

Policy brief:

TRANSITION TOWARDS RENEWABLE ENERGY

Introduction¹

The European Union (EU), in line with the Green Deal, has embarked on a transformative journey to become climate neutral by 2050. On this path towards climate neutrality, the EU has committed to reducing net greenhouse gas emissions by at least 55% from 2020 to 2030 compared to 1999² levels. The Green Deal includes initiatives covering energy, transport, industry, climate, environment, agriculture and sustainable finance.

Kosovo*, as a signatory of the Green Deal for the Western Balkans (WB), has committed to a shift towards a more sustainable energy system in line with EU commitments. This undoubtedly places Kosovo ahead of the challenges in meeting these demands and needs. The country generates about 80% of its electricity from lignite, and this heavy reliance on lignite highlights the necessity for radical and challenging changes, especially regarding decarbonisation requirements and investment in new energy technologies³. In this situation, increasing the share of renewable resources in Kosovo's energy mix is not only a commitment to implementing the Green Agenda but also a necessity for Kosovo's efforts to meet the demands of this agenda and achieve supply security within these constraints. This requires collective efforts from all stakeholders – the government, businesses, communities, and individuals.

In March 2023, the Assembly of Kosovo approved the Energy Strategy 2022-203⁴, committing to the complete decarbonization of the energy sector. This strategy represents a key step in Kosovo's energy transition and focuses on five strategic objectives, including: Improving system reliability; Decarbonization and promotion of renewable energy; Increasing energy efficiency; Strengthening regional cooperation and market functioning; and Protecting and empowering renewable energy. The strategy envisions a dynamic increase in renewable energy sources, primarily in wind and photovoltaic technologies, supported by renewable resource auctions, public investments, and active participation of consumers as prosumers⁵ in this process.

The strategy has set an ambitious objective to increase the share of Renewable Energy Sources (RES) in electricity sector consumption from 6.3%, the initial starting point, to 13% in 2024 and 35% in 2031. This means that the total installed capacity of RES (including prosumers) will increase from 279 MW currently to 490 MW by 2024 and 1600 MW by 2031. Achieving the target set for 2024 has failed, and according to current developments, the goal for 2031 will also be difficult to reach. The heavy reliance on lignite as an energy source is making the country's path toward a new energy mix, dominated by RES, and especially solar photovoltaic (PV) panels and wind energy, challenging on many fronts. Despite being geographically well-positioned, Kosovo faces various obstacles such as legal, administrative, and financial barriers, including lengthy authorisation procedures, limits

^{*}This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

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²Balkan Green Foundation (2024). Navigating Solar Investment Challenges in Kosovo. Link: file:///C:/Users/Admin/Downloads/Navigating Solar Investment Challenges in Kosovo ALB1708611320%20(1).pdf

³ INDEP (2024). The Right Energy Transition in Kosovo. Link: https://indep.info/9870-2/

⁴ Energy Strategy of the Republic of Kosovo 2022-2031: Link: https://kryeministri.rks-gov.net/wp-content/uploads/2023/03/Strategjia-e-Energiise-e-Republikes-se-Kosoves-2022-2031.pdf

⁵ Producer and consumer of energy from their solar panels

on installed capacity for solar PV, lack of skills and capacities for RES, the lengthy legalisation process, lack of subsidised price for the prosumers for the surplus electricity they sell, limited of public awareness, which are worsening the investment burden in solar energy in the country.

How to increase the share of RES in the energy mix?

In the effort for sustainable energy development, Kosovo has taken significant steps to expand its renewable energy capacity. Although belatedly, it has begun to recognise the urgency of transitioning towards cleaner energy sources. One of the main drivers behind Kosovo's transition to renewable energy is its abundant natural resources, particularly in solar and wind energy potential⁶. The country's favourable geographical location offers numerous opportunities for harnessing solar energy, with abundant sunlight throughout the year. Similarly, Kosovo boasts considerable wind resources, particularly in high-altitude regions, which can be effectively used to produce clean electricity. The next step is for this share to reach 35% by 2031. However, the integration of renewable energy into Kosovo's energy infrastructure is not without challenges. Key considerations include energy loss during transmission, network stability, and sustainability. Additionally, investment in grid infrastructure and transmission networks is essential to facilitate the efficient integration of renewable energy sources into the existing energy grid. Furthermore, policy frameworks and regulatory mechanisms play a key role in promoting the deployment of renewable energy, encouraging market competition, and attracting investment in this sector⁷.

Regarding the legal framework, the Government has approved supporting legislation and set objectives for renewable energy to provide a clear roadmap for the development of the sector. Initiatives have been presented to simplify the permitting processes, facilitate project financing, and encourage private sector participation in creating a favourable investment environment for renewable energy. Furthermore, collaborations with international partners, multilateral organisations, and development agencies will continue to be important in providing technical expertise, financial assistance, and knowledge exchange to shape the renewable energy transition in Kosovo. At the same time, government policies that subsidise the price for prosumers selling surplus electricity are essential for accelerating the transition to renewable energy. These policies provide financial incentives that encourage households and small producers to invest in solar and other clean energy technologies, making sustainable energy more accessible.

Promoting investments in RES – Auctions

The energy transition in Kosovo, which is primarily based on the Energy Strategy 2022-2031, ensures that the objectives of the European Green Agenda for the WB are met. The agenda encourages member states to adopt renewable energy auctions as a tool to promote the cost-effective use of renewable energy, ensuring fair competition, reducing subsidies, stimulating investments in renewable energy infrastructure, promoting competition, and contributing to the decarbonisation of the energy sector. Auctions are mechanisms that help countries purchase clean energy at

⁷ INDEP (2024). The Right Energy Transition in Kosovo. Link: https://indep.info/9870-2/

competitive prices. In an auction, a government sets the rules and processes for the buying and selling of energy.

Based on the recommendations of the Green Agenda and the Energy Strategy, the Government of Kosovo, through the Renewable Energy Law, has established auctions as one of the mechanisms for the development of solar and wind resources. The first auction in Kosovo⁸ was announced in May 2023 for the solar power park with a capacity of 100 MW in Kramovik, in the municipality of Rahovec. This auction represents the competitive process for setting the guaranteed price for the purchase of energy produced by a 100 MW solar photovoltaic power plant, which will be built on public property in Kosovo. The auction will provide the beneficiary with land and a power purchase agreement at a guaranteed price for 15 years.

After a process that lasted approximately one year, this auction concluded on January 31, 2024. The entire process was marked by delays and extensions of deadlines. According to Ministry officials, these delays were mainly due to requests from the bidding companies, which asked for more time to prepare their application files, while energy experts have emphasised that the lack of experience of public institutions in auctions, as well as bureaucracy with documentation, also contributed to these delays. The auction was finally closed in March 2024, with the winning consortium Orllati, with international and local partners, securing a final price of 48.88 euro/MWh.

After the completion of the first solar energy auction, the Ministry of Economy (MoE), together with the Energy Regulatory Office (ERO), announced the second auction in December 2024, which is based on wind energy with a capacity of 100 MWh and a maximum price of 80.20 €/MWh. The auction will be conducted in two phases. The first phase includes the qualification request, which will be open for at least 60 calendar days. During this phase, interested parties need to demonstrate their qualifications to participate in the bidding process. The second phase includes the request for proposals, which will be open for at least 60 calendar days for qualified bidders to submit detailed proposals for wind energy projects. In addition to the two recent auctions, Kosovo has also previously invested in wind energy. At the end of 2021, within the Bajgora wind park, there were 27 wind turbines, manufactured by General Electric. The total installed capacity is calculated at 105 MW, making it the largest wind turbine park and simultaneously the largest producer of renewable energy in Kosovo.

The experiences so far related to the development of RES indicate that it will be very challenging to reach the target set for 2031 regarding investments in RES. Consequently, the government should review this situation and create the necessary incentives for new private and public-private investments in this sector.

Energy efficiency and its importance in the energy transition

Energy efficiency measures in Kosovo are key components of the country's strategy to optimise energy use, reduce waste, and improve the overall sustainability of energy. An important area of focus is on increasing the energy performance of buildings, which make up a significant portion of energy consumption. Through measures such as building insulation, efficient heating, ventilation,

⁸ Ministry of Economy (2023). The first auction announced for 100 MW solar park. Link: https://me.rks-gov.net/blog/shpallet-ankandi-i-pare-per-parkun-me-energii-solare-me-kapacitet-prej-100-mw/

⁹ Ministry of Economy (2024). The first auction for wind energy with a capacity of 100 MW is launched. Link: https://me.rks-gov.net/blog/lansohet-ankandi-i-pare-per-energji-nga-era-me-kapacitet-100-mw/

and lighting systems, Kosovo aims to reduce energy demand and lower carbon emissions by enhancing indoor comfort and reducing energy costs for residents and businesses. The MoE, through public calls for the implementation of energy efficiency measures, includes the insulation of residential buildings, individual houses, and apartment buildings, as well as replacing electric appliances with more efficient ones. The essence of implementing these measures is not only to improve the situation in the short term but to ensure that energy efficiency is achieved in the long term as well. For this, it is important to assess the results, identify what has worked well, and pinpoint the shortcomings that have arisen during the implementation of the measures.

A more realistic mix of sources for the energy transition

The difficulties mentioned in achieving the targets set by the Green Agenda and the Energy Strategy in Kosovo regarding RES require a review of the situation. This means a definition of policies and measures for a mix of energy sources that makes the transition easier and more accessible. In this regard, it is necessary to determine what is the real possibility regarding the increase of resources from RES and take the necessary effective measures to achieve them. In addition, the Government's decision not to invest in a gas power plant as a transition solution 10 should be reconsidered. In particular, necessary preparations should be made, and investments should be made in a hydropower plant in Albania. It seems that securing abundant and affordable energy solely from RES, without investments in a gas power plant and cooperation with Albania on hydropower resources, presents an uncertain situation fraught with risks.

4 Recommendations

- Kosovo should continue its energy transition based on renewable energy sources while also realistically assessing what can be achieved.
- It is suggested to seriously consider alternatives for investment in a gas power plant and a hydropower plant in Albania.
- Kosovo should conduct a comprehensive review of the factors causing delays in auctions, adhere to implementation timelines, create a strong monitoring and evaluation system, and simplify and harmonise the permitting procedures for solar PV and wind installations.
- Unify the documents, update and simplify procedures for obtaining municipal approval for solar PV installations for businesses and households.
- The government should implement policies that subsidise prosumers' surplus electricity sales to incentivise renewable energy adoption and ensure fair compensation.
- Continue with measures to increase energy efficiency in collective buildings and residential homes.

¹⁰ Riinvest Institute (2024). What energy mix do we need? Link: https://www.riinvestinstitute.org/uploads/files/2024/October/30/Cfare_miksi_-_Instituti_Riinvest1730298543.pdf