



World Business Council for Sustainable Development

Cement Sustainability Initiative

SECIL Group: CSI membership 2015

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;
- 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.

SECIL Group contribution to the Cement Sustainability Initiative

SECIL Group is a participating member since year 2003.

Currently, SECIL Group is participating in all of the focus areas of the CSI, as from the following table.

	Status 2015
FA1 Climate and Energy	participant/JBF
FA2 Safety and Health	participant/APR
FA3 Product Stewardship and Sustainable Construction	participant/AMN
FA4 Local Impacts	participant/NMS
FA5 Resource Efficiency (<i>suspended in 2016</i>)	suspended
Governance/Liason Delegate (LD)	participant/APR



The Company Charter of the Cement Sustainability Initiative

The companies participating in the CSI have all signed the CSI Charter. It summarizes the individual member actions included in the Agenda for Action, published in 2002. 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 Charter was updated in 2009 and will be renewed as necessary to address developing issues. Since the document was issued in 2002, CSI members have further agreed to begin independent third party assurance of a number of the key performance indicators (KPIs), which are publicly reported. Beginning with 2006, companies carry out assurance of their CO₂ data at least once every two years. They have also committed to independent assurance of their safety data, beginning with data from 2008. Other KPIs will be added over time.

CO₂ and Climate Protection

Use the tools set out in the CSI CO₂ and Energy protocol to define and make public our baseline emissions

CSI Guidelines translated

Develop a climate change mitigation strategy, and publish targets and progress

See Annual Report for details

Report annually on CO₂ emissions in line with the protocol

Reported yearly through the Annual Report

Participate in and contribute agreed datasets to the Getting the Numbers Right global cement database system of CO₂ and energy information

Data uploaded every year

Assurance - CO₂ emissions data

Companies will carry out assurance at least once every two years using recognized, independent third party assurance practitioners

Carried out every two years (minimum)
Last: Nov 2015 **Next:** Nov 2016

Assurance practitioners will decide on the number of sites to be visited

Decided by third party verifier

Assurance statements will explicitly mention the number of sites visited and the corresponding % CO₂ emissions covered

Included in the assurance statement

Responsible Use of Fuels and Raw Materials

Apply the guidelines developed for fuel and raw material use

CSI Guidelines translated

Employee Health and Safety

Apply the safety good practice guidelines compiled by the Health and Safety Task Force

CSI Guidelines translated

Report to the CSI annually on employee safety data in line with the guidelines developed for measuring and reporting (fatality data to be reported to the CSI as of the year of joining)

Reported yearly through the Annual Report

Assurance - Safety data

Companies will carry out assurance at least once every three years using recognized, independent third party assurance practitioners

Carried out every three years (minimum)
Last: Nov 2015 **Next:** Mar 2017

**Air Emissions**

Apply the Guidelines for Emissions Monitoring and Reporting in the Cement Industry

CSI Guidelines

Make emissions data publicly available and accessible to stakeholders

Reported yearly through the Annual Report

Set emissions targets for main pollutants (NOx, SOx, dust) and report publicly on progress

Reported yearly through the Annual Report

Assurance - NOx, SO2, and dust emissions data

Companies will carry out assurance at least once every three years using recognized, independent third party assurance practitioners

Carried out every three years (minimum)

Last: Nov 2015

Next: Mar 2017

Local Impacts on Land and Communities

Apply the Environmental and Social Impact Assessment guidelines and develop tools to integrate them into decision making processes

Do not apply

Apply the Guidelines on Quarry Rehabilitation

CSI Guidelines translated

Reporting and Communications

Report publicly on all agreed CSI Key Performance Indicators on an annual basis

Reported yearly through the Annual Report

Publish a statement of business ethics

In planning

Establish a systematic dialogue process with stakeholders to understand and address their expectations

Reported yearly through the Annual Report

Report progress on developing stakeholder engagement programs

Reported yearly through the Annual Report

Develop documented and auditable environmental management systems at all plants

Reported yearly through the Annual Report

Agreed Key Performance Indicators of the Cement Sustainability Initiative

	2015	2014	2013
Climate protection			
Total CO2 emissions - gross (million tonnes)	3,9	3,8	3,3
Total CO2 emissions - net (million tonnes)	3,7	3,7	3,2
Specific CO2 emissions - gross (kg / tonne cementitious material)	683	670	633
Specific CO2 emissions - net (kg / tonne cementitious material)	654	641	608

	2015	2014	2013
Responsible use of fuels and raw materials			
Specific heat consumption of clinker production (MJ/tonne clinker)	3 767	3 876	3 723
Alternative fuel rate (%)	10,9%	11,0%	10,5%
Biomass fuel rate (%)	9,8%	9,4%	9,5%
Alternative raw materials rate (%)	3,5%	3,5%	3,2%
Clinker / cement ratio (%)	77,9%	76,3%	75,7%

	2015	2014	2013
Safety			
Number of fatalities (directly employed)	0	0	1
Number of fatalities per 10,000 directly employed	0	0	4,55
Number of fatalities (indirectly employed)	0	0	0
Number of fatalities (third party)	0	0	0
Number of lost time injuries (directly employed)	78	78	81
Total Number of lost time injuries	102	108	113
Lost time injuries per 1 million man-hours (directly employed)	14,45	17,92	17,65

	2015	2014	2013*
Air Emissions			
Overall coverage rate: percentage (%) of clinker produced with monitoring of all pollutants mentioned in the emissions guidelines	46%	54%	77%
Coverage rate continuous measurement: percentage (%) of clinker produced with continuous monitoring of main pollutants, dust, NOx, SO2	99%	97%	100%
Dust - coverage rate (%)	97%	100%	100%
NOx - coverage rate (%)	97%	100%	100%
SO2 - coverage rate (%)	96%	97%	100%
VOC/THC - coverage rate (%)	62%	70%	70%
PCDD/F - coverage rate (%)	56%	54%	52%
Hg - coverage rate (%)	56%	76%	52%
Sum of Cd and Tl - coverage rate (%)	56%	65%	52%



2015 2014 2013*

Air Emissions

Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V - coverage rate (%)	56%	65%	52%
Dust - specific emissions (grams / tonne clinker)	145,2	107,1	131,7
NOx - specific emissions (grams / tonne clinker)	998,0	681,8	926,7
SO2 - specific emissions (grams / tonne clinker)	193,3	110,3	102,4
VOC/THC - specific emissions (grams / tonne clinker)	129,1	67,9	168,6
PCDD/F - specific emissions (ng / tonne clinker)	8,0	14,3	11,0
Hg - specific emissions (mg / tonne clinker)	20,1	19,8	18,8
Sum of Cd and Tl - specific emissions (mg / tonne clinker)	13,3	19,7	10,5
Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V - specific emissions (mg / tonne clinker)	286,5	295,1	268,8
Dust - absolute emissions (ktonnes / year)	0,7	0,5	0,5
NOx - absolute emissions (ktonnes / year)	4,5	3,1	3,6
SO2 - absolute emissions (ktonnes / year)	0,9	0,5	0,4
VOC/THC - absolute emissions (ktonnes / year)	0,6	0,4	0,6
PCDD/F - absolute emissions (g / year)	0,04	0,08	0,05
Hg - absolute emissions (t / year)	0,09	0,09	0,07
Sum of Cd and Tl - absolute emissions (t / year)	0,06	0,09	0,04
Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V - absolute emissions (t / year)	1,3	1,3	1,0

*2013 data don't include Brazilian plants

2015 2014 2013

Local impacts on land and communities

Percentage (%) of sites with community engagement plans in place	50%	54,5%	53,3%
Percentage (%) of sites with quarry rehabilitation plans in place	80%	81,8%	80%
Number of quarries within, containing, or adjacent to areas designated for their high biodiversity value, as defined by GRI EN11 (number and coverage)	30%	18,18%	13,33%
Percentage (%) of quarries with high biodiversity value where biodiversity management plans are actively implemented	100%	100%	100%



	2015	2014	2013
Water			
Total water withdrawal by source (G4-EN8)	1.794.022	1.296.235	-
Withdrawal from ground water (million cubic meters)	1.486.063	1.296.209	-
Withdrawal from surface water (million cubic meters)	44.052	26	-
Withdrawal from municipal water supplies or other water utilities (million cubic meters)	44.026	0	-
Rainwater harvested (million cubic meters)	219.000	0	-
Withdrawal from other sources (million cubic meters)	881	0	-
Total water discharge by quality and destination (G4-EN22)	164.370	149.581	-
Water discharge to surface water (million cubic meters)	145.967	131.041	-
Water discharge for offsite treatment (million cubic meters)	11.332	0	-
Water discharge to others (million cubic meters)	7.070	18.540	-
Total water consumption (GWT for Cement Sector)	1.629.652	1.146.654	-
Percentage of sites with a water recycling system (GWT for Cement Sector)	12,5%	0	-