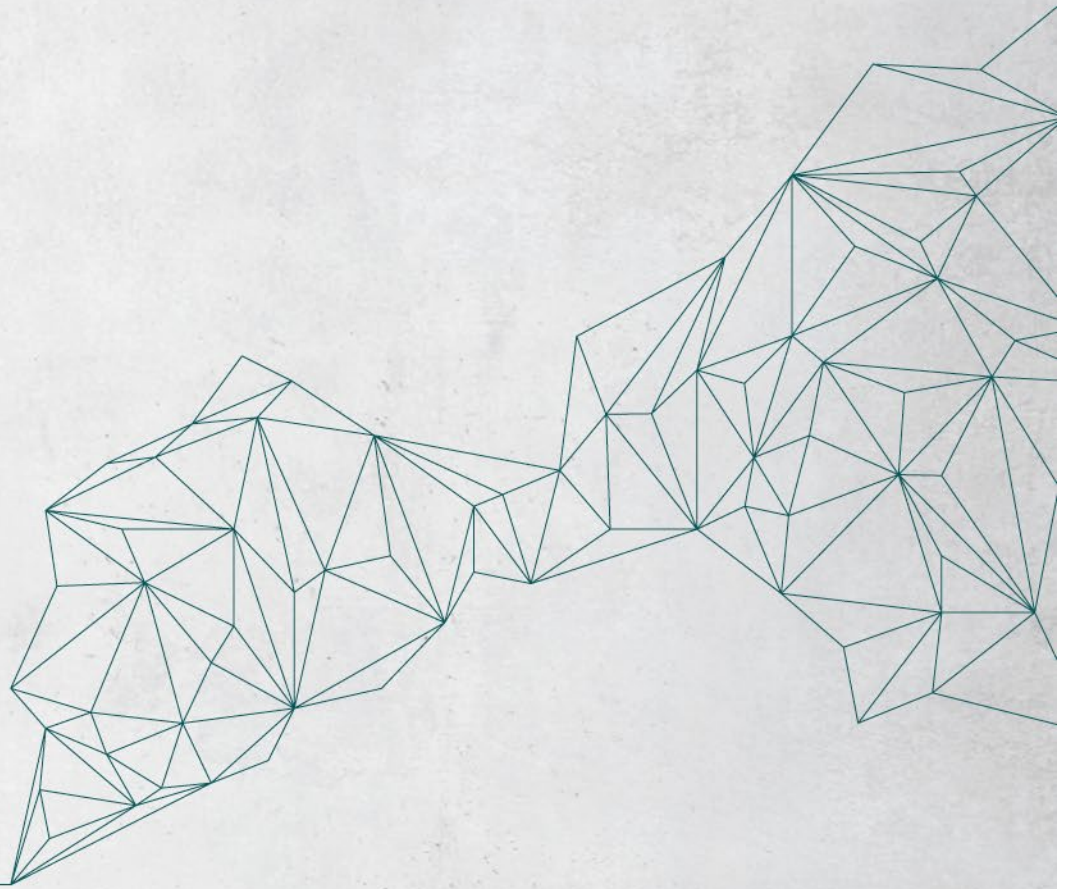
Hall 4A

Chillventa Specialist Forums 2022
Chillventa Fachforen 2022

CONNECTING
EXPERTS.



European Policy on Buildings, Ventilation and Fans

- **Introduction of EVIA**
- **Current Regulation framework EPBD and aspects for fans**

- **Video presentation form Ronald Piers de Raveschoot**
  - Fit for 55 package
  - EU Security and energy prices
  - Ecodesign for Sustainable Products
  - Review of Regulation EU 327/2011 on industrial fans

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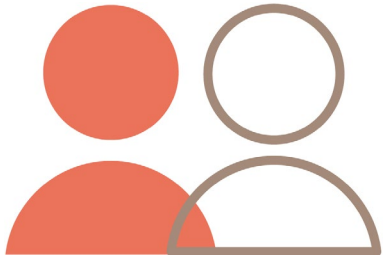
Who are we

44 direct members



38 companies & **6** associations

800 Europeans employed

Over **€ 7 B** annual turnover

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

Our members


AERECO
Airios
aldes
GROUPE ATLANTIC
Atrea
beama
BELIMO
BOSCH
Invented for life
BRINK
Air for life
camfil
core
ENERGY RECOVERY SOLUTIONS
DAIKIN
ebmpapst
Elektrovent
INDUSTRIAL FANS
eg
ELTA GROUP
Fachverband Gebäude-Klima e.V.
FETA
filtech
to enjoy clean air
EMC FIME
Motors for heating and ventilation
FläktGroup
Helios
Hoval
itho daalderop
Climate for life
MAICO
MITSUBISHI ELECTRIC
MULTI-WING
NICOTRA Gebhardt
Stowarzyszenie Polska Wentylacja
punker
RENSON
Creating healthy spaces
RLT
rosenberg
ruck
SIEMENS
SIG AIR HANDLING
Improving air because we care
Soler&Palau
Ventilation Group
STIEBEL ELTRON
Technik zum Wohlfühlen
systemair
torin-sifan
The Partner of Choice
TROX TECHNIK
The art of handling air
Uniclima
Venture Industries
VORTICE
VOSTERMANS VENTILATION
WITT&SOHN
WOLF
always the best climate
zehnder
ZIEHL-ABEGG

Our policy focus

Indoor Air Quality

Indoor Environmental Quality

Indoor Air Quality

System rules

Energy Performance of Buildings

Primary Energy Factor

Renewable Energy Directive

Green Deal

Taxonomy

Energy Efficiency Directive

Green Public Procurement

REPowerEU

Product rules

ENER Lot 10 (AC)

EPREL

Ecodesign & Energy Labelling Working Plan 2022-2024

Sustainable Products Initiative

MEErP

ENER Lot 11 (fans)

ENTR Lot 6 (ventilation)

Product Environmental Footprint

Energy Labelling Regulation

Sustainable Consumption of Goods Initiative

Ecodesign for Sustainable Products

Connectivity

Smart Readiness Indicator

Interoperability

ENER Lot 38 (BACS)

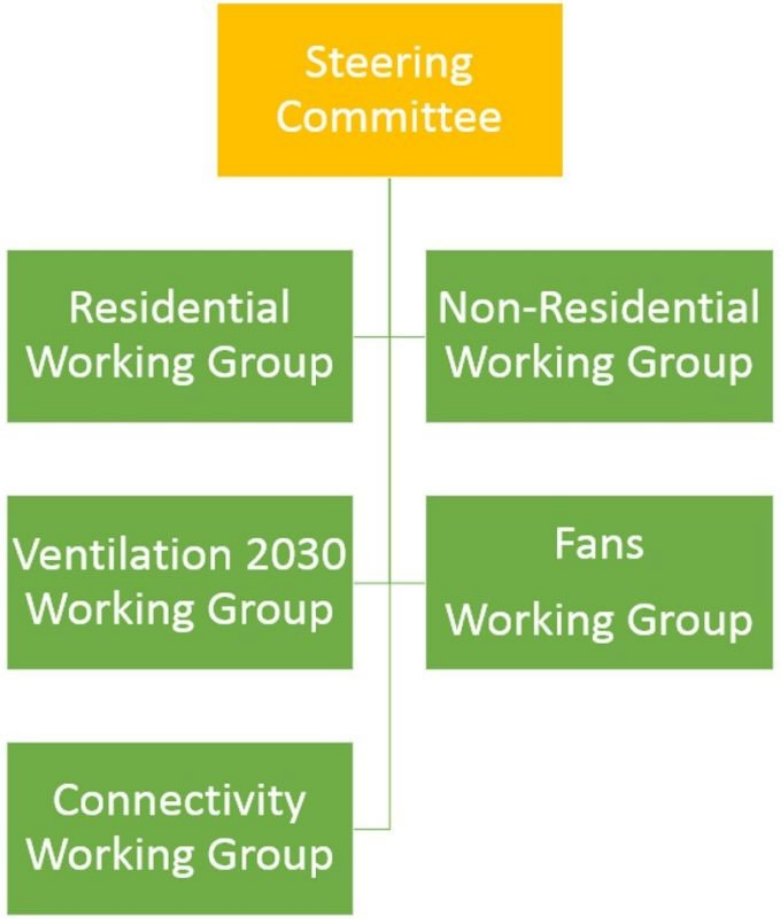
Data privacy

ENER Lot 33 (smart appliances)

Cybersecurity

EVIA Organisation – Working Groups

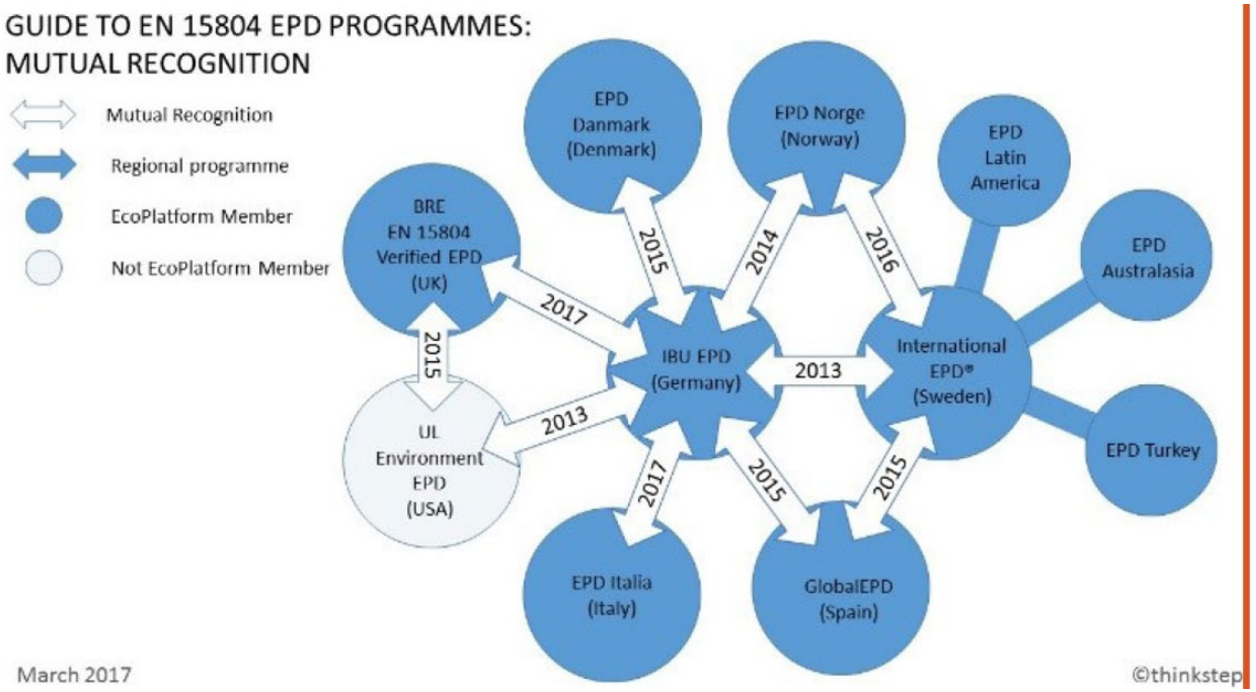
- **Residential Working Group:**
  Jelmer de Jong (Brink Climate Systems)
  - IAQ Label Task Force: Yves Lambert (Renson)
- **Non-Residential Working Group:**
  Laurence Higginson (Fläkt-Woods)
- **Fans Working Group:**
  Geoff Lockwood (ebm-papst)
- **Connectivity Working Group:**
  Jürgen Albig (Ziehl-Abegg)
- **Ventilation 2030 Working Group:**
  Marc Jardinier (Aereco)
- **National Association Liaison Group:**
  Colin Timmins (BEAMA)



- **Stakeholder View**
  - More than two thirds of respondents (68%) favored including in the EPBD measures to report on whole life-cycle carbon emissions (manufacturing and construction, use and end of life).
- **Article 7 brings together all provisions on new buildings**
  - The life-cycle Global Warming Potential (GWP) of new buildings will have to be calculated as of 2030 in accordance with the Level(s) framework, thus informing on the whole-life cycle emissions of new construction (with a useful floor area larger than 2000 square meters) as of 2027.
- **Member States shall ensure that the life-cycle Global Warming Potential (GWP) is calculated in accordance with Annex III and disclosed through the energy performance certificate of the building:**
  - (a) as of 1 January 2027, for all new buildings with a useful floor area larger than 2000 square meters; and
  - (b) as of 1 January 2030, for all new buildings.
- **For the calculation … a numeric indicator for each life-cycle stage … averaged for one year of a reference study period of 50 years. The data selection, scenario definition and calculations shall be carried out in accordance with EN 15978 (EN 15978:2011.**

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 will refer to Qualitätssiegel Nachhaltiges Gebäude (QNG)
- Does this work?



EPBD Revision – EVIA´s key requests: Indoor Air Quality

Sufficient air renewal through mechanical ventilation is crucial to ensure the health of occupants and buildings

- New and renovated buildings should be energy efficient but also guarantee an appropriate indoor environmental quality (IEQ), including a good indoor air quality, to safeguard the health of people and keep the building in a good condition.
  - **A sufficient but controlled air renewal is necessary for a healthy indoor environment and to limit thermal losses**
- Considering the increasing air-tightness of buildings achieved through ambitious energy efficiency measures, controlled air renewal via mechanical ventilation is a necessary contributor to avoid negative impacts on the health of people and the condition of the building.
  - **Controlled air renewal through ventilation systems is therefore a necessity, particularly in highly efficient buildings, such as zero emission and nearly zero energy buildings (ZEBs & NZEBs)**
- In addition to ensuring a healthy indoor air quality, controlled air renewal through mechanical ventilation systems can contribute significantly to optimizing a building's energy consumption through heat/cold recovery and/or demand-control.
- Despite this, the uptake of mechanical ventilation systems in renovations and new buildings across the EU is lacking, mainly due to missing regulation.
  - **Requiring the implementation of ventilation systems in the EPBD will yield large dual benefits in both health and energy efficiency**

Key amendments proposed by EVIA

- **Sufficient but controlled air renewal should be required in the following articles:**
  - **Article 2** – In all Zero Emission and Nearly Zero Energy Buildings.
  - **Article 5 & 8** – In major renovations and minimum energy performance standards (MEPS).
  - **Article 7** - In all new buildings.

EPBD Revision – EVIA´s key requests: Inspections

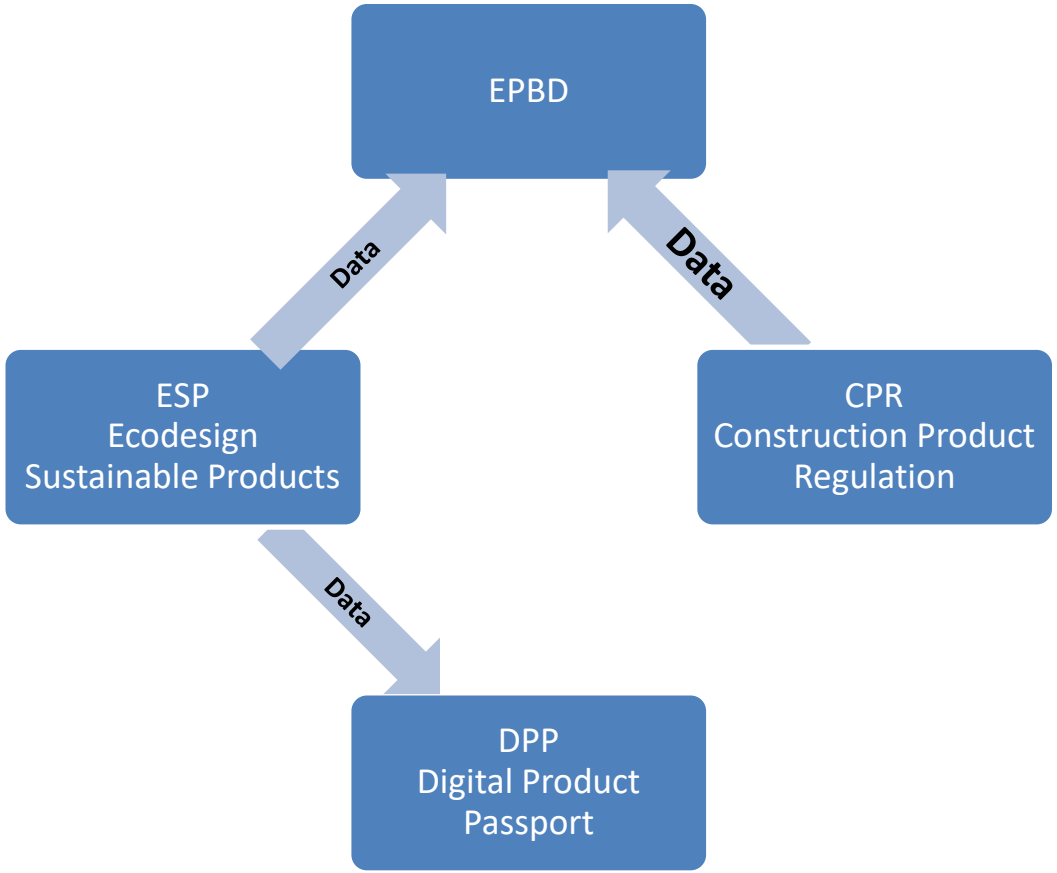
Implement proper handover and lifetime inspections of mechanical ventilation systems

- Regular lifetime inspection of ventilation units is key to ensure a proper functioning and thereby contribute to guaranteeing an appropriate indoor air quality level and reduce the building's heat losses and fan energy use.
  - **EVIA therefore welcomes the inclusion of ventilation systems in the regular inspection requirements of the EPBD in Article 20**
- Currently, too few systems are being inspected which jeopardizes the benefits of properly functioning ventilation systems. Many old systems are badly operating or not operating at all, have no or inadequate heat recovery systems, low fan efficiency and no demand-control.
- However, the proposed metric summing up the capacities of heating, ventilation and air-conditioning to the threshold of 70kW of effective rated output is not suitable for ventilation systems and would only cover the largest of systems.
  - **A suitable metric would be based on airflow rates (in m^3/h), which is common to describe the capacity of ventilation systems and is already being widely used in national regulations on the subject**
- In addition, many ventilation systems (e.g. around 50-60% in some member states) are not properly fitted or implemented and therefore never perform as intended.
  - **The EPBD should therefore require a proper handover inspection of an installed ventilation system and an obligation to take corrective actions in the case that non-compliances are detected during an inspection**

Key amendments proposed by EVIA

- **Article 20(1):** lay down an inspection requirement for ventilation systems above a capacity threshold of 500m3/h.
- **Article 20(4):** include a basic requirement to take corrective action in case of non-compliance.
- **Article 11(4):** when a technical building system is installed, an inspection should be performed to ensure the proper operation of the system.

- **Ecodesign for Sustainable Products**
  - Motor
  - Fan
  - Ventilation Unit
  - Fan-Coil …
- **Construction Product Regulation or Extended Ecodesign?**
  - Ductwork and distribution
  - Fire and thermal insulation …
- **EVIA requests one clear source**
  - EPBD shall refer to ESP and vice versa



The Voice of the European Ventilation Industry

Chillventa 2022