

Heat Pump Awards 2026

Application submission

Sports Hall at the Primary School Pogódki

Panasonic | Building Solutions Award

1. Application overview

Award category	Building Solutions
Title of the project	Sports Hall at the Primary School Pogódki
Organisation Name	Panasonic
Exact address of the project	Zespół Szkół Publicznych, Szkolna 3, 83-236 Pogódki
Funding	Private, Public
Organisations involved in the project	Pawelec - Instalacje Grzewcze, Wodno-kanalizacyjne, Sanitarne Krzysztof Pawelec Krzysztof Pawelec 507 251 625
Project ending date	10/09/2025
Project website	No answer provided.
Sector of application	Public

2. Applicant & EHPA contact details

Full name	Paweł Maj
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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)

The investment involved the construction of a Sports Hall adjacent to the Primary School building in Pogódki. The aim of the project was to provide heating for the Sports Hall building's heating system. The system is largely based on water heaters and underfloor heating.

Expected or achieved benefits

The project provides a modern and maintenance-free heating solution for the Sports Hall, with the heat pump cascade covering 100% of the building's heating demand. The system ensures a stable supply of heat to both the water heaters and underfloor heating, while the cascade controller optimizes the operation of the two heat pump units according to the building's demand. The solution also eliminates the need for manual operation of a conventional heating source and provides a scalable and reliable system for the facility.

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 heat pump cascade can provide a reliable, modern and maintenance-free heating solution for a public sports facility. The two-unit Panasonic Aquarea T-CAP Big M cascade covers 100% of the building's heating demand and efficiently supplies both water heaters and underfloor heating. The project also shows how Panasonic technology can be successfully integrated into a redesigned system, providing a practical and scalable solution for other public buildings.

4. Technical specifications

Capacity of unit(s)	Panasonic Aquarea T-CAP Big M, 25 kW, cascade of 2 units: WH-WXG25ME8 + WH-CME8L with PAW-A2W-CMH-3 cascade controller
Energy sources used	Heat pumps - air to water
Coefficient of Performance (COP)	No info
Service provided	Heating
Refrigerant type	R290

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

Panasonic Aquarea T-CAP Big M, 25 kW – 2 units (WH-WXG25ME8 + WH-CME8L) in a parallel cascade, controlled by the PAW-A2W-CMH-3 cascade controller. The system uses inverter compressor technology and a water-side plate 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. The heat pumps supply energy to a buffer tank, from where it is distributed to the water heaters and underfloor heating. The operation of the Panasonic heat pumps is optimized by the PAW-A2W-CMH-3 cascade controller.

6. Innovation, monitoring and replicability

General (all awards)

Why the project is innovative *(all awards)*

The innovation of the project lies in the use of a heat pump cascade in the Primary School Sports Hall building. It meets the operational requirements and is an interesting project within the municipality.

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 heat pump cascade can provide a reliable, maintenance-free heating solution for a large facility. The system covers 100% of the Sports Hall's heating demand and can be adapted to similar buildings with comparable heating 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)*

The main barriers are the initial design and system adaptation, particularly when replacing equipment already specified in the original project. These can be overcome through early coordination between the designer, installer and manufacturer, allowing the system to be redesigned and properly integrated. Careful technical planning and selection of the appropriate heat pump cascade and control system are also essential.

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.