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EUROVENT SUMMIT ANTALYA

25-28 OCT 2022

#BuildingBridges

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Meeting of the Eurovent Product Group 'Rooftop Units' (PG-RT)

Tuesday, 25 October 2022, 09:30-12:45, Sedir

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1. Introduction, EUROVENTSUMMIT Open Session

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Good to know

What can you expect today?

Good to know

Tuesday, 25 October 2022

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WHEN?	WHAT?	WHERE?
11:00-11:30h 15:30-16:00h	**Coffee Break**	Foyer (Floor 1)
12:45-13:45h	**Lunch Break**	Meeting room Ladin + Foyer (Floor 1)
13:45-17:30h	**ISKID/TTMD Seminar:** New technologies and trends in HVACR – Part 1 (in Turkish and English) (Powered by Eurovent Certified Performance)	Side Ballroom (Floor 1)
18:30-20:30h	**Summit Opening Ceremony by the Eurovent President** (Powered by Systemair)	Hotel Garden Terrace
20:30-22:00h	**Policy Panel:** Vision for the future of product efficiency (Powered by CEIS)	Hotel Garden Terrace

Good to know

Tuesday, 25 October 2022

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ISKID/TTMD Seminar: New technologies and trends in HVACR – Part 1 (Powered by Eurovent Certified Performance)

- Time: 13:45-17:30h
- 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

Tuesday, 25 October 2022

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Summit Opening Ceremony by the Eurovent President (Powered by Systemair)

- Time: Starts at 18:30h at the Akra Hotel Garden Terrace
- A warm welcome from the Eurovent President Raul Corredera Haener (Systemair).
- Enjoy traditional Turkish barbecue while learning more about our activities and recent developments in the industry and the Eurovent world, and listening to welcome remarks by several high-ranking invited guests.

Good to know

Tuesday, 25 October 2022

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Policy Panel: Vision for the future of product efficiency (Powered by CEIS)

- Time: 20:30h, after Opening Ceremony at the Akra Hotel Garden Terrace
- The panel will discuss the future of global product efficiency policies, such as MEPs, energy labels, and more.
- Features Turkish Ministry of Industry and Technology, VHK, UNEP, CEIS, ECC and Eurovent.

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Thank you to our sponsors and partners

Who made the 2022 Eurovent Summit possible?

Co-organiser

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- 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

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- 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

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BALTIMORE AIRCOIL COMPANY

- 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

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- 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

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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

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ISIB TURKISH HVAC-R

- 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

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- 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

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FRITERM® since 1979

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

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systemair

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

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WIKA
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

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ISK-SODEX ISTANBUL

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

Exhibition Partner

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C&R CLIMATIZACIÓN Y REFRIGERACIÓN
International HVAC&R Exhibition

- 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.

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Meet them in the foyer

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About this Product Group

Eurovent Product Group ‘Rooftop Units’ (PG-RT)

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About this Product Group

Product scope

- Rooftop Units
- Covering the product and its components (inlc. refrigeration circuit , controls, fans, filters, energy recovery components, fans)

About this Product Group

Members

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- The youngest Eurovent Product Group dynamically growing
- Over 40 participants from 15+ leading European RTU manufactures
- Supported by Eurovent Member Associations and Associate Members.

About this Product Group

Chairmen

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Chairman

Filip Konieczny
Flowair

Vice-Chairman

Arel Arsoy
Üntes

About this Product Group

Eurovent Secretariat

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Igor Sikonczyk

Massimiliano Ferrario

About this Product Group

Key tasks

- **Advocacy**
  - European Union legislation (specifically Ecodesign, Energy Labeling, EPBD)
- **Technical**
  - EN and ISO standardisation
  - Development of Eurovent standards (codes of good practice)
- **Marketing**
  - General promotion of the European RTU industry and their state-of-the-art approaches

Meeting Roadmap

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1. Introduction, EUROVENTSUMMIT Open Session

2. - 4. Formalities

5. Eurovent Rooftop Units Guidebook
6. Update on review of regulations

- Coffee Break 11:00 – 11:30

7. Opportunities and challenges for the RTU Industry
8. Update on standards
9. Upcoming agenda items
10. Announcements
11. Next meeting(s)

2.- 4. Formalities

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- Competition Law Rules, Bribery and corruption, Data protection
- Attendances and introduction of participants
- Approval of the Draft Agenda
- Approval of the minutes of the last meeting

2. Attendances and introduction of participants

- Remember to sign the attendance list

3. Approval of the Draft Agenda

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Draft Agenda

1. Introduction, EUROVENTSUMMIT Open Session
2. - 4. Formalities
5. Eurovent Rooftop Units Guidebook
6. Update on review of regulations

- Coffee Break 11:00 – 11:30

7. Opportunities and challenges for the RTU Industry
8. Update on standards
9. Upcoming agenda items
10. Announcements
11. Next meeting(s)

4. Approval of the minutes of last meetings

PG-RT meeting
WebEx
26 October 2021

Action items

Action	Agenda item N°	Deadline	Responsible	Status
Provide the Secretariat with pictures of installed RTs	5	By next meeting	Members	Completed
First draft of RT Guidebook	5	By mid-December	Secretariat	Completed

Meeting Roadmap

EUROVENT SUMMIT ANTALYA 25-28 OCT 2022 #BuildingBridges

1. Introduction, EUROVENTSUMMIT Open Session
2. - 4. Formalities
5. **Eurovent Rooftop Units Guidebook**
6. Update on review of regulations

- Coffee Break 11:00 – 11:30

7. Opportunities and challenges for the RTU Industry
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10. Announcements
11. Next meeting(s)

5. Eurovent Rooftop Units Guidebook

Final draft

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- Final draft circulated on 7 October (PG-RT – 2201.51)
- Review of comments received on the final draft and discussion on their implementation in the final document
  - Clivet (editorial)
  - Untes (editorial + proposal for new pictures)
  - Daikin (content + proposal for new pictures)
  - Carrier (content + new pictures)
  - Flowair (editorial + content)

-> see PG-RT – 2201.54

5. Eurovent Rooftop Units Guidebook

Promotion and dissemination of the Guidebook

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- Basic measures
  - Circulation in the Eurovent network (LinkedIn, partner HVAC magazines)
- Next steps to gain publicity
  - Translation into national languages?
  - Articles in HVAC magazines?
- PG-RT members' support?

Meeting Roadmap

EUROVENT SUMMIT ANTALYA 25-28 OCT 2022
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1. Introduction, EUROVENTSUMMIT Open Session
2. - 4. Formalities
5. Eurovent Rooftop Units Guidebook
6. **Update on review of regulations**

- Coffee Break 11:00 – 11:30

7. Opportunities and challenges for the RTU Industry
8. Update on standards
9. Upcoming agenda items
10. Announcements
11. Next meeting(s)

6. Update on review of Regulations

F-Gas Regulation

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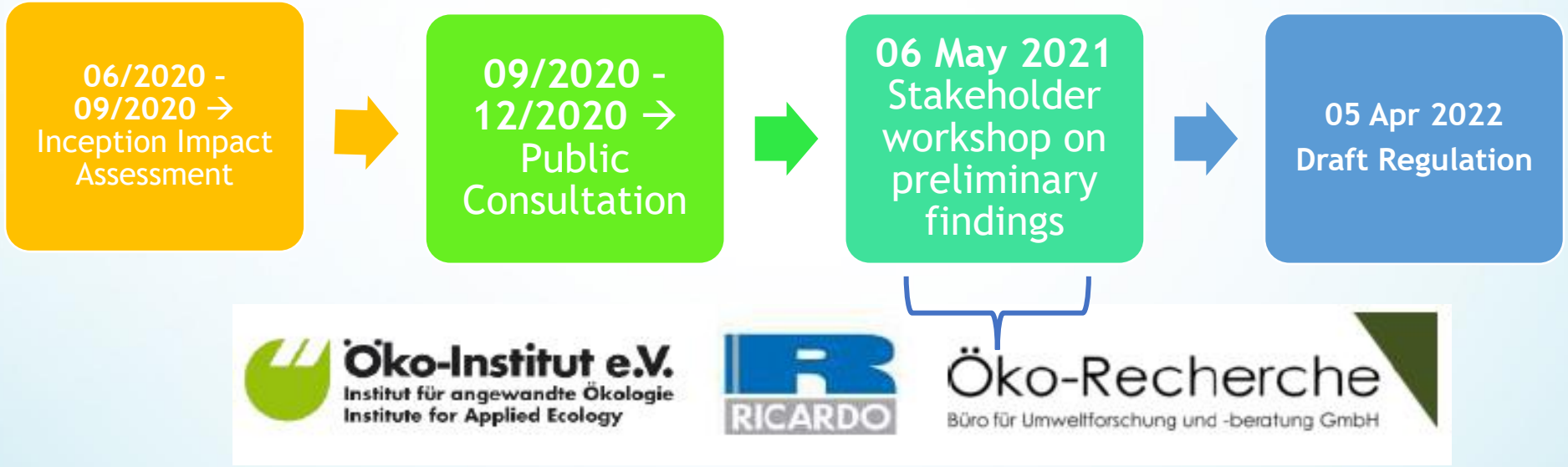
It's been a quite long process



6. Update on review of Regulations

F-Gas Regulation

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New EU F-Gas Regulation - Draft 5th April 2022

The Regulation will be directly applicable in all Member States

29th June 2022 deadline for public comment on the “Have your say” portal

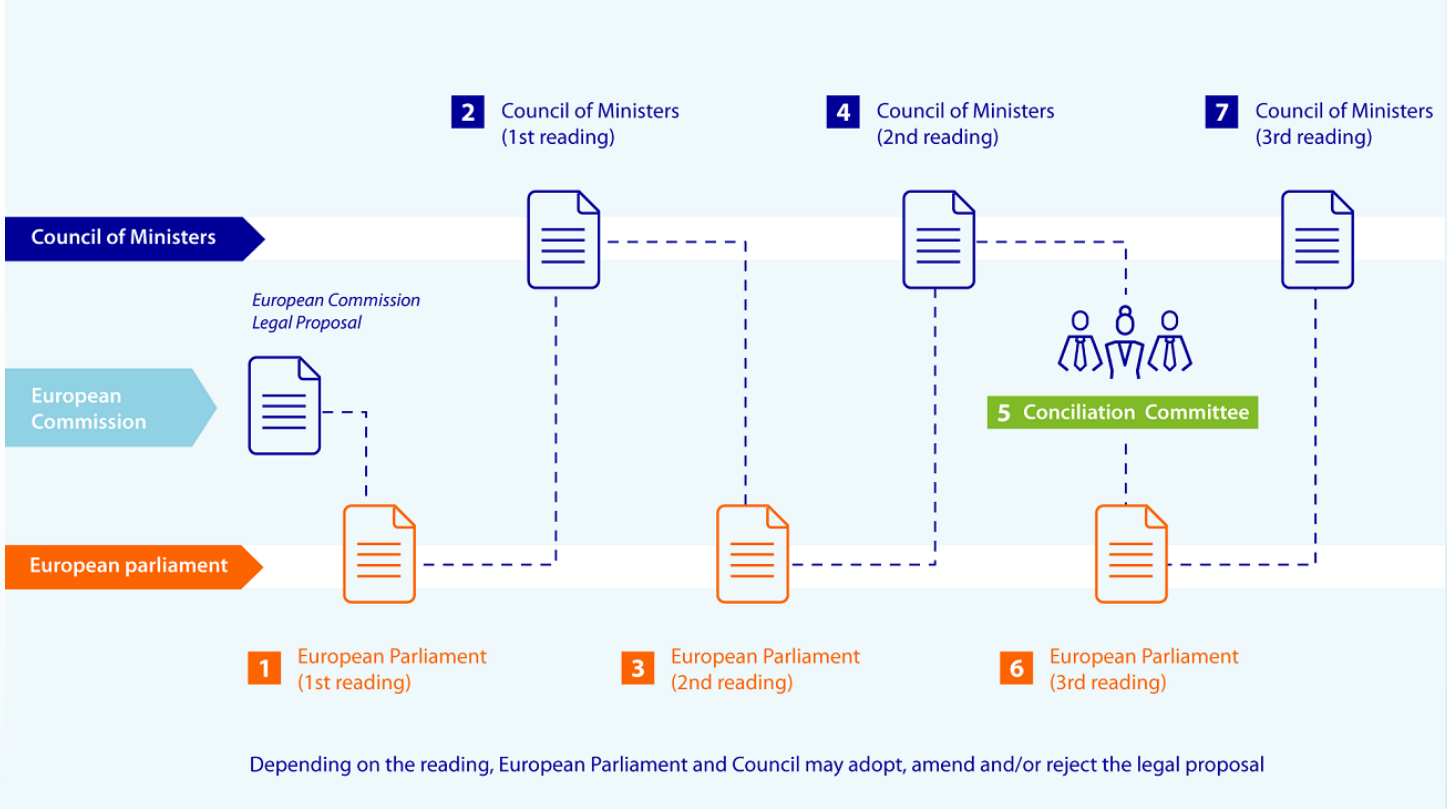
In late autumn the negotiation between Member States and European Parliament will start – now Committees at work

Entry into force expected for beginning of 2024

6. Update on review of Regulations

F-Gas Regulation

The Ordinary Legislative procedure



6. Update on review of Regulations

F-Gas Regulation

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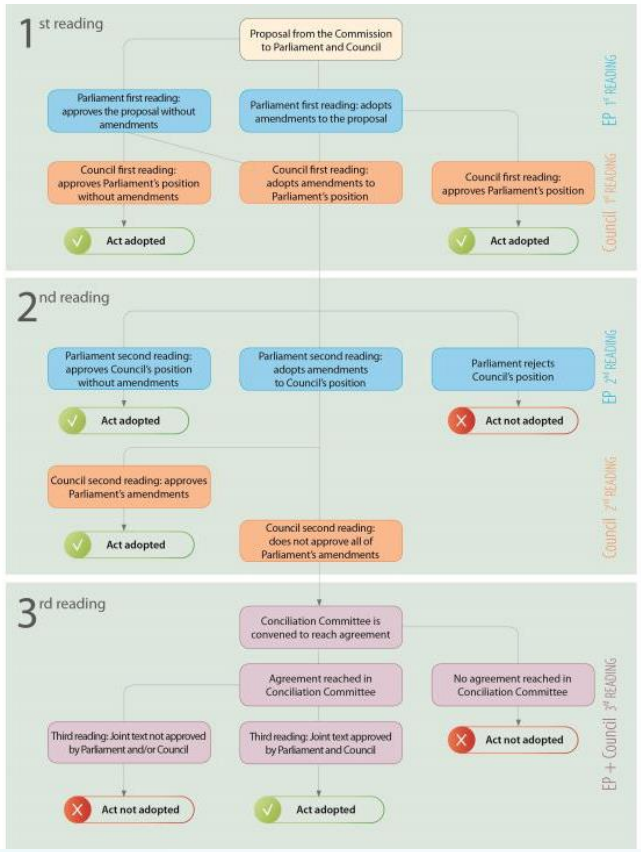
The Ordinary Legislative procedure – more in detail



No deadlines

3+1 months EP
3+1 months EC

4+2 weeks EP
4+2 weeks EC

6. Update on review of Regulations

F-Gas Regulation

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Key Figures

Rapporteur
Bas EICKHOUT
Group of the Greens/European Free Alliance

ENVI

Rapporteur(s) - Associated Committee(s)
Sara SKYTTEDAL
Group of the European People's Party (Christian Democrats)

ITRE

+ Shadow Rapporteurs

6. Update on review of Regulations

F-Gas Regulation

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Next steps

- Beginning of October: draft opinion of rapporteurs circulated
- The discussion in the ITRE Committee is foreseen on 26 October
- 27 October is the deadline for amendments for the ITRE committee
- On 07 November there should be the discussion within ENVI on the report of Mr. Bas Eickhout
- 15 November is the deadline for amendments for the ENVI committee

6. Update on review of Regulations

F-Gas Regulation

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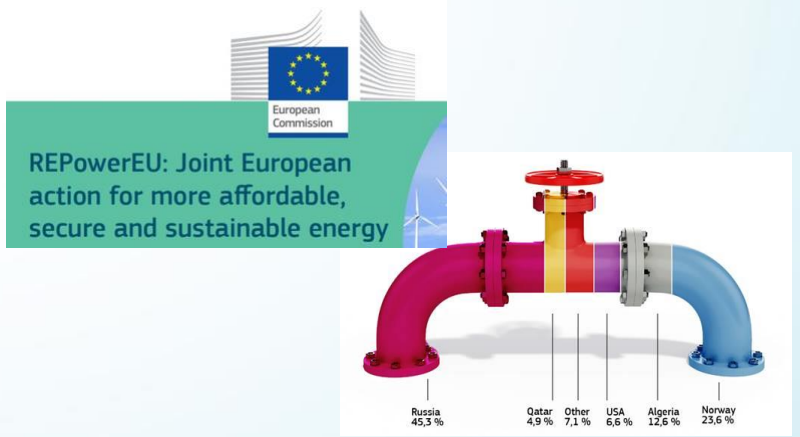
Context

European Green Deal, European Climate Law and the enhancement of the contribution under the Paris Agreement on Climate Change require reinforcing all instruments relevant for decarbonisation of EU → **-55% GHG emission by 2030 and climate neutrality by 2050**.

- F-gas emissions amount to 2,5% of EU's total GHG emissions but **doubled** from 1990 to 2014.
- Kigali Amendment to implement a global HFC phase-down.
- The actual Regulation 517/2014 cannot fully ensure compliance with all the obligations. Nevertheless, the supply of HFCs has declined by 37% in metric tonnes and 47% in terms of tonnes CO_2 equivalent from 2015 until 2019.



6. Update on review of Regulations

F-Gas Regulation

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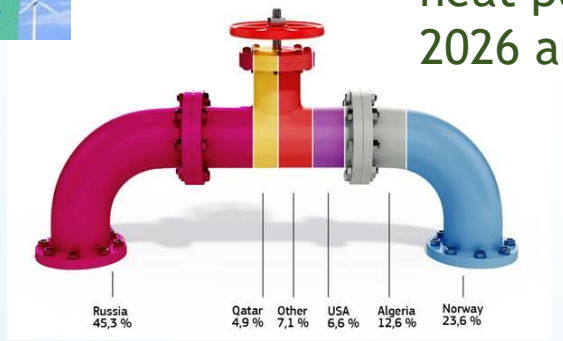
Fundamental topic at the base of Eurovent Proposal

Context



REPowerEU (published a month and a half after the proposal): The RePowerEU Plan envisions an additional 20 million new heat pumps to be installed in the Union by 2026 and nearly 60 million by 2030.*

*Source: Amendment 1, recital 4(a) of the draft opinion of the Committee on Industry, Research and Energy. Rapporteur Sara Skyttedal

6. Update on review of Regulations

F-Gas Regulation

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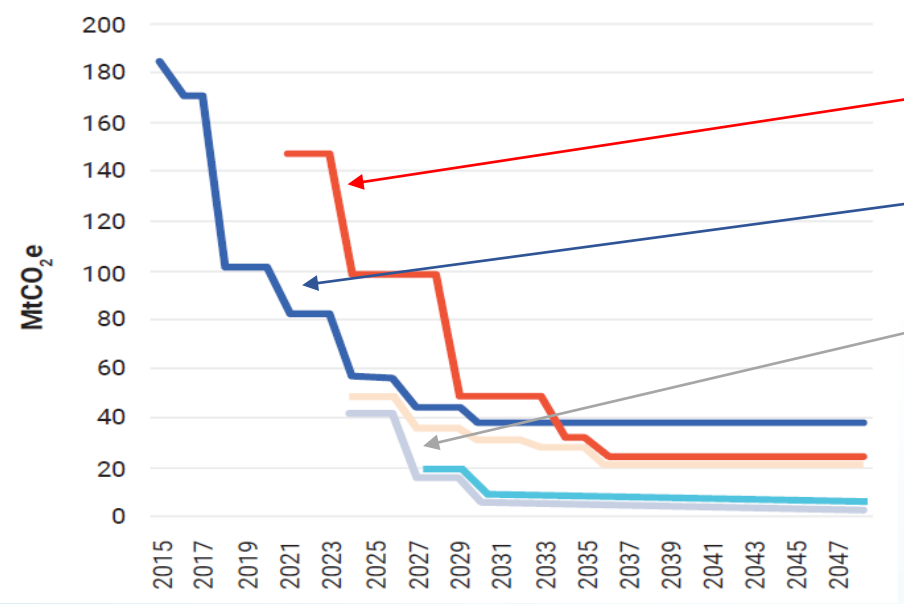
Main Contents of the draft proposal

1. New phase-down for the quota system. It will start in 2024 and will be extended up to 2050.



- **Limits under the Kigali Amendment for EU**
- **Current F-gas Regulation 517/2014**
- **F-gas limit proposal**

The allocation of quotas will be subject to the payment of the amount of 3€/tonnCO_2eq of quota to be allocated.

6. Update on review of Regulations

F-Gas Regulation

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Main Contents of the draft proposal

2. Additional bans on air-conditioners and heat pump equipments.

? Plug-in?

? Self-Contained?

? Air conditioner vs heat pump?

? Except when required to meet safety standards?

(17)		Plug-in room and other self-contained air-conditioning and heat pump equipment that contain fluorinated greenhouse gases with GWP of 150 or more.	1 January **2025**
(18)		Stationary split air-conditioning and split heat pump equipment:	
	(a)	Single split systems containing less than 3 kg of fluorinated greenhouse gases listed in Annex I, that contain, or whose functioning relies upon, fluorinated greenhouse gases listed in Annex I with GWP of 750 or more;	1 January 2025
	(b)	**Split systems** of a rated capacity of up to and including **12 kW** containing, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 150 or more, except when required to meet safety standards;	1 January **2027**
	(c)	**Split systems** of a rated capacity of more than **12 kW** containing, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 750 or more, except when required to meet safety standards.	1 January **2027**

6. Update on review of Regulations

F-Gas Regulation

Main Contents of the draft proposal

3. The GWP of HFCs is based on the Fourth Assessment Report adopted by the IPCC

Substance	GWP
R32	675
R134a	1430
R410a	2088

4. The GWP of HFOs is based on the Sixth Assessment Report adopted by IPCC

Substance	GWP
R1234yf	0,5
R1234ze	1,37

6. Update on review of Regulations

F-Gas Regulation

Main Contents of the draft proposal

5. Equipments must be checked for leaks also when they contain HFO refrigerants.

Annex I refrigerants (HFC)	Frequency of leak checks
qty < 5 tonn CO_2eq	-
5 ≤ qty < 50 tonn CO_2eq	Every 12 months (24 if leakage detection system installed)
50 ≤ qty < 500 tonn CO_2eq	Every 6 months (12 if leakage detection system installed)
qty ≥ 500 tonn CO_2eq	Every 3 months (6 if leakage detection system installed)

Annex II refrigerants (HFO)	Frequency of leak checks
qty < 1 kg	-
1 ≤ qty < 10 kg	Every 12 months (24 if leakage detection system installed)
0 ≤ qty < 100 kg	Every 6 months (12 if leakage detection system installed)
qty ≥ 100 kg	Every 3 months (6 if leakage detection system installed)

6. Update on review of Regulations

F-Gas Regulation

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Main Contents of the draft proposal

6. Rules extended to HFO refrigerants.

- Operators of stationary equipment containing HFCs **and HFOs** shall ensure that the recovery of those gases is carried out by certified persons and that those gases are recycled, reclaimed or destroyed.
- Any HFCs **or HFOs** recovered shall not be used for filling or refilling equipment unless the gas has been recycled or reclaimed.
- Member States shall establish or adapt certification programmes, ensure training on practical skills and theoretical knowledge for person dealing with HFCs, **HFOs and other relevant alternatives** to fluorinated greenhouse gases.

6. Update on review of Regulations

F-Gas Regulation

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Don’t forget PFAS

Substance name	EC / List no	CAS no	Status	Expected date of submission	Submitter(s)	Details on the scope of restriction
Per- and polyfluoroalkyl substances (PFAS)	-	-	Intention	13-Jan-2023	Germany Denmark Netherlands Norway Sweden	Restriction on manufacture, placing on the market and use of PFAS.

PFAS are defined as substances that contain at least one fully fluorinated methyl (CF3-) or methylene (-CF2-) carbon atom (without any H/Cl/Br/I atom attached to it).

6. Update on review of Regulations

F-Gas Regulation

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Ongoing Activities

In 2022 the Eurovent Task Force “FGAS” met 11 times, and another meeting is planned for 26 October in Antalya.

The last position paper drafted by the TF-FGAS includes a general statement on the historical and unique context in which the revision of this regulation is taking place and a set of amendments to the European Commission’s proposal.

The aim of the set of amendments is to contribute to the gradual phasing-down of fluorinated greenhouse gases while leaving enough time and solutions to the industry to reach the goals that Europe set on decarbonisation and consequently deployment of the heat pump technology.

6. Update on review of Regulations

F-Gas Regulation

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Ongoing Activities

In the meantime the Committees ENVI and ITRE circulated their first documents on the Regulation on Fluorinated Greenhouse Gases proposed by the European Commission. These will also be addressed during the next TF-FGAS meeting.

ENVI draft Report: https://www.europarl.europa.eu/doceo/document/ENVI-PR-737211_EN.pdf

ITRE draft Opinion: https://www.europarl.europa.eu/doceo/document/ITRE-PA-737218_EN.pdf

6. Update on review of Regulations

F-Gas Regulation

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Eurovent Proposed amendments of relevance for PG-RT

Article 3 – definitions

Original text	Eurovent suggested modification
- (new proposal)	(x) Self-contained equipment Complete factory-made refrigerating system in a suitable frame and/or enclosure, that is fabricated and transported in one or more sections and in which no refrigerant containing parts are connected on site other than by companion or block valves.

Article 10 – Certification and training (subclause 3)

Original text	Eurovent suggested modification
The certification programmes and training provided for in paragraphs 1 and 2 shall cover the following, **(a) applicable regulations and technical standards;** **(b) emission prevention;** **(c) recovery of fluorinated greenhouse gases listed in Annex I and Annex II, Section 1;** **(d) safe handling of equipment of the type and size covered by the certificate; and** **(e) energy efficiency aspects.**	The certification programmes and training provided for in paragraphs 1 and 2 shall cover the following, (a) applicable regulations and technical standards; (b) emission prevention; (c) recovery of fluorinated greenhouse gases listed in Annex I and Annex II, Section 1; (d) safe handling of equipment of the type and size covered by the certificate; and (e) energy efficiency and heat recovery aspects

6. Update on review of Regulations

F-Gas Regulation

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Eurovent Proposed amendments of relevance for PG-RT

Annex IV – subclause 17

Original text	Eurovent suggested modification
Plug-in room and other self-contained air-conditioning and heat pump equipment that contain fluorinated greenhouse gases with GWP of 150 or more. 1 January 2025	plug in self-contained "comfort air conditioning and heat pump equipment" which is moveable between rooms by the end users that contain fluorinated greenhouse gases with GWP of 150 or more. Date of prohibition: 1 January 2025

Annex IV – subclause 18

Original text	Eurovent suggested modification
Stationary split air-conditioning and split heat pump equipment: **(a) Single split systems containing less than 3 kg of fluorinated greenhouse gases listed in Annex I, that contain, or whose functioning relies upon, fluorinated greenhouse gases listed in Annex I with GWP of 750 or more; 1 January 2025** **(b) Split systems of a rated capacity of up to and including 12 kW containing, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 150 or more, except when required to meet safety standards; 1 January 2027** **(c) Split systems of a rated capacity of more than 12 kW containing, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 750 or more, except when required to meet safety standards. 1 January 2027**	Stationary air-conditioning and heat pump equipment: (a) Single split systems and fixed double duct appliances containing less than 3 kg of fluorinated greenhouse gases listed in Annex I, that contain, or whose functioning relies upon, fluorinated greenhouse gases listed in Annex I with GWP of 750 or more; Date of prohibition: 1 January 2025 (b) other split and self-contained equipment containing, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 750 or more. Date of prohibition: 1 January 2030

6. Update on review of Regulations

F-Gas Regulation

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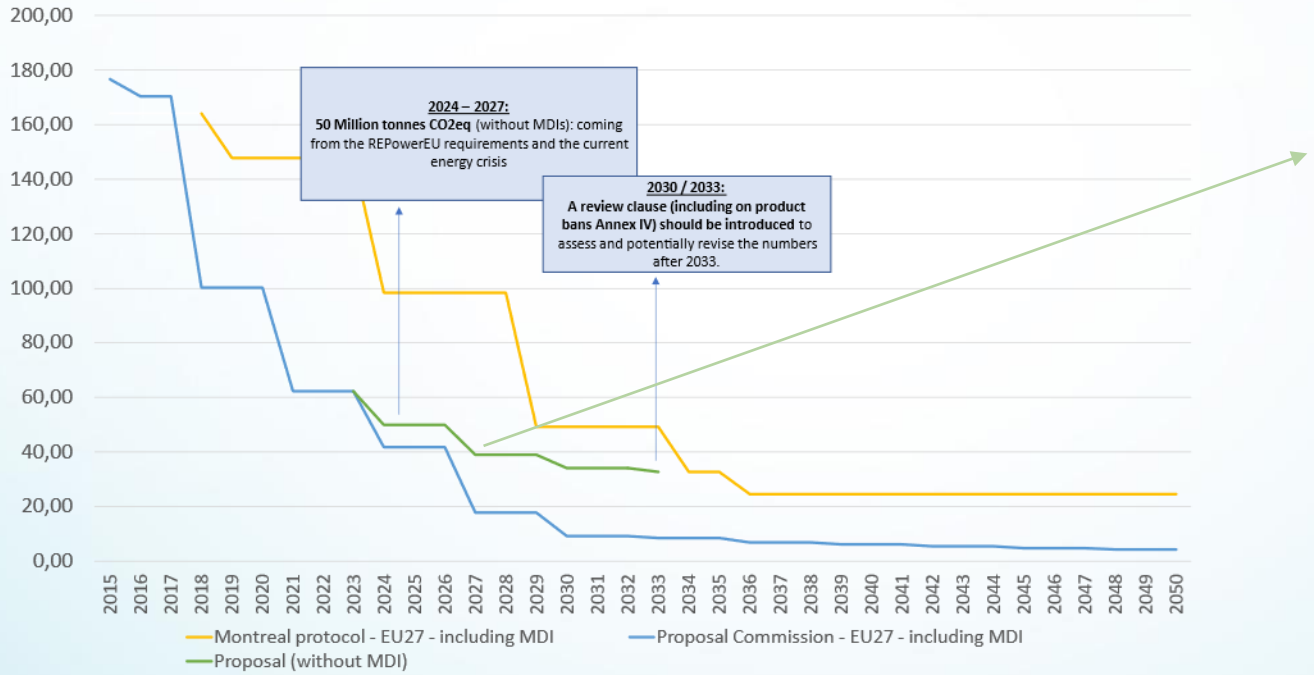
Eurovent Proposed amendments of relevance for PG-RT



Eurovent proposal

6. Update on review of Regulations

Fans Regulation 327/2011

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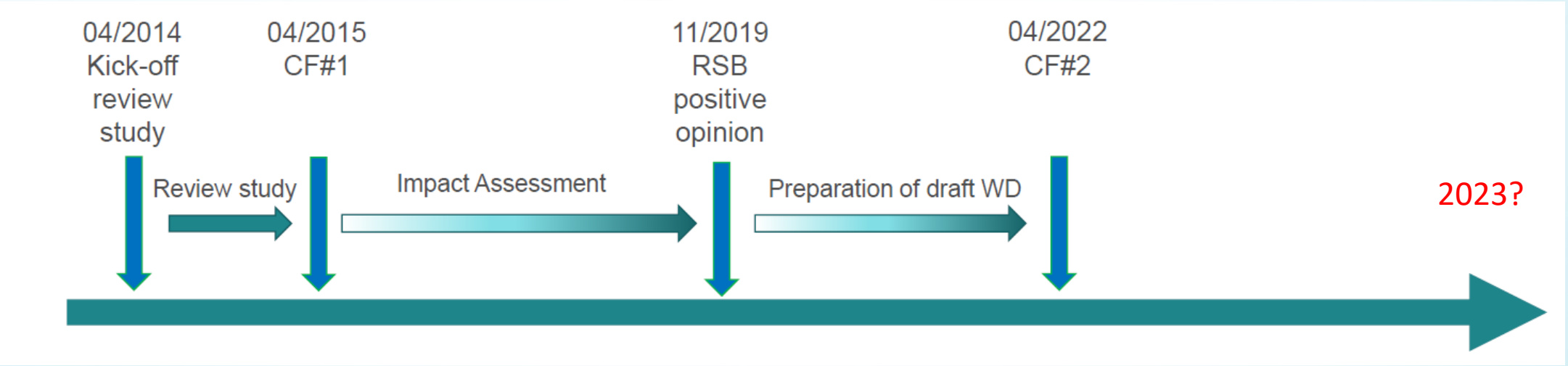
Overview of work on the revision – a long story



6. Update on review of Regulations

Fans Regulation 327/2011

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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

6. Update on review of Regulations

Fans Regulation 327/2011

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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**

6. Update on review of Regulations

Fans Regulation 327/2011

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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

6. Update on review of Regulations

Fans Regulation 327/2011

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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

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

Motorised impeller

Bare shaft fan

Impeller

European Commission

6. Update on review of Regulations

Fans Regulation 327/2011

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).

6. Update on review of Regulations

Fans Regulation 327/2011

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Rules for incomplete fans

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

6. Update on review of Regulations

Fans Regulation 327/2011

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Conformity assesment 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

European Commission

6. Update on review of Regulations

Fans Regulation 327/2011

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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?

6. Update on review of Regulations

VU Regulation 1253/2014

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Review history

- February 2019 Lunch of study
- May 2019 First Stakeholder meeting
- April 2020 Second Stakeholder meeting
- March 2021 Consultation Forum Meeting

6. Update on review of Regulations

VU Regulation 1253/2014

- In March 2022, the Commission informed of its intention to lauch an additional technical study
  - Contract was supposed to be settled before the summer
  - Study was expected to be finalised within 12 months

6. Update on review of Regulations

Regulation 2281/2016

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Article 7 of the current Regulation

"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

6. Update on review of Regulations

Regulation 2281/2016

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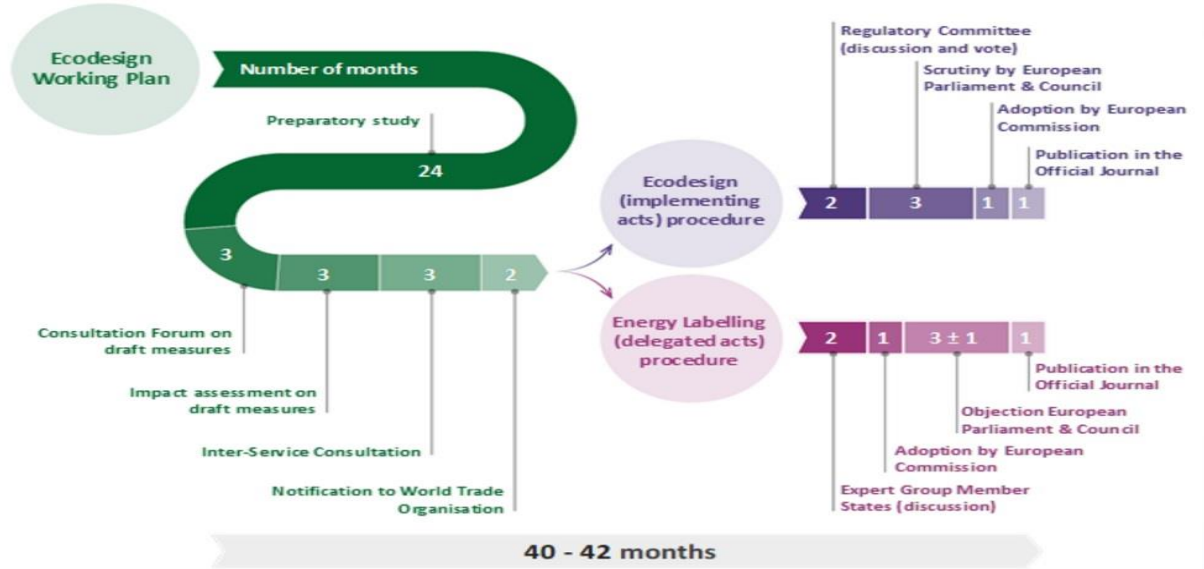

The main aspects that will be assessed by the review could be:
the appropriateness of setting ecodesign requirements covering direct greenhouse gas emissions caused by refrigerants;
the appropriateness of setting ecodesign requirements for high temperature process chillers using evaporative condensing 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.

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Coffee break

Join us in the foyer

See you again in 30 minutes!

Meeting Roadmap

EUROVENT SUMMIT ANTALYA 25-28 OCT 2022 #BuildingBridges

1. Introduction, EUROVENTSUMMIT Open Session
2. - 4. Formalities
5. Eurovent Rooftop Units Guidebook
6. Update on review of regulations

- Coffee Break 11:00 – 11:30

7. **Opportunities and challenges for the RTU Industry**
8. Update on standards
9. Upcoming agenda items
10. Announcements
11. Next meeting(s)

7. Opportunities and challenges
for the RTU Industry

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- Identification of upcoming opportunities and challenges for the RTU industry to define tasks of PG-RT accordingly.
- Proposal of issues to address:
  - Long-term EU policy on climate change
  - Ability of RTUs to provide high IAQ
  - Current energy crisis and shortages in supply of fossil fuels

7. Opportunities and challenges

Long-term EU policy on climate change

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- Heat pumps are perceived as key renowable technology to reach decarbonisation goals
- Directive (EU) 2018/2001 (RED II) on the promotion of energy from renewable sources
  - At least 32% energy in 2030 from renewable sources
  - Proposal to increase to 40-45% in the revision (next year)
  - Methodology for accounting for energy from heat pumps

7. Opportunities and challenges

Long-term EU policy on climate change

Proposal for task

- Develop a position paper / white paper to demonstrate how an increase in RTUs' deployment in the building industry could contribute to meeting the RED goals in Member States
  - To advocate on the EU and national level
  - To seek state subsidies for the use of RTUs

Renewable Heating and Cooling Pathways, Measures and Milestones for the implementation of the recast Renewable Energy Directive and full decarbonisation by 2050

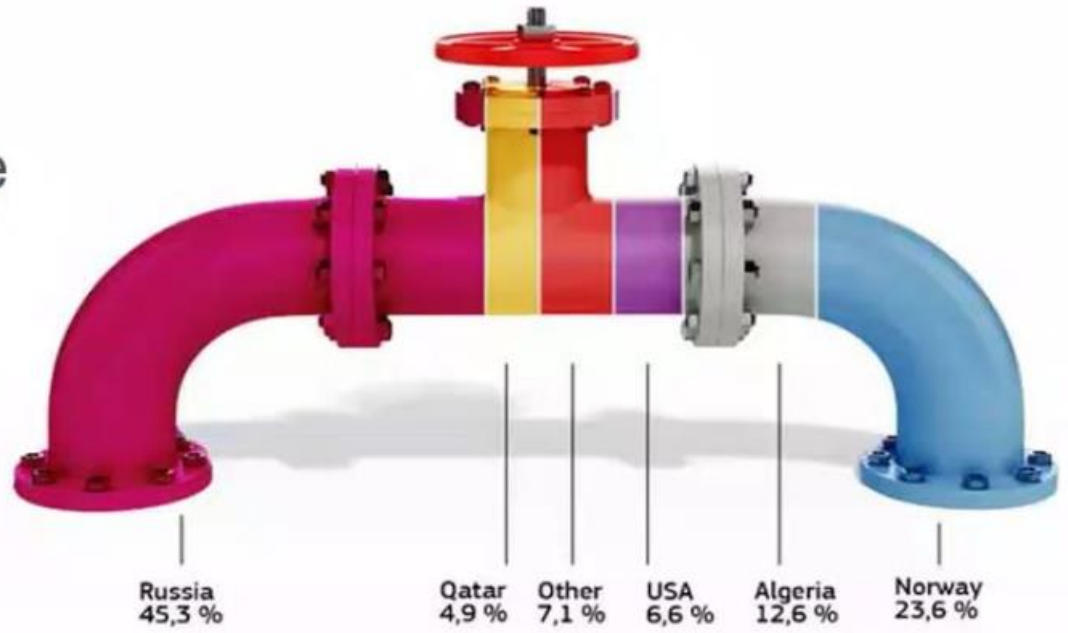
ENER C1 2019-482

Stakeholder workshop (online)

20/10/2022

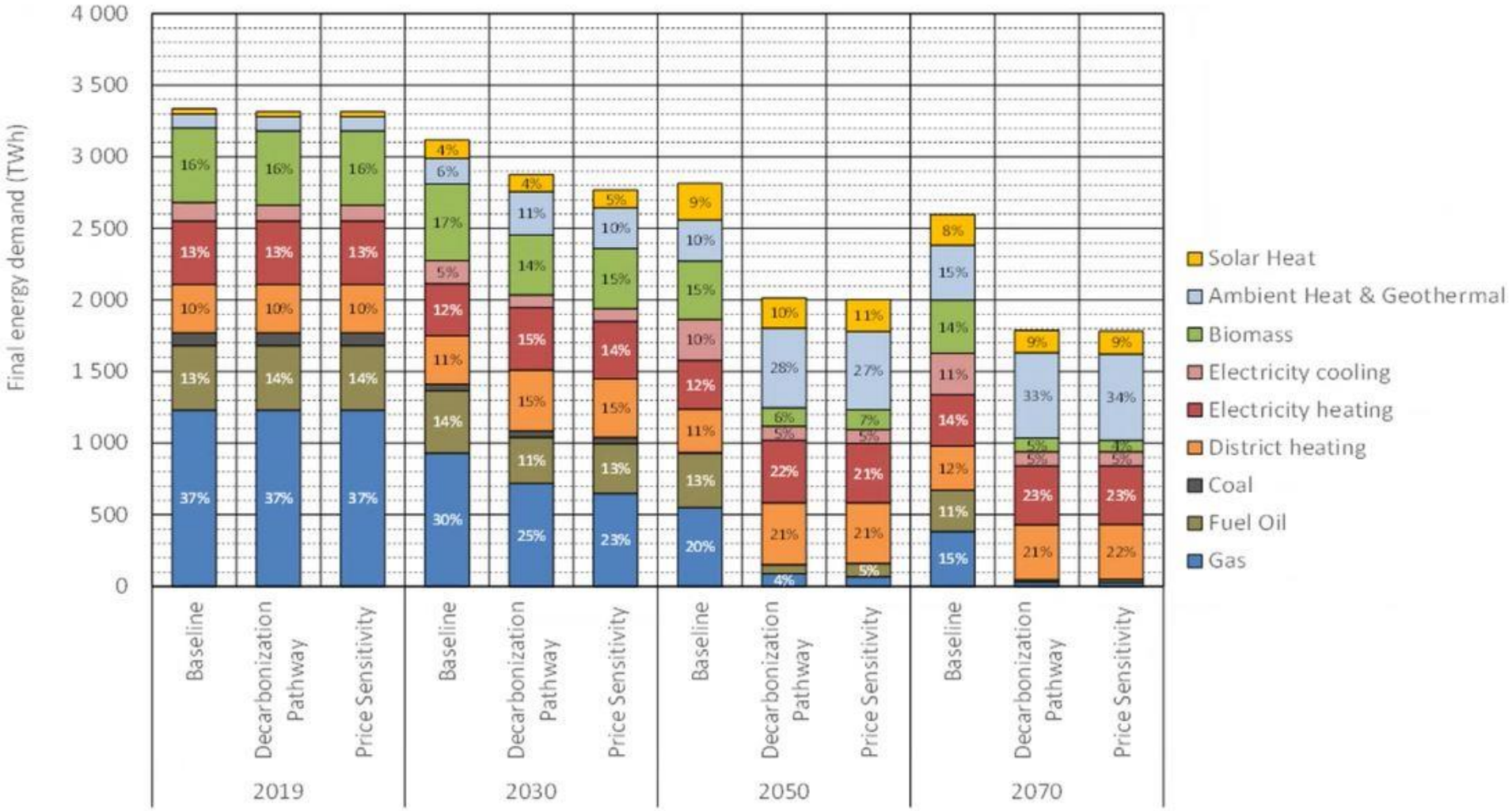
RepowerEU: Double HP deployment rate & develop district heating to replace fossil fuels

- **30 million newly installed heat pumps** in 2030, **10 million units** in the **next 5 years**
- **Develop, modernise district heating systems**, which can replace fossil fuels in individual heating, especially in densely populated areas and cities, to **accelerate** the **deployment and integration of**: 1) **large-scale heat pumps**, 2) **geothermal** and 3) **solar thermal** energy
- Develop clean communal heating
- Exploit industrial heat whenever available.



European Commission

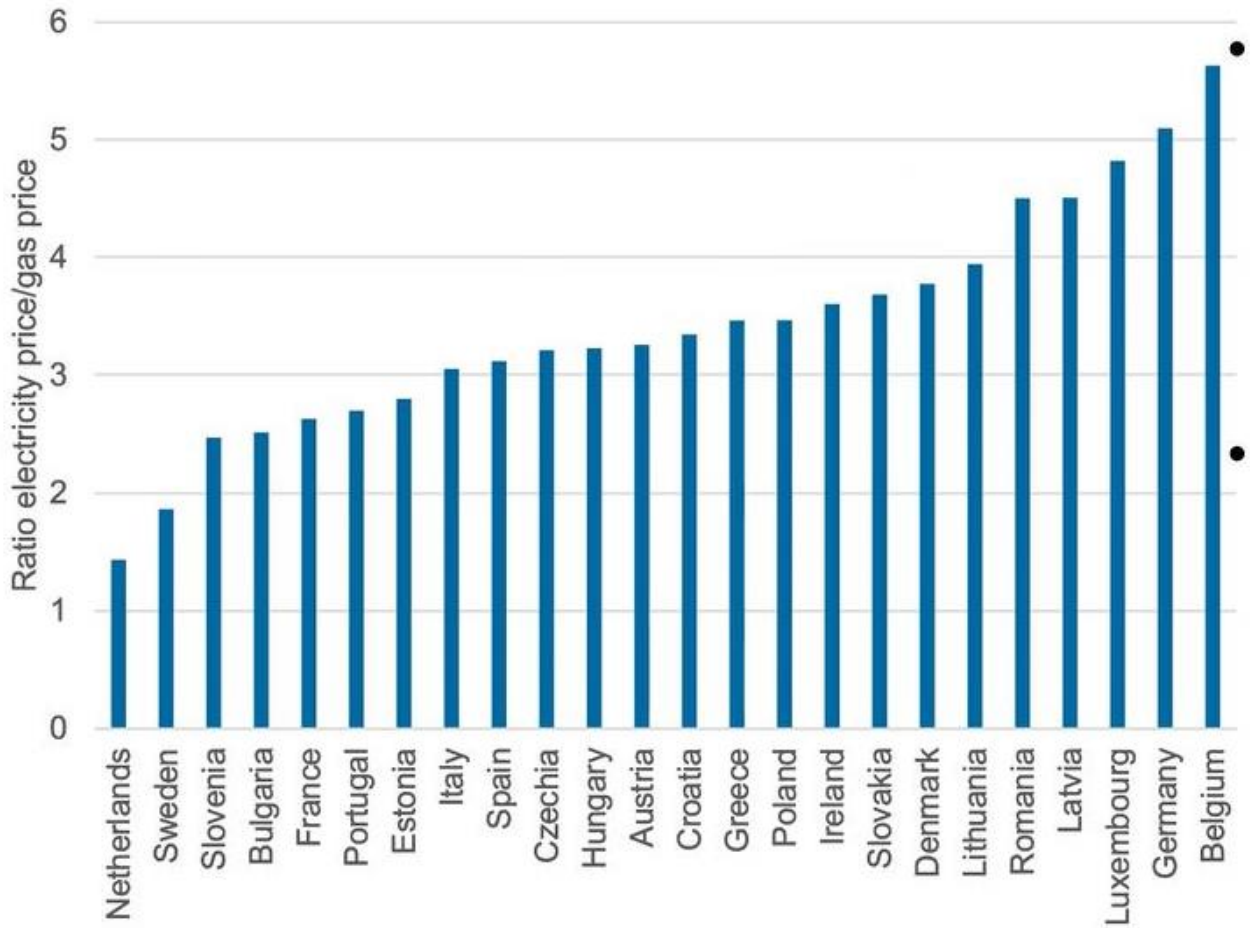
Final energy demand heating and cooling in buildings



Decarbonisation pathway is characterized through:

- Efficiency gains, strongly reducing space heating demand and stabilizing cooling demand
- Gas and oil phase out due to stringent regulations
- Biomass use restricted
- Increasing share of heat pumps, solar and district heating

Economic measures – Energy and carbon pricing and investment subsidies

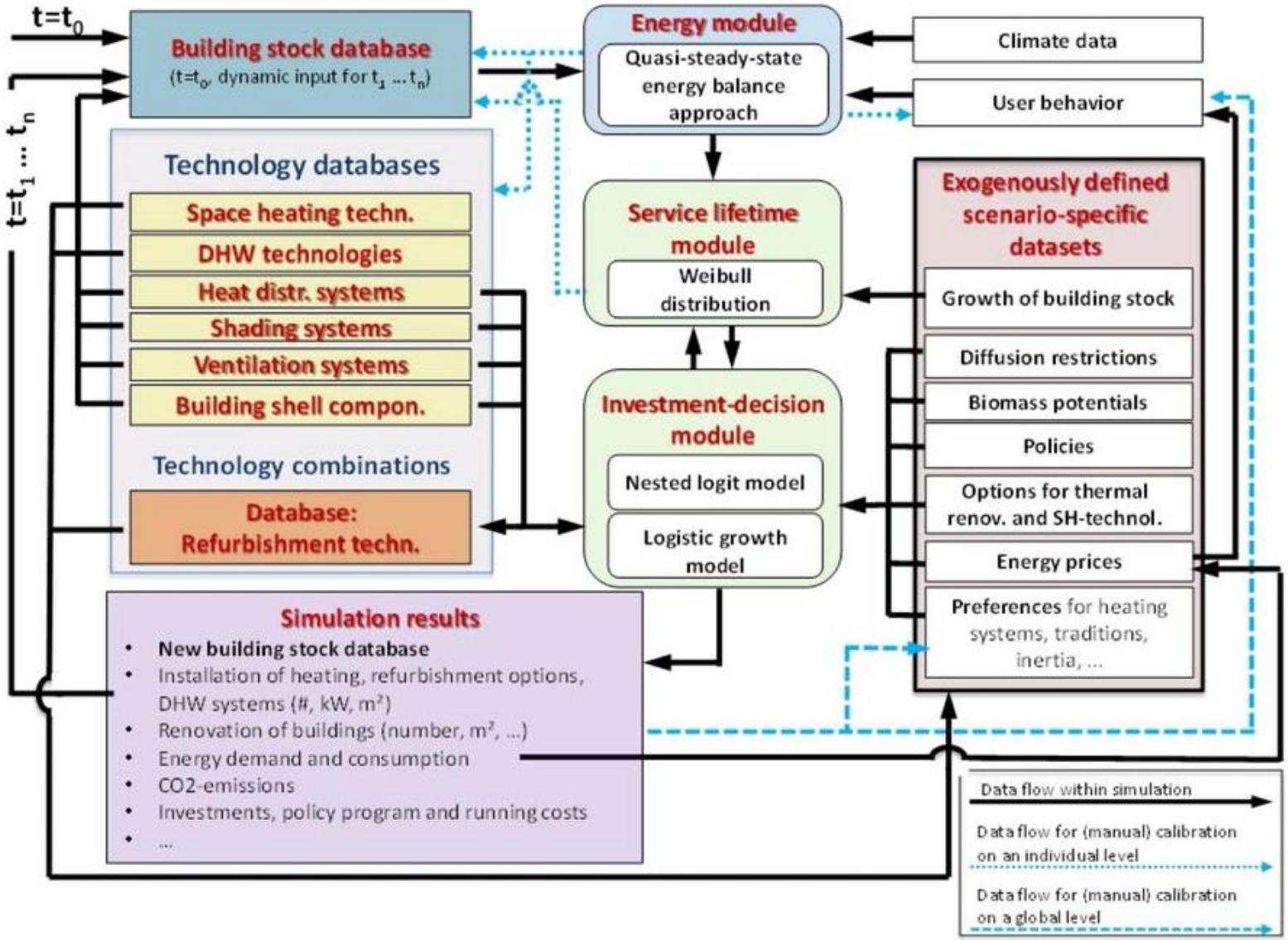


- Subsidy schemes are particularly relevant in countries where the difference between investments in fossil fuel-based heating and heat pumps are high.
- In terms of operating costs, heat pumps are not economically competitive (the graph reflects prices of the second half of 2021)

	Regulations	Economic instruments	Complementary instruments
EU level	Short term: Fossil free new buildings (EPBD) Short term: Framework for national fossil fuel phase-out (EPBD/RED) Medium term: End-date for selling fossil boilers at EU level (Ecodesign)	Short term: No subsidies for fossil heating technologies in any EU funding schemes From 2027: Carbon pricing ETS 2 (ETS directive) Social Climate Fund: Focus on vulnerable households	Facilitate exchange between Member States Guidelines and framework for national support schemes Technology supply chains and production of technologies
National level	Fast introduction of (gradual) phase-out regulations (use obligations, efficiency requirements, ban) Heat planning and strategy for regulatory framework for decommissioning parts of the gas grid	No subsidies for fossil boilers Subsidies for RES-heating Reduce taxes on electricity, add taxes levies on fossil energy carriers	Facilitate market transformation through information and capacity building Address shortage of workforce in the installer market Expansion of RES-E

The model Invert/EE-Lab

- Socio-techno-economic bottom-up building stock model
- Covers EU-27 (+)
- Disaggregated description of the building stock on national level (partly climate regions within countries)
- Modelling the dynamic replacement of building components
- Modelling decision making behaviour of building owners and occupants



7. Opportunities and challenges

Ability of RTUs to provide high IAQ

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- RTUs are often seen as devices with limited ability of providing high IAQ
- Modern RTUs can operate with low or no recirculation while maintaining high energy efficiency (in some climates)

Proposal for task

- Draft a recommendation on the ability of RTUs to ensure high IAQ.

7. Opportunities and challenges

Current energy crisis

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- RTUs as ’all electric devices’ (in some climates) can mitigate shortages in fossil fuels (natural gas) supplies.
- Share of electricity from renewable sources constantly rises and the use of ’all electric units’ contributes to decorbanisation goals.

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8. Updates on standards and regulations

prEN 17625 – rooftop units

Update by the Convenor of CEN TC113/WG15 (Rooftops)

Mr Arnaud Lacourt

8. Updates on standards and regulations

SCIP notification

- SCIP is the database for information on Substances of Concern In articles as such or in complex products established under the Waste Framework Directive
- Guest presentation by **Ms. Salvina Murè** of **ICIM** (Italian independent certification body) on SCIP obligations for AHU manufacturers

8. Updates on standards and regulations

EN 308 – Heat exchangers

New EN 308:2022 supersedes the outdated EN 308:1997

- Approved in Formal Vote in August 2021
- Implementation at national level by CEN members by 31 May 2022

8. Updates on standards and regulations

Standardisation project - BIM for HVAC sector

CEN TC442 (Building Information Modelling) is launching a BIM standard project dedicated to the HVAC sector, which will consist of defining a dictionary model and an exchange format for HVAC product (prEN ISO 16757-4 and prEN ISO 16757-5).

Is there a need for Eurovent to get involved?

- **horizontal task force to liaise with CEN TC442?**

Meeting Roadmap

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9. Upcoming agenda items

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-> to be discussed in the meeting

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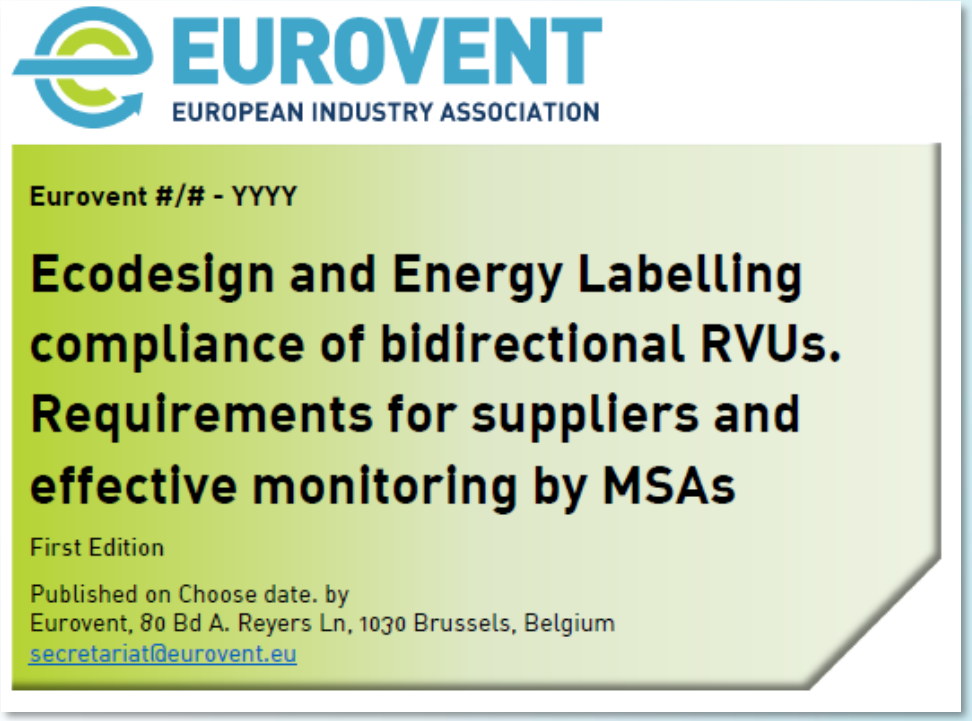
10. Announcements

New PG-RAHU Recommendation

- Enhance the enforcement of Ecodesign and Energy Labelling requirements for bidirectional residential ventilation
- Aimed at market surveillance to presents practical tips to facilitate effective compliance monitoring

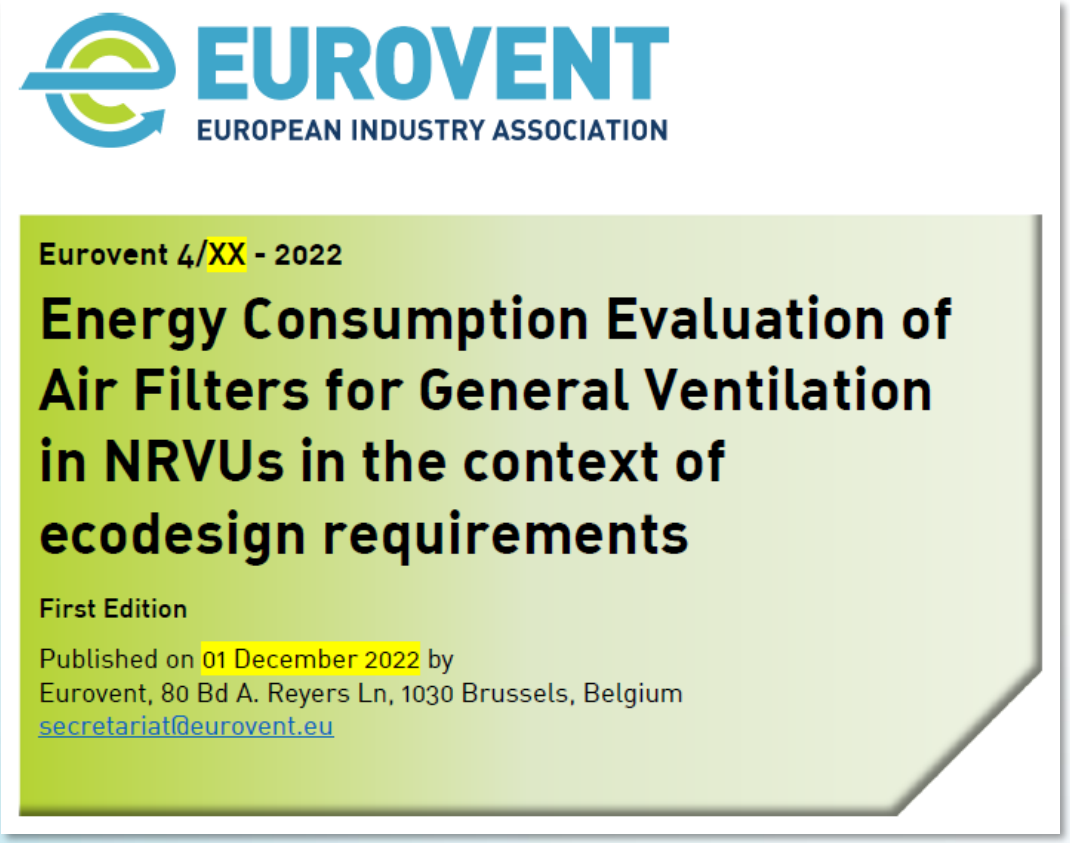


10. Announcements

New PG-AHU Recommendation

10. Announcements

New draft PG-FIL Recommendation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Eurovent 4/XX - 2022

Energy Consumption Evaluation of Air Filters for General Ventilation in NRVUs in the context of ecodesign requirements

First Edition

Published on 01 December 2022 by
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11. Next meeting(s)

Spring 2023 meeting

Proposal:

- PG-RT meeting to be held together with ECC PC-RT meeting (2-day event)
- Venue: CEIS, Madrid, Spain
- Date:
  - Calendar week 12 (20 to 24 March 2023) or
  - Calendar week 13 (27 to 31 March 2023)

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End of meeting

See you soon and enjoy the rest of the **EUROVENT**SUMMIT!

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