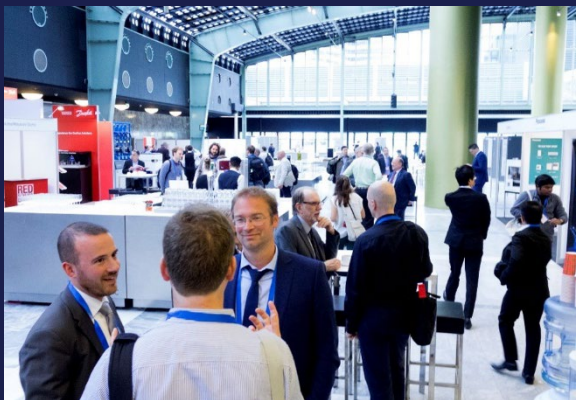


IEA Technology Collaboration Programme on Heat Pumping Technologies (HPT TCP)



Research, Development, Demonstration, and Deployment of Heat Pumping Technologies

The HPT TCP is part of a network of autonomous collaborative partnerships focused on a wide range of energy technologies known as Technology Collaboration Programmes or TCPs. The TCPs are organized under the auspices of the International Energy Agency (IEA), but the TCPs are functionally and legally autonomous. Views, findings, and publications of the HPT TCP do not necessarily represent the views or policies of the IEA Secretariat or its individual member countries.

Webinar – IEA HPT Project 64 Webinar on Flammable Refrigerant Safety

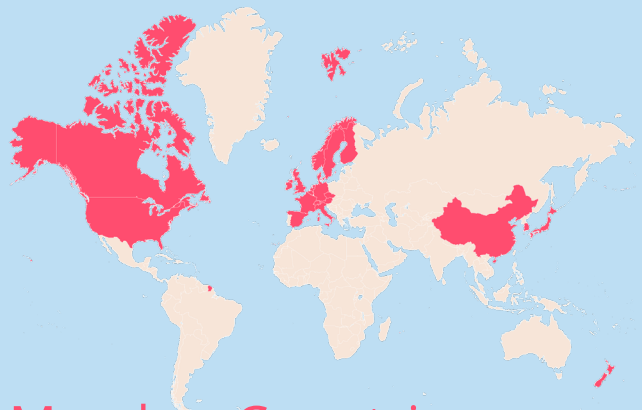
On the Agenda:

- **Metkel Yebiyo (HPC):** Welcome and introduction
- **Björn Palm (KTH Royal Institute of Technology):** Introduction to Project 64 on Safety with Flammable Refrigerants
- **Jafar Esmaelian (KTH Royal Institute of Technology):** Experimental Study of R-290 Leakage Behavior
- **Bernd Windholz (Austrian Institute of Technology):** Austrian survey on the frequency, location, and detection of leaks in heat pump and cooling systems up to 50 kW nominal capacity
- **Maëlle Journay (EDF):** Limits of modelling approach for refrigerant charge assessment in residential heat pumps
- **Arpit Baranwal (Fraunhofer ISE):** Interpolation approaches to improve the exploitation of sparse sensor matrix in indoor release experiments

Housekeeping

- Please ensure your microphone is muted when you are not speaking
- If necessary, change your Zoom ID to your name
- If you have questions or comments during the presentations, please share them with all of us in the chat or raise your hand after the presentation
 - Our aim is to address questions following each presentation during the meeting. However, should we run short on time, we will arrange responses via email
- **This webinar will be recorded and may be shared and made publicly available.**

About Heat Pumping Technologies TCP



20 Member Countries

Austria	Denmark	Italy	Spain
Belgium	Finland	Japan	Sweden
Canada	France	Netherlands	Switzerland
China	Germany	Norway	United Kingdom
Czech Republic	Ireland	South Korea	United States
			New Zealand (limited sponsor)





- A Technology Collaboration Programme (TCP) within **the IEA** since **1978**
- An international framework of **cooperation** and **networking** for different HPT actors
- A forum to exchange **knowledge** and **experience**
- A contributor to **technology improvements** by RDD&D projects

Heat Pumping Technologies

- **Includes**
 - Heating and cooling
 - Air conditioning and dehumidification
 - Refrigeration
- **Covers applications in**
 - Residential and commercial buildings
 - Industries
 - Thermal grids in cities and communities
 - Other applications



RDD&D Priority Areas 2023-2028 - International collaboration projects

System integration	Robust, sustainable, affordable value chains	Extending operation range and applications	Refrigerants and new technologies
			
<ul style="list-style-type: none"> • Project 61: Heat Pumps in Positive Energy Districts • Project 67: Digital Services for Heat Pumps • Project 70: Flexibility from Large-Scale and Aggregated Heat Pump Systems NEW • Heat pumps for hydrogen and carbon capture • Comfort Cooling Concept for Different Types of Climates 	<ul style="list-style-type: none"> • Project 63: Placement Impact on Heat Pump Acoustics • Project 65: Heat Pumps in a Circular Economy • Project 66: Optimal Heat Pump Design and Operation for Broader Acceptance • Project 69: Enhanced Miniaturized Components NEW • New or alternative business models for heat pump 	<ul style="list-style-type: none"> • Project 59: Heat Pumps for Drying • Project 60: Retrofit Heat Pump in Larger Non-domestic Buildings • Project 62: Heat Pumps in residential multifamily buildings in cities • Project 68: Industrial High Temperature Heat Pumps • Heat Pumps in residential multifamily buildings in cities – follow-up 	<ul style="list-style-type: none"> • Project 54: Heat Pump Systems with low GWP Refrigerants FINALIZED • Project 64: Safety Measures on Flammable Refrigerants • Monitoring of Advanced Vapor-Compression and non-Vapour-Compression Technologies for Heating, Cooling and refrigeration • Safe Use of Refrigerants in Heat Pumping Technologies

Communication and Dialogues

Information dissemination and communication

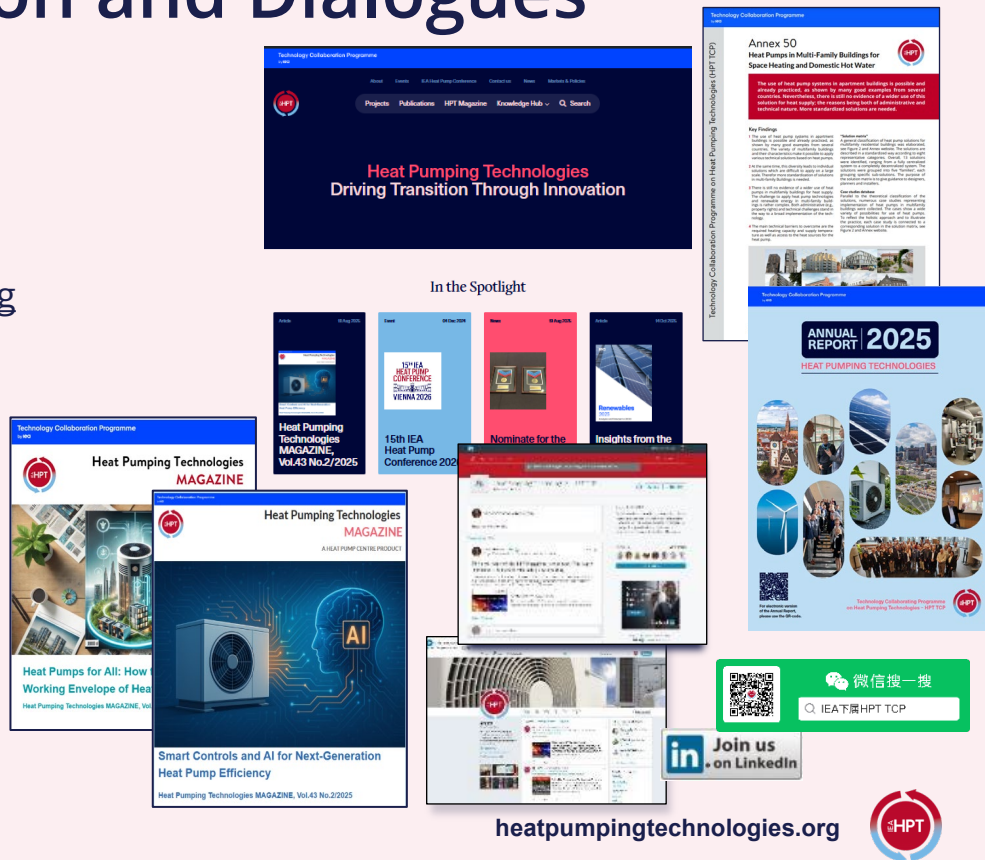
- Publications (e.g., project reports)
- HPT Magazine and Newsletter (digital)
- Website: www.heatpumpingtechnologies.org
- **Workshops and webinars**
- Social media: LinkedIn and WeChat

IEA Heat Pump Conference

- Organized every 3rd year
- **Next: 2029 in Copenhagen, Denmark**

And

- National Experts meetings
- Support to IEA publications
- Outreach activities



Heat Pumping Technologies Magazine and Newsletter



Heat Pumping Technologies

MAGAZINE

A HEAT PUMP CENTRE PRODUCT



**Flammable Refrigerants in Heat Pumps:
Safety, Standards, and Best Practices**

Heat Pumping Technologies MAGAZINE, Vol.44 No.1/2026

**Download
the latest
issue here!!**



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HPT MAGAZINE
& NEWSLETTER**




Upcoming HPT TCP Events


Final Webinar – IEA HPT Project 62: Heat pumps for multi-family residential buildings in cities

 16 July 2026, 14:30 CEST. [Register here](#)

HPT TCP National Experts Meeting

 27 October 2026, 13:00 CEST. [Register here](#)

- **Final Webinar – IEA HPT Project 63:** Placement Impact on Heat Pump Acoustics

 02 December 2026 | 11:30–13:30 CEST | Online

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