

Avec le soutien de :



1 Environmental Product Declarations

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2 Content of today

- Overview of LCA embedded in current EU policies
- Overview of LCA in BE



EU (1)

Communication on Integrated Product Policy

(COM (2003)302)

the European Commission concluded that LCA provide **the best framework for assessing the potential environmental impacts** of products currently available.

→ European Platform on Life Cycle Assessment (LCA)

→ <http://ec.europa.eu/environment/ipp/lca.htm>

Thematic Strategy on the sustainable use of natural resources

(COM(2005) 670)

It is necessary to develop means to identify the negative environmental impacts of the use of materials and energy throughout life cycles (often referred to as the cradle to grave approach) and to determine their respective significance. This understanding of global and cumulative impacts along a causal chain is needed in order to target policy measures so that they can be most effective for the environment and more cost-efficient for public authorities and economic operators.



EU (2)

Communication on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan

(SEC(2008) 2111)

The challenge is to create a virtuous circle: improving the overall environmental performance of products **throughout their life-cycle**, promoting and stimulating the demand of better products and production technologies and helping consumers to make better choices through a more coherent and simplified labelling.

The **Ecodesign Directive** provides rules for setting ecodesign requirements for energy-using products with the aim of ensuring the free movements of those products within the Internal market, taking a **life-cycle perspective**. This Ecodesign Directive currently only applies to energy-using products. With the objective of enlarging the frame also to other environmentally significant products, its product scope will be extended to cover all **energy-related** products, construction products: **windows**

Preparatory phase 2013-2015 / Adoption phase 2015 / On basis of roadmap they will use PEF /insulation materials?



EU (3)

Council conclusions on sustainable materials management and sustainable production and consumption: key contribution to a resource-efficient Europe (Belgium, 20 December 2010)

- INVITES the Commission and Member States to continue their efforts to make European resources and materials use more **sustainable throughout the life-cycle**
- identify the most appropriated policy options to exploit the results of life cycle methods, such as requirements on the ecological design of products, labelling and other consumer awareness actions



EU (4)

Resource Efficiency Roadmap Communication

(COM(2011) 571)

strengthened and defined the future role of the [environmental footprint methodology](#) by explaining that the Commission will:

- [Establish a common methodological approach](#) to enable Member States and the private sector to assess, display and benchmark the environmental performance of products, services and companies based on a comprehensive assessment of environmental impacts over the life-cycle ('[environmental footprint](#)') (in 2012);
- Ensure better understanding of consumer behaviour and provide better information on the [environmental footprints](#) of products, including preventing the use of misleading claims, and refining eco-labelling schemes (in 2012).
- Address the environmental footprint of products, building on an ongoing assessment due in 2012 and following a consultation with stakeholders, including through setting requirements under the Ecodesign directive, to boost the material resource efficiency of products, and through expanding the scope of the Ecodesign directive to non-energy related products (in 2012);



EU (5)

- Transforming the economy onto a resource-efficient path will bring increased competitiveness and new sources of growth and jobs through cost savings from improved efficiency, commercialisation of innovations and better management of resources over their whole life cycle
- Member States, with the Commission should as of 2012, assess: **Measures to extend producer responsibility to the full life-cycle of the products** they make (including via new business models, through guidance on take-back and recycling schemes and support for repair services);
- Accurate information, based on the life-cycle impacts and costs of resource use, is needed to help guide consumption decisions.
- PEF: <http://ec.europa.eu/environment/eussd/pdf/footprint/PEF%20methodology%20final%20draft.pdf>
- Milestone: **By 2020** the renovation and construction of buildings and infrastructure will be made to high resource efficiency levels. **The Life-cycle approach will be widely applied**; all new buildings will be nearly zero-energy,



EU (6)

Strategy for the sustainable competitiveness of the construction sector and its Enterprises (COM(2012) 433)

High level
+
Thematic
group 3

Two first
meetings
in 2013

				horizon
Mutual recognition of methods to assess the environmental performance of buildings ³⁰	EU scheme for environmental assessment of buildings and EU technical specifications	EU resource efficiency policy and EU standardisation policy	European Commission	2014-2016
Mutual recognition of risk assessment methods taking into account environmental performance, in particular within the context of EU standardisation activities and insurance schemes	EU technical specifications	EU standardisation policy	European Commission	2014-2018
EU wide life cycle costing (LCC) methodology for buildings for Green Public Procurement ³¹	EU guidance on Life Cycle Costing in public procurement	Green Public Procurement	European Commission	2014-2016
Increasing the use of Green Public Procurement in regional policy in coming programming period ³²	Further promotion of construction related GPP criteria in EU financed projects	Regional Policy	European Commission	2014-2020
Assessment of hindrances resulting from national legislation governing the authorisation process for major construction projects	Operational conclusions from the revision process of the	Environmental assessment and national permit-granting	European Commission	2013-2016
Harmonised rules on the declaration of the performance characteristics of construction products in relation to a sustainable use of resources ³³	Harmonised EU rules and updated harmonised EU standards	ENTR/Construction Products Regulation	European Commission	2013-2018
Evaluation of the performance of construction sub-sectors in terms of competitiveness and sustainable development at national and regional levels	Reports	National construction policies	Member States	



EU (7)

Communication on sustainable buildings (DG ENV)

- Public consultation expected in coming weeks!
- Content unknown



EU (8)

DG ENV: Communication unlocking single market for green products

http://ec.europa.eu/governance/impact/planned_ia/docs/2012_env_019_single_market_greening_products_en.pdf

- PEF methodology
- EU normalisation factors
- Integration of PEF in EU Ecolabel?



Pilot projects! Call of interested volunteers in april 2013.

Objectives:

- Test the process of developing PCR
- Testing the different verification possibilities
- Testing different ways of communication + benchmarking and classes possibilities

Single companies/group of companies/federations/MS/NGO/mix



12 CEN TC 350

Product level:

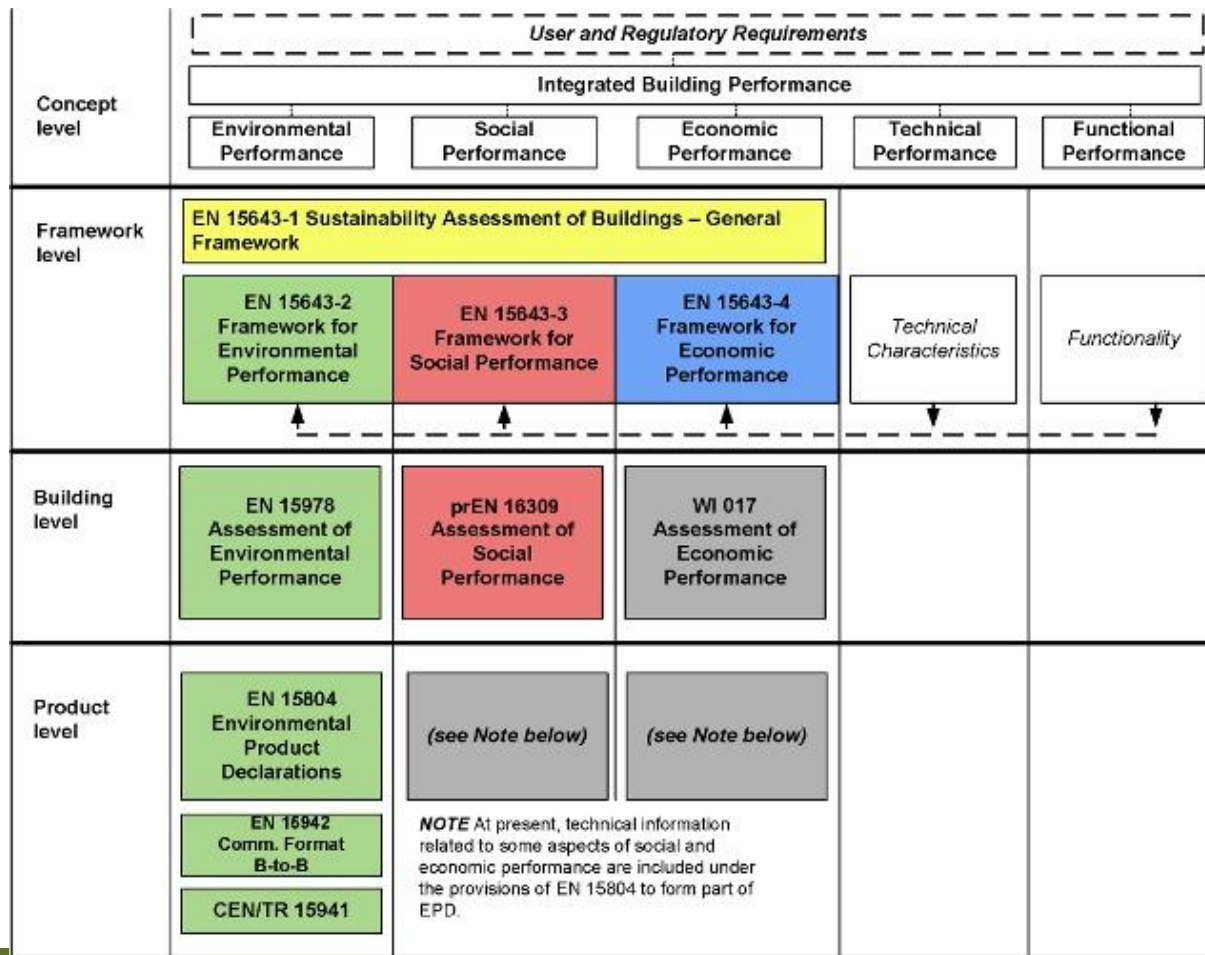
Refinement needed / product specific PCR needed / extension to other indicators / ECO platform

BELGIAN MIRROR COMMITTEE

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http://lct.jrc.ec.europa.eu/index_jrc

ILCD handbook
Recommended LCIA methods
LCI database
Etc



Construction Products Regulation 305/2011

BWR 7 sustainable use of resources

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



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BE (1)

POD

Wetenschapsbeleid

SUFIQUAD

(790.292 €)



Sustainability, Financial and Quality evaluation of Dwelling types

End of project: 2011

(KUL ASRO / WTCB / VITO)



.be

BE (2)

FOD Volksgezondheid, DG5 Leefmilieu

Product plan 2009-2012

- Actie 16 creëert een duidelijk kader voor het evalueren en communiceren door de Belgische bouwproductindustrie van de milieu-impact van bouwproducten en is onontbeerlijk om tot eenduidige, vergelijkbare en transparante informatie te komen.
- Actie n 17: Ontwikkelen van tool voor het gebruik van EPD's op het niveau van bouwelement (combinatie van bouwproducten)
- Actie n 18 : Kennis vergroten rond de milieu-impact van grondstoffen



VLAANDEREN - OVAM

Milieugerelateerde materiaalprestaties van gebouw(element)en (MMG)

2011-2012

- De ontwikkeling van het expert-rekenmodel begon met het opstellen van de bepalingmethode voor het berekenen van de milieugerelateerde materiaalprestatie van gebouwelementen . Als basis voor de milieuevaluatiemethodiek werd geopteerd voor (LCA).
- op basis van deze bepalingmethode een rekenmodel en database opgemaakt voor verwerkte materialen
- een rekenmodel en database voor gebouwelementen.

Doel van het ontwikkelde expertrekenmodel is voor een aantal gebouwelementen de milieu-impacten, op milieu-impactcategorie- en op geaggregeerd niveau, te kunnen berekenen en zo een beter inzicht te verwerven in de milieugerelateerde materiaalprestatie van gebouw(element)en binnen een Vlaams/Belgische context en rekening houdend met de volledige levenscyclus van het gebouw(element).

HOW TO CONTINUE → now being decided → together with FOD and IBGE/BIM (RW informed)

M-level?



BE Royal Decree

FOD Volksgezondheid

Royal Decree setting minimum requirements for construction products with environmental claims and the creation of a federal database for environmental product declarations

- *Voorontwerp 20 juli 2011 voorgesteld op de vergadering met bouw materiaal producenten en de Ovam van 14 juli 2011*
- *tekst 18 april 2012 voorgesteld op de vergadering van 9 mei 2012 waarbij vertegenwoordigers van de verschillende stakeholders inclusief overheden waren uitgenodigd. Uitnodiging tot schriftelijke opmerkingen tegen eind mei 2012.*
- *aangepaste versie verspreid in juli 2012 met deadline voor opmerkingen eind september 2012.*
- **Last version (this week - waiting for translation), March 2013 → comments + meeting mid april → official councils + notification: june 2013.**



BE Royal decree

(1) In case of environmental claim

⇒ declare an environmental profile.

⇒ Claim shall conform to EN ISO 14021

(2) B-EPDbase → one unique federal and national database with EPDs => for use at building level

Individual + collectif



BE Royal decree

- EN 15804
- Verification
- **January 2015** : + module A4 (transport to site / Brussels)
- **January 2017** :
 - EOL, module C2, C3 en C4 (EN 15804)
 - module D (EN 15804)
 - “reference service life”
 - Extra CEN+ indicators



B-EPDbase

- BE took the initiative to contact EU Commission, Germany, France, Netherlands to establish in the future a common database format.

Lead by FOD

- IT development started februari 2013.
- Target date: January 2014.



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BE_REF-B

Certification scheme for the Sustainability of buildings

National initiative: RBG + VG + RW + FOD

Section materials: to be replaced by MMG?



BE Project LCA:tim

Insulation material	Type A: brickwork with outer leaf in facade plaster	Type B1: brickwork with outer leaf in timber cladding – wood fiber board for wind tightness and water resistance	Type B2: brickwork with outer leaf in timber cladding – wind tightness- and water resistant foil ready-made attached to the insulation product	Type C: timber frame with brickwork outer leaf	Type D: cavity wall in brickwork inner and brickwork outer leaf
EPS	X				X
Flax		X		X	
Glass wool				X	X
Glass wool blowing				X	X
Hemp		X		X	
Paper flakes		X		X	
PUR			X		X
Rock wool	X				X
Sheepwool Black Mountain		X		X	
Sheepwool Doscha		X		X	
Wood fiber		X		X	
XPS Abriso					X
XPS Jackodur					X

- External walls
- Guide/rules (PCR)
- Specific LCA
- Communication
- Policy recommendations

VITO

- + KUL
- + VIBE
- + CERAA
- + Renuables

Start January 2012

End August 2013



Conclusion

Positive

- LCA fully embedded throughout EU policy (DG ENTR + DG ENV)
- LCA embedded in Belgian policy (fed + regions)
- Both CEN and DG JRC (ILCD) have now established a methodology
- Both are based on ISO 14000

But

- CEN and ILCD should blend together
- Benchmarking?
- Train is running but a lot of elements missing (indicators, data...)

