

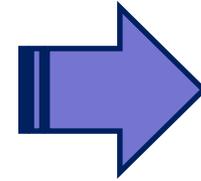
Life Cycle Assessment and Environmental Product Declarations, where are we going?

Present and future of EPDs and PLCA in Europe

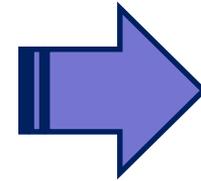
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INTRODUCTION: MARKET DRIVERS

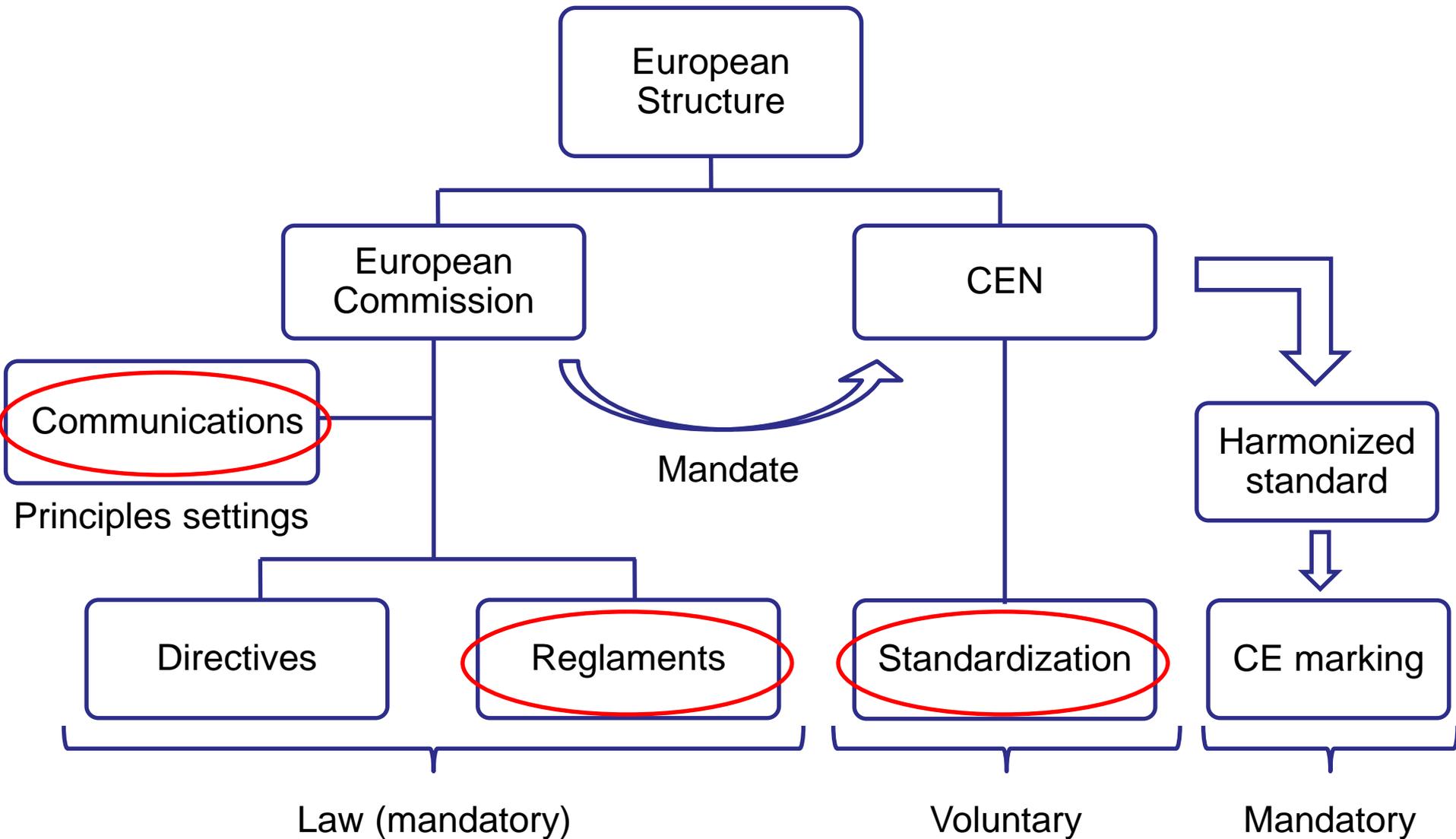


DEMAND



REGULATION

REGULATION: EUROPEAN STRUCTURE



REGULATION: STANDARDIZATION

CEN TC 350
Sustainability of
construction
works

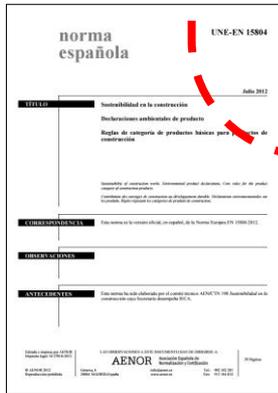
CEN TC 51
Cement

CEN TC 104
Concrete

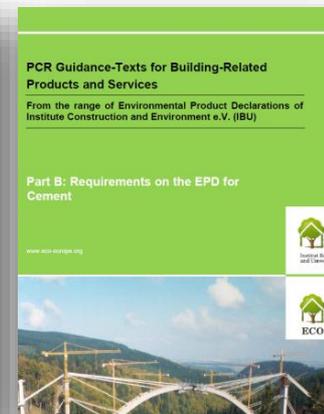
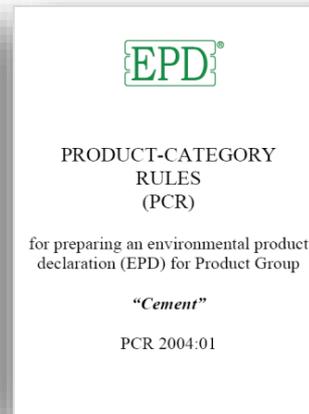
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ISO 14040

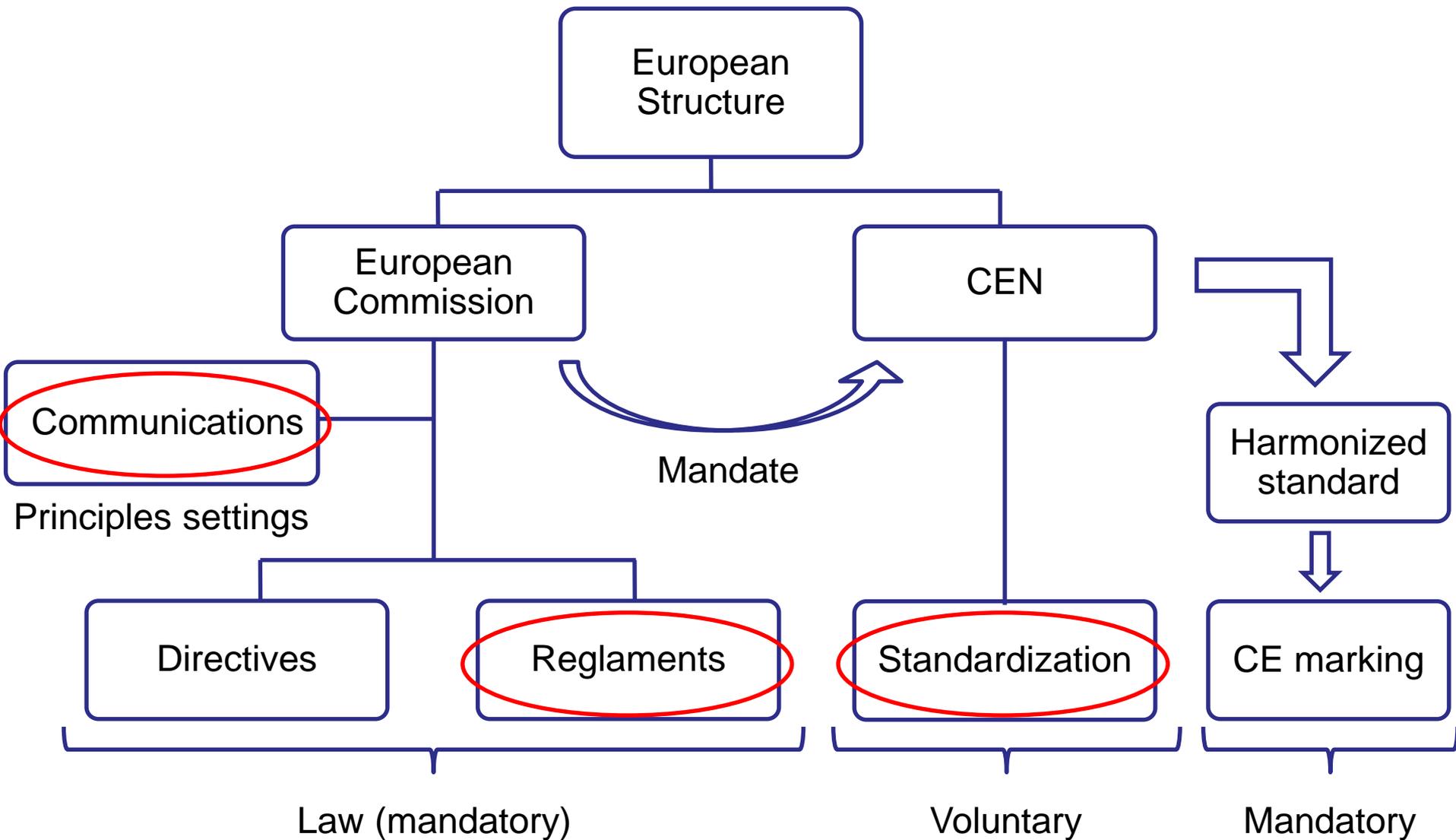


EN 15804

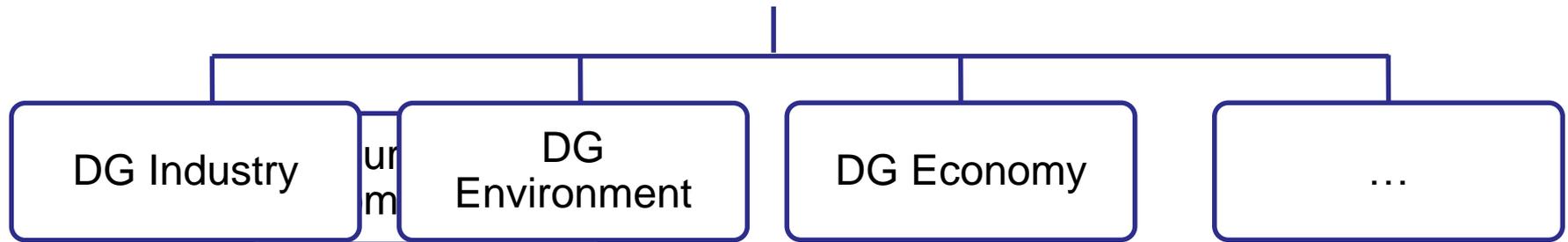


- PCRs are developed within a programme. Programme operators work at national level. Several programmes are running in Europe.
- Convergence process is ongoing

REGULATION: FUTURE OF EPDs



REGULATION: FUTURE OF EPDs



1. New indicators aligned with PEF
2. Revising the definitions of functional unit and declared unit

Based on the communication COM 2013/196 “Single Market for Green Products”.

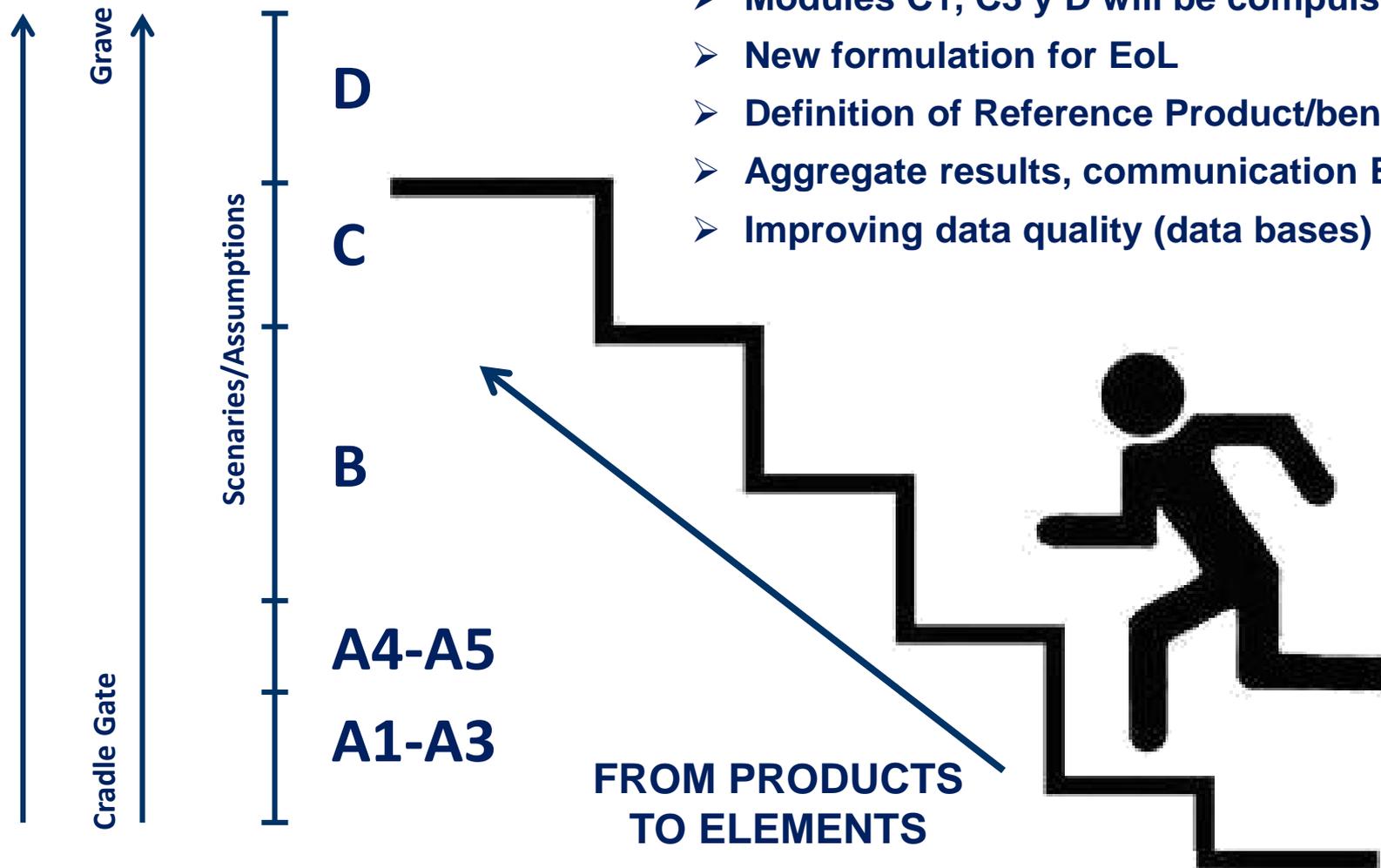
It is a system developed for final products fully based on CO2 emissions.

REGULATION: FUTURE OF EPDs

NEW MANDATE OF THE COMMISSION

- Modules C1, C3 y D will be compulsory, ¿and B?
- New formulation for EoL
- Definition of Reference Product/benchmark
- Aggregate results, communication B2B...
- Improving data quality (data bases)

+ years + uncertainties



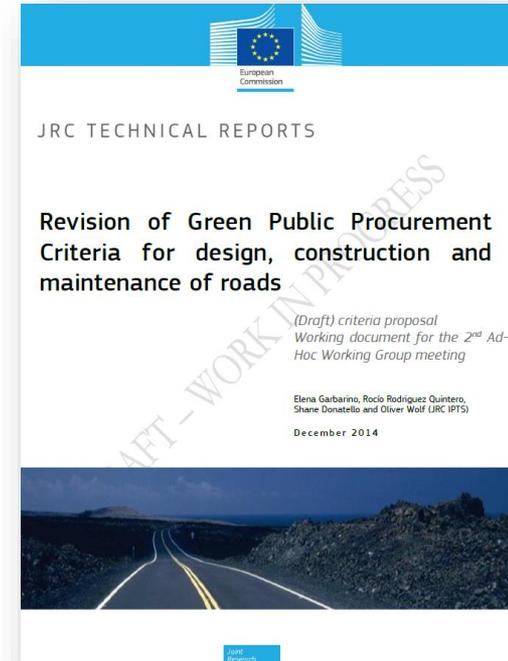
ONLY RECOMENDATIONS, NOTHING MANDATORY

EPDs and LCA are included as a criterion for Green Public Procurement.

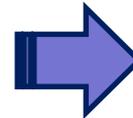
Option 1: Aggregation of Environmental Product Declarations (EPDs)

The performance shall be evaluated using Environmental Product Declarations (EPDs) that are in compliance with ISO 14025, EN 15804 or equivalent. The ITT shall specify which of the following two methods shall be used for the evaluation:

- (i) Aggregation of EPD characterisation results (the raw LCA results for indicators) for each building element, or



Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement (replacing Directive 2004/18/EC)



Lay down the criteria of awarding a contract by using the 'life-cycle costing.

DEMAND: PRIVATE SECTOR

Commercial certification tools: LEED, BREEAM, ...

**Bepalingsmethode
Milieuprestatie
Gebouwen en GWW-werken**



Berekeningswijze voor het bepalen van de milieuprestatie van gebouwen en GWW-werken gedurende hun gehele levensduur, gebaseerd op de levenscyclusanalyse methode (LCA-CML2).

BOUWKWALITEIT

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Website: www.bouwkwaliiteit.nl
www.milieudatabase.nl

Definitief
03.01.11.2011

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 **LEED**

CREDIT LIBRARY

LEED BD+C: New Construction | v4 - LEED v4
Building product disclosure and optimization - environmental product declarations

Possible 2 points

Language Guide Resources Interpretations Forum All credits Previous Next

Glossary

Join LEEDuser
Ask questions, share tips, and get notified of new forum posts by joining LEEDuser, a tool developed by BuildingGreen and supported by USGBC!

Intent
To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To review **Mat 01 Life cycle impacts** selecting products from manufacturers who have verified improved environment



Criterio de evaluación

La evaluación del edificio a través de este criterio se establece por medio del cálculo del número de materiales que disfrutan de una ecoetiqueta tipo I o tipo III (DAP)

Las medidas que deberán cumplirse para la valoración de este criterio son las siguientes:

Medidas	
Se aporta una ecoetiqueta tipo I	20%
Se aportan tres ecoetiquetas tipo I de grupos de materiales diferentes	50%
Se aportan cinco o más ecoetiquetas tipo I de grupos de materiales diferentes	100%
Se aporta la DAP de un producto	100%

Documentación requerida

Documentos justificativos:

- ❖ D.J. RN 13.1

Ecoetiquetados, tanto tipo I como tipo III de los materiales definidos en obra.

BREEAM[®]

Number of credits available	Minimum standard
Building type dependent	No

the use of construction materials with a low environmental impact (including embodied carbon) over the building's life cycle.

Criterio

to demonstrate compliance with the requirements of the building's quantified environmental life cycle impact through assessment of the materials used in the building, as set out in Table 13 below.

Element Type Assessed	Building Type					
	External walls	Windows	Roof	Upper floor slab	Internal walls	Floor finishes
	•	•	•	•	•	•
	•	•	•	•	•	•

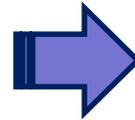
DEMAND: PUBLIC SECTOR (PAVEMENTS)

- No political willing when Public Bodies are the clients.
- Politicians care about short-term and LCA and LCCA go against this philosophy.

WHAT IS OUR EXPERIENCE IN EUROPE?



FUNDED BY THE EUROPEAN
COMMISSION



- Public bodies do not like comparisons.
- LCA and LCCA means assigning resources for the future (less political independence).
- One exception: The Netherlands.

CONCLUSIONS

- **Regulatory framework is strong in Europe regarding EPDs and LCA.**
- **The future of these methodologies do not depend on regulations but on the market.**
- **EPDs will be pushed by the buildings market.**
- **LCA and LCCA of buildings will be developed in the mid-term.**
- **Very pessimistic regarding implementation of PLCA in public procurement.**

THANKS FOR YOUR ATTENTION

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