

## 1. Introduction

CSI is an organization of many companies of cement and other building materials industries.

As known, these companies have activities that are aggressive to the environment and employees health. For that reason, CSI promotes the achievement of the best results to all activities with environment/employees health issues, through *FOCUS AREAS*.

To ensure that achivement is accomplished, it is requested to report data about the focus areas periodically to register the improvement that are being made.

## 2. Cement Sustainability Inicative

The Cement Sustainability Initiative (CSI) is a global effort by 24 major cement producers with operations in more than 100 countries who believe there is a strong business case for the pursuit of sustainable development. Collectively these companies account for around 30% of the world's cement production and range in size from very large multinationals to smaller local producers.

The purpose of the Initiative is to:

- Explore what sustainable development means for the cement industry;
- Identify actions and facilitate steps cement companies can take, individually and as a group, to accelerate progress toward sustainable development;
- Provide a framework for other cement companies to become involved; and
- Create the content and context for further stakeholder engagement.

To date the CSI remains one of the largest global sustainability programs ever undertaken by a single industry sector.

For more information, visit the CSI website: <http://www.wbcscement.org/index.php/en/about-csi>

SECIL Group named its members for representation and participation in the various working groups of the CSI. (table Secil Group contribution - 00 GP G 00 01/02)

## 3. Key Sustainable Issues

In 2002 the CSI member companies defined a work program to proactively and systematically tackle the environmental and social impacts of cement manufacturing. They have since then developed guidelines for good practice across all addressed issues and defined key performance indicators (KPIs) and measurable targets to track progress. Companies report publicly on their performance with regards to the commitments taken in the CSI, as outlined in the CSI Charter.

CSI is the leading voice of sustainable development. It has developed numerous guidelines, tools, protocols, databases, studies, etc, in areas as diverse as climate change, biodiversity, health and safety, sustainable construction, supply chain management, and others. These subjects are organized in Focus Areas (FA).

These FA's do not define individual tasks but rather wider topics that will guide CSI's work programm in the years to come. Each Focus Area and respective issue is detailed below:

### 3.1. Climate and Energy

#### 3.1.1. CO<sub>2</sub> and Climate Protection

Cement production causes approximately 5% of global man-made CO<sub>2</sub> emissions. Because of that the emissions reduction is an important and urgent task for the cement sector.

The CSI member companies have been addressing CO<sub>2</sub> reduction since the start of initiative. The emissions are measured and reported following the same protocol, the CSI's Cement CO<sub>2</sub> and Energy Protocol (visit CSI website for more information: <http://www.wbcdcement.org/index.php/en/key-issues/climate-protection/co-accounting-and-reporting-standard-for-the-cement-industry>). All the members also have set targets to reduce emissions intensity.

The CSI's work, and other sources, has identified four main levers for CO<sub>2</sub> reductions:

- Energy efficiency, via modern dry-process technology
- The use of alternative fuels (incl. Biomass) to replace coal and petcoke in the cement kiln heating process
- The substitution of clinker with other mineral components in cement
- Carbon capture and storage

#### 3.1.2. Emissions Monitoring and Reduction

Cement plants, like other energy intensive operations, produce air emissions (other than CO<sub>2</sub>) that must be controlled and mitigated. Emissions measurement, monitoring and reporting contributes to understanding, documenting and improving the industry's environmental performance.

The CSI published the *Guidelines Emissions Monitoring and Reporting in the Cement Industry* to provide a common framework to its members.

For more information, visit CSI website: <http://www.wbcdcement.org/index.php/en/key-issues/emissions-reduction>

At SECIL Group there is a procedure with the criteria used to establish the emissions goals - 00 TP G 00 01.

### 3.2. Safety and Health

One of the CSI priorities is to ensure healthy and safe working conditions for employees and contractors

The CSI's motto is "Achieving ZERO harm – for OUR Workforce, Contractors and Communities": the goal is to achieve zero fatalities among members' company operations.

CSI members monitored and reported fatality and accident statistics and made them public. CSI members actively collaborate, sharing knowledge and best practices on safety measures. In the process, this raises valuable awareness on the need to cultivate a safety culture.

Despite promising steps in the right direction, injury and fatality rates remain a long way from world-class safety standards. The CSI is determined to improve these results year on year, to achieve and better those standards, and continue to work closely together on extensive efforts to further reduce fatalities and injuries. This includes putting in place additional training and awareness programs.

Every CSI members must collect and report data in a consistent way. About Employee Health and Safety, CSI has been published some guidelines with the purpose to ensure the accurate register of all occupational injuries of the company members in order to have the same basis on which to produce a consolidated report of safety indicators.

Until now, the guidance documents published are:

- Health and Safety in the Cement Industry: Examples of Good Practice

- (<http://www.wbcscement.org/index.php/en/key-issues/health-safety/good-practice>)
- Employee Safety in The Cement Sector: A Guidebook for Measuring and Reporting (<http://www.wbcscement.org/index.php/en/key-issues/health-safety/guidelines>)
- Recommended Good Praticice for Driver and Contractor Safety (<http://www.wbcscement.org/index.php/en/key-issues/health-safety/driver-contractor-safety>)
- Health Management Handbook: Addressing occupational exposures in the cement industry (<http://www.wbcscement.org/index.php/en/key-issues/health-safety/health-management>)

For more information, visit the CSI website: <http://www.wbcscement.org/index.php/en/key-issues/health-safety>

At SECIL Group, there is a procedure that describes all rules about incident reporting - 00 TP S 00 01.

### **3.3. Sustainable Constraction and Product Stewardship**

The production of concrete, notably its most important ingredient, cement, poses several sustainability issues that need to be managed: Cement production emits CO2 and other air emissions, and the quarrying of raw materials produces local impacts such as noise and dust. Also, water use needs to be carefully looked at in locations where water is scarce. The industry is well aware of these impacts and addresses them both collectively, via the CSI or regional and national trade organizations, and individually as producers within their sphere of influence.

The CSI is addressing the following issues regarding sustainability with concrete:

- Concrete recycling: It reduces the use of primary natural resources and keeps waste from going to landfill
- Sustainable construction: In a survey, the WBCSD looked at the decision-making process in sustainable construction
- Responsible sourcing

<http://www.wbcscement.org/index.php/en/key-issues/sustainability-with-concrete>

### **3.4. Local Impacts**

#### **3.4.1. Local Impacts on Land and Communities**

The CSI is fully aware that the ways by which companies evaluate and manage their social and environmental impacts affect the quality of life of the communities involved. Maintaining a 'license to operate' depends on the support and trust of local communities. Once they set up operations within a community, cement companies become a part of that community. CSI member companies are thus fully committed to a business model that respects, appreciates and cares for both local landscapes and the people who live in them.

The cement industry has long recognized its responsibility for rehabilitation of quarry and cement plant sites following closure.

<http://www.wbcscement.org/index.php/en/key-issues/biodiversity>

#### **3.4.2. Water Impact management**

Cement production requires water for cooling heavy equipment and exhaust gases, in emission control systems such as wet scrubbers, as well as for preparing slurry in wet process kilns.

Water scarcity can lead to practical and business risks for a wide-range of companies and sectors, including the cement industry. These risks can be addressed through the implementation of a comprehensive water management strategy, which in addition to mitigating water-scarcity risk, can also improve stakeholder relations. In order to implement water management measures and to meet stakeholders' expectations, water

data need to be credible, relevant and easy to understand. This requires consistent use of metrics, terminology and definitions.

The Protocol for Water Reporting for the Cement Industry was developed primarily for water reporting in cement plant operations, but can also be used in aggregate installations and ready-mix concrete operations. Together with the Guidance on Good Practices for Water Accounting, the document sets out detailed metrics, terminology, definitions and guidance for water accounting and serves as reference for CSI member companies.

For more information, visit the CSI website: <http://www.wbcscement.org/index.php/en/key-issues/water/water-reporting>

### 3.5. **Resources Efficiency**

By-products from domestic, industrial or agricultural sources can be used as fuels, partially replacing traditional fossil fuels. This reduces the associated environmental impacts of finding, producing, transporting and burning these fuels. It also decreases the loads on landfills and incinerators and their environmental impacts, including potential groundwater pollution, methane generation and hazardous ash residues.

The CSI published *Guidelines for Co-Processing Fuels and Raw Materials in Cement Manufacturing* (<http://www.wbcscement.org/index.php/en/key-issues/fuels-materials/guidelines-for-selection>)

## 4. CSI Charter

The companies participating in the CSI have all signed the CSI Charter.

All companies joining the Initiative agree to implement these actions as a minimum requirement of membership, as part of their contribution to sustainable development. The CSI secretariat manages the process and ensures that companies are aware of and fulfill their various commitments.

In the appendix 1, it is possible to see the CSI Charter and the Key Performance Indicators (KPI's) of each issue.

CSI promote every four years an audit to assure the compliance with the CSI Charter. The first occurred in 2014.

## 5. CSI Commitments

SECIL first joined CSI in 2003. Later, in 2009, SECIL signed the CSI Company Charter, that was updated in October 2012.

Annually SECIL reports the Group performance on different issues covered by the CSI Charter.

Issue	Commitment
<b>CO<sub>2</sub> and Climate Protection</b>	<b>Use</b> the tools set out in the <b>CSI CO<sub>2</sub> and Energy Protocol</b> to define and make public our baseline emissions
	Develop a <b>climate change mitigation strategy</b> , and <b>publish targets and progress</b>
	<b>Report annually</b> on CO <sub>2</sub> emissions in line with the Protocol
	<b>Participate in and contribute</b> agreed datasets to the <b>Getting Numbers Right</b> global cement database system of CO <sub>2</sub> and energy information
<b>Assurance</b>	Carry out assurance <b>at least once every two years</b> using recognized, independent third party assurance practitioners.

Issue	Commitment
<b>Employee Health and Safety</b>	<b>Apply the safety good practice guidelines compiled by the Health and Safety Task Force</b>
	<b>Report annually</b> on employee safety data in line with the <b>guidelines for measuring and reporting</b>
	Apply the <b>contractor safety good practice guidelines</b> compiled by the Health and Safety Task Force
	Apply the <b>driver Safety good practice guidelines</b> compiled by the Health and Safety Task Force
<b>Assurance</b>	Carry out assurance <b>at least once three years</b> using recognized, independent third party assurance practitioners.
<b>Emissions Reduction</b>	<b>Apply the Guidelines</b> for Emissions Monitoring and Reporting in the Cement Industry
	Make <b>emissions data publicly available</b> and <b>accessible</b> to stakeholders
	<b>Set emissions targets</b> for main pollutants (NOx, SOx, dust) and report publicly on progress.
<b>Assurance</b>	Carry out assurance <b>at least once very three years</b> using recognized, independent third party assurance practitioners.
<b>Responsible Use of Fuels and Raw Materials</b>	<b>Apply the guidelines</b> developed for fuel and raw materials use
<b>Local Impacts on Land and Communities</b>	<b>Apply the Environmental and Social Impact Assessment</b> guidelines and develop tools to integrate them into decision making processes
	Apply the Guidelines on Quarry Rehabilitation
<b>Reporting and Communications</b>	<b>Report publicly on all agreed CSI Key Performance Indicators on an annual basis</b>
	Publish a <b>statement of business ethics</b>
	Establish a <b>systematic dialogue process with stakeholders</b> to understand and address their expectations
	Report progress on developing <b>stakeholder engagement programs</b>
	Develop documented and auditable <b>environmental systems</b> at all plants

## 6. CSI Programm

Due to the assurance process, SECIL is building an improvement plan where will stand all of the actions about the CSI Focus Areas, that can improve each plant organization on those concerns - 00 GP G 00 01/01.

## 7. Annual Global Reporting

Annually is presented the SECIL Group: CSI membership.

This document collects all the main results obtain at SECIL Group and that were reported to CSI - 00 GP G 00 01/02.

**APPENDIX 1**

## The Company Charter of the Cement Sustainability Initiative



The Cement Sustainability Initiative (CSI) is a voluntary CEO-led business initiative, which operates under the World Business Council for Sustainable Development (WBCSD). Each CSI member company must demonstrate leadership, commitment and achievement toward sustainable development and report publicly on its sustainable development performance, in accordance with established international reporting practices (incl. independent third party assurance). It promotes CSI goals and activities inside the company and with its stakeholders. Member companies of the WBCSD Cement Sustainability Initiative pledge to apply a set of actions outlined below as part of their contribution to sustainable development.

*It is our intention to complete these actions within 3 years of joining the Initiative and to continue applying, and reporting on, these commitments.  
A CSI-coordinated audit will take place every 4 years.  
For the mentioned guidelines, reference is made to the latest available versions.  
The commitments may be revised / updated as agreed by the Core Member of the CSI.*

### Key performance indicators

**CO2 and Climate Protection**

- Total CO<sub>2</sub> emissions - gross (million tonnes)
- Total CO<sub>2</sub> emissions - net (million tonnes)
- Specific CO<sub>2</sub> emissions - gross (kg / ton cementitious material)
- Specific CO<sub>2</sub> emissions - net (kg / ton cementitious material)

**Fuels and Raw Materials**

- Specific heat consumption of clinker production (MJ / ton clinker)
- Alternative fuel rate (%)
- Biomass fuel rate (%)
- Alternative raw materials rate (%)
- Clinker / cement ratio (%)

**Employee Health and Safety**

- No. of fatalities (directly employed)
- No. of fatalities per 10,000 directly employed
- No. of fatalities (indirectly employed)
- No. of fatalities (3rd party)

- No. of Lost Time Injuries (directly employed)
- Total No. of Lost Time Injuries
- Lost Time Injuries per 1m manhours (directly employed)

### Emissions Reduction

- Overall coverage rate: percentage (%) clinker produced with monitoring of all pollutants mentioned in the emissions guidelines
- Coverage rate continuous measurement: percentage (%) Clinker produced with continuous monitoring of main pollutants, dust, NOx, SOx
- Absolute and specific emissions for all pollutants mentioned in the emissions guidelines

### Local impacts and Biodiversity

- Percentage (%) of sites with quarry rehabilitation plans in place
- Percentage (%) of sites with community engagement plans in place
- Number of quarries within, containing, or adjacent to areas designated for their high biodiversity value, as defined by GRI EN11 (number and coverage)
- Percentage (%) of quarries with high biodiversity value where biodiversity management plans are actively implemented

### Water

- Total water withdrawal by source
- Total water discharge by quality and destination
- Total water consumption
- Percentage of sites with water recycling