Proje	ct Fact Shee	et Tech	Institute of new Energy Systems
Project Title	Transfer cluster Heat Pump & Heat Grid -Shaping the Heat Turnaround Intelligently! (W ³)		
Keywords	Network, technology transfer, heat pump, heat grids, heat transition, technology development, networking, grid-serving operation		
Project Details			
Project Start Funding Autority Project Management	2023 European Union Bavarian State Ministry for Science and Art	Duration Project ID	5 years
Sponsor Program	European Regional Development Fund		
Project Budget Contact Person	628.818,12 € Prof. DrIng. Tobias Schrag (Project Leader) Stefan Schneider		
Project Partners	ENERPIPE GmbH, Energieberatung Frei, varmeco GmbH & Co. KG, Wallner GmbH & Co. KG, Installationen Hans Biswenger, K. Linner Heizung-Sanitär GmbH, Jura - Kälte GmbH, Nahwärme Pfofeld eG, ratiotherm GmbH & Co. KG, ENMA GmbH Energie & Objekt Management		

Description

The present project now aims to work out synergies and interfaces between grids (thermal, but also electrical) and heat pumps through innovation and further development in the technology areas, thereby making a sustainable contribution to the future heat supply in Bavaria and Germany and actively promoting the heat turnaround.

In order to unleash the greatest possible innovation potential, both technologies will be considered in their own right, but also interfaces that already reveal a high potential for synergies and thus innovation: For example, large heat pumps in heat grids, intelligent integration of heat pumps in grids (electrical and thermal), local and district heating with decentralized heat pumps, but also the question of when grids make more sense in renovations and when heat pumps.

The technical focus of this project is on the intelligent integration of heat pumps into existing electrical and thermal grids and the associated optimization of the grid-serving operation of heat pumps in a wide range of applications. The scope of the project holistically covers the entire value chain, focusing on the application in private households and in the commercial sector. In addition, new innovative research approaches for the operational optimization of heat pumps in thermal and electrical grids are being developed and jointly implemented with the participating SMEs.