

Thirteen member states of the European Union produced 683,512 GWh of nuclear electricity in 2020, which is almost 25 percent of the total electricity production in the EU, according to data from the EU Statistics Office (Eurostat).

The largest producers of nuclear energy in the EU were France (52 percent of total production; 353,833 GWh), followed by Germany (nine percent; 64,382 GWh), Spain (nine percent; 58,299 GWh) and Sweden (seven percent; 49,198 GWh). Together, the four countries accounted for more than three-quarters of the total amount of electricity produced at EU nuclear plants.

A Eurostat survey points out that at the beginning of 2020, 13 EU member states that produce nuclear electricity had a total of 109 active nuclear reactors in operation. During that year, three nuclear reactors were permanently shut down - two in France and one in Sweden. However, France remained the EU member that relies the most on nuclear electricity, which accounted for as much as 67 percent of the total electricity produced in that country in 2020.

The only other EU country with more than half of the electricity produced in nuclear power plants was Slovakia (54 percent). Followed by Hungary (46 percent), Bulgaria (41 percent), Belgium (39 percent), Slovenia (38 percent), Czech Republic (37 percent), Finland (34 percent), Sweden (30 percent), Spain (22 percent), Romania (21 percent), Germany (11 percent) and the Netherlands (three percent).

**Nuclear power plant in Serbia?**

Serbia could also count on nuclear energy in the future. Although a moratorium is in force to ban their construction, the authorities are announcing a public debate on the construction of modern, so-called "modular nuclear power plants", or the purchase of shares in a nuclear power plant in the surrounding countries. Namely, three years after the Chernobyl catastrophe, the then Socialist Federal Republic of Yugoslavia introduced a moratorium on the construction of nuclear power plants in 1989, which is still in force since Serbia inherited it.

By the way, about 70 percent of the electricity produced in Serbia, ie 2,500 megawatts (MW), comes from coal-fired thermal power plants, according to the Energy Balance of the Republic of Serbia for 2019.

The Electric Power Industry of Serbia (EPS) states that our country lacks 700 MW, which in earlier plans should have been covered by the construction of two power plants. It is also noted that the price of electricity coming from nuclear power plants is the cheapest. Experts believe that our needs in the future would be met by a nuclear complex of 1.4 gigawatts (GW) of installed power, in the construction of which about five billion euros should be invested.

Earlier, the President of Serbia, Aleksandar Vučić, stated that it would be good for Serbia to have a nuclear power plant, but that its construction costs from 12 to 15 billion euros,

which, according to him, we do not have at the moment.

In November last year, the director of JKP Belgrade Power Plant Rade Basta in an open letter called on the Prime Minister of Serbia Ana Brnabic and the Minister of Mining and Energy Zorana Mihajlovic to consider lifting the moratorium. Cheaper production, technological development, energy stability and security, and environmental protection are some of the benefits of using nuclear energy he cited. However, many experts remind us of nuclear waste, which is also an important item, as well as some other shortcomings of such an idea.

So far, as far as is known, no steps have been taken to change the law. According to the Constitution, a proposal can be submitted by an MP, the Government of Serbia, the Assembly of the Autonomous Province or a group of at least 30,000 voters.

Opposition to the classification of nuclear energy as green

Support for nuclear energy is declining in Germany, so that 11 out of 17 reactors that the country had at the time have been shut down since 2011, and citizens do not support the idea of building new nuclear power plants, according to the World Nuclear website.

The German government has announced that it will oppose the European Commission's proposal to include nuclear energy in the list of sustainable energy sources. The so-called taxonomy, compiled by the EC, is also considered an approval for state subsidies for certain economic activities and a green light for investors.

German Minister of Environment Steffi Lemke told ARD television that Berlin's position would be "clearly not", but added that the chances of a successful blockade of the European Commission's proposal are small, Euractiv reports.

Taxonomy is a kind of classification of whether an economic activity is sustainable, and at the same time an assessment of whether it deserves state subsidies and recommendations to investors. In its proposal, the EC assessed that the investment in new nuclear power plants, or in the renovation of existing ones, is sustainable under certain conditions and that it is not harmful to the climate.

Five EU members, led by Germany, sent a letter to the European Commission last summer, demanding that nuclear energy remain outside the EU taxonomy of green finance, ie that investments in that energy should not be classified as green.

Apart from Germany, the letter was signed by the ministers of environmental protection or energy of Austria, Denmark, Luxembourg and Spain. They pointed to "shortcomings" in an April report by the European Commission's Joint Research Center (JRC). The report concludes that nuclear energy is safe.

France is considered to be the main lobbyist for nuclear energy in the EU, and a meeting of members who think the same about nuclear energy and gas in the context of taxonomy was held in October at the initiative of Paris. The meeting was attended by representatives of Bulgaria, Cyprus, the Czech Republic, Finland, France, Greece, Hungary, Malta, Poland,

Romania, Slovakia and Slovenia.

The EU currently receives about 26 percent of its energy from nuclear power plants, and it is estimated that that share will be reduced to about 15 percent by 2050.

Let us remind you that there are no active nuclear power plants in Austria. Zwentendorf is the only nuclear power plant in the world to be built, but it was never turned on due to a decision on use concerns made in a referendum in the late 1980s. Today, this country is actively lobbying against the use of nuclear energy.

In Italy, where the moratorium expired 10 years ago, a discussion on the construction of nuclear power plants was recently restarted, but there is still no political consensus, Biznis reports.