

RENEWABLES

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From the very beginning of the full-scale military aggression by the Russian Federation against Ukraine, the objects of our country’s energy infrastructure were and remain one of the main targets for the enemy army. At first, these were oil refineries, oil product storage facilities, power plants and substations supplying the railway, and now - critical energy facilities.

Renewable energy sources (RES) are such sources that are renewed naturally. Renewable energy (also renewable energy) is an energy industry specializing in obtaining and using energy from renewable energy sources. Renewable energy sources include periodic or steady flows of energy distributed in nature and limited only by the stability of the Earth as a cosmoplanetary element: radiant energy of the Sun, wind, hydropower, natural thermal energy, etc.

Renewable energy sources are able to renew themselves. Such renewal occurs naturally. Renewable energy sources include, in particular, solar energy, wind and water energy, organic biomass, etc.

The regular and purposeful destruction of Ukraine’s energy infrastructure has caused emergency and stabilizing power outages, street lighting shutdowns, restrictions on subway and trolleybus traffic, and energy consumption by industrial enterprises.

The war in Ukraine has also had a major impact on global energy markets, leading to price volatility, supply shortages, security concerns and economic uncertainty – all of which the International Energy Agency (IEA) has already called “the first truly global energy crisis”.

The production of renewable energy produces far fewer emissions, so the transition from fossil fuels to renewable energy sources is considered the key to overcoming the climate crisis.

In addition, the use of renewable energy can help reduce the cost of electricity, contribute to a fault-tolerant electricity grid, create jobs and stimulate economic growth, generate back-up energy for outages combined with its storage, and operate with equal efficiency in both small and on a large scale.

Renewable energy sources are numerous and surround us everywhere. Currently, the most popular among them are:

- solar energy;
- wind energy;
- hydropower;
- tidal energy;
- geothermal energy;
- biomass energy.

And the use of renewable energy sources contributes to the sustainable development of cities, which, thanks to solar, wind, biogas installations, and small hydroelectric power plants, can provide themselves with electricity, reducing their costs and resource dependence. The population can independently generate electricity and control its distribution, while also minimizing long-distance transmission losses. This, in turn, reduces the burden on nature and makes it possible to talk about economic growth, which today is restrained by the extensive traditional energy we are used to. Every year, “green” energy becomes more accessible, new sources and production technologies are invented, which undoubtedly contributes to the development of innovations and improvement of infrastructure, stimulates the development of education and science.

The transition to inexhaustible sources of energy contributes to the preservation of peace on earth, because, apparently, one of the main causes of wars is the struggle for resources, including energy resources. And in this case, there is no point in fighting for what is already in abundance: sun, wind, water...

Indeed, renewable energy is almost as key as the eradication of poverty, hunger and inequality, the goal of humanity, which is planned to be achieved by 2030.

The development of the “green” industry is particularly important for us. An industry capable of making every city and village, every citizen, more independent. So that there would be no war and Ukrainians would not die. So that there is no constant plea from the TV screens of sick children who need money for treatment. So that cancer and many other diseases do not reduce the quality and life expectancy of Ukrainians. So that the payment for light and heat does not constitute the meaning of our existence.

References:

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