Panasonic Industry relies on sustainable energy generation at the Ottobrunn site

Panasonic Industry Europe implements further measures as part of its global sustainability strategy "Environment Vision 2050" ++ A solar power system with HIT® heterojunction modules and Eco-POWER METER monitoring system from Panasonic optimizes the energy balance of the office building in the district of Munich ++ By 2050, Panasonic aims to use only renewable electricity in its global manufacturing and produce CO2-free.

Munich, July 2021

The optimization of the energy balance at the headquarters of Panasonic Industry in Ottobrunn near Munich through a photovoltaic system with 185 kilowatts of power is a building block in Panasonic's environmental strategy "Environment Vision 2050". With this strategy, Panasonic has committed itself to taking concrete measures globally and actively to implement the "Sustainable Development Goals" (SDG / 17 goals for sustainable development) of the United Nations (UN). While Panasonic in Ottobrunn is now generating solar power for its own consumption, the Eco-POWER METER monitoring system is simultaneously recording electricity consumption. On this basis, energy guzzlers are to be identified and electricity consumption in the building reduced as far as possible.

**Positive overall energy balance and CO2-free manufacturing as targets**

In response to the 2030 Agenda, which sets out the 17 goals for socially, economically and environmentally sustainable development, the Japanese electronics group adopted its own environmental strategy "Environment Vision 2050" with ambitious climate protection targets in 2017. "We all, and therefore all companies, have a responsibility to contribute to achieving the sustainability goals," says Johannes Spatz, CEO of Panasonic Industry Europe. The company therefore intends to further expand its product portfolio for ecological energy generation and saving as well as efficiency enhancement. In parallel, Panasonic is working to achieve the best possible energy balance in manufacturing - for example, of Aquarea® heat pumps, air conditioners and batteries - as well as in all commercial business areas. "The goal of our "Environment Vision 2050" is a positive overall energy balance: We want to generate more energy than we consume," emphasizes Johannes Spatz.

The first milestones are six "zero CO2 emissions factories" that Panasonic already operates in Belgium, Japan, Brazil and Costa Rica. Further "Zero CO2 Factories" will follow, with European production sites also in the picture.

Since 2019, Panasonic has also been a member of the RE100 initiative. In this global network, influential, world-leading companies commit to 100 percent renewable energy. Panasonic aims to use only renewably generated electricity in its manufacturing operations by 2050 and strives for CO2-free production. The Panasonic electronics group, which celebrated its 100th anniversary in 2018, includes 522 subsidiaries and 69 affiliated companies.

**Generate solar power for office building**

The photovoltaic system in Ottobrunn is a measure within the scope of the "Green Plan 2021", the first 3-year plan of the 2050 strategy. In the community within the district of Munich, around 630 Panasonic employees work in two buildings. The solar specialist Vispiron Energy installed 570 Panasonic HIT® N 325 modules, each with 325 watts of power, on the flat roof of one of the buildings. The total output of the system is 185 kilowatts (kW). The modules are elevated to the east / west with an angle of inclination of 10 degrees. 13 tons of material were applied to the roof. This corresponds to about 20 kilograms per square meter of surface load, which was possible without a roof renovation or other stabilizing measures.

The annual yield of the PV system was calculated at 185,000 kilowatt hours (185 MWh). On an ideal sunny day, the solar power can completely supply the building according to simulations. Over the course of the year, Panasonic will be able to cover just under 20 percent of its electricity needs at this location with the PV system. A battery-storage system was not included for reasons of cost-effectiveness. "Since we can use the solar power at the time it is generated, PV batteries are not necessary," says Alexander Schultz-Storz, head of Cross Value and Open Innovation at Panasonic Industry and project manager for this project. Part of the photovoltaic system are four inverters from SMA Solar Technology, that incorporate – depending on the model - high-power relays from Panasonic. The energy management system in the inverters control the energy distribution in the building and the feed-in of surplus PV power into the public grid.

**Saving energy through monitoring**

For effective climate protection, the generation of regenerative energy is one component, the reduction of energy consumption another. Panasonic Industry has therefore installed 22 measuring points of its Eco-POWER METER monitoring system in the building in recent months. Eco-POWER METERs are digital energy measuring devices. An Eco-POWER METER combines the measurement of several circuits with communication via Ethernet and web server.

In Ottobrunn, for example, the power consumption for the charging stations for electric vehicles, LED lighting, ventilation, district heating system, servers, air conditioning systems and even the ramp heating for the underground parking garage is recorded in detail. With a live monitoring system, energy consumption can be viewed in real time on an internet portal. Bin Zhou, Senior Engineer at Panasonic, is responsible for energy measurement with that project, explains the purpose: "It allows us to detect higher-than-average energy consumption and take appropriate power-saving measures, such as using energy-efficient equipment." The monitoring is to be further refined so that all areas of the company can be examined and optimized in terms of energy consumption.

The Institute for Renewable Energy and Energy Management at the Technical University of Munich has the opportunity to conduct research with the energy system at the Panasonic site.

The photovoltaic system has been in operation since July 2021. "We have improved our carbon footprint by 111,000 kilograms of CO2 per year, we are saving on electricity costs, and we are demonstrating a turnkey energy solution that can be adopted by other commercial and industrial companies," Alexander Schultz-Storz sums up.

Currently, the team in Ottobrunn is examining whether a photovoltaic system can also be installed on the second building. "We are already thinking about expanding this photovoltaic system that has just gone into operation," says CEO Johannes Spatz. "The roof of our second building at the Ottobrunn site can accommodate an additional 400 or so panels in the future - a significant number in terms of energy balance, which will allow us to take another significant step toward our 2050 sustainability pledge and the RE100 initiative."

More impressions about the PV installation and Panasonic Industry's strategy can be [found here.](https://youtu.be/zeR1vmkZ1wo)

**Technical data:**

Photovoltaic system with 185 kW power

570 PV modules HIT® N 325 from Panasonic

Four SMA inverters (model dependent with Panasonic High Power Relay)

Mounting system from K2 Systems

Eco-Power Meter from Panasonic

Installation company: Vispiron Energy

**More information:**

Panasonic Industry Europe: https://industry.panasonic.eu/

Panasonic Environment Vision 2050 <https://www.youtube.com/watch?v=sn6F4AYU2GQ>

United Nations Sustainable Development Goals (SDGs): [https://www.un.org/sustainabledevelopment/blog/tag/2050 /](https://www.un.org/sustainabledevelopment/blog/tag/2050%20/)

RE 100: <https://www.there100.org/>

###

**About Panasonic**

Panasonic Corporation is a global leader developing innovative technologies and solutions for wide-ranging applications in the consumer electronics, housing, automotive, and B2B sectors. The company, which celebrated its 100th anniversary in 2018, operates 522 subsidiaries and 69 associated companies worldwide and reported consolidated net sales of Euro 54.02 billion (6,698.8 billion yen) for the year ended March 31, 2021. Committed to pursuing new value through collaborative innovation, the company uses its technologies to create a better life and a better world for customers.

<http://www.panasonic.com/global>.

**About Panasonic Industry Europe**

Panasonic Industry Europe GmbH is part of the global group Panasonic and offers automotive and industrial products and services in Europe. As a partner in the industrial sector, Panasonic researches, develops, manufactures and supplies technologies that support the ideology "A better life, a better world".

The company's portfolio covers key electronic components, devices and modules to complete production solutions and equipment for manufacturing lines in a wide range of industries. Panasonic Industry Europe is part of the global company Panasonic Industrial Solutions. More about Panasonic Industry Europe: <http://industry.panasonic.eu>