New generation unit at Bydgoszcz CHP plant commissioned

09/05/2025



PGE Energia Ciepła Branch Elektrociepłownia in Bydgoszcz, part of the PGE Group, has commissioned a new gas-fired generation unit completed by a consortium of Polimex Mostostal and Polimex Energetyka. The project consists of five gas engine-based cogeneration units with a total electrical output of 52.7 MWe and a thermal output of 52.2 MWt, as well as a standby/peak source with a total output of more than 70 MWt.

The new generation unit has been built on the premises of the Bydgoszcz II Combined Heat and Power Plant. The project, which started in 2022, has just been completed. It ensures safe operation and guaranteed performance. The construction of a new generation source at the Bydgoszcz II Combined Heat and Power Plant is an important stage in the energy transition, enabling the decommissioning of two coal-fired boilers at the unit of the Bydgoszcz Combined Heat and Power Plant.

We are continuing our intense transformation and decarbonisation efforts in the heating sector. In May, we opened the state-of-the-art Czechnica - 2 gas-fired CHP plant in Siechnice with a power output of 179 MWe and a thermal output of 315 MWt at the Wrocław Combined Heat and Power Plant Complex. Today, at the Bydgoszcz II Combined Heat and Power Plant, we are commissioning the largest engine-based gas-fired cogeneration plant, not only in the PGE Group, but also throughout Poland. The project will allow us to decommission two of the four coal-fired boilers installed at the Bydgoszcz II CHP Plant and reduce CO2 emissions by about 14%. This is another step in the implementation of the PGE Group's new

strategy to allocate PLN 18 billion for the development of modern, low- and zero-emission district heating **– said Robert Kowalski, Vice President of the Management Board for Support and Development of PGE Polska Grupa Energetyczna.**

The new gas-fired unit at the Bydgoszcz II Combined Heat and Power Plant is the largest cogeneration source in Poland based on gas engines, and is another important step in the transformation at EC Bydgoszcz. Transition from coal fuel to gas fuel will significantly reduce emissions, affect air quality in the city and improve energy security for residents **– said Grzegorz Krystek, President of the Management Board of PGE Energia Ciepła.**

The construction of a new gas unit in Bydgoszcz is an important investment for the city and its residents. The cogeneration heat source will ensure optimal and reliable operation of the Bydgoszcz combined heat and power plant, while aiming to achieve the lowest possible heat production costs. The contractor for the project is a consortium of Polimex Energetyka and Polimex Mostostal.

The new cogeneration source at the Bydgoszcz II CHP plant is the result of a top-level, innovative and responsible partnership. As the lead contractor, we completed this project with full commitment, using the latest technologies and the experience of our teams. Through the synchronisation of cogeneration unit generators with the OSD network and the use of INNIO JENBACHER 10 MWe gas engines – each for the first time in Poland – we are not only ensuring energy security, but also taking a real step towards the decarbonisation of heating. We are proud to have been able to contribute to a project that improves air quality in Bydgoszcz and is part of the PGE Group's energy transition strategy **– summarised Jakub Stypuła, President of the Board of Management of Polimex Mostostal.**

New cogeneration source at the Bydgoszcz II Heat and Power Plant – top-level innovation and cooperation

On 26 September 2022, the implementation of one of the most important energy projects in the region began – the construction of a new gas-fired cogeneration source with a minimum capacity of 50 MWe at the Bydgoszcz II Heat and Power Plant.

The project involved a system of gas engines and a reserve/peak source to ensure energy security and production flexibility.

At its peak, more than 400 people were working on site. The success of the project was made possible by the dedication of the design, procurement, logistics and health and safety teams, who worked together to bring the new CHP plant into operation.

The key moment was the synchronisation of the generators with the OSD network, which took place on 13 February 2025. Since that day, it has been possible to produce electricity with the new cogeneration source, as well as to supply heat from the new gas boiler and process steam to the strategic customer, the project Owner.

The INNIO JENBACHER gas engines installed, each with a capacity of 10 MWe, are the first of their kind in Poland, which demonstrates the innovation and advanced technology of the entire project.

The construction work was completed by a consortium of Polimex Energetyka and Polimex Mostostal. Project teams from other companies of the Polimex Mostostal Capital Group – Mostostal Siedlce, Instal Lublin, Polimex Budownictwo and Energomontaż Północ Bełchatów – were also involved in the project.

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