CSC technical manual version 1.0 2017

The Concrete Sustainability Council Certification System

Print date: 17/02/2017

Introduction

In October 2013, a group of international organizations in the concrete and cement sector came together to begin the process of developing an international responsible sourcing certification system for the cement and concrete sector. On 5 February 2014, industry representatives signed an agreement to develop a responsible sourcing certification system for concrete, cement and aggregates during the International Concrete Sustainability Conference in Medellín, Colombia. The following organizations were involved in this project:

- European Concrete Platform (ECP)
- European Federation of Concrete Admixtures Associations (EFCA)
- Federación Iberoamericana de Productores de Áridos (FIPA)
- Federación Iberoamericana del Hormigón Premezclado (FIHP)
- Federación Interamericana del Cemento (FICEM)
- National Ready Mixed Concrete Association (NRMCA)
- Portland Cement Association (PCA)
- Union Européenne des Producteurs de Granulats (UEPG).

By putting in place a certification system for responsibly sourced concrete, cement and aggregates, the industry demonstrates and communicates the role of concrete, cement and aggregates in providing solutions for the built environment.

CSC main objectives

1. Improve concrete's sustainable performance2. Improve transparency of the concrete sector3. Get recognition for the sustainable effort in certification rating systems4. Get recognition in green procurement government policies5. Show continuous improvement to the public6. Improve the business case for responsible/sustainable concrete

The responsible sourcing system provides tangible evidence to share with customers, shareholders and other stakeholders supporting internal investment in sustainability initiatives.

This CSC Operations Manual contains all operational procedures necessary to provide a step-by-step guide to completing CSC assessments.

Organization

This project is the work of a large group of organizations and persons.

First of it is the work of all the committee members:

http://www.concretesustainabilitycouncil.org/index.php?pagina=organization

We thank the following persons for their help in developing this manual:

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Pilot Feedback The technical manual was tested during the second half of 2014 and in early 2015 by the following organizations:

- Argos, Colombia
- Bosch Beton, Netherlands
- Cemex, Mexico and Nicaragua
- Consolis/VBI, Netherlands
- Hanson, Australia
- Interbeton, Belgium

The technical manual and the toolbox (www.concretesustainabilitycouncil.com) have been tested from September 2015 until January 2016 by 25 pilot projects:

- Aggregate Industries (US)
- Argos (Colombia and Panama)
- Berks Products (US)
- Bosch Beton (The Netherlands)
- CalPortland (US)
- Cementerie National (Lebanon)
- Cemento Progresso (Guatemala)
- Cemex (US)
- Cemex (Mexico)
- Concrete Supply Co. (US)
- CRH (Ireland)
- Italcementi (Italy, France)
- Kirkpatrick Concrete (National Cement) (US)
- Lehigh Hanson (US)
- Makati Development Corporation (Philippines)
- Mebin (The Netherlands)
- Ocean Concrete (Canada)
- SCG (Thailand)
- Taiheiyo (Japan)
- Titan America (US)

- Tech Ready Mix(US)
- U.S. Concrete (US)

External stakeholders

A IUCN led stakeholder process has led and is leading to feedback from:

- International Union for Conservation of Nature (IUCN)
- Birdlife
- Friends of Nature (NFI - Naturfreunde International)
- World Wide Fund for Nature (WWF) China
- Downwinders at Risk
- United Nations Environment Programme
- Friends of the Earth
- World Resources Forum
- Indigenous Perspectives

The consolidated feedback report can be downloaded from the IUCN website and the CSC website.

A number of other organizations have given their feedback:

- German Sustainable Building Council (DGNB)
- U.S. Green Building Council (USGBC)
- Building Research Establishment (BRE)
- International Labour Organization (ILO)

For more information and to provide feedback, please write to info@concretesustainabilitycouncil.org

Members and founding members

The CSC project is sponsored financially by the following organizations:

See more at: http://www.concretesustainabilitycouncil.org/index.php?

The Certification Process

Process summary

1:Procurement of a license for the toolbox by the central office or the local company.

The client buys a license (a number of certificate application rights) for the toolbox. Discounts apply for CSC member companies or can potentially apply for association members.

2:Certification project preparation

THe client prepares his/her certification in http://www.concretesustainabilitycouncil.com ,selects the version available for his/her region.A client or his/her expert uploads evidence in the tool and writes explanations about the evidence. Other collegues can be involved and reports can be generated.

3 Project registration

representatives of an organization, plant, site) submits an application for certification. This is called the project registration. It is not only an administrative step but also a formal and important step because upon registration the certification scope is set.

4: Selection of the certification body The client has to select a certification body. This can be done before or after project registration. The certification body appoints an assessor/auditor to your project. The client has to come to an agreement with the certification body about the costs of the audit.

5: Validation of the evidence An independent CSC Auditor validates the report. The client can improve the evidence. Once this proces is ready, the assessorreport is generated and the project file is frozen.

6: Final quality check by certificaton body. The certification body/institute (CI) performs quality assurance activities on the work of the auditor and determines if an additional site visit is required. The square root of the amount of plants that are within the scope, need a site visit. In case there is a regional system operator, regional requirements for site visits can apply.

7: Issuing of the certificate Once the certification body is satisfied with the content and quality of the report, the certificate will be issued.

In order to maintain the certification standard, a periodic update is required. This also allows the client to further improve its operations in terms of this certification standard and thereby increase the level of certification.

Detailed Process discription

From Credits to Points

Each sustainability topic covered within the CSC system is called a "credit". For each credit, points can be achieved if the criteria as set out in the Technical Manual have been met. The total number of points achieved will lead to a total percentage that, in its turn, determines the overall score of the certified subject (product, plant, organization).

Minimum Certification Requirements

In order for a minimum standard to be achieved in each certification, a minimum percentage is required. Below that percentage no certificate will be issued. In addition, there are a number of "pre-requisites" -credits that always need to be satisfied in order to obtain certification.

Submission of Assessment Reports

Assessment reports may be submitted more than once, but with a limit to the number of submissions as agreed with the certification body. Both the client and the auditor should strive for the highest quality from the first submission in order to minimize the administrative process. Fees may apply for multiple submissions.

Certification Scope

The CSC scheme is product certification. However the logical scope for concrete production is the plant level or multiple plant level. We strongly advise to select the plantlevel (or multiple plantlevel) as the scope of your certification.

The scope of certification can vary. In principle, the scheme allows for different scopes:

1. One or more products (or ranges of products) from a plant, but not all products2. All products from a plant, but not all plants from an organization, or all products from a number of plants, but not all plants from an organization;3. All plants/sites within a country (regional) organization.

In some cases a number of different assessments could be required. The certification institute has to approve the scope.

Weighting and Certification Levels

The CSC certification system has three parts in the supply chain:

- The aggregate part (weight is 15% of the total concrete score)
- The cement part (weight is 25% of the total concrete score)
- The concrete production part (weight is 60% of the total concrete score)

The core content of the CSC certification is made up of a number of sustainability topics grouped in 4 categories, each with its own weighting percentage:

	Aggregates	Cement	Concrete
management	12%	10%	11,2%
environment	52%	60%	24,3%
social	17%	17%	13,9%
economical	19%	13%	10,5%
Cement supply chain			25%
Aggregates supply chain			15%

For each sustainability topic, called a "credit", points can be awarded if the criteria are satisfied.

	Weighting						
		Aggregate available per credit	Weighting	Cement available per credit	Weighting	Concrete available per credit	Weighting
		15%		25%		60%	
	Management	**17**	**11%**	**23**	**10%**	**30**	**11,2%**
M1	Sustainable Purchasing plan	9	5,8%	9	4,1%	9	3,4%
M2	Environmental Management	3	1,9%	3	1,4%	3	1,1%
M3	Quality Management System	2	1,3%	2	0,9%	2	0,7%
M4	Health and safety management	3	1,9%	3	1,4%	3	1,1%
M5	Chain of Custody	0	0,0%	6	2,7%	6	2,2%
M6	Benchmarking	0	0,0%	0	0,0%	7	2,6%
	Environment	**80**	**52%**	**133**	**60%**	**65**	**24,3%**
E1	Product information	3	1,9%	8	3,6%	8	3,0%
E2	Land use	12	7,7%	7	3,2%	2	0,7%
E3	Energy use	7	4,5%	29	13,1%	14	5,2%
E4	Air quality	8	5,2%	28	12,7%	8	3,0%
E5	Water	13	8,4%	12	5,4%	9	3,4%
E6	Biodiversity	27	17,4%	25	11,3%	3	1,1%
E7	Secondary Materials	0	0,0%	12	5,4%	16	6,0%
E8	Transport	10	6,5%	5	2,3%	5	1,9%
E9	Secondary Fuels	0	0,0%	7	3,2%	0	0,0%
	Social	**30**	**19%**	**37**	**17%**	**37**	**13,9%**
S1	Product information	3	1,9%	5	2,3%	6	2,2%
S2	Local community	9	5,8%	14	6,3%	13	4,9%
S3	Health and Safety	10	6,5%	10	4,5%	10	3,7%
S4	Labour Practices	8	5,2%	8	3,6%	8	3,0%
	Economical	**28**	**18%**	**28**	**13%**	**28**	**10,5%**
P1	Local economy	4	2,6%	4	1,8%	4	1,5%
P2	ethical business	13	8,4%	13	5,9%	13	4,9%
P3	Innovation	8	5,2%	8	3,6%	8	3,0%
P4	P4 Feedback procedure	3	1,9%	3	1,4%	3	1,1%
	Supply chain: cement					**67**	**25%**
C1	C1 Cement					67	
	Supply chain: aggregates					**40**	**15%**
A1	A1: Aggregates					40	
	Total (100%)	**155**	**100,0%**	**221**	**100,0%**	**267**	**100,0%**

This weighting relates to the amount of topics covered in each category in combination with the difficulty to achieve points. The management category also covers social and economic topics, but is about the management of those topics. This means that the weighting does not indicate that economic is less important than social and that environmental is more important than social.

The weighting has been defined by the technical committee based on an average of several scorings followed by a meeting where consensus about the scoring was reached. Several scoring methods where used:

1. List of heavy, medium and light credits to prove2. Number of criteria per category3. List of credits by impact4. List of credits that are difficult to achieve, very ambitious, ambitious and common market practice.

List number 4 was also used to set the different certification levels (certified, silver, gold and platinum).

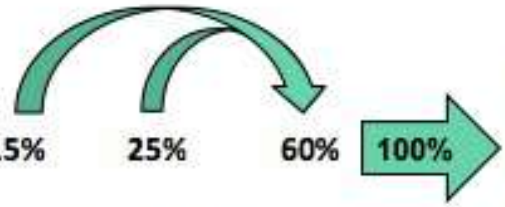
Levels of Certification

The CSC system has four levels:

1. Bronze: 30%2. Silver: 50%3. Gold: 65%4. Platinum: 80%

The concrete score

The concrete score is the average score of the aggregate suppliers (15%), cement suppliers (25%) and concrete producers (60%). In the case that a concrete producers seeks certification without the availablilty of scores in the supply chain, a maximum of 60% can be achieved.



	Aggregate	Cement	Concrete
management	12%	11%	19%
environment	52%	61%	40%
social	17%	14%	22%
economical	19%	13%	18%

Bronze	>= 30%
Silver	>= 50%
Gold	>= 65%
Platinum	>= 80%

If the concrete producer has three cement suppliers, the average score of the cement part is made out of the weighting of the three suppliers.

If the concrete producer selects a cement supplier in the tool, and a score is available from the cement supplier, this score X percentage of cement suppliers, is added automatically to the score of the concrete producer.

Mandatory Credits

At the moment no mandatory credits are defined per level, apart from two mandatory credits for all levels.

After more experience with the system has been gathered, it is possible that mandatory credits will be defined on a local level to reflect the level of local regulations and priorities.

Alignment with existing systems

The CSC certification content has been, to a certain extent, aligned with a number of existing international systems and guidelines.

BES6001

BES6001 is a responsible sourcing system developed by the Building Research Establishment (BRE, UK). It is focused on the product level, although almost all criteria are about the organization. It mainly has an environmental focus. For an organization to be aligned with BES6001, about 60 points need to be achieved.

ISO for the supply chain

Currently under development, ISO for the supply chain will have an impact on the CSC system. The ambition is to align the two.

ISO26000

ISO26000 is a social responsibility guideline. Organizations cannot certify against this guideline. The Concrete Sustainability Council has used this guideline as a reference for the CSC system and tailored it where applicable to the concrete sector. ISO26000 focusses primarily on social aspects.

The categories in ISO26000 are:

1. Governance - Topics are in a number of CSC credits

2. Human rights - Topics are in a number of CSC credits

3. Labor practices - Topics are covered in labor practices credit

4. Environment - The number of topics is limited and topics are covered in the environmental category

5. Fair operating practices - The topics are covered in the economics category

6. Consumer issues - Product information, local community and economics credits cover these topics

7. Community involvement - The topics are more tailored to the concrete industry and are covered in the local community and economics credits category.

SA8000

The SA8000 Standard is the central document of work at Social Accountability International (SAI). It is one of the world’s first auditable social certification standards for decent workplaces, across all industrial sectors. It is based on the United Nations (UN) Declaration of Human Rights, International Labour Organization (ILO) conventions, and UN and national law, and spans industry and corporate codes to create a common language to measure social performance. It takes a management systems approach by setting out the structures and procedures that companies must adopt in order to ensure that compliance with the standard is continuously reviewed. Those seeking to comply with SA8000 have adopted policies and procedures that protect the basic human rights of workers.

United Nations Global Compact

The United Nations (UN) Global Compact is an initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies and to report on their implementation. The UN Global Compact is a principle-based framework for businesses, laying out ten principles in the areas of human rights, labor, the environment and anti-corruption.

The 10 principles are:

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.
- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labor;
- Principle 5: the effective abolition of child labor; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

All principles but 7 and 9 are, to a certain extent, covered by the CSC system.

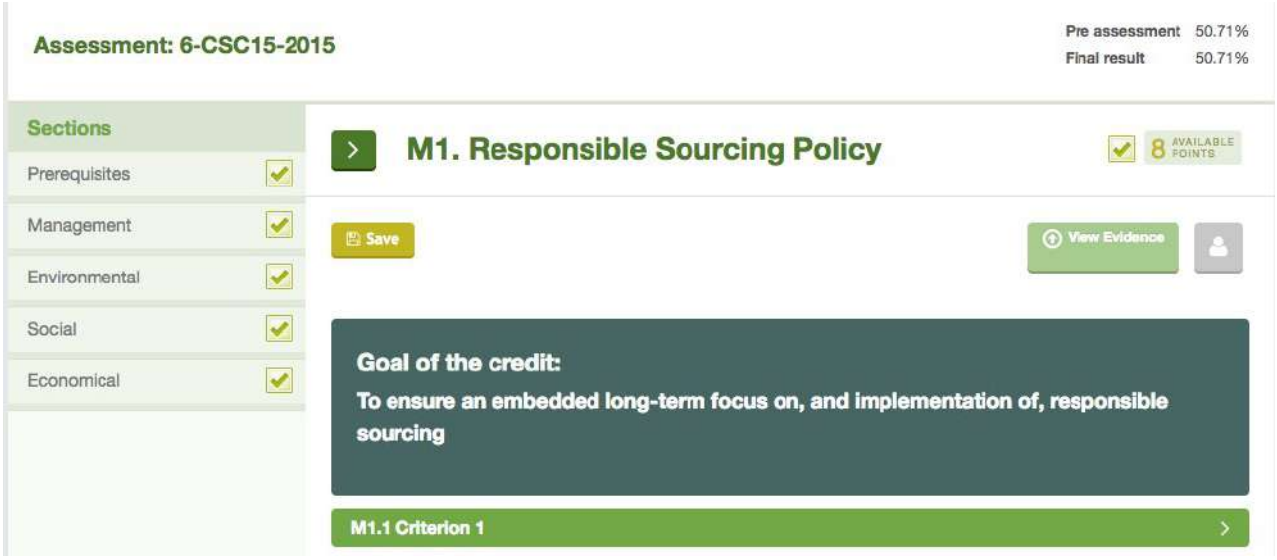
Forest Stewardship Council (FSC)

Evidence

Depending on the number of credits/criteria that are intended to be met, a number of documents need to be uploaded in order to provide evidence that they have been met.

Gathering evidence is made easier with the CSC assessment tool (www.concretesustainabilitycouncil.com).

Each piece of evidence can be uploaded and the uploading can be distributed among many people. Within the software tool there is a button for each criteria; this allows individual colleagues to access only the specified criteria and upload the required evidence. The software tool helps monitor progress.



The auditor can verify online, either by verifying all at once or in a step-by-step approach.

Some evidence is required for more than one criterion:

1. Photo report: A number of photos from facilities (re-use of materials, dust reduction, etc.) are requested for a number of credits.

Pre-requisites

Pre-requisites are sustainability topics within the assessment that are crucial to responsible sourcing. They are, however, topics that are hard to quantify and to assess and are often already covered by regional laws and regulations.

That is why, in the CSC system, senior management of the organization/plant or the product manager is requested to underwrite these topics with a letter. Both topics may be covered in one letter.

Two topics are pre-requisites for the certificate:

1. Legal Compliance
2. Human Rights

No CSC certificate can be issued without having satisfied all pre-requisites.

Additional cement and aggregate pre-requisites

For aggregates and/or cement, there are additional pre-requisites. The total cement or aggregate score will be zero if all of the following pre-requisites are not satisfied by all suppliers.

For mining operations, the following two additional prerequisites are mandatory for all sites starting operation after 31 December 2019:

- Indigenous People Rights
- Environmental and Social Impact Assessment

Additional concrete pre-requisite

- P5:Untraced materials

Legal Compliance

Aim

To ensure compliance with all applicable legal legislation.

This credit is a pre-requisite for certification. No points can be achieved. If evidence is delivered that the organization does not meet these criteria, the CSC can withdraw the certificate.

Assessment criteria

The following is required to demonstrate compliance:

C1: Legal compliance

The organization must declare that all efforts have been made that may reasonably be expected of the organization in order to ensure that all of its operations comply with all applicable legal legislation, requirements, regulations, laws and by-laws.

Also declare:

1. The International Labour Organization (ILO) conventions on forced labor (convention 29)

2. The ILO convention on child labor (convention 182)

3. The ILO convention on fundamental rights at work and international labor (appendix D)

Evidence

Criteria	Evidence ID	
C1	A	Written declaration by senior management satisfying the assessment criteria.

Links to other certification systems

ISO 26000

The principle: An organization should accept that respect for the rule of law is mandatory.

"The rule of law refers to the supremacy of law and, in particular, to the idea that no individual or organization stands above the law and that government is also subject to the law. The rule of law contrasts with the arbitrary exercise of power. It is generally implicit in the rule of law that laws and regulations are written, publicly disclosed and fairly enforced according to established procedures. In the context of social responsibility, respect for the rule of law means that an organization complies with all applicable laws and regulations. This implies that it should take steps to be aware of applicable laws and regulations, to inform those within the organization of their obligation to observe and to implement those measures.

"An organization should:

- Comply with legal requirements in all jurisdictions in which the organization operates, even if those laws and regulations are not adequately enforced;
- Ensure that its relationships and activities comply with the intended and applicable legal framework;
- Keep itself informed of all legal obligations; and
- Periodically review its compliance with applicable laws and regulations."

FUNDAMENTAL RIGHTS AT WORK AND INTERNATIONAL LABOUR STANDARDS

http://www.ilo.org/wcmsp5/groups/public/@ed_norm/@normes/documents/publication/wcms_087424.pdf

Human Rights

Aim

To ensure compliance with human rights.

This credit is a pre-requisite for certification. No points can be achieved. If evidence is delivered that the organization does not meet these criteria, the CSC can withdraw the certificate.

Assessment criteria

The following is required to demonstrate compliance:

C1: Human Rights

The organization must declare that all efforts have been made that may reasonably be expected of the organization in order to ensure that all of its operations comply with the Universal Declaration of Human Rights (UDHR).

Topics that must be addressed in the declaration are:

1. Human rights risk situations;
2. Avoidance of complicity;
3. Resolving grievances;
4. Discrimination and vulnerable groups;
5. Civil and political rights;
6. Economic, social and cultural rights;
7. Fundamental principles and rights at work.

Having an SA8000 certificate will be rewarded in the social category. Social topics are covered in the social category.

1. S1 Product Information
2. S2 Local Community
3. S3 Health & Safety
4. S4 Labor Practices

Evidence

Criteria	Evidence ID	**Description**
C1	A	Written declaration by senior management satisfying the requirements or an SA8000 certificate covering the scope of this certification, not older than three years

Links to other certification systems

SA8000

UN Declaration of Human Rights

BS8902: Human rights is a principle in BS8902

Additional information

ISO 26000

The principle: "An organization should respect human rights and recognize both their importance and their universality."

"An organization should:

- Respect and, where possible, promote the rights set out in the International Bill of Human Rights;
- Respect the universality of these rights, that is, that they are indivisibly applicable in all countries, cultures and situations;
- In situations where human rights are not protected, take steps to respect human rights and avoid taking advantage of these situations; and
- In situations where the law or its implementation does not provide for adequate protection of human rights, adhere to the principle of respect for international norms of behaviour."

UN: The International Bill of Human Rights and the Core Human Rights Instruments

"The Universal Declaration of Human Rights (Universal Declaration) was adopted by the UN General Assembly in 1948, and is the most widely recognized human rights instrument. It provides the basis for human rights law, and elements of it represent international customary law binding on all states, individuals and organizations. The Universal Declaration calls on every individual and every organ of society to contribute to securing human rights. The International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights are treaties adopted by the UN General Assembly in 1966 for ratification by states, and they came into force in 1976. The International Bill of Human Rights consists of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, and the optional Protocols to the Covenants, one of which aims to abolish the death penalty.

"In addition, seven core international human rights instruments form part of international human rights law, dealing with: the elimination of all forms of racial discrimination, elimination of all forms of discrimination against women, measures to prevent and eliminate torture and other cruel, inhuman or degrading treatment or punishment, rights of the child, involvement of children in armed conflict, sale of children, child prostitution and child pornography, protection of migrant workers and their families, protection of all persons from enforced disappearances and rights of persons with disabilities. Taken together, these instruments form the basis for international standards for universal human rights. The instruments are binding on states that ratify them. Some instruments allow for individual complaints to be lodged, subject to procedural rules outlined in optional protocols."

Indigenous People's Rights

Aim

To ensure that the rights and way of life of indigenous peoples potentially affected are respected.

This credit is a pre-requisite for certification. No points can be achieved. If evidence is delivered that the organization does not meet these criteria, the CSC can withdraw the certificate.

Analysis

C1 Analysis

An assessment of whether indigenous peoples are potentially affected by the operation.

C2: Free, prior and informed consent

If the assessment in C1 indicates that indigenous peoples are potentially affected, a participation process respecting the principle of free, prior and informed consent (FPIC) has to be implemented in the development of the activity, following for example the Conservation International Guidelines on FPIC or a similar framework.

Evidence

Criteria	Evidence ID	
C1	A	Copy of the assessment At regional level, additional requirements can be established
C2	B	Documentation of the process and its outcomes At regional level, additional requirements can be established

Links to other certification systems

Environmental and Social Impact Assessment

Aim

To ensure that an environmental and social impact assessment (ESIA) has been done before the implementation of the activity.

This credit is a pre-requisite for certification. No points can be achieved. If evidence is delivered that the organization does not meet these criteria, the CSC can withdraw the certificate.

Assessment criteria

The following is required to demonstrate compliance:

Environmental and social impact assessment (ESIA)

C1: An ESIA was conducted before the mining operation started. The ESIA shall (should) in particular identify whether the site is in a karst region and, if so, address the related biodiversity issues.

Evidence

Criteria	Evidence ID	
C1	A	Copy of the ESIA

Links to other certification systems

ISO 26000

P5:Untraced materials

Aim

To ensure that all materials are from traceable sources.

This credit is a pre-requisite for certification. No points can be achieved. If evidence is delivered that the organization does not meet these criteria, the CSC can withdraw the certificate.

Assessment criteria

The following is required to demonstrate compliance:

Maximum number of points available:

Aggregates	Cement	Concrete production
-	-	Pre-requisite

C1: Traceability of materials

The EMS must demonstrate that almost all materials are from traceable sources. The add mixtures are not included in this version of the certification system, therefore 100% is not required.

Bronze:>= 85% of materials must come from traceable sources

Silver: >= 90% of materials must come from traceable sources

Gold/Platinum: >= 98% of materials must come from traceable sources

Evidence

Criteria	Evidence ID	
C1	A	Written declaration by senior management satisfying the assessment criteria.

Links to other certification systems

M1 Sustainable Purchasing Plan

Aim

To ensure an embedded long-term focus on, and implementation of, responsible sourcing.

Maximum number of points available:

Aggregates	Cement	Concrete production
9 points	9 points	9 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Sustainable purchasing/Responsible sourcing policy

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C1. The organization has a sustainable purchasing policy covering the social, environmental, management and economic aspects covered in this system. The policy is current and has been approved by the management responsible for the scope of this assessment.

Responsible sourcing action plan

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C2. The organization has a sustainable purchasing plan covering the social, environmental, management and economic aspects covered in this system. The plan is current and has been approved by the management responsible for the scope of this assessment.

Monitoring & reporting

Regular reviews

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C3. The organization carries out regular (at least annual) reviews of the effectiveness of its sustainable purchasing policy and plan. "Effectiveness" is defined here as supporting the aim of this credit, meaning "focus and implementation" of responsible sourcing practices.

Action & results

Learning and development

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C4. The organization applies learning by and development of its employees to cover the principles of responsible sourcing in introduction programs and in all relevant professional and functional training.

Promoting responsible sourcing

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C5. The organization promotes, where applicable, responsible sourcing in public communications, such as websites and (financial) reporting.

Supply chain sustainable procurement criteria

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C6. The organization includes responsible sourcing as a criterion in procurement for at least 50% of the procurement (by mass) pertaining to the primary process.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply C6: Most relevant suppliers include suppliers of constituents, fuels, electricity, fly ash, slag
Aggregate producers		
	Applicable assessment criteria	C1-C5 apply
Concrete production		
	Applicable assessment criteria	All criteria apply All criteria apply; most relevant supplie rs include cement, supplementary cementitious materials and aggregates

Regional

R01	United States	C1: NRMCA Sustainable Plant Certification, particularly credit 1.4:

		Sustainable Purchasing Plan.
R44	United Kingdom	C1: BES6001 3.2.1 is accepted as alternative evidence C2: BES 6001 3.4.9 Employment and skills is accepted within CSC as alternative evidence C3: BES6001 3.4.1, 3.4.2, 3.4.3 are accepted within CSC as alternative evidence C4: 3.2.1 Responsible sourcing policy C6:3.2.4 Procurement process
R31	The Netherlands	C1: If BetonBewust 1.2 a & b (having a compliance program and publishing a sustainability report) are satisfied, then this criterion is met C4: If BetonBewust 1.2a and 1.2b and 1.2c are satisfied, then this criterion is met.

Evidence

Criteria	Evidence ID	
C1	A	A copy of the sustainable purchasing policy, including evidence that senior management has formally approved the policy
C2	B	A copy of the sustainable action plan
C3	C	Review planning or agenda and minutes of meeting
C4	D	Evidence that the learning program covers the intended employees and contains the intended responsible sourcing content

C5	E	Evidence of promotion, for example, website links and copies of reports, publications, etc.
C6	F	Substantiation that the required percentage is achieved, backed by examples of procurement actions that contain the required responsible sourcing criteria

Definitions

Responsible sourcing policy = Sustainable purchasing policy

Link to other certification systems

BetonBewust 1.1 compliance program

BES 6001: 3.2.1. Responsible sourcing policy

NRMCA: Sustainable Plant Guidelines Version 1.1, Credit 1.4: Sustainable Purchasing Plan

Additional information

BS8902 contains information on principles of responsible sourcing

BRE's Green Book Live: http://www.greenbooklive.com/search/scheme.jsp?i

Examples of responsible sourcing policies and sustainable purchasing plans:

Nestlé Responsible Sourcing Guideline:

http://www.nestle.com/asset-library/documents/library/documents/corporate_social_responsibility/nestle-responsible-sourcing-guidelines.pdf

Unilever - How and why we're making sustainable living commonplace:

M2 Environmental Management

Aim

To promote the use of an environmental management systems (EMS) in the supply chain.

Maximum number of points available:

Aggregates	Cement	Concrete production
3 points	3 points	3 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Environmental management system (EMS)

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C1. The organization that is being assessed has an EMS.

The EMS shall include the relevant scope the key processes for raw material extraction and primary material production and/or production of concrete.

Monitoring & reporting

Certified EMS

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C2. The organization that is being assessed has a certified EMS.

The EMS is certified by an accredited organization conforming to ISO 14001, the EU Eco-Management and Audit Scheme, or an equivalent system accepted regionally. Any constituent/raw material supplied under a certified BES 6001 compliant responsible sourcing system can be included. For small and medium-sized organizations, no certificate is required, but having a documented system, under audit compliance with the system by the CSC auditor, is accepted.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply

		Where the product being assessed is a primary raw material (i.e. where there is no supply chain) being extracted or recovered by the organization (e.g. gravel) under the same EMS, it will be deemed to satisfy the requirements
Aggregate producers		
	Applicable assessment criteria	All criteria apply Where the product being assessed is a primary raw material (i.e. where there is no supply chain) being extracted or recovered by the organization (e.g. gravel) under the same EMS, it will be deemed to satisfy the requirements
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	C2: NRMCA GreenStar (certified EMS) or Sustainable Concrete Plant certification is accepted as alternative evidence.
R44	United Kingdom	C1: BES6001 3.3.2 aC2: BES6001 3.3.2 bC3: BES6001 3.3.2 b/c/d

Evidence

Criteria	Evidence ID	
C1	A	Validation by the auditor that the organization has a documented management system
C2	B	Copy of the EMS certificate or, in the case of a small or medium-sized enterprise, validation by the

		auditor that the organization has a documented management system conform to ISO 14001 or equivalent

Definitions

C2 - Europe: A small or medium-sized enterprise (SME) is defined as follows: micro, small and medium-sized enterprises are enterprises that employ fewer than 250 people and that have an annual turnover not exceeding 50 million euros and/or an annual balance sheet total not exceeding 43 million euros.

C2 - Other regions: Each region must define what constitutes a small and medium-sized enterprise and a large organization and the meaning of "an appropriate management system", taking into account the size and maturity of the organization.

Links to other certification systems

BES 6001: http://www.concretecentre.com/codes__standards/bes_6001.aspx

ISO 14001: http://www.iso.org/iso/home/standards/management-standards/iso14000.htm

ISO 14001 for SMEs: http://www.iso.org/iso/home/store/publication_item.htm?pi PUB100329

NRMCA GreenStar: http://www.nrmca.org/operations/ENVIRONMENT/certifications_greenstar.htm

NRMCA Sustainable Plant: http://www.nrmca.org/sustainability/Certification/PlantCertification.asp

Additional information

M3 Quality Management

Aim

To promote the use of quality management systems in the supply chain.

Maximum number of points available:

Aggregates	Cement	Concrete production
2 points	2 points	2 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Quality management system (QMS)

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C1. A documented quality management system is in place.

Monitoring & reporting

Certified quality management system (QMS)

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C2. A documented quality management system such as ISO 9001 or equivalent is in place and certified by an accredited organization. In case the organization is a small or medium-sized company, the QMS does not need to be certified but the auditor must verify that the QMS is according to ISO 9001.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply
Aggregate producers		
	Applicable assessment criteria	All criteria apply
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	NRMCA producer quality certification The quality certification focuses on management commitment to quality, qualified personnel, properly maintained production facilities (main focus of the NRMCA plant certification), monitoring quality of concrete materials and the produced product and measurement systems Evidence - Certificate of conformance listing the production facilities included in the certified entity
R44	United Kingdom	C1 BES6001 3.2.3a C2 BES6001 3.2.3b C3 BES6001 3.3.1a/c (CSC does have an 80% requirement instead of 75% requirement as BES6001 does)

Evidence

Criteria	Evidence ID	
C1	A	Validation by the auditor that the organization has a documented management system conform to ISO 9001 or equivalent
C2	B	Copy of the valid certificate of the QMS or evidence that the organization (scope) is within the SME size

Definitions

C2 - Europe: A small and medium-sized enterprise (SME) is defined as follows: micro, small and medium-sized enterprises are enterprises that employ fewer than 250 people and that have an annual turnover not exceeding 50 million euros and/or an annual balance sheet total not exceeding 43 million euros.

C2 - Other regions: Each region must define what constitutes a small and medium-sized enterprise and a large organization and the meaning of "an appropriate management system", taking into account the size and maturity of the organization.

Links to other certification systems

BES6001 3.2.3 Quality management system & operational management of responsible sourcing, criteria C1 and C2 are mutually recognized. C1 is compulsory in BES6001.

NRMCA Quality Certification: http://www.nrmca.org/research_engineering/quality_certification/default.htm

Additional information

M4 Health & Safety Management

Aim

To promote the use of a health and safety management system.

Maximum number of points available:

Aggregates	Cement	Concrete production
3 points	3 points	3 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Health and safety system

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C1. The organization has a health and safety (H&S) management system in place.

Monitoring & reporting

Certified health and safety management system

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C2. The organization has a health and safety management system in place conform to OHSAS 18001 or ISO 45001, company health and safety management system, the local health and safety management system enforced by the association, or equivalent.

The health and safety management system is certified by an accredited organization as conforming to OSHAS 18001 or an equivalent system accepted regionally. For small and medium-sized organizations, no certificate is required, but having a documented system, in audit compliance with the system by the CSC auditor, is accepted.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply
Aggregate producers		
	Applicable assessment criteria	All criteria apply
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	C2: Sustainable Plant Certification, particularly credit 2.16: Worker Safety C1 evidence: Submit written safety program that includes formal safety training for workers and provide incentives for workers who maintain safe practices. Also submit a copy of Safety Worksheet and evidence of retaining OSHA 300A forms
R44	United Kingdom	C1: Alternative evidence is BES6001 3.3.3.a C2: Alternative evidence is BES6001 3.3.3 b C3: Alternative evidence is BES6001 3.3.3 b/c/d
R31	The Netherlands	C1: The risk inventory and evaluation (RI&E) assessment is accepted as evidence

Evidence

Criteria	Evidence ID	
C1	A	Validation of the auditor that the organization has a documented management system conforming to OHSAS 18001 or equivalent
C2	B	OHSAS 18001 or equivalent certificate or, in the case of a small or medium-sized company, validation of the auditor that the organization has a documented

		management system conforming to OHSAS 18001 or equivalent.

Definitions

C1 - Europe: An SME is defined as follows: micro, small and medium-sized enterprises are enterprises that employ fewer than 250 persons and that have an annual turnover not exceeding 50 million euros and/or an annual balance sheet total not exceeding 43 million euros.

C1 - Other regions: Each region must define what constitutes a small and medium enterprise and a large organization and the meaning of "an appropriate management system" taking into account the size and maturity of the organization.

Links to other certification systems

In 2016, ISO 45001 Occupational health and safety management systems will be available.

BES 6001 3.3.3 Health and safety management systems in the supply chain

RI&E: http://www.rie.nl/wetgeving/

IHSA Certificate of Recognition: http://www.ihsa.ca/Certificate-of-Recognition

Additional information

M5 Chain of Custody

Aim

To ensure customers that products, constituents and raw materials originate from responsibly operated quarries, plants, manufacturing and/or distribution sites, meaning the complete supply chain.

Maximum number of points available:

Aggregates	Cement	Concrete production
-	6 points	6 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Chain of custody selection criteria

Aggregates	Cement	Concrete production
-	1 point	1 point

C1. Document in the related environmental management system (EMS)/quality management system (QMS) procedure for purchasing the evaluation and selection criteria for responsible suppliers of raw materials, including the topics covered in this system.

Monitoring & reporting

Chain of custody administration

Aggregates	Cement	Concrete production
-	2 points	2 points

C2. The organization shall have and maintain up-to-date records of all suppliers who are supplying materials used for product groups, including:

a) The supplier name(s);

b) The supplied product types;

c) The supplied material categories.

d) A list with evaluated and approved suppliers

Action plan

QMS geared towards chain of custody (CoC)

Aggregates	Cement	Concrete production
-	2 points	2 points

The quality management system includes the following four criteria:

C3.1. Defined responsibilities concerning CoC;

C3.2. Documented procedures concerning CoC;

C3.3. Training on CoC;

C3.4. A complaints procedure relating to CoC complaints.

Implementation & results

Cross check of match between material administration and actual available material

Aggregates	Cement	Concrete production
-	1 point	1 point

C4. Random sample by the auditor, defined by the auditor (online or during site visit), to check if a current material available at the location matches with the material list in the administration and that the material can be traced back to its origin.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply If a cement plant is an integrated plant, including quarrying, these points are awarded by default
Aggregate producers		
	Applicable assessment criteria	No criteria apply
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	Representative extract of the records, including a statement by the assessor that the records

		satisfy the requirements
C2 C3 C4	B C D	ISO 9001 certificate or screenshots of supplier management system Screenshot of the administration Statement from auditor that constituent check has been performed and that it matched with the constituent list

Links to other certification systems

FSC-STD-40-004 V3-0 EN - Chain of Custody Certification"

Additional information

Aim

To participate in international/regional/local industry benchmarking.

Maximum number of points available:

Aggregates	Cement	Concrete production
-	-	7 points

Assessment criteria

The following is required to demonstrate compliance:

Monitoring & reporting

Benchmark participation

Aggregates	Cement	Concrete production
-	-	5 points

C1. The organization participates in benchmarks that cover at least 20% of the market, covering a minimum of five of the topics listed.

Participation in a minimum of 5 topics.

Example list of industry benchmark topics:

- Clinker content;
- % of transport (raw material and or to client) within total emissions;
- Use of secondary materials;
- Use of fossil fuels;
- Use of potable water;
- Carbon dioxide emissions;
- Incidents/injuries/accidents;
- Employee health & well-being.

Externally verified data

Aggregates	Cement	Concrete production
-	-	2 points

C2. The benchmark data delivered is externally verified.

Supply chain

Cement producers		

	Applicable assessment criteria	For competitive regulations, this is not included
Aggregate producers		
	Applicable assessment criteria	All criteria apply
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R31	The Netherlands	For ready mixed producers in The Netherlands, the BetonBewust benchmark is mandatory and has to be updated and verified annually. C2 is 7 points.
R44	United Kingdom	A BES6001 certificate from a supplier is accepted as evidence from a supplier

Evidence

Criteria	Evidence ID	
C1	A	Evidence that the organization participates in the listed benchmarks
	B	List of topics covered in the benchmark
C2	C	Evidence of external verification; for example, the benchmark report is produced by the independent third-party organization that performs the verification

Additional information

Examples of concrete benchmarks:

Mineral Products Association - Sustainability - http://www.mineralproducts.org/sustainability/

Aim

To provide transparency and to encourage the use of products and materials that have a lower carbon footprint and improved life-cycle impacts

Total points available:

Aggregates	Cement	Concrete production
3 points	8 points	8 points

Assessment criteria

The following is required to demonstrate compliance:

Implementation and results

Contribution to sectoral environmental product declarations (EPDs)

Aggregates	Cement	Concrete production
1 point	2 points	2 points

C1. The organization joins efforts to develop sectoral environmental product declarations (EPDs) for their products that conform to one of the EPD standards accepted in national law and or norms.

Company-specific EPDs

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C2.1. Cement: For at least the main cements it supplies, the cement producer provides a EPD (life-cycle assessment LCA).

C2.2. Aggregates: For at least the main aggregate (by tonnage) it supplies for use in concrete, the aggregate producer provides an LCA (EPD).

C2.3. Concrete production: The concrete producer provides, for at least one of the concretes from the plant or on average oneLCA (EPD) per plant. The EPD need not be verified.

Verified EPDs

Aggregates	Cement	Concrete production
-	2 points	2 points

C3. A verified EPD. The life-cycle assessment has to be independently verified according to the requirements of one of the following standards: ISO 14025, ISO 21930, EN 15804, ASTM E1991-05 (withdrawn but recent EPDs are accepted), EN-EN 15804, XP P 01-064/CN (2014) (France) or other national equivalents.

Reporting on project or client basis

Aggregates	Cement	Concrete production

-	2 points	2 points

C4. The LCA information (or average CO2 emissions) has been reported in the previous year to all projects or clients who requested this information.

Supply chain

Cement producers				
			Applicable assessment criteria	All criteria apply except C2.2, C2.3
Aggregate producers				
			Applicable assessment criteria	All criteria apply except C2.1, C2.3
Concrete producer				
			Applicable assessment criteria	All criteria apply except C2.1, C2.2

Regional

R01	United States	C1. Evidence of participating in IW-EPD C3. Verified and published EPD
R44	United Kingdom	C1. BES6001 3.4.6b is accepted as alternative evidence C2. EPD for concrete product within the scope certified C3. BES6001 reporting: 3.4.1b is accepted as alternative evidence
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	The industry-wide EPD (or a link)
C2	B	Evidence that the EPD conforms to one of the listed standards or that the standard used is deemed

		"equivalent"
C3	C	Evidence that the EPD conforms to one of the listed standards or that the standard used is deemed "equivalent"
C4	D	Evidence that at least two clients have received CO2 information or the LCA information about the concrete or cement delivered.

Links to other certification systems

LCA standards are:

E2 Land Use

Aim

To ensure land is used in a rightful way, that land-use conflicts are minimized, and that the land at the end of use is restored in accordance with the planning consent or, if there are no requirements in the planning consent, restored to a level that meets the approval of the local community.

Total points available:

Aggregates	Cement	Concrete production
12 points	7 points	2 points

Assessment criteria

The following is required to demonstrate compliance:

Policy to avoid certain classes of sites

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C1. Companies have a publicly available policy that prohibits operations in certain areas of potential land-use conflict; the definition of these areas should follow accepted frameworks, for example UNESCO Heritage Sites or International Union for Conservation of Nature (IUCN) categories.

Aggregates	Cement	Concrete production
2 point	1 point	--

C2. If mining operations use blasting: continual monitoring of vibrations in nearby communities. If no blasting is done, this credit will be awarded by default.

Implementation and Results

Quarry rehabilitation plan

Aggregates	Cement	Concrete production
3 points	3 points	--

C3. A quarry rehabilitation plan that is in line with accepted guidelines in the latest version available at the time of drafting the plan.

Specific actions - Protection from pollution

Aggregates	Cement	Concrete production
3 points	1 point	1 point

C4. The plant(s) has(have) facilities where chemicals (used on the plant and used for production and fuels) are stored in conditions where any spillage, including accidental, does not contaminate the land.

- **Reduce impacts on neighboring communities**

Aggregates	**Cement**	**Concrete production**
3 points	1 point	--

C5. If mining operations use blasting or have used blasting in the past: demonstrable efforts to reduce vibrations in nearby communities (e.g. use of ripping in most sensitive areas, use of pioneering blasting techniques to reduce vibrations beyond the site). If no blasting is used, the credit is awarded by default.

Supply chain

Cement production

All criteria apply.

Applicable assessment criteria: C2 apply only to integrated cement plants where blasting is used

Aggregate production

All criteria apply to aggregate sites

Applicable assessment criteria: C2 apply only to aggregate plants where blasting is used;

Concrete production

Applicable assessment criteria: Only C1 and C4 apply

Evidence

Criteria	**Evidence ID**	
C.1	A	Copy of policy and proof of publication (e.g. URL)
C.2	B	Copy of monitoring protocols or confirmation from management of the plant that blasting is not done
C.3	C	Copy of the site rehabilitation plan or confirmation that an audit against the Cement Sustainability Initiative (CSI) charter was performed within the last four years
C4	D	Photographs of storage facilities for chemicals and fuels plus a statement by the assessor that the storage is deemed to satisfy the criterion; or the ISO 14001 certificate.
C5	E	Depending on action taken, e.g.

		photo of excavator, copy of measuring protocols, etc., or confirmation from management of the plant that blasting is not done

Regional

R01	United States	C1 & C2 - NRMCA Sustainable Plant Certification, particularly credit 2.7 & 2.8, and Wildlife Habitat Council (WHC) Conservation Certification. C1: Submit photos and a copy of the plant site plan identifying storage and containment facilities, as well as safety measures such as emergency shut off switches and emergency spill kits. Retain copies of the plant spell prevention, control and countermeasure (SPCC) plan, the plant's routine facility inspections, SPCC inspection checklist, and comprehensive site inspections. C2 and C3 align with Wildlife Habitat Council Conservation Certification. Any end-use plan that includes seeking Wildlife Habitat Council (WHC) certification will be seen as evidence of a strong end-use plan as WHC recognizes operators that exceed regulatory requirements for

				restoration and reclamation efforts. C2: WHC Conservation Certification on former operational sections of sites that have been restored or reclaimed to exceed regulatory requirements.
R44			United Kingdom	
R31			The Netherlands	

Links to other certification systems

C1 aligns with BES6001 3.4.7 Ecotoxicity.

WBCSD quarry rehabilitation case studies: http://www.wbcsdcement.org/index.php/en/key-issues/biodiversity/quarry-rehabilitation/quarry-rehabilitation-case-studies

Wildlife Habitat Council: http://www.wildlifehc.org/get-certified/

Additional information

The *CSI Guidelines for Environmental and Social Impact Assessments* can be found at <a href="
http://wbcsdcement.org/pdf/Guidelines%20for%20Environmental%20&%20Social%20Impact%20Assessment.pdf">
http://wbcsdcement.org/pdf/Guidelines%20for%20Environmental%20&%20Social%20Impact%20Assessment.pdf

Further information:

Aim

To minimize the use of energy, maximize the use of renewable energy, and minimize greenhouse gas emissions.

Total points available:

Aggregates	Cement	Concrete production
7 points	29 points	14 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Public greenhouse gas (GHG) reduction target

Aggregates	Cement	Concrete production
1 point	4 points	1 point

C1. The organization or installation has a public CO2 reduction target for its scope 1, 2 and 3 emissions.

Target aligned to science

Aggregates	Cement	Concrete production
-	1 point	1 point

C2. An additional point will be scored if the organization can demonstrate that the target is aligned with science-based targets and has a time horizon of at least 10 years.

Target for power consumption and related emissions

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C3. The organization or installation has a target related to power consumption and/or related GHG emissions. This target should comprise at least one of the following elements:

1. Electricity consumption per unit of production;
2. Share of renewable electricity in the electricity mix;
3. GHG emissions from power consumption or in scope 2 per unit of production.

Monitoring & reporting

Monitoring scopes 1 & 2

Aggregates	Cement	Concrete production
2 points	3 points	1 point

C4. The organization regularly monitors emissions in scopes 1 and 2.

Externally verified GHG monitoring

Aggregates	Cement	Concrete production
—	3 points	1 point

C5. The GHG reporting has been externally verified according to accepted standards (see e.g. www.cdp.net for a positive list of acceptable standards) and to at least a level of limited assurance.

Public reporting

Aggregates	Cement	Concrete production
1 point	3 points	1 point

C6. The organization publicly reports monitoring results on a yearly basis. If applicable law and regulations prohibit the publication of such information, this criterion does not apply.

Reporting to GNR

Aggregates	Cement	Concrete production
—	3 points	—

C7. The organization reports on a yearly basis to the CSI's Getting the Numbers Right (GNR) database for all its cement plants where this is legally possible. If an organization controls any cement plants where reporting to the GNR database is not legally possible, this criterion does not apply.

Monitoring of scope 3

Aggregates	Cement	Concrete production
—	1 point	4 points

C8. The organization regularly monitors scope 3 emissions of the primary process.

Implementation & results

Progress towards GHG reduction target

Aggregates	Cement	Concrete production
-	8 points	2 points

C9. The organization has achieved the previous GHG reduction target or, if the target is in the future, can show that it is on track to meet it.

Action plan for energy/power/scope 2 achieved

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C10. The organization has achieved the energy savings of the previous target (for example last year) as identified in the action plan (see C3).

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply
Aggregate producers		
	Applicable assessment criteria	Criteria C3, C4, C6, C9 and C10 apply
Concrete producers		
	Applicable assessment criteria	All criteria except C7 apply

Regional

R01	**United States**	**US C3 - NRMCA Sustainable Plant certification, particularly Prerequisite 3: Energy Audit, elements of credit 2.10: Reduced Carbon Footprint, and elements of credit 2.11: Reduced Primary Energy Consumption Evidence: If not included as part of the EMS, complete an energy audit**

		conducted by an independent consultant or energy utility company. Submit a copy of the CO2 Calculator's output page inclusive of material purchases, transportation, purchased energy, and fuel use. Alternative pathway - C1 through C7: Participation in the Carbon Disclosure Project (CDP) with evidence for applicable sections.
R44	**United Kingdom**	**C1: BES6001 3.4.2 a is accepted as alternative evidence** **C3: BES6001 3.4.2.c is accepted as alternative evidence** **C4: BES6001 3.4.1 c is accepted as alternative evidence**
R31	**The Netherlands**	

		Evidence	

Criteria	**Evidence ID**	
C1	A B	Evidence of public statement (e.g. URL) OR Proof that the organization underwent an audit against the CSI charter within the last four years
C2	C	Comparison with science-based target methodology or certificate (from e.g. sciencebasedtargets.org)
C3	D	Copy of target
C4	E B	An extract of the monitoring results indicating that it satisfies the requirements OR Proof that the organization underwent an audit against the CSI charter within the last four years
C5	F	Copy of verification statement
C6	G B	Copy of latest publication/link to publication OR Proof that the organization underwent an audit against the CSI charter within the last four years
C7	H B	Listed on positive list from PwC (non-CSI member) OR Proof that the organization underwent an audit against the CSI Charter within the last four years
C8	I	Copy of monitoring results
C9	J	Comparison of monitoring results – target, additional analysis if required to show progress
C10	K	Clarification of the auditor that the target(s) has(have) been met and that targets are above industry standards

Links to other certification systems

Criteria C1 aligns with BES6001 3.4.2 Energy Use.

NRMCA Sustainable Plant Certification:
http://www.nrmca.org/sustainability/Certification/PlantCertification.asp

Additional information

As specific energy consumption in aggregates businesses tends to be very volatile over time (e.g. opening/closing of pits, different onsite transport distances) long-term targets for GHG emissions are considered of limited value for aggregate plants.

CSI Guidelines for Co-Processing Fuels and Raw Materials in Cement: <a
href="http://www.wbcsdcement.org/pdf/CSI%20Guidelines%20for%20Co-Processing%20Fuels%20and%20Raw%20Materials%20in%20Cement%20Manufacturing_v2.pdf">
http://www.wbcsdcement.org/pdf/CSI%20Guidelines%20for%20Co-Processing%20Fuels%20and%20Raw%20Materials%20in%20Cement%20Manufacturing_v2.pdf – As improper selection, handling, processing and use of alternative fuels can lead to increased emissions of regulated and/or toxic substances, it is highly recommended to strictly follow these guidelines.

GHG Protocol:

http://www.ghgprotocol.org/

<a
href="http://www.ghgprotocol.org/standards/scope-3-standard">
http://www.ghgprotocol.org/standards/scope-3-standard

CSI standard for energy use and GHG emissions: <a
href="http://wbcsdcement.org/pdf/tf1_co2%20protocol%20v3.pdf">
http://wbcsdcement.org/pdf/tf1_co2%20protocol%20v3.pdf

CSI guidance for monitoring and reporting of scope 3 emissions in cement and adjacent sectors: forthcoming

Methodologies for developing and testing science-based targets: http://sciencebasedtargets.org/

No minimum level for reduction targets are set; this is not only to allow for a thorough consideration of local or organization-specific circumstances, but also to avoid penalizing proactive companies that have implemented improvements in the past. On a regional level, for a part of the supply chain, a minimum target may be set.

Aim

To minimize emissions of air pollutants, such as NOx, SO2, hydrocarbons, heavy metals, dioxins and furans, and particulate matter from exhaust gases.

Total points available:

Aggregates	Cement	Concrete production
8 points	28 points	8 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Emission reduction targets

Aggregates	Cement	Concrete production
-	3 points	-

C1. The organization has a publicly declared goal for the reduction of NOx, SO2 and PM emissions.

Monitoring & reporting

Monitoring and reporting according to CSI guidance

Aggregates	Cement	Concrete production
-	3 points	-

C2. The organization monitors and reports air emissions in compliance with the *CSI Guidelines for Emissions Monitoring and Reporting in the Cement Industry*.

Verification of emission reports

Aggregates	Cement	Concrete production
-	2 points	-

C3. The emissions data have been externally verified according to accepted standards (see e.g. www.cdp.net for a positive list of acceptable standards) and to at least a level of limited assurance.

NOTE: Based upon the European system of emissions monitoring, an additional verification is not required. Normally, the emissions have to be monitored by an independent third party that is accredited according to European standard EN 17025. The same is true for the calibration and/or the annual surveillance tests of installed continuous emissions monitoring systems (CEMS). These procedures have also to be carried out by accredited external bodies. In these cases at least, an additional external verification of the emission reports is not required.

Actions & results

NOx control at clinker kiln

Aggregates	Cement	Concrete production
-	1 or 3 points	-

C4. The clinker kiln is equipped with the following emission control measures:

Primary measures (low NOx burner, flame cooling, stage combustion, etc.) (1 point).

OR

Secondary measures (3 points)

NOTE: If it can be proved that the same level of emissions is achieved (e.g. by comparing monitoring results with literature values for emission reduction devices), the corresponding number of points shall be awarded.

SO2 control at clinker kiln

Aggregates	Cement	Concrete production
-	2 points	-

C5. The clinker kiln is equipped with emissions control measures operating at BAT (best available technique) level (2 points).

NOTE: If it can be proved that the same level of emissions is achieved (e.g. by comparing monitoring results with literature values for emissions reduction devices), the corresponding number of points shall be awarded.

PM control at clinker kiln

Aggregates	Cement	Concrete production
-	2 or 3 points	-

C6. The clinker kiln is equipped with the emission control measures operating at BAT level (3 points).

NOTE: If it can be proved that the same level of emissions is achieved (e.g. by comparing monitoring results with literature values for emission reduction devices) the corresponding number of points shall be awarded.

Other air pollutants at clinker kiln, especially dioxins, furans and heavy metals

Aggregates	Cement	Concrete production
-	1or 3 points	-

C7. The clinker kiln is operating at BAT level (3 points).

NOTE: If it can be proved that the same level of emissions is achieved (e.g. by comparing monitoring results with literature values for emissions reduction devices), the corresponding number of points shall be awarded.

Clean air silos

Aggregates	Cement	Concrete production
-	1 point	3 points

C8. Every cement/addition (secondary cementitious material (SCM)) silo has the following control measures:

Silo top baghouse or central vacuum collector system

AND

Silo overfill warning system (high bin indicators)

AND

Pinch valve, alarm system or other high pressure protection system

AND

The control measures are routinely maintained.

Process dust reduction measures

Aggregates	**Cement**	**Concrete production**
4 points	4 points	2 points

C9. Adequate dust suppression measures have been taken, for example minimizing dust during:

1. Transfer of aggregates (e.g. covered or enclosed conveyor belts);
2. Weighing and discharging to mixer and mixing of aggregates, cement and additions (SCMs);
3. Post-hardening treatment of concrete products (e.g. sawing, grid blasting);
4. During cleaning hardened concrete from truck mixers in case of ready-mix production.

Fugitive dust emissions

Aggregates	**Cement**	**Concrete production**
2 or 4 points	2 or 4 points	3 points

C10.1. Fugitive dust control procedures are defined in the environmental management system (EMS) and they are implemented

AND

C10.2. No more than one incident, receiving justifiable complaint, in a pre-determined 12-month period.

Supply chain

Cement production		
	Applicable assessment criteria	All criteria apply C4-C7: If it can be proved that the same level of emissions is achieved (e.g. by comparing monitoring results with literature values for emission reduction devices),

		the corresponding number of points shall be awarded C4-C7: No points will be awarded if the monitoring does not comply with the CSI guidance for that particular pollutant or class of pollutant; if monitoring results indicate lack of effectiveness of control devices, the corresponding points shall not be awarded
Aggregate production		
	Applicable assessment criteria	Only C9 and C10 apply
Concrete production		
	Applicable assessment criteria	Only C8, C9 and C10 apply

Regional

R01	United States	C1-C3 alternative: National Ready Mixed Cement Association (NRMCA) Sustainable Plant Certification pertaining to credit 2.1: Process Dust Emissions Control and credit 2.2: Fugitive Dust Emissions Suppression C1-C2: Submit a copy of the completed “Dry Batch Process Emissions” or “Central Mix Process Emissions”

		worksheet from the Emissions Calculator. C3: Submit a copy of the completed "Fugitive Emissions" worksheet from the Emissions Calculator.
R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A OR B	Copy of document or link to website Proof that the organization underwent an audit against the Cement Sustainability Initiative (CSI) charter within the last four years.
C2	C OR D	Evidence of compliance with CSI Guidelines Proof that the organization underwent an audit against the CSI charter within the last four years.
C3	E	Copy of verification statement
C4-C7	F	Performance-level evidence
C8	G	Mining plan including explanation of how it reduces emissions
C8.4	H	Maintainance records
C9	I	Photographic evidence
C10.1	J	Copy of the relevant section(s) of the environmental management system (EMS)
C10.2	K	Appropriate section of complaints handling log

Links to other certification systems

Additional information

Aim

To optimize water use and to ensure that discharged water is of a quality that does not harm the environment.

Maximum points available:

Aggregates	Cement	Concrete production
13 points	12 point	9 point

Assessment criteria

The following is required to demonstrate compliance:

Analysis

Importance of water quality, water quantity and hydrological risks

Aggregates	Cement	Concrete production
2 points	1 point	1 point

C1. In order to get insight in the relevance, risks and materiality, hydrological risks, assess the water scarcity in the area using recognized assessments (e.g. WWF Water Risk Filter or WBCSD Global Water Tool) and assess the sensitivity of extracting water, use of potable water and discharge of water, following guidance provided in the *CSI Good Practice Guidance for Water Accounting*.

If the plant is in a water sensitive area, C2, C3, C5 and C7 are mandatory. If no water is discharged, C5, C6 and C7 are awarded by default.

Policy

Water target

Aggregates	Cement	Concrete production
2 points	2 points	1 point

C2. The organization has at least one publicly declared target related to water use and regularly reports on progress. Possible targets include, but are not restricted to, the key performance indicators defined in the *CSI Protocol for Water Reporting*.

Monitoring & reporting

Water monitoring

Aggregates	Cement	Concrete production
2 points	2 points	1 point

C3. The organization monitors and reports according to the *CSI Protocol for Water Reporting*.

Verification of water reporting

Aggregates	Cement	Concrete production
2 points	2 points	1 point

C4. The organization carries out assurance at least once every two years using recognized, independent assurance practitioners and the scope of assured data covers at least total water withdrawal by source.

Report on water use, discharge, quality and reduction

Aggregates	Cement	Concrete production
2 points	2 points	1 point

C5. The organization reports water use in terms of quantity, quality of discharged water (for aggregates: total suspended solids (TSS) and temperature; for ready-mix and precast: pH and total suspended solids (TSS)) and reduction measures to its stakeholders on at least an annual basis.

Actions & results

Actions for reduction and efficiency

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C6.1. The plant has achieved or is in the process of achieving the water-usage improvement targets from previous years' assessments covering the entire plant. If the project opts for "in the process of achieving", evidence must show a trend line indicating that the target(s) can realistically be met within the 12-month deadline. A realistic reduction target is at least 5% or a lower target if agreed with a local nature group.

OR

C6.2. The plant has taken the following measures to reduce water use and discharge:

1 Rainwater recycling facility;

2 Recycling facility for water from washing trucks;

3 Enhancing water quality through filtration.

Maximizing water quality discharged outside the site.

Aggregates	Cement	Concrete production
-	-	2 points

C7. The plant uses a system for removing particulate matter (silt) and that discharges water outside of the site with a pH within the range of 6.5 to 8.5.

Note: "discharge" also includes discharge into the sewerage system.

Supplying water to nearby communities

Aggregates	Cement	Concrete production
1 point	1 point	-

C8. The plant provides water to nearby communities.

Supply chain

Cement production		
	Applicable assessment criteria	All criteria except C7 apply
Aggregate production		
	Applicable assessment criteria	All criteria except C7 apply If no water is discharged, C5, C6 and C7 are awarded by default
Concrete production		
	Applicable assessment criteria	All criteria except C8 apply If no water is discharged, C5, C6 and C7 are awarded by default

Regional

R01	United States	Evidence for C1-C4: alternative evidence is conformance documentation meeting National Ready Mixed Concrete Association (NRMCA) Sustainable Plant Certification for credits 2.3-2.6.
R44	United Kingdom	C1: BES6001 3.4.5a is accepted as alternative evidence C5: BES6001 3.4.5 supplementary credit: share knowledge
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	A copy of the analysis
	B	The risk category
C2	C	Copy of or link to the public statement detailing the water-related target
C3	D	Evidence that the organization monitors and reports according to

	E	CSI guidelines OR Evidence that the organization was audited against the CSI Charter within the last four years

C4	F E	Certification/assurance report OR Evidence that the organization was audited against the CSI Charter within the last four years
C5	G	Copy of public report or link to corresponding website
C6.1	H	Evidence that the targets have been met or are in the process of being met and photo evidence of the measures taken
C6.2	I	Photographic evidence of the system or evidence of natural filtration system
C7	J	Monitoring report
C8	K	Suitable evidence, e.g. contracts, letter from community

Links to other certification systems

CSI Protocol for Water Reporting:
http://www.wbcsdcement.org/index.php/en/key-issues/water/water-reporting

CSI Good Practice Guidelines on Water Accounting: http://www.wbcsdcement.org/index.php/en/news-stories/2016/507-water-accounting-guidance-now-available-for-the-cement-sector

NRMCA Sustainable Plant Certification: water

BES 6001: Water abstraction

C1 is the first criterion in BES6001.

C7 is the second criterion in BES6001.

The highest score in BES6001 is reached if the potable water quantity in the benchmark is externally verified.

GRI: water

C5: The client is rewarded in Leadership in Energy and Environmental Design (LEED), hydrological design - storm water management (decrease of volume of water runoff)

Additional information

The *CSI Guidance on Good Practices for Water Accounting* (<a href="
http://wbcsdcement.org/pdf/CSI%20Guidance%20on%20good%20practices%20for%20water%20accounting.pdf">
http://wbcsdcement.org/pdf/CSI%20Guidance%20on%20good%20practices%20for%20water%20accounting.pdf)

E6 Biodiversity

Aim

To maintain or enhance the biodiversity value and the ecosystems throughout the value chain, taking particular consideration of the often unique biodiversity in karst areas.

Maximum points available:

Aggregates	Cement	Concrete production
27 points	25 points	3 points

Assessment criteria

The following is required to demonstrate compliance:

Analysis

Biodiversity baseline study

Aggregates	Cement	Concrete production
2 points	2 points	-

C1. A biodiversity baseline study has been performed with local experts before starting mining operations.

Analysis of biodiversity hotspots

Aggregates	Cement	Concrete production
2 points	2 points	-

C2. One point: expert determination of whether a plant is overlapping with or in close proximity to a biodiversity hotspot area as defined by a recognized framework, e.g. International Union for Conservation of Nature (IUCN) categorization.

Policy

Biodiversity hotspots policy

Aggregates	Cement	Concrete production
2 points	2 points	1 point

C3. Where relevant, the organization has a public policy including clearly defined timelines for:

a. Developing and implementing biodiversity management plans or biodiversity action plans at in at least all sites that are overlapping with or in close proximity to biodiversity hotspot areas.

OR

b. Not having any active mining operations (including non-rehabilitated former mining operations) in sites that are overlapping with or in close proximity to biodiversity hotspot areas.

Implementation & results

Biodiversity assessments

Aggregates	Cement	Concrete production
2 points	2 points	-

C4. Where relevant, the plan does regular (at least every three years) biodiversity assessments involving local experts.

Aggregates	Cement	Concrete production
1 point	1 point	-

C5. An additional point is rewarded for publishing the results of the biodiversity assessment or having on record why a biodiversity assessment is not relevant.

Advanced methodology for biodiversity assessment

Aggregates	Cement	Concrete production
2 points	2 points	-

C6. Where relevant, the plan uses a net positive impact methodology to assess its total impact.

Biodiversity management plan

Aggregates	Cement	Concrete production
3 points	2 points	1 point

C7. The plant has a biodiversity management plan or biodiversity action plan that was developed involving local experts.

Aggregates	Cement	Concrete production
2 points	2 points	1 point

C8. Where relevant, the plant fulfils C7 and the biodiversity management plan or biodiversity action plan conforms with certain standards for biodiversity management plans, such as *the CSI Guidance on Biodiversity Management Plans* or the *Extraction and Biodiversity in Limestone Areas* guidelines developed by BirdLife International, Fauna & Flora International, the International Union for Conservation of Nature (IUCN) and World Wide Fund for Nature (WWF). Conformity should be the most recent version of the standard at the time of first developing the plan or a revised action plan based on any later version of the standard.

Implementation of the biodiversity management plan

Aggregates	Cement	Concrete production
2 points	2 points	-

C9. Where relevant, the plant shows clear and substantial progress towards the implementation of the biodiversity management plan or biodiversity action plan.

Education and integration of stakeholders

Aggregates	Cement	Concrete production
2 points	2 points	-

C10. The plant has regular (at least one year) events to educate stakeholders about biodiversity or involve them in activities to protect and enhance biodiversity, such as planting of native species. Plants that have static facilities (e.g. a biodiversity path) that are normally accessible to the public also qualify.

Net positive impact

Aggregates	Cement	Concrete production
5 points	4 points	-

C11. Where relevant, the plant is expected to deliver a net positive biodiversity impact over its full life cycle in accordance with accepted standards.

Other conservation projects

Aggregates	Cement	Concrete production
2 points	2 points	-

C12. The company has biodiversity conservation projects outside its mining areas that:

- Cover at least the same surface as is currently being disturbed by its mining activities

AND

- Are recognized as a conservation project by a local or international environmental non-governmental organization (NGO) or a public authority.

Supply chain

Cement production
Aggregate production
Concrete production

Regional

US:

C2: Major suppliers with quarry/pit operations having a biodiversity management plan (BMP) in accordance with WBCSD CSI BMP guidance or having achieved conservation certification through the Wildlife Habitat Council's standard for corporate conservation.

Evidence:

C2: Conservation certification from Wildlife Habitat Council

C3: Conservation certification from Wildlife Habitat Council, with questions answered and scored on participation, alignment and connectivity.

Evidence

Criteria	Evidence ID	
C1	A	Copy of baseline study
C2	B	Copy of study/expert finding
C3	C	Copy of company policy and proof of public availability (e.g. URL)
C4	D	Copy of latest biodiversity monitoring study, clearly identifying local experts (individuals or groups, e.g. environmental non-governmental organizations (NGOs))
C5	E	Proof of public availability (e.g. URL)
C6	F	A copy of the impact assessment
C7	G	Copy of biodiversity management plan (BMP)/biodiversity action plan (BAP) clearly identifying experts (individuals or groups, e.g. environmental NGOs)
C8	H	Written declaration by non-company expert (this can be the expert involved in the development of the BMP/BAP) This point is automatically awarded if - C7 is fulfilled - The company has undergone an audit against the CSI Charter within the last 4 years
C9	I J	List of actions implemented Proof of at least one action item implemented that the verifier considers significant, e.g. picture, invoice
C10	K L	List of events, including dates and estimates for numbers of participants Detailed documentation for at least one event, including at least a short description and other proof (e.g. picture, press coverage)

C11	M	Report on impact on biodiversity
C12	N	Documentation of the biodiversity project, including at least: - Short description of project - Exact location - Size (surface area) of project and list of all mining sites, including surface area currently mined (Note: total surface area of mining sites can be used as conservative proxy) - Proof that the company's involvement is crucial for the project - Proof of recognition by NGO/public authority (e.g. letter, award, certification)

Definitions

Baseline: inventory and analysis of the biodiversity before development

Links to other certification systems

WBCSD Cement Sustainability Initiative (CSI) *Biodiversity Management Plan (BMP) Guidance*

http://wbcsdcement.org/pdf/CSI%20BMP%20Guidance.pdf

Wildlife Habitat Council: http://www.wildlifehc.org/get-certified/

Additional information

Please note that an environmental and social impact analysis (ESIA) is a pre-requisite for new locations and is covered in E2 Land Use

Extraction and Biodiversity in Limestone Areas guidance (by BirdLife International, Fauna & Flora International, IUCN, WWF)

http://www.birdlife.org/sites/default/files/Extraction-and-Biodiversity-in-Limestone-Areas.pdf

E7 Secondary Materials

Aim

1. To reduce the consumption of primary materials by using secondary materials (including recycled materials) where available.

2. To ensure that the use of secondary materials has no significant negative health and safety or environmental impacts during production and on the final product.

3. To ensure that by using secondary materials (including recycled materials) the final product achieves all the intended technical requirements, e.g. for concrete: mechanical properties, durability and stability over the intended working life and at end of life.

4. To contribute to waste reduction.

Maximum points available:

Aggregates	Cement	Concrete production
-	12 points	16 points

Assessment criteria

The following is required to demonstrate compliance:

Analysis

Assessment of alternatives

Aggregates	Cement	Concrete production
-	2 points	4 points

C1.1. Cement: There is an assessment and documentation on the availability of secondary raw materials for clinker production. The assessment shall include the current use of secondary raw materials in the local market and whether there is a market for cements containing more than one main constituent. This assessment shall be reviewed at least every two years.

C1.2. Concrete production: There is an assessment and documentation on the availability of secondary aggregates, including recycled aggregates and returned concrete.

C1.3. Analyze the availability of Portland cement clinker substitutions, either through cement choice or by using secondary cementitious materials.

Policy

Policy about usage of secondary materials

Aggregates	Cement	Concrete production
-	2 points	2 points

C2.1. A policy shall be prepared that sets out how the objectives given above and any others that are relevant will be achieved or if an objective is not relevant, why it is not relevant.

C2.2. This policy must be reviewed at least every two years.

Monitoring & reporting

Monitoring and reporting of the implementation of the policy

Aggregates	Cement	Concrete production
-	2 points	2 points

C3. Progress made with implementing the policy shall be monitored at least annually and the results reported to shareholders and available to clients and stakeholders on request.

Implementation & results

Reuse or recovery of returned concrete

Aggregates	Cement	Concrete production
-	-	2 points

C4. Concrete production: The plant has and operates a system for the reuse or recovery of returned concrete. Recovery may be as aggregate from crushing rejected precast concrete products or returned concrete that has been allowed to harden, or by separating the returned concrete into aggregates, water and fines.

Optimized use of secondary materials

Aggregates	Cement	Concrete production
-	3 points	3 points

C5. Cement and concrete production: The plant has optimized the use of secondary materials in line with the assessment (Criteria 1) during the last three years.

Optimized use of secondary materials on a project

Aggregates	Cement	Concrete production
-	3 points	3 points

C6. Cement and concrete production: The plant has optimized the use of secondary materials on a project.

Supply chain

Cement producers
Aggregate producers

Concrete production

Regional

R01	United States	C1-C3: National Ready Mixed Concrete Association (NRMCA) Sustainable Plant Certification, particularly credits 1.1 and 1.2
R44	United Kingdom	C1: BES6001: 3.4.3a is accepted as alternative evidence
R31	The Netherlands	C5 and C6: The amount of secondary materials has to be proved with an environmental product declaration (EPD) according to ISO 14025 and EN 15804 (PCR 2013:2). CUR-Ontwerptool Groen Beton can be used This criteria is required for the MIA/VAMIL Milieulijst: amount of secondary materials

				has to exceed 30% and the Curtool has to show that this level is reached CO2 neutral compared to the scenario that no secondary materials would have been used.

Evidence

Criteria	Evidence ID	
C1	A	Copy of assessment, including date of issue
C2	B	Copy of the policy
C3	C	Report on the use of secondary materials for external stakeholders
C4	D	Photograph of recovery system
C5	E	Evidence of increased use of secondary materials
C6	F	Evidence of maximized use of secondary materials on at least one project Evidence of the amount of secondary materials used (% of granulates, etc.)

US

Evidence for C1-C3: NRMCA Sustainable Plant Certification documentation, which includes:

Submit letter from company's accountant or corporate officer stating the total quantity of recycled aggregate used and the total quantity of all aggregate used at the plant during the 12-month period. Retain records of the quantity of aggregate reclaimed from returned concrete, recycled aggregate claimed from other sources, and total aggregates. Retain receipts from recycled and virgin aggregate purchases.

Submit letter from company's accountant or corporate officer stating the total quantity of Portland cement used, the total quantity of concrete produced at plant during the 12-month period, and the total quantity of Portland cement used and the total quantity of concrete produced. Retain records of all Portland cement purchased and concrete produced.

Links to other certification systems

NRMCA Sustainable Plant Certification:
http://www.nrmca.org/sustainability/Certification/PlantCertification.asp

Additional information

CUR calculation tool for green concrete:

http://www.sbrcurnet.nl/producten/rekentools/cur-ontwerptool-groen-beton-1?gcli CjwKEAiAyO_BBRDOgM-

K8MGWpmYSJACePQ9C4NjITWnJ4pWJiMxkvIfJbDKefK8mxoNV5YQIL6RD8RoCueXw_wcB

E8 Transport

Aim

To minimize environmental impact of transportation. For each business, transport is defined as "production site (quarry/plant) to customer site".

Maximum number of points available:

Aggregates	Cement	Concrete production
10 points	5 points	5 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Transport pollution reduction policy

Aggregates	Cement	Concrete production
4 points	2 points	2 points

C1. The organization has implemented a policy for the reduction in environmental impacts of the transport of concrete products and supplied constituents. These impacts include, but are not limited to, non-renewable fossil fuel consumption and emissions of greenhouse gasses, NOx and fine dust particles.

Monitoring & reporting

Transportation management system

Aggregates	Cement	Concrete production
4 points	2 points	2 points

C2. The organization has a transportation management system in place that contains operations-related transportation data in terms of modes of transportation, distances covered, technologies related to fuel consumption, and types and quantities of fuel consumption. All distances traveled by contractors directly related to the organization’s operations and directly contracted by the organization are included in the data collection.

Action & results

Assessment of clean technologies and methods

Aggregates	Cement	Concrete production
2 point	1 point	1 point

C3.1. The organization performs regular assessments, using the data from the transportation management system, geared towards minimizing impacts, including, for example, centralized dispatching systems, information technology tools for route optimization (GPS), training of drivers, awareness training and (real-time) fuel consumption monitoring.

C3.2. The outcomes of the assessments are compared to the industry practice regarding clean transportation technologies and methods.

C3.3. The assessment must be performed at least every three years.

Supply chain

Cement producers
Aggregate producers
Concrete producers

Regional

R01	United States	National Ready Mixed Concrete Association (NRMCA) Sustainable Plant Certification, particularly credits 3.1-3.3 Applicable transportation evidence for the Carbon Disclosure Project (CDP)
R44	United Kingdom	C1 & C2: BES6001 3.4.8a is accepted as alternative evidence
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	A copy of the transport policy
C2	B	Extract of the transportation management system showing that it contains the required items
C3 1-3	C	Evidence that the assessments are performed according to the requirements

US

Efficiency improvement – Submit the fleet fuel consumption plan. Submit a letter from company's accountant or corporate officer indicating how many gallons (or liters) of diesel fuel were used for concrete delivery and how many cubic yards (or cubic meters) of concrete were produced at the plant during the 12-month period. Retain a copy of fleet fuel consumption plan on file.

Fleet emissions reduction – Submit letter from company’s accountant or corporate officer stating truck engine inventory and age, and the total number of trucks that were assigned to the plant for the 12-month period. Submit a letter from company’s accountant or corporate officer indicating the total amount of alternative and diesel fuel purchased for concrete delivery for the plant during the 12-month period. Submit certification numbers for NRMCA-certified trucks assigned to the plant and the total number of trucks assigned to the plant.

Driver training - Submit records of NRMCA CDP certification or equivalent program for all drivers at the plant and the total number of drivers at the plant.

Links to other certification systems

BREEAM E8 Transport

Additional information

E9 Secondary Fuels

Aim

1. To reduce fossil fuel consumption by using secondary fuels where available.

2. To ensure that the use of alternative fuels has no health and safety or environmental impact during sourcing, transportation, handling, production, on the final product and its end of life.

<3. To contribute to waste reduction.

4. To recognize that where waste materials cannot be managed technically or economically by prevention and reduction or reuse, the cement manufacturing process provides a more ecologically sustainable solution compared to landfill or dumping, thanks to its combination of material recycling and energy recovery in the process.

Total points available:

Aggregates	Cement	Concrete production
-	7 points	-

Assessment criteria

The following is required to demonstrate compliance:

Use of restricted waste

Aggregates	Cement	Concrete production
-	1 point	-

C1. The cement suppliers must commit to not use "commonly restricted waste" as defined in the *CSI Guidelines for Co-Processing Fuels and Raw Materials in Cement Manufacturing*.

Analysis

Assessment of alternatives

Aggregates	Cement	Concrete production
-	1 point	-

C2.1. C1 is met

AND

C2.2. There is an assessment and documentation on the availability of alternative fuels

AND

C2.3. This assessment must be reviewed at least every two years.

Actions & results

Assessment of non-harmful alternative fuels

Total points available:

Aggregates	Cement	Concrete production
-	3 points	-

C3.1. C1 is met

AND

C3.2. The cement suppliers using alternative fuels follow the entirety of the *CSI Guidelines for Co-Processing Fuels and Raw Materials in Cement Manufacturing*.

Communication and stakeholder involvement

Total points available:

Aggregates	Cement	Concrete production
-	2 points	-

C4.1. C1 is met

AND

C4.2. Evidence that the local community has been involved in the decision-making process for using alternative fuels.

Supply chain

Cement producers
Aggregate producers
Concrete producers

Regional

R01	United States	
R44	United Kingdom	C1: BES6001 3.4.3a is accepted as alternative evidence
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	Written commitment of the senior plant management
C2	B	Copy of assessment, including date of issue
C3	C	Confirmation that an audit against the CSI charter was performed within the last four years OR Written report from the auditor confirming that the cement supplier is following the *CSI Guidelines for Co-Processing Fuels and Raw Materials in Cement Manufacturing*
C4	D	Minutes, protocols of stakeholder consultation and alignment processes

Links to other certification systems

Additional information

CSI Guidelines for Co-Processing Fuels and Raw Materials in Cement Manufacturing, version 2.0, July 2014:
http://www.wbcsdcement.org/pdf/CSI%20Guidelines%20for%20Co-Processing%20Fuels%20and%20Raw%20Materials%20in%20Cement%20Manufacturing_v2.pdf

Aim

To protect individual human health and well-being.

Maximum number of points available:

Aggregates	Cement	Concrete production
3 points	5 points	6 points

Assessment criteria

The following is required to demonstrate compliance:

Monitoring & reporting

Impact on human health - Reporting

Aggregates	Cement	Concrete production
2 points	4 points	3 points

C1.1. The organization has established a formalized process to provide full disclosure of all ingredients in all products, including recycled content, that fall under the certification scope. These disclosures may come in the form of safety data sheets or their equivalent.

C1.2. Current ingredient disclosures conform to criteria established by a third party along the lines of the European Union's REACH (registration, evaluation, authorization and restriction of chemicals) regulation or similar.

Implementation & results

Information sharing about minimizing risks of using the products

Aggregates	Cement	Concrete production
1 point	1 point	2 points

C2. The organization makes information on minimizing the risks associated with using the product available freely and publicly available by publishing the information on its corporate website or through other freely

accessible information channels.

Proactive awareness downstream

Aggregates	Cement	Concrete production
-	-	1 point

C3. The organization proactively makes downstream users (particularly small builders and do-it-yourself (DIY)) aware of the risks of using the product and how they may be minimized.

Supply chain

Cement producers
Aggregate producers
Concrete producers

Regional

R31	The Netherlands	
R44	United Kingdom	
R01	United States	

Evidence

Criteria	Evidence ID	
C1.1	A	A copy of the standard operating procedure or company-approved process (guidance document) to create the disclosures
C1.2	B	A copy of the current disclosures
C2	C	A link (URL) to the information provided
C3	D	Evidence of the proactive approach towards downstream users

Links to other certification systems

Health Product Declaration website: http://hpdcollaborative.org/

European Chemicals Agency *Guidance on the compilation of safety data sheets*: http://echa.europa.eu/documents/10162/13643/sds_en.pdf

Official Journal of the European Union, L 133, 31 May 2010: http://eur-lex.europa.eu/legal-content/En/ALL/?ur OJ:L:2010:133:TOC

Additional information

S2 Local Community

Aim

To contribute to higher levels of well-being in the community in which the organization operates.

Maximum points available:

Aggregates	Cement	Concrete production
9 points	14 points	13 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Policy for local stakeholder involvement

Aggregates	Cement	Concrete production
2 points	4 points	4 points

C1. The organization has a policy in place to engage with local community on a regular basis (at least once every three years if there are no major changes affecting the local community). The policy should include a list of stakeholders directly affected by the operations of the organization.

Social investment

Aggregates	Cement	Concrete production
1 point	2 points	2 points

C2. The organization has a written policy to invest resources in initiatives and programs aimed at improving the social aspects of community life through, for example, the following:

- Taking into account the promotion of community development in planning social investment projects;
- Avoiding actions that perpetuate a community's dependence on the organization's philanthropic activities, ongoing presence or support;
- Considering partnering with other organizations, including government, business or non-governmental organizations (NGOs) to maximize synergies and make use of complementary resources, knowledge and skills;
- Considering contributing to programs that provide access to food and other essential products for vulnerable or discriminated groups and persons with low income.
- Take into account land devaluation and displacement.

Monitoring & reporting

Communication & information

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C3. The organization actively communicates with and informs the local community on all aspects that have or could have significant impact on them, such as increase/decrease of economic activities

(extension/reduction of the plant), pollution (land, air, water, noise) and traffic.

The following may be used to demonstrate compliance:

- Evidence of site visits for the local community and local government;
- Meeting minutes, information session protocols, flyers, folders and other forms of communication that actively seek to reach the local community.

Action plan

Noise pollution, vibration and odor management plan

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C4.1. A noise pollution, vibration and odor management plan is in place containing several strategies to reduce inconveniences around the plant(s), including both on- and offsite noise sources (e.g. machinery, production, transportation).

C4.2. Stakeholders representing the local community have been consulted on the viability of the strategies.

Implementation & results

Implementation of the noise pollution, vibration and odor management plan

Aggregates	Cement	Concrete production
1 point	2 point	2 point

C5. The strategies of the noise pollution, vibration and odor plan have been implemented.

Safety around site for the local community

Aggregates	Cement	Concrete production
2 point	3 points	2 point

C6. The organization has taken active safety measures such that risks of injuries to passersby are minimized, such as:

- Proper fences around the site;
- Signs that warn of any risks (e.g. swimming, fishing, high voltage);
- Site visits for the local community explaining safety hazards.

Transport to and from the site

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C7. Measures are taken to minimize the risk of accidents in the local community related to site transportation, such as:

- Clear routing for trucks to the site(s) (until 500 meters from the site);
- Measures that reduce the risk of accidents (e.g. fences around play areas, accident prevention on trucks).

Supply chain

Cement producers
Aggregate producers

Concrete producers

Regional

R01	United States	C3: National Ready Mixed Concrete Association (NRMCA) Sustainable Plant Certification, particularly credit 2.13
R44	United Kingdom	C1: BES 6001 3.4.10 is accepted as alternative evidence C2: BES 6001 3.4.10 is accepted as alternative evidence C7: BES 6001 3.4.10b is accepted as alternative evidence
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	**A**	**A copy of the policy, including stakeholder identification**
C2	**B**	**A copy of the policy**
C3	**C**	**Evidence of active communication and information, such as site visits for the local community and local authorities, meetings,**

		information sessions, flyers, folders and other forms of communication that actively seek to reach the local community
C4.1 **C4.2**	**D** **E**	**Copy of noise pollution management plan** **or Submit a brief narrative describing the noise management plan, including plant protocols governing noise. Submit photos and the plant site plan indicating berms, sound walls and/or vegetation used to reduce noise.** **Evidence of stakeholder consultation, such as minutes of meetings with attendees, their roles/functions and dates**
C5	**F**	**Evidence of measures taken, such as photos**
C6	**G**	**Evidence (photographs) of the measures taken; for a site visit, evidence that attention to safety hazards is part of the visit**
C7	**H**	**Evidence (photographs) of the measures taken**

Links to other certification systems

SA 8000

FSC: Indigenous people's rights

ISO 26000: local community

BS8902: Local community

BES 6001: Local community

Additional information

Definition: Community in this credit refers to residential or other social settlements located in a geographic area that is in physical proximity to an organization's operating sites or within an organization's areas of impact.

Engagement with community is integral to sustainable development.

Organizations that engage in a respectful manner with the community and its institutions reflect and reinforce democratic and civic values. An organization's contribution to community development can help to promote higher levels of well-being in the community. Such development, as generally understood, is an improvement in the quality of life of a population.

Historical and cultural characteristics make each community unique and influence the possibilities of its future. Community development is therefore the result of social, political, economic and cultural features and depends on the characteristics of the social forces involved. Stakeholders in the community may have different – even conflicting – interests. Shared responsibility is needed to promote the well-being of the community as a common objective.

Information on C3 and C4: A noise management plan for plant(s) that outlines appropriate noise levels for specific times of the day should be developed and communicated. Measures should be taken to ensure that noise regulations and goals are met. Consider noise measurements to be taken at different locations and times to form the development of the noise management plan. Landscaping, verges and sound walls can provide effective noise barriers to reduce noise levels outside the plant. Significant noise-generating activities could be reserved for the daytime, or whenever they will least affect the surrounding community. Other operational changes can also be made to minimize noise pollution.

IFC Grievance mechanism for affected communities:
http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/learning+and+adapting/knowledge+products/publications/publications_gpn_grievances

Main Page

Aim

To ensure the inclusion of workers into occupational safety and health (OSH) matters and the protection of the physical, mental and social well-being of workers, and the prevention of harm to health caused by working conditions.

Maximum points available:

Aggregates	Cement	Concrete production
10 points	10 points	10 points

Assessment criteria

The following is required to demonstrate compliance:

Analysis

Risk analyses

Aggregates	Cement	Concrete production
2 point	2 points	2 points

C1.1. The organization analyses and controls the health and safety risks involved in its activities at least on an annual basis.

C1.2. The organization takes preventive action based on the recordings from C3, reviews the effectiveness of policies and measures, and feeds the results back into policies and measures.

Policy

Occupational safety and health (OSH) policy

Aggregates	Cement	Concrete production
2 point	2 points	2 points

C2.1. The organization's occupational safety and health policy includes:

- Training plan for health and safety;
- Frequency of review of toolbox instructions – minimum twice a year for operational workers;
- Availability of health and safety instructions;
- Clear indications of risk zones;
- Regulations and procedures concerning personal protective equipment;
- Policy for illness and registration of safety incidents;
- A risk and injury action plan.

C2.2. The policy is shared with, and is available to, every employee.

Monitoring & reporting

Registration

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C3. The organization records:

- Near misses;*
- Medical incidents;*
- Lost time injuries;* and
- Fatalities.*

(*) equivalent terminologies may apply

Implementation & results

Health management system

Aggregates	Cement	Concrete production
2 point	2 points	2 points

C4. Implement a health management system that follows the *CSI Health Management Handbook* or similar.

For example, they should:

- Have occupational health services as defined in International Labour Organization (ILO) Recommendation 112;
- Have health surveillance carried out at appropriate intervals and taking risk into account;
- Ensure that an effective health management system is in place at every site.

Joint labor-management health and safety committee

Aggregates	Cement	Concrete production
2 point	2 points	2 points

C5. The organization has developed a joint labor-management committee as the basis of its health, safety and environment systems, including the participation of the workers concerned and that the organization recognizes and respects the rights of workers.

In case the organization (part/plant) is a small organization (less than 50 employees), joint labor - management cooperation may be ensured in any other form as long as both labor and management are represented.

The following may be used to demonstrate compliance:

- The committee obtains timely, full and accurate information concerning health and safety risks and the best practices used to address these risks;
- Laborers may freely inquire into and be consulted on all aspects of their health and safety as related to their work;
- Laborers may refuse work that is reasonably considered to pose an imminent or serious danger to their life or health or to the lives and health of others;
- The committee may seek outside advice from workers' and employers' organizations and others who have expertise;
- The committee may freely report health and safety matters to the appropriate authorities;
- The committee participates in health and safety decisions and activities, including the investigation of incidents and accidents.

Supply chain

Cement producers
Aggregate producers
Concrete producers

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	BetonBewust chapter 2

Evidence

Criteria	Evidence ID	
C1	A	Evidence that the analyses take place annually and fulfill the requirements
C2.1 C2.2	B C	A copy of the policy Evidence that the policy is available to all employees
C3	D	Evidence that the required registration actually takes place
C4	E	Evidence of compliance with *CSI Health Management Handbook* or similar
C5	F	A list with members of the committee and their functions and the roles and responsibilities of the committee

Links to other certification systems

ISO 26000

United Nations Global Compact

Global Reporting Initiative (GRI)

BetonBewust chapter 2

CSI Health Management Handbook

Natural Stone scheme

Additional information

Aim

To ensure the fair and equitable treatment of workers.

Maximum points available:

Aggregates	Cement	Concrete production
8 points	8 points	8 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Social protection

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C1. Where changes in operations would have major employment impacts, the organization has a written commitment to provide reasonable notice to the appropriate authorities and representatives of the workers so that the implications may be examined jointly to mitigate any adverse impact to the greatest possible extent.

Monitoring & reporting

Personal record for all employees

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C2.1. Every employee has a personal record (dossier) with proof of education and safety training relevant to the tasks the employees perform.

C2.2. All personal data and the privacy of the workers are protected against unauthorized access.

C2.3. All employees are granted access to their personal record upon first request.

Personal evaluation

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C3. The personal record includes reports of regular evaluation meetings with the employee and an employee signature showing that the employee has seen this record.

Training in the workplace

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C4.1. A profile has been made for every task. The profile includes required job-specific training and education and, where applicable, instructions on undertaking the tasks in a safe manner.

C4.2. All workers at all stages of their work experience are provided with access to skills development, training and apprenticeships, and opportunities for career advancement.

Implementation & results

Personal health, work-life balance

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C5.1. Joint labor-management programs are established that promote health and well-being; yearly (or as frequently as the joint labor-management health and safety committee advises) preventive medical examination for all employees is offered at no cost.

C5.2. Conditions of work permit work-life balance in terms of reasonable working hours (= overtime is voluntary and infrequent), parental leave and child care, and other services.

Performance appraisal system

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C6. Presence of a performance appraisal system for all employees

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply C1-C6: An SA8000 certificate (not older than 3 years) is valid evidence Random audit: For the S4 criterion, a random check by the auditor for at least 1 person per plant to see which criteria are met. Evidence is a written statement of the auditor clearly indicating which criteria are met.
Aggregate producers		
	Applicable	All criteria apply

	assessment criteria	C1-C6: An SA8000 certificate (not older than 3 years) is valid evidence Random audit: For the S4 criterion, a random check by the auditor for at least 1 person per plant to see which criteria are met. Evidence is a written statement of the auditor clearly indicating which criteria are met.
Concrete producers		
	Applicable assessment criteria	All criteria apply C1-C6: An SA8000 certificate (not older than 3 years) is valid evidence Random audit: For the S4 criterion, a random check by the auditor for at least 1 person per plant to see which criteria are met. Evidence is a written statement of the auditor clearly indicating which criteria are met.

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	Aligned with BetonBewust criteria 2.1a and b, 2.2a and b

Evidence

Criteria	Evidence ID	
C1.1	A	Copy of a formal document containing this commitment
C2.1	B	Evidence of the existence of personal records for all employees, for example a picture of the cover of the records of different people with different functions, or a letter

C2.2	C	signed by the person responsible for human resources that explains that records are kept for all employees
C2.3	D	Explanation, where possible supported by photographic evidence (e.g. a locked room, filing cabinet or password protected program), of how personal data is protected Copy of a formal document containing this right to access
C3	E	Cover sheets of at least five current evaluation reports for different employees with different functions
C4.1	F	A copy of a number of function profiles deemed representative by the auditor, both in terms of percentage of total and in content
C4.2	G	Evidence of access to skills development
C5	H	Evidence of a health programs
	I	Evidence of facilities to allow choices in work-life balance; interviews with employees supporting this suffices
C6	J	A copy of the appraisal procedure

Links to other certification systems

Additional information

A fundamental principle in the International Labour Organization's (ILO) 1944 Declaration of Philadelphia is that labor is not a commodity. This means that workers should not be treated as a factor of production and subjected to the same market forces that apply to commodities. The inherent vulnerability of workers and the need to protect their basic rights is reflected in the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights. The principles involved include the right of everyone to earn a living through freely chosen work and the right to just and favorable conditions of work. -- From ISO 26000 6.4.2.1 Principles and 6.4.3/4/5/7 Practices-- From BetonBewust working conditions

SA8000

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Main Page

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P1 Local Economy

Aim

To promote the adoption of practices for the economic benefits of the local community.

Aggregates	Cement	Concrete production
4 points	4 points	4 points

Assessment criteria

The following is required to demonstrate compliance:

Policy

Local sourcing and local business

Aggregates	Cement	Concrete production
4 points	4 points	4 points

C1. The organization gives preference to recruiting local staff and hiring local expertise where suitably qualified or to recruiting and training local people, taking into account the local legal boundaries to such a preference.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply
Aggregate producers		
	Applicable assessment criteria	All criteria apply
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	A copy of the policy given to human resources staff of recruiting agencies

Links to other certification systems

ISO 26000

C1 aligns with the BES6001 performance criterion option to source personnel from the local community.

Additional information

Aim

To operate the business in a fair and ethical manner.

Maximum points available:

Aggregates	Cement	Concrete production
13 points	13 points	13 points

Assessment criteria

Analysis

Ethical risk assessment

Aggregates	Cement	Concrete production
3 points	3 points	3 points

C1. The organization conducts and documents risk assessments of its operations focused on the avoidance of bribery and corruption, fair marketing, and respect of property rights, with maximum intervals of three years.

The following may be used to demonstrate compliance:

- Identify the risks of corruption and implement and maintain policies and practices that counter corruption and extortion;
- Ensure its leadership sets an example for anti-corruption and provides commitment, encouragement and oversight for implementation of anti-corruption policies;
- Train employees and representatives in their efforts to eradicate bribery and corruption, and raise the awareness of employees, representatives, contractors and suppliers about corruption and how to counter it;
- Ensure that the remuneration of employees and representatives is appropriate and for legitimate services only;
- Establish and maintain an effective system to counter corruption;
- Encourage employees, partners, representatives and suppliers to report violations of the organization's policies and unethical and unfair treatment by adopting mechanisms that enable reporting and follow-up action without fear of reprisal;
- Work to oppose corruption by encouraging others with which the organization has operating relationships to adopt similar anti-corruption practices.

Policy

Policy and code for ethical business

Aggregates	Cement	Concrete production
3 points	3 points	3 points

C2. The organization has a policy and code of business ethics in place. The policy includes procedures and training that cover anti-corruption, fair competition and marketing, respect for property rights, responsible political involvement and confidential investigation.

Policy and code for ethical business that covers suppliers

Aggregates	Cement	Concrete production
2 points	2 points	2 points

C3. The organization has a policy and documented code of business ethics in place with an obligation for the organization's most relevant suppliers to adhere to this code.

Monitoring & reporting

Confidential investigation

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C4. The organization has a mechanism for confidential investigation, resolution and reporting of suspected cases of bribery and/or corruption in place.

Action plan

Responsible political involvement

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C5. The organization has training, procedures, policies or other safeguards in place in its pursuit to be free of undue political influence and avoids behavior, such as manipulation, intimidation and coercion, that can undermine the public political process.

The following may be used to demonstrate compliance:

- Train employees and representatives and raise their awareness regarding responsible political involvement and contributions and how to deal with conflicts of interest;
- Be transparent regarding its policies and activities related to lobbying, political contributions and political involvement;
- Establish and implement policies and guidelines to manage the activities of people retained to advocate on the organization's behalf;
- Avoid political contributions that amount to an attempt to control or could be perceived as exerting undue influence on politicians or policy-makers in favor of specific causes;
- Prohibit activities that involve misinformation, misrepresentation, threat or compulsion.

Implementation & results

Fair competition

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C6. The organization pursues fair competition, including (but not limited to): avoiding price fixing, i.e. where parties collude to sell the same product or service at the same price; bid rigging, i.e. where competitors collude to manipulate a competitive bid; and predatory pricing, i.e. selling a product or service at a very low price with the intent of driving competitors out of the market and abusing of a dominant position. The organization conducts its activities in a manner consistent with competition laws and regulations, cooperates with the appropriate authorities, is mindful of the social context in which it operates, and does not take advantage of social conditions, such as poverty, to achieve unfair competitive advantage.

The following may be used to demonstrate compliance:

- Establish procedures and other safeguards to prevent engaging in or being complicit in anti-competitive behavior;
- Train employees to raise awareness of the importance of compliance with competition legislation and fair competition;
- Support anti-trust and fair subsidies, as well as public policies that encourage competition;
- Maintain a reporting tool on this matter.

Respect for property rights

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C7. The organization recognizes property rights, both physical and intellectual.

The following may be used to demonstrate compliance:

- Implement policies and practices that promote respect for property rights and traditional knowledge;
- Conduct proper investigations to be confident it has lawful title permitting the use or disposal of property;
- Do not engage in activities that violate property rights, or in counterfeiting and piracy;
- Pay fair compensation for property that it acquires or uses;
- Consider the expectations of society, human rights and basic needs of the individual when exercising and protecting its intellectual and physical property rights.

Fair marketing

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C8. The organization has training, procedures, policies or other safeguards in place in its pursuit to not engage in any practice that is deceptive, misleading, fraudulent or unfair, unclear or ambiguous, including the omission of critical information.

Supply chain

Cement producers		
S1	Applicable assessment criteria	All criteria apply
Aggregate producers		
	Applicable assessment criteria	All criteria apply
Ready mix/mortar producers/onsite producers		
	Applicable assessment criteria	All criteria apply
Precast and concrete product producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	

R44	United Kingdom	
R31	The Netherlands	BetonBewust 1.1: Compliance program

Evidence

Criteria	Evidence ID	
C1	A	Evidence that a risk assessment has been performed less than 3 years before; this can be a confirmation that the auditor has seen the assessment or a copy of the assessment
C2	B	A copy of the code, proving that suppliers are within the scope
C3	C	A copy of the code
C4	D	Evidence that a mechanism for confidential investigation is in place
C5	E	Evidence of responsible political involvement or a statement signed by management that there is no political involvement
C6	F	Procedures, training or other material proving that fair competition is pursued.
C7	G	A policy or statement about respecting property rights.
C8	H	A copy of the fair marketing policy

Definitions

Major suppliers / most relevant suppliers

Cement: Most relevant suppliers include suppliers of constituents, fuels, electricity, fly ash, slag.

Concrete: most relevant suppliers include cement, supplementary cementitious materials and aggregates.

If it is unclear what the most relevant suppliers are, the top 5 suppliers in terms of financial value will pertain.

Links to other certification systems

BS8902 Ethical business

BES6001 3.4.11: Business ethics

ISO 26000: ethical business

Additional information

ISO 26000: Fair operating practices concern ethical conduct in an organization's dealings with other organizations. These include relationships between organizations and government agencies, as well as between organizations and their partners, suppliers, contractors, customers, competitors, and the associations of which they are members.

Fair operating practice issues arise in the areas of anti-corruption, responsible involvement in the public sphere, fair competition, socially responsible behavior, relations with other organizations, and respect for property rights.

Behaving ethically is fundamental to establishing and sustaining legitimate and productive relationships between organizations. Therefore, the observance, promotion and encouragement of standards of ethical behavior underlie all fair operating practices. Preventing corruption and practicing responsible political involvement depend on respect for the rule of law, adherence to ethical standards, accountability and transparency. Fair competition and respect for property rights cannot be achieved if organizations do not deal with each other honestly, equitably and with integrity.

P3 Innovation

Aim

To stimulate the development and implementation of new, sustainable, low-carbon solutions, and responsible solutions and services not covered by this certification system, or to deliver exemplary performance against any criterion in this system.

Maximum points available.

Aggregates	Cement	Concrete production
8 points	8 points	8 points

Assessment criteria

Implementation & results

Innovative solutions and/or exemplary performance

Aggregates	Cement	Concrete production
1-8 points	1-8 points	1-8 points

C1. An independent committee has evaluated one or more innovations according to the innovation procedure in this system and has decided to award one or more additional points, up to a maximum of 8 points.

A higher number of points is awarded if the impact on the criteria is higher (CO2 reduction, biodiversity, etc.)

Innovations may be in the field of product, process, materials, social, etc. *A priori*, there is no restriction to the type of innovation.

Exemplary topics are:

An exemplary performance is an achievement on a credit that is better than asked and that (regionally) illustrates high performance within the industry.

Supply chain

Cement producers		
S1	Applicable assessment criteria	All criteria apply
Aggregate producers		
S2	Applicable assessment criteria	All criteria apply
Concrete producers		
S3	Applicable assessment criteria	All criteria apply

Regional

R01	United States	

R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	The approval letter of the innovation committee, including the number of points to be awarded for the innovation or exemplary performance
	B	Evidence of implementing the innovation (photo, report from auditor, etc.)

Links to other certification systems

Additional information

P4 Feedback Procedure

Aim

To stimulate the capacity of the local community, employees and customers to provide feedback to the company.

Maximum available points

Aggregates	Cement	Concrete production
3 points	3 points	3 points

Assessment criteria

Implementation & results

Feedback and complaints procedure for the local community

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C1. A complaint procedure and complaint facility (link on website, phone number, responsible person to handle the complaints) for the local community is available.

Feedback and complaints procedure for employees

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C2. A feedback and complaint procedure and complaint facility (link on website, phone number, responsible person to handle the complaints) for employees.

Feedback and complaints procedure for customers

Aggregates	Cement	Concrete production
1 point	1 point	1 point

C3. A feedback and complaint procedure and complaint facility (link on website, phone number, responsible person to handle the complaints) for customers.

Supply chain

Cement producers		
	Applicable assessment criteria	All criteria apply
Aggregate producers		
	Applicable assessment criteria	All criteria apply
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1-C3	A	A link to the online complaints procedure that satisfies the requirements

Links to other certification systems

Additional information

C1 Cement

Aim

To stimulate the use of sustainable and responsible cement.

Maximum available points

Aggregates	Cement	Concrete production
-	-	67 points

Assessment criteria

Implementation & results

The weighted average score of the cement suppliers

Aggregates	Cement	Concrete production
-	-	0-67 points

C1. The weighted average score of the cement supplied, as calculated in the CSC supply chain calculation tool. For the percentage of cement supplied from each supplier, data from last calendar year must be used. If this data cannot be supplied, the data of the year before last year must be used.

Supply chain

Cement producers		
	Applicable assessment criteria	-
Aggregate producers		
	Applicable assessment criteria	-
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	The calculationsheet with the weighted average score of the cement suppliers. And or a confirmation from the

		auditor that the calculation is checked and the score is correct.

Links to other certification systems

Additional information

A1 Aggregates

Aim

To stimulate the use of sustainable and responsible aggregates.

Maximum available points

Aggregates	Cement	Concrete production
-	-	40 points

Assessment criteria

Implementation & results

The weighted average score of the aggregate suppliers

Aggregates	Cement	Concrete production
-	-	0-40 points

C1. The weighted average score of the aggregates supplied, as calculated in the CSC supply chain calculation tool. For the percentage of aggregates supplied from each supplier, data from last calendar year must be used. If this data cannot be supplied, the data of the year before last year must be used.

Supply chain

Cement producers		
	Applicable assessment criteria	-
Aggregate producers		
	Applicable assessment criteria	-
Concrete producers		
	Applicable assessment criteria	All criteria apply

Regional

R01	United States	
R44	United Kingdom	
R31	The Netherlands	

Evidence

Criteria	Evidence ID	
C1	A	The calculationsheet with the weighted average score of the aggregate suppliers. And or a confirmation from the

		auditor that the calculation is checked and the score is correct.

Links to other certification systems

Additional information

Part 3: Governance

Part 3: Governance

Please refer to the CSC WIKI page for more in dept information about:

1.Governance Structure

2.Roles in the Certification Process

3.Regional Scheme Operator - Requirements

4. Global & Local Operations

5. Scope evaluation

6.Stakeholder Consultation

7.Maintain and Withdraw of Certificates

8. Lisense Agreement Certification Institutes

9. Confidentiality Agreement

10. Credibility

Additions

Supplementary cementitious materials (SCM) such as fly ash, limestone fines and slag.

Aggregate

A broad category of coarse particulate material used in concrete, including sand, gravel, crushed stone, slag and recycled concrete.

Assessment

The process with which a registered CSC auditor/assessor determines the sustainability performance of a project based on the relevant scheme documents.

The combined processes of audit, review, and decision on a client's conformity with the requirements of a standard (ISEAL Glossary of terms).

Assessment tool

A web-based information and communication software tool; the primary means of content communication between project, assessor and certification institute.

Auditor/assessor

Qualified person establishing the sustainability qualification of a project, independent from the project.

Biodiversity

Degree of variation of life forms within a given species, ecosystem, biome or planet.

BES6001

A responsible sourcing scheme developed by the Building Research Establishment (BRE, UK).

BS8902A Britisch Standard for responsible sourcing schemes. BES6001 is based on this standard. The CSC manual has reviewed its standard against BS8902.

Cement plantA cementplant covers three parts: the limestone quarry, clinker kiln including raw material preparation, and grinding installations.

Chain of custody

A system or process used to maintain and document the chronological history and unbroken path that a product takes through a supply chain. For concrete to be responsibly sourced, its main constituents need to be responsibly sourced.

The custodial sequence that occurs as ownership or control of the material supply is transferred from one custodian to another in the supply chain. (adapted from: WB, WWF Alliance for Forest Conservation and Sustainable Use, 2002)

Certification institute (CI)

A regional body that performs quality assurance on assessment reports, trains assessors and experts, and issues certificates. It may suggest regional scheme differences to the global scheme operator

Concretea composite material composed of coarse aggregate bonded together with a fluid cement that

hardens over time (source: wikipedia). The concrete score is the CSC system is based on the score of the concrete producer, the aggregate producer and the cement producer. A composite made out of alternative constituents as granulates or alternative binders is also considered to be concrete and can be certified under the CSC certification system.

Concrete production In the CSC the concrete producer can achieve a score. The concrete score is the combination of the aggregate (15%), cement (25%) and concrete production score (60%).

Constituent material

The material component of a product

CSC auditor

Also called "assessor"; a third party, independent person validating organizations' CSC assessment reports.

CSC expert

A person trained on the CSC scheme in order to assist an organization in constituting the assessment report. This is not a formal role in the assessment process. An expert may be internal or external to the organization.

Credit

A sustainability topic within the CSC scheme containing the assessment criteria to satisfy in order to achieve points, e.g. M1 - Responsible Sourcing Policy credit.

Environmental management system (EMS)

An EMS is generally one part of a larger management system used to establish an environmental policy and to manage the environmental aspects of an organization’s activities, products and services.

Evidence

Prescribed documentation supporting the claim for achieving points within credits.

Fine aggregates

Sand with a size of less than 4.75 mm

Fly ash

pulverised fuel ash, an addition or supplementary cementtitious material (SCM)

Free Prior Informed Consent The aim of Free Prior Informed consent (FPIC), is to establish bottom up participation and consultation of an Indigenous Population prior to the beginning of a development on ancestral land or using resources within the Indigenous Population's territory.

Impact assessment

A systematic, objective and in depth, ex-post assessment of the medium or long-term effects, positive or negative, intended or unintended, of the implementation of a standards system. Impact evaluations employ methodologies that are designed to enable evaluation users to understand the extent to which an observed change can be attributed to the standard system or another intervention. (adapted from 3ie Impact Evaluation Glossary, 2012 and World Bank).

ISO26000

Provides guidance on how businesses and organizations can operate in a socially responsible way. This means acting in an ethical and transparent manner that contributes to the health and welfare of society.

Major suppliers / most relevant suppliers

Cement: Most relevant suppliers include suppliers of constituents, fuels, electricity, fly ash, slag.

Concrete: most relevant suppliers include cement, supplementary cementitious materials and aggregates.

If it is unclear what the most relevant suppliers are, the top 5 suppliers in terms of financial value will pertain.

Management system

A network of interrelated elements. Elements include responsibilities, authorities, relationships, functions, processes, procedures, practices and resources. A management system uses these elements to establish policies and objectives and to develop ways of applying these policies and achieving these objectives.

NRMCA sustainable plantguide

North American Ready Mixed Concrete Assocation's guide to a sustainable plant. This guideline has been used as a reference to develop the CSC scheme.

Organization

Company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration**.**

Operations manual

This manual. Contains all operational procedures, tariff information, responsibilities, etc. required to properly operate the CSC scheme. Constitutes the operational part of the scheme, together with the Technical Manual.

Points

Per credit, points can be achieved. The total number of points determines - among others - the level of certification achieved.

Policy

Formal expression of an organization’s intent and direction with regards to an issue or set of issues, Source: ISO26000

Project

In the context of CSC certification, the project is the object or subject defined for certification; it could be (part of) an organization, a plant or a product range.

Quality management system (QMS)

A set of interrelated or interacting elements that organizations use to direct and control how quality policies

are implemented and quality objectives are achieved.

Quality assurance (QA)

A set of activities intended to establish confidence that quality requirements will be met. QA is one part of quality management.

Responsible sourcing

A holistic approach to managing a product from the point at which component materials are mined or harvested, through manufacturing and processing. Source: Building Research Establishment (BRE). Management of sustainable development in the provision or procurement of a product. BS8902

Responsible sourcing certificate

Shows stakeholders the level to which an organization, plant or product operates in an environmentally, socially and economically responsible way.

Robust

One of the criteria for a qualitative certification system is that it has to be robust.

Scope (certification scope) The range of products that are part of the certification. Often the plant is chosen as the scope for certification (meaning all products produced in the plant are certified). However CSC is product certification so other scopes are possible. Another scope can be all concrete deliverd for construction product X. The certification body has to approve the scope.

Sustainability claims

A message used to set apart and promote a product, process, business or service with reference to one or more of the three pillars of sustainability (social, economic and/or environmental). Claims may be consumer-facing or business to business. Claims which are not clear and accurate may provide the user with misleading or even false information. (source: ISEAL)

Scheme operator

Independent body operating globally and maintaining all scheme documents, procedures and requirements necessary to ensure the proper, reliable and effective application and certification against the scheme. The scheme operator has final responsibility for global content and oversees and regulates local adaptations.

Small organization

A small or medium-sized enterprise (SME) is defined as follows: micro, small and medium-sized enterprises are enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euros and/or an annual balance sheet total not exceeding 43 million euros.

Supplementary cementtitious material (SCM)

Additions to concrete or cement such as fly ash, limestone fines and slag**.**

StakeholderIndividual or group that has an interest in any decision or activity of an organisation (adapted from ISO 26000)

Standard setting organization Also called the scheme operator. The organisation responsible for managing the development or revision of a standard.

Technical Manual

Contains all assessment criteria and constitutes the operational part of the scheme. In order for a company to obtain CSC scheme certification, a minimum of criteria need to be satisfied in addition to mandatory pre-requisites.

TraceabilityThe completeness of the information about every step in a process chain which allows for verification of origin of the material. (ISEAL Glossary of terms)

Common Synonyms (ISEAL GLossary of terms)

Complaint of the client

Step 1: complaint to auditor

Step 2: complaint to certification manager of the certification institute (see complaints procedure of your CI)

If the complaint is not solved (or the complaint is about the CI):

Step 3: complaint to the regional committee (if in place in the region)

Support

Helpdesk

info@concretesustainabilitycouncil.org

Certification Institutes

In the future we plan to have certification institutes covering all regions.

Local support

Europe

- VOBN, Marie van der Poel

Middle East

- Grey Matters, Rabih Fakih

North America

- NRMCA, Lionel Lemay