

RHC ETIP Expert Group France

Details

- Date: 27 October 2025
- Time: 10:00-11:30
- Format: Online meeting

Participants

- Lucia Torlai (Solar Heat Europe / RHC ETIP Secretariat);
- Esteban Gas (Solar Heat Europe / RHC ETIP Secretariat) ;
- Edwige Porchere, Project Coordinator, Enerplan (Syndicat des professionnels de l'énergie solaire);
- Xavier Moch, Expert Engineer at AFPG (Association Francaise des professionnels de la geothermie);
- Quantin Barral, Vice president of AFPG (Association Francaise des professionnels de la geothermie);
- Auguste Rams, Secretary Generale of FEDENE, District Heating and Cooling division;
- Mohamed Traoré, Innovation Officer at FEDENE;
- Apolline Faure, Head of division for Energy and District Heating and Cooling, AMORCE;
- Rémi Beaulieu, Task Officer for District Heating and Cooling and Geothermal Energy at AMORCE;
- Valerie Laplagne, Renewable Energies Manager (Solar, Biomass, Heat Pumps) at UNICLIMA; Board Member of AFPAC (Association Francaise Pompe a Chaleur).

Summary

Introduction

- Esteban Gas presented RHC ETIP and its work to promote renewable heating and cooling (RHC) solutions at EU and national level, particularly on research and innovation.
- Esteban Gas 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.
- Esteban Gas presented the past French national RHC roundtable in March 2025, organised by the RHC-ETIP and EHP. This expert meeting was structured as a follow-up of such roundtable, to gather the insights from experts in a closed discussion setting.

Discussion

Esteban Gas opened the discussion introducing three guiding questions:

- What are the main **challenges for the uptake** of RHC solutions in France (both common and technology-specific ones)?
- What are the **Research and Innovation priorities** for RHC in France —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 France?

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

- **Funding mechanisms**

The *Fonds Chaleur* managed by ADEME remains the main national instrument supporting large renewable heating projects, yet current allocations are insufficient to meet growing demand, and often the available money is spent quickly. The suspension of *Ma Prime Rénov'* has created a financing gap for building renovation, halting many planned upgrades. Experts noted that while some projects receive initial support, follow-up financing is often delayed or incomplete, threatening implementation timelines. Moreover, *Ma Prime Rénov'* mechanism does not properly take into account RHC technology combinations, such as solar thermal and heat pumps.

- **Economic and regulatory barriers**

Several experts highlighted that economic constraints limit the renewal of building systems, particularly concerning the replacement of heating systems in existing buildings. It was emphasized that the current energy context is not favorable to the development of renewable heating solutions. Indeed, the price of fossil fuels is relatively low, so subsidies are necessary to support the market. Ensuring stability and predictability of the allocated budgets is therefore essential. The regulatory framework tends to favor photovoltaics (French law on “artificialisation” exempts PV fields, while solar thermal fields are accounted as artificialisation of the land), sometimes penalizing solar thermal (ST) and other renewable heat solutions, and thus the *Plan Solaire* parameters should more accurately reflect field realities. Moreover, it was underlined that district heating and cooling (DHC) projects often

face delays due to complex administrative procedures and unclear prioritization between heating and cooling in buildings.

- **Insufficient financial instruments**

Participants highlighted the need for a dedicated guarantee fund to secure investments in *waste heat* recovery, a resource still underexploited in France. Financing for district heating and cooling remains limited despite the sector's high potential, and the current segmentation of the *Fond Chaleur* produces imbalances between large projects and smaller territorial or community-based initiatives. Overall, experts called for more predictable and simplified financial instruments to stimulate deployment.

- **Competition and visibility**

Renewable heating and cooling technologies rely heavily on state support to be cost-competitive, yet funding schemes lack stability and long-term visibility. Ideological debates persist regarding whether collective heat pump systems qualify as renewable, though most experts now recognize them as such. The absence of a clear, stable policy trajectory generates uncertainty for investors and slows down industrial and local planning.

- **Research and innovation priorities**

Deep geothermal resources remain under-mapped, and experts recommended regional geo-scanning campaigns to identify hidden potentials in France. At the DHC level, lowering the operating temperatures of district heating networks would significantly improve their efficiency and integration with low-temperature renewable sources. Thermal Energy Storage (TES) requires stronger public support, especially for large seasonal systems, more efficient and largely used in Northern Europe, and for innovations in phase-change materials. Regarding district heating networks, it was recalled that inter-seasonal storage must be developed more (in tanks, silos, or large basins) to enable the energy transition of these networks. A participated debate concerned the *Hybridization of technologies*—such as combining geothermal, solar thermal, and heat pumps—which is not efficiently supported by current funding rules. The sector needs clearer technical definitions, optimized temperature ranges, and digital control systems to improve synergy. Lastly, training and professional upskilling are also critical to expand expertise in collective and tertiary heat pump applications.

- **Need for recognition of renewable cooling**

Cooling demand is rapidly increasing, particularly in residential buildings, yet there is no European or national method for accounting renewable cold in energy balances. Experts stressed that recognizing renewable cooling within statistics and support mechanisms is essential for driving development of district cooling networks and efficient heat-pump-based systems.

- **Regulatory and financial framework**

France has yet to clarify its national position regarding financing instruments and has not transposed the new ETS 2 (EU Emissions Trading System extension). Fossil fuels remain under-taxed, which undermines the competitiveness of renewable heating. AMORCE has proposed an amendment to adjust gas pricing and a "socio-economic buffer" to reinforce fiscal incentives for consumers for renewable alternatives. At the European level, the Social Climate Fund, to be financed by ETS 2 revenues, is designed to assist households through the energy transition, but France has not yet submitted its national action plan, leaving future access to these funds uncertain.

Conclusion:

The RHC sector in France faces persistent structural barriers—limited funding, fragmented regulation, and insufficient recognition of renewable cooling. Experts agreed that a more coherent and predictable framework is needed, combining clearer regulation, stronger financial support for waste heat and storage, and enhanced R&I investment to secure competitiveness and sustained growth.