



European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Basic Requirements for Construction Products caused by environmental needs

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Construction Products Regulation EU 305/2011

- Legal framework for the Internal Market of EU
- Common technical language for the products
- Basic Requirements for Construction Works
 1. Mechanical safety and stability
 2. Safety in case of fire
 3. Hygiene, health and the **environment**
 4. Safety and accessibility in use
 5. Protection against noise
 6. Energy economy and heat retention
 7. **Sustainable use of natural resources**
- Basic Requirements include “GWP” and “use of environmentally compatible raw and secondary materials”
- But, is not setting any obligation for Member States to regulate



Basic Requirements for Construction Works – 3. ...Environment and 7. Sustainable use of resources

- **3 (b) “Construction works will ... not have an exceedingly high impact, over their entire life cycle, on the environmental quality or on the climate ... as a result of emissions of greenhouse gases...”**
- **7 (a) “reuse or recyclability of the construction works, their materials and parts after demolition;”**
- **7 (b) “durability of the construction works;”**
- **7 (c) “use of environmentally compatible raw and secondary materials in the construction works.”**
- **Recital 56: “For the assessment of the sustainable use of resources and of the impact of construction works on the environment **Environmental Product Declarations** should be used when available”**
- **Member States can set the requirements for performance of the building or demand for the product information**



CEN/TC 350 Sustainability of construction works

- **European standards for sustainability assessment with the PERFORMANCE BASED APPROACH in terms of:**
 - **Environmental performance (Mandate M/350)**
 - **Social performance**
 - **Economic performance**
- **Life cycle approach with the quantifiable indicators**
- **Development of CEN/TC350 standards has taken into account the needs of the relevant EU policies related to the Construction Products and buildings**
 - **Construction Products Regulation,**
 - **Eco-design, Public Procurement,**
 - **Resource Efficiency, Low Carbon Economy**
- **Original aim: prevention of potential technical trade barriers within the Internal Market and international market (in accordance with the international framework of ISO standards)**

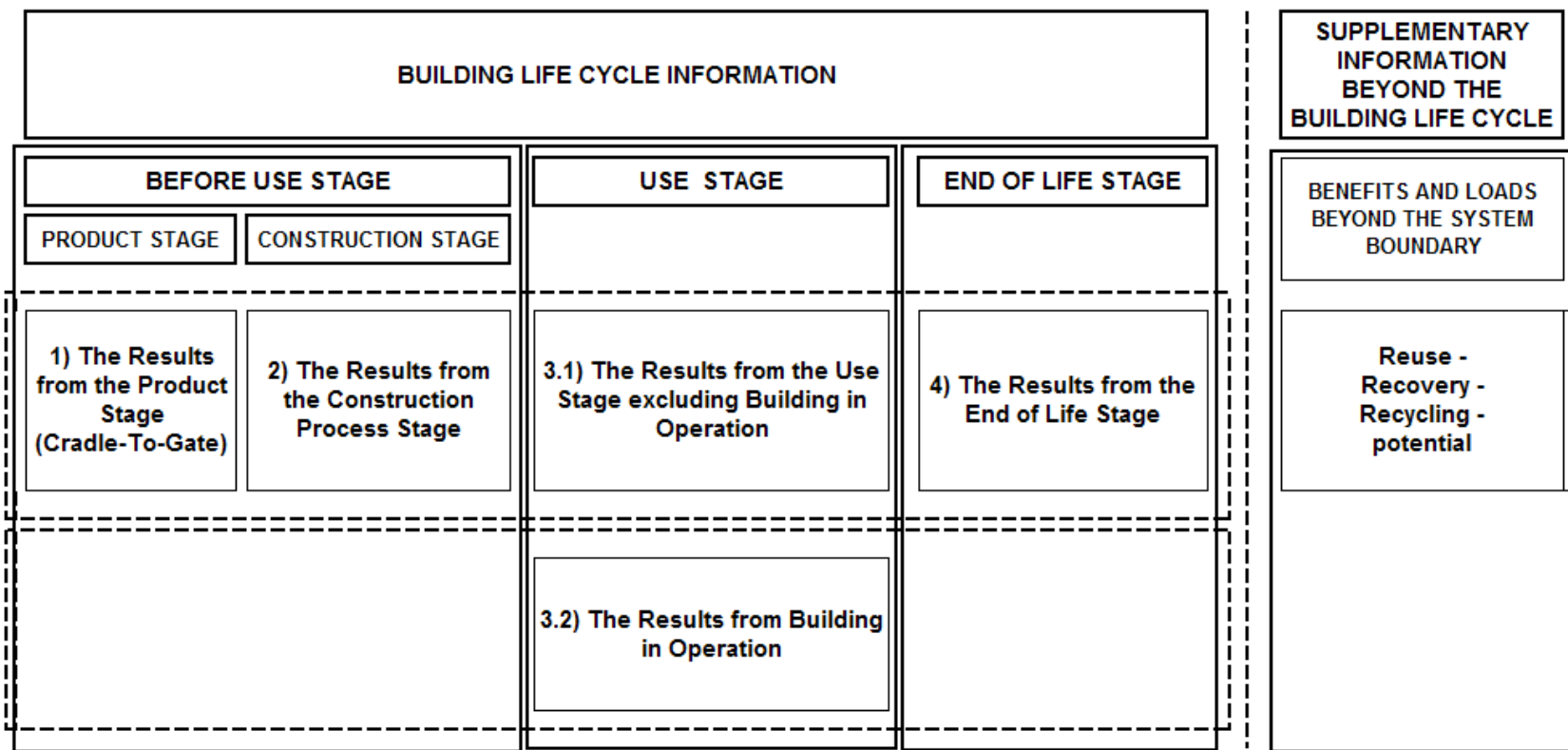


CEN/TC 350 – Sustainability of Construction Works

Framework level	EN 15643-1 Sustainability Assessment of Buildings - General Framework (TG)				
	EN 15643-2 Framework for Environmental Performance (TG)	EN 15643-3 Framework for Social Performance (WG5)	EN 15643-4 Framework for Economic Performance (WG4)	Technical Characteristics	Functionality
	Framework for Assessment of Environmental Performance (ISO 21931-1)			Service Life Planning – General Principles (ISO 15686-1)	
Building level	EN 15978 Assessment of Environmental Performance (WG1)	FprEN 16309 Assessment of Social Performance (WG5)	prEN 16627 Assessment of Economic Performance (WG4)	CEN Standards on Energy Performance of Buildings Directive (EPBD)	
Product level	EN 15804 Environmental Product Declarations (WG3)	(see Note below)	(see Note below)	Service Life Prediction (ISO 15686-2), Feedback from Practice (ISO 15686-7), Reference Service Life (ISO 15686-8)	
	EPD of Build. Products (ISO 21930)	Note: At present, technical information related to some aspects of social and economic performance are included under the provisions of EN 15804 to form part of EPD			
	EN 15942 Comm. Form. B-to-B (WG3)				
	CEN/TC 350				



Building life cycle and modular information = the same rules for the product and building level





Standardized environmental indicators by CEN/TC350

1) Indicators for environmental impacts:

1. Global warming potential, GWP
2. Destruction of the stratospheric ozone layer
3. Acidification of land and water resources
4. Eutrophication
5. Formation of ground level ozone
6. Abiotic depletion potential (fossil fuels)
7. Abiotic depletion potential (elements)

2) Indicators for use of resources:

8. Use of non-renewable primary energy
9. Use of renewable primary energy
10. Use of non-renewable primary energy resources used as raw materials
11. Use of renewable primary energy resources used as raw materials
12. Total use of non-renewable primary energy resources
13. Total use of renewable primary energy resources
14. Use of secondary materials
15. Use of non-renewable secondary fuels
16. Use of renewable secondary fuels
17. Net use of freshwater resources

3) Indicators for other environmental information:

18. Components for re-use
19. Materials for recycling
20. Materials for energy recovery
21. Non-hazardous waste to disposal
22. Hazardous waste to disposal
23. Radioactive waste to disposal
24. Exported energy



Development of regulated demands for the GWP of construction products information in EU and the Member States

- **According to the CPR: Manufacturers declare the essential characteristics of their products in the Declaration of Performance together with CE-marking**
- **Building regulations, e.g.:**
 - **The Netherlands requires assessment of GWP of new buildings over its life cycle, no limit values**
- **Product regulations, e.g.:**
 - **France and Belgium will require EPD for the construction product according to EN 15804, if any marketing claim or message in any form is made related to the environmental information of the product in the French or Belgium market**