

Concrete Sustainability Council

CSC-certification for concrete and its supply chain

Annual Report 2020



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Christian Artelt Chair of the CSC



Michael Scharpf Vice-Chair of the CSC

1 Introduction

Dear Stakeholders,

It goes without saying that 2020 was the year of the COVID-19 pandemic. Much of our energy had to focus on dealing with this crisis. In this challenging situation, we are particularly proud of being able to look back at another successful year for the CSC that was marked by several highlights:

- After an intense preparation phase, the new CSC R-module was successfully launched. This
 module enables concrete suppliers to express the recycled aggregate content through a
 dedicated CSC-module. The new module was adopted by the first concrete plants in Germany
 and the Netherlands.
- The CSC achieved recognition in LEED as one of the verified Company and Product Standards in the "Social Equity within the Supply Chain" Pilot Credit. Furthermore, recognitions in other renowned green building label were prolonged and strengthened: BREEAM recognized the newly introduced certification level "Platinum" at tier level 7, and the new CSC R-module was accepted as evidence in DGNB's criterion "ENV 1.3 Sustainable resource extraction".
- The number of annual certifications continued to increase to a record high of 192 in 2020, leading to 395 active certificates, a 50% increase compared to 2019.
- CSC System version 2.1 was developed. The preparation included a thorough stakeholder consultation process where very valuable input was received. The new CSC system version was successfully launched in January 2021.

The results of the certifications performed in 2020 with CSC system version 2.0 were monitored and evaluated and are shared in this report. Insights gained through the evaluation process will be used for future improvements of the CSC certification system.

As the operator of the first and leading certification system for responsibly sourced concrete of global relevance, the CSC is proud of its contribution to making concrete and its supply chain even more sustainable.

Yours sincerely,

Procian Arter

Christian Artelt Chair Michael Scharpf Vice-Chair



2 CSC certification

2.1 Scope of certification

The CSC system is a product certification system, which practically targets the certification of production plants. Typically, the certification applies to all products manufactured and supplied by the respective plant.

Ready-mix concrete plants and precast concrete plants can obtain a "CSC certificate". Cement and aggregate suppliers can obtain a "CSC supplier certificate". Geared towards the comprehensive coverage of the supply chain, CSC supplier certificates are fully recognized in the CSC concrete certification.

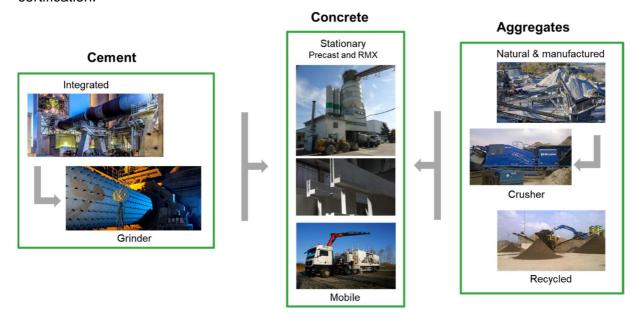


Fig. 2.1: CSC certification scope

2.2 Scoring & certification levels

The CSC certification system follows the concept of continuous improvement. The system currently offers four certification levels (Bronze, Silver, Gold and Platinum) to foster continuous improvement.

For certifying concrete plants, the certification level obtained is the result of a scoring system, considering the individual scores from the concrete plant, and the weighted average from its CSC certified cement and aggregates suppliers. Certifying plants need to comply with all prerequisites (see section 2.3), plants aiming to certify at the level Silver or higher furthermore need to fulfill several mandatory criteria.



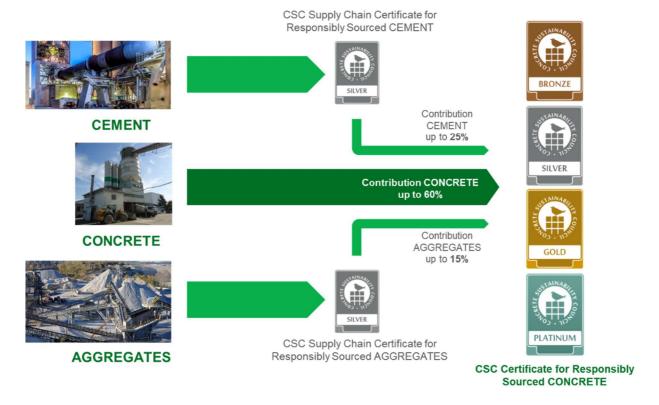


Fig. 2.2: CSC scoring principles

2.3 Content of CSC certification

Each plant undergoing CSC certification must fulfill a certain number of prerequisites to obtain a CSC certificate. Provided the prerequisites are met, it can score points in the following categories:

- M Management;
- E Environment;
- S Social;
- B Economic;
- C Supply chain.

An overview of the credits applicable in CSC version 2.0 is shown in the figure 2.3. Some of the credits or criteria only apply to the certification of a specific part of the supply chain, such as "E9 Secondary fuels" to clinker producing plants.





P1 Ethical and Legal Compliance

P2 Human Rights

P3 Indigenous People Rights

P4 Environmental and Social Impact

P5 Traced Materials

MANAGEMENT

M1 Sustainable Purchasing

M2 Environmental Management

M3 Quality Management

M4 Health & Safety Management

M5 Benchmark

SOCIAL

S1 Local Community

S2 Health Product Information

S3 Occupational Health & Safety

S4 Labor Practices

ENVIRONMENTAL

E1 Life Cycle Impact

E2 Land Use

E3 Energy & Climate

E4 Air Quality

E5 Water

E6 Biodiversity

E7 Secondary Materials

E8 Transport

E9 Secondary Fuels

ECONOMICS

B1 Local Economy

B2 Ethical Business

B3 Innovation

B4 Feedback Procedure

EACHAIN OF CUSTODY

C1 Cement

C2 Aggregates

Fig. 2.3: Content of CSC certification

2.4 The "R-module"

This new module is a product certification that enables concrete suppliers to label RC-concrete with a recycled aggregate content of 10% or higher. The R-module is available for CSC-Silver (or higher) certified concrete plants.



PREREQUISITES

R1 Responsible Sourcing

R2 Traced R-Material Supply

R3 Recycled Material Consumption

R4 Quality Management

R5 Minimum R-Material Content

Fig. 2.4: R-module certification content

2.5 Supporting the implementation of the United Nations' Sustainable Development Goals (SDGs)

CSC certification follows a holistic approach and requires compliance with five fundamental prerequisites and a wide range of social and environmental performance indicators, including "occupational Health & Safety", "Labor practices", "Land use", "Energy & climate", "Air emissions", "Water", "Biodiversity", "Secondary materials", and "transport". With this, the CSC aims to contribute to the implementation of the SDGs in the concrete sector and its supply chain. Most of the SDGs are directly or indirectly addressed, namely SDG 3 "Good health and well-being", 6 "Clean water and sanitation", 7 "Affordable and clean energy", 8 "Decent work and economic growth", 9 "Industry, innovation and infrastructure", 10 "Reduced inequalities", 11 "Sustainable cities and communities", 12 "Responsible consumption and production", 13 "Climate action", 14 "Life below water", 15 "Life on land", and 16 "Peace, justice and strong institutions".





Fig. 2.5: The CSC system's coverage of the SDGs

3 Credibility of the CSC certification system

The aim of the CSC is to achieve a positive impact on the social, environmental and economic practices of concrete, cement and aggregate producers. Therefore, the CSC certification system is based on the 10 ISEAL credibility principles:

1. Sustainability

The CSC certification system aims to achieve several clearly identified sustainability objectives, namely:

- Improving the sustainable use of concrete by promoting responsible practices throughout the value chain and incentivizing continuous improvement;
- Ensuring transparency in the concrete sector by making sustainable practices more visible and enable organizations to demonstrate leadership;
- Raising the public awareness regarding the sustainability of the concrete sector and its products;
- Obtaining tangible benefit for implementing responsible sourcing by receiving recognition for the supply of CSC certified concrete in green building and green infrastructure rating systems such as BREEAM, DGNB, LEED, ENVISION;
- Obtaining recognition in "green procurement" government policies and policies for social procurement.

2. Continuous Improvement

Raising the bar for obtaining CSC certification is an important lever to continuously improve responsible sourcing practices. This is achieved via a number of dedicated measures, including

- regular discussions on the level of the CSC Technical Committee;
- the CSC's annual report including the RSOs' and Certification Bodies' (CBs') annual feedback;
- harmonization meetings between CBs;
- exchange meetings with RSOs;
- exchanges with certificate holders;
- stakeholder events with CSOs and labor organizations.

3. Relevance



Relevance of credits and criteria covered by the system are of highest importance to ensure "fitness for purpose" and progress in responsible sourcing practices. The topics covered by the certification system were consequently identified with the support of a broad range of stakeholders:

- Amongst the environmental key-topics identified are the reduction of CO₂ emissions, energy and water consumption, recycling and the use of secondary materials. In the supply chain, i.e. the production of cement and aggregates, biodiversity was identified as another important topic to be carefully considered.
- Amongst the key social topics identified are relations with the local community, occupational health and safety, and labor practices.
- In the field of economics, local economy, ethical business practices and innovation were identified as particularly important.

The CSC system allows adaptations to ensure local applicability.

4. Rigor

The system focuses on topics relevant for responsible sourcing. All evidence used for certification first needs to be uploaded in the CSC assessment tool, the so-called "CSC Toolbox". In a second step, the uploaded evidence is assessed and validated by an independent CB before issuing the certificate.

5. Engagement

The system was developed and updated in a collaborative approach with involvement from internal stakeholders - i.e. enterprises, industry associations and CBs - and external stakeholders - i.e. CSOs, labor organizations, green building councils (GBCs) and academics.

6. Impartiality

The CSC has a broad range of internal stakeholders comprising concrete, cement and aggregate producers, industry associations, and CBs. Impartiality is ensured by the organization's Governance, namely

- a General Assembly (GA) with equal voting rights for all members;
- the setup of the Executive Committee (ExCo) ensures appropriate representation of all internal stakeholders:
- the CSC Advisory Committee providing the direct voice of social and environmental stakeholder organizations;
- a dedicated grievance management procedure.

7. Transparency and

8. Accessibility

All relevant information regarding the CSC, its Governance and the certification system can be accessed via the CSC's homepage: https://concretesustainabilitycouncil.com/

9. Truthfulness

CSC intends to secure truthfulness, and thus confidence in products from CSC certified plants via a framework of dedicated measures:

- The CSC formally requests that claims and communications relating to CSC certification and the use of the logo are in line with the respective CSC guidance document;
- a dedicated procedure is in place to report false claims, false use of the CSC trademark and logo;



- the CSC regularly checks the use of the CSC logo and trademark, e.g. via internet spotchecks;
- the CSC reserves the right to take legal action against any false/deceptive claims including any misuse of the CSC logo.

10. Efficiency

CSC certification is aligned with ISO standards, namely ISO 14001, ISO 18001, ISO 9001, ISO 26000 and other standards. This makes the certification process efficient for companies, who are already following those standards. The CSC continuously seeks a dialogue with green building and green infrastructure labels. Recognition has been achieved within BREEAM, DGNB and ENVISION and is an important driver to create value for CSC customers. Recognition by such systems can become an important success factor for the CSC, leading to a growing number of CSC certifications, such as demonstrated in the Netherlands and in Germany.

Local promotion of the CSC certification system among stakeholders other than the concrete sector and its supply chain is key to implementing the CSC system throughout the construction value chain. Local promotion is secured through "system ownership" via RSOs who proactively engage with green building councils and public authorities.

4 CSC in numbers

4.1 CSC-certifications

Since the launch of CSC-certification in January 2017, 458 CSC certificates were awarded (see Table 4.1). The number of annual certifications continued to increase to a record high of 192 in 2020, leading to an increase of 49% compared to 2019.

Date of certificat	Aggregates	Cement	Concrete	Grinder	Mobile concrete	Recycled agg.	Grand Total
2017	5	4	54				63
2018	3	21	50				74
2019	28	11	88			2	129
2020	35	12	139	3	1	2	192
Grand Total	71	48	331	3	1	4	458

Table 4.1: Number of certificates issued per year and per segment

140 out of the 192 certificates (\triangleq 73%) awarded in 2020 were concrete plant certificates, one of them for a mobile concrete plant. 37 supplier certificates (\triangleq 19%) were awarded for aggregate production sites, two of them for sites producing recycled aggregates, and 15 supplier certificates (\triangleq 8%) were awarded for cement plants, 3 of them for cement grinding plants.

32 (\triangleq 17%) of the 2020 certificates were awarded at the level "Bronze", 17 certificates (\triangleq 9%) at the level "Silver", 132 certificates (\triangleq 69%) at the level "Gold", and 11 certificates (\triangleq 5%) at the level "Platinum". The overall scoring was higher than in 2019 and is related to the increased supply chain coverage (see section 5.1.4).

Amongst the 192 CSC certification projects executed in 2020 were 86 in Germany, 76 in the Netherlands, 8 in Latin America and Belgium, 7 in Italy, 6 in Turkey, and 1 in the United Kingdom. This increases the number of active certificates to 395.



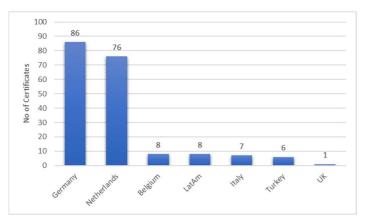


Fig. 4.1: Certificates by country issued in 2020

4.2 CSC R-Module certifications

After its launch mid-2020, three R-module certifications were successfully achieved before the end of the year; two of them in Germany, and one in the Netherlands.

5 Certificate holders' responsible sourcing performances

This section provides an overview on the achievements of plants certified in 2020 under the latest CSC system version 2.0. The data allows gaining insight into the implementation status of sustainability practices in the concrete and aggregate sector and is used to steer future updates of the CSC certification system.

5.1 Concrete producers

140 concrete plants were awarded in 2020 with a CSC certificate version 2.0.

5.1.1 Management criteria

Fig. 5.1 provides insight into the achievement of management related certification criteria: Concerning sustainable purchasing practices it can be seen that nearly all CSC certified concrete plants have a purchasing policy in place (\rightarrow M1.01) covering social and environmental aspects, that they carry out supplier assessments (\rightarrow M1.02) and include responsible sourcing as a criterion in their procurement process (\rightarrow M1.06). Illustrating the principles of responsible sourcing to relevant employees via trainings is an area for further improvement for around 25% of the plants.

Nearly all certified plants have documented management systems in place addressing environmental (\rightarrow M2.01) quality- (\rightarrow M3.01), and health and safety (\rightarrow M4.01) related issues. Significant progress was made in the implementation of documented management systems over the past years. Requesting this in future CSC certification system versions for all plants undergoing CSC certification at the level Silver or higher will secure and expand the level of progress achieved.





Fig. 5.1: Concrete: Management criteria - ratio of criterion achievement

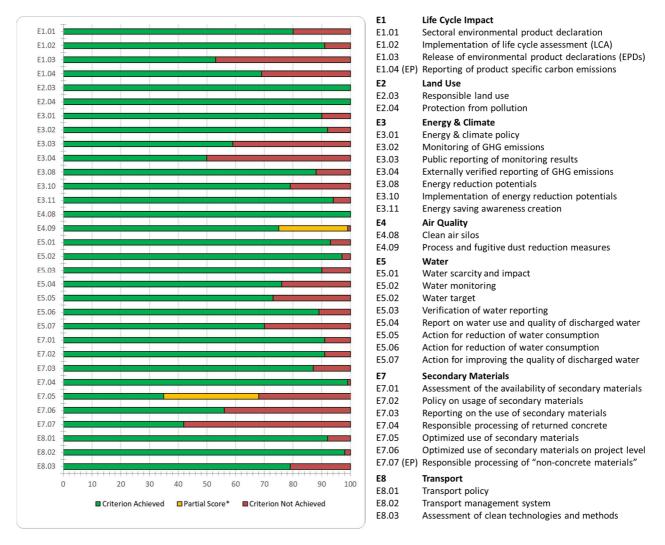
At the same time, low achievement rates of criteria M2.02, M3.02 and M4.02 clearly indicate that the implementation of certified management systems such as ISO 14001 and ISO 45001 still is in an early stage.

5.1.2 Environmental criteria

Fig. 5.2 provides an overview on the achievement ratio of certification criteria relating to environmental issues: The achievement of environmental criteria shows a mixed picture. The overall fulfillment rate of criteria addressing land use (\rightarrow E2) is 100%. Also, the achievement rate of the criteria addressing air quality (\rightarrow E4) is elevated.

However, there is room for improvement in other credits: EPDs are not yet released by every certified concrete producer (\rightarrow E1.03 and E1.04). Furthermore, for around 30 % of the certified plants there is the opportunity to engage into reporting on GHG emissions (\rightarrow E3.03, and E3.04) and on water use (\rightarrow E5.04, E5.05), respectively. Other areas providing improvement opportunities include optimizing the use of secondary materials (\rightarrow E7.05 and E7.06) and assessing and implementing clean transportation technologies and methods (\rightarrow E8.03).





E4.09: 24% of the plants achieved 2 out of 4 points E7.05: 33% of the plants achieved 1 out of 3 points

Fig. 5.2: Concrete: Environmental criteria - ratio of criterion achievement

5.1.3 Social criteria

Fig. 5.3 summarizes the achievement of certification criteria relating to social issues: Good relationships with the surrounding community are important for concrete plants as many of them operate in industrial zones located near residential areas. Nonetheless, an improvement opportunity for around 15% of the certified concrete plants includes implementing a policy committing to engage with the local community on a regular basis (\rightarrow S1.01). More than 20 % of the certified plants may still engage into a more active communication with the local community (\rightarrow S1.03) or develop and implement a noise management plan (\rightarrow S1.04, S1.05).

Regarding labor practices – providing preventive medical examinations and ensuring work-life balance (\rightarrow S4.08) sometimes seems to remain a challenge. The exemplary performance criterion on "External control of social standards and compliance with human rights" (\rightarrow S4.09) is – as expected – extremely challenging and, so far, only achieved by a small minority of the concrete plants undergoing CSC certification.



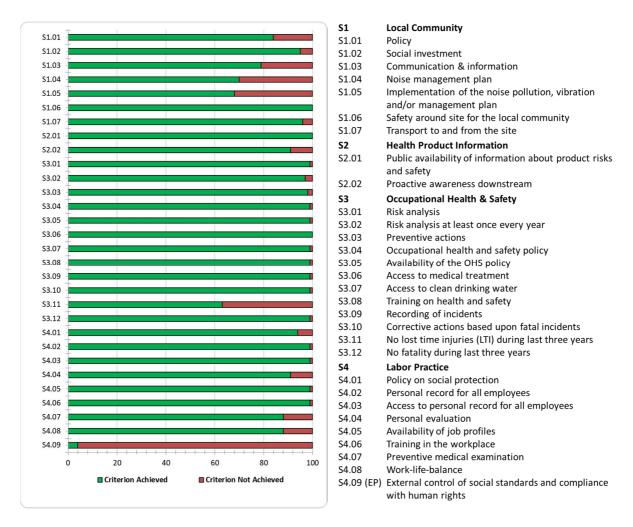


Fig. 5.3: Concrete: Social criteria - ratio of criterion achievement

5.1.4 Supply chain criteria

Fig. 5.4 summarizes the achievement of the supply chain criteria "C2.01 Cement" and "C2.02 Aggregates". 0% achievement means that a CSC certified concrete plant does not use any CSC certified aggregates or cement, respectively. 100% achievement means that a CSC certified concrete plant uses 100% CSC certified aggregates or cement, and that the respective suppliers achieved a total scoring of 100%. Supplier scores lower than 100% always lead to an achievement rate of less than 100% in the concrete certificate, even if the complete supply is from certified producers.

According to fig. 5.4, less than 10% of the concrete plants certified in 2020 do not use any CSC-certified cement (\rightarrow C1.01). In 2019, still 26% of the concrete plants certifying according to CSC version 2.0 did not use any CSC certified cement. Due to the increasing availability of CSC certified cement, in the Netherlands, Germany, Italy, and Turkey more than 70% of the concrete plants reached a scoring between 91% and nearly 100%.

On the other hand, nearly 40% of the CSC-certified concrete plants still do not use any CSC-certified aggregates. This relates to the limited availability of CSC certified aggregates in many regions. Overall, the aggregate supplier certificates show a slower uptake than cement, primarily due to a more fragmented situation in the aggregates market. However, as the number of certified aggregate producers is continuously increasing, it is expected that the achievement ratio of the criterion C2.01 will improve.



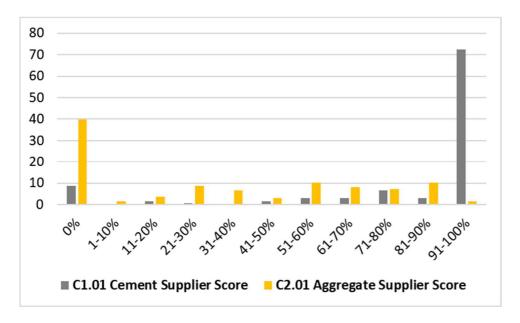


Fig. 5.4: Concrete: Supply chain - ratio of criterion achievement

5.2 Aggregate producers

37 Aggregate production sites were awarded in 2020 with a CSC supplier certificate version 2.0. Two of the 37 sites are producing recycled aggregates.

5.2.1 Management criteria

Fig. 5.5 provides insight into the achievement of management related certification criteria: Concerning sustainable purchasing (\rightarrow M1) there remain a number of improvement opportunities, including supplier performance monitoring (\rightarrow M1.03), training on responsible sourcing (\rightarrow M1.04), and including responsible sourcing as a criterion in the procurement process (\rightarrow M1.06). In 2020, these criteria were not met by around a third of the production sites undergoing CSC certification.

Management systems are generally well established: all plants achieving CSC certification in 2020 have a documented quality and health and safety management system in place (\rightarrow M3.01 and M4.01). However, similar as for concrete plants the implementation of certified management systems (\rightarrow M2.02, M3.02 and M4.02) still is in a much earlier stage. Finally, publishing annual performance data (\rightarrow M5) is also not yet common practice throughout the sector.



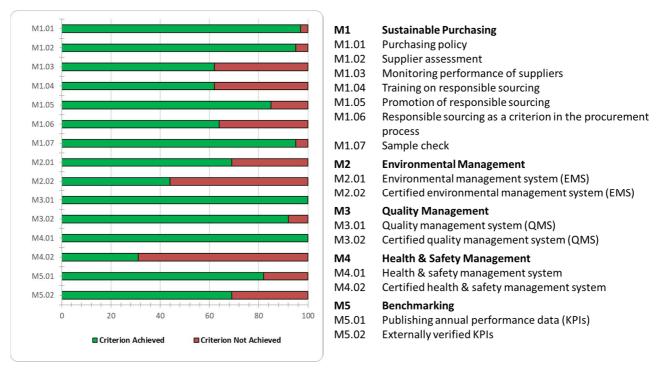


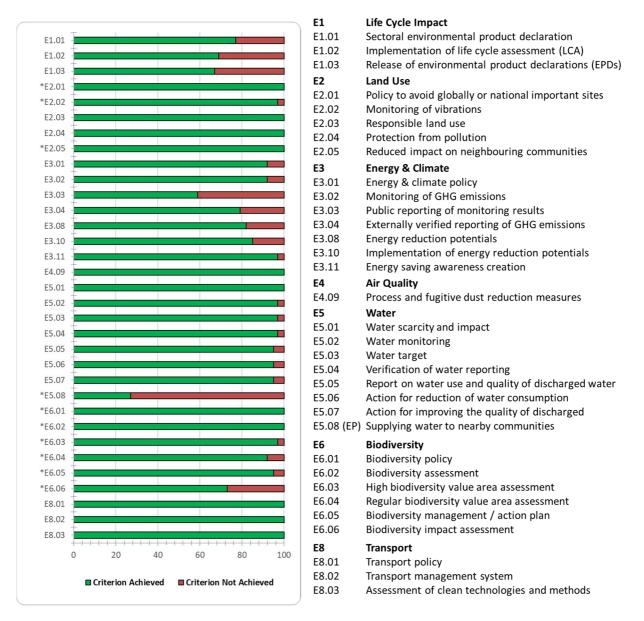
Fig. 5.5: Aggregates: Management criteria - ratio of criterion achievement

5.2.2 Environmental criteria

Fig. 5.6 provides an overview on the achievement ratio of certification criteria relating to environmental issues: The achievement ratio of environmental criteria shows a mixed picture. The overall fulfillment rate of the criteria addressing land use (\rightarrow E2), air quality (\rightarrow E4), water (\rightarrow E5) and biodiversity (\rightarrow E6) is generally very elevated. Exceptions include the lack of opportunity to supply water to nearby communities (\rightarrow E5.08) and missing biodiversity impact assessments (\rightarrow E6.06) in around 30% of the aggregate production sites undergoing CSC certification. Full scoring in the transport credit (\rightarrow E8) was achieved by all production sites undergoing CSC certification in 2020. This is a significant improvement vs. 2019 and a strong motivation to review the credit for CSC system version 2.1.

The comparably lower fulfillment rate of energy and climate (\rightarrow E3) related issues could be a consequence of energy consumption and GHG emissions being less relevant in the production of aggregates than e.g. in the production of cement.





^{*}not relevant for recycled aggregate producers, only producers of primary materials are considered in the evaluation

Fig. 5.6: Aggregates: Environmental criteria - ratio of criterion achievement

5.2.3 Social criteria

Fig. 5.7 summarizes the achievement rates of certification criteria relating to social issues: The overall scoring in social credits is elevated. Good relationships with the surrounding community are well established as they are important to secure "the license to operate". Criteria addressing occupational health and safety practices (\rightarrow S3) and fair and equitable treatment of the workforce (\rightarrow S4) are generally fulfilled. However, in several cases, additional effort can be made to further reduce the risk of accidents (\rightarrow S3.11).

The recently implemented exemplary performance criterion on external control of social standards and compliance with human rights (\rightarrow S4.09) is – as expected – very challenging



and is achieved by only around 30% of the aggregate production sites undergoing certification.

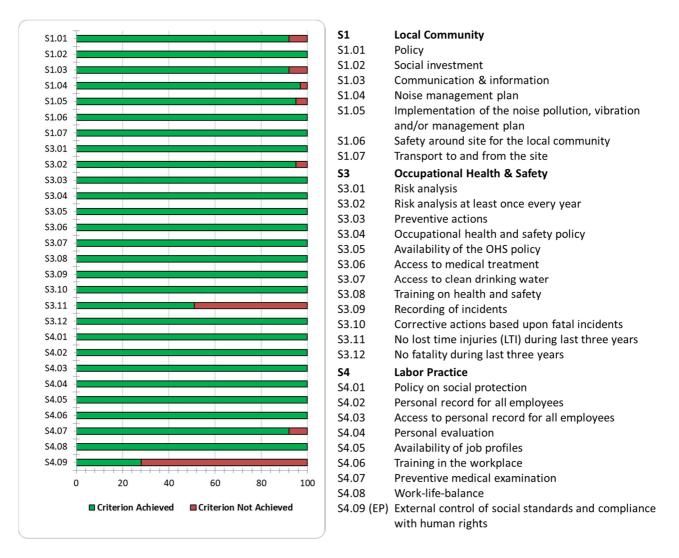


Fig. 5.7: Aggregates: Social criteria - ratio of criterion achievement

5.3 Cement producers

14 cement plants were awarded in 2020 with a CSC supplier certificate version 2.0. Three of the sites are cement grinding plants.

5.3.1 Management criteria

Fig. 5.8 provides insight into the achievement of management related certification criteria: Concerning sustainable purchasing (\rightarrow M1) there remain improvement opportunities for some plants in implementing a supplier assessment process and supplier performance monitoring (\rightarrow M1.02 and M1.03), training on responsible sourcing (\rightarrow M1.04), and including responsible sourcing as a criterion in the procurement process (\rightarrow M1.06).

Clinker and cement production is performed in plants equipped with huge mills, kilns and other heavy machinery. This explains why documented management systems (→ M2.01, M3.01 and M4.01) are implemented in all plants and certified management systems (→ M2.02, M3.02 and M4.02) in nearly all plants.



Cement plants are in the spotlight of public attention due to the high amount of energy required for clinker production and the related CO2 emissions. Publishing annual performance data (\rightarrow M5) is consequently common practice throughout the sector.

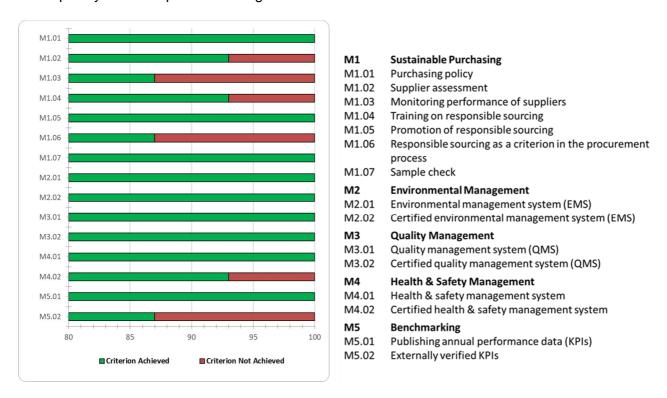


Fig. 5.8: Cement: Management criteria - ratio of criterion achievement

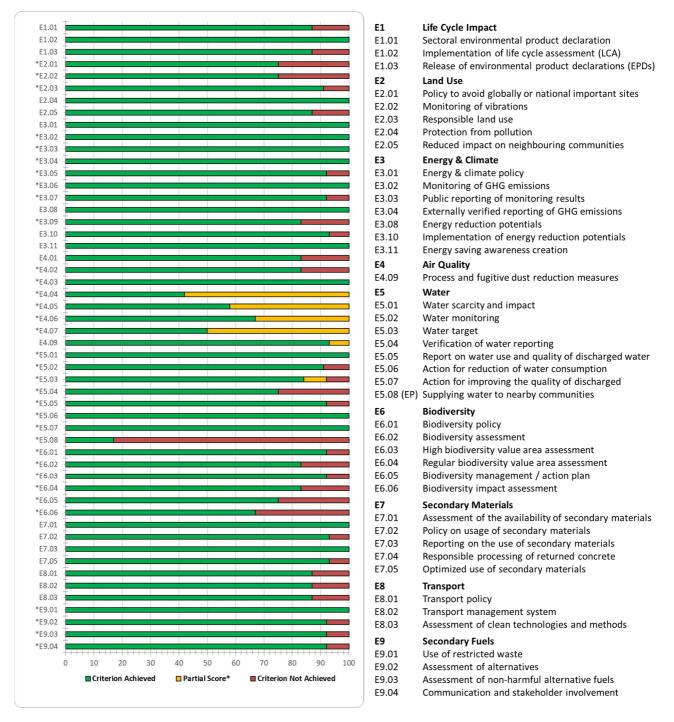
5.3.2 Environmental criteria

Fig. 5.9 provides an overview on the achievement ratio of certification criteria relating to environmental issues: The achievement ratio of environmental criteria shows a mixed picture with improvement opportunities in all credits.

Some plants have not yet contributed (\rightarrow E1.01) or produced environmental product declarations (\rightarrow E1.03). This is a bit surprising as know-how for doing so (\rightarrow E1.02) seems available. When it comes to sustainable land use (\rightarrow E2), the main opportunities for improvement include developing a policy to avoid important sites (\rightarrow E2.01) and implementing comprehensive monitoring of vibrations related to blasting (\rightarrow E2.02). Energy and climate (\rightarrow E3) related criteria are generally well covered. However, there is one quite important improvement opportunity, namely achieving CO₂ emission reduction targets!

CSC system version 2.0 introduced several challenging performance criteria for NOx (\rightarrow E4.04), SOx (\rightarrow E4.05), dust (\rightarrow E4.06) and mercury emissions (\rightarrow E4.06). Around 50% of the cement plants can achieve a higher scoring in the future when reducing their emission level. This is very challenging in some cases, e.g. SOx, where the achievable emission level largely depends on the nature of the raw materials.





^{*}not relevant for cement grinders, only clinker producers are considered in the evaluation

E4.04: 17% of the plants achieved 2 out of 6 points, 42% of the plants achieved 4 out of 6 points

E4.05: 25% of the plants achieved 2 out of 6 points, 8% of the plants achieved 3 and 4 out of 6 points, respectively

E4.06: 33% of the plants achieved 4 out of 6 points

E4.07: 50% of the plants achieved 2 out of 4 points

E4.09: 7% of the plants achieved 2 out of 4 points

Fig. 5.9: Cement: Environmental criteria - ratio of criterion achievement

In the section relating to water issues (\rightarrow E5) more than 80% of the plants face the lack of opportunity to supply water to nearby communities (\rightarrow E5.08) and consequently did not score in this exemplary



performance criterion. Biodiversity (\rightarrow E6) is a very important topic when it comes to quarrying activities. The achievement ratio of cement plants undergoing CSC certification in 2020 was not entirely satisfying in the respective section: 20% and more of the plants still have the opportunity to start carrying out biodiversity assessments (\rightarrow E6.04 and E4.06) and setting up biodiversity management plants (\rightarrow E6.05). Finally, implementing a transport policy (\rightarrow E8.01) and a transport management system (\rightarrow E8.02) can still be considered in some of the plants.

5.3.3 Social criteria

Fig. 5.10 summarizes the achievement rates of certification criteria relating to social issues: The overall scoring in social criteria is elevated. Good relationships with the surrounding community (\rightarrow S1) are well established as they are important to secure "the license to operate". Criteria addressing occupational health and safety practices (\rightarrow S3) are generally fulfilled. However, in several cases, additional effort can be made to further reduce the risk of accidents (\rightarrow S3.11). Criteria relating to labor practices (\rightarrow S4) are mostly fulfilled. Some plants remain with the opportunity to grant all employees access to their personal record (\rightarrow S4.03) and to implement an appraisal procedure (\rightarrow S4.04).

The recently implemented exemplary performance criterion on external control of social standards and compliance with human rights (\rightarrow S4.09) is – as expected – very challenging and is achieved by only around 45% of the aggregate production sites undergoing certification.

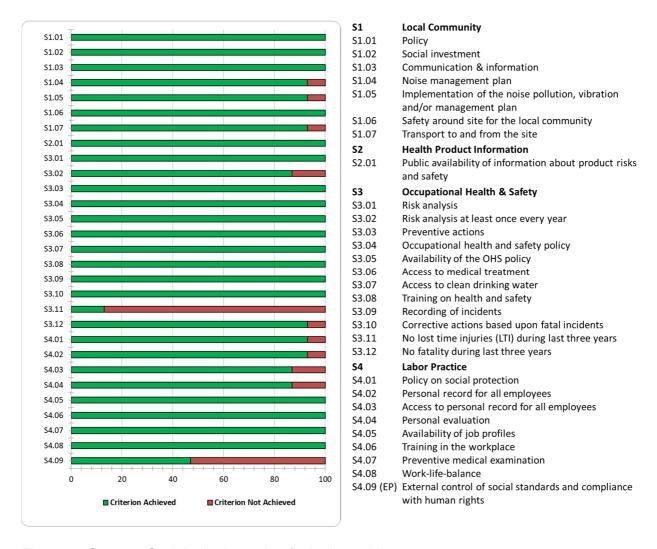


Fig. 5.10: Cement: Social criteria - ratio of criterion achievement



5.4 General remarks

CSC certification is frequently performed by concrete plants, aggregate production sites and by cement plants with the ambition to advance their sustainability practices and to improve their score. Consequently, their overall responsible sourcing performance is likely to increase over time.

6 Innovation

The CSC certification system promotes innovation via the dedicated innovation credit "B3 Innovation".

This credit aims at stimulating

- the development and implementation of new solutions that contribute to the sustainability of the operations, its products, its suppliers or other parts of the value chain;
- best practices in the field of sustainability that are not covered by this certification system; and
- exemplary performance under any CSC certification criterion.

In 2020, the CSC's innovation committee (IC) received 18 innovation applications for projects according to version 2.0. Several of the applications referred to more than one plant. Therefore, the 18 applications received covered around 60% of all certification projects performed in 2020. Innovation points were granted to all applications submitted, with results ranging between 2 and 7 points out of a maximum of 9 achievable points.

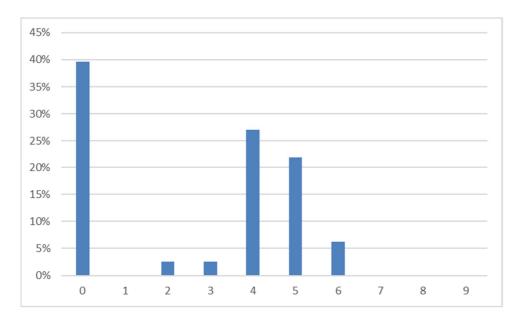


Fig. 6.1: Innovation points awarded to CSC version 2.0 projects in 2020

7 Continuous improvement

Continuous improvement of the CSC certification system, including its toolbox, is an important lever to improve the sustainability performance of CSC certified plants.

Valuable feedback was received in 2020 via an inquiry amongst internal CSC stakeholders, namely all RSOs and CBs, and an external stakeholder consultation event.

RSOs and CBs identified the following improvement potentials:



- providing additional guidance on how to contribute to Green Building Labels with CSC certified concrete;
- providing better explanation of conditionally mandatory criteria;
- sharing the content of auditor notes with a broader range of stakeholders, including customers;
- listing more meaningful KPIs for aggregate producers;
- adding compliance with sustainable financing requests as a new criterion;
- including SCMs and admixtures in the scope of CSC certification;
- solving specific issues relating to the CSC toolbox.

External stakeholders also highlighted several social and environmental elated issues, such as

- ensuring that temporary workers are included in the scope of the prerequisite on human rights;
- including the availability of documented health and safety procedures into the prerequisites' section for all certification levels;
- revisiting the level of ambition of the biodiversity credit;
- monitoring transport related scope 3 emissions once GCCA guidelines become available.

8 Our way forward

As part of the CSC continuous improvement process an updated CSC system version was developed and released early in 2021. The new CSC system version 2.1 adds new criteria to the energy & climate credit (\rightarrow E3) to promote the use of renewable energy and, in cement production, the reduction of CO2 emissions. The relevance of operational health and safety will also be acknowledged in the system prerequisites.

The CSC intends expanding the certification scope in aggregate production: A project was started to assess challenges in marine aggregate production and to develop a dedicated certification system to be launched in 2021.

9 Governance structure

The CSC's Governance Structure is shown in Fig. 9.1:

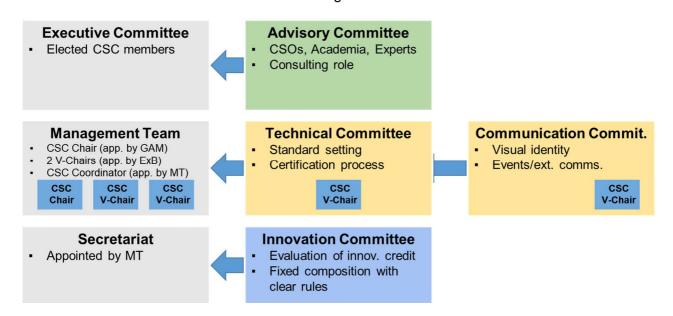


Fig. 9.1: CSC Governance Structure

• The transparent and straightforward decision process is at the responsibility of the CSC's executive committee.



- Continuous involvement of a broad range of stakeholders will be guaranteed through the
 dedicated advisory committee, which the CSC was able to establish in 2020 under the lead of
 Prof. Guillaume Habert, the Chair for Sustainable Construction at the ETH Zurich, together
 with distinguished experts from environmental and social stakeholder groups as well as
 leading green building councils.
- The technical and communication committees with defined leadership ensure target orientated work.

10 Abbreviations

BREEAM Building Research Establishment Environmental Assessment Methodology

CB Certification Body

CSC Concrete Sustainability Council CSO Civil Society Organization

DGNB Deutsche Gesellschaft für Nachhaltiges Bauen – German GBC

EPD Environmental Product Declaration

GBC Green Building Council

GCCA Global Cement and Concrete Association

LEED Leadership in Energy and Environmental Design

RSO Regional System Operator SDG Sustainable Development Goal