# E2VENT

Energy Efficient Ventilated Façades

„Energy Efficient Ventilated Façades for Optimal Adaptability and Heat Exchange enabling low energy architectural concepts for the refurbishment of existing buildings."

E2VENT will develop, demonstrate and validate a cost effective, high energy efficient, low CO_2 emissions, replicable, low intrusive, systemic approach for retrofitting of residential buildings, able to achieve remarkable energy savings, through the integration of an innovative adaptive ventilated façade system, including:
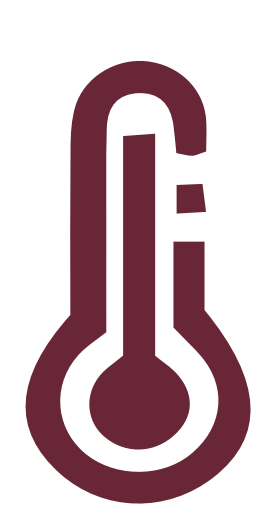
- Smart modular heat recovery units which improves Indoor Air Quality while minimizing energy losses
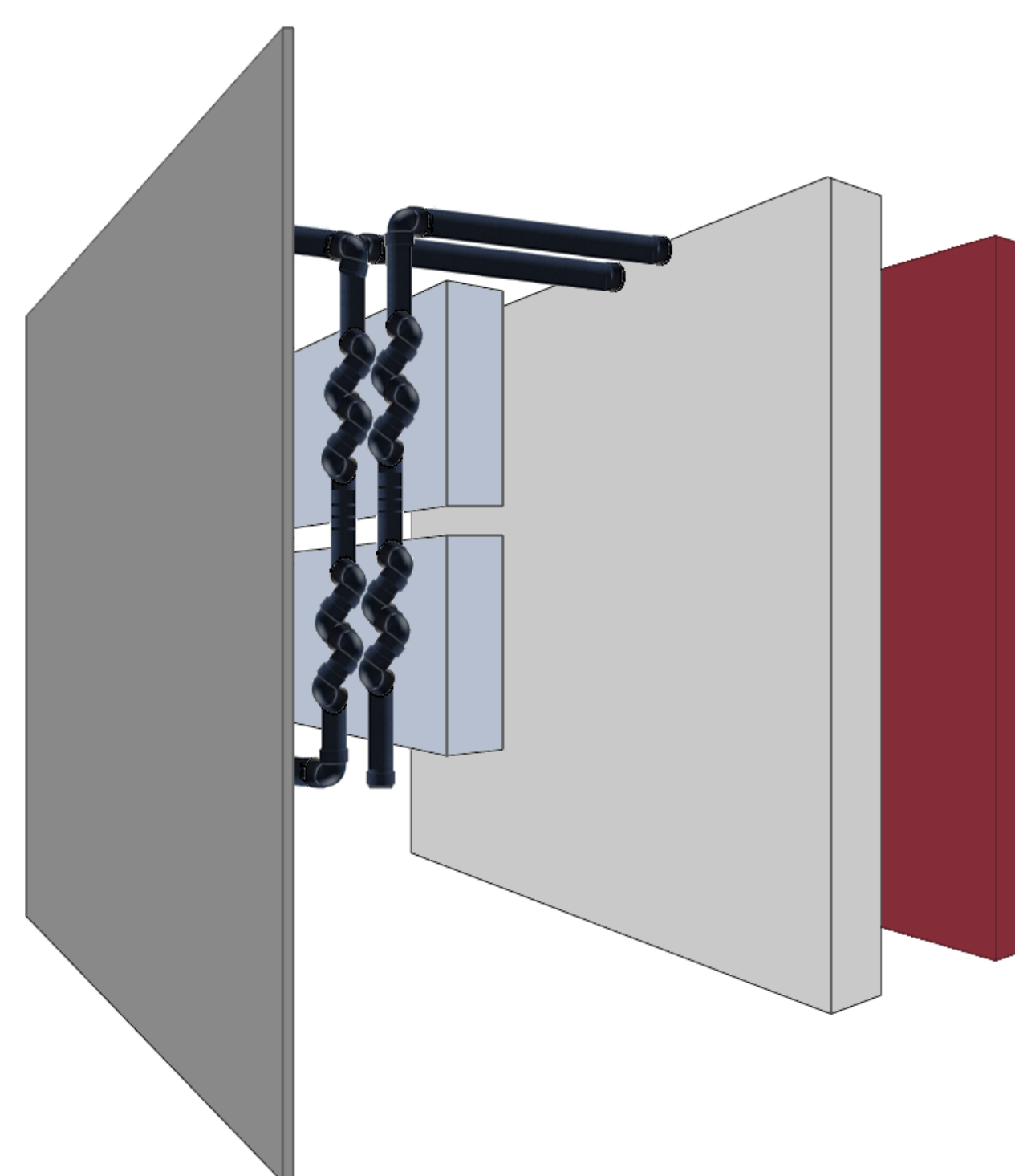
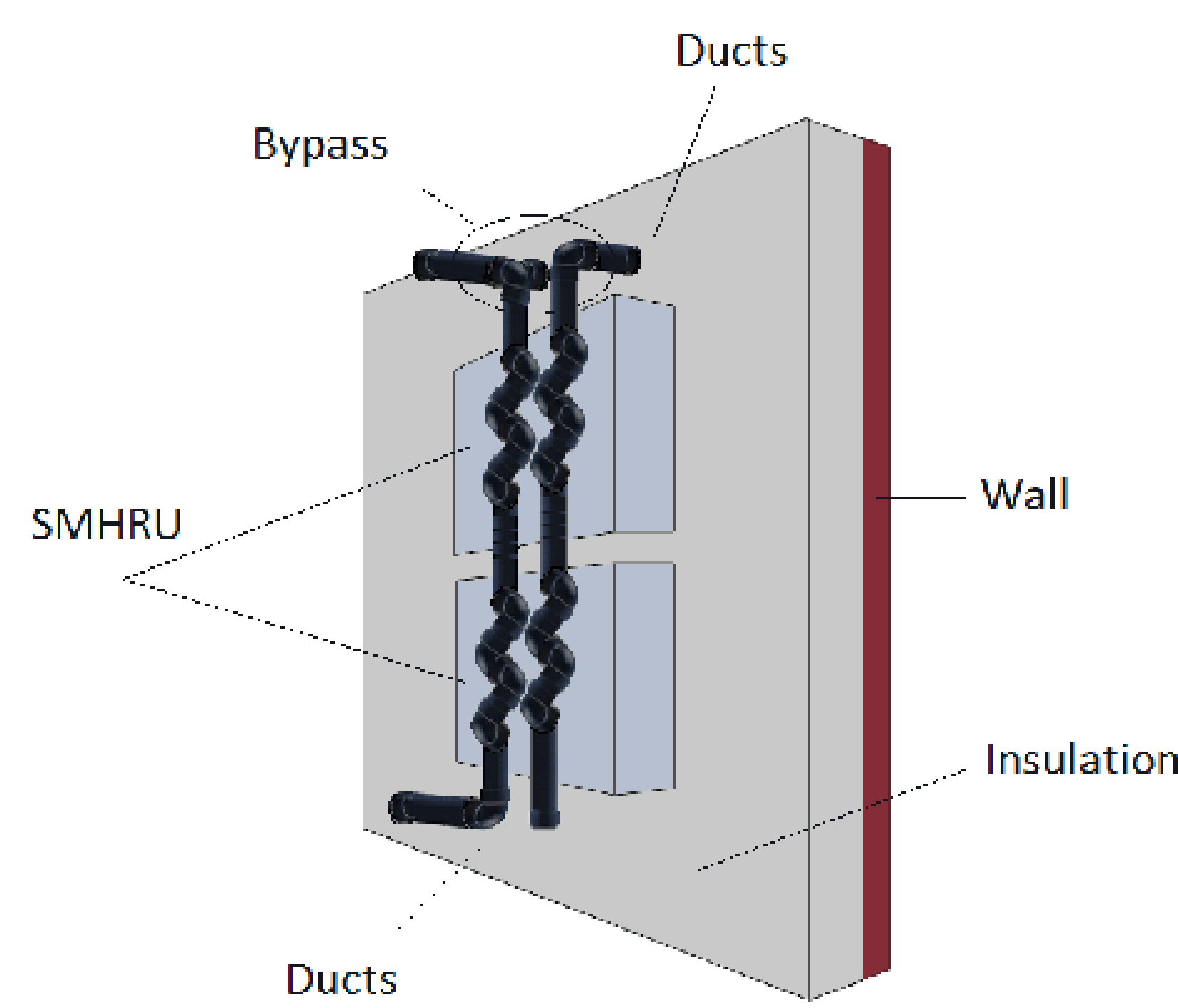- A latent system using PCM that allows thermal storage mode for the reduction of energy peaks

- Cost-effective, easy to install, high performance adapted products for external thermal insulation
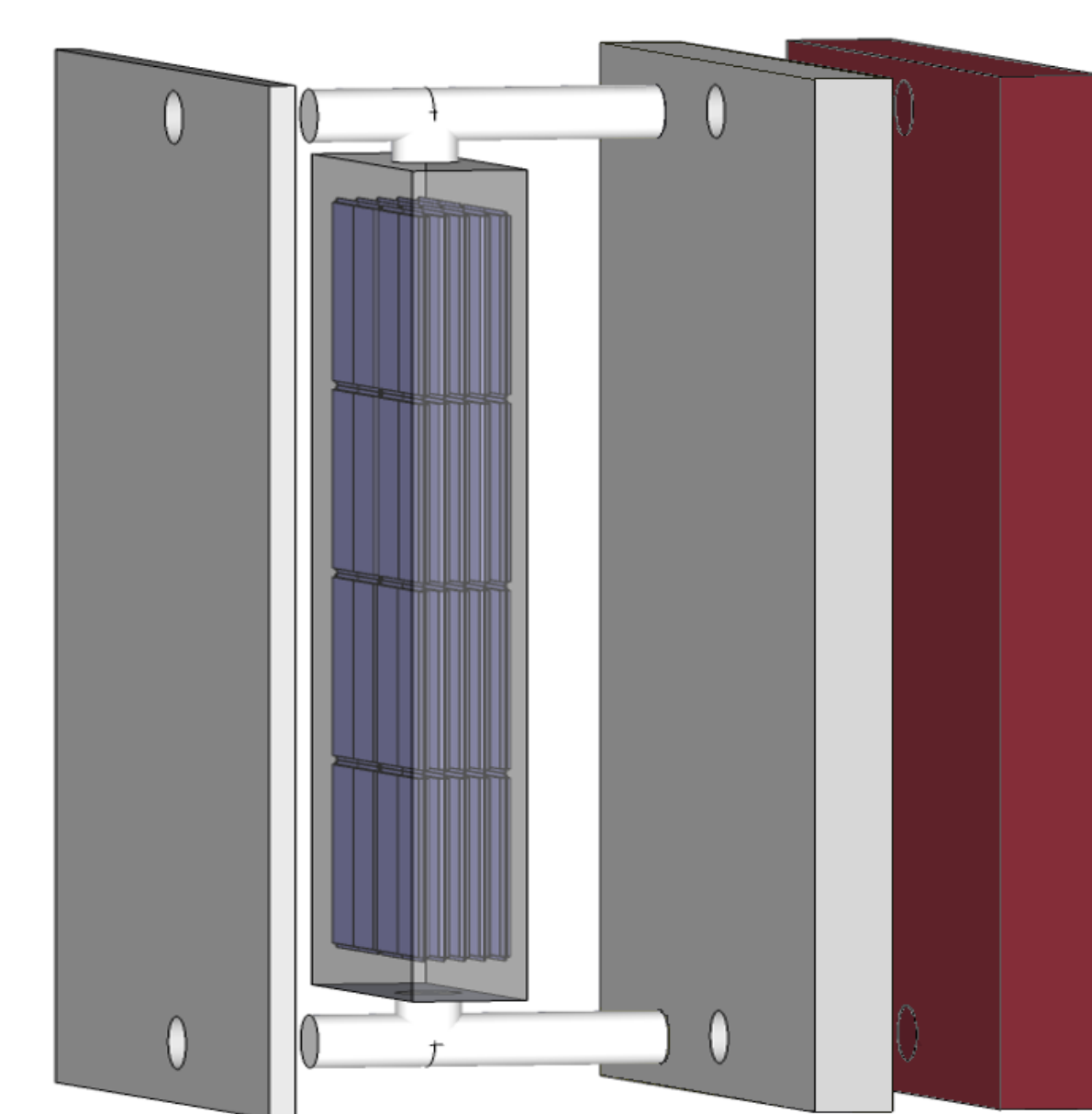
- A smart building management system enhancing the user experience and allowing future adaptability

E2VENT system

SMHRU Smart Modular Heat Recovery Unit

Labels: Ducts, Bypass, SMHRU, Ducts, Wall, Insulation

LHTES Latent Heat Thermal energy Storage

PROTOTYPES performance will be firstly tested on the future façade test bench of Nobatek allowing a setting step.

Two pilot buildings will be renovated with E2VENT systems. One is in Gdansk, Poland, and another in Burgos, Spain, in order to test the E2VENT system in two different climates.
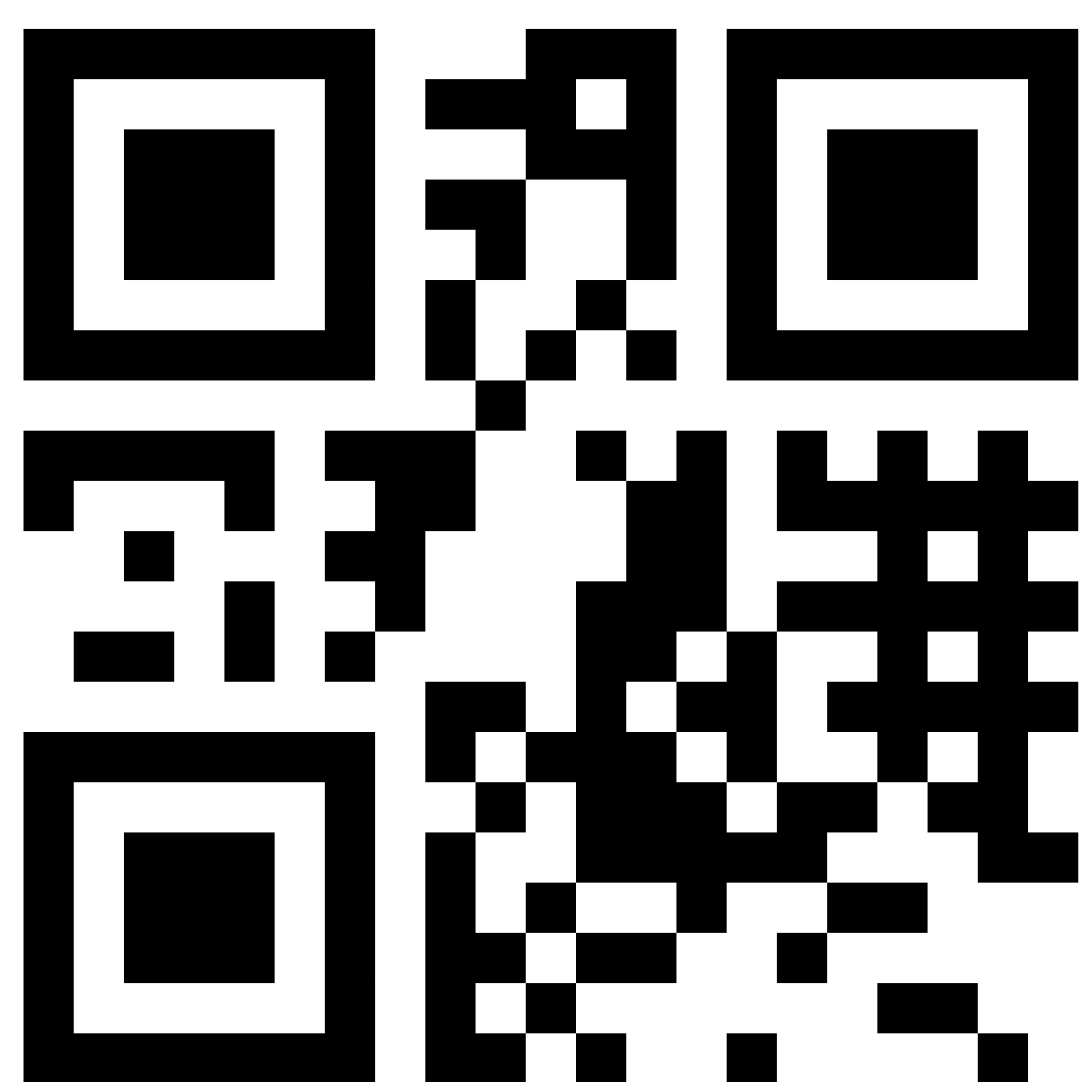

Façade test bench of Nobatek with the E2VENT system

Demo building in Burgos, Spain

Demo building in Gdansk, Poland

Partner logos: Nobatek, EUROPEAN ALUMINIUM, ELVAL, FENIK.TNT, ARISTOTLE UNIVERSITY OF THESSALONIKI, UNIVERSIDAD DE BURGOS, D'APPOLONIA, FASADA, picharchitects, tecnalia, acciona Infraestructuras, UNIVERSITY OF Hull, TECHNOLOGY CENTRE CARTIF

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