

### RHC ETIP Expert Group Croatia

#### Details

- Date: 13 May 2025
- Time: 11:30-13:00
- 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)
- Andro Bacan, Lead consultant at the Energy Institute Hrvoje Pozar (EIHP)
- Josip Miskic, Project Assistant at Zagreb University
- Martina Tuschl, Director of Geothermal energy sector at Croatian Hydrocarbon Agency
- Ivan Przulj, Expert Advisor, REGEA
- Tomislav Novosel, Senior expert at the Institute for European Energy and Climate Policy foundation (IEECF)

#### 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 Croatian national roundtable in February 2025, 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 Croatia (both common and technology-specific ones)?
- What are the **Research and Innovation priorities** for RHC in Croatia —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 Croatia?

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

- **Low Public Awareness and Engagement**  
Among the main challenges to RHC in Croatia, here is limited understanding and societal interest in renewable energy technologies, with cost being the dominant factor in household energy choices. Traditional fuels like firewood remain common.
- **Aging Building Stock and Inefficient Renovations**  
Croatia's old and energy-inefficient buildings require significant renovation. However, renovation efforts are sporadic and insufficient to support widespread RHC adoption.
- **Lack of Stable Financial Support Mechanisms**  
Current financial schemes are inadequate, with no consistent incentives for RHC. Price distortions from fossil fuel subsidies undermine market competitiveness for renewables.
- **Underinvestment by District Heating Providers**  
District heating (DH) companies show limited interest in renewable integration, largely due to uncompetitive pricing structures and outdated system designs, especially in meeting hot water and high-temperature demands.
- **Weak Institutional and Regulatory Coordination**  
Poor inter-ministerial coordination, underfunded institutions, and fragmented decision-making slow progress. A lack of government cooperation and transparency exacerbates implementation challenges.
- **Insufficient and Unreliable Funding**  
Government support for RES is sporadic, unpredictable, and often based on a first-come,

first-served model. Long-term, needs-based financing is required, particularly for DH grid upgrades and building retrofits.

- **Data Gaps and Planning Barriers**

A lack of reliable data—on renewable energy use, heat pump deployment, and renovation rates—prevents effective planning and slows down the deployment of RHC technologies.

- **Untapped Potential and Innovation Needs**

Croatia has strong potential for RHC—especially solar thermal—yet political support is lacking. Innovation should focus on replicating proven EU technologies, advancing digitalization, and integrating sector coupling (e.g., thermal storage).

- **Sustainability and Biomass Use**

While biomass (notably wood) is widely used, it is often applied unsustainably. A strategic approach is needed to ensure biomass use supports long-term renewable heating goals.