



# *From PCR to EPD*

*Jean-Pierre Jacobs*

# PCR for Lifts



# PCR for Lifts: global reference

**The ELA PCR for Lifts Working Group with the input from (alphabetically ordered):**

- Blain Hydraulics
  - EFESME
  - ELCA
  - GMV S.p.A.
  - Hydroware AB
  - KONE
  - Orona
  - OSMA Aufzüge
  - Otis Elevator Company
  - Schindler Elevators Ltd.
  - Schmidt+Sohn Aufzüge
  - ThyssenKrupp Elevator
  - VFA-Interlift
  - WITTUR Holding GmbH
- Carbotech AG, Dr. Ana Maria Lorente Lafuente, Instituto Tecnológico de Aragón, IQC GmbH, Technische Universität Berlin



# PCR for Lifts

The PCR can be used for the issuing of EPD's of:

- New lifts:
  - Specific lift
  - Generic lift
- Modernized lifts
  - Repair or modernization interventions have been excluded from the system boundaries
  - They shall be considered as new incomplete lifts



# PCR for Lifts

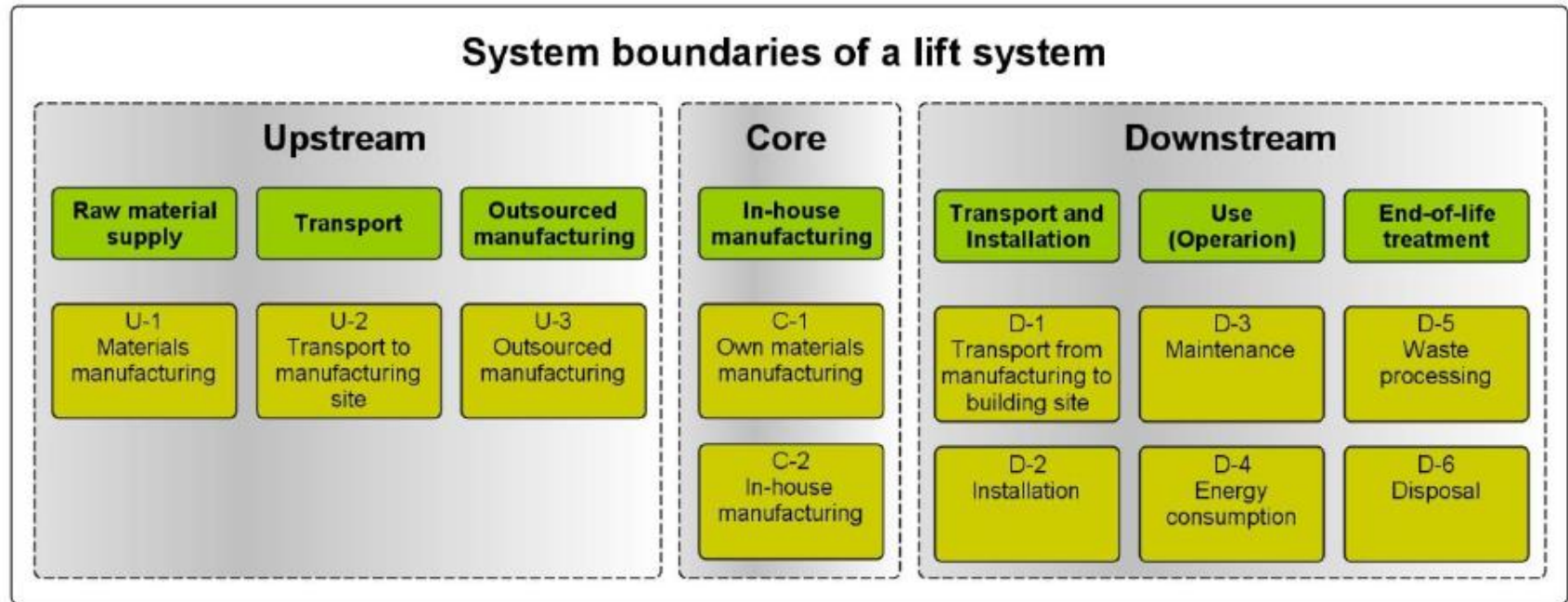


Figure 6-1: General system boundaries

# Product Environmental Platform (PEP) for Lifts

Life Cycle Analysis and Environmental Performance Declarations for Lifts: the way forward

**ELA Conference 2016 - Rome, April 18 2016**

**Martin Blumberg**, Vice President  
Sustainable Building & Construction

thinkstep AG

## Drivers

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Increasing interest in energy efficiency, health & safety and environmental impact of buildings

- **Regulation** (Energy Performance of Buildings Directive (EPBD); EU Ecodesign Directive, EU Lifts Directive)
- **Green Building Rating Schemes** (DGNB, LEED, BREEAM)
- **EPD** (Environmental Product Declarations for building products)

## The Need

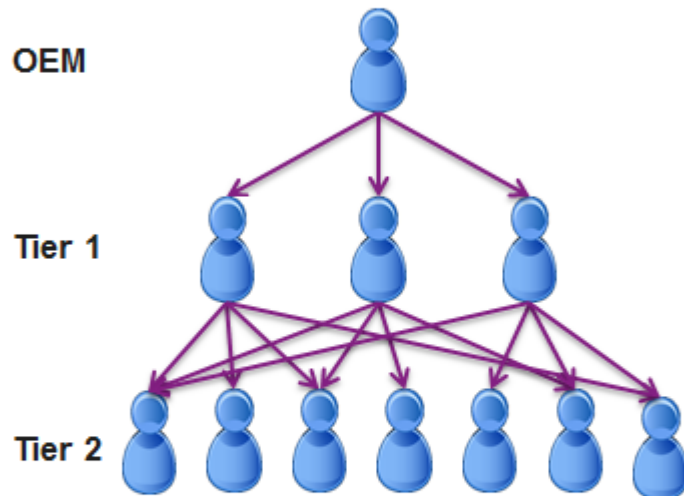
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Empower the lift industry (lift manufacturers, component suppliers) to satisfy increasing market demand for life cycle-based energy and environmental product information

- **Scalable, web-based LCI dB for the lift industry**
- **Easy LCA-assessment of complete lift models and/or single lift components in compliance with the PCR for Lifts (published in October 2015)**
- **Cost effective approach towards EPDs**
- **Easy identification of potential substance risks of used materials**

*Provide non-competitive services to the Lift and Lift Component industry that lowers individual company investments into life cycle based product environmental initiatives (as requested by the PCR for Lifts Working Group in 2014)*





**If an OEM wants to conduct an LCA for a specific lift model and/or plans to publish an EPD he needs information on..**

- The material composition
- The mass
- And LCA results for the components supplier's

**If an OEM wants to screen for relevant compliance issues he needs...**

- At least the material composition
- The mass

***This information is usually unknown to the OEM and needs to be collected from his Tier 1 supplier. The latter must probably engage with Tier 2.***



## www.pep4lifts.com

1. **Internet-based access to a Database** for manufacturers of lifts and lift components, containing up-to-date life cycle inventory data for raw materials, intermediates and manufacturing processes enabling cradle to grave life cycle analysis for any kind of lift products and lift components.
2. **Easy calculation of LCAs** for complete lift models and/or individual lift components (based on specific Bill of Materials (BOM)) in compliance with relevant norms and standards (e.g. ISO 14040/44, PCR for Lifts) in a secure/confidential environment.
3. **Automatic generation of product specific LCA-reports** as the basis for the development of Environmental Product Declarations (EPD) in compliance with ISO 14025, EN 15804.
4. **Material Compliance Application** (optional).

———— June 2016 – September 2016 —————> ● ————— October 2016 —————>

## Phase 1: PEP Set Up & Pilot

## Phase 2: PEP Roll Out

- Set up secure **pep4lifts server**.
- Set up and upload **LCI Database** based on the requirements of the PCR for Lifts (incl. raw materials, energy supply used in the manufacturing of lifts, basic manufacturing processes, End Of Life processes).
- Provide an easy to use **LCA-Software** to manufacturers of Lifts and Lift components (Pilot Users).
- Pilot User **Kick Off Training and First Level Support** incl. assistance in regards to the Database and Software use.
- Specify requirements for **sharing LCA results** throughout the Supply Chain.
- Specify requirements against a **material compliance** application as part of pep4lifts.com.
- Set up **www.pep4lifts.com** as web-based home for all designated PEP services.

# Composition of the PCR for Lifts follow-up Task Force

- **Paula Casares, Convenor (ES)**
- Etienne Brault (FR)
- Claudio Donghi (IT)
- Jan König (DE)
- Carine Le Callonnec (FR)
- Miguel Medrano (ES)
- Andres Ruiz (ES)
- Urs Thumm (CH)
- Luciano Faletto (IT), Guest

