

Innovative Heat Pump Pilot Project in Pasaia, a landmark in European Energy Efficiency efforts



Pasaia, Spain —[10/07/2024]— As part of the European HAPPENING project, the pilot initiative in Pasaia is set to contribute to building energy efficiency through the deployment of innovative heat pump technology. Currently, the pilot is in its operation and monitoring phase, showcasing promising advancements.

The pilot project is part of the pilot project program, an essential task in the HAPPENING project, and has successfully entered the operation and monitoring phase. As has been remarked by members of local partners ALOKABIDE and TECNALIA “the installation of the innovative heat pumps technology involved two key stages. The central installation was completed in three weeks, primarily in the parking area, with distribution piping laid out in common spaces without impacting individual dwellings. The individual heat pump installation for each of the eight dwellings followed a structured process over six weeks”.

Preliminary results indicate substantial energy savings, with significant reductions in primary energy (PE) consumption compared to traditional natural gas boilers. “These early findings are promising, even without the added benefit of PV integration, which would further reduce non-renewable PE consumption”, ensures Jon Iturralde of TECNALIA.

The heat pump cascade system's versatility extends its application to refurbished residential buildings in different climates, ensuring high efficiency. This system is also suitable for office buildings, enhancing the project's replicability across diverse settings.

Since October 2023, the newly installed HAPPENING system at Pasaia has been running efficiently, with continuous control adjustments and improvements enhancing its performance.

About HAPPENING EU Project

Currently, buildings account for 40% of energy demand and 36% of CO2 emissions in Europe, needing the decarbonisation of existing structures to meet climate goals. HAPPENING project aims at achieving this by developing decentralised heat pumps combined with renewable electricity production, offering a low-intrusive and adaptable solution for different building requirements. This project streamlines planning, installation, and operation processes while introducing innovative financial models to boost investments in residential retrofitting. Demonstrating in Spain, Italy, and Austria, HAPPENING targets to achieve 70-75% renewable energy use, 30-50% energy and GHG savings, and significantly reduced planning and installation times, with a payback period of under 8 years.

For More Information

For further details about the HAPPENING project and the Pasaia pilot initiative, please visit our website or contact: info@happening-project.eu