



READY TO HEAT

WHAT HEAT PUMP TECH IS READY TO DELIVER FOR WIDESPREAD DECARBONISATION



Femke de Jong European Climate Foundation

Heat pumps, together with solar energy and energy efficiency, underpin heating and cooling strategy in both the RePowerEU and Fit for 55 package.

While 90% of European homes can technically make the switch, critics often dismisses heat pumps as solutions for so-called "hard-to-decarbonise". In fact, the technical solutions are already in place, and they can decarbonise these buildings within the Paris Agreement timeframe at a fraction of the running cost.

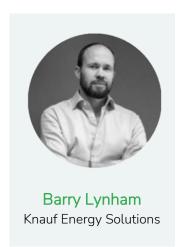
The discussion of them makes for a great contribution to the debate on the Energy Performance of Buildings Directive (EPBD) and on the phase-out of fossil fuel heating.

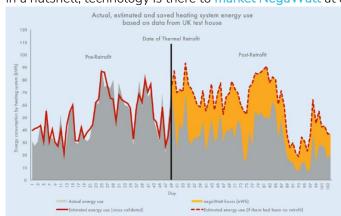
On 28 June, Coolproducts hosted a webinar with tech experts to discover the full potentials of heat pump technologies that might convince the harshest critics. You can follow the recording or read the brief below.

NEW PARADIGM: WHY ENERGY EFFICIENCY IS NO LONGER JUST ABOUT SAVING ENERGY

Energy efficiency is no longer only about mere energy savings. In fact, energy efficiency measures can also be geared to shave off peaks of demand. Through IT and the thorough analysis of the energy demands of our homes and offices, we can integrate smaller and smarter heat pumps in the system and help stabilize the grid.

In a nutshell, technology is there to market NegaWatt at domestic level.







Claudio Carano Clivet

SOLUTIONS FOR THE RURAL MEDITERRANEAN AREAS AND BEYOND

Currently, millions of dwellings in the Mediterranean area do not have hydronic heating. Instead, they rely on energy-guzzling local space heaters for their short winters.

The best technological solutions to decarbonise these houses and condominiums is the combination air-to-air heat pump for heating and to produce domestic hot water, ideally coupled with solar thermal. Air-to-air heat pumps also provide the much-needed summer cooling, a key feature in this area, and the hot water heat pumps reduce the bills on their most important energy use.

It is a particularly effective solution for holiday homes because it is very fast to get into action and a relatively cheap solution. Lastly, this solution is also highly relevant for those who live in more remote areas, such as rural areas, where the costs of the energy transition are felt the most.



Morten Deding
Johnson Controls

MAINSTREAMING LARGE SCALE CLEAN TECHNOLOGIES FOR DISTRICT HEATING

Large scale heat pumps are growing exponentially across Europe, and they are the perfect match for district heating. Often coupled with waste heat from industrial areas, they can also utilise heat sources from non-industrial areas such as rivers and waterbeds.

Against other methods of heating, their strength lies on the low running cost, especially when coupled with waste heat, thermal storage, and solar energy.



Helen Carlström E.ON

HEAT PUMP AS SOLUTIONS FOR MINIMISING WASTE HEAT IN DISTRICT HEATING @

Our industrial areas and urban districts are great producers of lowtemperature waste heat, whether from the green hydrogen production or the heat from air conditioners.

With the low temperature district heating, we can install district heating pipes in dense areas at a fraction of the cost and use that heat in combination with heat pumps located in the buildings, delivering both heating and cooling with optimal performances at competitive costs.



HIGH TEMPERATURE HEAT PUMPS FOR BLOCKS OF FLATS

Urban areas in Europe are characterised by large blocks of flats that not always are easy to renovate. On top of that, there is a large challenge to replace centralised heating that is already present in many big, complex heritage buildings.

For these buildings, the solution is a high temperature heat pump running on natural refrigerants, that can efficiently replace the old gas or oil boiler seamlessly and allowing for a staged renovation of the building. Heat pumps can normally be installed where the boiler is, using and taking advantage of either geothermal or air-to-water units.

YOU CAN FIND MORE MATERIALS BELOW:

Presentation decks

Full recording of the webinar

This event is part of the Coolproducts campaign. Co-led by European Environmental Bureau (EEB) and Environmental Coalition on Standards (ECOS), Coolproducts is a coalition of NGOs working to ensure better products for consumers and the planet. www.coolproducts.eu