



Concrete Sustainability Council Technical Manual - Version 2.1 (Annex)

The Concrete Sustainability Council (CSC)

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P1.01 Legal compliance

Applicable to region (s)	Criteria	Applicable sections		Evidence	
Italy		Concrete	х	 For Italy additionally for concrete: UNILAV, the compulsory on line document to communicate a new employee (for plant employees) 	
		Cement	х		
		Aggregates	Х	 DOL (Durc On Line), certification of social contributions compliance (for transport companies employees) LUL (Libro Unico del Lavoro – Unique Labour Book), a compulsory register with information about employees such as work tasks, work hours, etc. (for transport companies employees) evidence of the salary payments (for transport companies employees) FPC certificate for concrete plants Environmental authorization for concrete plants (AUA) 	

P1.02 Anti-corruption

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	х	For Italy alternative:A copy of the ISO37001
		Cement	Х	certificate
		Aggregates	x	OR
				 Evidence of Administrative responsibility
				 For Italy additional for concrete: White list inclusion evidence (i.e. screenshot of the public list from district website)



P2.01 Human rights

For countries that have legal frameworks that conflict with one of the listed ILO conventions, plants have to deliver alternative evidence as listed below:

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	
		Cement	x	
		Aggregates	x	
	Child Labour. Child labour shall not be	Concrete	x	Signed declaration of compliance with ILO
	used. Companies are requested to follow the	Cement	x	Conventions and proof of internal
	ILO conventions recommendation of minimum age for admission to employment.	Aggregates	x	communication/implementati on.
	Forced Labour. Forced or compulsory	Concrete	x	Signed declaration of compliance with ILO
	labour shall not be used.	Cement	x	Conventions and proof of internal
	Employees shall be free to leave employment after reasonable notice.		x	communication/implementati on.
				Provide evidence that explains what is done to prevent forced labour.



	Identity documents should not be withheld by the employer.			Demonstrate that identity documents are not withheld and are provided to the employees on his/her demand.
	Freedom of Assembly and Association	Concrete	x	Agenda and minutes of meetings with employees
	Companies are expected to adhere to the right of	Cement	x	where labour conditions were discussed and actions taken
	employees to freedom of association and recognition of employees' rights to collective bargaining, where allowable by law. Reasonable alternatives should be offered to employees if restrictions are imposed by law.	Aggregates	х	after the meeting.
	Discrimination (Gender equality,	Concrete	x	Signed 'non - discrimination policy' by the company and
	Political persuasion, Religious freedom)Harassment or discrimination against employees in any form is not acceptable. This includes but is not limited to gender, ethnic origin, skin colour, religion, sexual orientation, disability or age.Reasonable alternatives should be offered to employees if restrictions are imposed by law.	Cement	x	proof of internal communication/implementa
		Aggregates	Х	on.



Applicable to region (s)	Criteria	Applicable s	ections	Evidence
Global		Concrete		Countries where indigenous peoples issues are irrelevant:
		Cement	х	AustriaBelgium
		Aggregates	х	 Czech Republic Denmark Estonia Germany Hungary Ireland Iceland Iceland Italy The Netherlands Poland Portugal Slovak Republic Spain Switzerland United Kingdom Source: http://www.landmarkmap.org/and OECD

P3.01 Assessment of potential impact on indigenous people

P3.02 Free, prior and informed consent

Applicable to region (s)	Criteria	Applicable s	ections	Evidence
Global		Concrete		The following frameworks may be used to demonstrate compliance with this
		Cement	х	criterion: • <u>FPIC Framework by Conservation</u>
		Aggregates	Х	 International: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities framework by the World Bank: http://pubdocs.worldbank.org/e n/837721522762050108/Enviro nmental-and-Social-



P4.01 Environmental and social impact assessment (ESIA)

Applicable to region (s)	Criteria	Applicable s	ections	Evidence
Global		Concrete Cement	X	The following frameworks may be used to demonstrate compliance with this criterion: <u>Cement Sustainability Initiative</u>
		Aggregates	Х	<u>(CSI): Guidelines for</u> <u>Environmental & Social Impact</u> <u>Assessment</u> ,

P5.01 Traceability of materials

Applicable to region (s)	Criteria	Applicable s	ections	Evidence
Italy		Concrete	х	For Italy additional for concrete:Evidence that the CPR
		Cement		(Regulation 305/2011) is implemented for cement and
		Aggregates		aggregates AND • Evidence that the CLP (Regulation 1272/2008) is implemented for cement

P6.01 Vessels Evidence List (Marine Aggregates)

Applicat to region (s)	Applicable s	ections	Evidence
Global	Concrete		List of countries which have ratified the Marine Labor Convention (MLC)
	Cement		 https://www.ilo.org/dyn/norml ex/en/f?p=NORMLEXPUB:11300
	Aggregates	х	:0::NO::P11300_INSTRUMENT_I D:312331

P Prerequisite - Annex





M1.04 Training on responsible sourcing	M1.04	Training of	on responsibl	le sourcing
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Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	x	For Italy additionally:mapping of training
		Cement	x	training programregistration of training application
		Aggregates	х	 For Italy additionally for concrete (including transport companies): driving licence driver qualification certificate (compulsory) qualification certificate (compulsory) for concrete pump operator

M1.06 Responsible sourcing as a criterion in the procurement process

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	x	For Italy additionally for cement and concrete:
		Cement	x	 evidence must be provided for each supplier
Aggregates x	x	 self-declaration by the management about the alignment with Association guidelines 		
				OR
				an evidence of Association membership



M1.07 Sample check

Applicable to region (s)	Criteria	Applicable sections		Evidence
-		Concrete Cement Aggregates	x	 For Recycled Aggregates: The producer must have procedures for the acceptance of mineral waste in the form of an "Acceptance Regulations" and must keep them up to date. When hazardous substances are found in the mineral waste, it is the producer's responsibility to handle this adequately and in compliance with all applicable laws in order to prevent any contamination. The Acceptance Regulations must state: What types of mineral waste are accepted;
Netherlan ds				 2) What acceptance criteria are used for this; 3) What the maximum permitted levels of contamination are; 4) How to deal with rejected batches of mineral waste. For Recycled Aggregates, accepted evidence: BRL Guideline 2506

M2.02 Documented EMS

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	х	



	Cement	x	A documented, non-certified environmental
	Aggregates	x	management system (EMS) should be based on the following criteria. With the exception of points 1 to 3, the criteria mentioned here are neither minimum requirements nor an indicative list, but are intended to provide a useful framework for a documented EMS:
			 Definition of environmental targets (mandatory)
			Assignment and description of EMS responsibilities (mandatory)
			3. Monitoring and documentation of key
			figures (mandatory) • Consumption recording (water,
			electricity, oil, gas)
			 Proof of waste disposal Evaluation / internal
			monitoring
			 Permits, if applicable 4. Scope and factors influencing an EMS
			• Noise
			• Dust
			• Waste by type
			 Water i. Extraction
			ii. Disposal/Whereabouts
			• Energy
			i. Electricity
			ii. Gas
			iii. Fuel oil
			iv. Miscellaneous
			 Hygiene and health protection 5. Protective measures against
			environmental contamination
			 General measures
			 Special measures
			i. Fall arrest systems
			ii. Sump trays
			iii. Separator
			iv. Miscellaneous



M2.02 Certified EMS

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Accepted EMS systems are: • ISO 14001(3 points)
		Cement	x	 NRMCA GreenStar (3 points) EMAS (3 points)
		Aggregates	x	

M3.01 QMS

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Accepted QMS systems are:
		Cement	X	ConcreteProcedures specified in EN 206, and
		Aggregates	x	the related national application documents

M3.02 Certified QMS

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Accepted QMS systems are: • ISO 9001 (3 points)
		Cement	x	 NRMCA Producer Quality Certification (3 points)
		Aggregates	x	Concrete: • Procedures according to EN 206 appendix C.3.1 (1 point) Cement:



				 Valid CE certificate according to hEN 197-1 (1 point) Aggregates: Valid CE certificate according to hEN 12620 (1 point) Procedures according to AVCP (Assessment and Verification of Constancy of Performance) at the system level 1, 1+ or 2+ (1 point) Note: no points are awarded for AVCP system level 3 and 4
Netherlan ds		Concrete	x	For the Netherlands additionally:KOMO (2 points)
		Cement	x	
		Aggregates	x	
Belgium		Concrete	x	For Belgium additionally: • BENOR (2 points)
		Cement	x	
		Aggregates	x	
Germany		Concrete	x	For Germany additionally: • Certificate of conformity, control
			certificate according to EN 206-1 appendix C (2 points) including national application rules as set out in DIN 1045-2	

M4.01 Health & Safety management system

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	x	For Italy additionally for concrete:self-declaration by the management
		Cement	x	about the alignment to the national health and safety guidelines (issued by
		Aggregates	x	INAIL - National Institute for Insurance against Accidents at Work)

M4.02 Certified Health & Safety management system



Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	 Accepted H&S management systems are: RI&E assessment <u>if executed by a third</u>
		Cement	x	 <u>party</u> (2 point) OSHAS 18001 (3 points)
		Aggregates	x	 ISO 45001 (3points)
Germany		Concrete	x	For Germany additionally:Sicherheit mit System (2 points)
		Cement	x Sicherheit mit System with addit reference to ISO 45001 (3 points	 Sicherheit mit System with additional reference to ISO 45001 (3 points)
		Aggregates	х	 OHRIS (2 points) Arbeitsschutz mit System (AMS-Bau) (2 Points) Arbeitsschutz mit System (AMS-Bau) with reference to ISO 45001 (3 Points)
Turkey		Concrete	x	For Turkey additionally: • GreenHelmet (2 points)
Cement x Aggregates x				

M5.01 Publishing annual performance data (KPIs)

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Accepted reporting standards are:
		Cement	x	 GRI, both core option and comprehensive option SASB
		Aggregates	x	• JAJD
Germany		Concrete	x	For Germany additionally:
		Cement	x	Deutscher Nachhaltigkeitskodex



Aggregates	x
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M5.02 Externally verified KPIs

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Accepted verification standards are:
		Cement	х	• ISAE 3000 (revised)
		Aggregates	х	

M5.03 Participation to a benchmark study

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Not applicable
		Cement		
		Aggregates		
The Netherlan ds		Concrete	x	 Accepted benchmarking schemes: The BetonBewust benchmark system is accepted as evidence
Italy		Concrete	x	Accepted benchmarking schemes: • Federbeton Rapporto di Sostenibilita
		Cement	x	 written confirmation by Federbeton that the company has contributed to
		Aggregates		the report



E1.02 Implementation of Life Cycle Analysis (LCA)							
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Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	LCA tools shall comply with ISO 14025/ISO 14040:
		Cement	x	 GABI SimaPro
		Aggregates	x	GCCA EPD ToolOne Click LCA
The NetherlanConcretexLCA tools shall c14040:	LCA tools shall comply with ISO 14025/ISO 14040:			
ds		Cement x • Rekentool Groen Beton	Rekentool Groen Beton	
		Aggregates	x	
Belgium		Concrete	x	LCA tools shall comply with ISO 14025/ISO 14040:
		Cement	x	LCA QUADRANT ToolRekentool Groen Beton
		Aggregates	x	

E1.03 Release of Environmental Product Declarations

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	х	The life-cycle assessment has to be independently verified according to the
		Cement	х	requirements of one of the following standards:
		Aggregates	х	 ISO 14025, ISO 21930 EN 15804 ASTM E1991-05 (withdrawn but recent EPDs are accepted) XP P 01-064/CN (2014) (France) national equivalents

E2.01 Policy to avoid globally or nationally important sites



Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Accepted frameworks: • UNESCO Heritage Sites
		Cement	х	 International Union for Conservation of Nature (IUCN) categories
		Aggregates	x	

E2.02 Responsible land use

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	x	Evidence 1 Accepted guidelines for quarry reclamation
		Cement	x	plans:
		Aggregates	x	 Local requirements, such as Zoning plans Development Plan Construction & environmental codes Evidence 2 Community alignment requirements Proactive addressing of responsible land use including biodiversity towards the community Evidence for mobile concrete and mobile recycled aggregate plants: E2.02 is automatically achieved for mobile plants (points achieved by default).

E3.02 Monitoring of GHG emissions E3.04 Public reporting of monitoring results

Applicable	Criteria	Applicable sections	Evidence
to region (s)			
(s)			



Global	Concrete	х	Equivalents to GCCA/CSI-Protocol:
	Cement	х	
	Aggregates	x	

E3.07 Science based CO2 emission reduction target

Applicable to region (s)	Crite ria	Applicable sections		Evidence
Global		Concrete		Approved Organizations:
		Cement	х	• Science Based Target Initiative
		Aggregates		

E3.12 CO₂ emissions

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete		Accepted verification standards are:
		Cement	x	• ISAE 3000 (revised)
		Aggregates		

E4.02 Air Quality

P	······································					
Applicable to region (s)	Criteria	Applicable sections		Evidence		
Global		Concrete		Continuous monitoring is understood as a quasi permanent process		
		Cement	х	• leading to the continuous recording of an output value (= emission)		
		Aggregates		OR		



	 securing that exceeding of a pre- specified threshold is recorded at any moment in time
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E4.03 Verification of emission reporting

Applicabl e to region (s)	Criteria	Applicable sections		Evidence
EU		Concrete		EU: The criterion is also awarded if the plant is
		Cement	х	subject to the European system of emissions monitoring.
		Aggregates		Explanation: 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. Also the calibration and/or the annual surveillance tests of installed continuous emissions monitoring systems (CEMS) have to be carried out by accredited external bodies. In these cases, an additional external verification of the emissions report is not required. USA:

E4.09 Process and fugitive dust reduction measures

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete Cement	x x	 Examples concrete: material conveying (e.g. covered or enclosed conveyor belts, or spraying of water)
		Aggregates	x	 weighing and discharging to mixer and mixing of aggregates, cement and additions (SCMs) (e.g. filters)



<u> </u>
 during post-hardening treatment of concrete products, e.g. during sawing or grid blasting during cleaning hardened concrete from truck mixers filter bag defect alarm device
Examples cement:
 material conveying (e.g. covered or enclosed conveyor belts, or spraying of water) appropriate operation of major point dust source filters (clinker cooler, coal mill, cement mills, etc.) controlled by dust monitors or broken bag detectors use of dust filters in material handling areas (e.g. loading and unloading) use of material handling equipment (e.g. bucket elevators) and installations (e.g. silos) filter bag defect alarm device
Examples aggregates:
 material conveying (e.g. covered or enclosed conveyor belts, or spraying of water) transfer of aggregates (e.g. covered, enclosed conveyor belts or spraying of water) filter bag defect alarm device

E5.01 Water scarcity and impact

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	х	• WWF Water Risk Filter



		Cement	x	WBCSD Global Water ToolWRI Aqueduct
		Aggregates	х	• GRI Standard 303 "Water and Effluents"
Italy		Concrete	x	For Italy additional:Water withdrawal permit
		Cement	x	(disciplinary)
		Aggregates	x	

E5.02 Water monitoring E5.03 Water target E5.04 Verification and water reporting

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	х	• GCCA Sustainability Guidelines for the monitoring and reporting of
		Cement	х	water in cement manufacturing (https://gccassociation.org/wp-
		Aggregates	х	 <u>content/uploads/2019/03/GCCA</u> <u>Guidelines Water-v0.pdf</u>) CSI Protocol for Water Reporting (<u>https://www.wbcsd.org/Sector-Projects/Cement-Sustainability-Initiative/Resources/Protocol-for-Water-Reporting</u>).

E5.07 Action for improving the quality of discharged water

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	х	For Italy additional: • Last available certificate
		Cement	Х	reporting values better than limits (across all parameters)
		Aggregates	х	

E6.02 Biodiversity assessment



Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete		The following or similar criteria can be used to assess the biodiversity value:
		Cement	х	• Overlap with or close proximity to
		Aggregates	х	 an internationally or nationally recognized protected area Dependence of an internationally or nationally threatened species (e.g. according to the IUCN Red List) Presence of a internationally or nationally outstanding and/or threatened ecosystem/habitat (e.g. according to KBA Key Biodiversity Area)

E6.06 Biodiversity impact assessment

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete		Recognized methodologies for Biodiversity Impact Assessment:
		Cement	х	Biodiversity Indicator and
		Aggregates	Х	 Reporting System BIRS by IUCN Net Impact Assessment Methodology by CSI

E7 Secondary materials

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global		Concrete	х	Secondary materials in concrete:Secondary fine material (e.g. fly
		Cement	х	ash, slag, limestone) added during concrete mixing
		Aggregates		 Recycled (e.g. concrete based) or secondary (e.g. crystalline slag) sand and aggregates Returned concrete



	 Secondary fine materials indirectly added via cement during concrete mixing Secondary materials in cement: Secondary raw materials added to kiln (e.g. fly ash, slag) Secondary materials added in cement production / grinding (e.g. fly ash, slag, limestone, pozzolana)
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E7.03 Reporting of the use of secondary materials

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete Cement	x x	 For Italy additional for cement and concrete: Evidences provided for GPP compliance
		Aggregates		

E7.04 Responsible processing of returned concrete

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	х	For Italy additional for concrete:A copy of the management
		Cement	х	procedure regarding reuse or recovery of returned concrete
		Aggregates		

E8.04 Next generation trucks

Applicable to region (s)	Criteria	Applicable sections		Evidence
Italy		Concrete	х	Innovative, CO2 emission reducing drive technologies
		Cement	х	electrichydrogen (fuel cells)
		Aggregates	х	 methane, methanol



Applicabl e to region (s)	Criteria	Applicable sections		Evidence
Global	S2	Concrete	x	• European Union's REACH (registration, evaluation, authorization and restriction
		Cement	х	of chemicals) regulation or similar.Health Product Declarations
	A	Aggregates		•
Italy	S2	Concrete	x	 For Italy additional for concrete: Evidence of the product/s registration in
		Cement	х	the dangerous preparation database by Istituto Superiore di Sanità (ISS)
		Aggregates		 (https://preparatipericolosi.iss.it/defaul t.aspx) The producer shall provide a declaration by the management that safety sheets are in compliance with Association guidelines.

S2.01 Public availability of information about product risks and safety

S4.02 Personal record for all employees

	tersonal record for an employees						
Applicabl e to region (s)	Criteria	Applicable sections		Evidence			
Italy	S3	Concrete	x	For Italy additional:A sample of training			
		Cement	x	programs/certificates for employees.			
		Aggregates	x				

S4.09

e to	Criteria	Applicable sections	Evidence
region (s)			



Global	S4.09	Concrete	x	Accepted measures of external adequacy investigation
		Cement	S S	• Evidence of an existing framework
		Aggregates	x	 agreement with a global trade union (e.g. copy of agreement, public mentioning by trade union) A valid SA8000 certificate A valid MVO Prestatieladder certificate level III or level IV or level V



Applicable to region (s)	Criteria	Applicable sections		Evidence
Global	B1.01	Concrete x		Applicable for concrete and recycled aggregate mobile plants.
		Cement		B1.01 need to be fulfilled on company
		Aggregates	х	(not plant) level.

B2.01 Ethical Risk Assessment

	cal RISK ASSE			
Applicable to region (s)	Criteria	Applicable sections		Evidence
Global	B2	Concrete	x	The following may be used to demonstrate compliance:
		Cement	x	 Identify the risks of corruption and implement and maintain policies and
		Aggregate s	x	 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 companies 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 company has



			operating relationships to adopt similar anti-corruption practices.
Italy	Concrete	x	For Italy additional for concrete:a declaration by the software
	Cement	x	producer/supplier automation software protection against manual changes (plant
	Aggregate s	х	 software that records quantities and qualities of materials) Number of REN registration (https://www.ilportaledellautomobilista.it /web/portale-automobilista/ricerca-imprese-trasporto-merci (for transport companies) Valid insurance (RCA and RCT/O) (for transport companies) Last available compulsory inspection certificate of mixer-trucks (for transport companies) Concrete-pump boom inspection certificate (for transport companies)

B2.02 Policy or code for ethical business

Applicable to region (s)	Criteria	Applicable sections		Evidence	
Italy	B2	Concrete	Х	For Italy additional for cement and concrete:	
		Cement	Х	• a self-declaration by the management about the alignment	
		Aggregates	х	with Association guidelines (Aitec "Code of ethics", Atecap "Code of ethics")	

B3.01 Innovation

Applicable to region (s)	Criteria	Applicable sections		Evidence
Global	<u>Link to the Innovation Credit</u> <u>Guidelines.</u>	Concrete	x	
		Cement	x	
		Aggregates	x	