communities near mines |
| Follow up with stakeholders | Initiated as regards Energy (AFR) and CSR. In AFR, 8 stakeholder meets were organized during the last four years, while in CSR 75 Community Advisory Panel (CAP) meets have been organised |
| Integrate stakeholder engagement into core business | Capacity building of SD Councils initiated so as to prepare them for this integration. About 2392 manager hours of training imparted during the year |
| Set Targets | Process has been initiated and would be reported in 2011 |
| Facilitate Comparison | Internal exercise on benchmarking has been carried out |
| Strengthen Assurance | Being undertaken through this report |
| Clarify Corporate Governance and SD | Initiated through the Performance Management System, where SD performance is a part of the targets of SD Council members numbering 114 senior managers |




## Case study – Waste Management

### Engaging Stakeholders

Our AFR (Alternative Fuels and Raw materials) group which conducts a form of Waste Management is in a business, in which developing and maintaining strong relationships with stakeholders is of prime importance. The AFR group engages with internal and external stakeholders in a continuous process of interaction. Employees and workers make up internal stakeholders while the external group comprises regulatory authorities, waste generators and the communities around our Plants. In the past four years, 8 stakeholder meets were organized in different states in association with the respective State Pollution Control Board (SPCB) officials, CPCB, GTZ and Holcim. We are also regularly organizing ISHA (Internal Stake Holders' Alignment) meets to align our internal stakeholders with the challenges and concerns of AFR Business.

ACC's AFR team has made presentations in more than 150 interaction forums and seminars all across India to create awareness about co-processing technology. To facilitate statutory acceptance of this technology for managing Hazardous Wastes, ACC has worked jointly with CII, CMA, FICCI and ASSOCHAM for inclusion of co-processing as an environmentally sound technology in the new Hazardous Waste (management, handling and trans-boundary movement) Rules, 2008.

### *A Stakeholder's View*

***ACC has been in the forefront of sustainable development as early as 1995.***

***ACC has been an active member of the TERI-BCSD (Business Council for Sustainable Development) India. In addition to its active participation in the Stakeholder Discussion Forums to promote a Cement Sustainability Initiative (CSI) in India, it also championed along with five other member companies of the Business Council a Corporate Action Plan on Climate Change complementing the Government of India's National Action Plan on Climate Change (NAPCC). Mr Sumit Banerjee led the Task Force focusing on the business role in the National Solar Mission and National Mission for Enhanced Energy Efficiency. Under his leadership, the task force undertook an in-depth review to come up with a vision and long-term agenda for businesses, under these two national missions. This resulted in complementing the ministerial efforts in developing plans of action under each national mission and was brought out in the form of a white paper on a "Corporate Action Plan on Climate Change".***

***In its long association with ACC, TERI has found its management to be deeply committed to the cause of sustainable business practices and issues for social progress. ACC displays a strong sense of accountability and performance orientation. Further it has also supported the DSDS, (Delhi Sustainable Development Summit), a forum where policy makers engage to come out with strategic inputs to stakeholders including Governments.***

***Annapurna Vancheswaran***
*Director-Sustainable Development Outreach*
***The Energy and Resources Institute***

# 1.8 Corporate Governance

ACC's philosophy is embedded in a rich legacy of fair business dealings and ethical practices most of which were in place even before they were mandated for listed companies. This strong sense of values and robust business practices makes ACC a much respected name in the Indian corporate world. The Company has complied with the requirements of Corporate Governance as laid down under Clause 49 of the Listing Agreement with the Stock Exchanges.

***ACC's Audit Committee was awarded the Best Audit Committee Award 2008 by the Asian Centre of Corporate Governance & Sustainability and Indian Merchants' Chamber***

### Governance & Organisation Structure

ACC is a professionally managed company that functions under the overall strategic supervision of the Board of Directors. In 2006, the organisation structure was reorganized into three autonomous geographical regions namely North, East and South-West each defined with profit accountability and decentralised decision-making. The overall management structure headed by the Managing Director incorporates strong support functions at the corporate level.

### 1. Board of Directors

The ACC Board functions in a democratic style and plays a pivotal role in ensuring good governance. Members are free to bring up any matter for discussion at Board Meetings with the permission of the Chairman. The role, functions, responsibility and accountability of the Board are clearly defined. In addition to its primary role of setting corporate strategies and goals and monitoring corporate performance, the Board directs and guides activities of the management towards the set goals and seeks accountability with a view to create long term sustainable growth that translates itself into progress, prosperity and the fulfilement of stakeholders' aspirations. It also sets standards of corporate behaviour and ensures compliance with laws and regulations.

### 2. Committee of Directors

The Board has constituted four committees viz. Audit Committee, Compliance Committee, Compensation Committee and Shareholders'/Investors' Grievance Committee each of which has been mandated to operate within a given framework.

### Audit Committee – (Constituted in 1986)

This committee acts as a link between the statutory and internal auditors and the Board of Directors. Its terms of reference are as per the guidelines set out in the Listing Agreement with the Stock Exchanges read with Section 292(A) of the Companies Act, 1956. These broadly include approval of Annual Internal Audit Plan, review of the financial reporting system, internal control systems, discussions on quarterly, half yearly and annual financial results, interaction with Statutory Internal & Cost Auditors, recommendation 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 Chief Internal Auditor, significant related party transactions. The Audit Committee comprises of 4 non-executive directors. 3 of them are independent. The Company has framed the Audit Committee Charter for the purpose of effective compliance of Clause 49 of the Listing Agreement. The Audit Committee has put in place a self assessment process for assessing its performance. The process, set up in 2009, has a set of questionnaire grouped into the following themes developed to obtain feedback from its members:

- Audit committee composition, structure and meetings
- Understanding the Business and Risk management
- Overview of Financial Reporting Process
- Internal Control over Financial Reporting
- Overview of the Internal and External Audit

The Audit Committee's self assessment for the years 2008 and 2009 has been carried out and the results along with action plans have been duly submitted to the Board of Directors.

ACC's Audit Committee was awarded the Best Audit Committee Award 2008 by the Asian Centre of Corporate Governance & Sustainability and Indian Merchants' Chamber. According to the citation, "the Committee has not only adopted international best practices but has also created its own benchmark that can be emulated by other Audit Committees".

### Shareholders' / Investors' Grievance Committee - (Constituted in 1962)

This committee deals with various matters that concern the Company's shareholders and investors relating to the following:-

- 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 dematerialised and all other related matters,
- monitoring expeditious redressal of investors' grievances,
- Non receipt of Annual Report and declared dividend,
- All other matters related to shares / debentures.

### Compensation Committee – (Constituted in 1993)

The terms of reference of the Compensation Committee, inter alia consist of reviewing the overall compensation policy, service agreement and other employment conditions of the Managing Director with a view to retaining and motivating the best managerial talents. In determining the remuneration package of the Managing Director, it evaluates the remuneration paid by comparable organisations and thereafter makes its recommendations to the ACC Board in this regard. The committee also reviews the performance of the Managing Director and recommends to the ACC Board the quantum of annual increment/ performance incentive. The Compensation Committee also monitors the implementation of existing Employees' Stock Option Schemes.

### Compliance Committee (Non Mandatory – Constituted in 2008)

The Compliance Committee was constituted to regularly review the status of Company's Compliance with various Laws and Regulations as well as to understand the implications of major legislative and regulatory developments that may significantly affect the Company, and report the same to the Board. It reviews the Company's readiness to comply with Competition Law and also monitors the developments in important legal cases.

### 3. Managing Committee

This Committee comprises Managing Director and other senior executives who look into the implementation of strategic policies laid down by the Board, business processes and day-to-day operational activities of the Company.

### Organisational status of internal audit department

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

### Clarity of roles and responsibilities at function level

All heads of major functions like purchasing, finance, human resources, projects etc report directly to Chief Executive Officer thereby ensuring independence and proper segregation of duties (SOD).

### Code of Business Conduct & Ethics

We have a Code of Business Conduct & Ethics which clearly mentions behaviorus expected of individuals and actions to be taken in case of non-adherence. 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.

### Disclosures as per statutory requirements

- Under the Companies Act in respect of Directorships of Directors in other companies.
- Disclosure of transactions with companies in which a Director is deemed to be interested as per relevant laws.
- Disclosure of shareholdings in the Company by Directors
- Disclosure by Directors of memberships held by them in Committees of other companies

### Adequate segregation of duties at process level

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

Information on how the Company protects itself against the risks of frauds and corruption are described later in this report in the chapter titled Fair Business Practices. More details of the Company's governance and composition of the Company's Board of Directors is available on the Company's website at www.acclimited.com.

# 1.9 Legal Compliance

ACC as a corporate through its policies has always strived to ensure compliance. Business risk assessment and management is pursued on a continual basis in the Company. Risks are monitored through internal control systems, accounting procedures and policies at all locations.

When the Competition Act was on the threshold of being implemented, we thought it proper to learn and internalise the principles of Competition Act through our **Value Creation in Competitive Environment** (VCCE) programme. This involved the circulation of Manuals to enlighten the managerial staff about intrinsic provisions of the Competition Act and to encourage and advocate the spirit of free competition which is at the very core of the Act.

The basic objectives of the VCCE programme were

- To ensure that ACC and its employees respect the laws of Fair Competition.
- To create understanding of the legal framework (Competition Law) and an adaptation of current agreements & practices (where required).
- To train all relevant personnel to achieve this goal.

To achieve these objectives, the following steps were taken.

- Awareness sessions were conducted at all units and locations
- Manuals were circulated to all management staff
- A copy of the manual was put up on the internal portal
- Broad guidelines were issued to avoid any conflict with the Competition Act.
- New recruits in the Company are also being continuously made aware of this during their induction programmes.


# Economic Performance

*Cement is perhaps the most important construction material - it builds the foundations of economic activity. It is an essential ingredient in building and enhancing the country's infrastructure which plays an influential role in improving the quality of life of the communities we serve. We are deeply conscious that our economic performance has direct and indirect impacts on all our stakeholders, including employees, local governments, non-profit organisations, customers, suppliers, and the communities in which we operate.*

*In contributing value to society, our activities also create other economic impacts such as advances in innovation or the economic effects of changes in the locations where we operate. As our own operations grow, the activities of our stakeholder groups also progress creating value to the local and national economy. The rise in the level of our operations has also enabled increased job creation in our value chain by our suppliers, distributors, dealers, contractors and customers.*

*We make continuous efforts to ensure that our supply chain exhibits manufacturing and sales excellence. We aim to seek the participation of our key stakeholders in implementing our agenda for sustainable development.*

# 2.1 Economic Impact

ACC strives to be a trusted partner and create value for all its stakeholders.

Being in the construction material industry, ACC's contribution to the economic growth of India is significant. Apart from the direct impact that may be attributed to the Company's operations, its consumption fuels downstream economic growth from construction, infrastructure development and from subsequent use of infrastructure.

Suppliers are major players in our value chain and during the year our consumed supplies stood at Rs. 4884 crores ( up by 2% compared to last year). The payment to Government by way of taxes rose by 31%. Our Net Sales (including other operating Income) rose sharply by 10% indicating downstream economic activity that this would naturally catalyze.

Energy is significant to our operations and has a direct bearing on the topical issue of climate change. As a responsible Company we are continually in the quest for alternate and renewable energy options. Indeed we invest in these pursuits to secure our future and that of society. **During the year, we invested Rs. 11.52 crores to commission a wind energy farm in Maharashtra.**

Our commitment towards building a strong foundation based on sustainable growth is demonstrated by measures to pursue the abatement of Greenhouse Gas (GHG) emissions by seeking continuous improvements in thermal and electrical energy efficiencies, promoting the utilization of alternative raw materials and alternative fuels, continuous up-gradation of technologies, conservation of natural resources by being the largest users of environmentally hazardous by-products of steam based captive power plants (fly ash) and steel plants (slag) to manufacture blended cements.

Under direct economic impacts our payments to suppliers increased by around 2%, Payment to Government by way of taxes increased by 31%. Our Net sales (including other operating income) rose sharply by 10% indicating growth and a larger population we are now touching.

**EC1: Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.** Please see table below

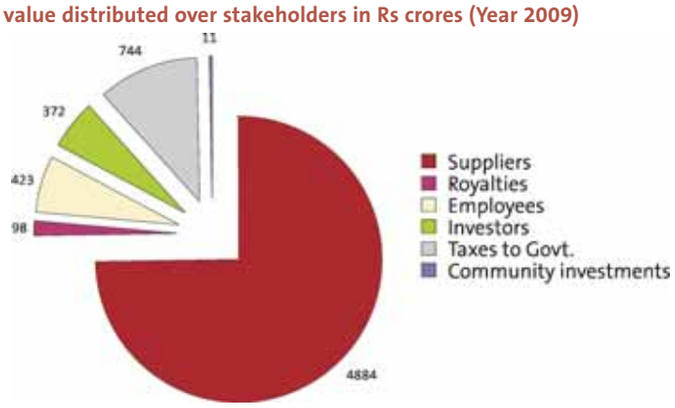
**EC2: Financial implications and other risks and opportunities for the organisation's activities due to climate change.**

**Comparative analysis of Economic Indicators (Quantitative data in rupees crore)**

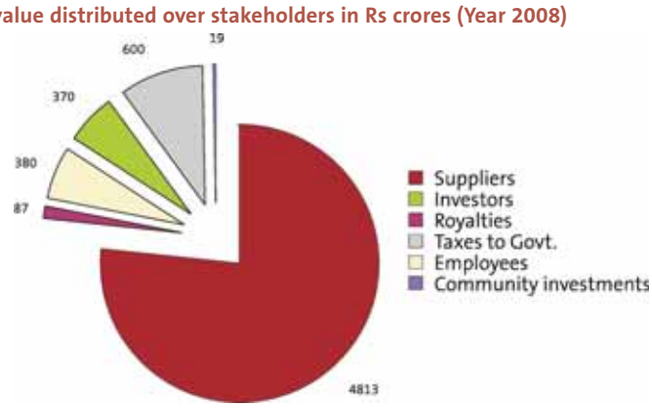
| | 2009 | 2008 | Difference |
|---|---|---|---|
| Suppliers | 4884 | 4813 | 71 |
| Royalties | 98 | 87 | 12 |
| Employees | 423 | 380 | 43 |
| Investors | 372 | 370 | 2 |
| Taxes to Govt. | 744 | 600 | 144 |
| Community investments | 11 | 19 | -8 |

Safety expenditure was included under community investments in 2008 but omitted from this category in 2009 due to a change in internal reporting practice. Hence the numbers are not strictly comparable.

**Economic value distributed over stakeholders in Rs crores (Year 2009)**




**Economic value distributed over stakeholders in Rs crores (Year 2008)**



The financial implications of risks and opportunities for the organisation's activities due to climate change have come to occupy an important place in our approach to business. Energy conservation and improvisations have been priority targets.

We recognize that climate change is the most important environmental issue facing the planet. Its physical effects, along with regulations designed to mitigate it, will have a measurable impact on communities and businesses all over the world. We are committed to understanding and responsibly managing the regulatory and physical impacts of climate change on our business.

We want to be in the forefront of change in the climate change movement and are involved in the TERI BCSD India Draft Corporate Action Plan on Climate Change developed as a part of the National Action Plan on Climate Change announced by the Government of India.

### Our performance

We are pioneers in the production of blended cements and are the largest users of fly ash and slag in the country. Fly ash, a waste generated by coal fired thermal power plants, is used to produce Portland Pozzolana Cement (PPC). Slag is generated by steel and aluminum Industries as a by-product and used to produce Portland Slag Cement (PSC). Both these varieties of cement help replace mineral components, significantly. Both the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol have recognized the initiative of utilizing fly ash and slag in Cement production to make PPC and PSC as $CO_2$ reducing initiatives and our project of fly ash utilization in cement manufacturing is registered as Clean Development Mechanism (CDM) Project.

Our Wind energy farm of 9MW capacity at Madukkarai has also been registered as a CDM project in September 2009.

Since 2005, we have been monitoring and reporting our carbon dioxide ($CO_2$) emissions in an effort to measure our direct and indirect impacts. Our performance in reduction of $CO_2$ emission. Refer to Chart 1.

| | 2007 | 2008 | 2009 |
|---|---|---|---|
| $CO_2$ per tonne of clinker | 846 | 847 | 844 |
| $CO_2$ per tonne of OPC equivalent cement ** | 894 | 886 | 806 |
| $CO_2$ per tonne of cementitious material | 581 | 571 | 552 |

**(Wadi I Plant is treated as the ACC representative number). Above numbers are excluding on site power generation

The numbers reflect our commitment to the GHG gases abatement by continuous improvement in thermal and electrical energy efficiencies, promoting the utilization of alternative raw materials and alternative fuels, continuous upgradation of technologies and many more activities towards sustainable growth.

We have taken up our target for the year 2010 vide a pilot project through consultants to understand and describe significant Indirect Economic Impact due to our business by measuring the count of people in our supply chain, improvements in the living standards in and around units and trends in disposable income.

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

### Employee benefits

**a) Defined Contribution Plan:**

We have a defined policy regarding contribution to Officer's Superannuation Fund, Employees, State Insurance Corporation Scheme where applicable and Labour Welfare Fund. Employees have also been given one time option to opt for cash-out facility under Officers' Superannuation Fund.

**b) Defined Benefit Plan and Other Long Term Benefit:**

Retirement benefits in the form of 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 are determined using the projected unit credit method as at Balance Sheet date. Actuarial gains / 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 for separations under the Voluntary Retirement Scheme are charged to the Profit and Loss Account immediately.

### EC4 : Significant financial assistance received from government

During the year 2009 the Company received excise duty exemption on cement at Gagal Plant I and II and it received 80IC benefits at Gagal Plant I . It also received the sales tax (VAT) benefits at Wadi which is likely to be exhausted in Q1 2010.

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

We understand that as an essential construction material, cement is a commodity that builds the foundations of economic activity. We are deeply conscious that our economic performance has direct and indirect impacts on all our stakeholders, including employees, local governments, non-profit organisations, customers, suppliers, and the communities in which we operate.

In contributing value to society, our activities also create indirect economic impacts such as advances in innovation or the economic effects of changes in the locations where we operate.

The rise in the level of our operations has also enabled increased job creation in our value chain by our suppliers, distributors, contractors and customers. The product we make is an essential ingredient in building and enhancing the country's infrastructure which plays a direct effect in improving the quality of life of the communities we serve.

We have taken up a pilot project with the help of reputed external consultants to understand the financial implications, risks and opportunities due to climate change on ACC.

# 2.2 Customer Relations

ACC recognizes that a satisfied customer is a pre-requisite to win in the marketplace. We therefore strive to excel in customer engagement through various initiatives and programmes

### Value Chain Excellence

Value Chain Excellence (VCX) is an organisational transformation initiative to create excellence within the value chain aiming at customer happiness with sustainable growth. It is not about cost cutting, but aims at optimizing costs, improve service levels, improve perceived benefits to customers and add value all along the supply-chain. The programme was launched in the year 2008. High performing individuals were identified from the logistics teams to be trained as VCX coaches, and thereafter execute improvement projects in the area of logistics. Each coach took up projects and worked out an implementation plan for them. Training and Brain storming Academies were held to roll-out the projects across different locations. Some of the important projects undertaken included:

1. 2X2 matrix – It is a concept of maximizing the contribution in high market share areas by reducing cost to serve.
2. COP (Centralized Order Processing) – To centralize the order booking process for an entire Sales Unit (SU) at one location to increase firing ratio, with a view to reduce costs.

### Customer Complaint Handling System

ACC has an online customer complaint handling system which is designed to log quality complaints received from consumers. This activity of logging of consumer complaints is undertaken by the customer service personnel from the Sales units. The information entered are batch number, week number, site details, nature of complaint, dealer details etc. Based on the nature of complaints, suitable corrective actions are taken and details are logged back into the system.

The system has been upgraded to have a linkage with the plant if the complaint is related to quality issues at plant. Complaints related to plants are recorded and forwarded to plants for corrective action. Plants are required to take corrective action depending on the nature of complaint and the action thus taken is also fed into the system.

We plan to further upgrade the system, whereby customers can enter their complaints online. It is also planned to have an independent feedback process to check the satisfaction levels of the consumers about the service and solution offered for their complaints.

### Lakshya-II

Lakshya is an online dealer loyalty

programme for ACC dealers. This was launched in year 2007 and has been highly popular and appreciated by the dealers. **This was a first of its kind in the cement industry.** Under this programme, a dealer accumulates points based on their performance as against targets. The accumulated points can be redeemed by the dealer against purchase of any items listed on the Lakshya website. A wide array of items is listed for selection by dealers - from items as small as a mixer to those as large as passenger cars.

Under Lakhsya-II the point accumulation is based on sales revenue, rather than the sales volume of the dealer. The website has also been made more user-friendly and customizable. The dealer can load their pictures and share their experiences with other dealers on this website. A lot of interest has been aroused among the families of our dealers, who are able to track the points accumulated on the internet from their homes.

### Customer Service Excellence

Customer Service Excellence (CSX), is an initiative targeted to improve our relationship with Influencers. This has been currently rolled out in Eastern India. Masons, Contractors and Engineers are key influencers, who play an important role in the brand decision for cement. Currently ACC is in the process of mapping the entire influencer community. The attributes being taken are tracked on two factors i.e. relationship with brand ACC, potential to influence. Thereafter action plans would


be developed to improve the relationship with all high potential influencers.

### EN27: Percentage of products sold and their packaging materials that are reclaimed by category.

In the last quarter of 2009, ACC commissioned two new grinding units at Thondebhavi and Kudithini in Karnataka. These units will further open up opportunities to supply cement in bulk tankers to large buyers who have the facility of handling bulk. ACC has been promoting usage of cement in bulk, as it does away with packaging and is more convenient for large buyers. In 2009 we handled 960,000 tonnes of bulk cement. Further, the company also explores the possibility of using bio-degradable paper bags for packing cement - during the year 6, 11,552 paper bags were consumed.

### PR5: Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.

ACC conducts Channel satisfaction survey and Brand Equity measurement on a national basis every 2 years. These researches were carried out in 2008 independently by The Nielsen Company. In cement category the market dynamics demand a measurement cycle of 2 years to see some trends at the national level and ACC follows this.

The Channel satisfaction is measured through a eQ score where ACC's score was reflective of a good performance, across its channel partners, namely wholesale and non wholesale dealers.

Our brand performance is measured through the Brand Equity Index. The index performance reveals that ACC is a strong Brand. In fact ACC's brand equity was found to be the strongest among its key competitors and higher than that for consumer durables, which is considered exceptional for a product like cement.

In year 2010, we would be again conducting this research. During year 2009, Brand researches were conducted in specific markets wherein ACC had expansion plans i.e. Karnataka and Eastern Maharashtra. In most of these markets, the Brand Equity Index showed a strong brand performance improvement.


**ACC Help Centres**


**ACC Help Vans**


**ACChelp.in**

**ACC Help Literature**

# 2.3 Supply Chain Management

The year 2009 was filled with various initiatives taken to make the Company's Central Procurement the best in the cement industry and aim to become a world class procurement organisation. In order to do this, we have implemented several of the best practices in procurement of the Holcim group.

To facilitate deeper involvement of all internal stakeholders at the organisation level a project titled "Project: Procure" was sponsored with the formation of a top level steering committee along with the project team. Following five streams were constituted under "Project: Procure"

1. Organisation
2. Process
3. Sourcing
4. Reporting
5. Supplier Relationship Management

### What is Procure!

Procure! is a Standard Methodology from HGRS Corporate Procurement which is designed to implement the effective and efficient Procurement Organizations in the Holcim Group.

Procure! consists of 5 main work streams: Organisation, Sourcing, Process, Supplier Relationship Management (SRM) and Reporting and is conducted in 5 phases: Preparation, Analysis and Scoping, Implementation, Rollout and Certification.

As of March 2008, Corporate Procurement has successfully implemented Procure! projects in 23 operating companies.

### Purpose of Procure

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

- Align the evolution of the procurement function
- Standardise business processes
- Optimise ERP usage
- Support a strong local platform to manage suppliers and ensure lowest total cost of ownership

It started off with a one week workshop conducted by experts from Holcim for commodity heads and plant procurement managers for awareness of world class methodologies and process adopted by our Holcim group companies. A separate one week workshop for Supplier relationship management was also conducted. This was followed by a series of workshops and teleconferences with internal stakeholders.

Holcim has instituted procurement "Project: Procure" Certification for all operating plants. Periodical assessment is done by HGRS group for certification of each plant.

Two of our operating units were taken up as pilot plants for the implementation during 2009. The roll out of this implementation shall take place in three of our operating units during the year 2010. We aim to complete it in rest of the locations in a phased manner by 2012.

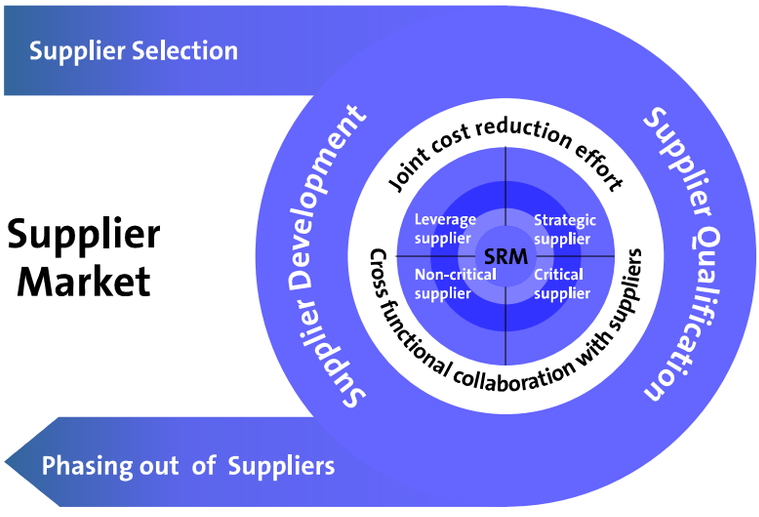
We had also initiated multi faceted action plans to improve the robustness of the supplier master which is very vital for effective implementation of Supplier Relationship Management (SRM).

### Integration of CSR, Occupational Health and Safety (OH&S) with Procurement Operations

A standard questionnaire on CSR and OH&S is sent to suppliers while seeking requests for quotation (RFQ) in which appropriate clauses have been incorporated based on the nature of order. It is mandatory for new suppliers to provide these details.

### HR2: Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken

Some of the suppliers were assessed




1 Robust Induction process for New Vendors after due consideration of three aspects

a. Being a better supplier as compared to the existing ones
b. Logistically advantageous supplier at the operating locations
c. Consideration of inadequacy of suppliers for a given commodity to bring in competitive edge among suppliers

2. Review of existing supplier base in terms of identification of Inactive/Redundant cases and improve the content as well as quality of data
3. Synergize the supplier master with relevant referential data besides keeping the master data.

during performance evaluation of top spend suppliers. However the formal assessment through questionnaire / visit to supplier premises shall begin in 2010.

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

Definition of Local Suppliers: For this purpose all Suppliers operating from within the Indian Territory (National Suppliers) are treated as local suppliers.

**We define Local Suppliers as all suppliers located from within the Indian territory**

| | |
|---|---|
| Total spend on suppliers during 2009 | Rs. 6563 Crore |
| Total Spend on national Suppliers (Called Local) | Rs. 5874 Crore |
| % share of spend on local suppliers to total | % 89.5 |

The total spend on suppliers excludes an amount of Rs. 171 crore transacted across group and associated companies.

Also, wherever viable, our plants encourage vendors located in the proximity of our plants.

# 2.4 Eco-Efficient Products

ACC has been a pioneer and trend setter in the manufacture of Eco-Efficient Cements such as Portland Slag Cement (PSC) and Portland Pozzolana Cement (PPC). Blended cements such as these consume less non-renewable raw materials like limestone and utilise industrial waste materials namely slag, fly-ash generated from other industries. These eco-efficient cements have a lower carbon footprint. They replace a proportionate part of clinker which is produced from limestone and hence reduce the intensity of mining thus conserving mineral resources. Simultaneously since less clinker is produced there is proportionate reduction in the emission of $CO_2$ which is produced in the combustion process.

ACC is the highest producer of blended cements in the industry. In the year 2009 ACC utilized over 6.5 million tonnes of alternative materials consisting of marble slurry, chemical gypsum, granulated slag, fly ash, lime sludge, chemical sludge etc. In the year 2009 ACC has increased the consumption of alternative raw materials by 45% compared to the year 2008. To achieve the above, considerable R&D work was done inhouse, without comprising on the quality and strength of cement.

ACC commissioned two ultra modern cement grinding plants in Karnataka in the year 2009 which will produce fly ash and slag based cements. Thus many initiatives are taken to increase production of eco-efficient products which will reduce the impact on environment.

***"Our company is converting waste of other industries into useful products thus acting as cleaners in Industrial Ecology analogous to the role of Bio-cleaners in the Natural Eco-System"***

**EN1 : Materials used by weight or volume**

| Raw Material | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| Limestone | Million Tonnes | 19.166 | 19.290 | 19.135 |
| Gypsum | Million Tonnes | 1.113 | 1.13 | 1.075 |
| **Raw Material (Recycled waste material)** | **Unit** | **2009** | **2008** | **2007** |
| Alternative Raw Materials | Million Tonnes | 0.257 | 0.178 | 0.164 |
| Slag | Million Tonnes | 2.06 | 1.977 | 1.858 |
| Fly ash | Million Tonnes | 4.456 | 3.986 | 3.535 |
| **Additives** | **Unit** | **2009** | **2008** | **2007** |
| Additives | Million Tonnes | 2.096 | 2.002 | 1.863 |
| **Associated materials** | **Unit** | **2009** | **2008** | **2007** |
| Lubricating Oil | Tonnes | 1102 | - | - |
| Grease | Tonnes | 209 | - | - |
| **Packaging Materials** | **Unit** | **2009** | **2008** | **2007** |
| Weight of Bags Consumed | Tonnes | 29094 | - | - |

# Environmental Performance

***Environment Policy***

*Our commitment is to continuously improve our environmental performance and provide positive contributions to our business.*

*"Quarry to Lorry" is a motto that encapsulates our concern for environmental conservation. It is integrated into all activities of our value chain. Environment management has always been an essential and distinct function in the company's organisation structure. We continue to implement various initiatives to conserve natural resources and to prevent pollution.*

- *Our activities begin with adopting clean mining techniques, development of green belts and rehabilitation of used mines to conserve precious mineral and land resources.*
- *Energy is a prime concern. We have made significant strides in attaining energy efficiency through our captive power plants and the pursuit of building our capacities in clean renewable energy sources.*
- *We have expanded the use of waste materials generated by other industries as alternative fuels and raw materials, thus partnering with society to effectively address its waste management issues.*
- *We continue to be leaders in the manufacture of environment-friendly blended cements and are the largest users of waste fly ash and slag in the country.*
- *We seek better ways to manage our water resources efficiently.*
- *We have made marked improvements in the control of greenhouse gases (GHG) and atmospheric emissions and related environmental parameters in and around our plants and mines.*
- *We lead the industry in the race to reduce CO2 emissions. Our performance is seen by independent sources to be best in class and perhaps a global benchmark.*
- *We invest in modernization and upgrading technologies of our plants to enhance their efficiency, conserve energy and control pollution.*
- *We support the cause of sustainable construction and have implemented four unique green building projects - two of them decisively prove that old buildings can also be renovated to conserve energy and water.*

# 3.1 Cement Industry Sustainability Overview

India's cement industry is the world's second largest after that of China. Even as most of the global economy struggled to recover from the downturn that set in two years ago, the Indian cement industry sustained steady growth of 10.3 per cent in 2009, directly proportional to the growth of the national economy. Overall cement despatches in 2009 were about 195 million tonnes, up from 177 million tonnes in 2008. Demand for cement grew in all regions of the country, led significantly by rapid developments in infrastructure development and a generally stable housing sector. We expect that prospects for the cement industry will continue to be encouraging in the next decade, with a steady growth impetus of 9 to 10% in 2010 and in the near future, aided by the government's continued thrust on infrastructure and an expanding rural economy. Per capita consumption of cement, a good indicator of economic development, is presently about 170 -180 kilograms in India, way below the global average of 400 kilograms.

The critical challenges before the industry are securing uninterrupted, dependable and adequate supply of energy, major raw materials such as limestone, coal, slag and gypsum, transport and logistics. Apart from this, the industry has to deal with a very high incidence of taxation as compared to the cement industry in other countries.

### Positive Response to Climate Change

The Indian cement industry is being recognized for efforts in lowering its carbon footprint. These include measures such as promoting green cement, modernization and adoption of new technology, process improvements, steps to achieve greater thermal and electrical energy efficiency, the pursuit of renewable energy, alternative fuels and raw materials, optimizing transportation costs and leads and striving for cost-competitiveness. Two recent independent studies record the achievements of the Indian cement industry in terms of its track record in key parameters of sustainable development.

Centre for Science & Environment (CSE), India's leading environmental NGO, has published a report titled "Challenge of the New Balance" which reveals comparative details of the energy and emissions profile of six sectors of Indian industry including cement which account for the largest share of the country's carbon dioxide emissions.

Another study concluded almost concurrently titled "Low Carbon Roadmap for Indian Cement Industry" was published by the CII- Sohrabji Godrej Green Business Centre of the Confederation of Indian Industry in May 2010. The objective of the study, as suggested by its title, is to create a roadmap for the cement industry to achieve a target of 20% reduction in its greenhouse gas emission intensity. In doing so, the report has compiled and compared the current performance of leading cement companies in terms of their thermal and electrical energy consumption, production of blended cements and specific emissions.

Both studies affirm that the Indian cement industry is among the world's most energy efficient and has the lowest emissions in the world, enabled mainly by the high share of blended cements. In both independent studies the performance of ACC is seen to be markedly better than other cement companies in the country in terms of the share of blended cements, energy efficiency and specific emissions per tonne of cement.

### Blended cements

Notable among the industry's measures to reduce $CO_2$ emissions is the production of blended cements, namely Portland Slag Cement (PSC) and Portland Pozzolana Cement (PPC) that are made by inter-grinding clinker (an intermediate product) with cementitious materials such as slag and fly ash generated as waste by-products. Ordinary Portland Cement is made by inter-grinding 95% of clinker with 5% of gypsum. The production of clinker is a carbon-intensive process. In blended cements, some part of clinker is replaced with cementitious materials such as slag and fly ash. While PPC can use about 35% of fly-ash, PSC can be made with as much as 65% slag. Blended cements have certain properties that enable them to offer added advantages to concrete in terms of durability as compared to ordinary cements. The manufacture of blended cements has a combined favourable impact on the environment by conserving limestone (a mineral resource) and by reducing the production of clinker which in turn directly reduces $CO_2$ emissions.

ACC has been a pioneer in the manufacture and promotion of blended cements. Today nearly 90 % of ACC's production is made up of blended cements, well ahead of the industry average of 75 %.

### Fly ash & Slag

Slag is obtained as a waste by-product from the manufacture of steel. Most of the slag made in the country is utilized in cement manufacture. Fly ash is a waste pollutant obtained from the combustion of coal in thermal power plants. Barely 20% of fly ash generated in the country is productively re-channeled, most of which is used by the cement industry.

Government announced a new policy on fly ash in November 2009, which brought to an end a ten year old directive to thermal power plants to provide fly ash free of cost to users with minimal handling charges. The new notification is meant to promote the usage and disposal of fly ash in India so as to minimize its polluting effects. The cement industry is the principal productive user of fly ash and has made considerable investments to install facilities for the collection, handling, storage and transport of this material, which is a vital input for blended cements. The industry is justly concerned about the implications of this new policy on the supply and price of fly ash.

### Energy

The manufacture of cement is an energy intensive process requiring larqe quantities of thermal and electrical energy. Coal is the principal fuel for thermal energy. The industry has invested considerably in establishing captive power plants, mostly thermal based which meets about 50 to 60% of its power requirement. In the case of ACC, our captive power plants generate three fourth of our total energy requirement. Some companies including ACC have a small share contributed by wind energy farms.

### Coal

Coal is the major fuel for the cement industry. Domestically it has continued to be in short supply, leaving cement manufacturers to source their requirements from the open market and from imports. ACC and a few other cement companies were able to secure allotments of coal blocks for captive mining. But this forms only a small part of the total requirement. It will take a few years before these deposits are proved and begin to yield coal supplies. Overall the uninterrupted supply of coal will continue to pose serious concerns as the industry seeks ways of securing coal requirements to fire its cement kilns and run captive power plants.

### 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 optimizing transport costs by choice of mode of transport, warehousing, routes and markets. Rail transport in large rake-load quantities is preferred for longer leads. Bulk cement distribution is also promoted, though bagged cement by far still comprises the largest share of total cement despatches. Rail movement is more environment friendly. The share of rail movement in total industry is about 37%. ACC despatches about 51% of its cement by rail.

### Towards a low carbon diet

The World Business Council for Sustainable Development has drawn up an industry wide approach to carbon emissions reduction suggesting a transition to reach a status of half the current level of emissions by year 2050. This is no doubt an ambitious vision which calls for extraordinary coordination and concert of the will and cooperation of government and industry alike. The roadmap  zeroes in on four important levers to reduce $CO_2$ emissions. These are (1) Thermal and electric efficiency, (2) Clinker substitution, (3) Use of alternative fuels and (4) Carbon capture and storage. The Indian cement industry is already making significant progress and moving decisively in the right direction in the first two levers. The industry is recognized as being the world's most energy efficient and the most successful in clinker substitution through the blended cement route. But considerable effort lies ahead in the quest for alternative fuels while practical and feasible means of carbon capture are yet to be proven and demonstrated.

# 3.2 Energy

In line with ACC's commitments to reduce energy consumption during the process of cement manufacture, many energy conservation and efficiency measures were undertaken in various areas of the cement plants. Some of the projects which greatly influenced our energy performance are detailed below:

- At Kymore, optimisation of crusher ensured that one crusher could cater to the requirement of two raw mills, thereby avoiding use of the other crusher; Damper control of SEPEX FAN motor of RM -2 was changed to Grid Rotor Resistance control for speed.
- At Gagal, one new screw compressor was installed to replace 5 reciprocating compressors; Installation of microprocessor based multi-step automation control for various reciprocating compressors helped to optimise the operating pressure.
- At Lakheri, Coal mill (E Mill) fan was modified with suitable high efficiency design impeller.
- At Chaibasa, Screw air compressors were installed in place of old inefficient reciprocating air compressors.
- At Wadi compressors were interconnected as permitted by layout and discharge pressure was optimized which resulted in stopping of some compressors operating in tandem: Blender was installed to increase the output of CM – 2.
- At Bargarh, damper control of two SEPEX FAN motors was changed to GRR Speed control.
- At Chanda, Dense phase pump was installed for Mill 3 for cement grinding to increase throughput.
- At Sindri, replacement of existing Cement Mill 3 Re-circulating fan with high efficiency fans: replacement of 2 Nos old inefficient reciprocating type compressor with efficient screw type compressor and re-routing of compressor pipe Line.
- Inter connecting compressors in kiln area and thereby stopping 2no pocking compressor, 1 no IKN compressor, 1 no surge bin dust collector purging

### Interconnection of Kiln Baghouse compressor with other compressors

The Kiln ESP (electrostatic precipitator) at Madukkarai was replaced with bag house, to improve plant environmental conditions. To meet the purging air requirements an ELGI make screw compressor was installed, with design and operating parameters as below (One operating and one standby)

| | | |
|---|---|---|
| Capacity cubic feet per minute | (CFM) | 815 |
| Rated Pressure | (Kg/Cm2) | 9.69 |
| Loading pressure | (Kg/Cm2) | 7 |
| Load Power | (KW) | 115 - 125 |
| Unloading pressure | (Kg/Cm2) | 8 |
| Unload Power | (KW) | 90-95 |
| Required pressure | (Kg/Cm2) | 6 |

Although the actual pressure requirement was 6kg/cm2 only, the screw compressor had to be operated at the above mentioned load / unload pressure to avoid carry over of oil in compressed air. As the compressor was capable of delivering compressed air quantity very much in excess of the quantity desired, independent compressors were connected to the main compressor in a phased manner.

### Poking compressor ( 2 nos)

| | |
|---|---|
| Capacity (CFM) | 2 x297 |
| Rated Pressure (Kg/Cm2) | 6.5 |
| Operating Power (KW) | 2 X 37 |
| Supplies air for 34 nos air cannons in pre heater section | |
| 74 kwh power saved after interconnection | |

Similarly Surge Bin Dust Collector Compressor (35 CFM, 10KW), Clinker Silo Dust Collector Compressor (35 CFM, 10 KW), Cooler IKN Compressor (90 CFM, 10 KW), and Coal Mill Bag House compressor (35 CFM, 15 KW) were interconnected and savings of >110 KW were achieved. With the increased consumption, the loading pressure could be reduced

compressor and 1 no Old silo dust collector purging compressor.

- At Jamul, Pneumatic conveying was converted to Mechanical conveying for cement mill no. 3 to 8.
- At Damodhar, reciprocating compressors were replaced with energy efficient screw compressor at packing plant.
- Variable voltage variable frequency drives were installed for various applications across ACC plants to avoid damper control and to have precise control on the process parameters.
- ACC Cement House was renovated into a Green Building with many energy saving initiatives which has reduced the Air conditioning as well as Lighting load.
- Various initiatives were taken at Thane complex to reduce electricity consumption, like installation of energy savers for air conditioners, regulations on operating time for the Air conditioners etc.

### Green power

The Wind energy Farm in Rajasthan generated 14.04 million units of Green energy during 2009 as compared to 3.78 million units generated during 2008. The Wind Farm in Tamil Nadu generated 25.3 million units of energy during 2009 as compared to 23.4 million units generated during 2008.

### Alternative Fuels

The Company's Alternative Fuels and Raw Materials (AFR) Business recorded savings of Rs. approximately Rs.41 crore in 2009 as against Rs. 22.8 crore in 2008. This was achieved by co-processing 77,800 T of Industrial waste as compared to 12,900 tonnes in 2008.

The measures stated in points (a) and (b) above would improve the thermal and electrical energy efficiency of the Plants. Year 2009 saw a reduction of 1.44% in Electrical Energy over 2008.

**Case Study**

### Optimisation of kiln slurry feed by reducing speed (Chaibasa Plant)

Three slurry pumps are installed to pump slurry from mixer basin to Vertical Roller Mill (VRM) feed pump hopper as per specifications given below. One pump is

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

| Parameter | Unit | 2009 |
|---|---|---|
| Alternative Raw Materials Used | % | 23.25 |
| Thermal Substitution Rate | % | 0.59 |
| Clinker Factor | % | 64.71 |

I. Percentage of Alternative raw materials used: Ratio between the total amount of alternative raw materials used to the total amount of materials gone into the Cement manufacturing of cement
II. 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.
III. Clinker factor: Percentage of clinker used for manufacturing of cement.

### EN3 : Direct energy consumption by primary energy source

| Energy Consumption | Unit | 2009 | 2008 |
|---|---|---|---|
| Coal + Pet Coke consumption in Kiln | TJ | 43675 | 44335 |
| Diesel Oil consumption in Kiln | TJ | 34 | 31 |
| Alternative Fossil fuels* consumed in Kiln | TJ | 148 | 57 |
| Alternative Bio-mass consumed in Kiln | TJ | 113 | 83 |
| Diesel Oil consumption for onsite vehicle movement | TJ | 403 | 239 |
| Coal for onsite power generation | TJ | 24642 | 23754 |
| Diesel Oil consumption for onsite power generation | TJ | 21 | 138 |

*As per WBCSD protocol - Alternative fossil fuel comprises waste oil, waste tyres, plastics, solvents, impregnated saw dust etc.

### Specific energy consumption

| Energy Consumption | Unit | 2009 | 2008 |
|---|---|---|---|
| Specific power consumption up to & including clinker production | KWH / Tonne of Clinker | 76.85 | 76.77 |
| Specific power consumption up to & including cement grinding | KWH / Tonne of Cementitious Material | 88.52 | 89.77 |
| Specific power consumption including cement grinding, colony, auxiliaries | KWH / Tonne of Cementitious Material | 90.93 | 92.14 |
| Specific total power consumption including cement grinding, colony, auxiliaries & packing | KWH / Tonne of Cementitious Material | 92.40 | 93.54 |
| Specific thermal energy consumption | GJ / Tonne of Clinker | 3.12 | 3.12 |

### EN4 : Indirect energy consumption by primary source

| Electrical Energy Purchased | Unit | 2009 | 2008 |
|---|---|---|---|
| Electricity Purchased | MWH / Annum | 585343 | 677274 |

running continuously and the other two pumps are kept as standby.

### Observation & Analysis

The rated capacity of the old kiln slurry feed pumps are 90m3/hr @ 19.50 mt pressure head, however the delivery flow is around 100-120m3/hr due to less operating head. Slurry pumps are installed to pump slurry from mixer basin to VRM feed pump hopper. Rated capacity of VRM feed pump is only 60 m3/hr and remaining 40 60m3/hr is again coming back to feed pump pit; resulting in electrical energy loss on account of recirculation of additional quantity of slurry.

### Options & Actions

One of the options was to install a Variable Feed Drive (VFD) to regulate the flow as per requirement by controlling the speed. The other option was to reduce pit pump flow capacity to the required quantity - 65 m3/hr to 70 m3/hr, by reducing speed and thereby maintaining flow of 10 % more than slurry feed pump to VRM. The VRM feed pump Hopper will be maintained at full level at any point of time to avoid tripping of VRM feed pump.

The second option to "Downsize capacity of old kiln slurry feed pump by reducing the speed" was quite suitable due to lesser investment cost. Based on the calculations for the required operating flow, a new pulley size was calculated for replacement at the motor shaft.

### EN5 : Energy saved due to conservation and efficiency improvements

(Partial List of Major Energy Conservation Initiatives in 2009 where the savings have been annualized in TJ Units)

| Initiatives | Unit | Energy Savings |
|---|---|---|
| Provided Grid Rotor Resistance (GRR) 2 numbers for SEPAX fan at Bargarh | TJ | 2.33 |
| Replaced inefficient compressors with energy efficient screw compressors 3 numbers at Chaibasa | TJ | 4.75 |
| Installation of 3nos. of 105KVA lighting transformer at Chaibasa | TJ | 1.85 |
| Installed Variable Voltage Variable Frequency Drives (VVVFD) for clinker cooler fans (FN41,FN42,FN43,FN44) at Chaibasa | TJ | 17.39 |
| Installed VVVFD in circulating fans for CM#5,6 & 7 at Chaibasa | TJ | 10.45 |
| Installed dense phase pump for Mill#3 at Chanda | TJ | 6.25 |
| Replaced existing reciprocating compressors with screw compressors for packing plant in Damodhar | TJ | 1.23 |
| Leakage plugging & installation of microprocessor based loading & unloading control for reciprocating compressors of the plant at Gagal | TJ | 2.82 |
| Replaced 1200 KW motor of Tertiary Crusher 1 by 400 KW motor at Kymore | TJ | 5.57 |
| Provided GRR for SEPAX fan motor of RM-2 at Kymore | TJ | 5.19 |
| Modified Coal mill fan with high efficiency impeller at Lakheri | TJ | 5.43 |
| Installed VVVFD for cement mill vent fan at Lakheri | TJ | 4.86 |
| Inter-connected packing compressor, IKN compressor and coal mill bag house compressor with kiln bag house compressor at Madukkarai, which now requires only bag house compressor to be operated. | TJ | 11.98 |
| Replaced existing Cement Mill 3 recirculating fan with high energy efficient fan at Sindri | TJ | 1.05 |
| Optimization of compressed air system and stopping of 7nos. of compressors at Wadi II | TJ | 14.87 |
| Installed VVVFD for cooler fans of Kiln-2 at Jamul | TJ | 3.17 |
| Installed mechanical conveying for cement mills 3 to 8 at Jamul | TJ | 17.67 |
| Conversion of raw mills 4&5 from mono chamber to double chamber at Wadi I | TJ | 38.40 |
| Installation of VVFD for cooler FC fans of Kiln 3 at Wadi I | TJ | 8.08 |
| Replacement of shell and optimization of grinding media in cement mill 5 at Wadi I | TJ | 30.62 |

### Non Conventional Energy in units

| | | |
|---|---|---|
| Wind Power generated by Tamil Nadu | 25348224 | Units |
| Wind Power generated by Rajasthan | 14787808 | Units |

### EN6 : Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these

NA

### EN7 : Initiatives to reduce indirect energy consumption and reductions achieved

NA

# 3.3 $CO_2$ Emissions

**Climate Change: Meeting the Challenge**

ACC recognizes Climate Change as a major challenge faced by mankind and its importance to curtail Greenhouse Gas (GHG) emissions. $CO_2$ emissions from the Cement sector are reported to be of the order of 5% of Global emissions and are the only greenhouse gas that is of relevance to the sector. We are committed to reduce these emissions by following a less carbon intensive approach. Reducing $CO_2$ emissions from our operations is a challenge and we are continuously striving to meet this challenge.

The greater part of our $CO_2$ emissions arise from the production process and from captive power generation. As production increases, $CO_2$ emissions inevitably rise; the real challenge therefore is to minimize $CO_2$ per tonne of product. The major approaches towards achieving lower specific $CO_2$ emissions adopted by our Company are reduction of clinker factor, optimization of plants, energy reduction, use of alternative fuel and raw materials and the installation of wind mills.

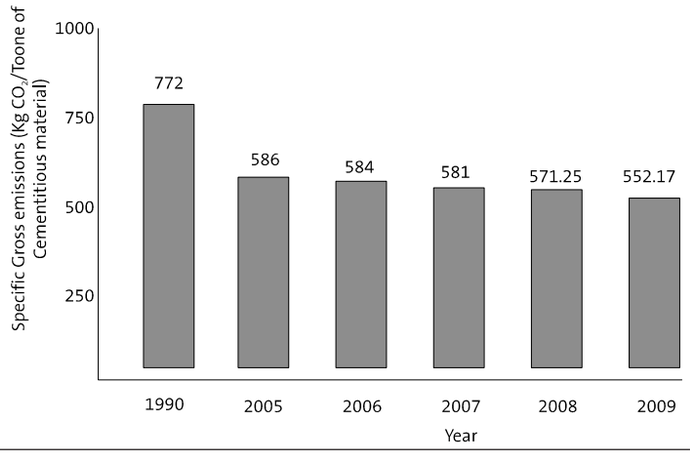
**Data Capturing and Annual Review Process**

At the end of every month, information pertaining to Scope – I $CO_2$ emissions from all our plants is collected as per WBCSD Protocol. These inputs are validated for correctness with the help of SAP data and inputs from various sources. Subsequently individual plant inputs are collated to arrive at the corporate GHG Emissions.

At each year-end, these inputs are once again collated in the Annual Technical Report (ATR). During the collation, certain checks are carried out as per the inherent checks and balances incorporated in the ATR. Thereafter these ATRs are validated by Holcim by means of physical verification at plant level.

In addition to the above checks and balances, reputed third party experts designated by Holcim audit the reported $CO_2$ figures. In the year 2009, PWC Switzerland team along with Holcim team visited several of our plants and audited the $CO_2$ emissions as reported in ATR 2008. The focus of the entire process is not just on gathering data, but is designed to benchmark the Company's performance against its commitments in GHG emissions and to show how to improve and excel.

**$CO_2$ Emissions**




**Climate Change Indicators**

The specific emission of $CO_2$ excluding on power generation in the year 2007 was 581 which is reduced to 552.17 Kg $CO_2$ in the year 2009. **Despite the increase in production levels, we are able to achieve the commitment of 2.5% reduction in specific $CO_2$ emissions made in the Roadmap indicated in our Report for 2007.**

In the year 2009, as a proactive step we started Carbon footprint study of all our activities to capture the data related to Scope I, II & III emissions, developing the required tools for Scope II & III to capture the data on monthly basis.

**Climate Change investments**

Two new ultra-modern cement grinding units were commissioned in Karnataka during the year. These two grinding units produce fly ash and slag based blended cements. We are upgrading our existing plants which will help in further reducing our Carbon foot print. Overall these investments are targeted at modernizing and optimizing lower carbon cement production.

During 2007 – 2009 we invested in Wind power generating units at Tamil Nadu and Rajasthan. At Rajasthan we have installed 5 wind mill turbines with a total capacity of 7.5 MW. At Tamil Nadu we have installed 6 wind mill turbines with a total capacity of 9.0 MW. During the year 2009 we have generated 14787808 units of Wind power from our Rajasthan Wind power station and 25348224 units of power from our Tamil Nadu Wind power station. We commissioned our third wind energy farm in March 2010 near Satara in Maharashtra made up of two turbines of 1.25 MW capacity each. With this new plant, ACC now has a total wind power capacity of 19 MW.

**Cement – Alternative Fuels and Raw Materials**

We are aware that a major enabler in achieving our climate change commitment is through the use of alternative fuels and raw materials in our cement activities, particularly as it offers other direct economic benefits. We have already made a good start with several initiatives progressively being adopted in our cement plants:

(a) Use of alternative materials (such as fly-ash, slag, marble slurry, mill scales, iron waste etc.,) within the permitted limits of technical standards, thereby reducing

the amount of clinker consumption in the cement production. This will have a huge direct impact in reduction of $CO_2$ emissions.

(b) Use of various biomass alternative fuels (such as forest residue, sewage waste etc.,) which are carbon neutral

(c) Use of other alternative fuels basically alternative fossil fuels (such as plastics, tyres, solvents, industrial waste etc.,) which will have positive impact on $CO_2$ reduction.

In India, the concept of Alternative Fuels and Raw Materials (AFR) is still relatively new. We have put in much effort with various statutory bodies to secure acceptance of Alternative Fuels and Raw Materials and have also made huge investments in obtaining necessary statutory approvals, installing feeding kits, storage facilities and educating plant personnel in handling wastes. We are proud to share that all our cement plants actively utilize AFR in steadily increasing quantities. In year 2009 we installed AFR feeding units at all our plants. We consumed 22372 MT of Alternative Fuels and 271337 MT of Alternative Raw Materials.

**ACC and Clean Development Mechanisms:**

The Clean Development Mechanism (CDM) is an arrangement of the UNFCCC (United Nations Framework Convention on Climate Change) under the Kyoto Protocol. It allows industrialized countries with greenhouse gas reduction commitments to invest in projects that reduce emissions in developing countries. This is an alternative to more expensive emission reductions in their own countries. As of now we have registered two CDM projects as per the details given below:

a) Fly ash Blended Cement Project
b) Wind Power Project at Rajasthan

Despite the increasing difficulties, low acceptance rate and consequently longer lead-times to register these projects, ACC is committed to leverage wherever it makes sense this strong incentive mechanism in order to reduce $CO_2$ emissions from our activities. We are currently exploring the possibility of installing Waste Heat Recovery projects at a few of our plants and are considering these projects as CDM project activities.

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

$CO_2$ Emissions from Cement Production (Excluding onsite power generation)

| Parameter | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| Absolute Gross $CO_2$ Emissions | Million Tonnes of $CO_2$ | 11.88 | 11.95 | 11.57 |
| Absolute Net $CO_2$ Emissions | Million Tonnes of $CO_2$ | 11.87 | 11.95 | 11.57 |
| Specific Gross $CO_2$ Emissions | Kg $CO_2$ / Tonne of Cementitious Material | 552.17 | 571.25 | 581 |
| Specific Net $CO_2$ Emissions | Kg $CO_2$ / Tonne of Cementitious Material | 551.63 | 571.25 | 581 |

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

### $CO_2$ Emissions from Clinker Production (Excluding onsite power generation)

| | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| Absolute $CO_2$ Emissions | Million Tonnes of $CO_2$ | 11.89 | 11.95 | 11.57 |
| Specific $CO_2$ Emissions | Kg $CO_2$ / Tonne of Clinker | 844 | 846.66 | 845.61 |

### $CO_2$ Emissions from Onsite Power Generation ($CO_2$ emissions are corrected duly taking the credits on account of the power exported)

| Parameter | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| Absolute $CO_2$ Emissions | Million Tonnes of $CO_2$ | 2.191 | 2.099 | 1.990 |

### $CO_2$ Emissions from Purchased Electricity (Combined Margin Emission Factor was used for calculating the $CO_2$ Emissions

| Parameter | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| Absolute $CO_2$ Emissions | Million Tonnes of $CO_2$ | 0.493 | 0.546 | 0.570 |

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

**Overall $CO_2$ Reductions Achieved**

| Parameter | Unit | 2009 | 2008 |
|---|---|---|---|
| On Account of Thermal Savings | Tonnes of $CO_2$ | 59961 | 27104 |
| On Account of Electrical Savings[1] | Tonnes of $CO_2$ | 18775 | 60657 |
| On Account of Clinker Factor Improvement[2] | Tonnes of $CO_2$ | 170592 | 279476 |

**Note:** (1) Combined Margin Emission Factor ($CO_2$ Baseline Database for the Indian Power Sector – User Guide – Version 5.0 – Nov 2009 – by Central Electricity Authority) was used for calculating the $CO_2$ emissions on account of electrical savings. (2) $CO_2$ emission reductions on account of clinker factor improvement is calculated by using the thumb rule that for 1% improvement in clinker factor there is reduction of 7.5 Kg $CO_2$ / Tonne of Cement

## EN29 - Significant Environmental impacts of transporting products and other goods and materials used for the organisation's operations and transporting members of the workforce.

We continually seek to optimise the cost and distances involved in, inbound and outbound transportation and storage of inputs and finished products and prefer rail transport for longer leads. This has a beneficial impact on the environment in terms of reduced emissions.

# 3.4 Atmospheric Emissions

Our effort to control atmospheric emissions started way back in 1966,when we installed our first pollution control equipment even though there were then no regulatory laws to control emission. Atmospheric emissions prevention and control continues to be one of the proactive priorities for the Company.

In today's business-as-usual scenario, any increase in cement production is very likely to result in a corresponding increase in emissions. However, in our case even though our cement production has increased, we have successfully kept specific emissions reduced to a great extent. These reductions are achieved by the use of high efficiency pollution control systems such as Electrostatic Precipitators, Bagfilters and Hybrid filters in our plants.

Following the maxim "what is measured, gets reported and what is reported gets improved", we carry out the monitoring and measurement of atmospheric emissions as part of an important control measure. Major emissions like Dust, $NO_x$ and $SO_2$ are monitored and measured through online and test house measurements.

We have installed online continuous emission monitoring system for kilns in our Kymore plant which is the first for any plant in the Indian Cement sector. This equipment is capable of measuring six pollutants including $NO_x$ & $SO_2$. We have also installed continuous online ambient air quality monitoring stations in four plants.

Between 2007 and 2009, ACC's Specific $SO_2$ emissions decreased by 28.12%, Specific $NO_x$ emissions decreased by 13.56% and Specific Dust emissions decreased by 41.20% although total cement production increased from 19.92 million tonnes in 2007 to 21.06 million tonnes in 2009. We are continuously working to reduce our specific emissions.

All our cement manufacturing units are certified to ISO 14001 system.

Here are some of the initiatives we have taken to reduce emissions:

### Stack & Fugitive Emission Control:

In the continued endeavour to maintain clean stacks and work zone environment across all our plants, we have installed several air pollution control equipment at our various plants during the year 2009.

- Conversion of 6 MW Captive Power Plant (CPP) ESP into Hybrid Filter at our Chaibasa Cement Plant.
- Installation of Bag House for Slag VRM at our Bargarh Cement Plant.
- Installation of Cement Mill Bag House at our Thondebhavi Cement Plant.
- Installation of Cement Mill Bag House at our Kudithini Cement Plant.
- Installation of ESP for 15 MW CPP at our Bargarh Cement Plant.
- Bag filters for Fugitive emission control at Bargarh Cement Plant, Kudithini Cement Plant, Thondebhavi Cement Plant, Madukkarai Cement Plant and Gagal Cement Plant.

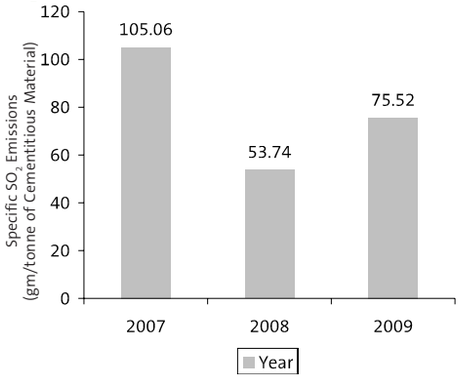
All these equipment have been successfully commissioned and are performing better than the prevailing pollution control norms.

### Dust control

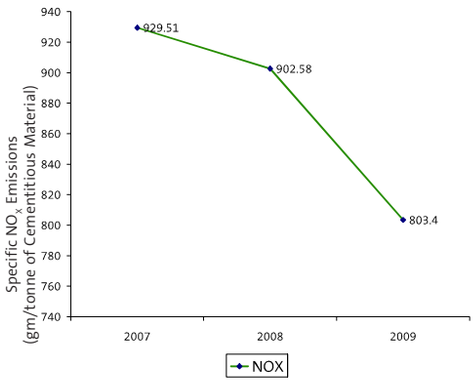
In the year 2009 we successfully converted the existing ESP for the 6 MW Captive Power Plant at Chaibasa into a Hybrid Filter. This is first of its kind in our plants and was designed solely with inhouse expertise. The original Captive Power Plant was installed in 1996.

In 2007, the Chaibasa plant decided to convert the boilers from stoker fired type to AFBC type. This would increase the dust load from 16 gm/m3 to 107 gm/m3, thus rendering the existing ESPs inefficient. In order to meet the prevalent pollution control norms, the pollution control equipment needed to be upgraded.

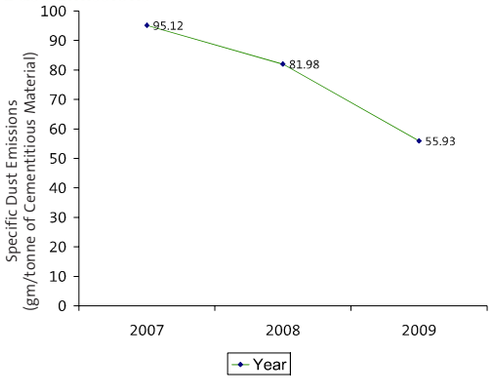
**$SO_2$ Emissions**




**$NO_x$ Emissions**




**Dust Emissions**




### EN20 : $NO_x$, $SO_2$, and other significant air emissions by type and weight*

| Parameter | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| $NO_X$ | gm / Tonne of Clinker | 1226.92 | - | - |
| $SO_2$ | gm / Tonne of Clinker | 115.33 | - | - |
| Dust | gm / Tonne of Clinker | 85.41 | - | - |
| $NO_X$ | gm / Tonne of Cementitious Material | 803.40 | 902.58 | 929.51 |
| $SO_2$ | gm / Tonne of Cementitious Material | 75.52 | 53.74 | 105.06 |
| Dust | gm / Tonne of Cementitious Material | 55.93 | 81.98 | 95.12 |
| $NO_X$ | Tonnes | 17289.09 | - | - |
| $SO_2$ | Tonnes | 1625.11 | - | - |
| Dust | Tonnes | 1203.53 | - | - |

* The emissions reported are based on Kiln stacks only

### EN30 : Total environmental protection expenditures and investments by type

| Details | Unit | 2009 | 2008 | 2007 |
|---|---|---|---|---|
| Environmental Expenditure | Rs. In Million | 1551 | 1711 | 1228 |

After exploring various options, it was decided to convert the ESP to a Hybrid Filter, by keeping the first field in service and replacing the 2nd and 3rd field of the ESP with tube sheet and filter bags. The outlet was also modified and CFD analysis was carried out for the modified arrangement.

During the retrofit job we encountered the following challenges:-

- Locating the tube sheet so as to have minimum adverse effect on the ESP flow.
- Modifying the outlet with minimum disturbance to the existing arrangement.
- Maintaining a uniform flow within the first field.

The Hybrid filter was successfully commissioned in June 2009 and it brought down dust emissions to 9.3 mg/Nm3 as against the earlier design level of 150 mg/Nm3.

### EN17 : Other relevant indirect greenhouse gas emissions by weight

Methodologies are being developed for periodical compilation or calculation of scope 3 emissions. These emissions will be reported from 2011 onwards.

### EN19 : Emissions of ozone-depleting substances by weight

"Cement Industry is not emitting any ozone-depleting substances. Hence this is not applicable".

# 3.5 Mineral Resource Management

ACC is committed to the management of ecosystems and biodiversity. Our objective is to improve our operational approach to resource management as well as to contribute to the societies where we have a presence. We have revised and formalised our biodiversity position in order to identify and understand certain risks associated with biodiversity.

We have 16 cement plants at 14 locations in the country, two of which were added as Green field sites in the year 2009. Our existing operations are not in or adjacent to any protected area, sensitive area, biosphere reserve or world heritage sites. In India, Taj Mahal, Doon Valley, Dahanu, Mahabaleshwar and Coastal Regulatory Zones etc. have been identified as sensitive areas in The Environment Protection Act 1986. However, none of these fall within a 10 km radius of the Company's operations.

We have conducted Environmental Impact Assessment studies for all our operational units including our mines. No reportable changes have occurred to the natural habitats in these areas.

During our mining operations, the area used is affected. And for rehabilitation of these areas, closure plans are prepared and approved by the government bodies. The rehabilitation of the mined out area is carried out with a view either to restore the environment to its original state or to a state which is healthy for the ecosystem.

To assess the biodiversity value and prepare a biodiversity management plan at one of our operational unit, we are joining hands with experts of Applied Environmental Research Foundation (AERF). AERF aims to conserve biological diversity through research and participation of local stakeholders. In the partnership, we propose to create an organizing structure for concerted activities. We have devised a detailed work plan and roadmap to carry out different activities in a time bound manner. We expect that outcome of this exercise would be in the form of recommendations on improving ACC's environment policy and assistance in establishing key elements of a defined biodiversity strategy. Moreover, to upgrade the knowledge and awareness of ACC employees and communities in and around our operations, we have on schedule the capacity building programmes also to be organized by AERF.

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

None of our areas of operations have any protected area or high biodiversity value area. As a mandate of Environment Clearance process, ACC has prepared a Wildlife Management Plan wherever required and adheres to the same. All locations of ACC have the Environment Clearance 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 ACC operations nor reported changes to natural habitats due to ACC activities.

Going beyond the legal boundaries, ACC has a plan to prepare a Biodiversity Management Plan for one of its operational unit, as an initial step, and a detailed project of about two year's duration is going to be undertaken very soon. ACC aspires to map the Biodiversity Value at this location, asses the impact (positive and negative) of ACC operations on the Biodiversity Value and prepare a Biodiversity Management Plan to preserve and enhance the Biodiversity Value of the area.

**EN13: Habitats protected or restored**

All the quarries of ACC are worked out and restored / rehabilitated according to the approved mine plan including progressive mine closure plan. These plans are approved by Indian Bureau of Mines, a regulatory body under the Ministry of Mines, Government of India.

ACC adopts all measures to ensure least damage to nearby habitat. Afforestation of various areas, including worked out area of quarries, have for long been a foremost concern. In the 2008 web update edition of our SD report, we have reported the data for our plants which have captive mines. The collective data of affroestation for our locations with captive mines are listed in Table 1.2.

**Afforestation Details**

| | Within Mining Lease | | Outside Mining Lease | |
|---|---|---|---|---|
| **Period** | **Area (Ha)** | **Number of Trees** | **Area (Ha)** | **Number of Trees** |
| In 2009 | 53.660 | 164111 | 49.840 | 227100 |
| Cum. Upto Dec'09 | 1209.016 | 2755141 | 733.800 | 1634975 |

This year we have attempted to collate data pertaining to these indicators for our grinding plants. Afforestation details for grinding plants are listed in Table 1.3 below.

**Afforestation Details**

| Period | Area (Ha) | Number of Trees |
|---|---|---|
| In 2009 | 5.200 | 22194 |
| Cum. Upto Dec'09 | 51.300 | 179368 |

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

The materiality matrix exercise which we conducted has given a thrust to the management of Biodiversity related issues at our locations.

We plan to tie up with AERF to conduct a two year project with the objective of mapping the total biodiversity value in the area, impacts of ACC operations on them and preparation of a Biodiversity Management Plan at one of our operational units.

We also have plans for capacity building in this regard. AERF will conduct various training programmes for ACC employees as well as for members of the local communities residing in the surrounding communities.

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

During EIA study, survey of the study area is conducted particularly with reference listing of the existing biological resources. No such survey has reported any Schedule I fauna in our operational area. Data on IUCN red list have not yet been collected.

# 3.6 Alternative Fuels And Raw Materials

ACC has pioneered in India, the promotion of Alternative Fuels and Raw Materials (AFR) in cement manufacturing process as a corporate commitment to sustainable development.

Co-processing refers to the usage of waste materials in industrial processes as alternative fuels and raw materials (AFR) to recover energy and material value from them. Cement kilns operate at very high temperatures and the materials flowing inside them face long residence periods with considerable turbulence. These conditions make very desirable attributes for safe thermal destruction of wastes.

The practice of co-processing in cement kilns respects the hierarchy of waste management. It undertakes waste management only after the options of Reduce, Reuse and Recycle are exhausted. It avoids the options of resource destruction by way of incineration and containment by way of landfill both of which do not promote sustainable development. Co-processing ranks higher on the waste disposal hierarchy and eliminates the need for landfills and uncontrolled incineration. The cement kiln process offers substantial opportunity to recover resources such as silica, alumina, iron and calcium that invariably form components of wastes and also the energy contained in it. Co-processing of waste materials not only maintains the ecological balance in nature but also conserves precious natural resources that are

**Key Initiatives in the Year 2009**

- *Inclusion of co-processing in Hazardous Waste Management Rules, 2008*
- *2 new national level agreements with FMCG and beverages sectors*
- *Co-processing of approx 500 T of difficult to treat Acid Tar Sludge at Jamul*
- *Formulating /initiating Zero Fuel Cost (ZFC) project for Madukkarai*
- *Co-processing of plastic wastes from Municipal Solid Waste (MSW) of Bhopal and Kulu Municipalities at Kymore and Gagal.*

### *A Stakeholder's View*

***"I would thank ACC for rendering their disposal services and ratify the same on behalf of Tata Cummins. The co-processing of wastes in cement kiln is a very promising technology for a developing country like India. This environmentally sustainable technology exists in US and Europe and it is good to see ACC making a head start in such a noble mission of protecting the environment. We at Tata Cummins are disposing our hazardous wastes (solvent based paint sludge) through co-processing at ACC Chaibasa Cement Plant. This co-processing of hazardous waste has been endorsed by the state PCB since there are no traces of waste after the process and emission levels are within the specified limits as well, hence no liabilities associated with it. The initiative taken up by both Tata Cummins and ACC for disposal of hazardous waste through the cement kilns has been appreciated by the HSE division for Cummins as well."***

***Rishi Sharma***
*Senior Manager – EHS*
***Tata Cummins Limited***

otherwise utilized in the manufacture of cement.

From 2008 onwards, the company's AFR business shifted its focus from an approach of mere commodity procurement to provision of services.

The share of income from waste management service provision is gradually increasing in the total value of AFR business. In 2009, the value earned from Waste generators for waste management services rendered through co-processing at ACC cement plants has more than doubled. The increasing usage of industrial waste is indicative of the fact that our business foundation is being laid on a more mature and definitive market of industrial waste segment as compared to the seasonal and volatile nature of the markets for commodities such as biomass.

We have conducted 17 successful third party emission monitoring trial burns for hazardous waste and 2 trial burns for non-hazardous waste in close coordination with regulatory authorities and industries to demonstrate that co-processing wastes in cement kiln while producing clinker does not have any adverse impact on environment and the product quality. In 2009, 2.93 MT of different categories of

| | Co-processing | Incineration | Landfill |
|---|---|---|---|
| Recovery | 100% energy and material recovery | Landfill required for generated ash residues | Sometimes Methane (CH4) recovery possible |
| Residues | No ash or residues | Landfill required for generated ash residues | (Temporarily) disposal of residues |
| | No landfill required[1] | | |
| Environmental Impact | Effective combustion: High temperatures, long residence time and self cleaning system | Negative environmental impact (according to life cycle analysis studies) | Negative environmental impact (now and future) |
| | Complete destruction of organic compounds | Net increase in global emissions | Emissions of $CO_2$, $CH_4$, VOC, $NH_3$, $H_2S$ and organic acids |
| | Reduction of global emissions by substituting of fossil fuels and natural raw material (cf. Kyoto protocol) | | |
| Miscellaneous | Inherent safety due to high thermal inertia | Need to invest in incineration capacity instead of using existing facilities. | Not instantaneous waste processing. Most landfills need to be rehabilitated after some time. |
| | Natural gas cleaning due to alkaline environment | | Unpredictable risk for groundwater and soil. |
| | Facilities and capacities available | | |

AFR materials such as industrial waste including trade rejects, agricultural wastes, pruned biomass, commodities, and plastics from Municipal Solid Waste (MSW) were co-processed.

### Co-processing of Non-recyclable plastic waste

To demonstrate proper disposal capability of co-processing technology for non-recyclable plastics present in Municipal Solid Wastes (MSW), ACC has worked with Indian Centre for Plastics in the Environment (ICPE), a nodal agency recognized by Government of India and the Madhya Pradesh Pollution Control Board. The results of these demonstration evaluations have paved the way for our Kymore Plant to offer co-processing as a viable solution to cities in the vicinity to help solve their problem of dealing with non-recyclable waste plastic present in MSW. Similar initiatives are being extended to other ACC plants.

### Plantation to Fuel

ACC has been planting bio-energy yielding plants as Jatropha and Acacia in its colonies, mining leased area, over-burden dumps and barren lands around its Cement Plants. Till the year 2009, we have planted more than 2 million saplings of which 1.7 million, i.e. 75% of plants are surviving. The pruned biomass from these plants and Jatropha seeds would serve as an alternative fuel in the coming years substituting traditional fossil fuel such as coal. To capitalize on the Biomass from captive plantations, efforts have been made to identify and nurture other plant species which regenerate biomass faster than Jatropha and require lesser care.

### Infrastructure for managing waste

We have set up **4 AFR testing laboratories** at our Wadi, Madukkarai, Kymore Plants and at Technical Support Services, Thane for prompt and accurate determination of waste characteristics and establishing the potential co-processibility of new streams identified in respective regions. The 3 laboratories in the Plants also cater to the day-to-day input control of wastes to be co-processed. Over 1000 samples from 350 different industries have been analyzed to assure their co-processibility in cement kilns.

## *A Stakeholder's View*

*"We at Ford India Private Limited were looking for an environment-friendly technology for disposal of waste generated at our facility. Towards this, we have entered into an Agreement with ACC for co-processing the waste materials in their cement kiln at Madukkarai. We had also gone for a trial burn of the waste to ensure that co-processing does not have any adverse impact on the emissions and on the product. We look at ACC as our reliable partner for contributing to sustainable waste management.*

***Tom S Chackalackal,***
*Vice President - Manufacturing.*
***FORD India Private Limited***

## *A Stakeholder's View*

*Hindustan Unilever has a long tradition of being company with strong social values that cares about the impact it has on communities and the environment. Co-processing the damaged or expired stocks through cement kiln is one such activity which impacts our consumers, communities and environment in many ways. ACC being our partner for this journey over years has displayed innovativeness, commitment & developed a win-win strategy to co-process damaged/expired stocks through cement kilns. Through this ACC derives the benefit of the calorific value of waste product as alternate fuel with zero waste by products and HUL gets an eco-friendly and sustainable option in Waste Management with its commitment to its consumers and society. The co-processing journey started from a single ACC factory in 2007 has come up to a stage where almost all ACC factories are capable to handle and manage variety of HUL waste products. ACC's efforts are appreciable on the ground that they have shown positive mindset and fast paced action plan on getting all the statutory /regulating approvals for the entire activity across multiple states of India and always honoured the target commitments. Going forward I wish that ACC should come up in a big way in managing the hazardous Effluent Treatment Plant (ETP) waste through co-processing which will save the landfill areas of TSDF and contribute to environment in a big way.*

*Ganesh Chandra Tripathy*
*Head- Corporate Safety& Environment Management*
*Hindustan Unilever Limited*

### Storage

The company has constructed isolated **storage sheds** at all plants. At some locations, large containers have been procured. Appropriate signage and labels are displayed as per the norms and all precautionary measures are taken for normal operations and emergency situations. A state-of-the-art storage shed was constructed at Chaibasa Cement Plant in 2008 which complies with most of the requirements of statutory norms and Holcim guidelines. Necessary modifications and upgradation is being done at other locations also, benchmarking the Chaibasa storage shed.

For introducing waste materials into the cement kiln, starter kit **feeding systems** have been installed in all ACC cement plants at either calciner or at kiln inlet. Starter kit system consists of hoist machine, hopper, belt feeder, double flap dampers and slide gate. Double flap dampers are used in order to reduce the false air entry and a slide gate is additionally incorporated in the system as a safety consideration. These chute closure systems (flap dampers and slide gate) are interlocked with the kiln operation to prevent backfiring during the kiln shutdown. However this system can feed 3-4 tonnes of waste material in an hour.

For feeding more material per unit time, standard feeding arrangement with shredder, weigh feeder and long belt conveyor is installed as has been done at Kymore Plant. Similar system would be replicated at other locations once the quantum of waste contracted for co-processing increases.

### *A Stakeholder's View*

*"Earlier SAIL Bhilai Steel Plant was neutralizing and solidifying the Acid Tar Sludge, a waste generated from its Benzol Rectification Plant. SAIL understands that land filling may be a temporary solution but it has huge liability and ecological footprint. When the concept of co-processing was introduced as a sustainable waste management technology, SAIL Bhilai Steel Plant was the first company in the country to adopt the same. We appreciate the co-processing initiatives undertaken by ACC which is based on the concept of corporate industrial ecology and committed to sustainable development.*

*S Gangopadhyay*
*Deputy General Manager - Environment Management Department*
*Steel Authority Of India Limited (SAIL) -Bhilai Steel Plant*

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

ACC's AFR team has put in concerted efforts in building up a strong clientele, comprising leaders in industrial sectors such as chemicals, automobiles, pharmaceuticals, fast-moving consumer goods (FMCGs) etc. In year 2009, we used 270,292 T of alternative raw materials and 22,370 T of alternative fuels saving a substantial amount of natural resources such as coal, limestone and additives as iron ore and mineralizers. The business has also increased its portfolio of waste management, by safely and successfully co-processing more than 25 different streams of industrial-waste streams at our various cement plants. The global experience and expertise of the Holcim Group in this field and the strong support of the plants extended towards waste co-processing has helped the team in working intensively on the difficult-to-handle materials and making them compatible with the process of cement manufacturing. In 2009, savings from AFR Business was Rs 40.8 crores which was 78% higher than what it achieved in year 2008.

Co-processing waste in cement kiln will give an edge to make the cement business more competitive and it will also improve the image of ACC as being a company dedicated to the cause of sustainable development.

# 3.7 Water & Waste Management

In the "Water for Life" Decade 2005 -2015, ACC is focused on integrated water resource management encompassing both the demand and supply sides of managing this precious resource. On the demand side we are increasing efficiency of use, conservation and recycling of water. The supply side comprises treatment, reuse and harvesting. Zero wastewater discharge is our Company policy.

Water conservation is an integral part of our modernization plans. We have been replacing semi-wet kilns with dry high efficient kilns, using air cooled condenser instead of water cooled condensers in some of our captive power plants, installing thickeners and filters for ore beneficiation etc. We were the first to install a seven stage pre-heater in our Lakheri plant, which

**EN8 : Total water withdrawal by source**
(For Plant, Captive power plant, Colony and nearby Communities)

| Source of Water | Unit | 2009 | 2008 |
|---|---|---|---|
| Surface Water | Million $m^3$ | 7.17 | 5.38 |
| Harvested Rain Water | Million $m^3$ | 5.90 | 5.49 |
| Municipal Water Supplies | Million $m^3$ | 0.012 | 0.08 |
| Ground Water | Million $m^3$ | 0.89 | 1.14 |

**EN9 : Water sources significantly affected by withdrawal of water**
This aspect is being studied.

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

| Water Treated and Reused (Estimated) | Unit | 2009 | 2008 |
|---|---|---|---|
| Total Quantity of Water Treated and Reused Annually | % | 11.34 | 12.5 |
| Total Quantity of Water Treated and Reused Annually | Million $m^3$ | 1.59 | 1.51 |

eliminated the need for a gas conditioning tower resulting in huge water savings. Rainwater harvesting is carried out in our mines and plants. In our mines we convert old mine pits into water ponds, which not only helps to meet our own demand for water but also maintains the groundwater table in surrounding areas. Two of our cement plants including their residential colonies are self sufficient in water and they do not draw harvested rain water from any surface or ground water sources

We have effluent treatment systems for treating cooling water rejects. The treated water is recycled back to the system, which reduces our fresh water requirement. Sewage treatment plants in our factories treat sewage generated in our residential townships. The treated sewage is reused for green belt development. ACC was the first company to set up a Bio-tech Root zone treatment system in Gagal Cement plant for natural treatment of domestic sewage. The system is natural and does not produce any waste or pollution.

Wherever possible, we share our water resources with the surrounding community and help them augment their water needs by cleaning and dredging lakes and ponds in adjoining villages, digging wells and providing support for installation of bore wells.

**EN21 : Total water discharge by quality and destination**

Zero Discharge from our industrial processes.

**EN22 : Total weight of waste by type and disposal method**

The Company generated around 0.171 million litres of hazardous waste during the year 2009. The major hazardous wastes generated are Spent Oils and Lubricants. Hazardous waste is handled and disposed of as per the Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2010. The method for disposal of hazardous wastes is either co-processing in our own kilns or sale to authorized recyclers.

**EN 23: Total number and volume of significant spills.**

There has been only one significant spill so far, in 2009 at ACC Lakheri Plant where 150 liters of oil spilled in the cement mill area, which was properly contained and cleaned up.

**EN24 : Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally**

NA

**EN25 : Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff**

We do not discharge any wastewater outside the plant boundaries. Our plants work on the principle of zero discharge. Since wastewater discharge is nil, no water body is affected for its biodiversity value.

# 3.8 Sustainable Construction

As the leading manufacturer of building materials, ACC is concerned with sustainability of its products. The most significant way this concern is exhibited is in the utilization of waste by-products such as fly ash and slag which help conserve limestone resources and by promoting the use of alternative fuels by co-processing wastes generated by other industries. ACC is inspired by the Holcim Foundation for Sustainable Construction to promote and encourage sustainable construction projects in the country.

The Company has been pursuing sustainable construction through execution of projects in different environs and advocating what it believes are sustainable construction practices useful to the national infrastructure.

### Centre of Excellence in Sustainable Housing and Rural Infrastructure

ACC has supported the Centre for Excellence in Sustainable Habitat and Rural Infrastructure jointly with Development Alternatives, a renowned NGO with whom we work closely on several projects. The long term objectives of this center managed by Development Alternatives, include

- Facilitate mainstreaming of sustainable housing and rural infrastructure solutions
- Provide innovation support, capacity building and outreach services to the construction industry
- Enable creation of livelihood opportunities and provide enterprise development support connected to rural habitat and infrastructure

A project to manufacture sustainable building products for rural markets was designed during the year. It involved assessing the market demand for such products among communities with irregular incomes in selected rural areas of North India and developing outreach solutions for this. It was proposed that ACC's extensive dealer network in the country be engaged to help promote such products. The project is still being discussed with our dealers to seek and secure their involvement.

Two modules were designed for training masons comprising one for a short term of 12 days and another for a longer term of 60 days. These modules would be used to train existing and fresh masons across the country thereby creating livelihood opportunities and meeting an important need to build valuable human resources for the construction and infrastructure development sectors of the economy.

### Green Buildings

We are singularly satisfied with our achievements in the realm of green buildings. In a short span of time, ACC has accomplished four instances of

environment-friendly buildings. Two of them, including our corporate headquarters building, vividly demonstrate that green buildings need not only be Greenfield projects but can easily be conceived as simple yet inventive solutions for restoration and renovation of old structures. We believe we may have set off a trend in this genre by offering visible benchmarks for the conversion of old buildings in our metropolitan cities.

A Green Building is defined by the Indian Green Building Council as one 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. In addition, a green building would incorporate the following green features:

- Effective use of existing landscapes
- Use of recycled and environment friendly building materials
- Superior indoor air quality for human safety and comfort
- Use of non-toxic & recycled materials
- Use of renewable energy
- Effective controls and building management system

### Cement House

Our mission began with the transformation of the almost 70-year old corporate office building into an energy-efficient green building. The assignment, called Project Orchid, retained the graceful façade while transforming the interiors into a contemporary and energy-efficient workplace. In April 2010, Cement House received the Gold Shield from Indian Green Buildings Council in the Leadership in Energy and Environmental Design under New Construction and Major renovation category. It is the first old building to be awarded Green building status.

### La Residency Hostel

Another project, called La Residency at Thane, is a 45 year old residential apartment block now redesigned and converted as a state-of-the-art residential facility for faculty and participants of the ACC Academy, our modern learning centre at Thane. The building incorporates a unique air-conditioning arrangement based on a ground heat air exchange system that takes advantage of the fact that sub-terranean air is cooler than that on the earth's surface. La Residency is a pre-construction platinum rated LEED project.

## *A Stakeholder's View*

*As the architects for Development Alternatives World Headquarters. wiuch has been an important project in our search for practical solutions toward sustainable construction. I wish to record my appreciation for the generous support that ACC has provided for the project. That was the beginning of our relationship with ACC. Today we are very happy that we are professionally associated with ACC for the design of the residential colony at the new ACC Cement Plant at Kudithini in Karnataka. The project is due to go into execution soon.*

*The project has been named ACC Greens Village to signify its objective of sustainable construction. It is a significant and commendable initiative in many ways. The scope of the project as proposed by Mr. Sumit Banerjee, Managing Director, and his team is truly comprehensive. It incorporates the integration of the built facilities with the surrounding land — to be used as a productive resource for the nutritional and energy requirements of residents, and as a way of balancing the $C0_2$, water and waste cycles locally. This is a test case for a sustainable "urban" prototype. The project is also important in that it proposes an aspirational lifestyle, for ACC employees, that celebrates the principles of sustainability — social neighbourliness with a compact footprint, an aesthetic of low energy and natural materials, and indigenous flora and fauna, sustainable recreation, comfort with low energy techniques, an integral provision of monitoring energy performance, waste management and water conservation. And also, that these objectives are sought to be met at moderate costs, drives innovations which would become widely affordable. You can say the project is guided by the Target Issues of the Holcim Foundation for Sustainable Construction.*

*This project is perhaps the first of its kind for Industry. In our experience of working on its design along with the ACC team, one can see a progressive culture of contributing towards sustainability goals in the making. We look forward to their continued leadership and support.*

**Ashok B. Lall**
**Architects**

### Sustainable Residential Habitat: ACC Bellary

ACC is building a unique new sustainable habitat as the residential facility to house employees at the Company's new cement plant in Kudithini near Bellary in Karnataka. The project is designed by noted architect Ashok B Lall and architects. This township will promote solar energy, rain water harvesting and natural air cooling with land earmarked for cultivation, organic farming and fish ponds. The campus including the cement plant and residential area is spread over 263 acres of which nearly 123 acres is reserved for forests and agriculture. A climate responsive strategy for the residential colony has been designed based on a climatic analysis factoring sunpath, wind profiles and water cycles. It is envisaged that the colony would have a net annual demand of 50% of the annual groundwater recharge, once the proposed land use matures.

An energy source – end use mapping has been undertaken and technologies to tap the various energy sources; viz – organic waste, biomass, solar and wind have been defined. All these have been integrated into the habitat system.

### Central Control Room Building (CCR), Chanda

The Central Control room building of the new Chanda cement project under implementation is also planned as an energy efficient building based on Green Building principles. This too is unique for a factory building.

As compared with conventional construction, the construction of this involves an additional cost of about Rs. 900/- per sqft of builtup area mainly by way of engineering, procurement of LEED certified materials and execution. However it is expected that the project will soon meet this additional cost by way of its energy efficiency. We estimate savings from this building of the order of Rs. 11.5 lakhs annually. These accrue from a range of benefits like:

- In general 30% to 40% reduction in operation cost
- 27.7% annual energy saving
- 91% overall saving in water usage (50% in case of flushing, 100% in case of landscaping & 50% in case of Heating,


Chanda's Central Control Room building is designed as a Green Building

Ventilation and Air-conditioning ( HVAC).

We anticipate that Green buildings offer us several intangible benefits.

- Green Corporate image
- Health and safety of the workmen during construction phase
- Health and safety of occupants by improvement of indoor air quality
- Enhance occupant comfort
- Improve productivity of occupants
- Imbibe best green operational practices from day one
- Incorporate latest techniques and technologies

Most of all they serve as visible outward proof of the organisation's green image and an environment-friendly attitude.

### Promoting Concrete Roads

We strongly believe that concrete meets the characteristics required in a good road building material. Concrete roads offer several advantages over conventional bitumen roads in both operational and financial terms.

- Concrete roads are durable and maintenance-free over 20-30 years
- They have a useful life that can stretch to 50 years.
- Concrete roads are abrasion-resistant and impermeable.
- They allow speedy traffic and better skid resistance
- The smoother ride lowers the wear and tear on vehicles
- Concrete roads offer proven economies of 15-25% in fuel consumption and 10-15% savings in vehicle running costs as compared to bituminous ones.
- They are more environment-friendly with a lower carbon footprint.

Unlike bitumen, cement is widely available in India at competitive prices. But the more compelling argument in favour of concrete roads is their environment-friendly nature and their cost-effectiveness on useful life cycle cost basis. In the last year we have done much to advocate the use of concrete roads over bitumen and asphalt in terms of two significant sustainable benefits to the economy - lower long term costs and lower impact on environment.

ACC conducted three seminars to advocate the construction of concrete roads. The first seminar was conducted for City Roads in New Delhi in September 2009, the second one on National Highways in January 2010 and the third more recently in Lucknow in April 2010. A large number of senior government officials from Municipal Corporation, PWD, NHAI, Planning Commission, contractors and consultants attended the seminars. Delhi Municipal Corporation announced that some of their roads will be concretized. A core committee has been created at Delhi to take the matter forward. Additional seminars are planned in the future to propagate the usage of concrete roads.

**There are several notable advantages of concrete roads in terms of their environmental impact as compared to the more common bitumen based roads.**

**1. Uses less energy**

The Athena Sustainable Materials Institute compared equivalent concrete and asphalt pavement designs for a typical Canadian high-volume highway from a Life Cycle Analysis perspective. The report revealed that over a 50-year period, the embodied primary energy required to construct, maintain and rehabilitate a highway is three times higher for the asphalt design than for its typical concrete equivalent. However, if one uses concrete shoulders and concrete restoration with no overlay as part of the maintenance and repair schedule, embodied energy is 5.6 times higher for the asphalt option. Embodied primary energy is all of the energy required in bringing a material to its final product, including transportation.
In this example, the feedstock energy

component, i.e. bitumen, is the largest contributor to embodied primary energy used. Feedstock energy is the energy of raw material inputs that are not being used as energy sources. Even when feedstock energy is excluded from the analysis, the asphalt pavement design still uses two thirds more net energy than its equivalent concrete pavement design.

**2. Reduces road base material required**

Compared to flexible asphalt pavement, rigid concrete pavement requires thinner granular bases because it distributes the weight of vehicles more evenly over a larger area. Typically, in most cases, up to 50 percent less granular material is required for a concrete highway road base, reducing both costs and the use of scarce resources. Additionally, less hauling of granular material results in significant fuel savings and associated emissions reductions.

**3. Makes use of industrial by-products**

Some of the cement in concrete is commonly replaced by industrial by-products that would otherwise use up space in a landfill. The three most commonly used supplementary cementitious materials are fly ash (a by-product of burning coal), blast furnace slag (from steel manufacturing) and silica fume (from making silicon or ferrosilicon alloy). Using these materials in the appropriate quantities can improve the durability, permeability and strength of concrete pavement. Fly ash and blast furnace slag also increase the workability of concrete

mixtures and can be used to mitigate potential alkali aggregate reactivity problems.

**4. Reduces urban heat**

Large cities can be several degrees warmer than outlying areas in the summer, due to the heat absorbed by dark surfaces such as asphalt pavements. This temperature increase, known as the urban heat island effect, can be reduced by using concrete pavement because of its light colour and reflective properties.

**Mass Communication on Environmental Benefits of Blended Cements**

As a pioneer in the manufacture and distribution of Blended Cements, ACC has championed the cause of usage of Blended cement for all kinds of applications. Quite apart from their known superior performance in concrete that give these cements greater resistance to aggressive chemical attacks, Blended Cements score decisively over Ordinary Portland cement in terms of their environment-friendly nature and noticeably reduced carbon footprint. In a world that is increasingly expressing concern with sustainability, we believe this inherent feature of this variety of cements has not been adequately propagated. We are working on a communication plan targeted at decision makers and influencers in Infrastructure sector that will serve to promote the usage of Blended Cements as superior environment-friendly alternative to ordinary cements. We will produce a short film and supporting literature to spread this message.

# Social Performance

*Safety of our workforce has come to occupy the most visible concern among our management priorities as we strive to attain a work enhancing safety culture. We need to work ceaselessly and tirelessly to demonstrate our OH&S vision of ensuring "No Harm Anywhere to Anyone Associated with ACC".*

*We are taking measured steps to enhance ACC as a good employer brand through our performance management systems, training and development and effective internal communication.*

*We continued to engage with the community living around our operations and secure their trust by encouraging their active involvement in various development schemes.*

*The creation of Community Advisory Panels comprising representative groups of local residents has proved to be effective in this respect.*

*ACC's Public Private Partnership scheme for the upgradation of seven Government run Industrial Training Institutes (ITI) remains a thrust area as we seek to improve the quality of technical education leading to better employability of the ITI trainees.*

*We have effective policies and procedures in place to ensure fair business practices.*

# 4.1 Community Engagement

The communities around our operations are among our key stakeholders. We believe that engaging and involving them is important for the overall growth of our business.

Our community intervention is based on the needs expressed by the communities themselves during the needs assessment studies done using participatory rural appraisal techniques. The assessment includes mapping of resources available with the community. A detailed action plan based on the needs assessment, is then developed at each of our plant locations, in consultation with the community, which sets out how we will achieve our objectives. The action plan implementation is continually monitored and reviewed so that it responds to the needs of our communities.

**Our key priority focus areas are:**

- Good Governance in the villages
- Self reliance of community by intervening through various projects:
  - Providing education for society's future
  - Supporting sustainable community development
  - Building infrastructure for livable communities
  - Charity and donations

Since most of our operations are in brown field areas, we had reviewed our

### *A Stakeholder's View*

*I, Deepak Gupta, Corporator in Ward No 5 of the Nagar Palika Parishad Jamul and have been involved in community welfare activities in the last 5 years. I firmly believe that the nation cannot progress without the development of the common man. I wish to felicitate the ACC CSR team for their efforts in giving new direction to the poor population and the community around Jamul. Considering the pace of these community development efforts, I have no doubt that not only will the local population stand to benefit from these programmes, but it will also let everyone see the social face of business and industry.*

*I am a responsible member of the community advisory panel set up by the company's CSR team and I feel proud to participate as an advisor and guide in a process that takes serious note of the view and needs of the common man and acts on them.*

*I salute the ACC team and the head of the local community at Jamul for working in public interest. They are playing a valuable role in accelerating the pace of social upliftment.*

*Deepak Gupta,*
*Corporator Ward No 05*
*Nagar Palika Parishad Jamul*
*District Durg*

approaches in 2008 and decided to take a step further in our partnership with key stakeholders. We initiated this change through needs assessment studies in all our sites using participatory rural appraisal tools such as focus group discussion, resource mapping by villagers and issue prioritization. In 2008, we were able to cover 5 sites while in 2009 we completed the remaining 7 sites. The assessments helped us to understand the context in which communities articulate their needs and the impacts of our actions, especially in the areas of health, education and infrastructure development over the years. It also helped us re-align ourselves to key concerns of the communities around us. These studies were facilitated through our internal cross functional teams, and in partnership with NGOs. The NGOs who facilitated us in this journey in 2009 included, Mahashakti Foundation, ASHA Orissa, BAIF, Partners In Change, PANI, Shri Narayan Guru - College of Arts and Science, Bharathiyar University Department of Social Work, Chetna, Aravalli and Himachal Pradesh Voluntary Health Association (HPVHA).

We developed a unique measuring and tracking mechanism for evaluating our performance in community engagement and involvement in 2009, a major step forward from 2008 where we had only the tool of Social Engagement Scorecard.

### Community Advisory Panels

The **C**ommunity **A**dvisory **P**anel (CAP) is an informal team formed by us at the local village level made up of selected stakeholders relevant to the site; i.e. villagers, union representatives, district officials and *panchayat* representatives. The panels have already lent considerable support to our initiatives. CAP meetings are facilitated by respective local ACC teams. This year with the support of CAP we were able to strengthen and elicit participation of the community in village development initiatives in each of our locations. The meetings involved planning, sharing of information on various aspects and project implementation. This year we initiated constitution of village development committees (VDC) in villages around some of our sites like Bargarh to design and execute village specific interventions.

### Community Advisory Panels – What we achieved

| Focus and key issues of CAP | Number of meetings in a year | Number of participants inclusive of CAP members |
|---|---|---|
| **Gagal** | **3** | **15** |
| Community development, Channelising of govt funds/ scheme implementation, Risk management- community perception related to mining activities | | |
| **Kymore** | **17** | **255** |
| Community development, School infrastructure development, Health programmes implementation, Women empowerment programme implementation, Livelihood generation | | |
| **Lakheri** | **11** | **143** |
| Community development, School infrastructure development, Health programmes implementation, Adult education, Livelihood generation, Senior Citizens programme | | |
| **Tikaria** | **8** | **56** |
| Community development, School infrastructure development, Health programmes implementation, Adult education, Livelihood generation, Senior Citizens programme, Sanitation, Safety Awareness, HIV/AIDS awareness | | |
| **Bargarh** | **3** | **42** |
| Low cost housing, Health awareness and treatment | | |
| **Chaibasa** | **6** | **96** |
| Infrastructure development, Education scholarship, Community development - village requirements, HIV/AIDS Awareness Camps, Maintenance of hand pumps | | |
| **Damodhar** | **4** | **20** |
| Community development, School infrastructure development, Health programmes implementation, Women empowerment programme implementation | | |
| **Jamul** | **9** | **144** |
| Construction of community toilet, Community development, School infrastructure development, Rural health clinic, Motivation training on Micro Enterprise Development (MED), Pediatric health camp, Heavy Equipment Operator (HEO) training | | |
| **Sindri** | **5** | **35** |
| Drinking Water, Reimbursement of education expenses, Organising monthly health camps; Training on computer skills, bari making and embroidery, Village development-planning and implementation, Lobbying with the govt for Denotification of the area | | |
| **Chanda** | | |
| CAP will be constituted this year | | |
| **Madukkarai** | **2** | **16** |
| 1. Community Planning | | |
| **Wadi** | **7** | **455** |
| Community development, Channelising of goverment funds/ scheme implementation, Construction of community toilet, Infrastructure development, Livelihood development | | |

The VDC formed last year near our Wadi, Jamul and Chaibasa sites, continued to contribute in our processes. These meetings help us to review our progress in the community projects, obtain timely feedback from stakeholders, gain recognition for the efforts made and most important to take corrective measures as required. These meetings also helped us utilize our resources more effectively and optimally.

Due to these village interactions, we find that gradually community and local governments have also now started contributing to the partnership through joint scheme implementation' and *"shram daan"*. We touched 57 villages through our various initiatives. We were able to reach out to 101,977 through our health programmes alone, apart from our other initiatives. We continued in our journey of fostering community self reliance with our partner NGOs. We expect more partners to join hands this year in this journey.

**SO1: Nature and effectiveness of programmes:**

The programmes can be clustered under four broad thrusts as below:

- Providing education for society's future
- Supporting sustainable community development
- Building infrastructure for livable communities
- Charity and donations

However, even out of these four broad areas of intervention, the emphasis on a particular aspect is as per the priorities identified for each site using the tool developed by ACC for community intervention. For example in our Wadi Plant area, Karnataka, South-west region the need identified was for Infrastructural development and the second priority was livelihood. We therefore developed initiatives focusing on these two key areas, with education and health being the next priority.

Traditionally, ACC Lakheri team, Rajasthan North region used to focus on health initiatives around the areas. But as a result of needs assessment, water was identified as a major issue for the villagers, followed by livelihood, therefore our emphasis has accordingly shifted.

## NGO Partners

**Bargarh**
- ASHA Orissa
- Mahashakti Foundation

**Damodhar**
- Network for Enterprise Enhancement and Development Support(NEEDS)
- Durgapur Integral Education and Research Society
- Sharamajibi Mahila Sikshya O Samiti

**Sindri**
- Chetna

**Chaibasa**
- Professional Assistance for Development Action (PRADAN)
- Kolhan Yuva Kalyan Sangh
- Bharat Sewashram Sangh

**Jamul**
- Jan Sewak Samiti
- NABARD (National Bank for Agriculture and Rural Development)

**Gagal**
- Himachal Pradesh Voluntary Health Association

**Kymore**
- BAIF Development Research Foundation
- Jan Shikshan Sansthan (JSS)

**Lakheri**
- ARAVALI

**Tikaria**
- People's Action for National Integration (PANI)

**Wadi**
- Development Alternative (DA)
- MYRAADA

**Chanda**
- Amhi Amchya Arogya Sathi
- Mahila Arthik Vikas Mahamandal

**Madukkarai**
- Shri Narayan Guru - College of Arts and Science
- Avinashlingam Jan Shikshan Sansthan
- Bharathiyar University Department of Social Work

**All Locations**

***Government Bodies***
- District Collectors
- District level ICDS officials of Damodar, Lakheri
- Local BDOs (Block Development Officers)

**Corporate Office**

***Volunteering initiatives support***
- Mobile Creches'
- DEEDS (Development, Education, Empowerment of the Disadvantaged in Society)

***Issue support***
- Habitat for Humanity, India
- Development Alternative
- Christian Medical College , Vellore
- Confederation of Indian Industries (CII)
- National AIDS Control Organization (NACO)

***Donation support***
- Padakshep
- Isha Education
- Maharshi Karve Road Residents' Association
- Bombay Community Public Trust
- Geological Society of India
- National Association of Students of Architecture (NASA), India

**Upliftment of tribal and backward class**

The population impacted by us this year through our activities was
Impacted due to health, livelihood generation both on-farm and off-farm initiatives.

| | |
|---|---|
| No. of tribal population | 10095 |
| No. of Dalit population | 19293 |
| No. of OBC population | 17526 |
| No. of minority population | 13113 |

To facilitate these initiatives we were also able to build a strong team of 84 village ambassadors from the local community.

In the Eastern region a classic example is that of our Chaibasa plant which is located in one of the most backward regions in the state of Jharkhand. Much of the infrastructure development in the region was possible due to ACC's presence. Apart from the education and health initiatives, we are now focused on natural resource management linked with livelihood with support from PRADAN, a reputed NGO, in sync with the culture of the tribal community around the site.

This year we have not reported the impacts at two of our sites namely, Damodhar and Sindri, since both were still in the initial phase of implementation of the ACC CSR tool.

### Providing Education for Society's Future: Education support / Literacy:

Education is the key to empowerment of people. We believe that if we are able to create an opportunity for the communities around to have access to good quality education, children will grow up to become responsible citizens and part of a competent workforce.

We have established schools across all our locations, wherein children from both the surrounding communities and our employees are provided 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 of our plants are situated in remote hinterlands, our schools are usually the most accessible and among the best in the region. Our support to these schools includes providing funds and infrastructure for initial construction, upgradation and contribution towards meeting a share of the teachers' salaries. The quality of our schools is such that the local communities willingly pay the fees and are keen to get their children admitted. We also provide educational sponsorship programmes for meritorious students.

Apart from the ongoing subsidy support to schools with which ACC has an agreement, we support other government schools around our operations. This year we carried

**Impact in this thrust area has been**

| | |
|---|---|
| Number of children from community in primary section | 4510 |
| Number of children from community in middle section | 3948 |
| Number of children from community in secondary section | 2571 |
| **Total Number of Children** | **11029** |

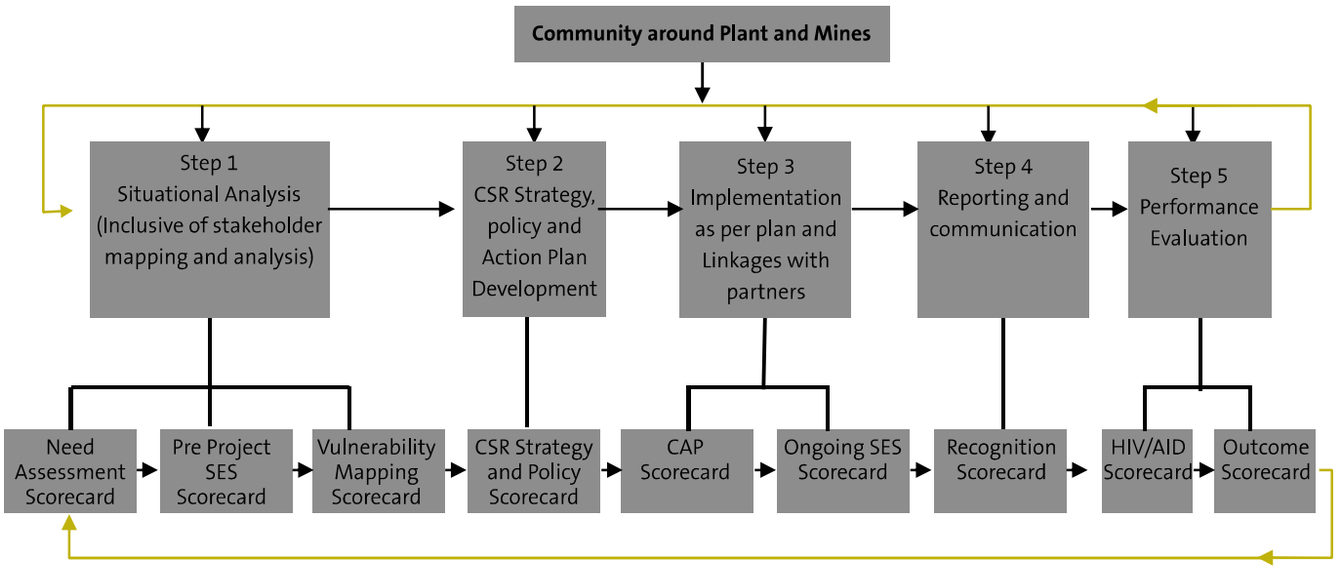
### Sports

We continued our support to promoting sports in the villages surrounding our operations. Sports events are a platform for engaging with youth and it creates a forum for the local youth to showcase their talent.

**Impact is as follows:**

| | | |
|---|---|---|
| Youth touched by our support to sports | Estimated No. of youth touched by our support to sports (youth interacting as volunteers and audience during the sports event) | 2820 |
| Respect for Indigenous sports | No. of indigenous sports events supported | 15 |
| | Number of youth participation in events | 1496 |
| Athletic sports | No. of athletic events supported | 7 |
| | No. of youth participation | 980 |

We believe that Sports helps in uniting the most active resources in the community. It also encourages them to develop a healthy lifestyle, along with an opportunity to nurture their respective talents.



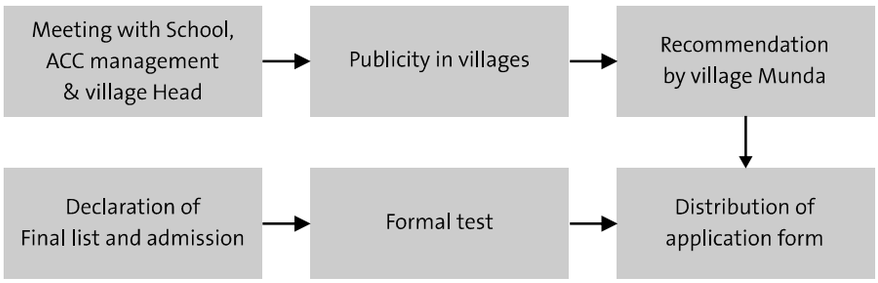
out repair works in 12 local schools. Special health camps were conducted for the school children, with a special focus on eye check-up and haemoglobin levels, as these two factors greatly affect children's learning. We have supported mid-day meal schemes of the government by providing utensils for the schools. In Damodhar, our team mobilized the community, local youth and panchayat to build furniture and compound wall for the school. In a school at Sindri, we encouraged the community and also motivated the school principal to increase attendance of children to the school by 10% this year, by providing support to set up a computer for children's education. A step further, was to ensure that meritorious children from the most vulnerable sections get the opportunity for quality education, for which scholarships were provided to children in Chaibasa (Jharkhand) and Dungri (Orissa) – two sites, comprising mainly of tribal population. Our volunteers' team also initiated dialogue with some of the schools for periodical review of the quality of education, and helping the school administration where they need additional help.

**Case Study** - Chaibasa Education initiative
Our Chaibasa Cement Plant is located in the Jhinkpani Block whereas our mines area comes under Tonto Block. ACC being the only large Company in the region, the surrounding tribal population are significantly dependent on this plant in terms of income, development and other social support. We believe that sustainable growth can be ensured only through projects having community involvement, and also a key to secure trust among communities.

A major concern in the operational area of Chaibasa is the low literacy rate, particularly among the local tribes. The scenario for the girl children is even worse.

For promotion of education amongst the rural children of nearby villages, Chaibasa has been supporting primary schools and provides infrastructure support. In non financial partnership with a local NGO (Kolhan Yuva Kalyan Sangh), ACC AHEAD, a voluntary group of our employees' spouses is promoting Adult Female Literacy programmes in the nearby five villages.

### Admission process for rural merits:





### Industrial Training Institutes (ITI)

| | Trainees undergoing course | | |
|---|---|---|---|
| | **Male** | **Female** | **Total** |
| Vijayraghavgarh, Kymore | 97 | 9 | 106 |
| Bundi, Lakheri | 35 | 3 | 38 |
| Parpodi, Jamul | 42 | 10 | 52 |
| Bilaspur, Gagal | 257 | 116 | 373 |
| Chaibasa | 534 | 0 | 534 |
| Wadi | 38 | 0 | 38 |
| | 1003 | 138 | 1141 |

### Supporting Sustainable Community Development: Indicative Progress in the Year 2009:

Further, the plant provides subsidized quality education to the community children through DAV school and admission to 25 children (per session) from nearby villages. ACC supports the education of these children by bearing the cost of the course books. DAV also contributes by subsidizing fees to up to 80% of the total fees.

The above process indicates involvement of stakeholders without compromising on merit requirements. The number of applications has risen by three- fold, over the last three years. The inclusion of these vulnerable deprived groups of children in the school promotes a culture of diversity, thereby laying a foundation for sensitized new generation.

**b. Training and Vocational guidance:**
We operate in under-developed areas where the local residents have low levels of skills leading to unemployment. We play an important role in skill building through the following approaches :

**Adoption of Government run Industrial Training Institute (ITI) under the government Public Private Partnership scheme (PPP)**
We adopted seven ITI's, for upgradation under the Public Private Partnership Scheme - a joint initiative with the Ministry of Labour and Employment, Government of India. Some of the popular courses we initiated were for training in trades, electrical, fitter, turner etc which are of two year duration. A flavour of progress can be seen in the numbers below:

**Setting up institutions by ACC**
We run two technical training institutes.

- **Sumant Moolgaokar Technical Institute (SMTI) at Kymore** — set up in 1949 mandated with the aim to train young men in specialized trades to become artisans, foremen and first line supervisors. In 2009, 93 young men, who have already completed their NCVT exams were trained through an 18 months course as Diesel Mechanic Cum Fitter and Electrical Instrumentation Technicians.
- **ACC Cement Technology Institute (ACTI) at Jamul** trained 50 diploma engineers through one year Advance Course in Cement Technology through classroom and practice school in operation and maintenance of cement plants.

**Vocational training programme focusing on income generation activities and entrepreneurship development with technical support from NGO partners.**
**Vocational training** on activities such as English speaking, poultry, driving and heavy equipment maintenance, basics in Computer skills - nearly 627 youth benefited from this initiative.

ACC AHEAD (Association for Health, Education And Development), is the volunteering wing of the Ladies Clubs at our plants. Launched in January 2008 it continued to actively support the company's social volunteering and

**Livelihoods and Indigenous culture impacts**

| | | |
|---|---|---|
| Respect to indigenous culture | No.of indigenous cultural events promoted | 15 |
| | Number of people participating in these events as spectators and participants | 41175 |
| Livelihoods | No. of on farm livelihoods generated | 1137 |
| | No. of off farm livelihoods generated | 235 |
| Community Advisory Panels and village *samitees* | Number of villages covered thru CAP | 57 |

**Women's empowerment and volunteering**
**Women impacted By our community programmes**

| | |
|---|---|
| No. of women impacted by our community programmes | **11775** |
| Health outreach programmes and health awareness programmes | 10833 |
| No. of single and destitute women supported | 6 |
| Number of villages having women's groups | 17 |
| Formation of Self Help Groups (SHGs)(28 groups with 10 women members each) | 280 |
| No. of women-managed livelihoods generated | 662 |

## *A Stakeholder's View*

*ACC Bargarh has been carrying out various community development programmes under its Corporate Social Responsibility in the Panchayat areas of this Block. Dungri is one of the remote Panchayats of the Bargarh District of Orissa with a total population of 5,112 as per Census 2001. The Panchayat comprises of three villages Dungri, Sauntamal and Badmal with 23 hamlets. The combined population of SC and ST in these three villages is 18.5 per cent and 25 per cent respectively.*

*All the villagers are mostly Cultivators and 95% of them were cultivating only one crop due to lack of irrigation facility. ACC has supported farmers of Dungri by facilitating irrigation and water services for the people of Dungri basti, due to which 40 to 60 hectares of land has been irrigated. This has helped farmers to cultivate seasonal vegetables and a second crop of Paddy as their major agricultural produce with sunflower which has increased their household income by almost Rs. 25,000/- per year.*

*Almost 600 households have been benefited by ACC's initiative to provide drinking water during summer in villages of Dungri, Sauntamal, Badmal, Dechuan, Gudi Para and Chhattadei,*

*It has provided scholarships to meritorious students of the locality. ACC also supports for the infrastructure of various educational institutes of the area and also lends financial aid to the needy primary schools and college present in the area.*

*The company extends support to the communities by providing free health services. ACC's Dispensary is open for all community members irrespective of caste, class, sex, and age. In 2009 the company provided regular health treatment to more than 30,000 populations across 4 Gram Panchayats of Dungri, Banjipali, Uttam and Lakhanpur. Besides various health camps and awareness programmes on eye check up, dental check up, Ante-Nata care (ANCs) and Post-Natal care (PNC) HIV/AIDS, World Health Day, Diabetes Club, Sickle Cell anameia Testing Camps have been organized. The Company partnered with the Government in active association with PRI members and the Block Administration.*

*Since November 2009, ACC partnered with Mahashakti Foundation and implemented this Sustainable Community Development Project, in order to make the community development process more organized and beneficial. The alliance so far has been successfully able to build up a total of 5 grain banks in the area and established 3 youth resource centers in Dungri village. Different skill development training camps, community mobilization workshops, capacity building workshops for women and youth mobilization, communication, capacity building and learning camps have been organized. Due to such activities, an enabling environment has taken shape in Dungri village.*

*I hope that ACC and Mahashakti successfully carry forward this culture of growth and prosperity ahead in their pursuit of development in the locality*

*Santosh Kumar Misra*
*Block Development Officer*
*Ambabhona, District Bargarh, Orissa*

community development programmes with special emphasis on women empowerment.

This year we had 191 members across all sites impacting the community through their various initiatives, such as creating livelihood opportunities for women, adult vocational education, health and hygiene for the underprivileged around our plants. The livelihood initiatives include, tailoring, embroidery, knitting, glove making, production and sale of *masalas* and pickles. These initiatives touched the lives of more than 600 women this year compared to nearly 200 last year.

One such instance is the impact on a local school in Madukkarai, Coimbatore where nearly 200 children are enrolled. In addition to their active participation in monitoring the quality of school education, some of these ladies also volunteered to teach the children subjects like Mathematics and Science, as there was a shortage of teachers in the school.

**Charity and Donations**

We also make some investments in communities through cash and kind donations, keeping in mind our focus areas of providing education for society's future, supporting sustainable community development and building infrastructure for livable communities. Our donations are usually to help society recoup from impacts of natural disasters.

### Floods in Eastern India

- In the aftermath of floods in Bihar, ACC mobilized its employees and business partners to take on relief work. To undertake rehabilitation, we have collaborated with our employees, dealers, Hindustan Unilever and partnered with Habitat for Humanity, India, a NGO for the execution of the project. This initiative apart from providing shelter to 72 most vulnerable families in the Jorgama village of Madhepura, also aims to generate livelihoods and upgrade skills for the locals. By the end of this project it is hoped that nearly 300 people will also have gained access to alternative livelihoods. The project has also initiated village institution building. Selection process of beneficiaries, land clearance for construction has been facilitated by the local villagers themselves with the support of local district administration
- At village Antradi, Orissa we contributed with the construction of 16 houses.

### *A Stakeholder's View*

*Project Ashreya envisages the rehabilitation and provision of sustainable livelihood to flood affected victims of Jorgama Panchayat in Bihar in wards 9 and 10, in terms of construction of 72 permanent houses for those beneficiaries who have no proper shelter and livelihood development programmes for an additional 280 of the villagers, to develop their social and economic conditions for better living, encompassing quality of life through socio-economic development.*

*The lead agency selected for the project was Habitat For Humanity India with its implementing partner being CNI. The project is unique in various ways;*

*a) Community: For the first time the community is participating right from project design, beneficiary selection process and implementation. The element of advocacy in Project Ashreya has seen the laying of concrete roads in Jorgama, which has enabled Habitat to start using the tool of Advocacy to leverage greater benefits from the government for other beneficiaries at its new project locations.*

*b) Habitat For Humanity India : Through project Ashreya, it has now been given the opportunity to design, develop and implement a holistic development programme for the marginalised. Given the expertise being gained by Habitat in the implementation of an integrated project, Habitat now proposes to start using this integrated approach as part of its bouquet of services being offered and provided, both to prospective donors and to communities. The integrated approach to development, with housing at the core, is a first for Habitat For Humanity India.*

*c) CNI: For CNI it is a first time intervention in Bihar for a housing project.*
*All in all, project Ashreya will be a 'showcase project' for all stakeholders .*

*Dino L. Touthang*
*CEO – Habitat for Humanity India*

### Floods in South India

- Responding to the floods that ravaged Karnataka, we contributed to the Chief Minister's Relief Fund. This apart, we have committed resources to rebuild houses in communities impacted around our operations in Wadi and Kudithini

(Bellary). We have initiated discussions with Nirmithi Kendra at Bellary to execute the project.

### EC 8: Infrastructure

**Most of our operations are situated in remote areas, which often lack even basic necessities such as roads, clean water and medical care. We strive to work with Government to enable this and in certain cases, supplement such efforts.**

The numbers impacted have been calculated based on estimation of population directly impacted- for example: community toilets built; number of families using this facilitiy. These initiatives have been carried out as per the prioritization done by the community, in consultation with the community advisory panel (CAP). In some of the sites such as Wadi, Kymore, Sindri, Damodhar the communities have provided *shramdaan* (voluntary labour) or mobilized a part of the funds for the project through the panchayat schemes.

#### Water management

Our locations such as Dungri Mines in Orissa, Chaibasa – Jharkhand, Kymore-Madhya Pradesh, Jamul – Chhattisgarh, Wadi – Karnataka, Sindri - Jharkhand have increasing water scarcity issues. Most of these locations are extremely remote. We therefore are encouraging communities to take up natural water resource management programmes – such a cleaning and maintenance of local ponds, and developing water harvesting projects.

Some of our unique initiatives include programmes initiated in Kymore and Wadi. Kymore team built a water harvesting pond in an area of five acres at Barari village for rainwater harvesting with support of the village *pradhan* and community. Due to this initiative nearly 1500 people were benefited. Apart from building the local water table, it also generated daily livelihood for nearly 50 people nearly 300 man days of work. The contribution of the community was in the form of additional 30 minutes shram daan in their entire day's paid labour. Every day around 50 persons were involved in the job. So each day 25 hours of shram daan was contributed by the community, which represents an amount of about Rs. 25,000/- as contribution.

#### a. Transportation/community structures:

The local infrastructure development initiatives in 2009 surrounding our various plant sites include:

| | | |
|---|---|---|
| Community Impacted Due to infrastructure works | No. of community impacted due to this | 12202 |
| Drainage Infrastructure | Drains in villages (Kms) | 1.9 |
| | Community toilets | 15 |
| | Individual toilets | 4 |
| Hospitals | No. of hospitals built | 2 |
| Others | Tailoring institute | 1 |
| Schools | Number of schools built/renovated by us | 12 |
| All weather Village roads | No. of villages having all weather roads made by us | 20 |
| | Total Length of these roads (Kms) | 18.35 |

| | | |
|---|---|---|
| Community impacted due to our water supply | Population impacted due to this | 14748 |
| Water supply for irrigation | Number of acres irrigated | 200 |
| Piped water supply to common points for drinking and domestic use | No. of villages (water supplied through water tankers) | 43 |
| | No. of common points - Hand pumps installed/maintained | 178 |

## *A Stakeholder's View*

***ACC–DA Partnership* – reflections**

*During the calendar year 2009, the partnership activities have been on multiple tracks at various stages of maturity:*

*1. The Sustainable Community Development Programme (SCDP) around Plant site was initiated in Wadi, Karnataka almost immediately. The joint efforts between ACC and DA, in collaboration with community groups, local NGOs, Panchayati Raj Institutions, and local government authorities in six villages and Wadi town has been a fulfilling experience. The comprehensive ACC-DA programme has led to strengthening of local institutions for self-reliance. Nearly 1000 people have benefited from life skills and vocational training for alternative livelihood opportunities. With support from the local administration, village infrastructure and facilities like roads, solar street lights, clean drinking water, supply and sanitation facilities have been significantly upgraded to improve quality of life. The SCDP in Wadi is benefiting approximately 14,000 people directly and 40,000 people indirectly.*

*2. A Task Force of DA, ACC and Ambuja Cement Foundation (ACF) is designing a training, assessment and certification model to build the capacity of masons to deliver quality services. Dialogue has been initiated with Construction Industry Development Council (CIDC) for skill assessment and certification.*

*3. ACC and TARA Nirman Kendra (TNK – a DA enterprise) are developing a plan to market building products and elements for low income families. While TNK will be the product supplier, ACC cement dealers with local masons will constitute the delivery chain for green, affordable cement based building components. After a detailed interaction with eight ACC dealers in Central India, the concept and plan of action has been re-designed for roll-out.*

*4. A Task Force of ACC and TARA Machines (a DA enterprise) is working on an initiative to service the needs of small scale green building material entrepreneurs through application of TARA fly ash technology. The initial plan is to service the needs of 10 enterprises – both community and commercial, Small and Medium enterprises (SMEs) associated with ACC.*

*The joint team working on the ground in Wadi has clearly demonstrated that in spite of all the difficulties, partnerships of this nature can better influence and leverage significantly more resources and focused efforts from PRIs, local government agencies, local elected representatives, contractors and community groups for the broader benefit of society at large.*

***George C Varughese***
*President, Development Alternatives*

**Case study: Barari project owned by stakeholders**

The village of Barari near Kymore is situated on sloping land because of which the water table drastically depletes in post monsoon season. An essential need of the village was to raise the water table and provide suitable employment opportunities for the local people in the non-farming period.

The main challenge was to store the run away water by building some storage facility in its downhill path so that the ground gets time to absorb the water thereby recharging the water table.

The key deliverable was to construct a water harvesting pond in an area of 5 acres. The project commenced on April 25, 2009. Around 1500 residents of village Barari were benefited.

The community's contribution was in the form of 30 minutes of *shram daan* or voluntary labour. Every day around 50 persons were involved in the job bringing in 25 man hours of voluntary labour. Wage rates for women and men were the same.

The improved water table is expected to help in improving vegetation in the area. No adverse impact is envisaged due to the project.

The project is expected to sustain a minimum of 15 years before major cleaning or repairs will be required.

Community will be benefited with an improved and sustainable water table for domestic and farming use. Apart from that they will be free to use the pond water for their routine work.

**Total project expense provided by ACC: Rs. 7, 96, 119**
**Community contribution: 2500 hours i.e 313 days of *shram daan* equivalent to almost Rs. 31,000/-**

The other unique initiative was at Wadi where we had undertaken the renovation of a nearly 100 year old temple which had a strong religious significance for the local community. We discovered that the temple had a unique underground water storage tank which could serve the surrounding villages, but had been lying dormant due to ill-usage. Therefore as part of the renovation of the temple roof, we introduced roof rain water harvesting. The entire rain water falling onto the roof was channelized to the underground storage tank, which will further replenish the local water table.

In other sites, such as Gagal in Himachal Pradesh we initiated construction of a check dam to help control and conserve flash flood waters during heavy rains.

The various initiatives shared above are our initial steps to attain our objective of making the communities around our operations self- reliant.

# 4.2 Community Around Mines

ACC is probably the first Company in India to incorporate this concept into its reporting framework for sustainability. The GRI indicators MM7, MM9, MM10, MM11 and MM12 are measures of the Organisation's commitment to the community around mines. This concept and the associated indicators was not a part of the original 18 issues borrowed from Holcim for ACC's Sustainability Report. In view of ACC's pan India presence and our historically symbiotic relationship with the local communities around our mine locations, the issue has gained increasing relevance in today's context. This was highlighted during the interactions we had with SustainAbility Ltd. and the feedback received from external stakeholders. It is for this reason that we have decided to incorporate this aspect in our SD Report for 2009.

ACC has a rich and long mining legacy that has traditionally been responsive to the sensitivities of the local communities around its mines.

The Company has proactively adopted scientific and modern mining methods which have helped to conserve mineral resources and led to efficient land usage and waste rock utilization. ACC has attempted to mitigate the negative effects of mining on Community and surrounding Environment through use of State-of-The art technology i.e. Non-Electric Initiation system to reduce vibration and sound generated due to blasts. We are one of the few mining companies which do not carry out secondary blasting with the local community in mind. We are using-State-of-art technology Hydraulic Rock Breakers. Norms related to maintaining safety zones around our mines are strictly adhered to and dust suppression practices are extensively followed.

Our efforts to bring benefit to the local community include rainwater harvesting and channelising to reach the cultivated fields, tree plantations, landscaping and rehabilitation of excavated areas and building infrastructure like roads, tube wells, school rooms, rest shelter, bus stand shelters etc.

Due to our interventions and support for infrastructure development, healthcare, and education and in creating indirect employment opportunities, a general improvement in living standards has been observed in the community around our mines.

Going beyond the operational mines, we are also in the process of developing a Resettlement and Rehabilitation Policy to assist us in our greenfield sites

The issue of community around mines is addressed jointly by colleagues from the mining and CSR functions at each location.

Our commitment to the local community around mines gets formally recognized through this SD Report.

**MM7**

**Significant incidents affecting communities during the reporting period, and grievance mechanisms used to resolve the incidents and their outcomes.**

We have initiated a formal system of logging and documenting grievances from the local community. Although this formal system is still in its nascent stages, an informal system of grievance redressal has always existed at all our Plant locations.

The significance of the incident causing grievance is defined and graded on the basis of its impact or potentiality to impact our immediate as well as long term relations with the local community. The complaints from the local community members generally pertain to development of cracks in houses due to blasting, dust pollution, drying up of tubewells etc. The significance of these incidents vary from location to location and case to case depending upon the severity of damage caused to the community and potential to hurt ACC's relations with the local community.

Whereas these incidents have the potential to snowball into significant issues, ACC's ability to resolve grievances can be credited to our long record of good relations with the local people and the interpersonal skills of our personnel. Most of ACC's mines have been in existence for over thirty years. Historically ACC has developed and maintained excellent rapport with the local community and there is regular communication between our representatives and the local people. Our personnel are easily accessible whenever there is need to resolve any dispute or grievance.

ACC has constituted Community Advisory Panels (CAPs) at some of the Plants comprising village representatives, ACC representatives, District Government officials etc to provide a formal mechanism for hearing and resolving disputes and redressal of grievances.

**MM9**

**Resettlement policies and activities**

**This indicator requires the identification of sites where resettlements took place and the number of households resettled in each; include practices regarding resettlement and compensation, and the degree of alignment with the World Bank Operational Directive on Involuntary Resettlement.**

ACC is in the process of formalizing a Resettlement and Rehabilitation Policy based on its long experience in establishing mines for its cement plants. The Policy will attempt to incorporate the best practices followed by ACC in the past as well some best practices by others in the industry.

ACC has always sought to follow peacable methods of land acquisition. The first option is to obtain land which belongs to the Government. Where the lands belong to private land owners, the preferred option is to purchase land on the "Willing Buyer-Willing Seller" basis. Procuring land by Land Acquisition through a Government agency is the third option which is used in the few

cases where the State Government laws mandate that the land be acquired this way.

At Greenfield project sites where ACC is desirous of or already procuring land, ACC has initiated Baseline Socio-Economic Survey and Social Impact Assessment through an external agency.

At Greenfield locations where lands belong to private land owners ACC has followed the practice of purchasing land at market rates which are far higher than prevailing Government rates. Compensation is paid not only for the land but also for any private structures that may exist. The compensation for the structures is determined independently by the Government. We follow a transparent land procurement policy.

ACC has been steadfast in acting for the mutual benefit of the Company and the local landowners.

Our practices are in full compliance with the World Bank Directive on Involuntary Resettlement and the National Policy of Resettlement and Rehabilitation, 2007.

**MM10**

**Number or percentage of operations with closure plans, covering social - including labour transition, environmental and economic aspects. Describe company policy, stakeholder engagement processes, frequency of plan review, and amount and type of financial provisions for closure.**

All ACC mines comply with all prevalent statutory rules and regulations of the Government of India. All the mines of ACC prepare a long term Conceptual Plan for the entire life of the mines for the Mining Lease area and a year wise detailed mining plan / Mining Scheme once in five year regularly from the start of the operations which is approved by the Indian Bureau of Mines (IBM) under Ministry of Mines, Government of India (GOI). This detailed 5 year mining plan / mining scheme includes a progressive mine closure plan. All the mines operations, reclamation as well future financial outlays are guided by the approved mining scheme/plan. The mine is closed at the end of its mine life as per final mine closure plan approved by IBM, GOI. The company submits a financial assurance to IBM in the form of a Bank Guarantee which can be utilized by IBM in case we do not comply with the reclamation plan in the approved mining plan/scheme.

### *A Stakeholder's View*

*ACC has partnered with 'Society for Educational Welfare & Economic Development (SEED)' to develop a robust Resettlement & Rehabilitation (R&R) mechanism for the people that may be affected by its forthcoming projects - both projects necessitate land acquisition of minor scale.*

*Following the project implementation frame-work submitted by SEED, the senior team of ACC and SEED officials met on numerous occasions at different sites and deliberated upon the priorities and requirements for execution of the said R&R projects. The inputs and insights so exchanged between the teams proved to be extremely valuable in designing the overall roadmap of the said projects.*

*While ACC's overarching strategy of community development remains consistent across projects, we recognize that each project has its own contextual specificity. To gain and understand first-hand information of the conditions prevailing on-the-ground, a field-level expert team of SEED was deployed to undertake a Base Line Socio-Economic Study and Social Impact Assessment, both in core and buffer zones (as decided mutually by ACC and SEED). The final reports to this effect have been duly compiled and submitted with ACC.*

*The R&R Plan submitted by SEED outlines a comprehensive compensation mechanism for those whose land would have to be acquired in line with the mine plan and additionally defines the areas and delivery methodology of the interventions to enable these communities, especially the Project Affected People, to become self-reliant in the long term. For ACC, the Plan will assist in prompt project take-off and subsequent operations, build ACC's rapport as a socially-conscious organization and define a framework for future ACC projects.*

*Anirban Roy*
*Executive Director*
*Society for Educational Welfare & Economic Development (SEED), New Delhi*

**MM11**

**Process for identifying local communities' land and customary rights, including those of indigenous peoples, and grievance mechanisms used to resolve any disputes.**

Any disputes pertaining to land rights shall be reported.

ACC maintains land records categorizing Government land, ACC's land, private land etc., on the basis of physical documents such as sale deeds, lease maps, revenue records and other related Government documents. These records were being maintained manually in registers and excel spreadsheets at different plant locations till recently.

All land records of ACC mines have been centralized and stored as electronic database ~~in~~ a single central server which will permit easy access and regular updation. This system will further minimize ambiguities pertaining to land ownership and disputes arising thereof.

Land matters have been settled amicably so that the local community is neither adversely affected nor hurt in the process of any mining activity carried out by ACC in its mines. ACC personnel are in regular communication with the local community.

ACC's approach has been vindicated by the fact that it successfully operates 17 cement manufacturing units across the length and breadth of the country amongst varied local communities for over seven decades.

**MM12**

**Describe approach to identifying, preparing for, and responding to emergency situations affecting employees, communities, or the environment. Include a description of the nature of existing skills, teams who respond to emergency situations, training, drills, review processes and community involvement**

Each Plant has developed and implemented an emergency response plan and various teams have been prepared to deal with the emergency situations and the training is being imparted to the employees. Find below a general diagram of Emergency preparedness action plan at ACC.

All the Mines have constituted a Mines Safety Committee as per the Mines Act, 1952. The Mines Safety Committee meets formally on a monthly basis.

# 4.3 Community Health

Most of our plant sites are situated in remote parts of the country, without access to adequate healthcare and medical services. Government services are not fully functional. Government also finds it difficult to get trained and qualified staff for these locations. Against this background the services extended by ACC becomes crucial. Through health camps and mobile vans, medical and health services are made available to this population. ACC also jointly works with the local district administration in promoting national campaigns on important health issues such as DOTS, Malaria prevention and immunization. In respect of DOTs, ACC's health team provides referral services and motivational assistance to patients for adherence to treatment.

### HIV/AIDS Preventive and Treatment work

### ACC Ayushmaan Trust Wadi:

- Hosted the 'peer counselors training' programme for workers, representatives across the cement industry in collaboration with the Indian National Cement Workers, Federation at Wadi.
- Awareness programmes and general health camps conducted in 9 villages.
  - Total population covered in awareness drives: 5000
  - Awareness programmes conducted for 1400 contract workers & 130 security personnel.
  - Special awareness cum treatment camp conducted for commercial sex workers (male & female).
  - Awareness programmes for factory workers & management staff through gate meetings.
- Telephone Helpline No. (08476 202033) which provides information to the local population with complete confidentiality – first in Gulbarga district
- Special outreach programme for children placed in an orphanage.
- Networking and supporting initiatives of PLHA network, MYRAADA and KSACS

| **HIV/AIDS Treatment :** | |
|---|---|
| **Patient Load (From Jan'09 to Nov'09)** | |
| • No. of patients counselled | 1345 |
| • No. of patients tested for HIV/AIDS | 794 |
| • No. of patients tested for CD4 cell count | 491 |
| • No. of patients on Pre ART | 328 |
| • No. of patients on ART | 128 |

### ACC Christian Medical College Trust For Infectious Diseases

Vellore: ACTFID is a joint venture of ACC and CMC Vellore, with support from CII and NACO.

### Details Of Patients Registered With ACTFID – Pre Art And Art During 2009

### Impact made us

| | | |
|---|---|---|
| Community impacted by our support Around our plants and mines | No. of population outreached by our health programmes | 101,977 |
| | Number of population touched by medical camps and disease details | 3,813 |
| | Number of population touched by mobile health van service | 69,064 |
| | HIV/AIDS Based action awareness programme | 1,244 |
| Institutional care at our hospitals | Number of villages with access to our facilities (ACC Dispensary) | 22 |
| | Number of community members treated and disease details | 4,657 |

## *A Stakeholder's View*

*The ACC CMC Trust for Infectious Diseases (ACTFID) has been set up with a mission to provide world class care and support for 3,000 PLHA [people living with HIV/AIDS], ensure the longevity of 1,000 HIVAIDS infected patients through supervised ARV and thus indirectly benefit over 10,000 affected people through economic and social gains . This programme will ensure that it focuses on those vulnerable to HIV/AIDS, especially those marginalized and living below the poverty line.*

*In a short span of two operational years ACTFID's ART center has provided comprehensive clinical care to 1,350 HIV/AIDS infected persons and indirectly served over 4,000 affected persons domiciled in the district of Vellore in Tamil Nadu, and in the neighbouring States of Karnataka and Andhra Pradesh.*

*A medication adherence rate of 98% - a factor which is deemed to be very crucial to survival, has been maintained amongst the 650 eligible HIV/AIDS infected persons by timely initiation of free anti retroviral (ARV) medicines. These results were possible only due to intensive counseling and follow up by the committed staff of the centre. This has significantly impacted mortality and minimized the need for their hospitalization owing to complications that would have occurred without this.*

*The centre is fully supported through ACC and, along with clinical expertise of CMC Vellore and NACO, has provided counseling and testing services to more than 8,000 persons and interrupted HIV/AIDS transmission in 320 discordant couples. About 50 mother-to-child transmissions are averted annually at the hospital, illness-related stigma and discrimination are reduced through education, home based support provided for children on ARV, shared resources to promote Self Help programmes and linkages with Positive People Network and other non-governmental organizations are the other highlights.* ***"This is the first instance (probably the only one in Asia) of a non-pharma corporate entity interacting with medical academia to promote excellence in patient care, research and higher education in infectious diseases – we are building the momentum for this great unprecedented leap".***

*We believe "Together, through this partnership with ACC Ltd, Mumbai we should have the ability to reach out more and more to the truly underserved in our society. We give our whole hearted commitment to further this".*

***Dr. Suranjan Bhattacharji, Director , CMC Vellore***
*Dr. Dilip Mathai, Professor and Head,*
*Department of Medicine, CMC Vellore*

**HIV/AIDS Treatment:**

| | |
|---|---|
| • Patient Load (From Jan'09 to Nov'09) | |
| • No. of patients counselled | 2487 |
| • No. of patients tested for HIV/AIDS | 794 |
| • No. of patients tested for CD4 cell count | 491 |
| • No. of patients on Pre ART | 829 |
| • No. of patients on ART | 297 |

The centre was able to achieve 98% medication adherence in the patients - a critical factor in ensuring longevity of life amongst People Living with HIV/AIDS (PLHA). This was possible due to the committed efforts and counseling done by the team.

An analysis of patients treated each month at the ACTFID ART Centre, indicated that in the year 2009, nearly 2% of the total patients treated were children. Another noteworthy trend was the gender ratio in adult patients which was male 65% and Female 35%; where as in children the trend was male child 41% and female child 59%. Further the number was higher during the months July – December. The team at ACTFID is analyzing these numbers to find the cause for these trends and develop further preventive intervention for 2010.

**Coordination network, education and training programmes for HIV/AIDS infected patients on ART and PRE ART (2009)**

Each month networking meetings were conducted in which on an average more than 80 persons participated. These network meetings help in providing the PLHA the much needed opportunities for obtaining support.

Apart from this sensitization programmes (15 participants), Family members (40 participants), training programme for health care providers, Yoga training (72 participants), Para-medical training (15 participants), Awareness programme with auto industry workers, were also conducted. These initiatives are an integral part of the process of developing a sensitive social network and providing morale support which is essential for (PLHA) to survive. It also plays a critical role in prevention and early detection.

## *A Stakeholder's View*

*"In the beginning, the corporate sector did not understand how they were involved in the whole issue of HIV/AIDS which was further augmented by the secrecy attached to the disease. They thought it to be a health issue like any other, very much a governments problem.*

*But over the last few years we have seen a change in the corporate sector's engagement with more and more companies coming on board to address the epidemic.*

*CII's engagement in HIV/AIDS in the past decade has seen the companies today doing a whole range of activities and programmes for employees families and the community at large right from creating awareness to setting up ART Centres - which are a global landmark.*

*ACC setting up the first corporate ART centre was a role model which has inspired others. Today, Avantha Group (Ballarpur Industries), Godrej and Boyce, Bajaj Auto, Reliance Industries, Larsen and Toubro have set up different models of ART centres for the people.*

*Even in the government system there was a concern whether the corporate sector could really step in for care, support and treatment services for HIV/AIDS.*

*The ART Centres set up by corporates is their commitment....long term commitment to dealing with HIV/AIDS by providing care and treatment facilities."*

*Tarun Das,*
*Managing Trustee, Indian Business Trust for HIV/AIDS*

## *A Stakeholder's View*

*"CII took on the mandate of catalysing industry's involvement in India's social development agenda, in the early 1990's and has undertaken a mission of placing these social objectives on every boardroom agenda.*

*As a part of this process, CII began its HIV/AIDS prevention and care programme in 1996 and workplace intervention programmes with its member companies shortly thereafter. Today, the initiative has gained momentum and is being expanded.*

*Over the years, by mobilizing member companies, the work has encompassed all levels of programmes form Workplace Policy on HIV/AIDS to training of doctors/paramedics in HIV/AIDS medicine to setting up Corporate ART Centres across the country. This journey saw successful partnership being established both at national and international level.*

*CII is privileged to partner with NACO in this unique public-private partnership."*

*Chandrajit Banerjee,*
*Director General, Confederation of Indian Industry*

# 4.4 Occupational Health and Safety

ACC places highest value in ensuring the health and safety of its employees, subcontractors, third parties and visitors at its sites. As health and safety is paramount, a strategic initiative, Passion for Safety, was launched in 2006. The initiative aimed to develop safe working culture by changing behaviours and attitudes. It is based on strong management commitment, clear organisational accountabilities and leadership to mobilize the workforce through training and communication. Monitoring key performance indicators and strict operational discipline will enable ACC to move toward its OH&S vision of 'No Harm Anywhere to Anyone Associated with ACC'.

Hazard Identification and Risk Assessment (HIRA) workshops were started in 2007 with an objective to develop anticipation capability amongst the line managers to address the root-cause of incidents by observing the hazards present on site. The HIRA workshop aims directly at the base of the accident pyramid by reducing the number of hazards present on site. These workshops have encouraged line managers in transforming OH&S Culture through Visible Leadership by changing their perception towards managing hazards, at work behaviour and thereby reducing the number of incidents.

An innovative concept of Safety Observation Tours (SOT) is being practiced at ACC to encourage people with safe behaviors and to identify unsafe acts and unsafe conditions associated with any activity. All management staff conducts SOT and records observations in a standard format. The unsafe acts identified during

### *A Stakeholder's View*

*I am optimistic for success, because the "will" to do this seems to be in place. I have learned long ago that management commitment is where it all starts and that "will" is what leads to a strong effort to acquire and institutionalize the "skill", which drives performance improvement!"*

*W. Roberts*
*Senior Consultant*
*DuPont Safety Resources*

SOT are corrected on the spot. Barriers to correct unsafe conditions are discussed and communicated to concerned site manager for taking necessary corrective actions. All management staff of plants have to conduct SOT at least once a week.

Tool Box talks are conducted daily at the beginning of each shift in every department to discuss and communicate the work place hazards and risks involved in a process or operations where the person are employed. Safety gate meetings are held on the first of every month to communicate safe working practices and initiatives among the employees.

Job Safety Analysis (JSA) is being conducted before start of all non-routine jobs at plants. JSA is conducted by dividing the job into a number of small activities and then for each activity, hazards are identified and corrective measures taken.

Training for plant personnel, generating awareness in the colony, use of safety equipment, ban on smoking in designated areas, distribution of safety publications, analyzing daily safety reports and interdepartmental safety audits have all been introduced to improve safety standards. Apart from periodic internal audits, external audits are also carried out to check the effectiveness of the OH&S management system. The gaps identified in the audits are rectified through action plans with identified responsible and target dates. A system of reporting and recording all near-miss incidents helps in preventing accidents by identifying root causes before accident has occurred. Apart from the practices described in safety induction training, specific trainings, on the job trainings, behavioral safety trainings are being imparted to supervisors, line managers, functional managers and the top management to create safety awareness and expertise.

All ACC units have formulated emergency response plans for managing disasters like fire, earthquake, floods, etc. duly approved by the concerned inspectorate of factories. Emergency response groups have been set up and mock drills are conducted periodically to evaluate the response of the system.

### OH&S Performance

| | 2009 | 2008 | 2007 |
|---|---|---|---|
| Fatality | 7 | 2 | 5 |
| LTIFR (Own and subcontracted employees) | 0.35 | 0.45 | 0.90 |
| LTISR (Own employees) | 13.58 | 26.24 | 38.85 |
| Occupational Diseases | No Case | No Case | No Case |
| Lost time injuries | 18 | 24 | 39 |

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 able to perform work for more than one day.

## *A Stakeholder's View*

***Ownership for Contractor Safety** MUST become the responsibility of everyone at ACC*
*ACC can build a strong ownership and a self sustaining culture for Contractor Safety Management starting with the following -*

1. *There must be the belief that ACC can definitely keep all the Contractor Workers safe at work if ACC puts its best effort forward. This is already reflected in the ACC corporate vision and value system. This is also linked to the ACC site safety policies.*
2. *The second fundamental is to use the Suraksha Bandhan initiative to support this belief.*
3. *And thirdly there is the need for persistence and strong determination. There are no short cuts to good Contractor safety management. Likewise, the Suraksha Bandhan safety journey never ends.*

*Strengths & Expectations*
*ACC is bringing many strengths to the Suraksha Bandhan initiative. Along with committed and dedicated Leadership. It is also my observation that ACC has already demonstrated key components in Production and Quality. **Leadership, Capability, Measurement and Process** are all fully functional in Production and Quality at ACC. My expectations are that when ACC dedicates the same importance and energy to Contractor Safety through the processes outlined in the Suraksha Bandhan initiative, ACC will experience the behavioral shift required that will reduce and eliminate Contractor / Employee injuries and provide an improved quality of life for everyone associated with ACC.*

*W. Roberts*
*Consultant – DuPont Sustainable Solutions*

A system of Safety Alerts is being followed at ACC for communicating serious accidents and injuries within the organisation at all levels. The learning from the incidents are circulated amongst all to avoid any similar incident at any of our sites.

### Don't Walk Past Campaign

To drive OH&S leadership amongst the employees "Don't Walk Past" campaign was launched on the national safety day all across ACC. Tools like leadership card, posters, and training programmes were used to drive OH&S leadership amongst the employees at all locations. Safety campaign on first-aid was also conducted to generate awareness amongst the persons working in the offices during the safety week.

### OH&S Transformation plan and *Suraksha Jagran*

There were many significant initiatives started during the year to improve our safety standards and to make our organisation a safe place to work. Series of actions were defined to secure a step change in the management of OH&S at the operational level through OH&S Transformation plan, which was developed by consolidating actions from sites in June'09. The objective was to instigate actions which target the critical activities and to accelerate implementation of the OH&S standards related to such activities.

Another important decision was taken to observe a six-day "Suraksha Jagran" event all over ACC from 27th July'09 to 1st August'09. Each day during the "Suraksha Jagran" period a particular theme was observed. Concentrated efforts were made to generate awareness related to the theme through meetings, skits, quizzes, posters, various competitions, etc. This

coupled with the fact, that the final day of the week (1st August'09) which was the foundation day of ACC witnessed a complete shutdown of activities at all plants for the first time in the history of ACC. The plants were shut down not because of maintenance related practices but only for conducting safety related activities to send a clear signal to all that safety is paramount.

From 2nd August'09 onwards implementation of the transformation plan started. Main work streams of the transformation plan were as follows:

- Leadership and commitment
- Contractor Safety Management
- Working at Heights
- Isolation and Lockout
- Vehicle & Traffic Safety
- Machine Guarding
- Emergency Response Plans
- Fire
- AFR

**LA6: Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programmes.**

100%. Each plant has a site safety committee comprising the management representatives as well as workers, representatives. The committee is headed by the plant head and meets every month to discuss safety issues as well as to draw up a future course of action. During the meeting workers directly interact with the plant head on safety issues and their suggestions are taken into consideration for developing action plans. The committee takes a round of a section of plant to understand safety issues which are then discussed and included in the action plan.

## *Goal statement 2013: To achieve zero fatality and sustain LTIFR of <2*

**LA7: Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work related fatalities by region.**

With our consistent efforts in making our workplaces safer, we have been able to maintain the Lost Time Injury Frequency Rate (LTIFR) below our long term target of 2. However, we are pained to report that we had seven fatalities during 2009. Analysis showed that fatalities mostly involved our contractor workers. Evaluation of these accidents indicates that we do not need fundamentally new systems, but have to raise the awareness and skill levels of the contractor workforce to that of our own employees and bring about a change in the operational behaviour. To drive this change within this high risk group, a special project "**Suraksha Bandhan**" has been launched. This project will help us in addressing the challenge of managing our large contractor workforce, which also has a very high turnover. The project aims to find ways to improve safety with emphasis on behavior modification rather than rules and policing. As we aim at providing a safe place to work to everyone who works with us, we continuously strive to improve our safety culture.

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

Health and safety are part of the standing orders signed by the unions. Topics like issue of personal protective equipment and adherence to the established procedures have been made mandatory. Union also participates in periodic inspections, audits and incident investigations.

# 4.5 Employment Practices

Our Human resource management system and processes aim to create an aligned organization which is learning and self refreshing, responsive and customer centric, attracts and nurtures quality talent, encourages engagement and drives towards the "ACC Way"- in a Single Company Collaboration.

The strategic HR imperatives of our business goals focus around the **"Structure"** which **supports** the **"Processes"** which in turn **drives "People context/ Behaviours".** The highlights of the HR imperatives are:

**Structure:** Market facing, well networked, Builds guiding coalition, Establishes accountabilities which are personal and clear

**Processes:** Excels at Integrity, Objectivity and Fairness, Drives Operating Rhythm, Encourages personal growth and development

**People Context/ Behaviours:** Drives excellence in quality of service and products, Encourages Employee Engagement, Inspires Leadership across organization

An important ingredient of the model is to motivate employees by improving the quality of life, addressing compensation issues, providing regular feedback and robust internal communication.

### Diversity and Equal Opportunity

We are an equal opportunity employer and make no discrimination on the basis of tribe, caste, community, race, colour and gender. We strive to increase diversity and employee engagement by institutionalizing in our culture the core organizational values of **Strength**, **Performance** and **Passion**. During 2009 our permanent full time employees numbered 8,916 out of which 61% are engaged under bargainable category. 25% of our management staff belongs to the minority groups. The attrition was around 8% across various levels.

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

- All Permanent Non Management Staff are governed by the National Wage Settlement and their wage level is much higher than the local minimum wage.
- All contract workers taking the jobs which are temporary in nature are paid as per the government notification

### 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, colour or gender. We hire and promote individuals on merit for each position compatible with the job requirement.

We strive to increase diversity and employee engagement by institutionalizing the culture of Strength, Performance and Passion. Our objective is to have strong footprints in increasing employee engagement, retention of pivotal talent pool, improved productivity and sustainable business.

### Performance Culture and Equal Remuneration

Our compensation philosophy recognizes performance and meritocracy. Each management staff is covered under a formal process of performance management system and granted increments on merit. The Performance Management System aligns individual goals and objectives with those of the Company such that employees are able to feel a sense of making direct contributions to the Company's major objectives of safety, market share, competitiveness, EBITDA and corporate citizenship.

We also have a new process of Strategic Talent Management which will help create a blueprint for development of talent in the organization by introducing effective measures to identify companywide talent, build adequate strength for future needs through succession planning for critical positions, while creating a healthy balance between internal and external talent in the organization.

### Percentage of employees receiving regular performance and career development reviews

All our Management Staff have received regular performance and career development reviews (out of which 83% have received formally through our intranet portal 'Accelerate' and 17% have received out of the system).

Also, a comprehensive tool for assessing gaps and developing all the employees and for enhancing employee engagement, we have introduced Development Discussion Document (DDD) which captures leadership and technical/functional development needs. It also helps in identifying any key contribution made by an individual and his career aspirations. This document also captures timelines and actions which the individuals along with the support from immediate manager and organization can obtain for their development. DDD thus will help us in more focused and systematic development across the organization.

### Prevention of Discrimination at Work place

We treat all our stakeholders with dignity, respect, integrity and have extended fairness in all aspects. During the year there was no incident of discrimination at any of our units.

### Freedom of Association

During the year no incidents of violation of freedom of association were reported. Within ACC there are no areas where the right to exercise freedom of association is at a risk. All the employees in the bargainable category in all our Cement Manufacturing Units are represented by a collective body i.e Union.

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

ACC treats all its stakeholders with dignity, respect, integrity and have extended fairness in all aspects. We are free from any kind of discrimination or harassment. We are dedicated to practice and implement principles and procedures that cover human rights and labour standards at all our operations across the organisation.

### 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 bargainable category are governed by the Collective Bargaining Process. There is no identified operation in which right to exercise freedom of association/ collective bargaining is at significant risk.

### Prohibiting Child Labour and Preventing forced Labour at Work Place

During the year no incidents of child or forced labour was noticed/ reported in any of our work units. In case of workforce migration, establishments engaging in any migration of workers have to register themselves under the Interstate Migrant Workmen Act, which provides protection to the migrant labour.

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

We ensure that none of our operation, processes, and units has an involvement of Child Labour. All our contract/ agreement with the contractors/ third parties clearly mention that all employees associated with ACC should be greater than 18 years of age.

In order to ensure that all employees/ workers entering our premise are adults we have security guards present at all our entry points and they ensure that workforce entering the campus is more than 18 years of age.

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

### LA 1 : Total Workforce by employment type, employment contract and region

| | TOP (AJB 21- above) | Senior (AJB 18-20) | Middle and FML (AJB 11-17) | Others | Total (2009) | Total (2008) |
|---|---|---|---|---|---|---|
| Male FTEs* | 34 | 157 | 3080 | 5431 | 8702 | 8917 |
| Female FTEs | 0 | 3 | 154 | 57 | 214 | 221 |
| Total FTEs | 34 | 160 | 3234 | 5488 | 8916 | 9138 |

Table 1: Workforce Numbers as per employment type, employment contract
*FTEs : Full Time Equivalents

### LA 2: Total number and rate of employee turnover (resignations) by age group, gender and region (MS and NMS* FTE)

| Region | Female | Male | Grand Total |
|---|---|---|---|
| Grand Total (2009) | 17 | 304 | 321 |

Table 2: Turnover (Resignations) Number as per Gender

### Number of FTEs leaving the company

| Under 30 years | 30- 50 years | >50 years | Total |
|---|---|---|---|
| 89 | 193 | 39 | 321 |

Table 3: Turnover (Resignations) Number as per age group
*MS: Management Staff and NMS: Non Management Staff

- We have a well laid down recruitment and selection process.
- None of our workplace requires forced/compulsory labour and we do not have any facility with forced/ compulsory labour.
- In case of workforce migration, establishments engaging in any migration of workers have to register themselves under the Interstate Migrant Workmen Act, which provides protection to the migrant labour

**Avoidance of conflict of Interest**

Our commitment extends beyond compliance with the law to include a firm belief that the best way to be a great Company and to deliver value to our customers, employees, shareholders and communities is to be fair, honest and ethical in our business practices and personal behaviour at work.

We have Code of Business Conduct and Ethics which clearly mentions behaviours expected of the individuals and the actions to be taken in case of non-adherence.

ACC has compliance procedures for Competition Law in place and we adhere to the terms and conditions of the law, this is also a part of the performance measurement for top executives.

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

All Non Management Staff are covered by collective bargaining agreements which form around 61% of the total number of employees. The key parties involved in the collective bargaining process are employers and workers who bargain on wages, allowances, benefits, working conditions, condition of service.

**Bargaining is carried out at two levels:**

- Bipartite Level : Bargaining is done at the Plant level between management and Union
- Tripartite Level: Conciliation where government machinery and labour department is involved

### 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 the recognised Union without giving 21 days notice.

**Innovate To Excel**

This is a special platform to encourage change and innovation at the workplace. Cross functional teams across various plants, sales units and functional departments are encouraged to work on an innovative idea/project. The teams then compete at unit and regional levels and finally the winning teams participate in a presentation of their project at the corporate level.

**Enabling employee communication**

An important approach to motivate employees has been through addressing the information needs of employees and providing regular feedback to them by creating a robust internal communication system. One element of this was the "Accelerate" intranet portal for employees first introduced in 2008 to a limited group of employees. It was well received and found to facilitate employee communication across different levels and locations addressing a wide range of issues. Encouraged by this, the Company went on to launch the portal in Hindi with access provided to all employees through kiosks installed at all locations. It provides information useful to all employees on various policies, procedures and functions. Personal remuneration and performance details are made available with password protection. A unique feature is the portal's discussion board which encourages employees to communicate their views, voice their grievances and make valuable suggestions. The Managing Director is himself a regular visitor of the portal. It is now planned to widen the coverage of this portal by making it available in regional languages.

**Learning and Development**

Nurturing quality talent supported by systematic investment in leadership, behavioural, functional and technical development of our employees has been our prime focus during the year, when over 46,700 man-days were spent on formal training. The learning and development focus across the organization encourages engagement and involvement to pursue the goal of becoming a **"**Learning organization**".** The Company places special emphasis on enhancing the skills and capabilities of employees through structured training and development interventions. This comprises internal and external training workshops, courses and seminars. Training programmes are designed to suit specific needs of the Company to enhance the technical talent pool of the company and to help the employee achieve all round development and growth. Training needs flow from business requirements, organizational needs and individual development needs based on inputs from the Performance Management System. Training is implemented at three levels - at the corporate level - ACC Academy at Thane, at the regional level and plant level. In addition, individuals are also nominated to attend external training programmes.

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

Learning and Development Data

| Level Bifurcation | Total Man- Days | Total Man - Hours | Average Training hours |
|---|---|---|---|
| (AJB 21 and Above) | 231. 15 | 1849.2 | 54.32 |
| (AJB 18 - 20) | 1632.72 | 13061.76 | 81.6 |
| (AJB 11 – 17 ) | 29518.92 | 236151.36 | 73.02 |
| Non Mgmt Staff | 11512.3 | 92098.4 | 16.78 |

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

| Grade | Ratio of Male to Female Basic Salary |
|---|---|
| AJB 21 and Above | - |
| AJB 18 to 20 | 0.97 |
| AJB 11 to 17 | 0.98 |
| NMS | 0.978 |

Compensation details as per employee category

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

**External Training –** Salient among the numerous external programmes organized for employees, are a few listed below

- Fraud Management and Control Training
- Tax Deduction at Source
- Maharashtra Infrastructure : Goldmine of Opportunities
- Legal Compliance Management
- Leadership Skills for Top Management
- Intellectual Property Rights, Lecture Series
- Internal Control and Financial Reporting

**Internal Training** – Various Functional, Leadership and Behavioural trainings were conducted for Individual development. The highlights are:

**Leadership**

- Training programme – "Management Skill Development Programme" focusing the employee base elevated to next job level was organized covering people from across Plants.
- Workshop on "Priority Management" was organized to aim at dealing efficiently with managing multiple tasks.
- Training programme on awareness of "Holcim Leadership Competency and Development Discussion" was conducted across levels/regions in ACC.
- Leadership programme – "Transformational Leadership" was organized for middle level employees with recognized potential.

**Functional**

- Training programmes on "Waste Management" aiming at learning to reduce waste and make effective use of it was conducted by the AFR unit.
- To understand the concept of Risk through "Risk Assessment" workshops were organized by AFR team.

- Training workshop on "Brand Management" and "Rural Marketing" to understand the dynamics of marketing was conducted for Commercial Services employees.
- Training programme on "Selling Skills and Negotiations" was conducted by Commercial Services unit.
- Widely acclaimed programme – "Finance for Non Finance People" was organized. Employees from across units participated and gained the finance acumen.
- Workshop with the objective of learning "Cost Control" measures was organized by the Finance Team.

**Behavioural**

- Workshop on "5 Cardinal Rules Awareness" on safety was conducted for ACC employees.
- To increase safety awareness workshop on "Action During Emergency" was conducted for ACC employees.
- To appropriately deal with emergency situation, training workshop on "Emergency Plan training" was organized.
- Session on sharing the OH&S Policy was organized for all unit employees.
- Training programme – "Business Writing Skills" was organized for all the units to enhance written skills and communication among the employees.
- Workshop on Change Management was organized focusing on how to proactively manage change and anticipate future changes.
- Training programme on "Stress Management" was conducted to help employees deal with the increasing stress level at work and in personal lives. Employees were also briefed on the powerful yoga techniques.
- To improve cohesiveness among the different units and teams programme on "Team Building" was organized.
- Training on "Public Speaking" was organized for employees so as to help them to effectively communicate with larger audiences and make smart presentations.

**Other Initiatives:**

- The initiative on Change Management through Organization Development (OD) intervention has been introduced for the shopfloor associates working in Wadi, Chanda and Tikaria plant. The initiative aims:
- To condition the mindset of the target population towards changes prevailing in industry.
- To ensure active engagement of the target group to enable them to play their roles effectively and hence gaining higher productivity.
- To develop problem solving skills among associates.

The intervention has been divided into 3 phases. The first 2 phases has been covered in Wadi and Chanda where as in Tikaria is on the completion edge of Phase#1.

**Study Policy -** The number of employees granted/availed the Study Leave Course – Full-time is 2.

**Occupational Health**

We are committed in implementing comprehensive health programmes for our workforce. We have various facilities and policies in place for safeguarding our stakeholders for events related to serious diseases. We have also organized various awareness, counseling and risk control programmes and have partnered with stakeholders in the following ways:

- All cement manufacturing units have occupational health centers which provides comprehensive preventive and promotive health care to employees and their dependents.
- Financial help in case of illness either through the insurance coverage or extended help by the Company.
- Special training to our doctors at CMC, Vellore.
- Various health management programmes, educational programmes such as National Family and Welfare (antenatal check up, tubectomies and vasectomies), DOTS for Tuberculosis, HIV/AIDS awareness, Eye camps ( IOL Implants), Universal programme on immunization for children, multi specialty camps for detection of major chronic diseases like cardiac, diabetes etc. , health awareness and first aid lectures.
- Other facilities includes free treatment (domiciliary and hospitalization) of employees and their family members at Plant hospital, medical reimbursements and periodical medical checkups, etc.

**We also have an ART (Anti-Retroviral Treatment) Center at Wadi Plant and Vellore which is supported by CMC (Christian Medical College).**

**Employee Health (LA8)**

ACC is committed to implement comprehensive health programmes for its workforce, their families and communities. We have various facilities and policies in place for safeguarding our stakeholders against events related to serious diseases. We have organized various awareness, counseling and risk control programmes and have partnered with stakeholders in the following ways:

- All cement manufacturing units have occupational health centres that provide comprehensive health care to employees and their dependents.
- Providing emergency medical care to community
- Financial help in case of illness either through insurance coverage or extended help by the Company
- **Special training for doctors:** All doctors are sent for special training programmes to update their medical knowledge at Christian Medical College, Vellore. Doctors are sponsored regularly for training in Associate Fellow Of Industrial Health (AFIH) or conferences on Occupational Health
- **Health Management Programmes:** Various health management programmes such as health checkups, awareness programmes, educational programmes, etc have been organized at our CMUs for workers, families and communities. The details of the programmes are as under:

**Table 4: Details of Health Management Programmes organized for employees, families and Communities**

The company also has the following medical schemes / facilities for assisting non management staff in the event of serious diseases:

**Employees of our Cement Plants**

- **Treatment at plant hospital –** Employees and their family members are entitled to get free medical treatment at Plant hospital. The treatment includes domiciliary as well as hospitalization.

- **Emergency Medical Response (EMR) system -** The EMR system has been strengthened by providing Advance Life Saving (ALS) ambulances, critical care equipments and training to factory medical officers at all plants, thus providing better vital health care facilities for various medical emergencies.

- **Medical Reimbursement –** Employees are entitled to get reimbursement towards domiciliary and hospitalization treatment to the extent of Rs.9,500 in a block period of three years. The plant director is empowered to grant special sanction up to Rs.5,500 in a block period of three years. Employee can claim reimbursement for self and his family members.
- **Special Sanction –** If an employee and his family members (spouse and children) incur expenses on hospitalization over and above Rs.15,000 in a block period of three years, the company bears the entire expenses towards hospitalization.

### Employees of HO, TSS, ROs, SUs

- **Medical Reimbursement –** Employees are entitled to get reimbursement towards domiciliary and hospitalization treatment to the extent of Rs.18,000 in a block period of three years. Employees can claim reimbursement for self and his family members.
- **Special Sanction –** If an employee and his family members (spouse and children) incur expenses on hospitalization over and above Rs.18,000 in a block period of three years, company bears entire expenses towards hospitalization.
- **Medical Health Check up –** Employees are entitled for medical health check up for self once in three years at a predetermined hospital or health centre.
- **Medical Room at Head Office –** There is a medical room at the corporate office which is manned by a full time nurse and a part time doctor. Employees are entitled to get free consultation as well as treatment if they suffer from any ailment while on duty.
- **Medical Camp for health awareness –** At Head Office, medical camps are arranged periodically for the benefit of employees. The camps are arranged for (i) cancer detection (ii) eye check up (iii) blood donation camp.

### Details of Health Management Programmes organized for employees, families and Communities

| Health activity | Beneficiaries | | |
|---|---|---|---|
| | Employees | Dependents | Community |
| National Family and Welfare Prog. (antenatal check up, tubectomies and vasectomies) | y | Y | Y |
| DOTS for Tuberculosis | y | Y | y |
| HIV/AIDS awareness prog | y | y | y |
| HIV/AIDS testing and treatment center at Wadi cement plant in collaboration with CMC, Vallore | y | y | y |
| Eye camps ( IOL Implants) | y | y | y |
| Universal programme on immunization for children | y | y | y |
| Multi specialty camps for detection of major chronic diseases like cardiac diseases, diabetes etc. | y | y | y |
| Health awareness and first aid lectures | y | y | - |

### Medical facilities/ polices/programmes in place for assisting management staff across organisation are as follows:

- Medical Reimbursement equivalent to minimum of Rs 15,000/- per annum but the employee has the flexibility to increase the same to one-month basic salary under flexi-salary services for domiciliary treatment.
- **Group Mediclaim Insurance Policy :** All management staff covered under the floater policy for a fixed sum insured per annum (Rs 5 lakhs, Rs 3 lakhs and Rs 2 lakhs) as per grade for self, spouse and upto 2 dependent children for hospitalization. The policy has been taken by the insurance company with the support of Third Party Administrator (TPA) for cashless facility with their networked hospital. There is additional provision for corporate buffer of Rs 50 lakhs for hospitalization reimbursement in case of an employee is suffering from chronic/ life threatening disease.
- **Group Personal Accident Policy :** All management staff are covered under the group personal accident policy insured with leading insurance company for fixed sum covered for accident/ permanent disability/ partial permanent disability. This policy is applicable 24x7 for self only and is renewed every year.
- **Executive Health Checkup:** Senior Executives (AJB 20 and above) and Management Staff in AJB 18 and above are allowed to undergo annual health checkup for self and spouse. For other employees they are entitled to avail check-ups at hospitals of repute.
- **Medicine facilities** for employees of Head Office, Thane and CMUs is available.
- We organize cancer detection, eye checkup, blood donation, diabetic checkup camps for all employees.

# 4.6 Fair Business Practices

ACC's vision statement articulates its aspiration **"to be one of the most respected companies in India; recognized for challenging conventions and delivering on our promises".** Since its inception, the Company has been known for its high ethical standards in business dealings and for demonstrating unhindered transparency and openness in communication with all stakeholders. Our corporate reputation was enhanced last year when we were proud winners of CNBC-TV18's India Business Leaders Award in the category India Corporate Citizen of the Year 2008, the *Jamnalal Bajaj Uchit Vyavahar Puraskar* for the year 2008 from the Council for Fair Business Practices and the Gold Shield of The Institute of Chartered Accountants of India for financial reporting in 2008.

| Significant lobbying issues | Lobbying platform | ACC's core position and/or status |
|---|---|---|
| (i) Abatement on Excise (ii) Reduction of total taxes for the Cement Industry (iii) Re-imposing Import Duty on imported cement (iv) Providing better supply for linkage coal | Ministry of Finance, Department of Industrial Policy and Promotion (DIPP) and Coal Ministry | We support the industry cause |
| Converting bituminous road to concrete road | (i) State Government (ii) Ministry for Road Transport & Highways | Concrete Roads are more durable and hence would enable the nation to enhance its productivity riding on a durable infrastructure |
| Authorization for co-processing of hazardous wastes at ACC Cement Plants | State Pollution Control Board of Jharkhand, Chhattisgarh, Bihar, Orissa, Himachal Pradesh, Rajasthan, Madhya Pradesh, Maharashtra, Karnataka and Tamil Nadu | ACC has got permits for co-processing of<br>• paint sludge<br>• off specification rubber<br>• trials of other wastes<br><br>In some cases SPCBs are encouraging the industries to opt for the waste management services offered by ACC. |
| For exemption of co-processing trials of certain wastes at ACC Plants for which trial is already conducted | Central Pollution Control Board and Ministry of Environment and Forest | Discussions are underway |
| For collection of biomass wastes from the periphery of the forests in cognizance of the Forest Protection Committees as a Sustainable Livelihood Initiative | Forest Department | Various biomass wastes as pine needles, bamboo debris, dead woods are being used at our Plants |
| For inclusion of co-processing in cement kiln in the Hazardous Waste Legislation and for creating awareness on co-processing amongst industries | FICCI, ASSOCHAM, CII and CMA | Utilization of high calorific value hazardous wastes is recognized in the new HWM Rules 2008 |
| For creating awareness on co-processing amongst industries and safety related issues while handling hazardous wastes | National Safety Council (NSC) | NSC has facilitated ACC for creating awareness on co-processing amongst industries by publishing our article and advertisement in their esteemed annual publication. |
| For facilitating the co-processing of non-recyclable fraction of plastics from MSW | Municipalities of Coimbatore, Kullu, Raipur and Bhopal | Non-recyclable plastic wastes are being co-processed at some of our Plants |
| Corporate involvement in efficient and renewable energy | Regional BCSD on National Action Plan for Climate Change | Corporates should participate in energy efficient and renewable energy technologies and Government should create an enabling environment to make this happen |

### Assessment of Risks Related to Corruption

The Company's Internal Audit Department follows a well structured risk assessment approach to draw up its Annual Internal Audit plan. This risk assessment is conducted every year and includes all business processes and all units. Potential fraud risk areas, their probability and impact are a vital input for the risk assessment. (Ref GRI SO2)

### Internal Controls System (ICS)

To strengthen control on financial reporting, the company implemented an Internal Control System (ICS) in 2007 across all units. A systematic approach has been developed for periodic testing of the ICS at units. The design and operational effectiveness of the well defined internal controls encompassing all business processes has been tested by the Internal Audit Department in the last 3 years. In 2009, 117 key controls were tested at 9 locations. The testing methodology and documentation is reviewed and validated by the Company's external auditors.

### Fraud Risk Management (FRM)

A Fraud Risk Management (FRM) Policy was adopted with effect from January 1, 2009 that was approved by the Board in December 2008. A Fraud Risk Management committee was constituted with the Company Secretary as its chairman and the Head Legal and Chief Internal Auditor as members to review and take appropriate action on all suspected cases of fraud/misconduct. Any person with knowledge of any incident of misconduct/ fraud can communicate to the committee through a dedicated e-mail and hotline or by written letter, with assured confidentiality.

FRM awareness programmes are conducted companywide by displaying posters at prominent locations in the units, screensavers on all company computers and workshops for management staff covering all business units of ACC comprising 16 plants, 20 sales units, 3 regional offices, Corporate Office and ACC Thane. In all a total of 2,064 management staff employees (64%) attended these workshops. The rest of the employees have been communicated the FRM policy and related presentations through e-mail. (Ref GRI SO3)

**Corruption:** There were 2 incidents in which employees were dismissed or disciplined for corruption. There were no instances where a contract with business partners was not renewed due to violation related with corruption. (Ref GRI SO4)

**Anti-trust and monopoly:** There are six such matters against ACC, in four of which the company is arraigned with other cement manufacturers and the Cement Manufacturers' Association. While one matter is at the stage of investigation of allegations, enquiry is in progress before the Commission/Tribunal in three matters. In the remaining two matters, appeals have been filed by us and others in the Supreme Court against the orders of MRTP Commission and the said appeals are pending hearing. (Ref GRI SO7)

**Public Policy Positions:** ACC believes that industry should adopt positions on material, economic, social and environmental issues. During the year, we were actively involved with discussions on corporate involvement in National Action Plan on Climate Change, Waste Management services and other industry specific issues. Here is a snapshot of how we participated in public policy development. (Ref GRI SO5)

# 4.7 Product Responsibility

In ACC this subject is treated as a Legal Compliance issue as seen in the Materiality Matrix. It is assigned to the Business heads of the three regions of the company and is overseen in consultation with the Legal, Commercial Services and Technical Support Services departments of the Company.

**Health & Safety Issues:** We strive to ensure that health and safety issues related with our products is understood and responded to over its different life stages. The life cycle stages have been defined and include development of product concept, R&D, certification, manufacturing & production, marketing & promotion, storage, distribution & supply, product application, and use of buildings, disposal, reuse and recycling. periodic health check-ups are ensured for employees at the manufacturing units. Safety parameters are tracked on a regular basis at all units through a well established monitoring mechanism.

**Mason Training:** On the product application side, mason training is conducted by the Customer Service team focusing on safety and health risks. During the year 9415 masons were briefed on health and safety related issues. The exposure spanned across a large number of the country's districts covered by our 30 business areas.

**Other Information:** Regarding the type of product and service information required by procedures, ACC complies with all information required under BIS, Weights and Measures norms. We also confirm to Advertising Standards Council of India guidelines for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship. For complaints regarding breaches of customer privacy and losses of customer data, ACC has a secure general complaint registration system in place which can be accessed by authorized personnel only.

**Product Life Cycle**

| | Risk | Status/ Comments |
|---|---|---|
| Manufacturing & Production | Exposure to dust | Dust control systems in place at plants.<br><br>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. |
| Storage Distribution & Supply | Exposure to dust, improper handling of cement | Safety & housekeeping at warehouses monitored through safety observation tours (SOT).<br><br>Periodic safety observation tours & warehouse safety audits conducted.<br><br>Training proposed for unloading labour at w/h for precautions during handling. |
| Use & Service (Product Application) | Chemical/ Dust; disposal of empty packaging | Mason training modules cover safety and health risks through practical training, PPE distribution and site compliance. Carried out mason health checkups at site. |

**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.**

We use the following grid to assess various life cycle stages. Our main product is Portland Cement. Considerable research and development effort has been put in to make the product meet exacting requirements of construction industry. Under normal conditions of usage and application, cement is not known to have any harmful effects.

**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**

During the year under review, there were no incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of our products. Currently we undertake 100% tracking of incidents/ near misses for manufacturing and production; LTI for distribution is also being tracked. Near miss reporting at plants is also undertaken comprehensively.

**PR3: Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements**

During the year 2009, we have complied with all necessary information required under Bureau of Indian Standard (BIS), Weights and Measures norms.

**PR4: Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.**

ACC currently manufactures PSC, PPC and OPC cement as per the specifications and norms of our cement bags display information about the grade, year of

manufacture, weight, lot number, week of manufacture and MRP (Maximum Retail Price). Every effort is taken to ensure that we indicate complete information about product quality and services (e.g. sharing of test certificates) on a regular basis.

**PR6: Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship**

ACC conforms to the guidelines of Advertising Standards Council of India, a self regulatory voluntary organisation of the advertising industry.

**PR7: Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotions and sponsorship by type of outcomes**

No non-compliance with regulations and voluntary codes concerning marketing communications were reported during the year 2009.

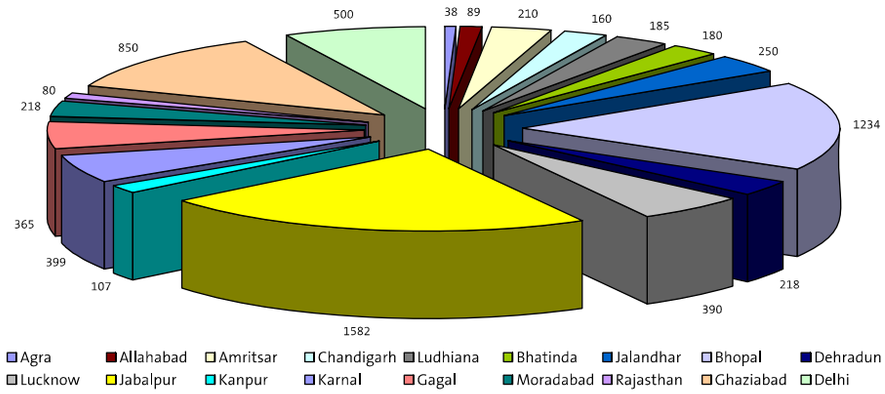
**PR8: Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data**

ACC has a secure general complaint registration system in place; the present CCS system can be accessed by authorized personnel only. ACC also has a service guideline clearly emphasizing the maintenance of confidentiality of internal data/ information, including any customer related information.

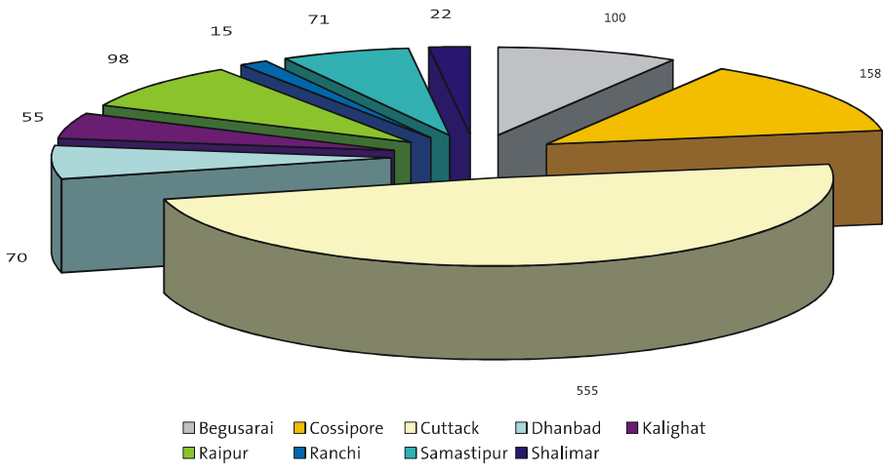
**PR9: Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services**

ACC has Competition Act, BIS, Weights & Measures compliance in place and has not evidenced incidents of fines or non-compliances.

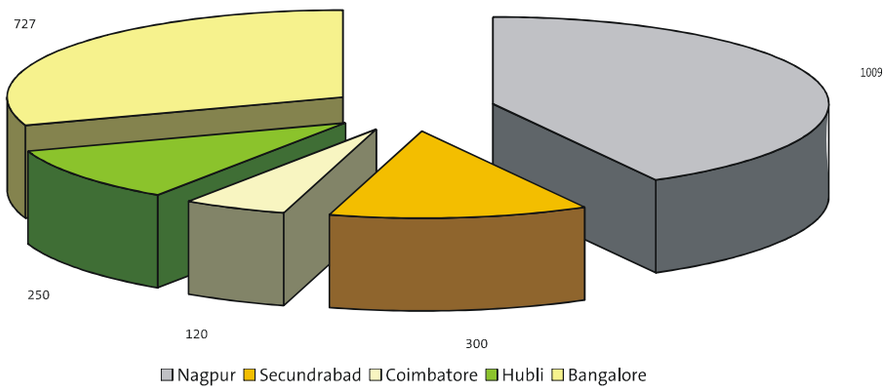
**Mason Training North**




**Mason Training East**




**Mason Training South-West**



# 5.0 The Road Ahead

For the road ahead, we will accord special focus to issues that are seen to be most material to the organisation, namely those perceived to be of the highest concern to our stakeholders and that are likely to have the most significant impact on our business and reputation. We have analysed the challenges and opportunities that surround each of the five main issues in this category setting specific goals to be achieved by the year 2013 and the plans needed to achieve them.

## Energy (Alternative Fuel & Raw Materials - AFR)

**Opportunities:** Waste generators under pressure from authorities as well as from society for disposing off the hazardous waste in ecologically sustainable manner. Cement Kiln co-processing offers this solution.
With India's real GDP expected to grow @ 8-10%, huge industrial and consumption growth will generate large amount of hazardous waste to co-process.
**Challenges:** Acceptance of co-processing as a preferred methodology of waste management by the authorities; Interstate movement/ restrictions of hazardous waste due to regulatory issues; Alignment of waste generators towards the principle of polluter to pay; Development of infrastructure for safe handling, transportation and processing of hazardous waste.

| | |
|---|---|
| **Goal 2013:** | Increase Total Substitution Rate (TSR) to 4% by 2013 from the base of 0.6% in 2009. |
| **Plan** | a) Stakeholder alignment on the co-processing technology through interactive meets. Recognition of co-processing as preferred technology in waste management rules.<br>b) Awareness generation and capacity build-up through training programmes.<br>c) Communication plan to align all the stakeholders on benefits of AFR co-processing. |

## Energy (Fossil Fuels And Energy Efficiency)

**Opportunities:** Introduction of E-Certs (Energy Certificates) by Government of India (GOI) from April 2011 as part of PAT scheme for designated energy consumers.
Tap alternative / renewable sources of energy like wind, solar, hydel and Waste Heat Recovery Systems.
**Challenges:** Achieving reduction targets set by GOI for every plant may be capital intensive; High capital cost of alternative / renewable sources of energy; Regulatory issues in terms of interstate wheeling of GREEN power. - policy not adequately incentivising.

| | |
|---|---|
| **Goal 2013:** | 5% reduction in specific power consumption per tonne of cement by 2013 from a base of 91 KHW in 2009<br>Increase the percent share of Renewable Energy capacity to total Captive Power capacity from 6% in 2009 to 15% by 2013 |
| **Plan** | a) To conduct Energy Audits at all our plants and identify potential areas.<br>b) Installation of Waste Heat Recovery Systems.<br>c) Installation / Acquisition of Wind farms and hydro power plants.<br>d) Installation of Energy Management Systems.<br>e) Use of Variable Frequency Drives for major electrical machines.<br>f) Optimisation through effective load management.<br>g) Encouraging innovation in energy conservation. |

## Legal Compliance

**Opportunities:** Compliance to Competition, Law would lead to fair business practices and industry would become more transparent. Enhancement in the Company's reputation, Less business interruptions.
**Challenges:** External environment; Short term performance imperatives; Poor understanding of the competition law by employees and other stakeholders.

| | |
|---|---|
| **Goal 2013:** | Goal 2013:To continue to be the most respected cement company in India and to become one of the most reputed corporate entities |
| **Plan** | a) Roll out VCCE (Value Creation in Competitive Environment) initiative to create awareness and ensure compliance to Competition Law.<br>b) Conduct Fair Competition Review every year.<br>c) Impart Fair Competition Training to all relevant employees.<br>d) Regularly monitor and review compliance to Competition Law. |

## Sustainable Construction

**Opportunities:** Huge spend planned by Government of India in the 11th and 12th 5-year Plans on rural and infrastructure development, key drivers for cement consumption. Usage of blended cement would conserve minerals for future use and also consume less amount of energy and water for construction activity.

**Challenges:** Communication to consumers on benefits of blended cement with some amount of sacrifice in the construction time.

| | |
|---|---|
| **Goal 2013:** | To promote usage of blended cement in all forms of construction, as green cement<br>To position ACC as a responsible company that promotes sustainable construction.<br>To maintain the lead rank in the share of blended cement to total cement production. (in 2009 ACC produced 91% blended cement against industry average of 75%) |
| **Plan** | a) Development of communication modules having a mix of films, presentations and support materials suitable for different stakeholder groups.<br>b) Regularly monitor improvement in awareness.<br>c) Sponsor researchers in usage of blended cement.<br>d) Promote approval for composite cement. |

## Water and Waste Management

**Opportunities:** Water recycling and water conservation at our manufacturing units and Captive Power Plants (CPP)

**Challenges:** Most of our plants are located in water deficit areas; All new plants would come up with its own CPP thereby further increasing water consumption; Huge capacity expansion planned by the industry - more pressure on water resources; Uncertain rainfall patterns.

| | |
|---|---|
| **Goal 2013:** | Zero discharge of effluents<br>10% reduction in specific water consumption per tonne of cement on the base of 2010 |
| **Plan** | a) Install monitoring systems for water and establish baseline consumption.<br>b) Install Wastewater treatment plants.<br>c) Water harvesting initiatives at plants, mines, colonies and nearby communities.<br>d) Install air cooled condensers for CPP instead of conventional water cooling towers in water deficit locations.<br>e) Usage of recycled water for mill sprays.<br>f) Supplying good drinking and irrigation water to nearby villages - as part of CSR activity.<br>g) Promote innovation in water saving projects. |

### Preparing for the foreseeable future

Recognizing the vulnerability of ACC to uncertainties in the external environment, we commissioned a comprehensive forecasting study to assess the likely global scenario that would unfold before ACC in the long term spanning a 10 year period. The study entitled ACC 2020 visualized likely scenarios of market trends in India and other parts of the world, in the years leading to 2020. First it entailed an assimilation of learning from a 'competitiveness' perspective in global and Indian markets for cement, other basic materials and commodity industries. The study then attempted an assessment of the likely cost structure of our plants through a benchmarking exercise. Further analysis of the likely situation conjured up possible solutions to identify strategic imperatives for the organisation based on national and global market trends. The exercise has helped identify opportunities and options to optimize the Company's input costs, secure long term energy and material requirements and plan to enhance cost competitiveness. Project ACC 2020 has enabled the Company understand the optimal countrywide asset configuration it requires, to meet its growth objectives over the next ten years.
If these findings are assimilated in tandem with our Materiality mapping exercise, it will serve as a powerful foundation to understand the agenda before us in dealing with possible impending challenges not only on the financial front but also those that will impact our social and environmental dimensions.

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# Independent Assurance Statement

**The Management and Board of Directors**
ACC Limited
Mumbai, India.

## OUR ENGAGEMENT

Ernst & Young Pvt. Ltd. (EY) was retained by ACC Limited (the Company) to provide an independent assurance on its Corporate Sustainability Report for the year ended December 31, 2009. 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 management 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 activities is to the management of the Company only and in accordance with the terms 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 party may place on the Report is entirely at its own risk. The assurance report should not be taken as a basis for interpreting the Company's overall performance, except for the aspects mentioned in the scope below.

## LEVEL OF ASSURANCE

Our responsibility, in accordance with the management's instructions, was to carry out the following assurance activities:

- A limited level assurance opinion on the completeness and accuracy of the claims and performance data presented in the Report (as set out in ISAE 3000)[1];
- A moderate level assurance opinion on the Report's content with respect to the AA1000AS (2008)[2] assurance principles of Inclusivity, Materiality and Responsiveness;
- A moderate level Type 2 assurance opinion with respect to the AA1000AS (2008) on the following indicators: alternate fuels and raw materials, energy consumption, carbon emissions and community initiatives.

## SCOPE AND LIMITATIONS

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

- Data and information related to the Company's sustainability performance for the period 1 January 2009 to 31 December 2009;
- The Company's internal protocols, processes, and controls related to the collection and collation of sustainability performance data;
- Sustainability specific data and information related to materials, energy, air emissions, water and waste management, workforce, safety, community initiatives and training;
- Visits to 3 sample plants where our work comprised review of the above mentioned indicators for these plants.

### Exclusions

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 2009 to 31 December 2009);
- The Company's statements that describe expression of opinion, belief, aspiration, expectation, aim or future intention provided by the Company;
- 'Economic performance indicators' included in the Report.

## OUR APPROACH

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[1] International Federation of Accountants' International Standard for Assurance Engagements Other than Audits or Reviews of Historical Financial Information

[2] AA1000AS (2008) – The second edition of the AA1000 assurance standard from the Institute of Social and Ethical Accountability.

Our assurance engagement was planned and performed in accordance with ISAE 3000 and to meet the requirements of a Type 2 assurance engagement as defined by AA1000AS (2008). The assurance principles of Inclusivity, Materiality and Responsiveness, as outlined in AA1000AS (2008), were used as criteria against which to evaluate the Report.

In 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 issue owners at the corporate office and at the 3 plants visited. Relevant associated documentation was also reviewed;
2. Interviewed select key personnel of the Company to understand the current processes in place for capturing sustainability performance data as per GRI 2006 (GRI G3) and Holcim Group (Group) guidelines and progress made during the reporting period.
3. Reviewed processes and supporting evidence for collecting, compiling, and reporting select indicators at the corporate and site levels.
4. Visits to a cement grinding plant at Tikaria (Uttar Pradesh) and integrated cement plants at Lakheri (Rajasthan) and Gagal (Himachal Pradesh) 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 sustainability or of key stakeholder groups that have been excluded from dialogue. We consider that the Company could establish systems to ensure mapping of relevant stakeholders and their concerns on an annual basis.
- Materiality: The Company has instituted a multi-tiered and cross functional Sustainability Governance Structure comprising of the Managing Committee Group, Corporate Sustainable Development (SD) Council, SD Core Group and plant SD Councils. These bodies discuss, evaluate and determine the materiality of sustainability issues on an ongoing basis. Barring aspects of the Report listed in "Exclusions" 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 us not to believe that the Company has applied its processes for determining material issues to be included in the Report.
- Responsiveness: The Company is committed to being responsive to its stakeholders as is evident from the wide range of forms and forums it has employed to communicate on sustainability issues. 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 materials, energy, air emissions, water and waste management, workforce, safety, community initiatives and training has 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 engaged with different external stakeholders such as state pollution control boards, GTZ, Confederation of Indian Industries (CII) for furthering the use of alternate fuels and raw materials in the cement industry in India.
- While the Report has been prepared in keeping with the GRI G3 guidelines, interpretation relating to human rights was an area of improvement.
- The Company has reported on its hazardous waste but should expand the scope to also include significant production related non-hazardous wastes.
- The Company has reported on additional indicators from the Metals and Mining sector for the first time; however its rehabilitation and resettlement policy is under development and the plant grievance handling procedures may be further synchronized across the plants with respect to a common corporate framework.
- A new structure for responding to community needs at the plants was instituted in 2009 based on the external materiality matrix, state of play and stakeholder engagement scores. Thus, while the programs are being implemented systematically across the Company's plants, the new structure would need to mature over time before its impacts can be gauged. There is scope for further streamlining beneficiary collation mechanisms.

## OUR ASSURANCE TEAM AND INDEPENDENCE

Our assurance team, comprising of multidisciplinary professionals, has been drawn from our climate change and sustainability network and undertakes 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[3] for Professional Accountants. EY's independence policies and procedures ensure compliance with the Code.

**for Ernst & Young Private Limited**

Sudipta Das
Partner
27 May 2010, Mumbai

AA1000
Licensed Assurance Provider
000-43

[3] International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants. This *Code* establishes ethical requirements for professional accountants. The guidance related to network firms was updated in July 2006.

# 7.1 GRI Content Index

| GRI No | Description | Page |
|---|---|---|
| 1 | Strategy & analysis | 14 |
| 1.1 | Statement of CEO | 02 |
| 1.2 | Description of key impacts, risks and opportunities | 79 |
| 2 | Organisational profile | 06 |
| 2.1 | Name of the organisation | 06 |
| 2.2 | Primary brands, products, services | 06 |
| 2.3 | Operational structure | 06 |
| 2.4 | Location of organisation's headquarters | 06 |
| 2.5 | Number of countries where organisation operates | 06 |
| 2.6 | Nature of ownership and legal form | 06 |
| 2.7 | Markets served | 06 |
| 2.8 | Scale of reporting organisation | 10 |
| 2.9 | Significant changes during reporting period | 10 |
| 2.10 | Awards received | 88 |
| 3 | Report Parameters | |
| | Report profile | 10 |
| 3.1 | Reporting period | 10 |
| 3.2 | Date of most recent previous report | 02 |
| 3.3 | Reporting cycle | 10 |
| 3.4 | Contact point for questions | 03 |
| Report Scope and Boundary | | 10 |
| 3.5 | Process for defining report content | 10 |
| 3.6 | Boundary of Report | 10 |
| 3.7 | Limitations | 10 |
| 3.8 | Basis for reporting on joint ventures,subsidiaries, etc | 10 |
| 3.9 | Data measurement techniques and assumptions | 10 |
| 3.10 | Explanation of the effect of re-statements | - |
| 3.11 | Significant changes in reporting | 10 |
| 3.12 | Table identifying location of standard disclosures | 84 |
| | Assurance | 81 |
| 3.13 | Policy and current practice regarding external assurance | 02 |
| 4 | Governance, Commitments, and Engagements | |
| 4.1 | Governance structure | 19 |
| 4.2 | Whether the Chair of the highest governance body is an executive officer | 19 |
| 4.3 | Number of independent and non-executive members | 19 |
| 4.4 | Mechanisms for shareholders and employees | 19 |
| 4.5 | Linkage between compensation and organisation's performance | 19 |
| 4.6 | Processes to avoid conflicts of interests | 70 |
| 4.7 | Process for determining the qualifications and expertise of members of the highest governance body for guiding organisational strategy, economic, environment and social topics | 19 |
| 4.8 | Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environment and social performance | 02 |
| 4.9 | Procedures for overseeing, identification and management of economic, environment and social performance including risks and opportunities | 79 |
| 4.10 | Processes for evaluating the highest governance body's performance | 19 |
| **Commitments to External Initiatives** | | |
| 4.11 | Explanation of whether and how the precautionary approach of principle is addressed | 12 |
| 4.12 | Externally developed economic environment and social charters which the organisation endorses | - |
| 4.13 | Memberships in associations | 90 |
| | Stakeholder Engagement | 17 |
| 4.14 | List of stakeholder groups | 17 |
| 4.15 | Basis for identification and selection of stakeholders | 17 |
| 4.16 | Approach to stakeholder engagement | 17 |
| 4.17 | Key topics and concerns raised through stakeholder engagement | 13 |
| 5 | Management Approach and Performance Indicators | |
| **Economic** | | |
| | Management Approach | 23 |
| | Performance Indicators | |
| EC1 | Direct economic value generated | 24 |
| EC2 | Financial implications and other risks and opportunities due to climate change | 24 |
| EC3 | Coverage of the organisation's defined benefit plan obligations | 25 |
| EC4 | Financial assistance received from Government | 25 |
| EC5 | Ratio of standard entry level wage to local minimum wage | 70 |
| EC6 | Policy practices and proportion of locally based suppliers | 29 |
| EC7 | Procedures for local hiring | 70 |
| EC8 | Development and impact of infrastructure investment | 61 |
| EC9 | Significant indirect economic impacts | 25 |
| **Environmental** | | 31 |
| | Management Approach | 31 |
| | Goals and Performance | 31 |
| | Policy | 31 |
| | Organisational Responsibilities | 31 |
| | Training and Awareness | 31 |
| | Performance Indicators | |
| EN1 | Materials used by weight or volume | 30 |
| EN2 | Percentage of materials used that recycled input materials | 44 |
| EN3 | Direct energy consumption by primary energy source | 36 |
| EN4 | Indirect energy consumption by primary source | 36 |

| GRI No | Description | Page |
|---|---|---|
| EN5 | Energy saved due to conservation and efficiency improvements | 35 |
| EN6 | Initiatives to provide energy efficient or renewable energy products | 35 |
| EN7 | Initiatives to reduce indirect energy consumption | 35 |
| EN8 | Total water withdrawal by source | 48 |
| EN9 | Water source significantly affected by withdrawal of water | 48 |
| EN10 | Volume of water recycled and reused | 49 |
| EN 11 | Location and size of land owned, leased, managed in, or adjacent to protected areas | 42 |
| EN12 | Significant impact of activities, products and services on biodiversity | 41 |
| EN13 | Habitats protected or restored | 42 |
| EN14 | Strategies, current actions and future plans for managing impacts on biodiversity | 42 |
| EN15 | Number of IUCN Red species listed | 42 |
| EN16 | Total direct and indirect GHG emissions by weight | 38 |
| EN17 | Indirect GHG emissions by weight | 40 |
| EN18 | Initiatives to reduce GHG emissions | 38 |
| EN19 | Emissions of ozone depleting substances | 40 |
| EN20 | $NO_x$, $SO_x$ and other emissions | 40 |
| EN21 | Water discharge by quality and destination | 47 |
| EN22 | Weight of waste by type and disposal method | 47 |
| EN23 | Number and volume of significant spills | 48 |
| EN24 | Weight of transported, imported or exported treated hazardous waste | 48 |
| EN25 | Size, protected status and biodiversity value of water bodies, and related habitats affected by discharge of water and runoff | 48 |
| EN26 | Initiatives to mitigate environmental impacts | 32 |
| EN27 | Percentage of products sold and packaging materials reclaimed | 27 |
| EN28 | Value or fines for non compliance with environment laws | - |
| EN29 | Environmental impact of transporting products and materials | 38 |
| EN30 | Total environment protection expenditure and investment | 40 |
| **Social Performance** | | |
| | Labour practices and decent work | |
| | Management Approach | 53 |
| | Goals and Performance | 53 |
| | Policy | 53 |
| | Organisational responsibility | 53 |
| | Training and Awareness | 70 |
| | Monitoring and Follow-up | 56 |
| | Performance Indicators | |

| GRI No | Description | Page |
|---|---|---|
| LA1 | Total workforce by employment type | 71 |
| LA2 | Total number and rate of employee turnover | 71 |
| LA3 | Benefits provided to full time employees | 70 |
| LA4 | Percentage of employees covered by collective bargaining | 72 |
| LA5 | Minimum notice period regarding operational changes | 72 |
| LA6 | Percentage of total workforce represented in formal health and safety committees | 69 |
| LA7 | Rate of injury, occupational diseases, loss days etc | 69 |
| LA8 | Education, training, counseling programmes and health risk related programmes | 65 |
| LA9 | Health and safety topics covered in agreements with trade unions | 69 |
| LA10 | Average hours per training, per year, per employee | 72 |
| LA11 | Programmes for skill management and learning | 72 |
| LA12 | Percentage of employees receiving performance reviews | 71 |
| LA13 | Composition of governance bodies and breakdown of employees according to gender, age group, and minority group membership | 71 |
| LA14 | Ratio of basic salary of men to women | 73 |
| | Human Rights | 70 |
| | Management Approach | 70 |
| | Goals and Performance | 70 |
| | Policy | 70 |
| **Human Rights Performance Indicators** | | |
| HR 1 | Percentage and total number of significant investment agreements that include human rights clauses | - |
| HR2 | Percentage of significant suppliers and contractors that have undergone screening on human rights | 29 |
| HR3 | Total hours of employee training on policies and procedures concerning aspects of human rights | - |
| HR4 | Number of incidences of discrimination and action taken | 71 |
| HR5 | Freedom of association and collective bargaining | 71 |
| HR6 | Child labour | 71 |
| HR7 | Operations identified as having risks for forced and compulsory labour | 72 |
| HR8 | Percentage of security personnel trained in organisational policies concerning human rights | - |
| HR9 | Number of violations involving indigenous rights | - |
| | Society | 54 |
| | Management Approach | 70 |
| | Goals and Performance | 70 |
| | Policy | 70 |
| | Organisational responsibility | 70 |
| | Training and Awareness | 70 |
| | Monitoring and follow up | 70 |

| GRI No | Description | Page |
|---|---|---|
| **Society Performance Indicators** | | |
| SO1 | Nature and effectiveness of programmes | 56 |
| SO2 | Percentage of units analysed for risks related to corruption | 76 |
| SO3 | Percentage of employees trained in anti-corruption policies | 76 |
| SO4 | Action taken in response to corruption | 76 |
| SO5 | Participation in public policy development and lobbying | 75 |
| SO6 | Value of financial contributions to political parties | 76 |
| SO7 | Number of legal actions for anti-competitive behaviour | 76 |
| SO8 | Value of fines and non-monetary sanctions for non-compliance with laws and regulations | 76 |
| **Product Responsibility** | | |
| | Management Approach | 77 |
| | Goals and Performance | 77 |
| | Organisational Responsibility | 77 |
| | Training and Awareness | 77 |
| | Product Responsibility Performance Indicators | |
| PR1 | Lifecycle stages of products in which health and safety impacts are assessed | 77 |
| PR2 | Incidence of non-compliance with regulation and codes concerning and health and safety impacts | 77 |
| PR3 | Type of product and service information required by procedures | 77 |
| PR4 | Incidence of non-compliance concerning product labeling | 77 |
| PR5 | Practices related to customer satisfaction | 27 |
| PR6 | Programmes for adherence to laws relating to marketing communication | 78 |
| PR7 | Non-compliance with regulations concerning marketing communications | 78 |
| PR8 | Number of substantiated complaints regarding breach of customer privacy | 79 |
| PR9 | Value of fines for non-compliance with laws concerning the provision and use of products | 79 |

# 7.2 UN Global Compact Principles

ACC is a signatory of the United Nations Global Compact. The following table shows reference to the relevant chapter of this report where each principle is addressed or explained. This report also serves as a Communication on Progress (COP) as required by signatories of the UN Global Compact.

| UN Global Compact Principles | Report Chapter |
|---|---|
| **Human Rights** | **4.5** |
| 1. Businesses should support and respect the protection of internationally proclaimed human rights; and | |
| 2. Make sure that they are not complicit in human rights abuses. | |
| **Labour Standards** | **4.5** |
| 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; | |
| 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** | **2.4, 3.1,3.2,3.3,3.4,3.6, 3.8** |
| 7. Businesses should support a precautionary approach to environmental challenges; | |
| 8. Undertake initiatives to promote greater environmental responsibility; and | |
| 9. Encourage the development and diffusion of environmentally friendly technologies. | |
| **Anti-corruption** | **1.8, 4.6** |
| 10. Businesses should work against corruption in all its forms, including extortion and bribery | |

# 7.3 Awards Received In 2009

## Safety

8th Annual Greentech Safety Award 2009, Gold category in cement sector - to ACC Tikaria & Jamul
**Awarding Body:** Greentech Foundation
**Citation:** Outstanding achievement in safety management

8th Annual Greentech Safety Award 2009, Silver category in cement sector
**Awarding Body:** Greentech Foundation
**Citation:** Outstanding achievement in safety management

International Safety Award 2008 - to ACC Gagal, Sindri & Tikaria
**Awarding Body:** British Safety Council
**Citation:** In recognition of achieving high safety standards

State Safety Award 2007 - to ACC Bargarh
**Awarding Body:** Government of Orissa
**Citation:** Best performance in accident prevention, safety management and communication system

Safety Innovation Award 2009 - to ACC Wadi (Expansion project)
**Awarding Body:** The Institution of Engineers (India)
**Citation:** Implementation of innovative safety initiatives

## Economic and Governance

IMC Ramkrishna Bajaj National Quality Trophy 2009 (Manufacturing category) - to ACC Gagal
**Awarding Body:** Indian Merchants' Chamber
**Citation:** Outstanding achievements in the field of quality

IMC Ramkrishna Bajaj National Quality Commendation Certificate 2009 (Manufacturing category) - to ACC Sindri
**Awarding Body:** Indian Merchants' Chamber
**Citation:** Outstanding achievements in the field of quality

IMC Ramkrishna Bajaj National Quality Certificate of Merit 2009 (Manufacturing category) - to ACC Chaibasa
**Awarding Body:** Indian Merchants' Chamber
**Citation:** Excellent quality strategies

Energy Conservation Award - to ACC Lakheri
**Awarding Body:** Rajasthan Renewable Energy Corporation Ltd
**Citation:** Best efforts in Energy Conservation

The Institute of Chartered Accountants of India (ICAI) Gold Shield (Manufacturing & Trading Enterprises)
**Awarding Body:** Institute of Chartered Accountants of India
**Citation:** Excellence in financial reporting for Annual Report 2008

India Manufacturing Excellence Award 2009 - Silver Certificate of Merit - to ACC Gagal
**Awarding Body:** Frost & Sullivan & The Economic Times
**Citation:** Efforts towards achieving world-class manufacturing status.

## Environment

Abheraj Baldota Environment Award to Wadi Limestone Mines
**Awarding Body:** Federation of Indian Mineral Industries (FIMI)
**Citation:** In recognition of sustainable environmental development

National FIMI Environment Award 2008-09 - to ACC Wadi Limestone Mines
**Awarding Body:** Federation of Indian Mineral Industries (FIMI)
**Citation:** Outstanding work in the area of environment promotion and sustainable development

10th Annual Greentech Environment Excellence Award - silver category - cement sector - to ACC Lakheri & Sindri
**Awarding Body:** Greentech Foundation
**Citation:** In recognition of commitment to environment protection and management

10th Annual Greentech Environment Excellence Award - gold category - cement sector - to ACC Tikaria
**Awarding Body:** Greentech Foundation
**Citation:** In recognition of commitment to environment protection and management

National Award for Excellence in Water Management - to ACC Wadi
**Awarding Body:** Confederation of Indian Industry (CII)
**Citation:** Efficient usage of water

Srishti Good Green Governance Award - to ACC Madukkarai
**Awarding Body:** Srishti Publications
**Citation:** Best efforts in Environment conservation and management in Manufacturing - Non Metallurgical Industrial category

FE-EVI Green Business Leadership Award
**Awarding Body:** Financial Express and Emergent Ventures India
**Citation:** Best Performer in the Cement Sector for contribution towards Environment and Excellence in the area of Green Businesses.

# 7.4 Memberships

1. All India Organisation 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. Maharashtra Chamber of Commerce, Industry & Agriculture
17. National Safety Council (NSC)
18. PHD Chamber of Commerce and Industry, PHDCCI
19. The Energy & Resources Institute Business Council for Sustainable Development (TERI-BCSD)
20. The Institute of Company Secretaries of India - Centre for Research & Training

# 7.5 Glossary

**Absolute gross emissions -** Total amount of $CO_2$ 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

**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.

**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."

**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**.**

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

**Clinker -** An intermediate product in cement manufacturing produced by decarbonizing, sintering, and fast-cooling ground limestone.

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

**Community Advisory Panel** - A formal way of collaborating with the community via a panel of 10–12 members representing the company and community. Its main aim is to enable a two-way dialogue for communicating with the community.

**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 organisations in India,

**Fly – ash** - Solid, particulate combustion residue from thermal power plants or waste incineration plants, for example. Because of its fineness (between 1 ìm and 1 mm), it passes out along with the flue gases and must be eliminated by filters. Additive for fly ash cements.

**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 carbon-based fuels traditionally used by the cement industry, including coal and oil.

**Global Compact -** A UN initiative to encourage global businesses to adopt ten principles covering Human Rights, Labour Standards, Environment and Anti corruption.

**Global Reporting Initiative (GRI)**: An International framework recommended for reporting progress against Sustainable Development G3 refers to the latest guidelines launched in October 2006.

**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 organisation working for natural resource conservation

**Jatropha** - a genus of plants and trees amenable to bio-diesel production. Easy to cultivate, its fruit produces seeds containing upto 40% oil. The fruit and seeds serve as replacement fuels.

**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 -** LEED (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 organisation'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 8 International Human Development Goals to be achieved by 2015.

**NAPCC -** National Action Plan on Climate Change

**NOx –** a generic term for Nitrogen oxide, usually refers to an air pollutant

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

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

**Photovoltaic Cell** - A photovoltaic cell is 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 Pozzolona Cement (PPC) -** Cement obtained by intergrinding a pozzolanic material such as fly-ash with clinker and gypsum, or by blending ground pozzolana with Portland cement.

**Portland Slag Cement (PSC) -** Cement obtained by intergrinding a cementitious material such as slag with clinker and gypsum, or by blending ground granulated slag with Ordinary Portland Cement. Slag is a waste by-product of the steel manufacturing process.

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

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

**Specific gross emissions -** The gross amount of $CO_2$ emitted per tonne of cement.

**Specific net emissions -** The net $CO_2$ emissions per tonne of cement.

State Pollution Control Board (SPCB) -

**Stakeholder dialogue** - A stakeholder dialogue is a structured way to solicit input from company stakeholders. Normally stakeholders are invited to comment on specific issues or problems.

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

**Sustainable development (SD)-** 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.

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

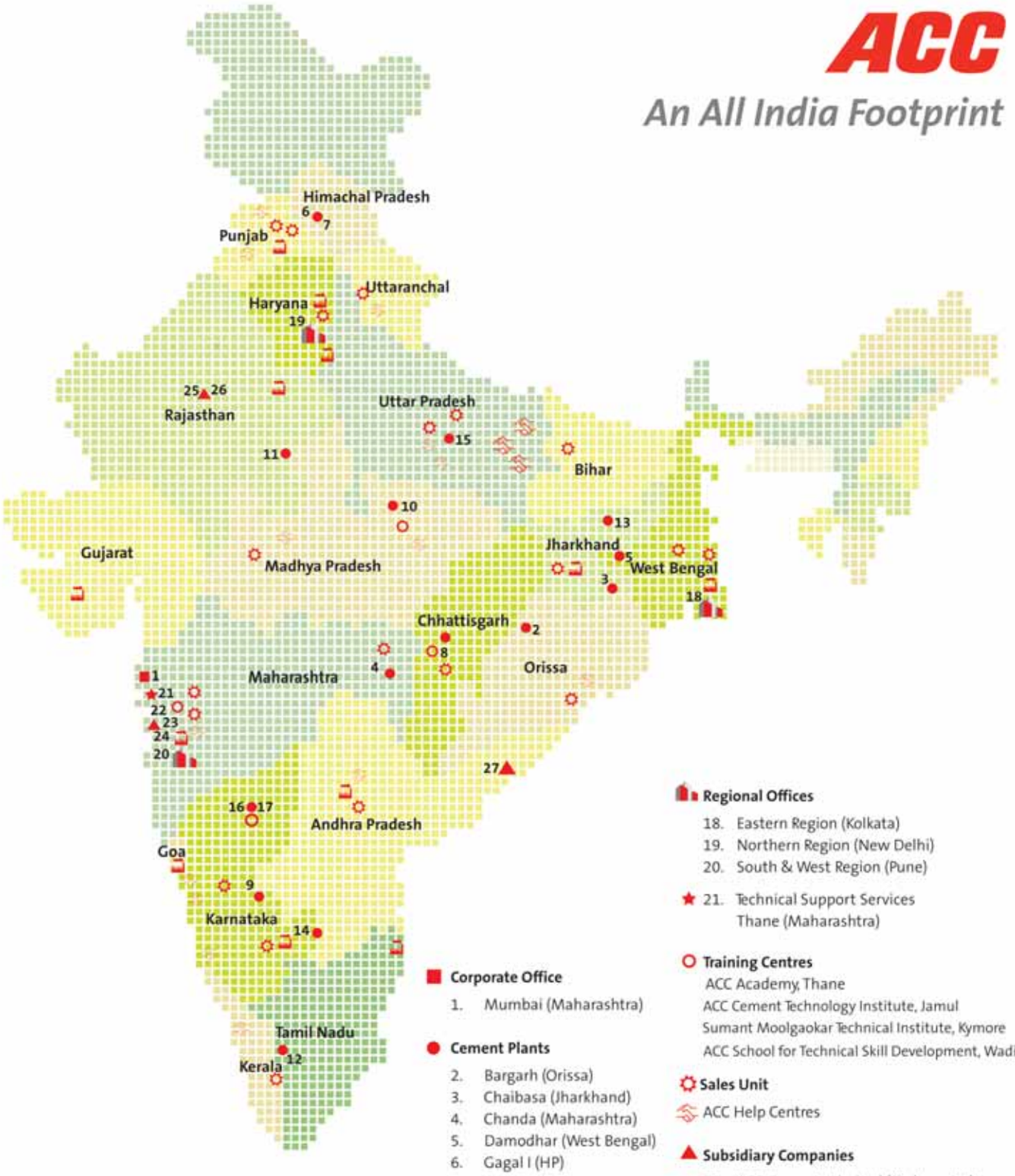
# 7.6 Milestones in Sustainable Development

| | |
|---|---|
| **1936** | Incorporation of The Associated Cement Companies Limited on August 1, 1936 |
| **1944** | ACC's first community development initiative near Bombay |
| **1947** | ACC helps relocate employees and associates during Partition of India – evacuating them to the new country of their choice |
| **1947** | India's first entirely indigenous cement plant established at Chaibasa in Bihar |
| **1952** | Village Welfare Scheme launched |
| **1955** | Sindri cement Plant used the waste product calcium carbonate sludge from fertilizer factory at Sindri |
| **1956** | Bulk Cement Depot established at Okhla, Delhi – First in India |
| **1957** | Technical training institute established at Kymore, Madhya Pradesh |
| **1961** | Blast furnace slag from TISCO used at the Chaibasa to manufacture Portland Slag Cement – First in India |
| **1965** | Manufacture of Portland Pozzolana Cement |
| **1977** | ACC receives ASSOCHAM first national award for the year 1976 instituted for outstanding performance in promoting rural and agricultural development activities |
| **1978** | Introduction of energy efficient precalcinator technology at Wadi – first in India |
| **1982** | Commissioning of first 1 MTPA plant in the country at Wadi, Karnataka |
| **1984** | ACC develops and supplies Special G type Oil well cement to ONGC - breakthrough in import substitution |
| **1992** | Incorporation of Bulk Cement Corporation of India, a joint venture with the Government of India |
| **1993** | ACC starts commercial manufacture of Ready Mixed Concrete at Mumbai – first in India |
| **1995** | ACC selected as Most Respected Company in India by Business India |
| **2001** | Commissioning of new 2.6 MTPA capacity plant at Wadi, Karnataka – India's largest and among the world's largest sized kilns |
| **2002** | PHDCCI Good Corporate Citizen Award |
| **2006** | National Award for highest Fly Ash Utilisation - by Ministry of Power, Ministry of Environment & Forests and Dept of Science & Technology, Govt of India - for manufacture of Portland Pozzolana Cement |
| **2006** | Good Corporate Citizen Award 2005-06 from Bombay Chamber of Commerce and Industry |
| **2006** | ACC establishes Anti Retroviral Treatment Centre for HIV/AIDS patients at Wadi in Karnataka– the first ever by corporate sector in India |
| **2006** | Waste management services launched |
| **2007** | ACC partners with Christian Medical College for treatment of HIV/AIDS in Tamil Nadu |

| | |
|---|---|
| **2007** | Sumant Moolgaokar Technical Institute completes 50 years and reopens with new curriculum |
| **2007** | ACC commissions Wind energy farms in Tamil Nadu and Rajasthan |
| **2007** | ACC ACADEMY opened in Thane, a new centre for training and development |
| **2008** | ACC Cement Technology Institute formally inaugurated at Jamul |
| **2008** | First Sustainable Development Report released on June 5, World Environment Day |
| **2008** | Sustainable Development Council set up on August 18 |
| **2008** | ACC wins CNBC-TV18 India Business Leader Award in the category India Corporate Citizen of the year 2008 |
| **2008** | ACC AHEAD is formed as social volunteering and community welfare wing of ACC Ladies Clubs |
| **2009** | NGO "Karmayog" rated ACC as best company in cement industry in terms of Corporate Social Responsibility |
| **2009** | ACC received Jamanalal Bajaj "Uchit Vyavahar Puraskar" of Council for Fair Business Practices |
| **2009** | ACC is allotted coal blocks in Madhya Pradesh and West Bengal |
| **2009** | Second Sustainable Development Report released as a web update |
| **2009** | Cement House, ACC's corporate office building transformed as Green Building |
| **2009** | New Grinding plant of capacity 1.60 million tonnes inaugurated at Thondebhavi in Karnataka – to manufacture Portland pozzolana cement |
| **2010** | Kudithini Cement Grinding Plant inaugurated in Karnataka with a capacity of 1.1 MTPA of Portland Slag Cement |
| **2010** | ACC acquires Encore Cements & Additives Private Limited, a slag grinding plant in Vishakhapatnam |
| 2010 | ACC commissions third wind energy farm in Maharashtra |

# ACC

## An All India Footprint




**Corporate Office**

1. Mumbai (Maharashtra)

**Cement Plants**

2. Bargarh (Orissa)
3. Chaibasa (Jharkhand)
4. Chanda (Maharashtra)
5. Damodhar (West Bengal)
6. Gagal I (HP)
7. Gagal II (HP)
8. Jamul (Chhattisgarh)
9. Kudithini (Karnataka)
10. Kymore (MP)
11. Lakheri (Rajasthan)
12. Madukkarai (TN)
13. Sindri (Jharkhand)
14. Thondebhavi (Karnataka)
15. Tikaria (UP)
16. Wadi I (Karnataka)
17. Wadi II (Karnataka)

**Regional Offices**

18. Eastern Region (Kolkata)
19. Northern Region (New Delhi)
20. South & West Region (Pune)

★ 21. Technical Support Services
Thane (Maharashtra)

**Training Centres**

ACC Academy, Thane
ACC Cement Technology Institute, Jamul
Sumant Moolgaokar Technical Institute, Kymore
ACC School for Technical Skill Development, Wadi

**Sales Unit**

ACC Help Centres

**Subsidiary Companies**

22. ACC Concrete Limited (Maharastra)
**RMX Plants**
23. ACC Mineral Resources Limited (Maharashtra)
24. Bulk Cement Corporation (India) Limited (Maharashtra)
25. Lucky Minmat Limited (Rajasthan)
26. National Limestone Company Pvt. Ltd. (Rajasthan)
27. Encore Cements & Additives Pvt. Ltd. (Andhra Pradesh)

N.B. This map is illustrative and not drawn to scale.