



## **Weekly Briefing**

### **Serbia economy briefing:**

### **Serbia made progress in using renewable energy sources**

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# Serbia made progress in using renewable energy sources

## Summary

*According to the latest reports of the United Nations Economic Commission for Europe, Serbia made progress in using renewable energy sources (RES). Out of 17 countries in the region, Serbia shares the fourth place with Georgia. According to the draft of the integrated energy and climate plan, which will be publicly discussed at the beginning of October, Serbia should receive 40 percent of its energy from renewable sources by 2030. If so, Serbia will not only provide healthier environment for its own citizens, but also contribute to global battle for climate and fulfillment of the Paris Agreement.*

## Introduction

In April 2021, Serbia adopted four energy laws, including the Law on Use of Renewable Energy Sources<sup>1</sup>, which together with relevant secondary legislation such as the Feed-in Premium Decree<sup>2</sup> set a robust legal and regulatory framework for auctions to award Contracts for Difference.

With the adoption of this law, the use of RES in energy production is legally recognized as one of the energy priorities of the Republic of Serbia, bearing in mind that the production of electricity from coal results in a large emission of harmful gases, which leaves numerous consequences for the environment.

Previously the field of RES use was regulated by the Law on Energy ("Official Gazette of RS", No. 145/2014 and 95/2018), but in an insufficiently comprehensive way for such an important area. Also, considering the membership of the Republic of Serbia in the Energy Community<sup>3</sup>, there was an obligation to regulate this area more detail.

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<sup>1</sup> Law on Use of Renewable Energy Sources, in Serbian: Zakon o korišćenju obnovljivih izvora energije, [https://www.mre.gov.rs/sites/default/files/2021/05/zakon\\_o\\_korishcenu\\_obnovlivikh\\_izvora\\_energije\\_0.pdf](https://www.mre.gov.rs/sites/default/files/2021/05/zakon_o_korishcenu_obnovlivikh_izvora_energije_0.pdf), accessed on 10/09/2022.

<sup>2</sup> Feed-in tariffs are provided incentive purchase prices per produced kWh from RES that are aligned with the technology that is applied and that the Government of the Republic of Serbia prescribes for a certain period of time in order to reduce incentives for investors and reduce investment risk. See more at: <https://www.energetskiportal.rs/ministarstvo/fid-in-tarife/>

<sup>3</sup> "The Energy Community is an international organization which brings together the European Union and its neighbors to create an integrated pan-European energy market. The organization was founded by the Treaty establishing the Energy Community signed in October 2005 in Athens, Greece, in force since July 2006. The key

By adopting law that deals exclusively with RES, the Republic of Serbia showed its determination to create the conditions for the production of electricity from RES on the largest possible scale. As stated in Article 2 of the Law on the use of RES, the use of energy from renewable sources is of special importance and is in the public interest of the Republic of Serbia. One should bear in mind that the National Action Plan for the use of RES is planned for the Republic of Serbia to reach a share of 27% of RES in the total gross final energy consumption of the Republic of Serbia by 2020, and that by 2021 it reached only 20% of total consumption.<sup>4</sup>

One of the most important novelties introduced by the RES Law is the status of buyer-producer, that is, a person who is both a producer and a consumer of electricity. Namely, the Law on RES for the first time regulates this type of incentive, which provides that the buyer-producer will be able not only to produce energy for their own needs, but also to deliver (sell) excess energy to the system or store excess energy for their own needs. Also, the buyer-producer has the right to reduce the bill in the following accounting period, that is, to be compensated by the supplier.

This practically means that everyone can be a producer of electricity in their home, every household, regardless of whether it is a house or a building, which opens up an opportunity for the development of entrepreneurship in the field of RES.

The Law on RES includes measures and activities that are going to be undertaken in order to achieve long-term goals likewise reducing the use of fossil fuels and increasing use of the RES in order to protect the environment and long-term reduction of dependence on energy imports. Furthermore, encouraging research, innovation and competitiveness in the field of using RES which would be followed by creation of new jobs and development of entrepreneurship in the RES area are indicated as necessary.

In order to attract investments in the mentioned area, i.e. to achieve the set goal of reaching 27% of the share of RES in the total consumption of electricity in the Republic of Serbia, the Law on RES provides for different types of incentives for producers of RES.

A particularly attractive investment opportunity is the development of wind parks, since wind as one of the RES certainly represents an untapped potential in Serbia. Now that the

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objective of the Energy Community is to extend the EU internal energy market rules and principles to countries in South East Europe, the Black Sea region and beyond on the basis of a legally binding framework”, <https://www.energy-community.org/aboutus/whoweare.html>

<sup>4</sup> National renewable energy action plan of the Republic of Serbia, [https://www.mre.gov.rs/sites/default/files/2021/03/national\\_renewable\\_energy\\_action\\_plan\\_of\\_the\\_republic\\_of\\_serbia\\_28\\_june\\_2013.pdf](https://www.mre.gov.rs/sites/default/files/2021/03/national_renewable_energy_action_plan_of_the_republic_of_serbia_28_june_2013.pdf)

relevant regulation has been adopted, the room is opened for the gradual replacement of traditional fossil fuels by RES in the foreseeable future. After nine wind farms were built at the end of the last decade, there was no major move towards clean energy. More than two-thirds of the total electricity produced in Serbia comes from fuel that pollutes the environment and warms the planet.

### **Serbian Progress measured by the UN Economic Commission for Europe**

The United Nations Economic Commission for Europe (UNECE) launched its report for 2022 on September 14<sup>th</sup><sup>5</sup>. Presented findings has an optimistic note stating that entire region scored an unprecedented growth in renewable electricity since 2018.

Related to Serbia, the UNECE praised the adoption of the Law on RES. So far, its implementation scored good result which brought Serbia to the group of countries which has functional energy efficiency policies<sup>6</sup>. Moreover, there were practical actions that are in favor of climate protection. The example is Serbian capital city plan to make significant changes in public transport by introducing electrical vehicles. In spite of financial limitations, Belgrade started to purchase electrified buses and cars pushing towards the goal of to have 40% of the bus fleet electrified, as well as 80% of taxis and 100% of municipal vehicles, 80% of commercial vehicles and 20% of private vehicles. Along with the national action plan, this target should be reached by 2040. For now, results are modest; Belgrade has 10 electric and 100 gas buses. Regrettably, due to the pandemic and financial crisis, Serbia suspended its subsidy programme for electric vehicles, which provided a grant of up to EUR 5,000 (USD 5,500) for private vehicle owners and had been in place in 2020-2021.

Serbia is also among countries which met targets set for heating and cooling sector. Although this renewable energy target was reached, Serbian Ministry of Energy and Mining announced a target of 40% renewables in total final energy consumption by 2040.

Still, regional trend of the decline in the average share of renewables in total final energy consumption for last two decades didn't completely pass Serbia. Although UNECE lists three main reasons for this trend<sup>7</sup>, it is clear that more effort should be taken by countries itself.

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<sup>5</sup> The UNECE Renewable Energy Status Report 2022, [https://unece.org/sites/default/files/2022-09/REN21\\_UNECE2022\\_FullReport\\_red.pdf](https://unece.org/sites/default/files/2022-09/REN21_UNECE2022_FullReport_red.pdf), accessed on 16/09/2022.

<sup>6</sup> Table 5, page 49 of the UNECE Report, *ibid*.

<sup>7</sup> The slowdown in the deployment of hydropower, an increase in motorization rates, and the fact that final energy consumption in the region did not change significantly in recent years plus the additional factors affecting

Although Serbia has more solar potential than Germany, Poland, and the Czech Republic, those countries produce much more energy from the sun. It is necessary to start exploit that energy and become competitive in that area as well. Solar energy should be exploited likewise the wind energy. Namely, Serbia has excellent pre conditions to benefit from wind parks. Currently, it plans to reach ambitious 2.7 GW of wind power projects in different stages of development adding greatly to the existing 398 MW of installed capacity. Operating wind farms include the 158 MW Čibuk 1 (the biggest in the Western Balkans with 57 turbines) and the 104 MW Kovačica, both constructed with support from the EBRD.<sup>8</sup> One might assume that great scores will be achieved once when the announced Maestrle Ring, a 638 MW wind park near Subotica, which stands for Europe's most ambitious renewable energy projects, become fully developed.

With the support of the UNDP, Serbia started to work on the development of the biomass market. The project aimed to increase the share of biomass in the energy mix, to finance, build and connect to the grid six combined heat and power (CHP) facilities, and to raise awareness about the benefits of biomass energy among investors, consumers, policy makers and others. The project accelerated a total of USD 22.6 million in investments in six biogas CHP plants and increased the installed capacity of biogas CHP facilities by 130% compared to 2015, for a total of 6.35 MW.<sup>9</sup>

## **Conclusion**

UNECE Report praised adoption and implementation of the required legal framework that will enable Serbia to expand use of the RES. If expectations finally met, by the end of this decade Serbia could raise to 40 percent use of RES i.e. 13 percent more than today. The development goes in three directions: private investments, which are mainly wind and solar power plants; state owned company "Elektroprivreda Srbije" made a development plan whit focus on wind power plants and on solar power plants on abandoned mines and citizens and businesses developing solar power plants for their own consumption. Serbian roofs, with more than 600 square kilometers, have great potential. If only 10 percent would be covered by solar panels, electricity for six million households would be obtained.

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the dynamics of the renewable energy share include difficulties in monitoring and measuring the use of biomass, seasonal fluctuations in hydropower, long-term lock-in to other energy sources, and cheap fossil fuel prices.

<sup>8</sup> The UNECE Report p. 74, *ibid*.

<sup>9</sup> *Op. cit.*, p. 77.