

A landscape photograph showing several white wind turbines on a grassy hill. In the background, there is a dense forest and a blue body of water under a clear sky. The foreground features a field of dry grass and several large hay bales. The text is overlaid on the left side of the image.

Renewable energy sources - How much our country use and introduce different energy sources

What is renewable energy?

Renewable energy is energy derived from natural sources, like sunlight and wind. Thanks to that we're reducing an amount of greenhouse gases in atmosphere and stopping polluting our planet. It is a key to solve the climate crisis.





Types of renewable energy

There are many types of renewable energy. The most popular of them are (from left):

- Hydropower
- Geothermal energy
- Wind energy
- Solar energy



What is renewable energy?

Renewables are now cheaper in most countries, and generate three times more works than fossil fuels. But what is the situation with renewable energy in Poland?





Wind farms in Poland

According to data from 2021, wind farms generated over 50% of all energy generated by renewable sources, while generating almost 1/10 of the national electricity demand.

The Potęgowo Wind Farm is the largest wind farm in Poland. It consists of 81 windmills. Its owner is the Israeli fund Mashav Energia, and the total cost of the farm was 1.25 billion PLN.

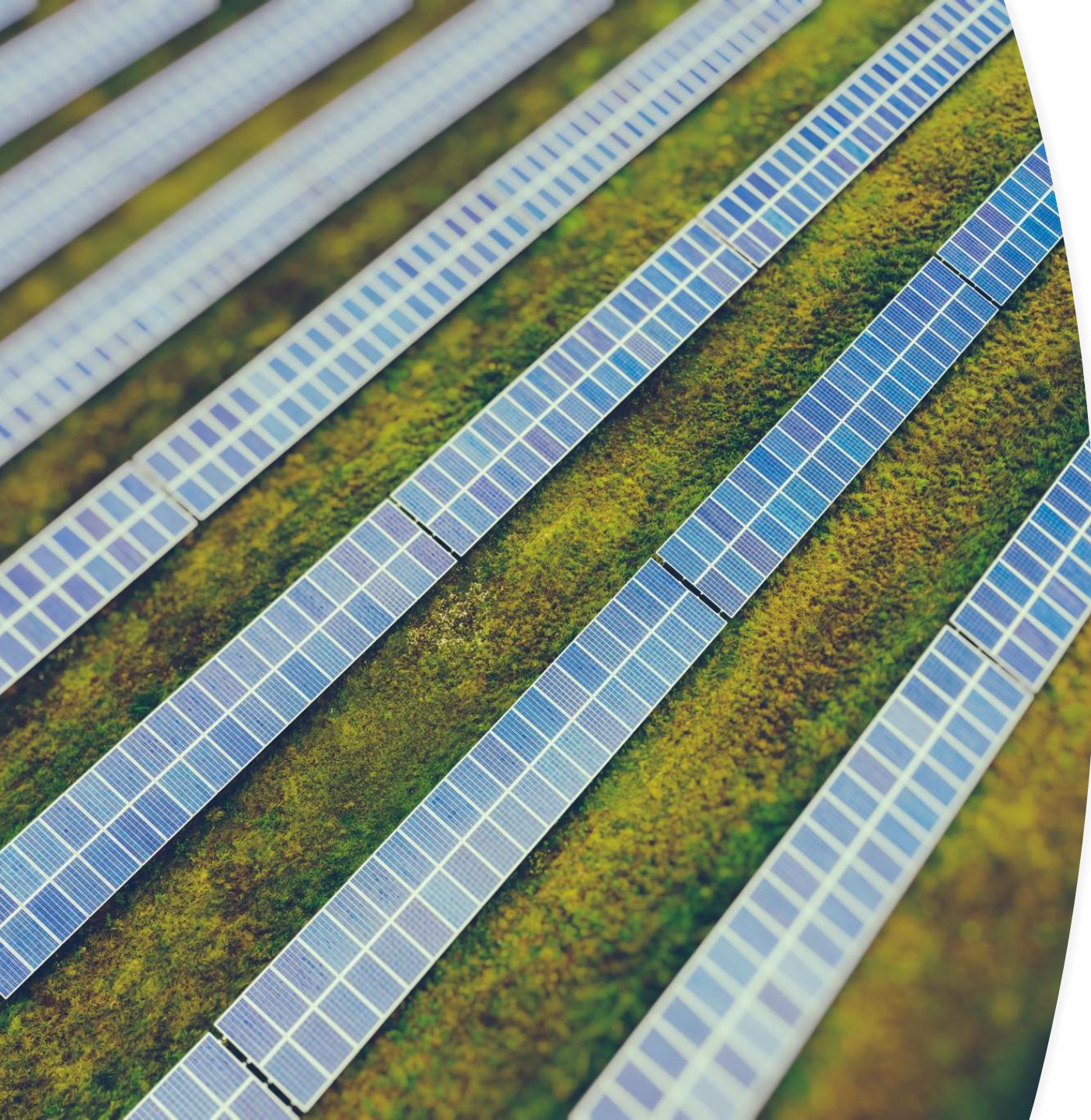


Hydropower in Poland

In Poland, energy from hydropower plants is only about 14 TWh per year. Only 12% of their resources are used. If Poland's hydropower potential could be fully exploited, it would be possible to achieve approximately 12 GW of power.

In 2017, hydropower in Poland produced 1.5% of electricity.

The largest hydroelectric power plant in Poland is the Żarnowiec Power Plant.



Solar Energy in Poland

As with previous types of renewable energy, solar energy in Poland is constantly developing. Thanks to subsidies from the government and the European Union, solar energy is becoming more and more popular. Solar panels are also installed more and more often in single-family houses, farms and company buildings. Thanks to them, we save more money and reduce the emission of harmful carbon dioxide.

The largest solar power plant in Poland is located in Czernikowo near Toruń. It consists of approximately 16,000 panels and covers 24,000 m². The annual production of electricity from this power plant is 3500 MWh

Biofuels

Data from 2020 show that 70% of energy from all renewable sources in Poland came from biofuels.

Biofuel is made from the processing of biomass - products of living organisms: plants, animals or microorganisms.

Biofuels include for example wood, hay and charcoal

A black and white photograph of a wind farm. In the foreground, there is a field of low-lying vegetation, possibly a crop field. A dirt path or road curves through the field from the bottom left towards the center. In the background, several large wind turbines are visible, spaced out across the landscape. The sky is overcast with soft clouds. The overall tone is somber and industrial.

Forecasts of development of renewable energy in Poland

It is estimated that by 2030 there will be a huge expansion of renewable energy in Poland. According to forecasts, we will obtain over 50% of the demand for electricity from renewable sources. The budget to be allocated to these investments is approximately PLN 32.5 billion.

However, despite optimistic forecasts, the entire project may extend over time by up to 10 years.

SOURCES:

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