

The LowUP partners are working together to develop and demonstrate **one heating and one cooling system** for office buildings, and **one heat recovery system** for industrial processes.

ABOUT THE LOWUP TECHNOLOGIES

HEAT-LowUP

Produces and distributes heat for tertiary buildings like swimming pools, hotels, hospitals or malls from renewable energy sources and heat recovery systems.



Main application: new and refurbished buildings with enough space to install the PVT and the storage system with high heating demand and water consumption.

COOL-LowUP

Offers cooling and ventilation to large and non-critical common areas of hospitals, offices, student residences, administrative buildings. The initial design includes the PCM cold storage system, active chilled beams system, and an advanced control system. The compression chiller and AHU are used as primary generators of cool and ventilation.



Main application: new or deep refurbished buildings with day-time occupancy, constant load schedule along the year and centralised cooling, ventilation and air conditioning.

HP-LowUP

The HP-LowUP provides heat for industrial process (55-80°C) with a heat recovery system upgraded with an electrically driven heat pump with an advanced control system.



How it works: the waste heat recovery system recovers heat efficiently from high density-viscosity fluids at 20-30°C and the water-to-water heat pump upgrades heat at higher temperature (over 70°C) for re-injection in the production line.