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EMB3Rs
Heat and Cold matching platform

Name of Project/Programme & Link to website

User-driven Energy-Matching & Business prospection tool for industrial Excess heat/cold Reduction, Recovery and Redistribution: EMB3Rs

https://www.emb3rs.eu

Description of Project

EMB3Rs is an EU-funded project aimed at developing an excess HC (Heat/Cold) (re)use matching platform for industry and end-users. The EMB3Rs platform will allow users to determine the costs and benefits related to excess HC utilisation routes, and to establish the conditions for implementing the most promising solutions. It offers industrial users and other stakeholders an intuitive self-use tool for assessing the feasibility of new technology and exploring business scenarios. This will benefit each individual producer or consumer in a given industrial community but will also deliver win-win solutions between different industries.

The five key messages of EMB3Rs project:
– Easy matching between sources and sinks for residual heat and cold (HC);
– Identification of economically viable business cases for the use of residual HC;
– Optimisation of techno-economic parameters of proposed solutions;
– Additional info' (e.g. on existing infrastructure, legal and administrative framework);
– Lower energy costs, improved competitiveness and reduced environmental impacts.

In the context of the project, a group of researchers and industry experts have joined forces in the European Research Project EMB3Rs (User-driven Energy-Matching & Business Prospection Tool for Industrial Excess Heat/Cold Reduction, Recovery and Redistribution) to investigate the potential of recycling industrial excess heat and cold. Their aim is to design a platform that visualises how energy - normally wasted by releasing it into the environment - could be reused as a valuable source for other industrial processes, district heating and cooling or for other purposes. Eventually, the consortium aims to match potential partners, creating synergies between energy sources and energy users, where the excess energy fits to a specific energy demand. This matchmaking matrix will include the amount of energy, its form, temperature and timing when it can be transferred. In addition, the transportation of the energy will also be modelled on the platform.

Aim/Expected Impact of Project

The objectives and results of EMB3Rs totally serve the overarching goal of the EU Green Deal for climate-neutral Europe, through the following key points:
- Building and renovating in an energy and resource efficient way;
- Mobilising industry for a clean and circular economy;
- Supplying clean, affordable and secure energy.

Involvement of the Agency and Link to the EU Green Deal

Smart Integration

INEGI, Portugal is Coordinator of this Consortium of 16 Partners in Austria, Denmark, Greece, Germany, Portugal & the UK