

The project explored two pivotal themes: H3, aiming to enhance energy practices for grid support through home energy technologies, and H5, focusing on smart algorithms to optimize household energy use and reduce costs for both consumers and the energy system. While emphasizing smarter energy utilisation like load shifting and dynamic export limits, it also sought real-world trials for these innovations.

The assessment revealed critical insights into household energy distribution, with 40% used for heating/cooling, 30% for appliances, and 25% for household use. Despite the