



Association for
Indoor Climate,
Process Cooling,
and Food Cold Chain
Technologies



EUROVENT SUMMIT ANTALYA

25-28 OCT 2022

B u i l d i n g B r i d g e s

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EUROVENT **SUMMIT** ANTALYA

25-28 OCT 2022

B u i l d i n g B r i d g e s

Meeting of the Eurovent Product Group 'Fan Coil Units' (PG-FCU)

Wednesday, 26 October 2022, 09:30-12:45, Begonvil

Good to know

What can you expect today?

Good to know

Wednesday, 26 October 2022



#BuildingBridges

WHEN?	WHAT?	WHERE?
11:00-11:30h 15:30-16:00h	Coffee Break	Foyer (Floor 1)
12:45-13:45h	Lunch Break (Powered by ISIB)	Meeting room Ladin + Foyer (Floor 1)
09:30-12:45h	ISKID/TTMD Seminar: New technologies and trends in HVACR – Part 2 (in Turkish and English) (Powered by Eurovent Certified Performance)	Side Ballroom (Floor 1)
19:00h	Gathering for Eurovent Innovation/HUB (Powered by UL Solutions & J2 Innovations) PLEASE BE ON TIME	Hotel lobby

Good to know

Wednesday, 26 October 2022



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ISKID/TTMD Seminar: New technologies and trends in HVACR – Part 2 (Powered by Eurovent Certified Performance)

- Time: 09:30-12:45h
- Location: Side ballroom (floor +1)
- In Turkish and English, with simultaneous translation.
- Aimed at architects, consultants, designers, installers, manufacturers and policy makers of the HVACR industry.
- This Turkish symposium will discuss hot topics and latest trends of the industry.

Good to know

Wednesday, 26 October 2022



Eurovent Innovation/HUB (Powered by UL Solutions & J2 Innovations)

- Starts at 19:45h
- Gathering at 19:00h in the hotel lobby, bus transport to the venue.
- Get inspired by visionary, TED-style manner keynote presentations from leading personalities from the HVACR industry and beyond.
- Enjoy a cocktail dinner at the after-show party in a unique traditional location Anadolu Park.

Thank you to our sponsors and partners

Who made the 2022 Eurovent Summit possible?

Co-organiser



- [ISKID](#) is the Turkish Air Conditioning and Refrigeration Manufacturers' Association. ISKID was established in 1992 with the contributions of prominent companies in the air conditioning and refrigeration sector, to conduct work towards making the HVACR Industry development healthier and faster. Over 100 member companies are gathering under ISKID's roof to conduct activities for the development of the sector and to stay in high-quality standards. As this edition of the Eurovent Summit takes place in Turkey, the association has become co-organiser of the event, as well as organiser of a Turkish-English seminar programme.

BridgeBuilding Partner



- [UL Solutions](#) is a global leader in applied safety science.
- UL Solutions transforms safety, security and sustainability challenges into opportunities for customers in more than 100 countries.

BridgeBuilding Supporter



- [Baltimore Aircoil Company](#) develops, manufactures and distributes evaporative cooling products, offering innovative and sustainable cooling solutions for saving water and energy in air conditioning, refrigeration and industrial process applications.

BridgeBuilding Supporter



Building Bridges



- CEIS is a Spanish testing, innovation and service centre offering well-recognised testing programmes for air conditioning and heat pump appliances. This year, CEIS has become a proud supporter of the Eurovent Summit for the third time in a row.

BridgeBuilding Supporter



J2 INNOVATIONS

A Siemens Company

- [J2 Innovations](#), a subsidiary of Siemens, is a provider of control and management software for HVAC and refrigeration equipment.
- J2 Innovations created FIN Framework; the next generation software platform for building automation and IoT applications in buildings.

BridgeBuilding Contributor



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- [ABB](#) is a leading manufacturer of drives, motors and controls for HVACR applications with a global footprint, supporting the industry across the world with products and services.

BridgeBuilding Contributor



- [Turkish HVACR Exporters Association \(ISIB\)](#) is the only coordinator and exporter association in Turkish HVACR sector. Established in 2012, ISIB works towards bringing together all the exporter companies active in the Turkish HVACR sector under one roof and increasing the export potential of the sector.

Other Sponsor



- [Boreas Technology](#) engages in manufacturing and sales of DC Master Adia Mechanic Cooler and CRAC/CRAH models which are specially designed for data centres as well DC Pro units, air conditioning units distinguished for their authentic design, and central air- conditioning equipment. With its know-how of more than 20 years, it offers state-of-the-art solutions for critical buildings such as hospitals, malls and hotels as well as industrial buildings and data centres in various countries in the world. As the choice of leading global brands, the company is dedicated to offering technology solutions for a sustainable world with high efficiency, customised products thanks to its R&D investments and engineering know-how.

Other Sponsor



- [FRITERM](#) is one of Europe's leading manufacturers of heat exchangers, providing solutions for industrial applications throughout the EMEA region.

Other Sponsor



- [Systemair](#) is a leading ventilation company with operations in 50 countries globally, manufacturing and market high-quality ventilation products.

Other Sponsor



 **Part of your business**

- [WIKA](#) is a global market leader in pressure, temperature and level measurement technology. Working together with our customers, we develop comprehensive solutions based on our high-quality measurement technology components, with the solutions ultimately being integrated in their business processes. We deliver 50 million quality products to over 100 countries every year. Worldwide, approximately 600 million WIKA measuring instruments are in use. WIKA employs around 10.000 people and owns over 40 subsidiaries worldwide. For the third time in a row, WIKA is proud to support the Eurovent Summit.

Exhibition Partner



- [ISK-SODEX](#) Istanbul is an International HVAC, Refrigeration, Insulation, Pump, Valve, Fitting, Water Treatment, Fire Prevention, Pool and Solar Energy Systems Exhibition.

Exhibition Partner



- [Climatización y Refrigeración \(C&R\)](#), an international exhibition in Spain in HVAC and Refrigeration, is one of the most important events which showcases the technological innovation and commitment to sustainability and energy efficiency of this industry.

Thank you to our partners

Meet them in the foyer



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ORGANISERS



OFFICIAL AIRLINE



Meeting of the Eurovent Product Group 'Fan Coil Units' (PG-FCU)

Wednesday, 26 October 2022, 09:30-12:45, Begonvil

About this Product Group

Eurovent Product Group 'Fan Coil Units' (PG-FCU)

Eurovent Product Group ‘Fan Coil Units’ (PG-FCU)

The Eurovent Product Group ‘Fan Coil Units’ is the largest European working group of fan coil unit manufacturers. It is engaged with ducted and non-ducted fan coil units. It is supported by the Eurovent Member Associations on a national level. Key tasks of the Group involve European and national legislation advocacy and EN, ISO and Eurovent standards development. The Group does not deal with certification.

Agenda



1. Introduction, meeting rules
 2. Attendances
 3. Approval of the Draft Agenda
 4. Approval of the Minutes of the last meeting
 5. Where we were
 6. Chairman and Vice-chairman elections
 7. Environmental Product Declaration (EPD)
 8. Updates on Regulations and relevant standards
 9. SCIP notification
 10. Upcoming agenda items
 11. Announcements, updates on Eurovent activities
 12. Next meeting(s)
- Coffee break

1.-4. Formalities



- Introduction
- Rules: Competition law, bribery, corruption and data protection
- Attendances
 - Introduction of participants
 - Remember to sign the attendance list
- Approval of the Draft Agenda
- Approval of the minutes of the last meeting
 - Seville, 26 September 2018

Agenda



1. Introduction, meeting rules
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5. Where we were

Resume of the last activities of the PG



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Eurovent Guidebook on Fan Coil Units

- During the last meeting Members were in favour of developing a guidebook on Fan Coil Units.
- The purpose of a guidebook is to highlight the state-of-the-art in technological development, raising awareness on core aspects such as life-cycle costs, design and selection.
- The guidebooks also serve as a document to raise awareness about the importance of the industry towards third parties, customers of FCUs and authorities.

5. Where we were

Resume of the last activities of the PG



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Eurovent Guidebook on Fan Coil Units

- Introduction
- Functioning of a fan coil unit
- Various applications of fan coil units and corresponding specifications
- European standards covering Fan Coil Units
- European Regulations covering Fan Coil Units
- Product fundamentals
- Key performance factors affecting energy consumption (non ducted and ducted units)
 - Cooling capacity (sensible and latent)
 - Heating capacity
 - Total electric power input
 - Static pressure
 - Sound power level
- Important aspects of FCU design affecting maintenance costs
- Importance of sound performance
- Practical issues
- Europe's FCU industry

5. Where we were

Resume of the last activities of the PG

Recommendation 16/2: Water Fan Heaters: Interpretation of the Commission Regulation (EU) 2016/2281 and Standard Rating Conditions

- The Eurovent Recommendation 16/2 has been already uploaded to the Eurovent website:
<https://eurovent.eu/?q=content/eurovent-162-2022-water-fan-heaters-interpretation-commission-regulation-eu-20162281-and>
- It can be also officially released through a Press Release in November or December.

Agenda



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6. Chairman and vice-chairman elections



So far, no applications have been submitted.

Members are invited to consider this opportunity carefully, especially in view of the upcoming challenges

Agenda



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Coffee
break

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

What is an environmental declaration?

Information on the environmental performance of a product, i.e about the impact and ways of impact the product has on the climate and the environment throughout its life cycle.

Evaluation of environmental performance is based on the Life Cycle Assessment (LCA)

The resulting environmental declaration (most common, EPD) is typically used as input for an LCA on building level.

What is LCA?

Life Cycle Assessment is a well-established method for the systematic analysis of the potential environmental impacts of products or services during their entire life cycle.

A general framework for LCA is established in standards ISO 14040 and ISO 14044 which provide a broad scale of applicability but with limited granularity.

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

What are Product Category Rules (PCRs)?

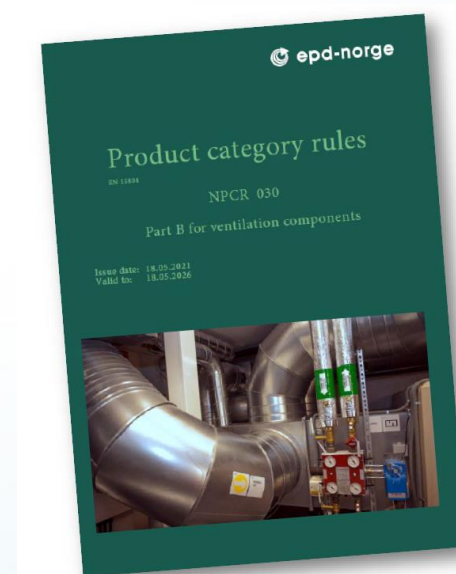
- ISO standards for LCA calculations for EPDs are general.
- Guidance on preparation of EPDs for product group is supplemented in product category rules (PCRs)
- EN 15804 gives a generic PCR for construction products (no use phase & energy consumption).
- The scenario for energy is defined by an EPD programme operator .
- A c-PCR (complementary) may be developed for a specific product group by the EPD programme operator.

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

Product Category Rules / c-PCR - example

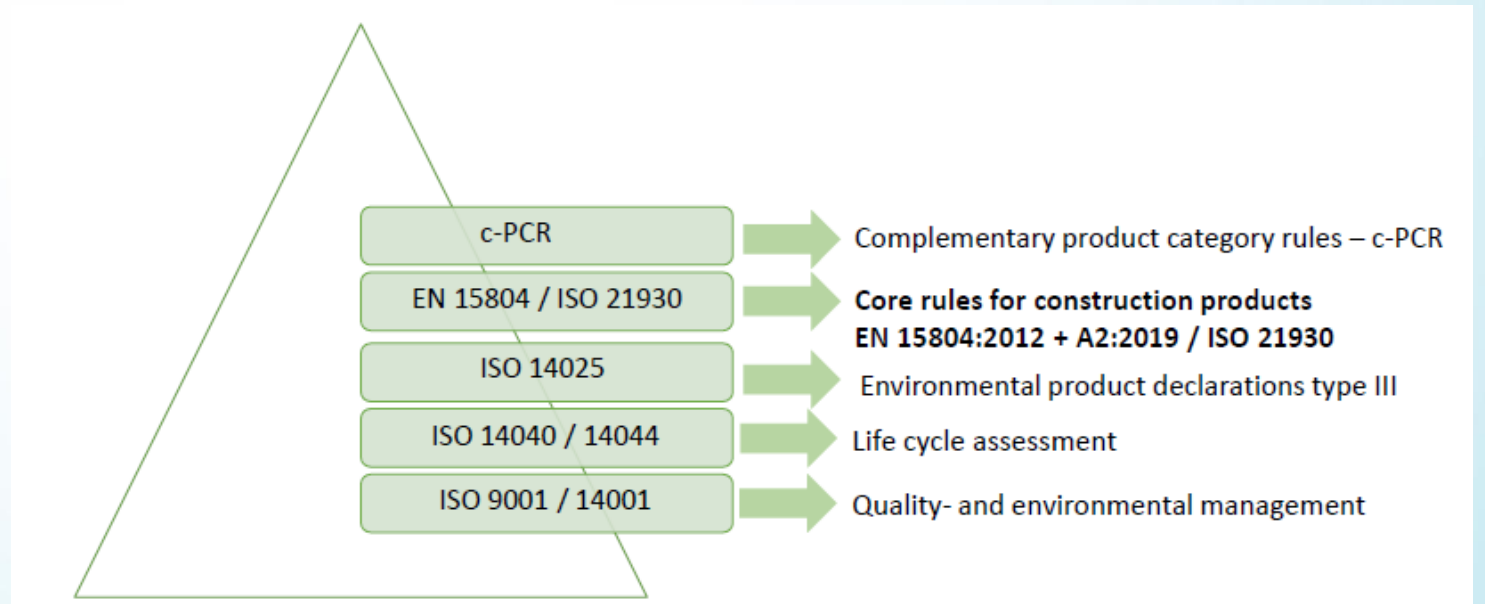


7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

Hierarchy of standards for construction products

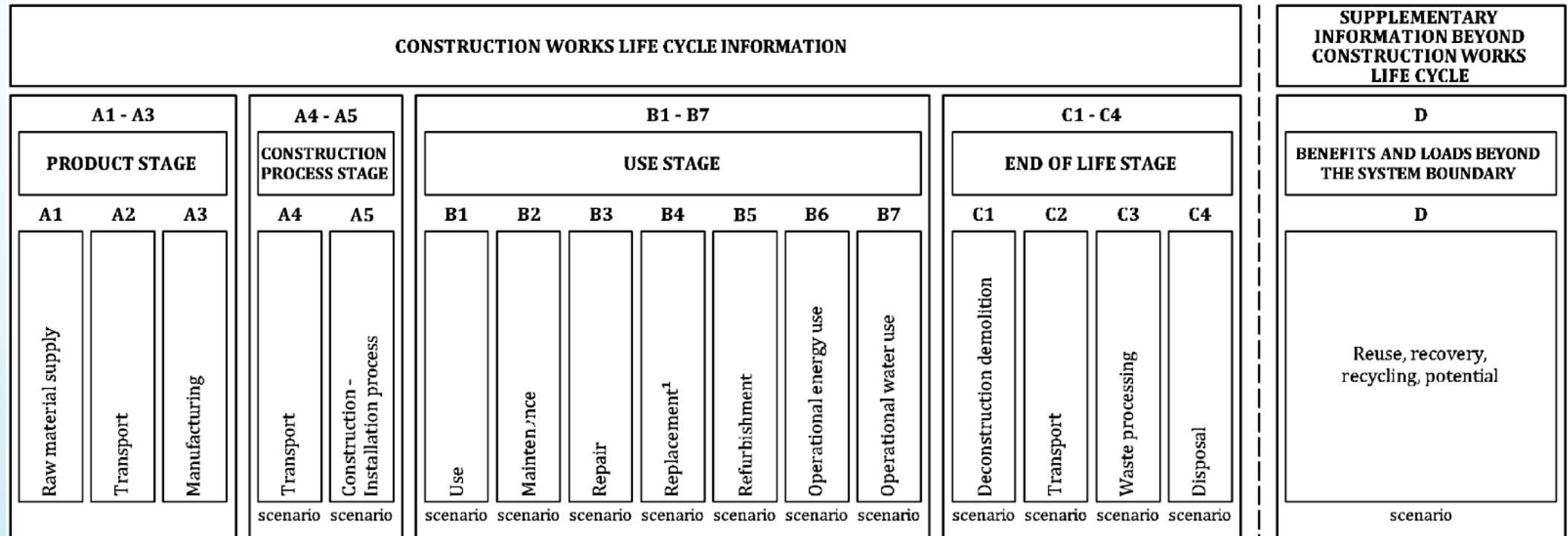


7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



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Overview of ongoing activities and proposal to set up a relevant Task Force



Life Cycles for construction works (EN 15804)

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



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Overview of ongoing activities and proposal to set up a relevant Task Force

Core environmental impact indicators (EN 15804)

Impact category	Indicator	Unit (expressed per functional unit or per declared unit)
Climate change – total ^a	Global Warming Potential total (GWP-total)	kg CO ₂ eq.
Climate change - fossil	Global Warming Potential fossil fuels (GWP-fossil)	kg CO ₂ eq.
Climate change - biogenic	Global Warming Potential biogenic (GWP-biogenic)	kg CO ₂ eq.
Climate change - land use and land use change ^b	Global Warming Potential land use and land use change (GWP-luluc)	kg CO ₂ eq.
Ozone Depletion	Depletion potential of the stratospheric ozone layer (ODP)	kg CFC 11 eq.
Acidification	Acidification potential, Accumulated Exceedance (AP)	mol H ⁺ eq.
Eutrophication aquatic freshwater	Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-freshwater)	kg PO ₄ eq.
Eutrophication aquatic marine	Eutrophication potential, fraction of nutrients reaching marine end compartment (EP-marine)	kg N eq.
Eutrophication terrestrial	Eutrophication potential, Accumulated Exceedance	mol N eq.

Impact category	Indicator	Unit (expressed per functional unit or per declared unit)
	(EP-terrestrial)	
Photochemical ozone formation	Formation potential of tropospheric ozone (POCP);	kg NMVOC eq.
Depletion of abiotic resources - minerals and metals ^{c d}	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	kg Sb eq.
Depletion of abiotic resources - fossil fuels ^c	Abiotic depletion for fossil resources potential (ADP-fossil)	MJ, net calorific value
Water use	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	m ³ world eq. deprived

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



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Overview of ongoing activities and proposal to set up a relevant Task Force

Sample
EPD
report

Environmental impact category	Unit	A1	A2	A3	A1-A3 total	A4	B4	B6	C1	C2	C3	C4	D
Global warming potential (GWP) – fossil	kg CO ₂ e	2,30E+02	2,77E+00	3,28E+00	2,36E+02	5,89E-01	1,57E+01	2,04E+02	1,63E-02	3,70E-02	2,02E+01	2,75E-02	-1,21E+02
Global warming potential (GWP) – biogenic	kg CO ₂ e	5,58E+00	-3,24E-03	-8,66E-01	4,71E+00	-6,90E-04	2,11E-01	1,91E-02	1,28E-05	-4,45E-05	3,17E+00	-7,98E-04	1,56E+00
Global warming potential (GWP) – luluc	kg CO ₂ e	1,72E-01	2,26E-02	1,67E-02	2,11E-01	4,80E-03	1,01E-02	3,87E-02	1,39E-06	3,06E-04	2,62E-02	8,07E-05	-4,27E-02
Global warming potential (GWP) – total	kg CO ₂ e	2,36E+02	2,79E+00	2,43E+00	2,41E+02	5,93E-01	1,59E+01	2,04E+02	1,63E-02	3,73E-02	2,34E+01	2,67E-02	-1,20E+02
Ozone depletion (ODP)	kg CFC11e	5,56E-06	5,46E-16	3,19E-07	5,88E-06	1,16E-16	1,83E-06	1,41E-13	3,51E-09	7,38E-18	1,12E-11	1,07E-16	-1,68E-07
Acidification (AP)	mol H ⁺ e	9,20E-01	1,13E-02	1,92E-02	9,50E-01	2,29E-03	9,09E-02	7,37E-02	1,70E-04	4,17E-04	3,61E-02	1,96E-04	-4,49E-01
Eutrophication (EP) – freshwater	kg PO ₄ e	3,28E-02	8,22E-06	1,41E-03	3,42E-02	1,75E-06	4,78E-03	3,28E-05	4,91E-07	1,11E-07	4,37E-05	4,61E-08	-1,42E-03
Eutrophication (EP) – freshwater	kg Phosphate eq.	1,87E-01	1,89E-03	9,10E-03	1,98E-01	3,84E-04	4,78E-02	7,31E-03	2,89E-05	7,22E-05	4,35E-03	1,76E-05	-3,01E-02
Eutrophication (EP) – marine	kg Ne	1,78E-01	5,33E-03	9,48E-03	1,93E-01	1,08E-03	2,68E-02	2,00E-02	7,53E-05	2,11E-04	1,04E-02	5,08E-05	-7,35E-02
Eutrophication (EP) – terrestrial	mol Ne	1,71E+00	5,92E-02	6,15E-02	1,83E+00	1,20E-02	1,86E-01	2,19E-01	8,24E-04	2,32E-03	1,14E-01	5,58E-04	-7,94E-01
Photochemical ozone formation (POCP)	kg NMVOCe	5,08E-01	1,22E-02	1,43E-02	5,35E-01	2,40E-03	6,40E-02	5,42E-02	2,26E-04	3,87E-04	3,46E-02	1,54E-04	-2,42E-01
Depletion of abiotic resources (ADP) – minerals & metals ¹	kg Sb eq.	3,04E-03	2,45E-07	3,66E-05	3,08E-03	5,21E-08	1,59E-04	2,54E-04	6,57E-09	3,31E-09	4,87E-06	2,59E-09	-1,79E-03
Depletion of abiotic resources (ADP) – fossil fuels ¹	MJ	3,21E+03	3,69E+01	4,77E+01	3,29E+03	7,83E+00	3,08E+02	2,02E+02	2,22E-01	4,98E-01	2,02E+02	3,64E-01	-1,40E+03
Water deprivation potential (WDP) ¹	m ³ e depr.	1,20E+02	2,57E-02	2,60E+00	1,23E+02	5,45E-03	1,23E+01	3,53E+02	5,34E-04	3,47E-04	1,28E+00	2,95E-03	-5,06E+01

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



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Overview of ongoing activities and proposal to set up a relevant Task Force

Environmental Product Declaration (EPD)

- EPD, which is an ISO type III Environmental Declaration according to ISO 14025 standard, must be verified by an independent third-party.
- Commonly adopted in the building industry (acc. CPR 305/2011 EPDs are voluntary to assess the sustainable use of resources and the environmental impact of construction works).
- EPDs are developed based on ISO 14025 and EN 15804 which provides the core rules for the product category of construction products

Available
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7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



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Overview of ongoing activities and proposal to set up a relevant Task Force

Types of EPD

- **Generic EPDs** are based on datasets, not specific to a certain product or project, but representing an average for a product category
 - representative set of suppliers (min. 80%), typically for a specific geographical market – Industry average EPDs
- **Product specific EPD** containing specific data for a certain product coming from one specific manufacturer
 - covering the environmental footprint from transportation from the supplier to the specific construction site – project specific EPDs

Available
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7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

Who can issue an EPD?

- ISO 14025 requires that an EPD must be independently verified.
- In practice data are verified by a third party licensed by an **EPD programme operator**, and the **EPD is registered in the system of the EPD programme operator**
- Cost of the EPD development ranges 17.000 to 50.000+ EUR
- Annual fee for registration in EPD libraries: 1.000 - 3.000 EUR

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



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Overview of ongoing activities and proposal to set up a relevant Task Force

Many EPD programme operators in Europe / other continents

- International EPD System (Sweden) – first world's operator
- Association P.E.P (France), French EPD = PEP ecopassport
- Institut Bauen und Umwelt – IBU (Germany)
- EPD Norge (Norway)
- KITECH (Korea)

not all of them mutually recognise EPDs nor Product Category Rules (PCRs)

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



































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Overview of ongoing activities and proposal to set up a relevant Task Force

eco-platform.org

Umbrella association of EPD programme operators

<p>Established ECD EPD PG</p>  <p>AENOR</p> <p>AENOR</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>Alliance HQE</p> <p>Alliance HQE - GBC</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>Bau-EPD</p> <p>Bau EPD GmbH</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>bre</p> <p>BRE Global Ltd</p> <p>Founding member</p>	<p>LCA Practitioners & Test Providers (up to 25 employees)</p>  <p>Ecochain</p> <p>EcoChain Technologies B.V.</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>EPD</p> <p>EPD International AB</p> <p>Founding member</p>	<p>Product Manufacturers or Associations representing roadmap</p>  <p>eurima</p> <p>EURIMA - European Insulation Manufacturers Association</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>IBU</p> <p>IBU - Institut Bauen und Umwelt e.V.</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>MRPI</p> <p>Stichting MRPI</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>epd-norge</p> <p>The Norwegian EPD Foundation (EPD-Norge), legal entity NØRINGSLOVETS STIFTELSE FOR MILJØBETRÅKTSJØNER</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>ICMQ</p> <p>ICMQ S.p.A.</p> <p>Founding member</p>	<p>Product Manufacturers or Associations representing roadmap</p>  <p>Cerame-Unie Alabi</p> <p>Founding member</p>	<p>Other stakeholders</p>  <p>EcoQuaestor</p> <p>EcoQuaestor (trade mark of Cooperative Bouwprojecteconomie U.A.)</p> <p>since 2016</p>	<p>Systematic initiatives or Green Building Rating Schemes</p>  <p>Green Building Council Italia</p> <p>Green Building Council Italia</p> <p>since 2016</p>	<p>Established ECD EPD PG</p>  <p>RAKENNUSTIETO</p> <p>Building Information Ltd</p> <p>since 2017</p>	<p>Established ECD EPD PG</p>  <p>IGBC</p> <p>Irish Green Building Council</p> <p>since 2017</p>
<p>Established ECD EPD PG</p>  <p>CAATEES</p> <p>CAATEES - Col·legi d'Arquitectes, Arquitectes Tècnics i Enginyers d'Edificació de Barcelona</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>centroHabitat</p> <p>Centro Habitat - Associação Plataforma para a Construção Sustentável</p> <p>Founding member</p>	<p>Product Manufacturers or Associations representing roadmap</p>  <p>Construction Products Europe Alabi</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>DANISH TECHNOLOGICAL INSTITUTE</p> <p>Danish Technological Institute</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>ITI</p> <p>ITI - Institut Tehniki Budovlaniye</p> <p>Founding member</p>	<p>LCA Practitioners & Test Providers (up to 25 employees)</p>  <p>Office for ecological studies</p> <p>Office for ecological studies</p> <p>Founding member</p>	<p>Established ECD EPD PG</p>  <p>ZAG</p> <p>SLOVENIAN NATIONAL BUILDING AND CIVIL ENGINEERING INSTITUTE</p> <p>Founding member</p>	<p>LCA Practitioners & Test Providers (up to 25 employees)</p>  <p>sphera</p> <p>Sphera Solutions GmbH</p> <p>Founding member</p>	<p>LCA Practitioners & Test Providers (up to 25 employees)</p>  <p>metabeta</p> <p>Metabeta Sustainability Consulting</p> <p>Founding member</p>	<p>Product Manufacturers or Associations representing roadmap</p>  <p>EPPA</p> <p>EPPA - European PVC Window Profile and Related Building Products Association EPPA Usp.</p> <p>since 2014</p>	<p>LCA Practitioners & Test Providers (up to 25 employees)</p>  <p>FORCE TECHNOLOGY</p> <p>FORCE Technology</p> <p>since 2014</p>	<p>Established ECD EPD PG</p>  <p>SUB</p> <p>SUBS - Schweizerischer Untersuchungsverband für Gesteinsbaustoffe</p> <p>since 2018</p>	<p>Established ECD EPD PG</p>  <p>Association P.E.P.</p> <p>Association P.E.P.</p> <p>since 2017</p>	<p>Other stakeholders</p>  <p>SURATAM</p> <p>SURATAM (EPD Turkey)</p> <p>since 2018</p>	<p>Emerging ECD EPD PG</p>  <p>kiwa</p> <p>Ecobility Experts - Kiwa GmbH</p> <p>since 2018</p>	<p>LCA Practitioners & Test Providers (up to 25 employees)</p>  <p>ConstructionLCA</p> <p>ConstructionLCA Limited</p> <p>since 2019</p>

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

Are EPDs mandatory for Eurovent products?

NOT for the time being, but

- ongoing developments in many Member States related to the integration of LCA calculations in the national Building Codes
 - Several voluntary schemes for assessing the sustainability and environmental performance of buildings

Force HVACR manufacturers to draw up EPDs for their products

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Building Bridges

Overview of ongoing activities and proposal to set up a relevant Task Force

National Implementations

- French RE2020 building regulation

considers the carbon footprint of buildings and requires LCA analysis of materials and equipment (applies as of July 2022)

LCA based on default data, if a supplier has no EPD for its product, or based on EPD if available

- Danish building regulation (mandatory in 2023)

limit on CO₂ emission of the building live determined based on LCA

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Building Bridges

Overview of ongoing activities and proposal to set up a relevant Task Force

Regulatory Forecast

Construction Product Regulation (CPR)

The revision of CPR aims to progressively introduce mandatory environmental declarations in the construction product family and to link requirements to the product placing on the market.

Sustainable Products Initiative (SPI) – Ecodesign Requirements for Sustainable Products

The European Commission has worked on the “Sustainable Products Initiative” that is now a proposal for a Regulation, under the name “Proposal for a regulation of the European parliament and of the council establishing a framework for setting ecodesign requirements for sustainable products (ESPR) and repealing Directive 2009/125/EC”.

The ordinary legislative procedure has officially started, a plenary vote on it could take place around mid-2023.

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Building Bridges

Overview of ongoing activities and proposal to set up a relevant Task Force

Regulatory Forecast

Product Environmental Footprint (PEF)

- The European Commission has been working on the development of a harmonised methodology for calculation of the **Product Environmental Footprint** (PEF) since 2012.
- PEFs are in the scope of the Sustainable Product Policy Initiative (SPI) and addressed in the new proposed Ecodesign for Sustainable Products Regulation (ESPR).
- It is expected that with time, PEF and the Digital Product Passport (DPP) will be introduced in the updated Methodology for Ecodesign of Energy-related Products (MEErP)

Differences between PEF and EPD

The PEF is based on and identical to the Environmental Product Declarations (EPD) initiated and developed by the US Green Building Council (<https://www.environdec.com/about-us/global-house-of-epd>). The data provided in EPDs are not to compare the environmental performance of respective products. They are used to assess LCA for the entire building, this is why the European Commission has been working on PEF and PEFCR for a decade now on.

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force General Recap

- Lack of PCR harmonisation and EPD recognition
- New national construction regulations addressing the reduction of Whole Life Carbon (WLC) of Buildings
- Indirect forcing HVACR manufacturers to develop EPDs (high cost)
- Expected future mandatory EPDs / PEFs – ESPR expected publication in 2023

-> What should / can Eurovent do about this?

7. Environmental Product Declaration (EPD) and Product Category Rules (PCR)



Overview of ongoing activities and proposal to set up a relevant Task Force

**The Eurovent Commission on 2 September
identified PEF/EPD as a priority for the near future
And consequently, a dedicated Taskforce will be set up**

Coffee break

Join us in the foyer

See you again in 30 minutes!

Agenda

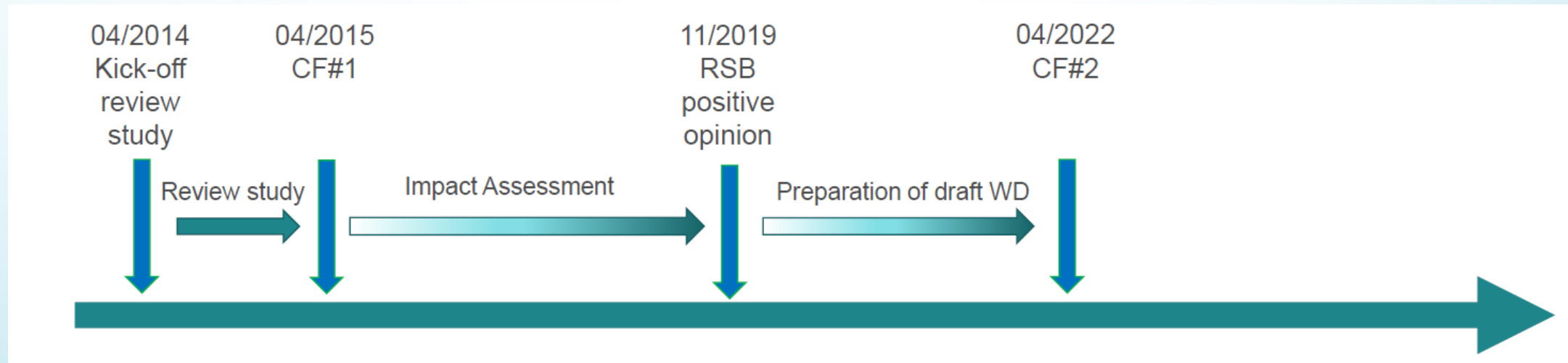


1. Introduction, meeting rules
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- Coffee break

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Overview of work on the revision – a long story



8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Main new proposals in working draft compared to 2015

- **Exclusions**

- Spare part fans for 7 years

- **Definitions**

- Significant elements
- VSD definition
- Complete fan
- Incomplete fan
- Spare parts

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Main new proposals in working draft compared to 2015 (cont.)

- **Conformity assessment**
 - Provisions for addressing incomplete fans
- **Minimum efficiency limits**
 - Tier 1: close to the current, but in some cases lower + new formulas
 - Tier 2: as proposed in 2015 (3 year after entry into force)
- **Information requirements on partial load or at specified duty**
- **Product Information requirements for incomplete fans**

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Main new proposals in working draft compared to 2015 (cont.)

- **Material efficiency product information requirements**
 - Information to include in instruction manuals and free access websites
- **Resource efficiency requirements**
 - 7 years availability of spart parts, maximum delivery time, access to repair and maintenance information, dismantling for material recovery and recycling

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

1. Complete fans:

- in scope
- has all the significant elements needed for its operation
- has been subject to a conformity assessment
- complies with the ecodesign requirements



2. Incomplete fans:

- a subset of a one or more well identified complete fan(s)
- does not have all the significant elements needed for its operation, and/or that does not comply with the ecodesign requirements
- comprises at least an impeller, but
- without one or more of the significant elements of the complete fan(s)
- Accompanied with the required information



**Motorised
impeller**



**Bare shaft
fan**



Impeller

=> To be tested in one or more configuration of a complete fan

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Significant elements that may be a part of a fan

- **Impeller**
- Electric motor
- Housing (stationary part that interacts with the air stream and affecting the air power of the fan)
- stationary aerodynamic parts improving the performance of the fan:
 - inlet cone, inlet or outlet guide vanes, diffuser ...
- mechanical transmission: aerodynamic influence and influence on efficiency;
- electrical transmission: aerodynamic influence and influence on efficiency, e.g. cable conduits, VSD (in air stream or not), terminal box...
- structural components that hold the assembly in place and may interfere with the airflow (e.g. brackets supporting the motor or the bearings).

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

- Fans other than complete or incomplete fans shall not be placed on the EU market.
- Incomplete fans shall:

Rules for incomplete fans

- ☐ not be put into service
- ☐ not bear the CE marking [for the purpose of this regulation](#)
- ☐ meet specific information requirements when placed on the EU market, including:
 - ☐ The technical data sheet of the corresponding complete fan(s)
 - ☐ Instructions to transform the incomplete fan into one or more complete fan(s) with detailed information on the essential elements needed and their relevant characteristics
 - ☐ Technical documentation and promotional material shall be accompanied by a **warning** of the need to add certain essential elements in order to meet the ecodesign requirements. It shall specify that meeting ecodesign requirements can be achieved in two ways: following the instructions of the supplier of the incomplete fan or through a complete conformity assessment under the full responsibility of the buyer of the incomplete fan. + **special warning** if a motor above the minimum IE class set under (EU) 2019/1781 is required.

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Conformity assessment for incomplete fans

- Conformity assessment: when an incomplete fan is transformed into the corresponding complete fan, the technical documentation may contain, as alternative, the evidence showing that the manufacturer instructions have been followed.
- Verification: the performance of incomplete fans is tested in at least one configuration of the corresponding complete fan(s), using the manufacturer's instructions.
- A VSD can be added to a complete fan without transforming it into a new product

8. Updates on Regulations and relevant standards

Revision of the Fan Regulation 2011/327

Comments at the 2nd Consultation Forum

- **No need for Tier 1 limits**
 - Position of the majority of stakeholders
- **Clear rules on liability between the supplier of an incomplete fan and the entity that assembles the incomplete fan**
 - Who is responsible for a non-compliance of an incomplete fan that has been transformed into a complete fan following the instructions?

8. Updates on Regulations and relevant standards

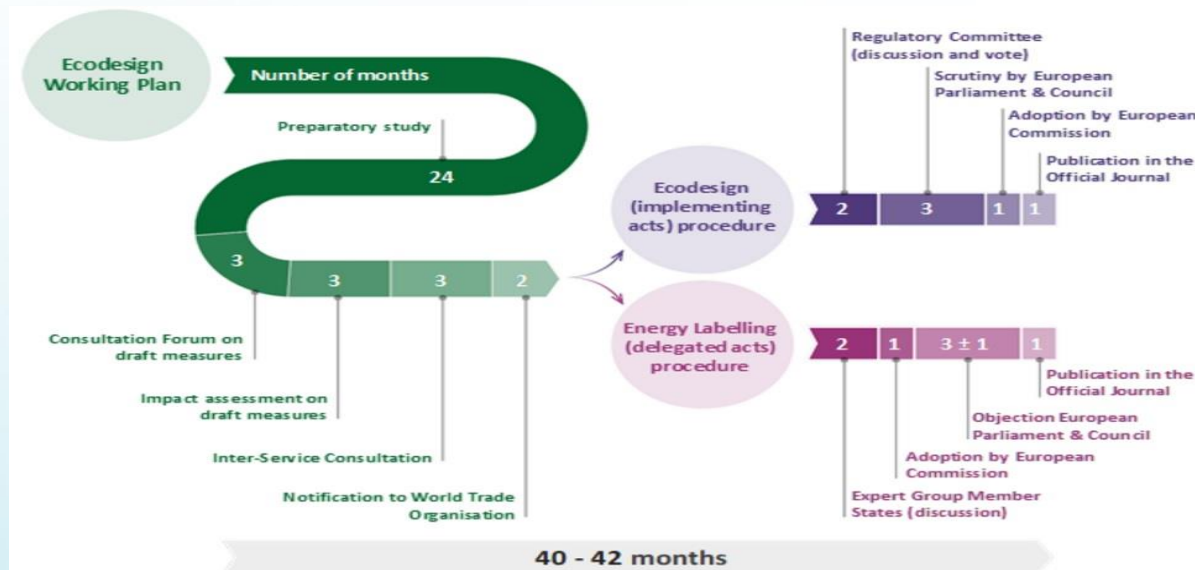
Revision of the Ecodesign Regulation 2016/2281

“The Commission shall review this Regulation in the light of technological progress made in connection to air heating products, cooling products and high temperature process chillers. It shall present the results of this review to the **Ecodesign Consultation Forum no later than 1 January 2022.**”

Latest new is that the revision is going to start in January 2023

8. Updates on Regulations and relevant standards

Revision of the Ecodesign Regulation 2016/2281



The main aspects that will be assessed by the review could be:

the appropriateness of setting ecodesign requirements covering direct greenhouse gas emissions caused by refrigerants;

the appropriateness of setting ecodesign requirements for high temperature process chillers using evaporative condensing and high temperature process chillers using absorption technology;

the appropriateness of setting stricter ecodesign requirements for the energy efficiency and emissions of nitrogen oxides of air heating products, cooling products and high temperature process chillers;

the appropriateness of setting ecodesign requirements for the noise emissions of air heating products, cooling products, high temperature process chillers and fan coil units;

the appropriateness of setting emission requirements on the basis of useful heating or cooling capacity, instead of energy input;

the appropriateness of setting ecodesign requirements for combination warm air heaters;

the appropriateness of setting energy labelling requirements for domestic air heating products;

the appropriateness of setting stricter ecodesign requirements for C2 and C4 warm air heaters;

the appropriateness of setting stricter ecodesign requirements for rooftop and ductable air conditioners and heat pumps;

the appropriateness of third party certification; and

for all products, the value of the tolerances for verification, as mentioned in the verification procedures set out in Annex IV.

8. Updates on Regulations and relevant standards

Revision of the Ecodesign Regulation 2016/2281



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Any suggestion from the Members for the future revision?

8. Updates on Regulations and relevant standards

EN 1397/2021

Heat exchangers - Hydronic room fan coil units - Test procedures for establishing the performance

Published in September 2021, it is expected to be cited on the Official Journal to guarantee the presumption of conformity to Ecodesign Regulation 2016/2021 requirements

8. Updates on Regulations and relevant standards

EN 16583/2022

Heat exchangers - Hydronic room fan coils units - Determination of the sound power level

Available since July 2022, it is expected to be cited on the Official Journal to guarantee the presumption of conformity to Ecodesign Regulation 2016/2021 requirements

8. Updates on Regulations and relevant standards

EN 16583/2022

Heat exchangers - Hydronic room fan coils units - Determination of the sound power level

- Scope extended from FCUs with ESP up to 120Pa to 300Pa
- New reference to the definitions from EN ISO 80000-8:2020
- Details regarding the testing procedure when the duct resistance results from auxiliary fan
- ZA appendix: requirements regarding the ecoconception of FCUs (as it has been done for the EN1397:2021)

Agenda



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- Coffee break

9. SCIP notification

- SCIP is the database for information on Substances of Concern In articles as such or in complex objects (Products) established under the Waste Framework Directive



Guest presentation by **Ms. Salvina Murè and Alejandra Restrepo** of **ICIM Group**

(Italian independent certification body) on SCIP obligations for manufacturers



Before the end of the meeting



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10. Upcoming agenda items

11. Announcements

12. Next Meeting

2023 CALENDAR

JANUARY						
Su	M	Tu	W	Th	F	Sa
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FEBRUARY						
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MARCH						
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OCTOBER						
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NOVEMBER						
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DECEMBER						
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End of meeting

See you soon and enjoy the rest of the **EUROVENTSUMMIT!**



EUROVENT **SUMMIT** ANTALYA

25-28 OCT 2022

B u i l d i n g B r i d g e s