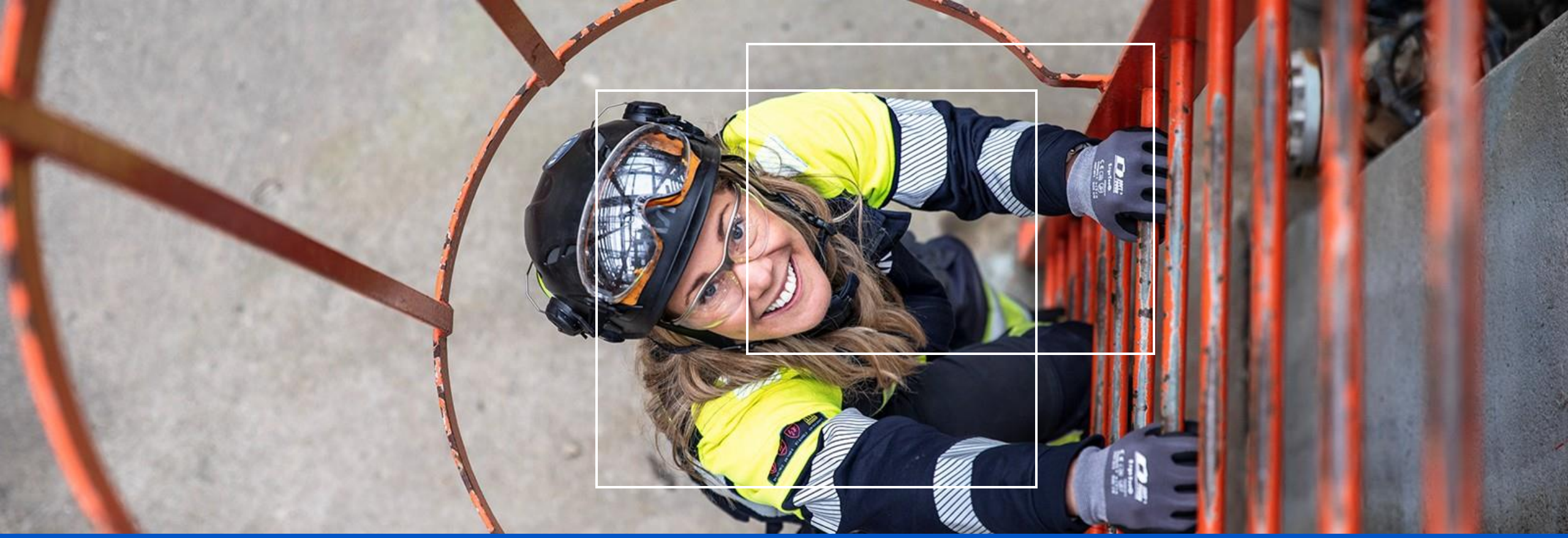

Sustainability in Concrete Sector:

Concrete Sustainability Council Certification & Construction Product EPDs

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05.02.2026

kiwa


We are committed to
a ***safer***, more ***sustainable world***.

This is our team

- **Technical Excellence**: Deep knowledge in sustainability standards, supply chains & lifecycle analysis
- **Sector Coverage**: Solar, Batteries, Construction, Electrical Devices, Textiles, Food, Feed & Agriculture
- **International Network**: Professionals from diverse cultural and academic backgrounds
- **Languages**: English, German, French, Spanish, Swedish, Russian, Portuguese, Persian, Serbian, Dutch, Norwegian, Chinese, Turkish + more

Sustainability Areas at Kiwa

Calculation and verification of environmental, social impacts of products, organizations or services (e.g. carbon foot printing).

Sustainability Metrics

Verification and certification of systems to reuse, refurbish or recycle products.

Circular Economy

Verification and certification of environmental and social impacts along the supply chain.

Sustainability Due Diligence

From regulation to market advantages

Agenda

- Sustainability in concrete sector
- Regulatory & Market Background
- Industry-Specific Challenges in the Concrete Sector
- CSC Certification: What It Is & Why It Matters
- Construction Product EPDs: Transparency at Product Level
- CSC vs. EPDs – How They Work Together
- Q&A

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Sustainability in concrete is no longer a choice — it is a business and market requirement

- Concrete is the most used construction material worldwide
- The context has changed
  - concrete production is linked to cement-related CO_2 emissions (around 7–8% globally)
  - increasing regulatory, market, and societal pressure

Why now?

  - regulations, procurement rules, and investors demand verified sustainability performance
  - customers expect transparency, comparability, and credibility
  - sustainability performance directly affects market access, competitiveness, and future viability
- Sustainability in the concrete sector aligns directly with Concrete Sustainability Council (CSC) certification and Environmental Product Declaration (EPD) creation

Regulatory & Market Background

- **Construction Products Regulation (CPR)**
  - effective on January 2025, starting January 2026 → mandates CE marking for concrete products (covering environmental performance).
    - Webinar: CPR, Digital Product Passport & Green Building (07.05.2026)

- **Corporate Sustainability Reporting Directive (CSRD)**
  - requires large construction firms to report ESG metrics—including Scope 1-3 emissions, resource use, and supply chain impacts.
    - Webinar: Corporate Carbon Footprint (CCF) (19.02.2026)

- **Public and private**
  - public procurement increasingly requires proof of sustainability

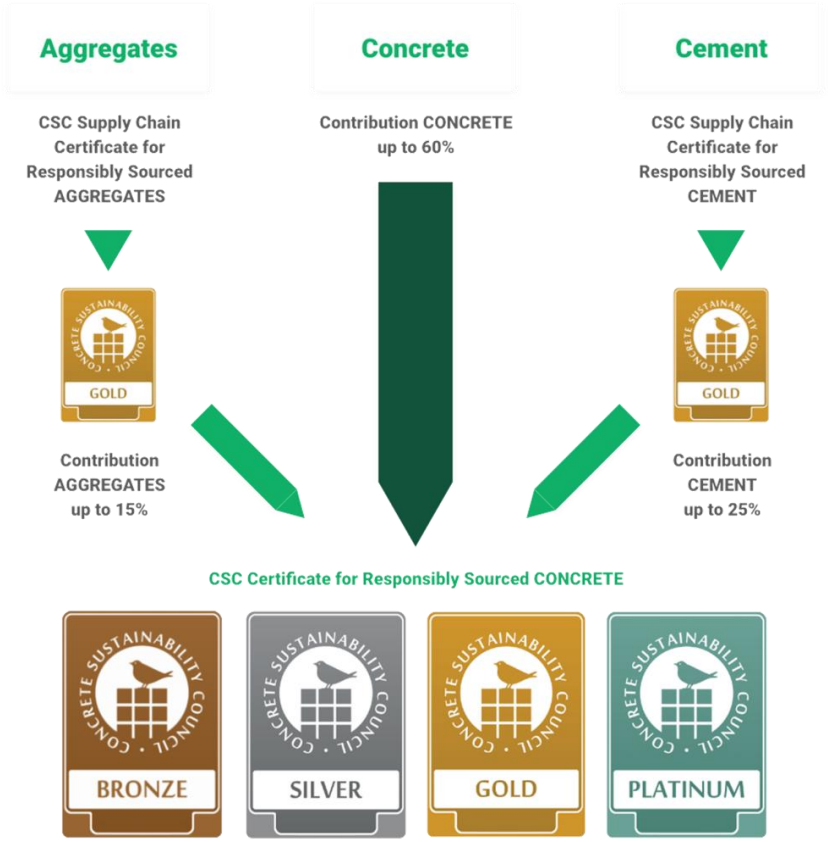
Industry-Specific Challenges in the Concrete Sector

- High CO_2 intensity driven by cement
- Complex and local supply chains
- Data availability and quality
- Balancing sustainability and product performance
- Regulatory and market pressure
- Operational constraints

CSC Certification: What It Is & Why It Matters

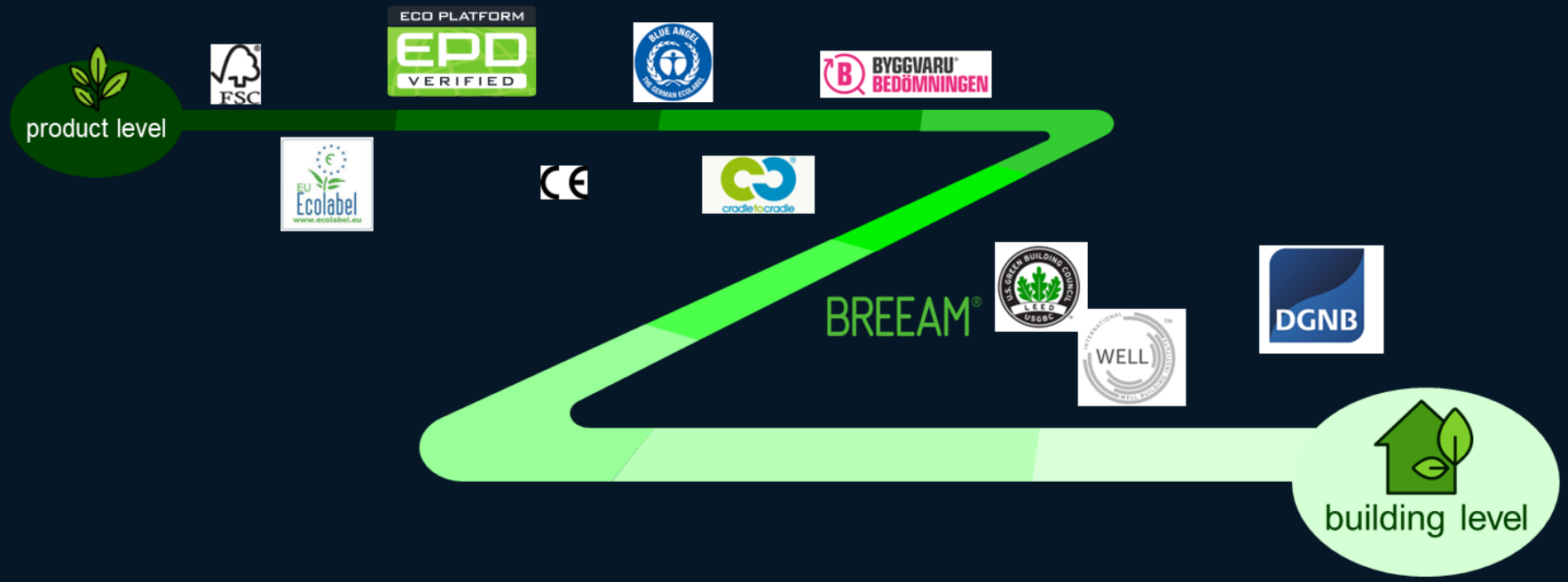
- What is CSC Certification?
  - a voluntary certification system
  - evaluates sustainability across environment, social, economic, and management pillars
  - verifies sustainability performance across concrete supply chains

- Scope:
  - ready-mix concrete, Precast elements, Cement, and Aggregates (level: Bronze to Platinum)
  - additional certificates: CO2 module and R module



Aligning with green building standards

- LEED (Leadership in Energy and Environmental Design), BREEAM (Building Research Establishment Environmental Assessment Method), DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen), ÖGNI(Austrian Green Building Council), SGNI (Swiss Green Building Council) , CASA Guatemala (Certificación Ambiental para la Sostenibilidad en Arquitectura), Envision v3, and ÇEDBİK – B.E.S.T.
- Variety of schemes for evaluating your product: **Depends on your market area!**



CSC Certification: What It Is & Why It Matters

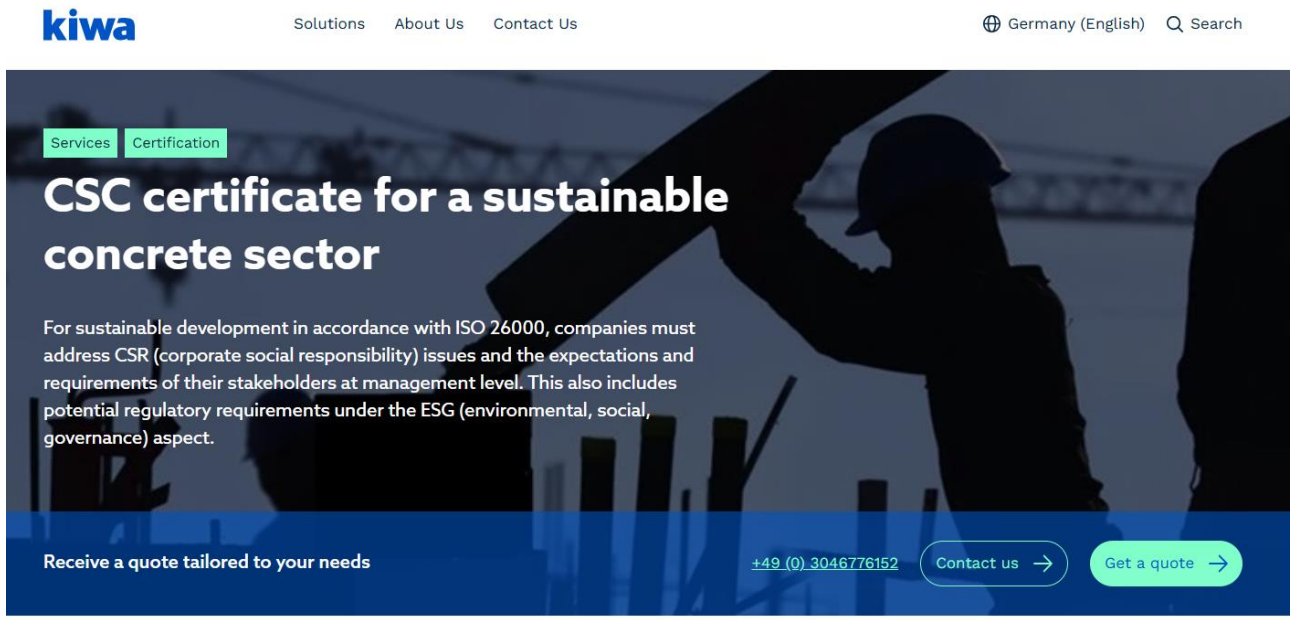
- Why CSC is relevant:
  - ✓ Strengthen your market position and competitiveness
  - ✓ Transparency & credibility
  - ✓ Competitive advantage & decarbonization

Green Building System	Credit / Criteria	Points / Quality Level	Role of CSC (Concrete Sustainability Council)
LEED BD+C v4 / v4.1	Pilot Credit – Social Equity in the Supply Chain	1 point	CSC (v2.0+) is USGBC pre-approved to meet the 8 ILO Fundamental Conventions under the Human Rights Prerequisite. **All CSC levels (Bronze–Platinum) are accepted.**
BREEAM (UK & International)	MAT 03 – Responsible Sourcing of Construction Products	Up to 4 credits (project-dependent)	CSC is a BREEAM-recognized Responsible Sourcing Certification Scheme (RSCS). CSC summary scores: **Bronze (4), Silver (5), Gold (6), Platinum (7)**, used in the MAT 03 calculator.
DGNB (Germany & International)	ENV1.3 – Responsible / Sustainable Resource Extraction	Quality Levels: Level 1.2 Level 2.2 Level 1.3 Level 4	DGNB recognizes **CSC Silver and Gold** at Quality Level 1.2 (since 2018). The CSC **R-Module** (recycling concrete) is recognized at Quality Level 2.2 (since Dec 2020). As of 1 July 2025, **CSC Platinum** is recognized under ENV1.3 as a **Recognized Product Label**, contributing to Quality Level 1.3 (DGNB v2018) and Quality Level 4 (DGNB v2023).

Source: Green Rating Systems – Concrete Sustainability Council

CSC Certification: What It Is & Why It Matters

- Why Kiwa:
  - streamlined processes (structured audit planning, Toolbox guidance, recertification reminder)
  - auditors with practical industry and sustainability background
  - proven experience - Kiwa certified 296 out of 1062 sites in Germany (status 28.01.2026).



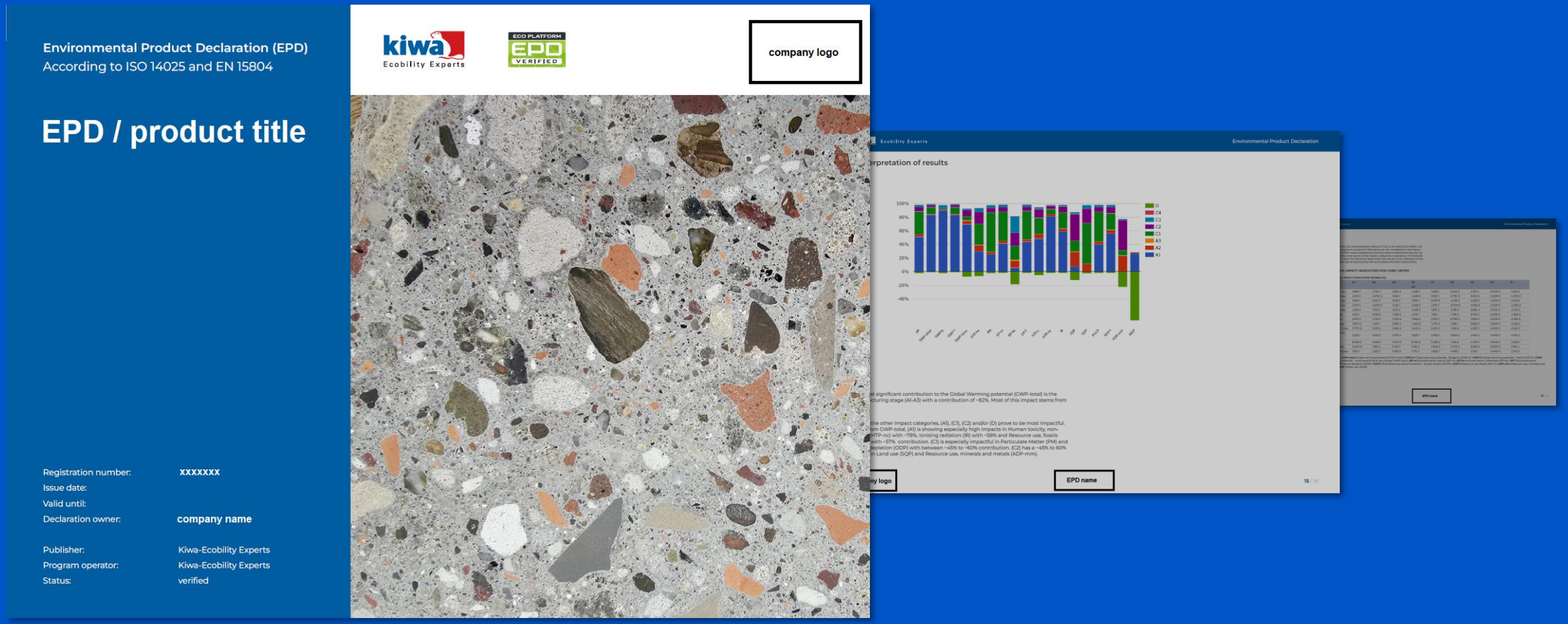
https://www.kiwa.com/de/en-de/services/certification/csc-certificate-for-a-sustainable-concrete-sector/

What is an EPD?

- Communicates environmental impacts of a product across its entire life cycle

- A Type III environmental declaration defined and governed by the international standard ISO 14025.
  - Covers Life Cycle Assessment (LCA) results according to ISO 14040/44
  - For construction materials EN 15804
  - Presents clear, standardized, and transparent results
  - A standardized, third-party verified and registered document

Environmental Product Declaration



Introduction to Construction Product EPDs

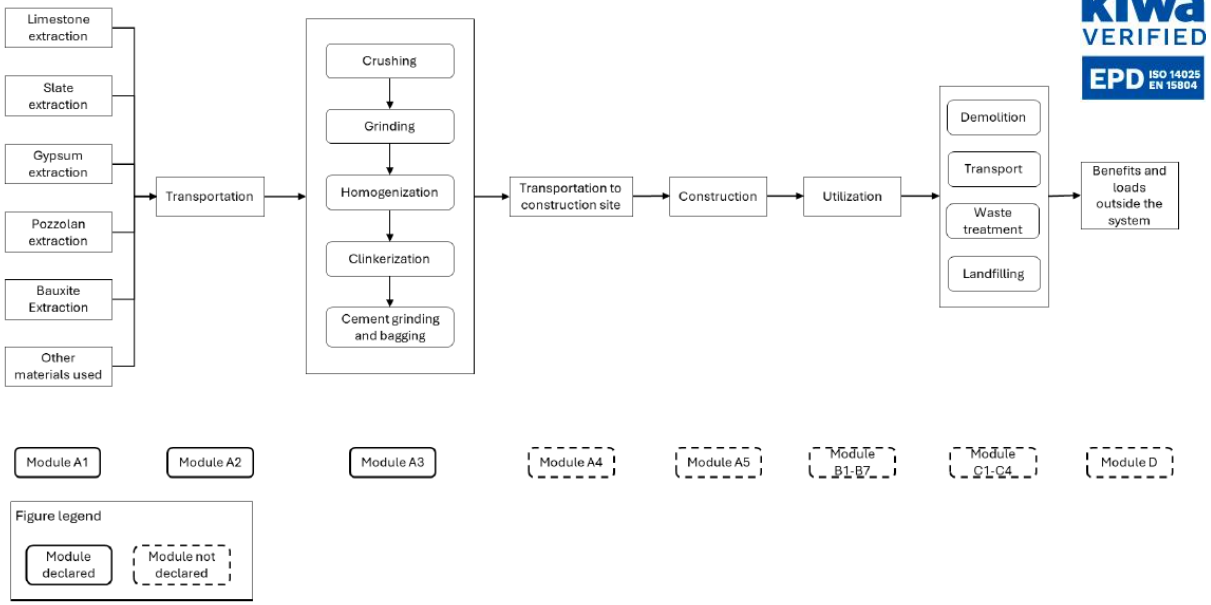


Figure 1: Graphic schematic process flow diagram for life cycle

(X = module declared, ND = module not declared)

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
[X]	[X]	[X]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- Environmental Product Declarations (EPDs) provide transparent environmental data
- Used widely in green building certifications (LEED, BREEAM, DGNB etc.)
- Enable whole-building LCAs

Content

- Product description
- Declared or functional unit
- System boundaries
- LCA results
- Environmental impact indicators
- Resource use and waste flows
- Verification statement

System Boundaries

Production stage			Construction process stage		Use stage							End-of-Life stage				Benefits and loads beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction / Demolition	Transport	Waste processing	Disposal	Potential to re-use, recycle and recover
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D

Mandatory according to **EN 15804+A2**

Why EPDs Matter in Construction

- Construction sector is one of the largest global contributors to environmental impacts, especially embodied carbon and resource consumption
- To control something, we should be able to measure in comparable quantities; so this is our quantified data

- Supports sustainable material selection
- Provides comparable environmental information
- Required in many public tenders and certification systems (LEED, BREEAM, DGNB)

Transparency & Credibility

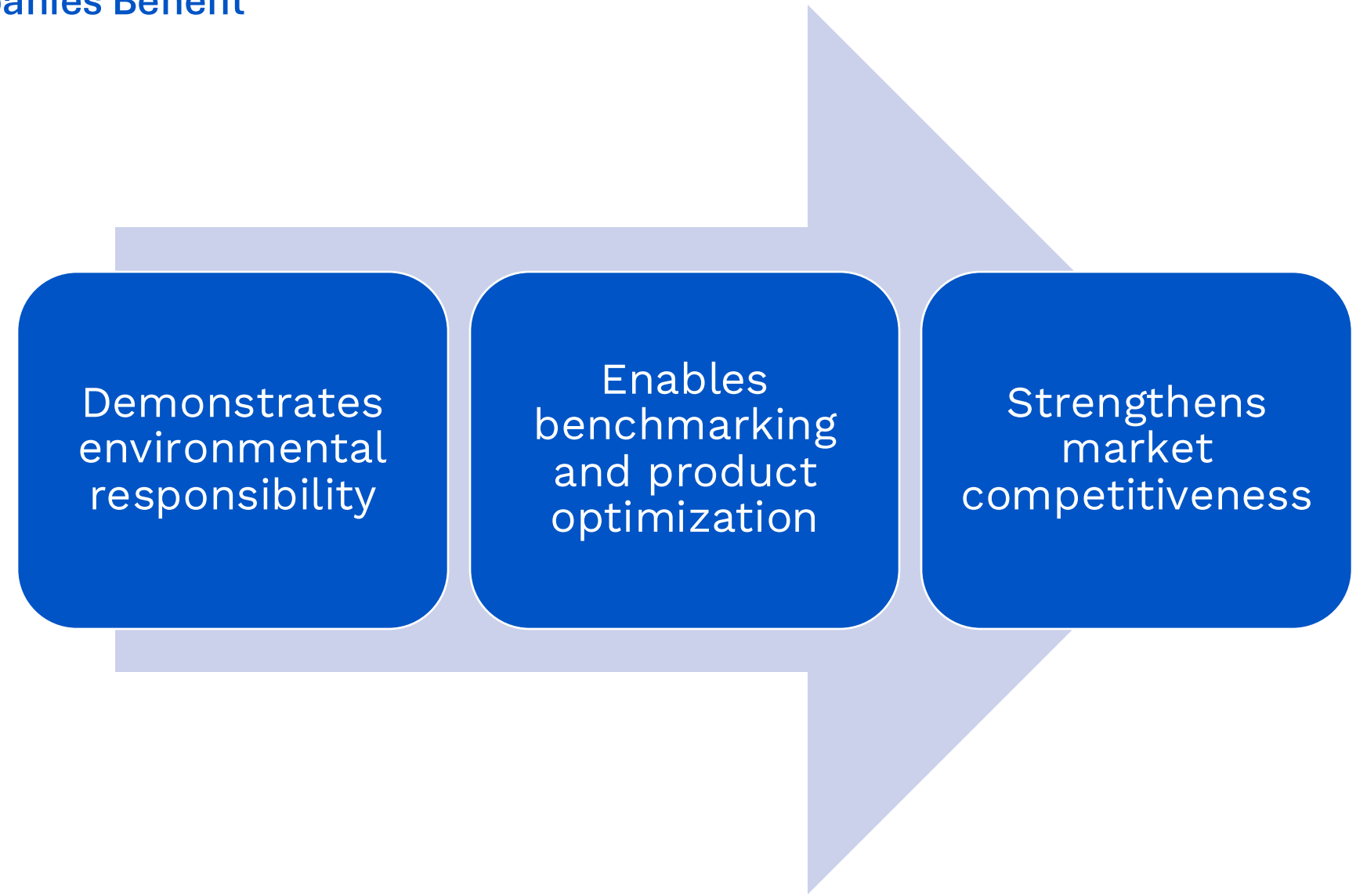
✓Evidence-based

✓Not marketing statements

✓Proofed by real-data

- **Independent 3rd-party verification:** consistent methodology, credible environmental declarations and no selective reporting
- **Standardized formats:** prevention of greenwashing and meaningful comparison within the same product category
- **Registration with recognized PO:** publicly available, transparent and follow internationally accepted rules

How Companies Benefit



Why is this webinar necessary?

- A wide choice of LCA softwares
- The level of details and expectations are different for different players

EPD Creation

- Collection of product, process, and supply chain data
- Execution of the Life Cycle Assessment (LCA)
- Drafting of the EPD according to ISO 14025 & EN 15804, EN50693
- Reporting of impact indicators (e.g., GWP, energy use, water consumption)
- Guidance through specific industry or program requirements

EPD Verification

- Review of LCA data, system boundaries, methodology, and documentation
- Verification of compliance with ISO 14025, EN 15804, EN50693 and applicable PCRs
- Alignment with ECO Platform requirements
- Issuance of a formal verification report
- Mandatory step for publishing and registering the EPD

Kiwa R<THINK web-based software for EPD/LCA/CCF

Country specific regulations (e.g. Netherlands, Belgium, France)

Different template options

Integrated third-party verification

Excel interfaces for more efficient calculation upload

Real time results on environmental impacts

Software to create calculations according to:

- ISO 14040/44
- ISO 14025/EN 15804/EN 50693
- ISO 14067
- ISO 14064 and the GHG Protocol

R<THINK

User-friendly Software for LCA/EPD/CCF *for Manufacturers*

CSC vs. EPDs – How They Work Together

CSC Certification	Goal	EPD
Organisation & supply chain level	Credible sustainability	Product-level focus
ESG & responsible sourcing	Verified performance	LCA-based (EN 15804) performance
Governance & management systems	Market & regulatory acceptance	Quantified environmental data
Social & environmental practices		Third-party verified

Together they deliver full sustainability transparency — sustainability is no longer optional; it is a business requirement.

Conclusion

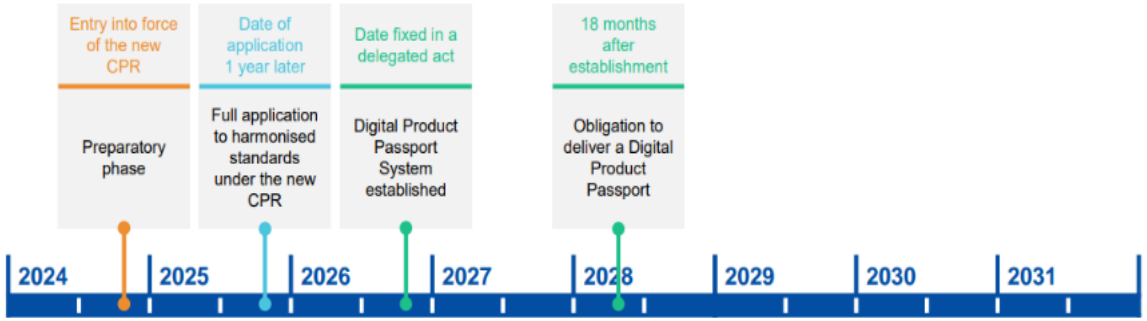
✓Concrete sector faces unique challenges but also clear pathways for improvement

✓CSC certification ensures responsible operations and supply-chain transparency

✓EPDs provide quantified, comparable product-level environmental data

✓Together, CSC and EPDs enable credibility, compliance, and competitiveness

Key takeaway: Verified data and transparency are essential to future-proof the concrete industry.



Kiwa and the Construction Product Regulation (CPR)

- ✓ Environmental Product Declaration (EPD) for Construction Products
- ✓ CPReadiness Check EPD Process
- ✓ Verification/Validation CPR 3+ Validation
- ✓ Digital Product Passport
- ✓ EPD/LCA software R<THINK

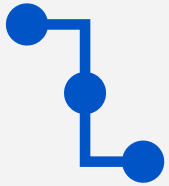
Kiwa services

Sustainability Metrics

- Environmental Product Declaration
- Corporate Carbon Footprint
- Emission Trading System
- etc.

Sustainability Claims

- Claim under EU Green Claims Directive like ISO14068 (Carbon Neutrality)



Sustainability Due Diligence

- SEE Standard (2nd + 3rd party ESG Audits)
- We Care (Food)
- ESG-SSI (Solar)
- ASI (Aluminium)
- Kiwa-Supplier platform
- etc.

Circular Economy

- RecyClass
- KiPlas
- End of Waste
- ISCC
- WEEELABEX
- etc.

Sustainability Reporting

- EU-CSRD Report Verification
- EFRAG-VSME scheme
- Double Materiality Analysis
- AA1000
- etc.

Thank you so much for your attention!

Any questions?