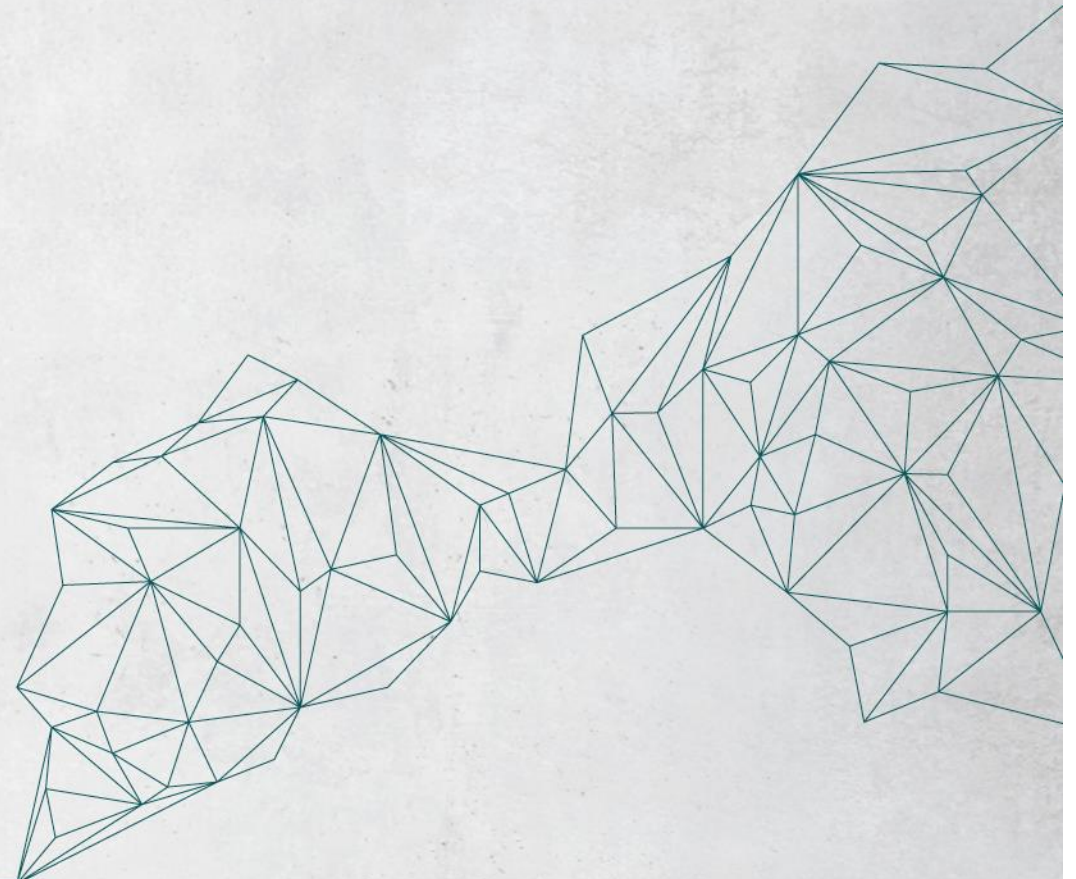


Hall 4A

Chillventa Specialist Forums 2024 Chillventa Fachforen 2024

**CONNECTING
EXPERTS.**



Rue du Luxembourg 22-24, 1000 Brussels | Belgium

Circular Economy and Consequences für Ventilation and Fan Industry

Claus Händel, EVIA Technical Secretary



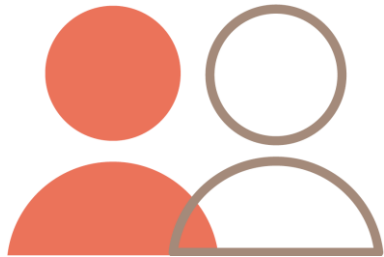
secretariat@evia.eu

Rue du Luxembourg 22-24, 1000 Brussels | Belgium

1. Introduction to EVIA

Who we are

43 direct
members



37 companies &
6 associations



45 k Europeans
employed



Over **€ 7 B**
annual turnover



The voice of the **ventilation industry** in Europe

Our vision

EVIA promotes **highly energy efficient ventilation**

applications across Europe.

Ventilation is key to achieving Europe's **energy efficiency & sustainability objectives**.

Heat recovery in ventilation systems, for instance, can result in avoiding large heat losses in buildings and therefore contribute to the overall energy performance.

Contributing to the EU energy efficiency targets goes hand in hand with promoting ventilation for the people; we spend 90 % of our time indoors, which means that the **air quality has an impact on our productivity, wellbeing, and comfort**.

Fresh and good **indoor environmental quality (IEQ)** is a critical element of comfort and contributes to keeping people healthy in buildings.

Energy efficiency and IEQ objectives are fostered and optimised by **connectivity of appliances** through the smart grid.

Demand-side flexibility, through connected smart appliances, enhances energy savings, lead to lower costs for consumers, and enable technologies that provide the right **air quality** at the right time **wherever it is needed**.

Indoor Air Quality (IAQ) to foster comfort, wellbeing, and health of Europeans

Regulatory framework EPBD and ESPR

Regulation Framework for Environment Product Declaration

Environment Product Declarations (EPD) for products (ventilation, fans, etc.) will be an important element of the

- EU Sustainable Product Initiative (SPI)
- in the future revision of Eco-design for Sustainable Products (ESPR) on product level
- the upcoming Life Cycle Analysis (LCA) as part of the Energy Performance of Buildings Directive (EPBD) on building level.
- Construction Product Regulation (CPR)

- PEF product environmental footprints – methods
- EU Green Public Procurement criteria for buildings

- National sustainable Buildings certification and regulation

EN 15804 - Types of EPD with respect to life cycle stages covered and life cycle stages and modules for the construction works assesment

CONSTRUCTION WORKS ASSESMENT INFORMATION																	SUPPLEMENTARY	
Cradle to gate with modules C1-C4 and module D	Mand.	Mand.	Mand.										Mand.	Mand.	Mand.	Mand.	Mandatory	
Cradle to gate with options,modules C1-C4 and module D	Mand.	Mand.	Mand.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.		Mand.	Mand.	Mand.	Mand.	Mandatory	
Cradle to grave and module D	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.	Mand.		Mand.	Mand.	Mand.	Mand.	Mandatory	
Cradle to gate ²	Mand.	Mand.	Mand.															
Cradle to gate with options ²	Mand.	Mand.	Mand.	Opt.	Opt.													

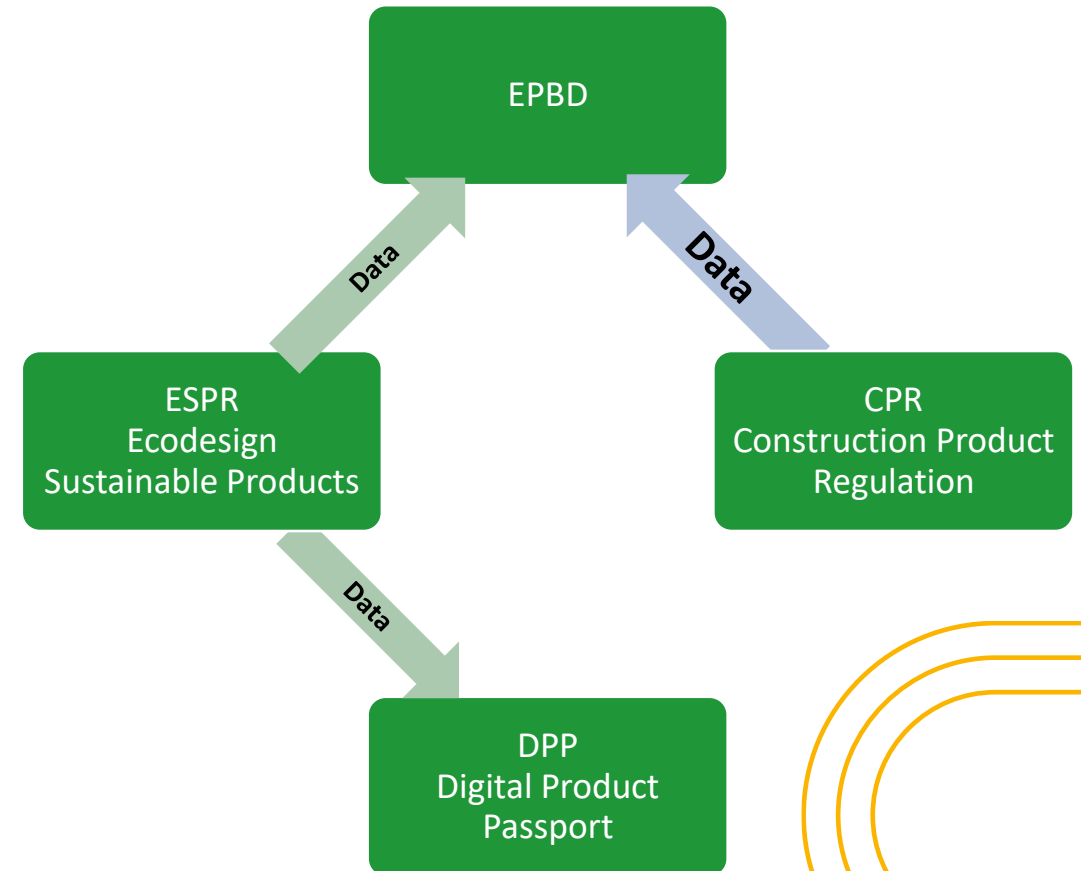
Product Declaration and Data Source – Ventilation System in Buildings

ESPR - Ecodesign for Sustainable Products

- Motor
- Fan
- Ventilation Unit
- Terminals, Fan-Coil ...
- Ductwork and distribution ?

CPR - Construction Product Regulation

- Ductwork and distribution ?
- Fire and thermal insulation ...



EU 2024/1781 ESPR states (14)

Directive (EU) 2024/1275 (EPBD) requires Member States to set minimum energy performance requirements for building elements that form part of the building envelope and system requirements in respect of overall energy performance, ...

It is consistent with the objectives of this Regulation that those minimum energy performance requirements may in certain circumstances limit the installation of energy-related products which comply with this Regulation and its delegated acts, **provided that such requirements do not constitute an unjustifiable market barrier.**

EU 2024/1275 EPDB states (16)

When setting energy performance requirements for technical building systems, **Member States should use, where available and appropriate, harmonised instruments**, in particular testing and calculation methods and energy efficiency classes developed under measures implementing Directive 2009/125/EC and Regulation (EU) 2017/1369 of the European Parliament and of the Council (14), with a view to ensuring consistency with related initiatives and **minimise**, to the extent possible, **potential fragmentation of the market**.

EU 2024/1275 EPBD states Annex 1

Where product-specific regulations for energy-related products adopted under Directive 2009/125/EC include specific product information requirements for the purpose of calculating energy performance and life-cycle GWP under this Directive, **national calculation methods shall not require additional information.**

FAQ on ESPR Q 15

15. How will you ensure coherence of parallel product regulations (for vehicles, construction materials, toys, etc.) with the ESPR in terms of requirements?

With regard to construction products, the revised Construction Products Regulation will be in principle the main tool for addressing the sustainability of construction products.

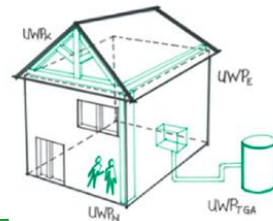
But construction products also fall within the scope of the ESPR, which will be able to function as a safety net and allow setting requirements in case the revised Construction Product Regulation does not achieve the intended results.

However, there are basically two exemptions from this rule: energy-related products which are also construction products (e.g. heaters, boilers, heat pumps, or ventilating systems) will be regulated **primarily under the ESPR, in continuation of the practice under the Ecodesign Directive, while the revised Construction Products Regulation may complement this by regulating other aspects of these products, especially safety. Similarly, the ESPR will have priority for the setting of sustainability requirements for construction products that are intermediate products, ...**

Data sets in the Design and Installation timeframe

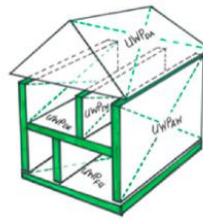


1
Building Systems



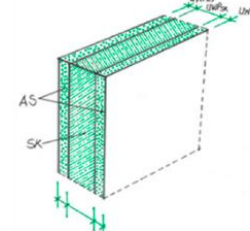
each consisting of a set of function systems

2
Function Systems



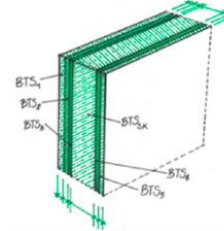
each consisting of a set of element systems

3
Element Systems

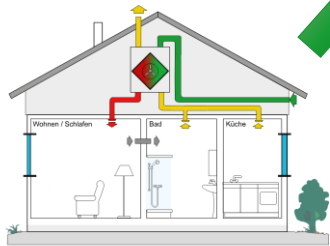


each consisting of a set of component layers

4
Component Layers

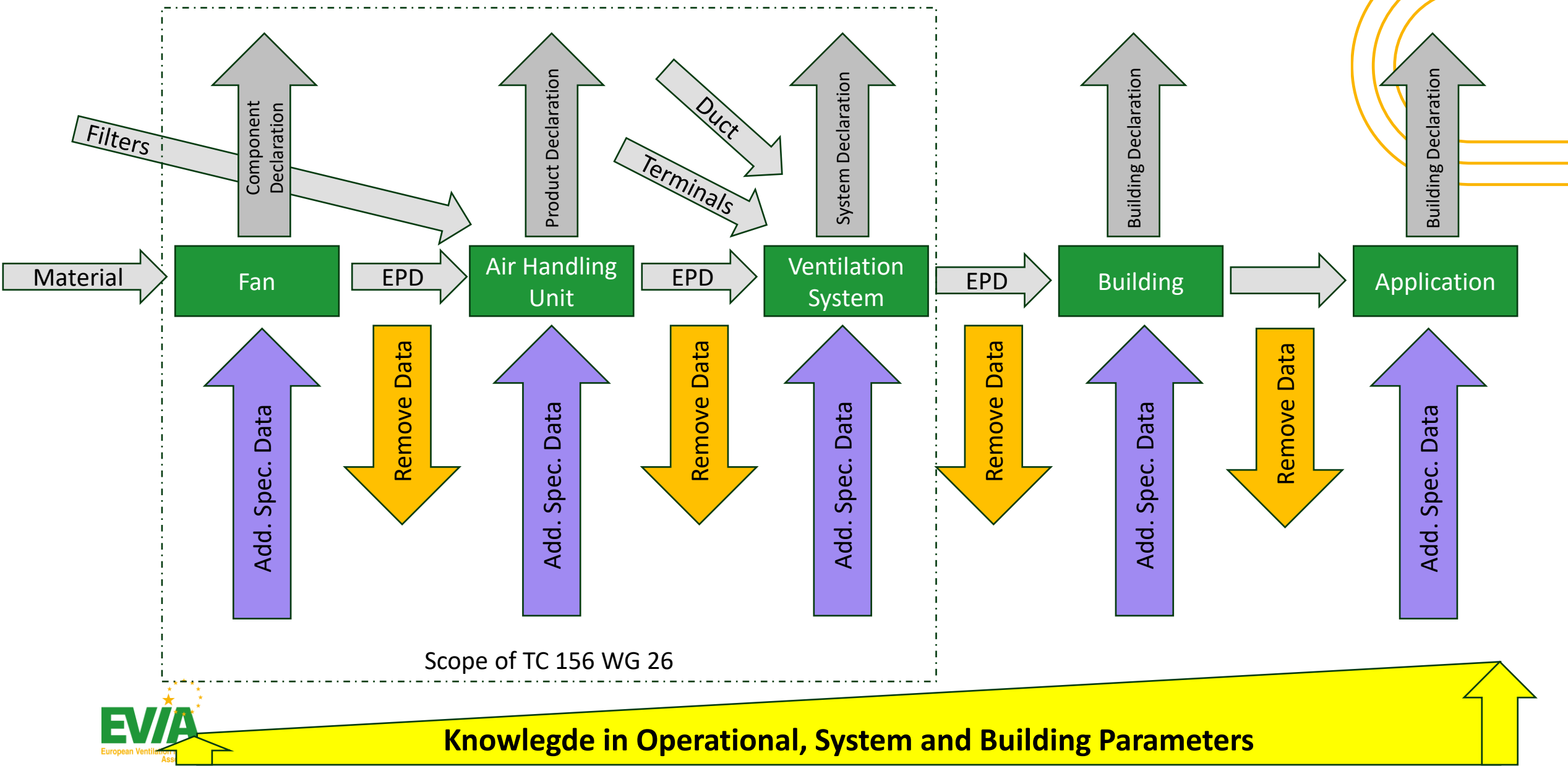


each consisting of material(s)



Possible correlation of ventilation products

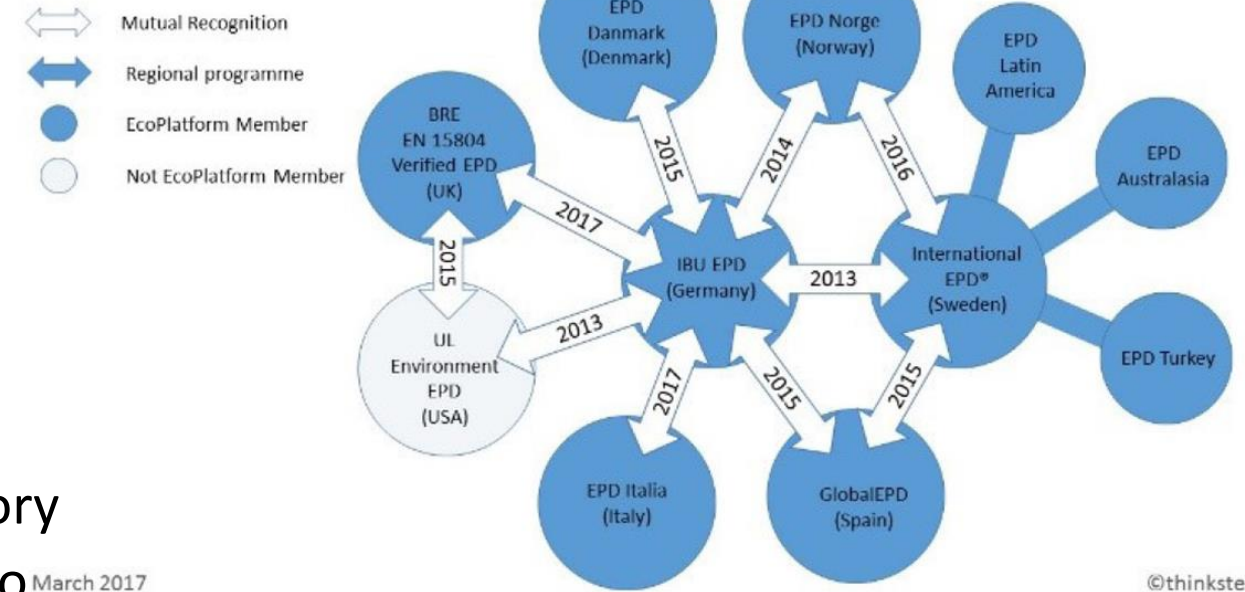
Product Declaration form Component to System



EPD's – Versions, mutual recognition and comparability

- EN 15804 might be the base
- Recognition agreements should ensure transferability to different markets
- ASBP (British Building Sustainability Association) calls for mandatory EPDs for public buildings from 2022 for UK
- Implementation of EPDs in BIM models is already in preparation
- In France, EPDs are soon already mandatory
- In Germany public funding in GEG refers to Qualitätssiegel Nachhaltiges Gebäude (QNG)
- Does mutual agreement in different systems work work?

GUIDE TO EN 15804 EPD PROGRAMMES:
MUTUAL RECOGNITION



Datasets - Example Ökobaudat

ÖKOBAUDAT distinguishes between the following data set types ("subtypes"):- specific dataset

- **manufacturer (company) specific dataset** for a concrete product of a plant.
- **average dataset** - average datasets of industrial associations, several companies, several plants or several products (i.e. based on industrial production data of companies)
- **representative dataset** - datasets that are representative for a country / region
- **template dataset** - non-specific datasets for specific products, based on a "template EPD"
- **generic dataset** - generic datasets according to DIN EN 15804 as well as other datasets not modelled on the basis of industry data (e.g. based on literature, expert knowledge, etc.).

https://www.oekobaudat.de/no_cache/datenbank/suche.html

Datenbanksuche

ÖKOBAUDAT gemäß EN 15804+A1 ÖKOBAUDAT gemäß EN 15804+A2 zusätzliche Daten

Diese ÖKOBAUDAT-Datensätze (aktuelle Version: 2021-II vom 25.06.2021) sind konform zur DIN EN 15804+A1 und auf Basis von **GaBi-Hintergrunddaten** berechnet. Die EPD-Datensätze erfüllen die Anforderungen an die „Grundsätze zur Aufnahme von Ökobilanzdaten in die ÖKOBAUDAT“.

Akzeptierte EPD-Programmbetreiber können laufend Datensätze an die ÖKOBAUDAT liefern. Ein neues ÖKOBAUDAT Release erfolgt ca. einmal im Jahr mit dem Update der generischen Datensätze. Laufend vorgenommene geringfügige Ergänzungen oder Korrekturen werden mit Datum in einer Korrekturliste dokumentiert.

ÖKOBAUDAT-Datensätze gemäß EN 15804+A1 werden im Rahmen des Bewertungssystems Nachhaltiges Bauen (BNB) als verbindliche Datenbasis adressiert.

Datensätze (Gesamtanzahl: 8 von 1096) (Seite 1 von 1)

Kategorienbrowser anzeigen Filter zurücksetzen

Name	Verfügb. Sprachen	Kategorie	Land / Region	Gültig bis	Datensatztyp	Eigentümer	
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Lüfter dezentral (Wand & Decke) 60 m³/h	en de	8.2.01 Gebäudetechnik / Klimatisierung und Lüftung / Lüftungsanlagen	DE	2022	generic dataset	thinkstep	
Lüfter dezentral mit WRG (Wand & Decke) 60 m³/h	en de	8.2.01 Gebäudetechnik / Klimatisierung und Lüftung / Lüftungsanlagen	DE	2022	generic dataset	thinkstep	
Lüfter zentral 10000 m³/h	en de	8.2.01 Gebäudetechnik / Klimatisierung und Lüftung / Lüftungsanlagen	DE	2022	generic dataset	thinkstep	
Lüfter zentral 30000 m³/h	en de	8.2.01 Gebäudetechnik / Klimatisierung und Lüftung / Lüftungsanlagen	DE	2022	generic dataset	thinkstep	
Lüfter zentral 5000 m³/h	en de	8.2.01 Gebäudetechnik / Klimatisierung und Lüftung / Lüftungsanlagen	DE	2022	generic dataset	thinkstep	

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Consequences for regulation and performance data

- When developing or updating regulation and related standards for technical building systems (fans, ventilation, etc.):
 - Ensure, that the data provided by ErP or EDSP fulfil the needs of EPBD and possible other regulation.
 - Ensure that EPBD requirements and calculations are based on data delivered by ErP and ESPR.
 - Declaration based on CPR may provide only additional data with respect to fire and smoke aspects.
 - Member states are allowed to specify minimum performance of buildings individual (EPSR Article 3) but shall not limit free movement of products and components.
 - At each stage of products for TBS:
Comparability needs to be ensured: Cradle to Grave



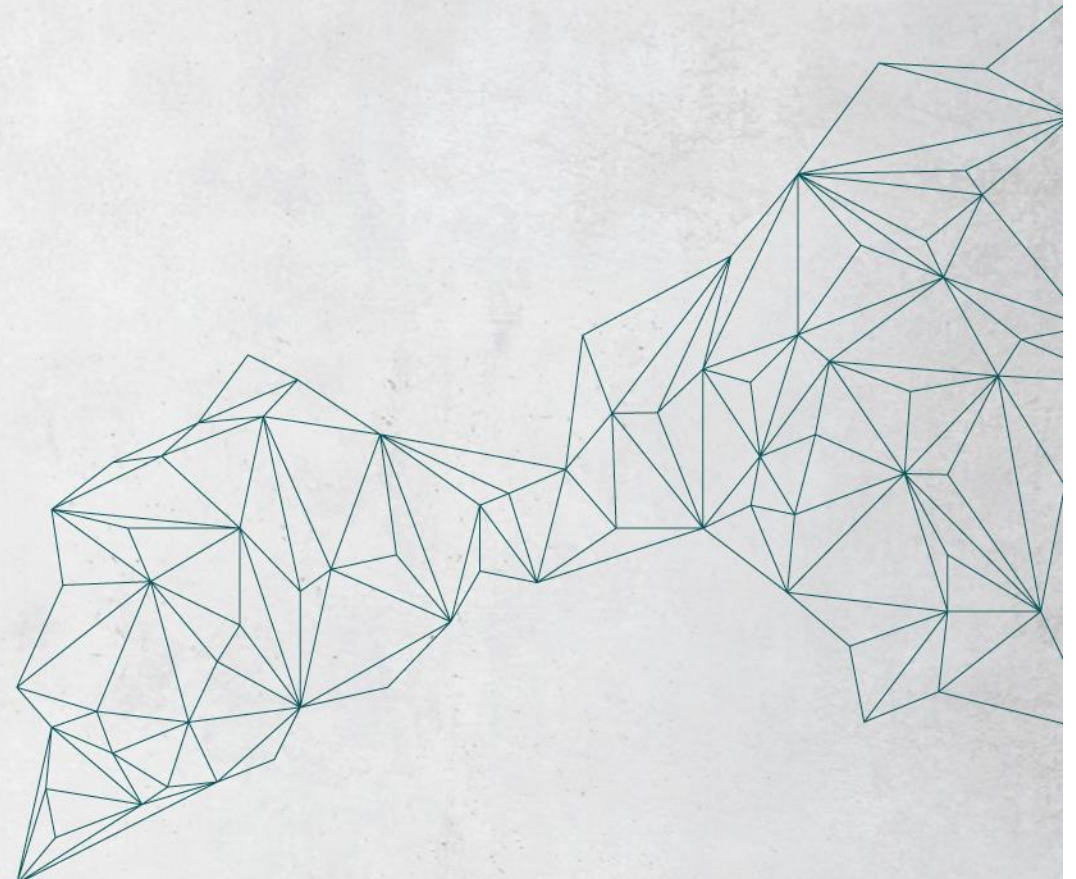
EVIA Fan Forum Program:

- 14:15 Fans energy Efficiency: The latest Developments in the EU
Ronald Piers de Raveschoot DG Ener
- 14:30 Fan Ecodesign 2024/1834 New requirements, interpretation and what next?
Geoff Lockwood, ebm-pabst, Chair of EVIA Fans WG
- 14:45 The prospects for the life-cycle sustainability of fans and ventilation units under the EU's Ecodesign Regulation
Alexander Rowlatt, Mitsubishi Electric Chair of EVIA PEF/LCA group
- 15:00 PEFCR ventilation units and fans
Wouter van Kootwijk, Ecomatters

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