

## **RENEWABLE ENERGY SOURCES**

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As the earth's population grew, the economy needed more and more fuel, and the fuel on which conventional energy was based was not infinite. The rising cost of fuel is exacerbated by the fact that the use of hydrocarbons, which have reached enormous proportions, is damaging nature, which affects people's quality of life. This means that in the need for energy, and therefore new ways of procuring it, will only increase in the future. New ways of acquiring it will only increase in the future. After the era of hydrocarbons comes the era of alternative, clean energy. However, interest in them has recently increased dramatically. From an environmental perspective, developing new sources of electricity is seen as way to reduce the use of traditional fuels and the associated emissions of greenhouse gases and other health hazards. In some countries, growing consumption of renewable energy sources is seen as a strategic way to reduce dependence on imported fuel and energy resources. At this point, the following main factors influence the importance of an early transition to alternative energy sources: global, environmental, economic, social, political ones [1].

We can also distinguish the most basic types of renewable energy sources. Wind power. The use of wind as a propulsion force is a long tradition. Windmills have been used to grind flour, mill lumber and as a pumping or water pumping station. Wind power is one of the fastest growing renewable energy technologies. Tall wind turbines can be used to generate electricity. About 83% of all installed capacity is in just 5 countries: Denmark, Germany, Italy, Spain,

and the United States. Geothermal energy uses heat from the earth to produce electricity. The temperature of the subsurface allows the upper layers of the earth and underground water reservoirs to be heated. Earth and underground water reservoirs. Geothermal energy is extracted from the ground with shallow wells - it is not costly. Bioenergy: It specializes in the production of energy from biological raw materials. One of the largest renewable energy programmes in the world, involving the production of fuel ethanol from sugar cane. Biomass is the oldest of the energy sources. It is represented by three final energy products: heat, electricity and various types of liquid fuels for transportation. Countries around the world have set ambitious targets for switching to renewable energy sources. For now, the leaders China, the US, Japan and the UK are the largest investor in renewable energy. Belarus does not have significant energy resources, with the exception of renewables. Most of the renewable energy sources in Belarus are biofuels. Belarus accounts for biofuels and there is great potential for the development of biomass, biogas, solar and wind energy and their integration in all end-use sectors. The most important advantages of renewable energy sources are: the inexhaustibility of energy the most important advantages of renewable energies are the inexhaustibility of energy resources, their environmental friendliness, the absence of a fuel component in the cost of the most important advantages of renewable energy sources are: inexhaustible energy resources, environmental friendliness , a lack of a fuel component in the cost of produced energy, generally higher reliability, service life, and lower costs of energy lower energy costs of operating equipment.

## **References**

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