

Will you need a PhD to make an EPD according to new standards for sustainable construction?



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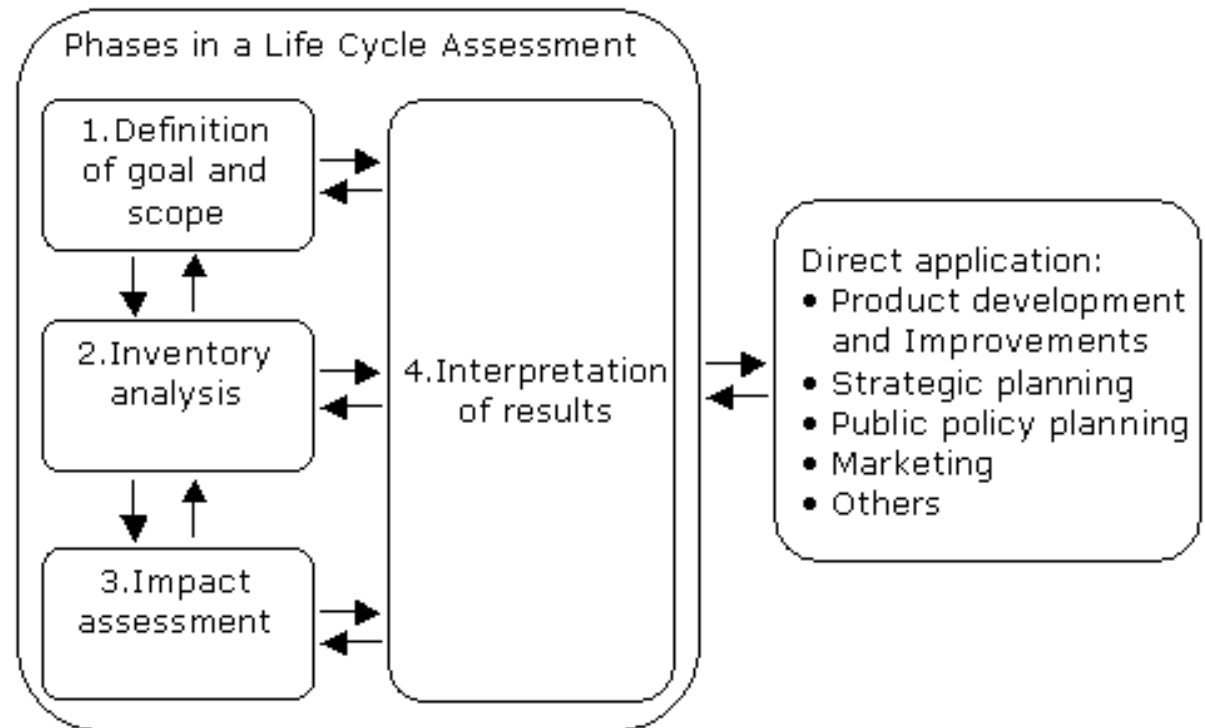
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A. Basics

Life Cycle Assessment (LCA)

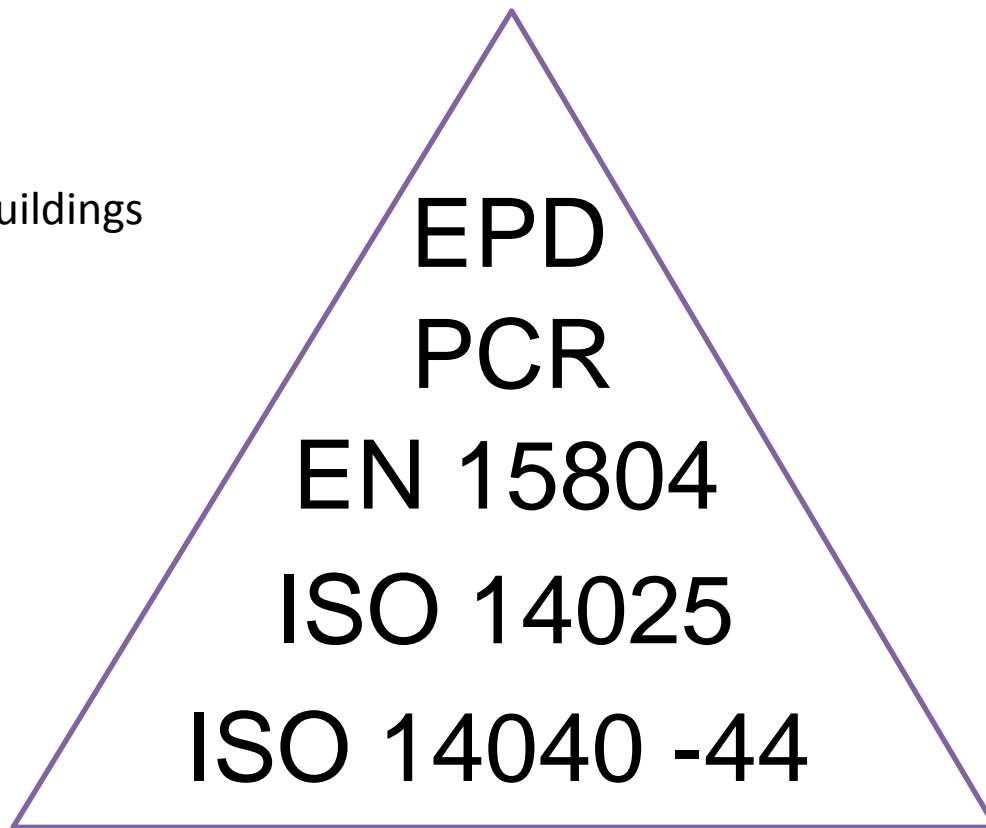
- Cradle to gate
- Cradle to grave
- Cradle to cradle

- Attributional LCA
- Consequential LCA



BUILDING LIFE CYCLE ASESMENT

EN 15978 for buildings

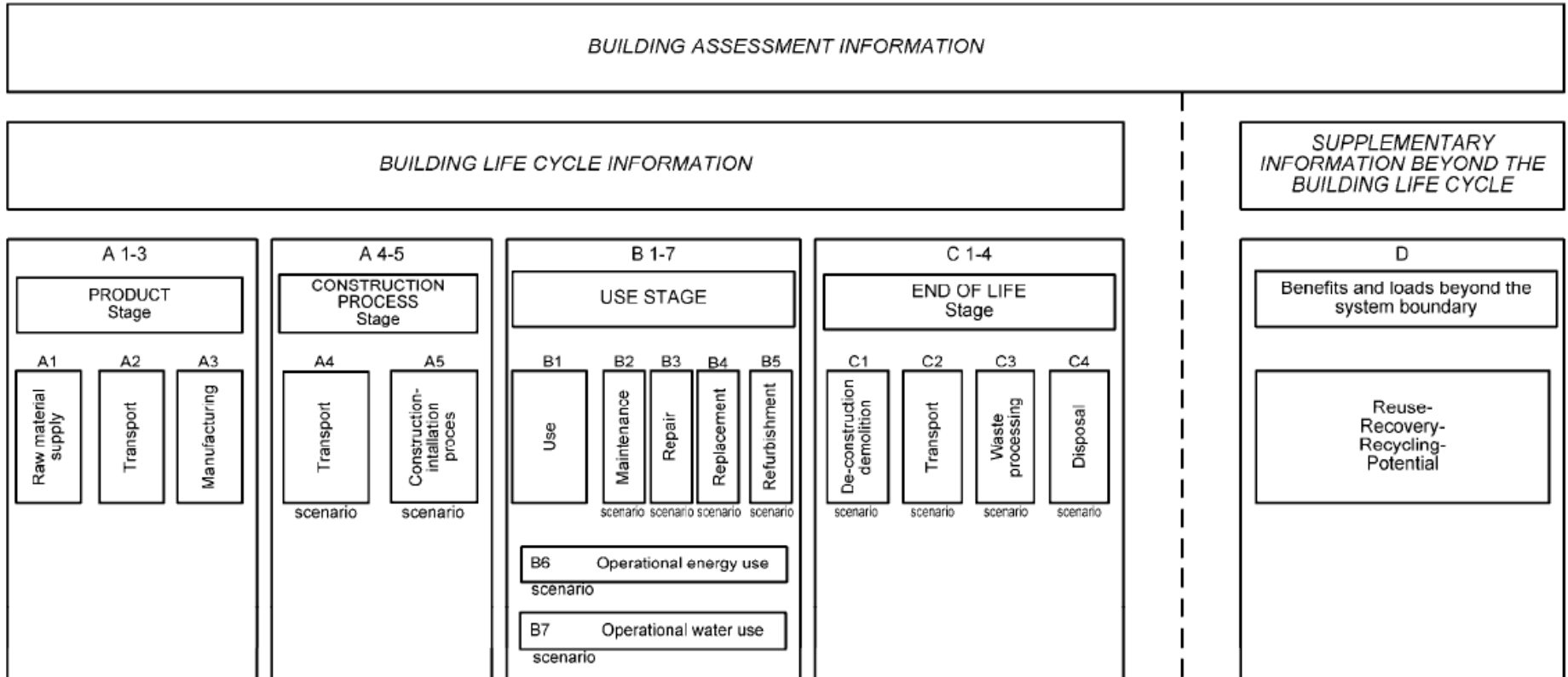


← PEF

← CPR

← GPP

Sustainable buildings (LCA)



Environmental Impacts in EN 15804

- Global warming
- Ozone depletion
- Acidification for soil and water
- Eutrophication (over fertilization of aquatic systems)
- Photochemical ozone creation
- Depletion of abiotic resources-elements
- Depletion of abiotic resources-fossil fuels.

Resource use in EN 15804

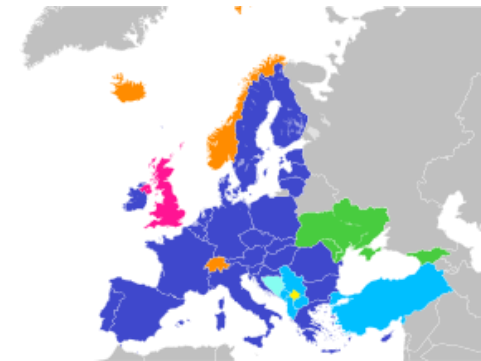
- Use of renewable and non-renewable primary energy used for raw material or energy
- Use of secondary material
- Use of renewable and non-renewable secondary fuels
- Net use of fresh water.

New Impact Categories in EN 15804

- Human toxicity, cancer effects
- Human toxicity, non-cancer effects
- Eco toxicity (freshwater)
- Land use related impacts/ Soil quality
- Particulate matter emissions
- Ionizing radiation, human health

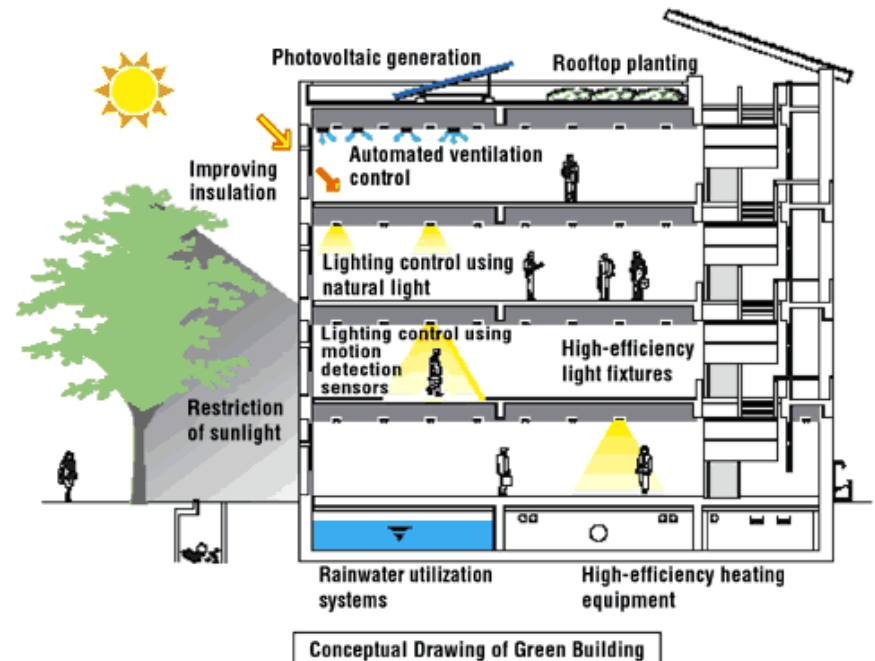
B. Use of EPD:s

- Certification programs
- Legislation
 - CPR
 - Green Procurement
 - PEF
- Marketing
 - The EPD as a marketing tool



The battle of materials

- Concrete - Timber - Steel - Bricks for construction
- Aluminium-Wood for windows
- Rockwool - Polymers - Cellulosa for insulation

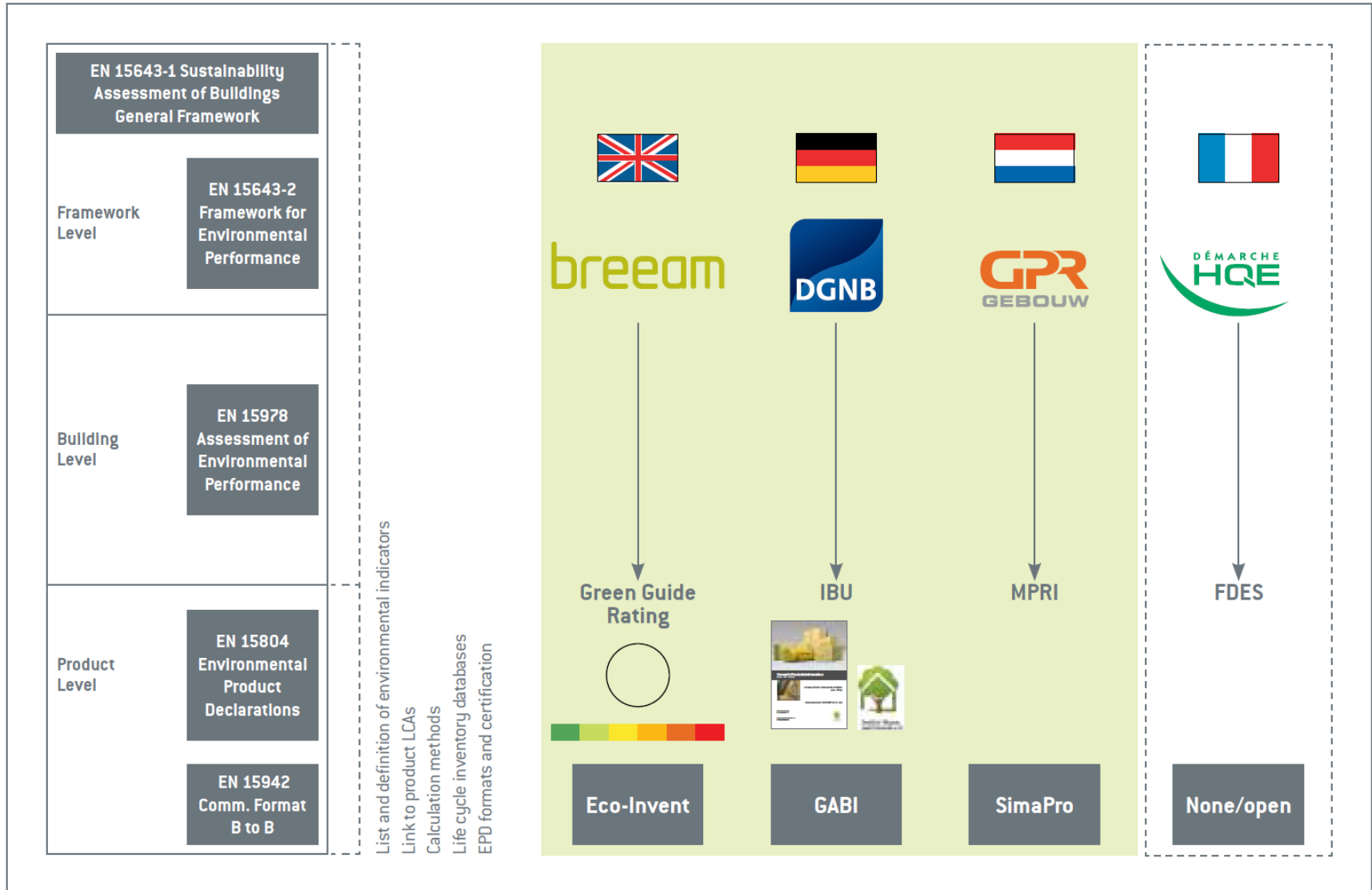


Use Assessments



Choice of materials Choice of supplier

Certification programs



C. Demands on organizations issuing EPD:s

- Staff



- Procedures and systems



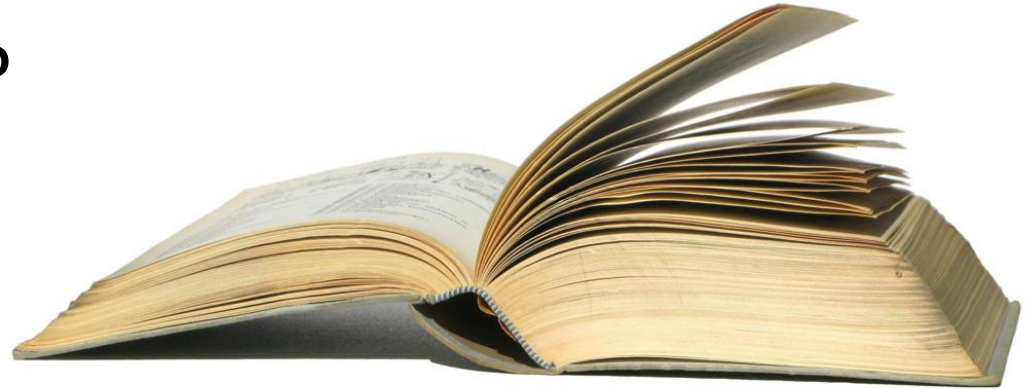
- Ethics



Figure 1. The competence network

D. Conclusion

- Where to start?



- What to do?



Images

- the epd systems
- hattmakarna.se
- Wikipedia
- EU
- Franzéns Mekaniska
- ehylia.se
- amazon.co.uk