

GPP opens Goeppert-Mayer green building

The Upper Silesian Industrial Park (“Górnośląski Park Przemysłowy”, GPP) has celebrated the opening of its first office building erected within GPP Business Park. This is the first office facility in Poland that uses a green infrastructure of the tri-generation system.

The innovative system enables a simultaneous generation of electricity, heating and cooling from gas*. The energy will be produced in the building. “Thanks to the applied solutions we expect to save up to 40-50 percent of energy that is used in a typical A-class office building” – explains Mirosław Czarnik, chairman of GPP. “We decided to apply the tri-generation system as the building has to be competitive on the office market in 20 years from now. Also it has to meet future requirements of EU directions concerning the policy for low-cost buildings.”

Demand for heat energy in the building will not exceed 72 kWh per one square meter yearly.

One of the most known global examples of the tri-generation system’s implementation is the City of Sydney that has set itself a target of reducing carbon emissions by 70 percent by 2030. To reach this target the City plans to power Sydney’s buildings with the tri-generation system. “In Poland we have only three facilities that already implemented the system, however the Goeppert-Mayer building is the first office building in the country using the tri-generation” – commented Łukasz Sajewicz, director at Viessmann Polska, a company that provided the system for GPP.

Also, GPP is applying to obtain a BREEAM certifi-

cate for the building. The initial assessment carried out by Buro Happold proved that the project has a chance to achieve a high rating in the assessment method. It is possible to obtain the “Excellent” or even the highest available rating – “Outstanding”.

The total cost of the investment reached PLN 39 million. Half of the amount is covered by the EU funds. The realization of the green building was approximately 10-15 percent more expensive in comparison to other A-class facilities being built in a traditional technology. “We calculated the refunding of additional costs will take from four to six years” – Łukasz Sajewicz added.

The building was named after Katowice-born Maria Goeppert-Mayer, a Nobel laureate in physics. She is the second female laureate in physics, after Maria Curie-Skłodowska.

Authorities of GPP want to name the following planned three office buildings of the park after the three other Nobel prize winners that came from the Upper Silesia – Otto Stern, Kurt Alder, Konrad Bloch. The building is located at 33 Konduktorska St. It was erected in 18 months by Budus (construction) and Spec Bau. The usable area of the building covers 7 800 sq. meters of which 6 800 sq. meters are designed for lease.

* The tri-generation system enables to produce the energy by a piston engine installed in the Goeppert-Mayer building and being powered with natural gas. The mechanical energy produced by the engine is transformed by a power generator into electric energy. The waste heat received during that process and rejected by the generator is used for water or office spaces heating. Cooling is achieved by passing the waste heat to an absorption chiller. As the network is local there is very little energy lost in transmission.



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