

## **Hybrid energy storage solutions for buildings: the Hybuild project**

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The development of integrated hybrid storage solutions, coupling both thermal and electric storage, is extremely relevant in many different applications, such as industrial and residential ones. The EU-funded HYBUILD project (GA 768824) focused on the design and testing of innovative hybrid storage solutions for buildings, suitable for applications both in Continental and Mediterranean climates. The presentation will summarize the most relevant results achieved in the course of the project. At first, the innovative components developed, namely, integrated vapour compression heat pump with latent storage, sorption modules for heating and cooling and integrated Li-based battery rack, will be described along with the performed characterization at lab level. Subsequently, some of the most relevant lab-scale characterization of the integrated systems and the results achieved during the demonstration campaign in selected buildings will be presented to highlight the most relevant features of the technologies and the future development plan.