

Highlights CT3

Decarbonising heating and cooling

1st CA-RES IV Plenary Meeting

17th -18th November 2021

Session 4: The role of the comprehensive assessment in stimulating renewable heating and cooling

As part of the EED and the RED all member states had to make a comprehensive assessment (CA) for heating and cooling, including renewable heating and cooling and waste heat. The CA includes the current status and the potential. Currently 21 member states (and the UK) have submitted their CA. The JRC will evaluate the CA's. Next year (around May) the commission expects to give feedback to the member states. In the session Eva Hoos (DG ENER) gave an overview of the objective for the CA and the state of play and the JRC gave the first appraisal of the submitted CA's. Stane Merse presented the results of the session on the CA from the CA-EED followed by a presentation about the CA from Norway and the results of the questionnaires. In the group work the participants had the chance to exchange their experience with the CA's.

Some main results:

- The CA has stimulated countries to improve their data for (renewable) heating and cooling.
- Data for cooling and waste heat were generally poor and hard to get
- The CA is useful for developing new policies and measures
- It would be better to combine the making of the CA with the NECP.
- The situation differs a lot between countries, therefore the given format was sometimes hard to use.

Session 9: Renewable cooling

The goal of the session was to gain awareness and knowledge of the current state of play on renewable cooling from the regulatory side.

Participants discussed the results of the questionnaire, regarding, among others, the criteria to define renewable cooling, including criteria on energy efficiency and data availability and measures to support renewable cooling.

The results of the study “Renewable Cooling under the Revised Renewable Energy Directive ENER/C1/2018-493” were presented. The study quantified final energy consumption for cooling in EU Member States. Furthermore, it develops projections on final energy consumption for cooling until 2030 as well as 2050. The study investigated the role of RES in cooling, analysed what can be considered as renewable cooling, and suggested definitions of renewable cooling in the context of the RED II. It also assessed the impact of different RES-Cooling definition options on RES and RES H&C shares in 2030 and 2050 and the associated economic impacts.

Participants also discussed the delegated act establishing a methodology for calculating the quantity of renewable cooling and district cooling that can be counted towards EU renewable energy targets under the Renewable Energy Directive 2018/2001. The methodology aims at ensuring that renewable energy used in cooling is calculated in the same way by each Member State and monitoring, reporting and verification is possible. The Delegated Act includes active cooling systems (building design, ventilation and comfort fans are excluded). Cooling in transportation, refrigeration and cooling applied to mitigate heat from high temperature energy generation processes are excluded. According to the methodology used in the delegated act, renewable cooling must be defined via the criterion of minimum seasonal performance factors (SPF). Only cooling systems operating above the minimum efficiency requirement expressed as primary Seasonal Performance Factor (SPFp) are considered to produce renewable energy. Participants discussed how to interpret the definitions and their implications for their calculations of renewable cooling shares.