

Highlights CT3

Decarbonising heating and cooling

2nd CA-RES IV Plenary Meeting

18th-19th May 2022

Session 3: Status of the implementation of the minimum level for renewable energy in major renovation of buildings (RED art. 15.4)

As of the first of July 2021 Member States should have implemented the Renewable Energy Directive II in their national regulations. In article 15, some requirements are set for the building sector. In particular, article 15.4 requires:

*“Member States shall, in their building regulations and codes or by other means with equivalent effect, require **the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation** in so far as technically, functionally and economically feasible, and reflecting the results of the cost-optimal calculation carried out pursuant to Article 5(2) of Directive 2010/31/EU, and in so far as this does not negatively affect indoor air quality. Member States shall permit those minimum levels to be fulfilled, inter alia, through efficient district heating and cooling using a significant share of renewable energy and waste heat and cold.”*

The goal of the session was to get an overview of the way in which member states have implemented article 15.4 in their building codes, and the main outcomes coming from the discussions of the participants were:

- Most countries (78% of respondents) have implemented the minimum requirement for the level for renewable energy in new buildings, and most of them for major renovations. The required level varies a lot between Member States.
- In most Members States a connection to district heating also is seen as fulfilling the requirement, but there is a difference in the demands for the efficiency or number of renewables in district heating.
- In the Netherlands the minimum level of renewable energy for major renovations is related to the roof area, as most customers use PV-panels to fulfill the requirement.
- Multi-family buildings were seen as an issue by several countries, because of available space for solar energy and issues on self-consumption and division of energy.

Session 13: Renewable heating and cooling in the industrial sector

Mainstreaming renewable energy in heating and cooling is the topic of the article 23 of the directive. In particular, article 23.4 makes express reference to the use of renewables in the industrial sector, when mentioning possible measures to reach the objectives.

The goal of the session was to acquire knowledge of current state of play on renewable H&C in the industrial sector, and the different options and experiences by Member states on how to decarbonize the industrial sector, both from the regulatory and the incentives perspectives.

Participants from the European Commission started by setting the general framework and showing the opportunities brought by REPowerEU to decarbonize the industrial sector, with reinforced targets of using renewable fuels of non-biological origin.

Participants discussed the results of the questionnaire, regarding, among others, current and foreseen in 2030 shares of RES consumption in the industrial sector, regulatory and financial measures in place and potential barriers that could prevent the deployment of renewable energies in the industrial sector.

Experiences on financial measures in place were presented by Germany and Spain. These measures have been running for a couple of years now, and so far, has been most successful in implementing bioenergy projects, although other technologies (solar, heat pumps) have also been developed.

The European Heat Pump Association also made a presentation on the specific potential for heat pumps to deliver and be used in different industrial sectors.

All the participants considered that it is a good time for industry to replace fossil fuels by renewable energies, and most of the participants indicated that the estimated payback time expected from industrial managers for these kind of investments is 3-5 years. Most participants also thought that energy services companies can play a relevant role (instead of the industrial making the investment directly by himself) and, when asked about what specific measures Member States could take, most of the answers targeted the financial side of the problem (e.g., tax exemptions, financing support, attractive funding schemes).