

Efficient energy management solution for the smart city project, Future Living® Berlin.

Berlin, Germany



Berlin's First Smart City Quarter Powered by Panasonic. Nearly CO₂-free Heating for 90 Households.

Today, the showcase for social, “digital & connected” and “green & sustainable” living has commenced in Central Europe. Panasonic Europe started an innovative, CO₂-saving energy solution for the smart city project, Future Living® Berlin. The urban beacon is an important project in the company’s wider smart cities portfolio, which contribute to its focus on the decarbonization of society.

The smart city project combines both “green & sustainable” and “digital & connected” living. It is realized through the installation of smart energy solutions including Panasonic’s highly efficient air to water heat pumps, photovoltaic (PV) panels and storage batteries integrated into an intelligent and efficient energy management system.

“We bring to the project over 60 years of heating and cooling expertise alongside decades in PV and battery solutions, and a passion for innovations that will shape the future for generations to come.” said Junichi Suzuki, Chairman and CEO of Panasonic Europe B.V.



Efficient Energy Management

Energy experts and software engineers from Panasonic Europe have developed an intelligent energy management solution to optimize the use of energy and couple electricity with the heating sector. The smart control combines heat pumps together with other efficient, green Panasonic technologies, such as PV panels.

“The solution is a world first, developed as a joint-venture with leading research institutions for decentralized energy management. In simulations together with university test labs we achieved an improvement of used energy by up to 15%.” explained Ralf Becker, Project Leader Energy Group, Panasonic R&D Centre Europe.



Photovoltaic Modules HIT®

Panasonic's unique heterojunction technology uses ultra-thin amorphous silicon layers. These thin dual layers reduce losses, resulting in higher energy output than conventional panels.

High Performance at High Temperatures

HIT® continues to perform at high levels due to the industry leading temperature coefficient of $-0.258\% / ^\circ\text{C}$.

25 Year Product and Performance Guarantee

Power output is guaranteed to 86.2% after 25 years. Powerful and efficient, designed to get the most out of your roof!



Air to Water Heat Pump "AQUAREA"

The Aquarea heat pump utilizes energy from the air to produce heating, cooling and hot water, providing a cheaper, cleaner and sustainable alternative to conventional fossil fuel or electric systems.

Powerful Capacity Even at Low Temperatures

With Aquarea T-CAP technology, Panasonic heat pumps can work in outdoor temperatures as low as -28°C and maintain capacity without backup heating at -20°C .

Aquarea Service Cloud

Aquarea Service Cloud enables remote maintenance of your heating systems. This feature ensures peace of mind and helps increase your satisfaction.

[Advanced remote maintenance functions]

Global view at glance / Error log history / Full unit information / Statistics always available / Most settings available

A Beacon for Sustainable Living

The core energy component of the Future Living Berlin “green & sustainable” goal is a combination of the installed Panasonic’s air to water heat pump product line-up, ‘Aquarea’ and Panasonic’s photovoltaic module “HIT” panels.

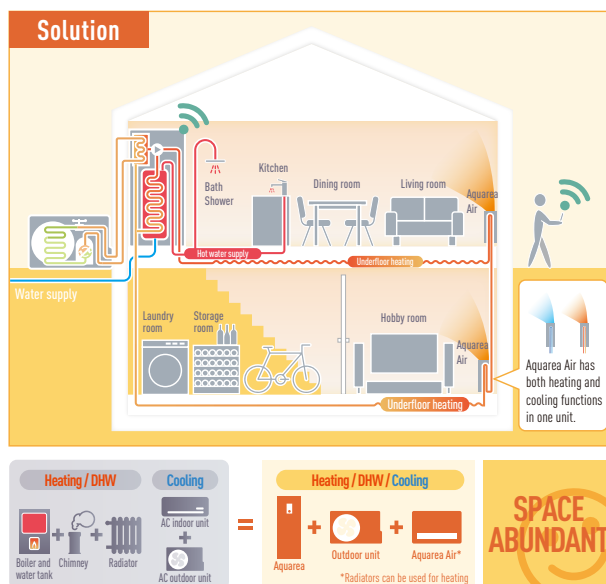
The highly energy efficient technology runs almost entirely carbon-free when powered by the renewable energy provided by the 600 Panasonic HIT panels, which supply a capacity of 195kWp. On account of the patented silicone technology, the Panasonic photovoltaic system is 10% more efficient than conventional modules.

Furthermore Panasonic’s HIT technology achieves a significantly better performance in hot environments because of its superior temperature coefficient – an essential advantage in coping with the climate change.

Utilizing the renewable energy, the air to water system is used for space heating and warm water generation but can also be used for cooling. For increased performance, the heat pumps include a cloud-based connectivity feature for installers called Aquarea Service Cloud, which makes them even more reliable. It saves further CO₂ emissions as maintenance visits can be organized much more efficiently and partly even conducted remotely.

These energy solutions are brought together under an Aquarea Smart Cloud, which allows end-users to monitor their power usage and manage temperature settings accordingly. This results in increased efficiency and comfort while enjoying transparency of their consumption.

To achieve further sustainable and green objectives, residents are part of a wider ecological environment which offers green car sharing, shared washing machines and Panasonic energy solutions.



Installed Products



Photovoltaic modules HIT®



Air to water heat pump "AQUAREA"

