

Heat Pump Awards 2026

Application submission

Sports Hall at the Primary School in Łeba

Panasonic | Large Heat Pump Award

1. Application overview

Award category	Large Heat Pump
Title of the project	Sports Hall at the Primary School in Łeba
Organisation Name	Panasonic
Exact address of the project	Adam Mickiewicz Primary School, Tysiąclecia 11, 84-360 Łeba
Funding	Private; Public
Organisations involved in the project	Klimypompypciepla.pl
Project ending date	11/09/2025
Project website	No answer provided.
Sector of application	Public

2. Applicant & EHPA contact details

Full name	Paweł Maj
Email address	Pawel.maj@eu.panasonic.com
Phone number	48538816204
EHPA member involved	None
Role of EHPA member	None

3. Project description and benefits

Project description (goal, problem addressed, and solution provided by the heat pump)

Investment involved extending the Primary School with a Sports Hall building. The aim of the project was to provide heating and DHW for the Sports Hall. The units serve an underfloor heating system and water heaters in ventilation units, and also provide DHW for the building.

Expected or achieved benefits

The project provides a modern and maintenance-free heating and DHW solution for the Sports Hall, with the heat pump cascade covering 100% of the building's energy demand. It ensures a reliable supply of heat for underfloor heating and ventilation units, as well as hot water for the building. The system also reduces reliance on the emergency gas boiler, which is available only to support the system during peak demand.

Obstacles/barriers encountered during development

The challenge was the design stage. The original project specified equipment from another manufacturer; however, the system was successfully redesigned to use Panasonic equipment.

Why should this project win an award?

This project demonstrates how a large-scale heat pump cascade can provide a reliable and modern heating and DHW solution for a public sports facility. Six Panasonic Aquarea T-CAP Big M units provide 100% of the building's energy demand, while the cascade controller ensures optimized operation. The project also demonstrates how an existing design can be successfully adapted to Panasonic technology to meet the specific needs of the building.

4. Technical specifications

Capacity of unit(s)	Panasonic Aquarea T-CAP Big M, 30 kW, cascade of 6 units: WH-WXG30ME8 + WH-CME8L with PAW-A2W-CMH-3 cascade controller
Energy sources used	Heat pumps - air
Coefficient of Performance (COP)	No info
Service provided	Heating + domestic hot water
Refrigerant type	R290

Heat pump details (compressor technology, heat exchanger, system configuration)

Panasonic Aquarea T-CAP Big M, 30 kW: six units (WH-WXG30ME8 + WH-CME8L) configured in a parallel cascade and controlled by the PAW-A2W-CMH-3 cascade controller. The system uses inverter compressor technology and a water-side heat exchanger

5. Renewable energy integration and grid response

Integration of renewable energy sources

No answer provided.

Response to energy demand / smart grid integration

The heat pump cascade system covers 100% of the building's energy demand. Additionally, an emergency gas boiler can support the system during peak demand.

6. Innovation, monitoring and replicability

General (all awards)

Why the project is innovative *(all awards)*

The project is innovative because it uses a six-unit Panasonic Aquarea T-CAP Big M cascade to provide a modern and maintenance-free heating and DHW solution for a large public sports

facility. The system is designed to cover 100% of the building's energy demand, with the cascade controller optimizing the operation of the units according to demand.

Monitoring approach (performance, cost, and carbon targets) *(all awards)*

No answer provided.

For Large Heat Pump or Building Solutions Award

Why the project serves as a model for others *(Large Heat Pump or Building Solutions Award)*

The project can serve as a model for other public and commercial buildings because it demonstrates how a large-scale heat pump cascade can provide heating and DHW reliably and with minimal maintenance. The six-unit Panasonic Aquarea T-CAP Big M system covers 100% of the building's energy demand and can be adapted to other facilities with similar heating and hot water requirements.

Potential for expansion to other locations/industries *(Large Heat Pump or Building Solutions Award)*

No answer provided.

Barriers to replication elsewhere *(Large Heat Pump or Building Solutions Award)*

No answer provided.

Business opportunities for expansion, licensing, or commercial production *(Large Heat Pump or Building Solutions Award)*

No answer provided.

For Innovation Award

Technology/technique developed solely for this project *(Innovation Award only)*

No answer provided.

Differentiation from state-of-the-art solutions & market maturity *(Innovation Award only)*

No answer provided.

Regional benefits (energy savings, emissions, jobs, infrastructure) *(Innovation Award only)*

No answer provided.

Commercial potential *(Innovation Award only)*

No answer provided.