## THE PROSPECTS OF THE ENERGY INDUSTRY IN BELARUS student Kaluta V.E. scientific supervisor – associate professor Vasilyeva T.I. Belarusian National University of Technology Minsk, Belarus

The energy industry is an essential sector of the global economy, and Belarus is no exception. As a landlocked country in Eastern Europe, Belarus relies heavily on imported energy to meet most of its energy requirements. However, the country is taking steps to reduce its dependence on imported fuel and transition towards renewable energy sources. In this essay, we will discuss the prospects of the energy industry in Belarus. Belarus has favorable conditions for the development of wind and solar energy. Additionally, Belarus receives an average of 1,600 kilowatt-hours of solar energy per square meter per year, making it suitable for solar energy production. The Belarusian government has set an ambitious target to increase the share of renewable energy in its energy mix to 30% by 2030. The country is offering subsidies, tax breaks, and simplified procedures for obtaining permits and licenses to investors in the renewable energy sector.

The prospects of wind energy in Belarus are significant. The country's wind potential is estimated to be around 9.6 gigawatts. Currently, Belarus has two wind farms with a total installed capacity of 101 MW, and the government has plans to develop more wind farms. The government aims to generate at least 1,000 MW of wind energy and supply ten percent of its electricity consumption from wind by 2025. The prospects of solar energy in Belarus are also significant. The country's solar potential is estimated to be around 98.8 GW. In 2019, the Belarusian government launched a program that provides grants to businesses that install solar panels on their rooftops. The government is also

offering tax breaks to businesses that install solar panels. With these incentives, the deployment of solar energy in Belarus is likely to increase in the coming years. Apart from wind and solar energy, Belarus is exploring other renewable energy sources such as hydropower, biogas, and geothermal energy. The government aims to increase the share of hydropower in the country's energy mix by 2025. Belarus has several rivers and streams, making it suitable for hydropower production. There are also several biogas plants in the country that generate energy from agricultural waste. The government aims to increase the deployment of geothermal energy in the country, primarily for heating systems in buildings.

In conclusion, the prospects of the energy industry in Belarus are promising, mainly due to the country's favorable conditions for wind and solar energy production. The Belarusian government's policy of offering incentives to investors in the renewable energy sector is increasing the deployment of renewable energy sources in the country. In the future, we can expect to see significant growth in the production of wind and solar energy in Belarus. Additionally, the integration of digital technologies such as AI, machine learning, and IoT is likely to become increasingly important in the Belarus energy sector in the coming years, driving efficiency and productivity.

## References

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