

Ceramics

tradition builds a future



Roof Tiles & Bricks

Floor Tiles



Refractories



Refractories

Floor Tiles



Floor Tiles & Bricks



CET Product Category Rules for ceramic tiles



Introduction

- **Product Category Rules (PCR)** establish a set of specific rules and requirements for developing **Environmental Product Declarations (EPD)** of products
- **EPD:** Communicate and quantify the potential environmental impacts of a product(s) throughout its life cycle
- **EPDs are voluntary**



Why using EPDs?

- Voluntary actions to declare the environmental impacts of products
- In some cases, the market is requesting EPDs
- Input for Green Building Rating Schemes

EPDs



Green Building Rating Schemes

PCR for ceramic tiles

- Lack of a harmonized PCRs for clay building products was identified in 2012
- **CET PCR is being developed in accordance with EN 15804 developed in CEN/TC 350**
- **CEN/TC 350 “Sustainability of construction works”** is an European horizontal standards for sustainability assessment of construction works in terms of:
 - Environmental performance
 - Social performance
 - Economic performance
- **Future EPDs of ceramic tiles developed at national level will be based on a common LCA approach and similar assumptions**



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

PCR for ceramic tiles

- **The PCR is being developed by the CET Environment WG**
- First meeting: 31 October 2012
- PCR is going to be presented at a conference on construction on 26 November in Brussels



When tradition builds a future

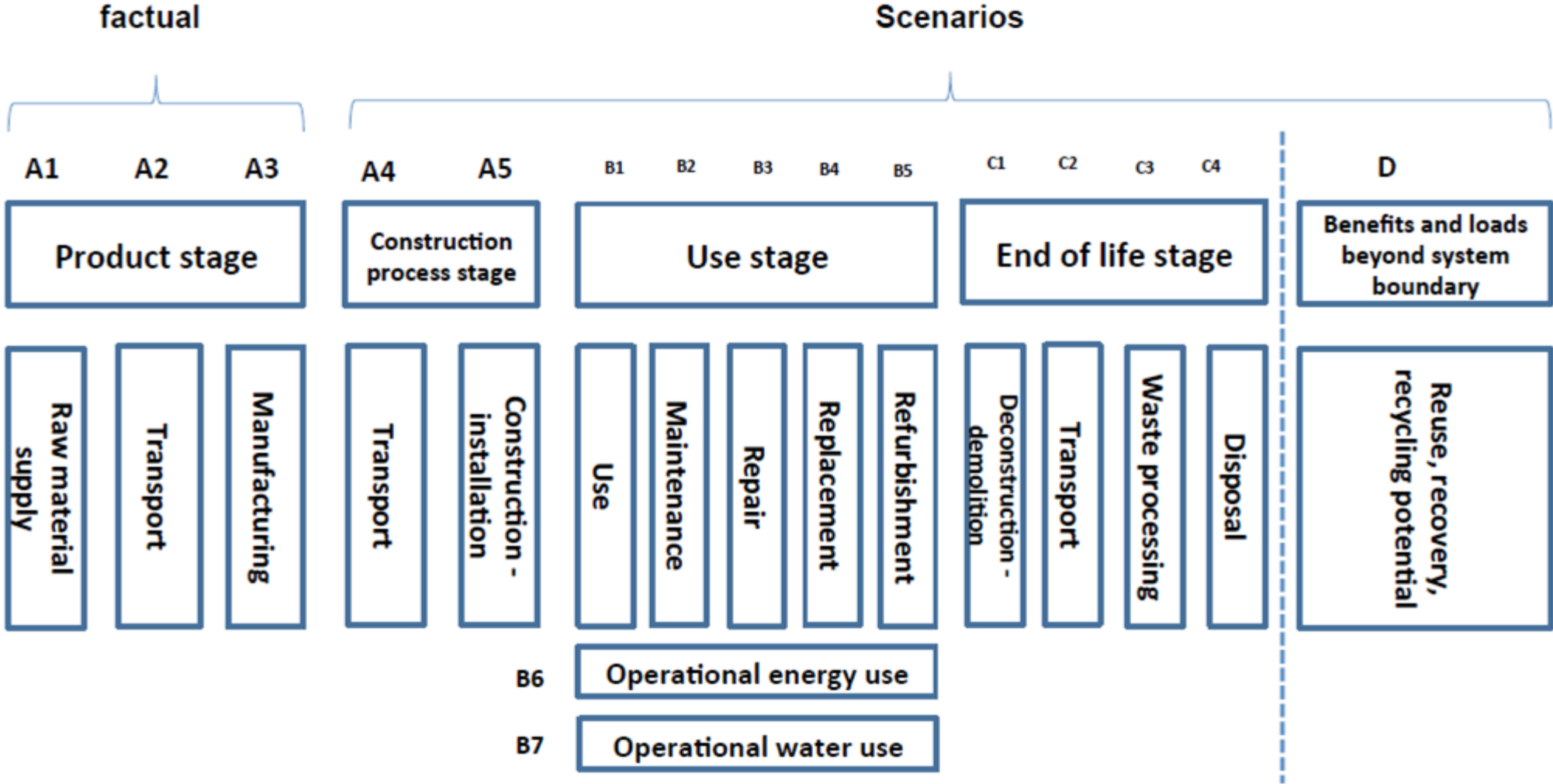
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PCR for ceramic tiles – General points

- PCR in accordance with the EN 15804
- Reference service life: 50 years
- **Default scenarios** (construction, use and end-of-life stages)
- CET recommends the use of **module D** (module where it can be declared the credits for recycling)



PCR for ceramic tiles – system boundaries



PCR for ceramic tiles – default scenarios

Transport to the building site scenario (module A4):

- National, Europe and international average distances to calculate default scenarios
- Truck and transoceanic freight ship



PCR for ceramic tiles – default scenarios

Installation into the building scenario (module A5):

- Ancillary materials considered (mortar, water, dispersion glue, polysulfide)
- Packaging waste scenarios, including end-of-life scenarios

Use stage scenario (module B1):

- Generates very low environmental impacts and therefore neglected

Maintenance scenario (module B2):

- Scenario for maintaining ceramic floor/wall tiles (detergent and water)

PCR for ceramic tiles – default scenarios

End-of-life scenario (module C):

1. National scenarios for the end-of-life stage
 2. European default end-of-life scenario
- Examples of national end-of-life scenarios (Germany and UK) used in the PCR



PCR for ceramic tiles – module D

Module D: Example

- After the demolition stage, ceramic tiles are crushed (recycling process) towards raw material for another application: roadwork and concrete aggregates

