



DF 57 — Life cycle assessment in the building sector:
analytical tools, environmental information and labels

Overview of EU harmonisation of building environmental assessment tools and labelling: the role of the EeBGuide InfoHub

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Agenda

1. General context
2. The EeBGuide InfoHub
3. Links with some other harmonisation activities
4. Perspectives



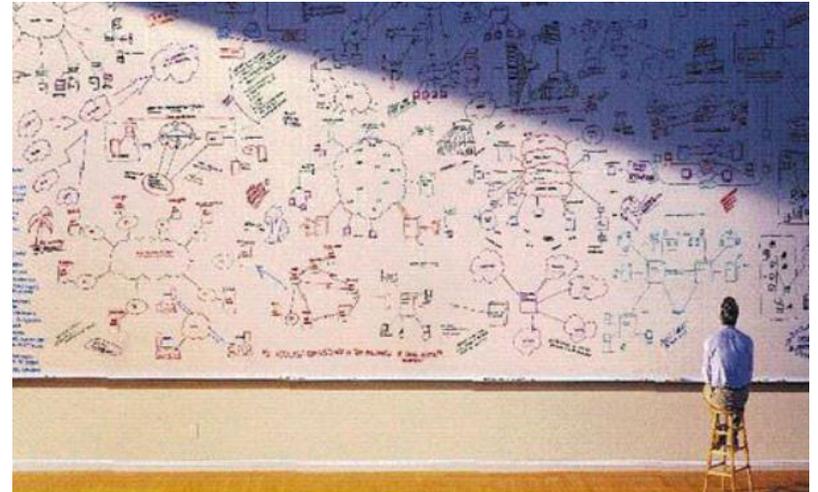
Current situation of LCA in Europe

- Need for LCA in research projects (especially for energy-efficient buildings and products)
- LCA being (or about to be) used
 - In building labeling schemes
 - For construction products EPDs
- Some legal obligation for construction products within Europe to have an environmental statement



Problem statement

- LCA studies are generally not comparable due to the different underlying assumptions in EU countries
- No assured consistency between products and buildings
- Few feedbacks on the implementation of the new EN 15978 standard for building LCA
- LCA difficult to use as-such in early design stages

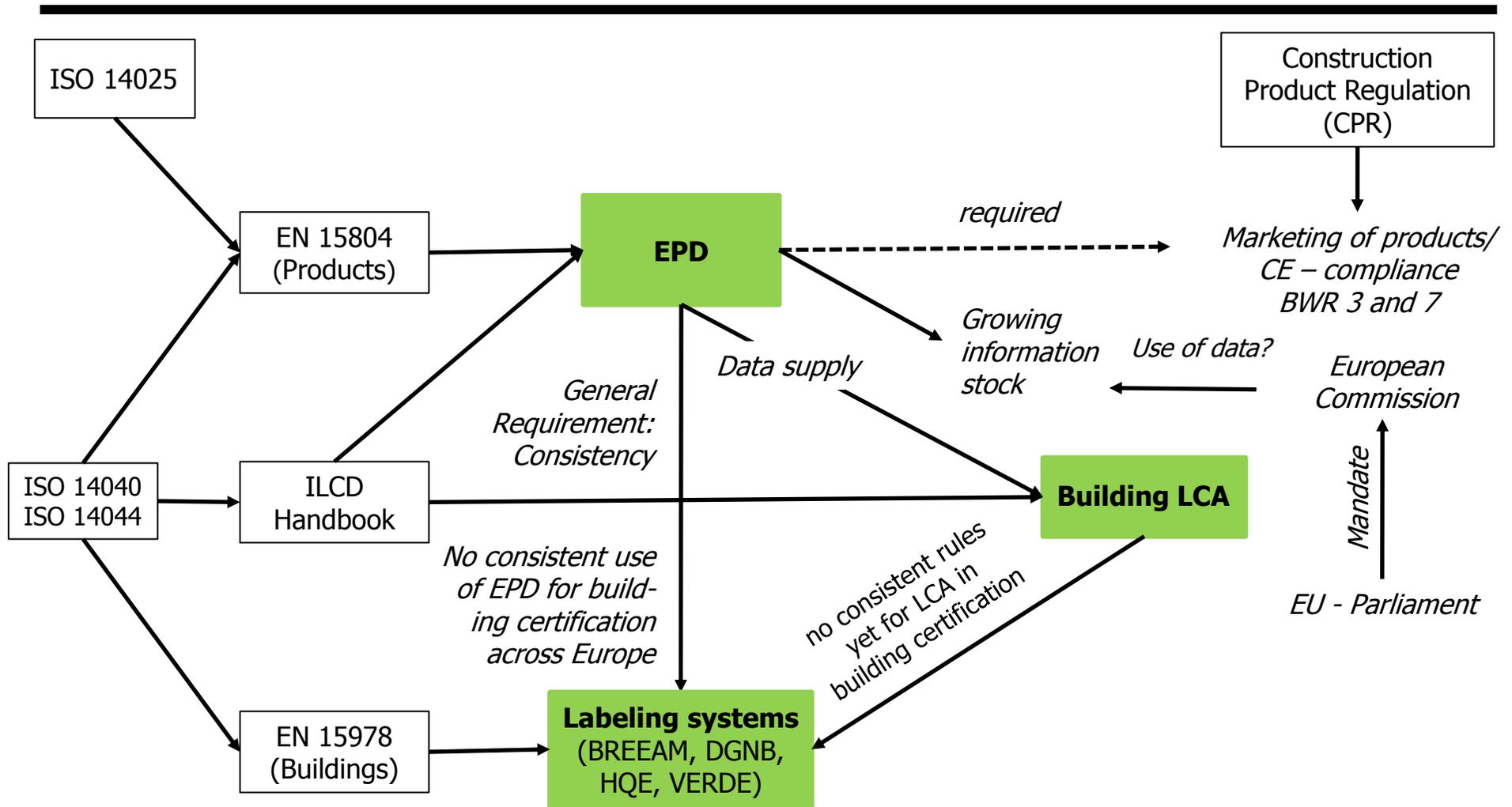


Agenda

2. The EeBGuide InfoHub



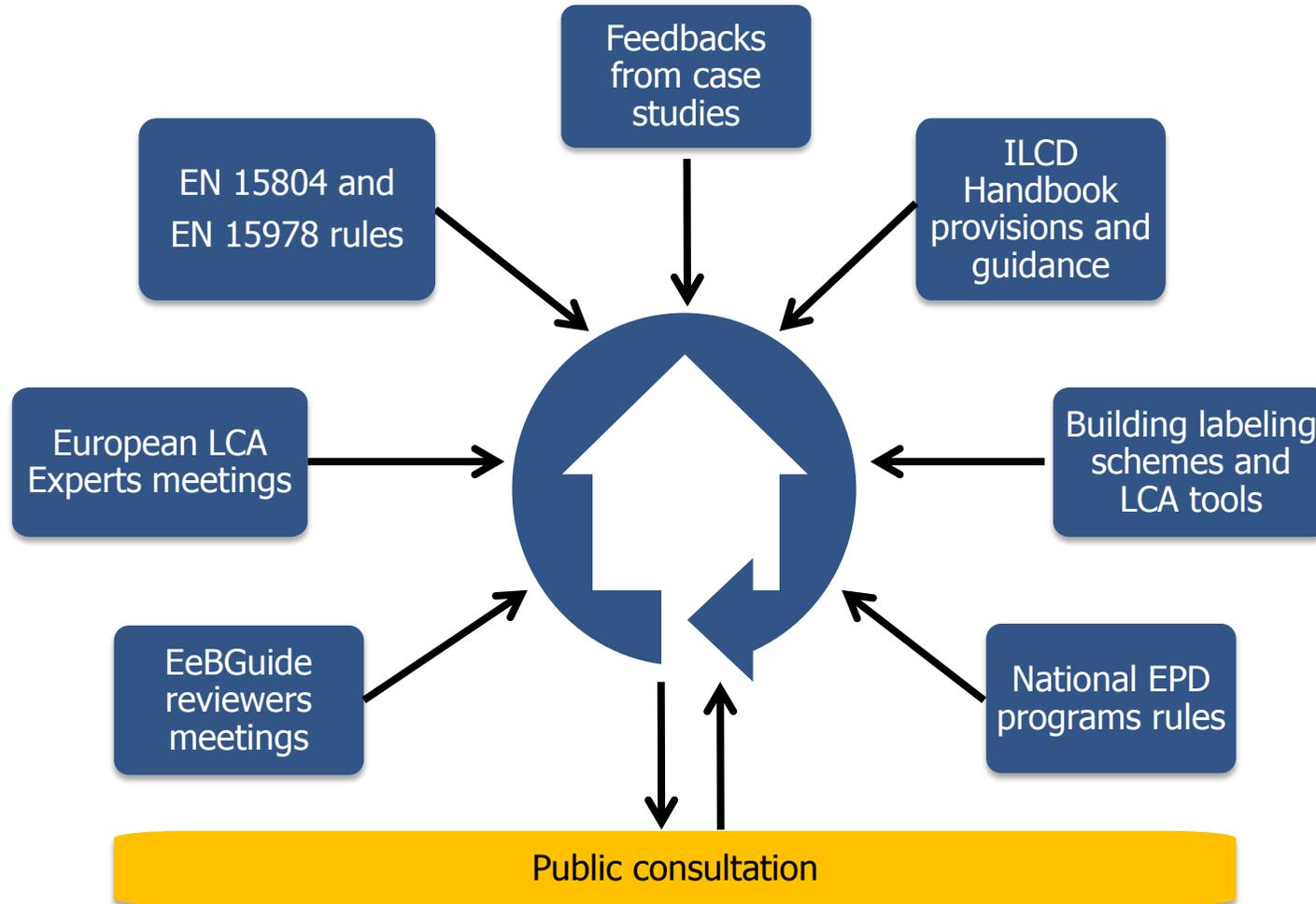
Starting point: overview of the EU context on sustainable construction



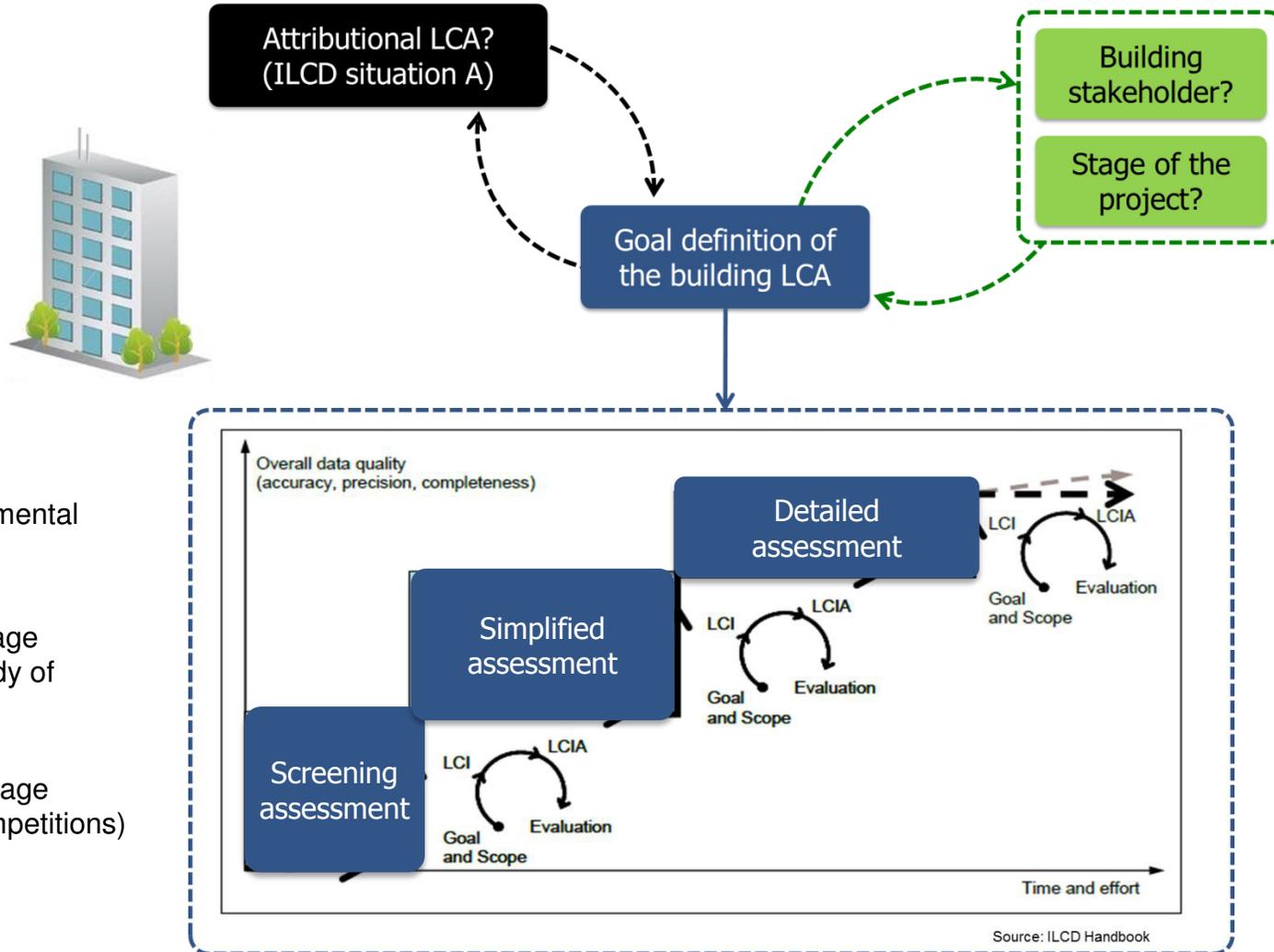
Legend:

-
- Involvement of LCA practitioners
-
- Current link / influence / requirement
-
- Future link / influence / requirement

EeBGuide approach



Outcomes of EeBGuide (1)

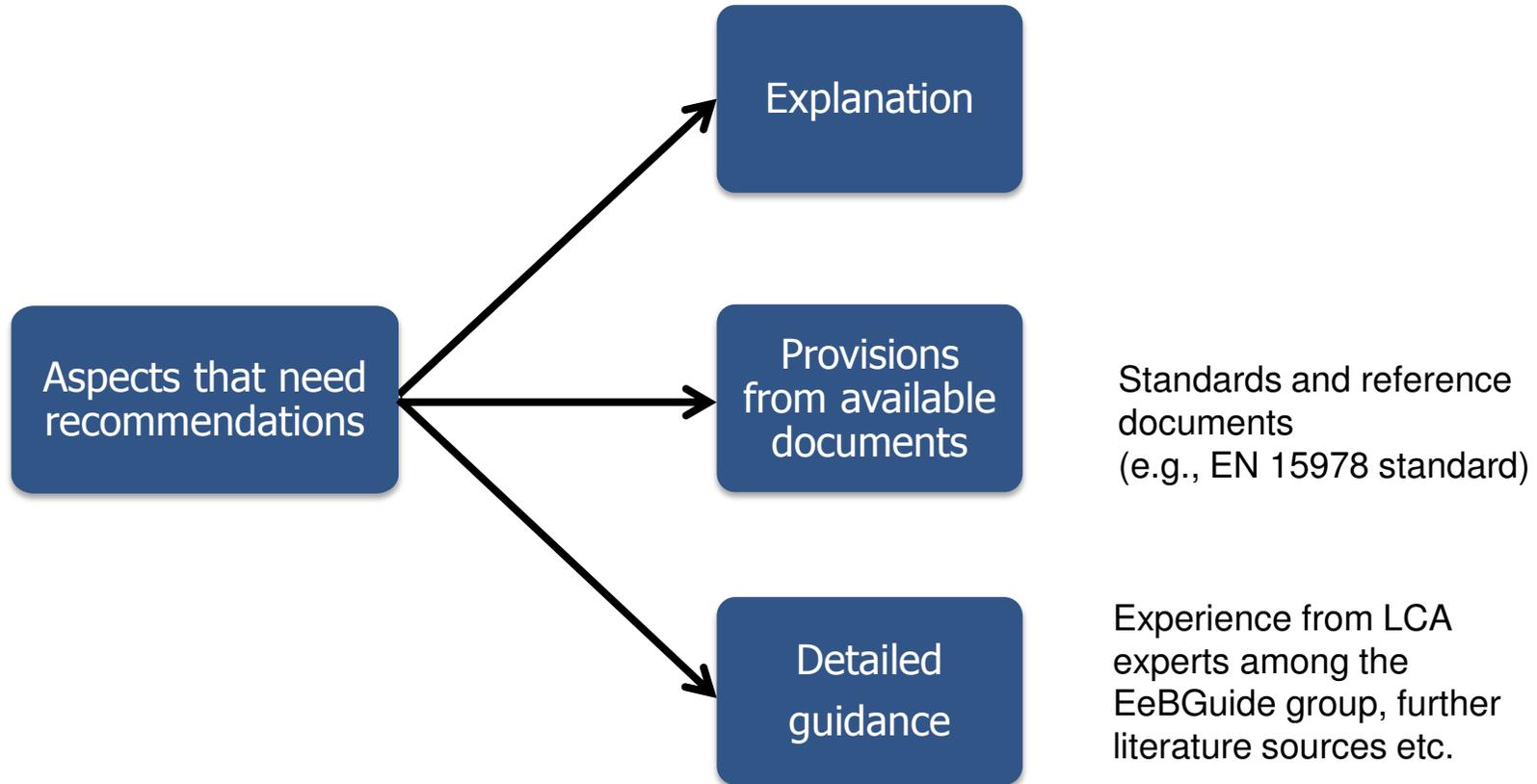


LCA in final stage
(e.g. detailed environmental hotspot analysis)

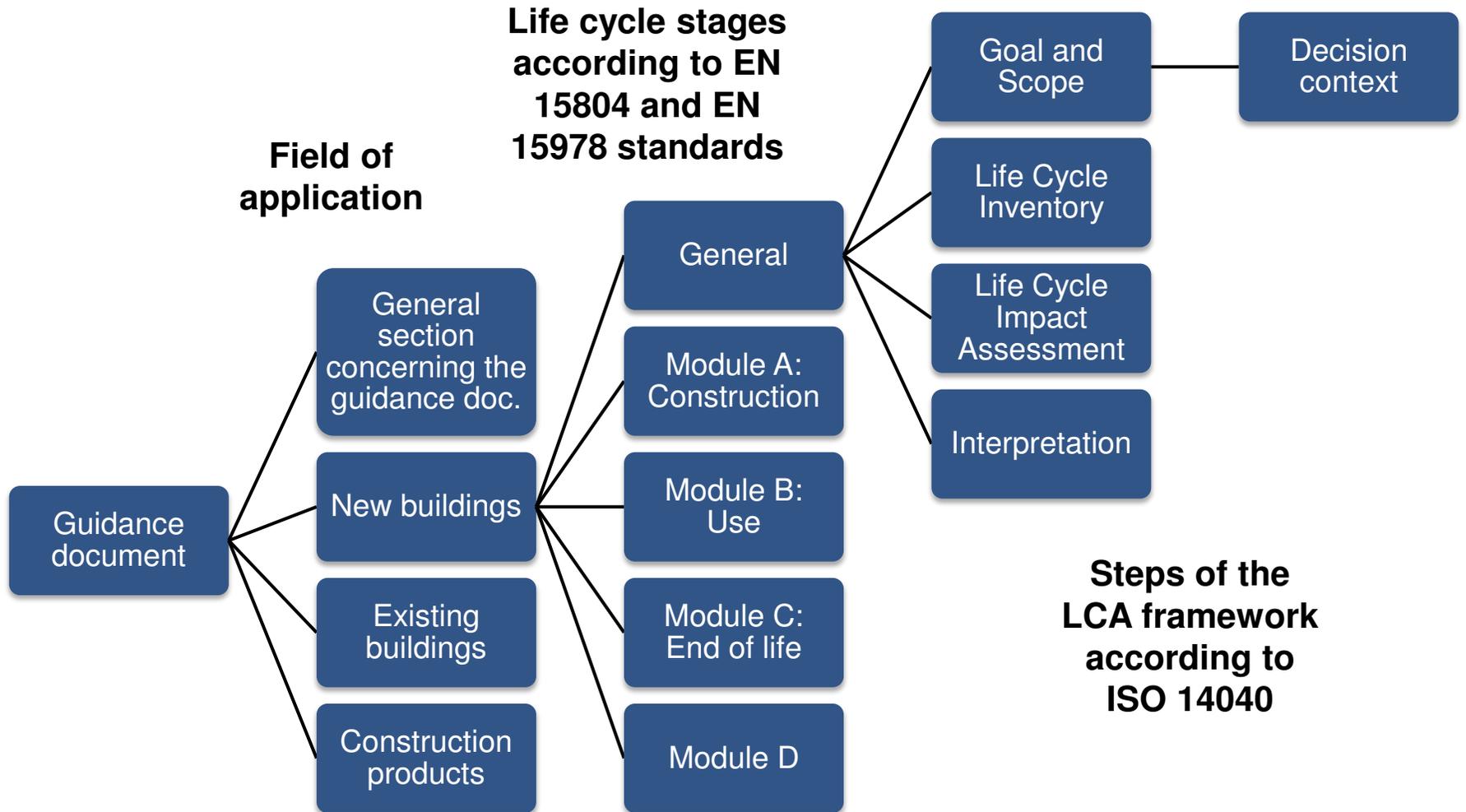
LCA in progressed stage
(e.g. comparative study of alternatives)

LCA in early design stage
(e.g. architectural competitions)

Outcomes of EeBGuide (2)



Structure of the EeBGuide InfoHub



EeBGuide in short

- Guidelines for LCA studies within research projects
- Consistent LCA approach (buildings and products) thanks to LCA experts involvement
- Development of different LCA study types to adapt the requirements to project stages
- Predefined reporting templates
- Training materials / Web application (**InfoHub**)



Source: EeBGuide project, www.eebguide.eu

Some references and web links for more information

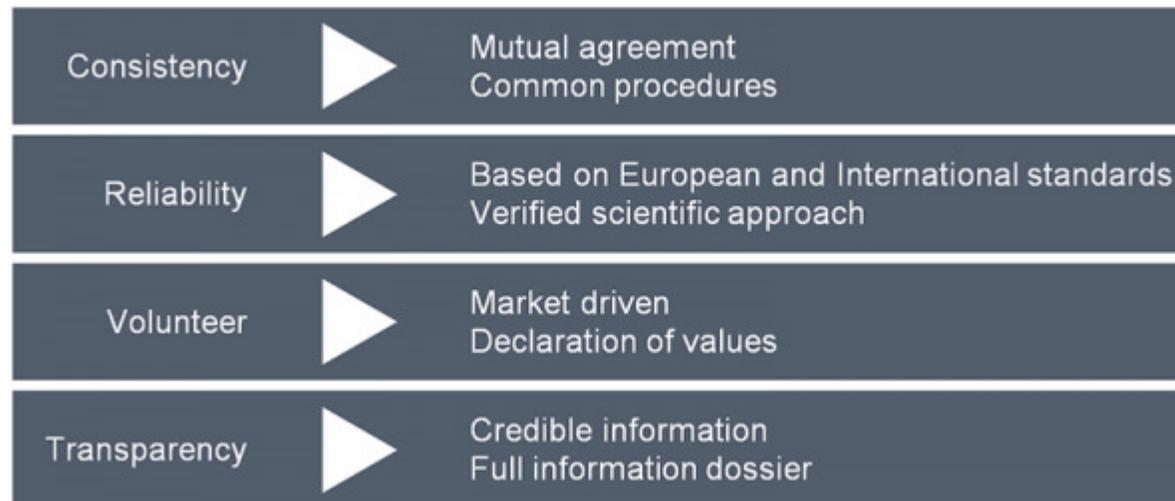
- Web-based InfoHub and full guidance, reporting templates, LCA case studies etc.
www.eebguide.eu
- EeBGuide results will be published as books to be available soon from the Fraunhofer editor
- Discussion article published in 2014 in the International Journal of Life Cycle Assessment
Lasvaux S., Gantner J., Wittstock B., Bazzana M., Schiopu N., Saunders T., Gazulla C., Mundy J-A., Sjöström C., Fullana-i-Palmer P., Barrow-Williams T., Braune A., Anderson J., Lenz K., Takacs T., Hans J., Chevalier J. «Achieving consistency in life cycle assessment within the European construction sector: the role of the EeBGuide» Int J Life Cycle Assess, 19, 1783-1793.



ECO Platform

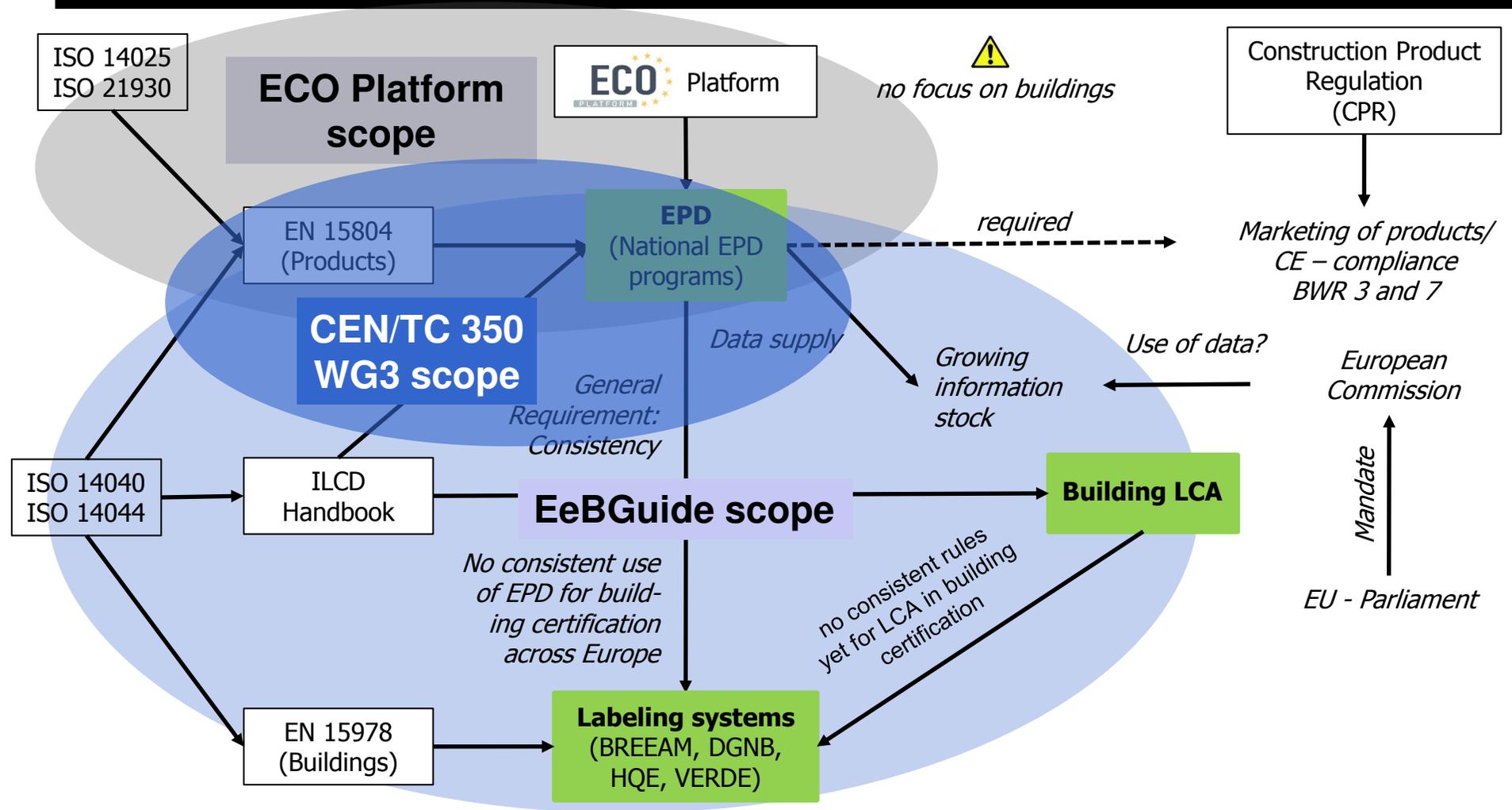


- Association to support the provision of credible and consistent information in form of EPDs for construction products



- Topic discussed at the previous Discussion Forum (DF56) by Eva Schmincke: more information on the LCA forum website and on the website of ECO Platform www.eco-platform.org

Parallel harmonisation activities in Europe: CEN/TC 350 WG3



Legend:

- Involvement of LCA practitioners
- Current link / influence / requirement
- Future link / influence / requirement

CEN/TC 350 Harmonisation activities



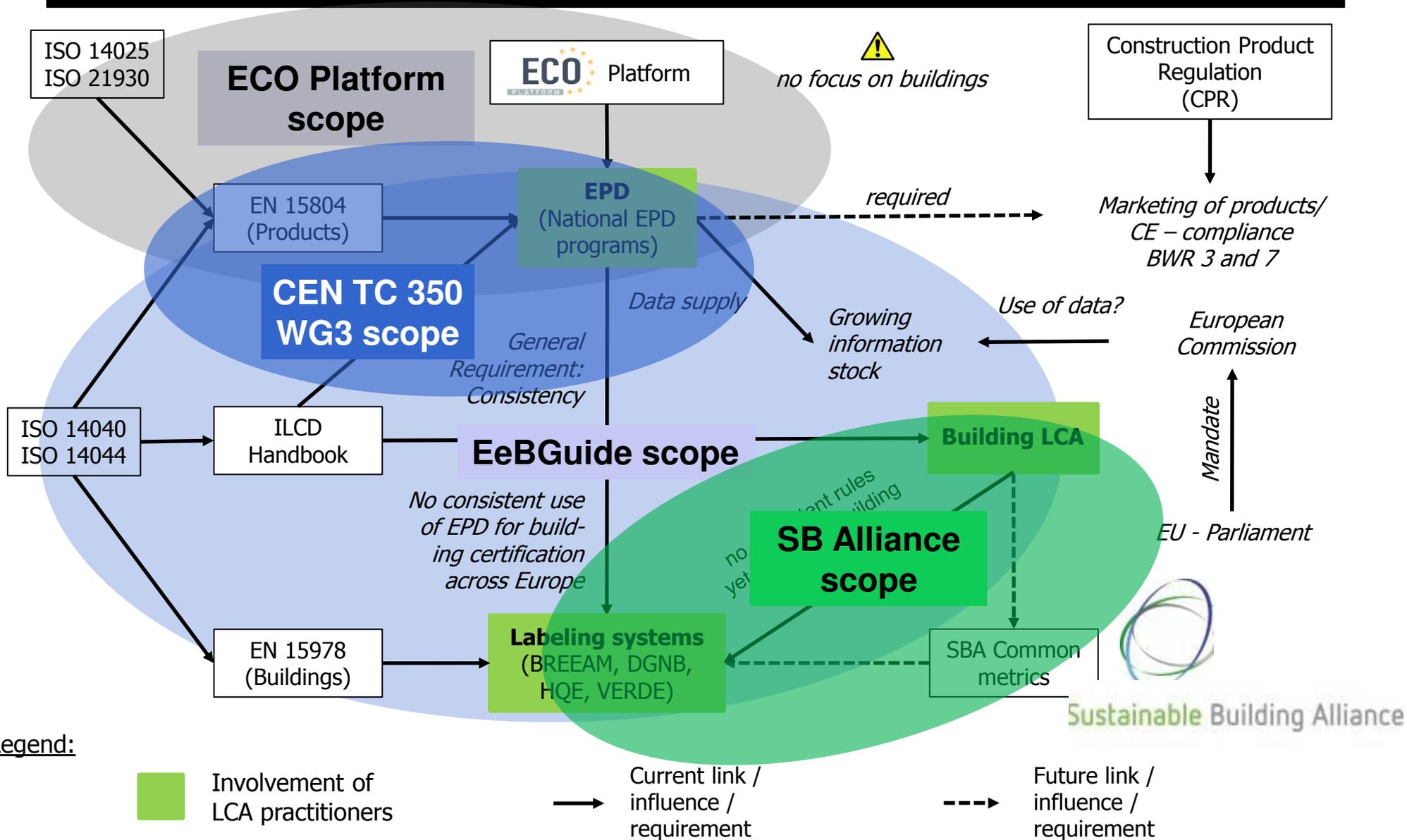
- Mainly under CEN/TC WG3 : Product Level (EPD's , communication formats etc)
 - Harmonisation activities in close link with ECO Platform (WG I technical issues)
 - Seminars to discuss common issues e.g., CEN seminar in June 2013 to discuss implementation issues of EN 15804 by the different product's TC that develop PCR (e.g. TC 175 sawn timber, TC 88 insulation etc.)

- Decision to write a guidance document to help a consistent and harmonise implementation of EN 15804 by product TC (e.g., allocations, scenarios, separation of processes in modules C end of life and D for the benefits and loads beyond the system boundaries, etc.)

- New discussions (on-going) to include new indicators covering toxicity, ecotoxicity, land use, ionizing radiations, particulate matter in addition to the actual one.



Other harmonisation activities: SB Alliance



SB Alliance: harmonisation from labeling systems' perspective

- Piloting SBA Common Metrics
 - Towards international feasibility and comparability of building environmental performance

« a common calculation approach, regarding a set of indicators which are feasible to calculate according to common rules, parameters, elements, building phases and local features. This approach should be integrated in the existing certification schemes to promote comparability worldwide »

www.sballiance.org



Conclusions and outlook



EeBGuide InfoHub

- EeBGuide InfoHub is a basis for LCA in European research projects
- It is also a source for EU harmonisation activities for building environmental assessment tools and labeling

EeBGuide and the other on-going harmonisation activities

- EeBGuide is a source for harmonisation along with other harmonisation activities such as
 - ECO Platform,
 - CEN TC 350
 - SB Alliance
 - (list not exhaustive)

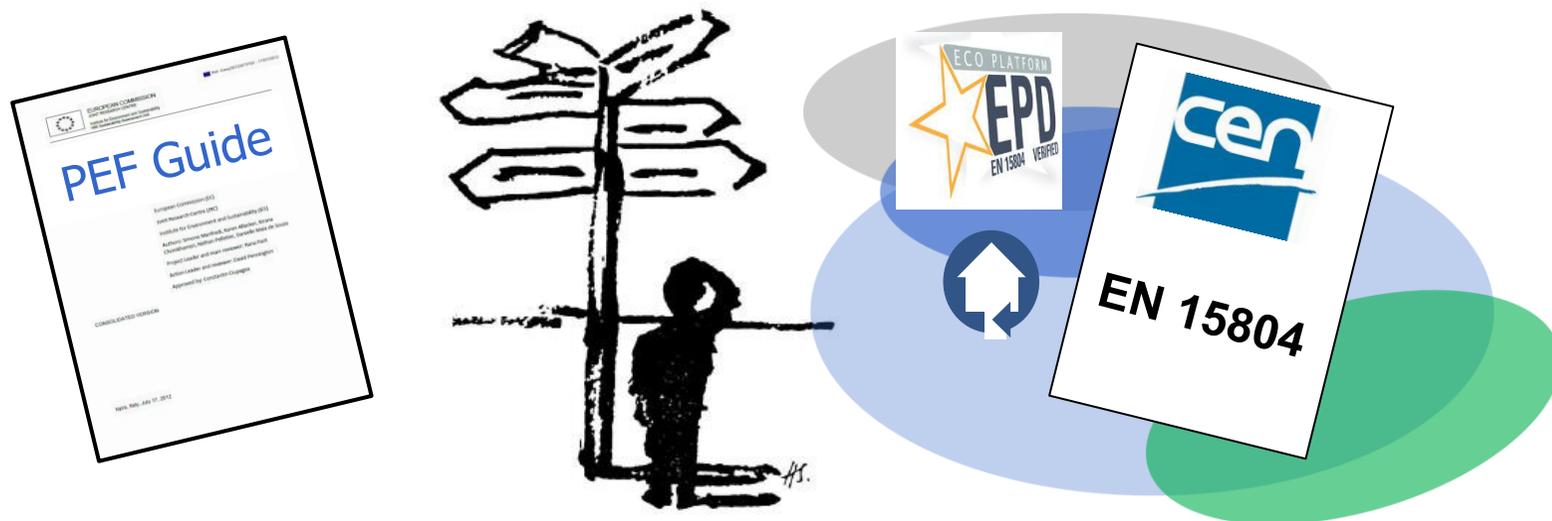


Sustainable Building Alliance

Perspectives: a new way of harmonising LCA in the building sector?

PEF Guide vs. CEN TC 350 standards (EN 15804)

- Diverging rules in several aspects
 - System boundaries
 - Choice of environmental indicators (and models of characterisation)
 - Data quality
 - Review requirements / Verification etc.
- Discussion under way between CEN TC 350 and JRC that develops the PEF Guide, PEF pilot project started in 2014 with construction related products





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Thank you very much for your attention !

Any questions?