



The cement sustainability initiative

progress report

Executive Summary

August 2005



World Business Council for
Sustainable Development

www.wbcscement.org



Executive Summary



Current Members of the CSI

- Ash Grove Cement (USA)
- Cemex (Mexico)*
- Cementos Molins, (Spain)
- Cimpor (Portugal)*
- CRH (Ireland)
- Gujarat Ambuja (India)
- HeidelbergCement (Germany)*
- Holcim (Switzerland)*
- Italcementi (Italy)*
- Lafarge (France)*
- Secil (Portugal)
- Shree Cement (India)
- Siam Cement (Thailand)*
- Taiheiyo Cement (Japan)*
- Titan (Greece)
- Uniland (Spain)
- Votorantim (Brazil)*

RMC, a member since 2000, was taken over by CEMEX in March, 2005.

(* Denotes founding member)

In 2002, ten international cement companies that had joined forces as the Cement Sustainability Initiative (CSI) to help the industry play a stronger role in support of sustainable development published *Our Agenda for Action*. Now an expanded group of 16 companies reports on progress in fulfilling those promises.

Working under the auspices of the World Business Council for Sustainable Development (WBCSD), the original members of the CSI commissioned the not-for-profit Battelle Memorial Institute to study the industry from a sustainability viewpoint. The CSI also organized a series of stakeholder dialogues around the world to help ensure the research addressed legitimate stakeholder concerns. Battelle's report offered challenging recommendations (see www.wbcscement.org).

These meetings and other research led us to set up task forces on six critical issues:

- climate protection and CO₂ management
- responsible use of fuels and materials
- employee health and safety
- emissions monitoring and reporting
- local impacts on land and communities
- reporting and communications

Our Agenda for Action promised this interim progress report in 2005, followed by the completion of its first five-year segment of work during the year 2006 and a full progress report in 2007. Work from each task force is summarized here and documented on our website, www.wbcscement.org.



Spain



Portugal



Ireland



Task Force: Climate protection and CO₂ management

Globally, the cement industry produces about 5% of man-made CO₂. The CSI Task Force on Climate Protection and CO₂ Management has produced, along with WBCSD and the World Resources Institute (WRI), a protocol and guidelines for accounting and reporting CO₂ emissions from the cement manufacturing process. The Protocol is consistent with the WRI/WBCSD Greenhouse Gas (GHG) Protocol.

The Task Force has reviewed and updated emissions factors for a number of traditional and alternative fuels based on new measurements. The updated Protocol incorporates accounting practices that allow for emission credits and trading to meet the requirements of current and future trading systems. The Task Force worked with the WBCSD Energy and Climate Program, The International Emissions Trading Association (IETA) and WRI, as well as consultants engaged by the European Commission to assist in developing the protocol, for use according to the EU Emissions Trading Scheme (EU ETS).

Progress will be measured by the number of companies using the tools set out in the protocol guidelines, developing climate change mitigation strategies, publishing their baseline emissions, and reporting annually as called for in the protocol.



Task Force: Responsible Use of Fuels and Materials

The cement industry can recover and use many industrial by-products, waste streams, and other materials in cement manufacturing. Some are used as raw materials, some are incorporated into the final product, while others provide the fuel needed to convert limestone into clinker. This allows us to reduce our own and other industries' environmental impacts. Yet the complexity of these operations has left many stakeholders concerned about emissions from our facilities and the contribution that the industry can make in helping to solve waste problems.

There are clear business and environmental benefits to be gained from using by-products. However, we will only use them in accordance with best waste management practices, where we can do so safely, without harm to our employees, neighbors, or the environment.

Following extensive stakeholder consultations, the Task Force on Responsible Use of Fuels and Materials developed a set of guidelines to lay out a consistent approach to the selection and use of fuels and raw materials. These are built on the principles of sustainable development, eco-efficiency, and industrial ecology, and integrated into local resource management infrastructures. CSI member companies have agreed to measure and report on alternative energy sources and raw materials used.

HEIDELBERGCEMENT
Germany

Italcementi Group
Italy

SECIL
Portugal

GUJARAT AMBUJA CEMENTS
India

Holcim
Switzerland

LAFARGE
France



Task Force: Employee Health & Safety

The Battelle Report concluded that the health and safety performance of the cement industry is below that of other manufacturing sectors. It called on the industry to share knowledge and good practices so that these can become the industry norm.

The Task Force on Employee Health and Safety agreed on industry safety definitions and reporting criteria, the first set of internationally-agreed definitions enabling consistent reporting. These definitions cover fatalities, lost-time injuries and, for direct employees, fatality rates and lost-time injury frequency ratio. These definitions enabled us to prepare a common safety-reporting format, and to compile a report based on data submitted by CSI companies covering the years 2003 and 2004.

Our analyses led us to prepare a report on the key elements needed for effective health and safety management. Most CSI companies have already implemented such guidelines, but we now need to disseminate these to the wider industry and external stakeholders, and ensure that they are fully followed at all our own facilities. We are working with our communications partners—many representing national cement associations—to ensure good knowledge and distribution of these definitions and good practice.



Task Force: Emissions Monitoring and Reporting

The production of cement releases different types of pollutants into the environment, primarily as airborne emissions. Some stakeholders feel that existing emissions regulations are not strong enough. In some developing countries, standards may not have been developed or they may be poorly enforced. Stakeholders told us they want clear information on the nature of our emissions, their impacts, and what we are doing about them.

The Task Force on Emissions Monitoring and Reporting agreed on a common protocol and identified NO_x , SO_x , and dust as the main polluting emissions. All member companies have agreed to monitor these pollutants at the main stacks according to international or national standards accepted by the local authorities. Member companies also agreed to pay increased attention to other, low-volume pollutants such as dioxins, VOCs and trace metals, establishing the current performance of each cement kiln. The results can help companies decide, for each plant individually, whether and what further measurements or remedial actions are necessary.

Each company will make its company-wide emissions data publicly available and accessible by 2006 to stakeholders using our agreed reporting format.



India



The Siam Cement Group

Thailand



TAIHEYO CEMENT

Japan



Greece



UNILAND

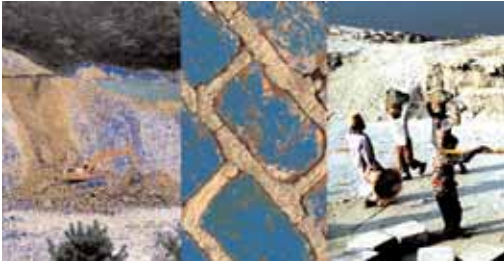
Spain



Votorantim

Cimentos

Brazil



Task Force: Local Impacts on Land and Communities

Impacts from quarries and cement plants may be positive - jobs, products, and services - or negative - disturbance to the landscape and biodiversity, noise, and pollutants.

The Task Force on Local Impacts on Land and Communities produced draft guidelines for an Environmental and Social Impact Assessment (ESIA) process for the industry to enable companies and communities to address critical issues during each phase of a cement facility's development, from site acquisition through construction, operation, and closure.

The ESIA's cover methods and key issues, the legislative framework, the consultation process, the social and environmental baseline, consideration of alternatives, prediction and evaluation of significant social and environmental impacts, mitigation and/or offset measures, and environmental and social management and monitoring plans.

Companies will measure progress by measuring the percentage of sites with community engagement plans in place; the percentage of active sites with quarry rehabilitation plans in place; and the number of active sites where biodiversity issues are addressed.



Task Force: Communications and Progress Reporting

This sixth Task Force is responsible for this report, and other CSI communications activities. We have previously published guidelines for plant managers in communicating with stakeholders.

The Future

Our full report in 2007 will report the progress of the CSI and identify issues where future actions may be required. Between now and then we have a full and complex job integrating these commitments, processes, and measurements into our respective organizations.

Looking to the future, we are evaluating various assurance processes for the key performance indicators on which we will report. We want to ensure the credibility of our reports as individual companies, while trying to minimize the complexity, time, and costs frequently associated with many verification and certification approaches.

Our Agenda is based on a 20-year timeframe, divided into five-year blocks, matching typical business planning cycles, capital spending and typical public policy timelines. There are other issues that could be addressed by the CSI. However, our first priority is to reduce our footprint from today's operations. The next two years will give us time to review and analyze possible future approaches. We will report fully on our conclusions and recommendations in 2007.



About the WBCSD

The World Business Council for Sustainable Development (WBCSD) is a coalition of 175 international companies united by a shared commitment to sustainable development via the three pillars of economic growth, ecological balance and social progress. Our members are drawn from more than 35 countries and 20 major industrial sectors. We also benefit from a global network of 48 national and regional Business Councils and partner organizations involving some 1,000 business leaders.

Our mission

To provide business leadership as a catalyst for change toward sustainable development, and to promote the role of eco-efficiency, innovation and corporate social responsibility.

Our aims

Our objectives and strategic directions, based on this dedication, include:

Business leadership: to be the leading business advocate on issues connected with sustainable development

Policy development: to participate in policy development in order to create a framework that allows business to contribute effectively to sustainable development

Best practice: to demonstrate business progress in environmental and resource management and corporate social responsibility and to share leading-edge practices among our members

Global outreach: to contribute to a sustainable future for developing nations and nations in transition.

Disclaimer

This report is released in the name of the WBCSD and the Cement Sustainability Initiative. It is the result of a collaborative effort by members of the secretariat and executives from member companies participating in the Cement Sustainability Initiative (CSI).

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