

WASTE HEAT: A SHORT EXPLAINER

Utilizing waste heat is at the core of RE-WITCH, the project will deliver waste-heat driven industrial cooling in four sectors.



WASTE HEAT AS DEFINED IN THE EU LEGISLATION



'Unavoidable heat or cold generated as a by-product in industrial or power generation installations, or in the tertiary sector, which would otherwise be dissipated unused into the air or water without access to a district heating or cooling system'.

Renewable Energy Directive (RED III ((EU) 2023/2413))



Waste heat and cold are counted towards renewable energy targets in buildings, industry, heating and cooling sectors.

Europe has considerable opportunities for waste heat recovery from power production, industry and other sectors.

245 Mtoe/year

Estimate of the excess heat in the EU

Waste heat can be directly used at the same or lower temperature, or it can be transformed to electricity or upgraded to a higher level temperature.



Waste heat technologies can be used on site for the energy need of the process itself, or supplied to an industrial process or local district heating and cooling - **reducing overall energy demand.**



300 TWh/year

technical potential for waste heat recovery from industries (Europe).

Barriers to waste heat recovery



HIGH COSTS

INADEQUATE INFRASTRUCTURE

RESTRICTIVE POLICIES

LACK OF TECHNICAL EXPERTISE



RE-WITCH will deliver game-changing solutions in the field of sustainable industrial cooling and heating by demonstrating thermally-driven industrial cooling technologies.



www.re-witch.eu



RE-WITCH

Find out more in a report by RE-WITCH partner IEECP:

"Analysis of related EU, national and/or regional policies, and standards"



RE-WITCH has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no. 101138697. The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither CINEA nor the European Commission are responsible for any use that may be made of the information contained therein.