



NxtHPG project

“Next Generation of Heat Pumps working with Natural fluids”

NxtHPG final workshop: Breaking out the barriers of natural refrigerants

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Targets:

- producing a definitive step forward to the launch of a high capacity heat pump technology employing natural refrigerants
- future solution for heating and cooling on both new and existing buildings, with full capabilities for integration into the future energy systems of the buildings
- contributing to transformation of the Sector into renewable and efficient system and to the minimization of EU energy consumption and CO₂ emissions

Objective:

The development of 4 to 6 reliable, safe, high efficiency and high capacity heat pumps (>40 kW) working with the two most promising natural refrigerants:

- Hydrocarbons
- CO₂
- Together with a set of improved components and auxiliary devices adequate for the efficient and safe use of the two refrigerants

Focus of the NxtHPG project:

- Development of an efficient capacity modulation in order to enhance the integration capability with other renewable sources in buildings and industry
- Bring a definitive step forward to overcome the barriers holding back the spread of natural refrigerants by proving that a new generation of heat pumps based on HCs and CO₂ is perfectly feasible and commercially competitive.

Thank you for your attention!

