

# New contract for the construction of two gas and steam power units with a total capacity of approximately 1,400 MW at the Dolna Odra Power Plant

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The contract signing ceremony for the construction of two modern, high-performance and low-carbon generating units at the Dolna Odra Power Plant that took place on 30 January 2020 was attended by many notable guests, including President of the Republic of Poland Andrzej Duda, the Deputy Prime Minister and Minister for State Assets Jacek Sasin, the Minister for Climate Michał Kurtyka, the US Ambassador to Poland Georgette Mosbacher, as well as local Members of Parliament, representatives of voivodeship and local government authorities, representatives of companies and institutions cooperating with the power plant, as well as the employees of the plant. The authorities of PGE Capital Group were represented by the management board of PGE headed by its President Henryk Baranowski and Robert Ostrowski, President of the Management Board of PGE GiEK. Sławomir Żygowski, President of General Electric Poland and Krzysztof Figat, President of Polimex Mostostal represented the General Contractor and they signed the construction contract on its behalf.

I am thrilled that we have arrived at the inauguration of this much anticipated and necessary investment, which is yet another stepping stone in the process of modernization of the Polish power sector. The investment is a technological leap for this area of the economy. The modernization process in Western Pomerania was initiated more than ten years ago by President Lech Kaczyński, who decided on the construction of a gas terminal in Świnoujście. Owing to this, we can buy gas from all over the world and we can fully benefit from the competitiveness of

the market - **said President Andrzej Duda in his speech.**

Energy security can only be ensured with the support of trusted friends and allies and the United States and Poland are a great example of such a cooperation. Today's contract signing is another step in the implementation of the Polish strategy for the diversification of energy sources. Such investments contribute to ensure that both our countries remain free, prosperous and safe. I am proud to be present at the contract signing ceremony for a project that is a testimony to the public-private partnership that exists between the United States and Poland - **said Georgette Mosbacher, US ambassador to Poland.**

The Polish transformation still requires large infrastructure investments as part of the modernization of the power sector. These investments are connected not only to the climate policy framework, but also arise from our belief that the transformation is needed so that we can limit the harmful effects of energy production for the environment and for the people. I am glad that the PGE Group is able to demonstrate this transformation in practice. The new gas-fuelled power units in Dolna Odra will bring new life to the power plant - **stressed Jacek Sasin, Deputy Prime Minister and Minister for State Assets.**

The construction of the gas units at the Dolna Odra Power Plant is another stage in the process of transformation of the Polish power sector, which can be summarized in three keywords: responsibility, safety and modernization. The new gas units will bolster the energy security of Poland, they will reduce emissions and they will integrate renewable energy sources, such as offshore wind farms - confirmed Michał Kurtyka, the Minister for Climate.

The two power generating units which will be built at the Dolna Odra Power Plant will not only set a golden standard in Poland, but they will also be at the forefront of the most modern facilities of this kind in Europe. The new investment of PGE is one of the key elements of the company's low carbon transformation.

The new gas and steam units will be equipped with class H turbines, which compared with the previous generation turbines have a higher rate of efficiency (63% compared with 59-60% respectively). The new units will also be more flexible, which is a crucial feature considering the large installed capacity of onshore wind farms in Pomerania. Energy production in the wind installations fluctuates depending on the weather, therefore the new gas and steam units at the Dolna Odra Power Plant will significantly contribute to the stabilization of the electricity system. The commissioning of the units is scheduled to take place by the end of 2023.

The investment at the Dolna Odra Power Plant is another testimony to the evolution of the Polish power sector in order to meet global and European megatrends. It is also our contribution to secure the supply of electric power in Western Pomerania and to prepare the Polish energy system for further utilization of renewable energy sources - in particular for the implementation of an ambitious offshore wind farm construction program, in which we proudly participate - **said Henryk Baranowski, the President of the Management Board of PGE.**

The units that will be built at the Dolna Odra Power Plant have been awarded a 17-year contract in the main capacity market auction, which will come into effect in 2024 and they will comply with strict environmental emission standards. The current average emission rate of electricity generation in the National Power System is around 0.8 tons of CO<sub>2</sub> / MWh. The emission rate in the new units will be below 0.35 tons of CO<sub>2</sub> / MWh. The commissioning of the new units will therefore reduce emissions by approximately 2-3 million tons of CO<sub>2</sub> per year.

The implementation of this investment is in line with global energy trends which assume the use of low-emission generating units and the strategic goals of the PGE Group are consistent with these trends. GE turbines which will be installed at the Dolna Odra Power Plant are designed to be relatively easily adapted to gas combustion with significant admixture of hydrogen. This will allow for further reduction in the CO<sub>2</sub> emission rates of these units - **said Robert Ostrowski, the President of the Management Board of PGE GiEK.**

The construction of the new generating units will make it possible to make use of the potential arising from the availability of the fuel supplied to the LNG terminal in Świnoujście and the planned route for the Baltic Pipe gas pipeline.

The investment in Dolna Odra will be implemented by a consortium comprising

General Electric (as the consortium leader) and Polimex Mostostal. The consortium was selected in the public tender for the design, delivery, construction, assembly, as well as commissioning and handover of two gas and steam power units along with the full underground infrastructure. The net value of this contract is PLN 3.7 billion. The order also includes an additional 12-year service contract in the amount of over PLN 1 billion net.

The contract that we signed today is much more than yet another ambitious project in the portfolio of Polimex Mostostal Capital Group. This year the company is celebrating 75 years of the market presence. We are very proud to have our contribution in building the “Poland of the future”. The project at the Dolna Odra Power Plant is one of the major and most modern domestic investments implemented by Polimex Mostostal. Our unique and extensive experience combined with GE's professional technological support is a guarantee that this investment will be our joint success. This will be another strategic power facility in Poland that we will be part of - **added Krzysztof Figat, President of the Management Board of Polimex Mostostal.**

GE Gas Power are glad to have the opportunity to cooperate with PGE and Polimex Mostostal on an investment that will provide the Dolna Odra Power Plant with the technologically advanced gas and steam power units. This project will benefit from our experience in the implementation of turnkey investments and it will allow us to adopt the leading gas turbine technology, which will support Poland in the process of the European energy transformation. GE has a long tradition of contributing to the development of the Polish energy system that dates back 70 years. We hope for the further continuation of this fruitful cooperation - **said Sławomir Żygowski, President of the Management Board of GE in Poland.**

The construction of two new gas units will allow to restore the generating potential of the Dolna Odra Power Plant. The investment in modern gas-fuelled installations will guarantee the long-term operation of the power plant, which plays a key role in the National Power System as the only system energy producer in the north-west of Poland. There are currently six coal-fired power units operating in the plant that produce electricity, as well as provide heat for individual, industrial and municipal consumers in Gryfino. They are equipped with installations that limit the emissions of nitrogen oxides, sulphur and dust, and due to the adoption of the latest technologies they comply with the current emission standards. Over the past 20 years the emissions of nitrogen oxides by the Dolna Odra Plant have been reduced by more than seven times, of sulphur

oxides by 32 times and of the dust by as much as 50 times. Regarding future plans, as part of the PGE Group's Solar Photovoltaic Program that was launched in April 2019, a solar farm with the capacity of about 100 MW will be built on the premises of the PGE's Dolna Odra Power Plant.

Eight years ago the investment strategy of the Dolna Odra Power Plant for the years 2012-2035 did not include the defined modernization investments that would guarantee further operation of the power plant. However, with the active social support a strategic planning was initiated with a goal to extend the operation of this most important energy producer in Western Pomerania.

Initially, in order to restore the generating potential of the Dolna Odra Power Plant there was the conception to expand the plant based on coal-fired facilities. In the pre-investment stage, PGE considered the construction of a single 500 MW coal-fired unit. Ultimately, however, in 2017 the project team recommended the gas-fuelled variant of energy supply for the unit. In the decision-making process on the choice of technology the team needed to consider the conditions for the power plant's operation in the National Power System. The rationale behind the choice of gas for Dolna Odra was also the location of the plant - the long distance from the sources of coal mining and the proximity of the gas port in Świnoujście. Pomerania is a region with a large share of variable wind power, which also worked in favour of the choice of gas. Other important determinants in the decision on the selected technology included the flexibility of gas-fuelled facilities and the need to balance unstable energy sources. The results of the feasibility study allowed to consider the implementation of a project with twice the capacity originally assumed, namely the construction of two gas units with a capacity of 500 MW each. Finally, after in-depth analyses, in 2019 the decision was made to construct two 700 MW gas units at the Dolna Odra Power Plant.

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