

Serbia; Beogradske Elektrane to construct smart building to generate all energy it consumes

Public heating utility Beogradske Elektrane intends to build the first smart building in Serbia to generate all the energy it consumes from renewable energy sources and be equipped with a range of other systems to make it energy efficient as much as possible. The building will span between 2,000 and 3,000 square meters and will be used by the company's staff, while the tendering to produce the design plan should be published soon. The building will be constructed in Belgrade, in the municipality of New Belgrade, on the grounds of Beogradske Elektrane, at the site of an old facility built in 1965 alongside the nearby 1,000 MW district heating plant.

The smart building will have solar panels for the production of electricity and heat, as well as a geothermal heat pump, which will provide heating. It will also have sensors for smart lighting, while water will be secured by rainwater harvesting.

Assistant Director at Beogradske Elektrane Petar Vasiljević told Balkan Green Energy News that the building will generate all the energy it consumes.

"Solar panels will generate electricity, and the geothermal heat pump will provide panel heating, in the floors. We will have LED lighting and light-sensory network to adjust light based on the intensity of the light outside, the number of people in the room. We will collect the rainwater that we will use as sanitary water in sanitary facilities. Our intention is to demonstrate that the building can operate autonomously. Excess water from rainwater harvesting will be used to water the green areas around the building," Vasiljevic said. He could not specify the size of the planned investment, noting that the building will span 2,000-3,000 square meters and that he expects tendering to produce the design plan to be announced soon.

The facility will also have a showroom, where any visitor will be able to see what the building's energy consumption is, how this energy is generated and what the overall CO2 emissions are.

"And behind this building, like some kind of symbolism, is a fossil-fired 1,000 MW district heating plant. We want to demonstrate that it is possible to create a zero-energy building, completely sustainable and using renewable energy sources. The idea is to illustrate that the public sector cares, and to address every citizen and make them think about energy consumption and how their home can be energy efficient," Vasiljević noted.

Largest plant in Southeastern Europe

State-owned public heating utility Beogradske Elektrane is the district heating company in the City of Belgrade. It generates and distributes heat energy and domestic hot water for one million citizens. Its total production capacity is 2,917 MW with an average annual production of heat energy of around 3,500,700 MWh.



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According to company's official portal, the 1,000 MW gas-fired plant in New Belgrade is the largest such in Southeastern Europe.

Source: [balkangreenenergynews](#)