

RHC ETIP Expert Group Sweden

Details

- Date: 8 May 2025
- Time: 10:00-11:30
- Format: Online meeting

Participants

- Lucia Torlai (Solar Heat Europe / RHC ETIP Secretariat)
- Valérie Séjourné (Solar Heat Europe / RHC ETIP Secretariat)
- Andrej Misech (EHPA / RHC ETIP Secretariat)
- Leonie Kuhlmann (EGEC / RHC ETIP Secretariat)
- Mattias Jarvinen (Swedish Refrigeration & Heat Pumps Association)
- Joakim Bystrom (Absolicon)
- Signhild Gehlin (Svenskt Geoenergi centrum)
- Kristina Lygnerud (Lund University)
- Caroline Haglund Stignor (RI.SE Research Institute)
- Willem Mazzotti (KTH Royal institute of technology)
- Francisco Beltran (KTH Royal institute of technology)

Summary

Introduction

- Lucia Torlai presented RHC ETIP and its work to promote renewable heating and cooling (RHC) solutions at EU and national level, particularly on research and innovation.
- Lucia Torlai then explained the threefold purpose of the meeting:
 - Connect with national stakeholders working on RHC and foster cooperation among the various solutions.
 - Bring together national experts from the different RHC solutions to discuss the state of the art, market trends, main bottlenecks, policy and financing needs (particularly for R&I), and identify common challenges and solutions.
 - Gather information and insights to substantiate RHC ETIP activities, starting from the upcoming online national roundtable.

- Lucia Torlai presented the past Swedish national roundtable in November 2024, organised by the RHC-ETIP and EHPA. This meeting was structured as a follow-up of such roundtable, to gather the insights from experts in a closed discussion setting.

Discussion

Lucia Torlai opened the discussion introducing three guiding questions:

- What are the main **challenges for the uptake** of RHC solutions in Sweden (both common and technology-specific ones)?
- What are the **Research and Innovation priorities** for RHC in Sweden —both technological (e.g., integration, storage, efficiency) and non-technological (e.g., regulation, market uptake)?
- What are the **regulatory and financing needs** to accelerate the uptake of RHC solutions in buildings and industry in Sweden?

The expert discussion highlighted some recurring themes relevant to the development and implementation of Renewable Heating and Cooling (RHC) solutions in Sweden:

- **Current Status of Heating in Sweden**
Experts unanimously acknowledged that Sweden's heating sector is already largely fossil-free, particularly in the building sector, supported by highly advanced district heating systems. However, while progress is being made in industrial decarbonisation, the sector remains far from fully renewable.
- **Biomass Use**
There was broad consensus on the need to gradually reduce the reliance on forest biomass for heat production, recognising environmental and sustainability concerns related to the excessive burning of forests.
- **Financial Barriers**
High electricity prices, elevated taxes on electricity, and the absence of targeted financial incentives were identified as major obstacles to the wider adoption of RHC technologies by the general population.
- **Political Prioritisation**
Concerns were raised about the current government's policy focus on nuclear energy and electricity generation, potentially at the expense of supporting the RHC sector.
- **Price Modelling**
Current heat pricing models do not adequately reflect the real costs for producers and

consumers across seasons. There is a pressing need to revise these models to improve efficiency and fairness in the market. This was noted as one of the main challenges towards 100% RHC in Sweden, and some entities such as the Swedish Heat Pumps association are actively raising awareness on the issue.

- **Data and Statistics**

Participants noted significant gaps in national energy statistics, particularly the exclusion of privately generated solar thermal and solar photovoltaic energy, as well as ground-source heat pump data. These omissions may lead to misrepresentations of building energy use, which could adversely affect policy formulation.

- **Research Priorities**

Experts emphasised the importance of developing integrated solutions that combine multiple RHC technologies with effective energy storage systems. Notably, a higher degree of Research freedom on RHC topic in universities and research centres would be beneficial to this scope.