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**BECOMING AN
ELECTRICITY
PROSUMER**

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Introduction

Climate change and environmental pollution have been among the most important global challenges of the last few decades. According to the European Environment Agency (EEA),¹ energy use accounts for 91% of all greenhouse gas emissions, which is why climate change is always associated with energy production and the need to reduce the use of fossil fuels.

The energy crisis brought on by the war in Ukraine has emphasized the need to abandon fossil fuels and decarbonize energy production. RePowerEU, the EU's plan to address the crisis, follows on from concepts developed in the Green Deal and the Green Agenda, including the gradual replacement of fossil fuels with renewable energy. Renewable energy sources are those energy sources that are naturally replenished in a time frame that people can experience and use, and include sunlight, wind, moving water, and geothermal energy. The Serbian Law on the Use of Renewable Energy Sources ("Renewables Law") defines them as "non-fossil energy sources such as water streams, biomass, wind, sun, renewable hydrogen, biogas, landfill gas, gas from sewage treatment plants, geothermal energy sources, and other renewable energy sources." (Article 4(1)29).

With winter approaching, in the midst of the energy crisis, large-scale use of renewable sources to generate energy and democratization of energy production present a major opportunity to overcome shortages and reduce electricity imports to a minimum. The gradual phase-out of fossil fuels is

necessary in the context of the climate crisis and the EU's efforts to reduce carbon emissions by 2050.

Solar power is increasingly harnessed to generate energy: in 2022, 12% of all energy production in the EU came from the sun. Solar energy production records were broken in 18 of the 27 EU countries. In the last four years, Poland has increased its production by as many as 26 times. The Netherlands (22.7%), Germany (19.3%), and Spain (16.7%) recorded the highest shares of solar energy in total production.²

Serbia is harmonizing its energy legislation with EU standards and making it easier to invest in renewables by deploying a range of initiatives aimed at energy producers who use renewable sources. This effort includes allowing electricity consumers to become "prosumers", or "self-consumer", as discussed below in greater detail. This guide is intended to make the process easier to understand for prospective investors and anyone interested in learning more. It begins with a definition of prosumer, then describes the process for becoming a prosumer, and, lastly, presents practical challenges and best practices.

What is a prosumer?

The EEA defines renewable energy prosumers as entities – Individual people, collectives, households, small and medium-sized enterprises, schools, hospitals, etc. – active in the energy system in different ways, for example both consumption and production or only production of energy or heat based on renewable energy sources, while offering an energy service such as: flexibility of demand or storage, inclusion in the energy

¹ EEA, 2020, 'Cross-border cooperation on renewable energy', EEA Briefing No 23/2020, European Environment Agency (eea.europa.eu/publications/cross-border-cooperation-on-renewable-energy).

² ember-climate.org/insights/research/record-solar-summer-in-europe-saves-billions-in-gas-imports.

community or ownership and network infrastructure management. This definition of prosumer projects also includes cases of virtual transfers, financial investments – even in plants located far from one’s home – as a contribution to energy production using renewables. This definition aims to cover a wide range of renewable energy projects and initiatives with a high degree of citizen participation.³

The prosumer concept is part of the broader idea of energy democratization, which implies insisting on the participation of citizens and democracy in the energy transition.

Democratizing electricity production and encouraging individual consumers to produce electricity can have numerous benefits at several levels, from economic to environmental, and social. Transferring the ability to manage resources from the central system to local communities and households can be more expensive due to the necessary investments, but when energy prices rise it enables quick adaptation.

In addition, developing renewables accelerates movement towards climate neutrality. How quickly these projects can proceed depends on government policy and legislative framework. Encouraging businesses to invest in renewables requires enabling profitable, efficient, and reliable electricity production while phasing out outdated and polluting generation capacity.

Prosumers are households, residential communities, economic entities, and all other energy stakeholders whose primary activity is not energy production. In many cases, this means they use renewables to generate their own energy or heat for their own consumption or are part of an energy community that produces energy.⁴

³ European Environmental Agency, Energy prosumers in Europe, Citizen participation in the energy transition, eea.europa.eu/publications/the-role-of-prosumers-of.

⁴ European Environmental Agency, Energy prosumers in Europe, Citizen participation in the energy transition, eea.europa.eu/publications/the-role-of-prosumers-of.

The Renewables Law defines “buyer-producer” (self-consumer or prosumer) as:

the final customer who has connected his own facility for the production of electricity from renewable energy sources to internal installations, whereby the electricity produced is used to supply his own consumption, and the excess electricity produced is delivered to the transmission system, distribution system, or closed distribution system.⁵

Currently, 380⁶ Serbian natural and legal persons are registered as prosumers, and the total installed power at their disposal is over 5 megawatts (MW).

The prosumer project is crucial for enhancing national energy stability and security. The more households and businesses become prosumers, the less pressure is placed on the EPS, the Serbian national power company. This also reduces the need for imported electricity and lowers pollution, an especially significant consideration in the context of the climate and energy crisis.

EU legislation

As an EU candidate country and a signatory to the Energy Community Treaty, Serbia follows the EU’s environmental and energy rules.

After joining the Paris Agreement, the EU resolved to exceed that treaty’s already ambitious goal and committed to achieving climate neutrality by 2050. The strategy used by the EU to achieve this goal is the EU Green

⁵ Law on Use of Renewable Energy Sources, *Official Gazette of the Republic of Serbia* No. 40/2021, Art. 4(1)23.

⁶ As of October 24, 2022; see elektrodistribucija.rs

Deal,⁷ and Fit for 55⁸ is the regulatory package designed to implement this strategy in national law. In addition, the EU has adopted the European Climate Law⁹ whose goal is to reduce the level of anthropogenic greenhouse gas emissions at the EU level. The most important task that the EU has before it in this field is the gradual replacement of fossil fuels by renewables. According to current trends and EEA projections, the EU will not reach climate neutrality by 2050, but greenhouse gas emissions will be cut by 54%.¹⁰ This makes it all the more important to accelerate and promote the development of power generation capacities that use renewables.



The EU solar strategy envisages doubling solar photovoltaic capacity by 2025, installing 600 GW by 2030, and integrating solar power plants into local district heating systems

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The EU envisages

54%

of its greenhouse gas emissions will be cut by 2050

⁷ European Green Deal, ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en.

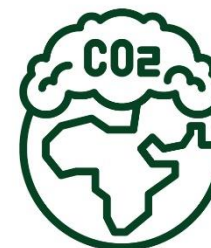
⁸ Fit for 55, Plan for a Green Transition, consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition.

⁹ European Climate Law, climate.ec.europa.eu/eu-action/european-green-deal/european-climate-law_en.

¹⁰ European Environment Agency, Member States' greenhouse gas (GHG) emission projections, eea.europa.eu/data-and-maps/data/greenhouse-gas-emission-projections-for-8.

In response to the war in Ukraine and the growing energy crisis, the EU adopted RePower EU,¹¹ a strategy for addressing energy-related issues that promotes greater use of renewables through an EU Solar Strategy aimed at doubling solar photovoltaic capacity by 2025 and installing 600 gigawatts (GW) by 2030, integrating solar power plants into local heating systems, a Solar Rooftop initiative, accelerating permitting processes for renewables projects, and the like.

Another factor that makes investing in renewables attractive is the Carbon Dioxide Emissions Trading System (ETS).¹² This framework has proven extremely effective as an incentive for businesses to invest in technologies that reduce carbon emissions while minimizing or completely eliminating “dirty” (environmentally unfriendly). Moreover, carbon prices had been fluctuating stable even before the start of the war in Ukraine. Carbon prices they skyrocket (or plummet) in a matter of months can destabilize industry. Excessive volatility brings uncertainty, making it difficult to make investment decisions. From this perspective, a gradual and predictable increase in EU carbon prices will work better for the EU in the long run. In that case companies would be more encouraged to invest in long-term sustainable solutions, such as renewables.¹³ In addition, electricity price discovery (absent any interventions) favors producers that use renewables, especially in the context of the growing cost of fossil fuels.



The EU Emissions Trading System (EU ETS) uses the “cap and trade” principle. The “cap”, or limitation, represents the total quantity of certain greenhouse gases that can be emitted by factories, power plants, and other facilities within the system. The cap decreases over time, which leads to a reduction in emissions. Within the cap, companies receive or buy emission units that they can trade with each other according to their needs. Also, they are able to buy a limited number of credits on the international market resulting from projects that contribute to cutting emissions worldwide.

¹¹ REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition, ec.europa.eu/commission/presscorner/detail/en/IP_22_3131.

¹² EU Emissions Trading System, climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en.

¹³ High EU Carbon Prices Are Structural, and Inaction Is Not an Option, economics.rabobank.com/publications/2022/march/high-eu-carbon-prices-are-structural-inaction-no-option.

Serbian legislation

The 2015 Paris Agreement set 2030 goals for renewables, energy efficiency, and emissions reduction, and the Energy Community is aligned with the EU's goals and ambitions in this area.¹⁴

As a member of the Energy Community and a signatory to the Green Agenda for the Western Balkans, Serbia is obliged to prepare a National Energy and Climate Plan (NECP) for the period from 2021 to 2030.

National energy and climate plans are umbrella strategies for energy and climate change. They are governed by the Recommendation of the Energy Community and should include the following elements: 1) overview of the current situation; 2) goals, policies and measures for the five dimensions of the Energy Union; 3) integrated projections and indicators including reference scenarios and policy scenarios that assess the relevant impacts of policies and proposed measures; and 4) reporting on the implementation of national plans.

The NECP should provide an overview of the state of play in Serbia, key policies and appropriate measures for considering the five dimensions of the Regulation on governance of the Energy Union and climate action (EU/2018/199):

- Decarbonization (greenhouse gas emissions and renewables),
- Energy efficiency,
- Energy security,
- Internal energy market, and

- Research, innovation, and competitiveness.

Serbia is currently drafting its NECP for 2021-2030 with projections to 2050. The country's energy sector requires wide-ranging changes and substantial investment to be harmonized with European policy in this area. The NECP will outline energy efficiency and renewables scenarios and set goals in these fields. The NECP will guarantee increased use of renewables for electricity generation with the aim of reducing Serbia's dependence on imports.

Serbia seeks to harmonize its energy rules with goals set by the Paris Agreement and align its legislation with EU and Energy Community regulations. To complete the statutory framework for renewables, in April 2021 the Serbian Parliament adopted the Renewables Law and the Energy Law.

Serbia is likely to recognize that companies wish to become energy independent and help develop and increase the use of renewables, and the country is therefore expected to subsidize solar panel procurement by medium-sized and large businesses.

The Energy Law sets energy policy goals and defines actions to achieve them, including prerequisites for accelerated development of renewables.

The Renewables Law regulates the utilization of energy generated by means of renewables and foresees incentives for energy producers that use renewables.

A piece of secondary legislation particularly relevant to this topic is the Regulation on criteria, conditions and manner of calculating mutual claims between self-consumers and suppliers ("Prosumer Regulation").

¹⁴ Recommendation on preparing for the development of integrated national energy and climate plans by the Contracting Parties of the Energy Community (Recommendation of the Ministerial Council of the Energy Community (2018/1/MC-EnC), [energy-](#)

[community.org/dam/jcr:de3adce9-e047-4fb3-a632-f63c64a5c9c6/REC_2018_01_MC_CLI.pdf](https://www.energy-community.org/dam/jcr:de3adce9-e047-4fb3-a632-f63c64a5c9c6/REC_2018_01_MC_CLI.pdf)).

Who is the competent authority in the procedure?

Elektrodistribucija Srbije (EDS), the national power distribution company, is responsible for managing and maintaining Serbia's power grid, while Elektroprivreda Srbije (EPS) is the national power generation and supply company.

These two companies were separated to ensure independence of the distribution system operator and allow it to deal on equal terms with all suppliers, both private generators and the EPS, to deliver electricity to consumers. Notwithstanding the above, EPS will be used in this document as an umbrella term that also includes EDS.



The Renewables Law regulates the use of energy from renewable sources and foresees a series of incentives for energy producers that use renewables.

Becoming a prosumer

Introduction

The procedure for installing solar panels and becoming a prosumer is governed by both the Planning and Construction Law (PCL) and the Prosumer Regulation.

The Prosumer Regulation has significantly simplified procedures for becoming a prosumer and cut the time required from six months to just one.

The Renewables Law defines prosumers as final consumers who operate their own electricity generation facilities using renewables sources that are connected to their internal installations, whereby the electricity produced is used to meet their own needs and the excess is fed into the transmission system, distribution system, or a closed distribution system (CDS).

The first step to becoming a prosumer is to build a renewables-based electricity generation facility that meets the prosumer's own demands and feeds excess energy into the transmission or distribution system or a CDS. This requires works approval under Article 145 of the PCL (except for production facilities with installed power of less than 10 KW).

The metering point must then be modified to account for the two-way flow of electricity, in accordance with regulations. To ensure the safety of the network and the prosumer, the contractor who performs this modification is required to provide a formal statement certifying that the devices, installations and metering point are free from defects and conform to regulations and standards.

What is the practical difference between the transmission and the distribution grids?

- The electricity system is a large, complex, and dynamic system whose primary function is to supply consumers with sufficient quantities of electricity safely, reliably, and cost-effectively. The system is comprised of the transmission system or grid, distribution grid, and CDSs. The transmission grid is the highest voltage network and is managed by transmission system operator Elektromreža Srbije (EMS). This grid is used to transmit electricity over long distances (for power greater than 10 MW).
- The distribution grid distributes electricity to final consumers (at voltages of 10, 20, and 35 kV) and is managed by EDS. In Serbia, 99% of distribution substations are located on the distribution grid.
- Closed distribution systems are used to distribute electricity in a geographically restricted industrial area, commercial area, or shared services area if the operations or production processes of the CDS user are integrated for operational or security reasons and if the electricity is primarily distributed to the CDS owner or operator and/or their related companies and other CDS users.

Because the transmission grid operates at extremely high voltages, in most cases prosumers will be connected to the distribution grid or to a CDS.

The prospective prosumer's power generation facility must also conform to all safety requirements as set by the EPS. The installed capacity of the facility must also not exceed the capacity approved by the EPS. If these requirements are met, the prospective prosumer must apply with the EPS for a supply agreement with net metering or net billing (depending on whether the prosumer is a household or not).

After this agreement is signed, the prosumer is connected to the power grid and registered in the Self-Consumer Register maintained by the EPS, and so formally gains prosumer status.

Requirements for registration depend on the installed capacity of the photovoltaic (PV) modules and on whether electricity is fed back into the grid or generated exclusively for the prosumer's own needs.

Prosumer facilities with a capacity under 10.8 kW are subject to a simplified procedure, while there are also separate rules for facilities of between 10.8 and 50 kW and for those with a capacity greater than 50 kW.

Installed capacity of between 10.8 and 50 kW

The Prosumer Regulation distinguishes between two categories of prosumers: households and housing associations comprise one group, and all other prosumers, including businesses, fall into the second band. According to the PCL, facilities with an installed capacity of between 10.8 and 50 kW do not require planning permission, as will be described below.

Simplified planning permission

Any construction project must comply with the PCL and the Rulebook on Unified Electronic Permitting Procedure. These procedures include requirements for connection to the power grid.

Article 2 of the Rulebook on Buildings and Works not Requiring Planning Permission exempts prosumers from planning permission requirements for PV facilities with an installed capacity of under 50 kW.

Instead of formal planning permission, these facilities require only **works approval** as prescribed by Article 145 of the PCL. Once it has obtained this works approval, before it can commence construction the prosumer must **notify the permitting authority** of the works using the permitting Central Information System (CIS).

Addendum to facility connection study

A prosumer intending to build a PV generation facility with an installed capacity of between 10.8 and 50 kW begins the process by applying for an addendum to the prosumer facility connection study and submitting a conceptual design to the EDS. This design outlines the plans for the facility and must contain information required to determine location requirements, assess compliance with planning documents, and establish design and connection requirements.¹⁵

Once the prosumer has applied for the addendum, it can develop a preliminary design, which is a design or set of related designs that set out the purpose, location, dimensions, capacity, technical and functional characteristics, and appearance of the facility, describe the works required, and demonstrate compliance with basic requirements for the facility, depending on the type and class of the facility and the works to be

¹⁵ Art. 15(1)-(2) of the Rulebook on Production and Assessment of Technical Documentation, *Official Gazette of the Republic of Serbia* No. 73/2019.

Net metering vs net billing

- In net metering, excess electricity fed into the grid during one month reduces the amount of net electricity in the next billing period.
- In net billing, the value of excess electricity fed into the grid during one month is billed in accordance with the agreement between the prosumer and the supplier. This method is used for prosumers other than households or homeowners' associations.

performed. For facilities for which the planning authority has issued location requirements, this preliminary design provides a more detailed concept for the facility, in accordance with the location requirements.

Connection approval

After preparing the technical documentation and obtaining works approval for the generation facility, the prosumer is required to apply with EDS for approval to connect the facility to the distribution system or a CDS. This is followed by entry into a connection agreement.

If the prosumer's metering equipment is not already owned by EDS, before obtaining connection approval the prosumer will have to sign an agreement transferring it to the distribution system operator. The Energy Law considers this equipment to include distribution cabinets and associated fittings and equipment, as well as connection cabling.

Building the production facility

Building a production facility requires engaging a licensed company. The facility must comply with the connection approval. After the construction is complete, contractor must certify to the prosumer that the devices, installations and metering point are free from defects and conform to regulations, standards, and requirements of the connection approval, and provide the findings of any technical testing carried out. The prosumer is required to deliver the contractor's documents to EPS in an electronic format. Once the facility has been constructed and the prosumer has met the requirements of the connection agreement, the prosumer can sign a supply agreement with net metering or net billing.

The type of prosumer determines how mutual claims between the prosumer and supplier are calculated.

If the prosumer is a household or homeowners' association, the supplier must use net metering. If, on the other hand, the prosumer is a legal person, the supply contract will envisage net billing.

The next step, once the facility is constructed, is for the prosumer to apply with the EDS for a full supply agreement with net billing.

The EDS is obliged to electronically submit to EPS a copy of the agreement with the prosumer but must redact any commercially sensitive information.

Under the supply agreement, the prosumer then applies for approval of trial operation, and, once requirements are met, permanent operation will also be approved. The prosumer must also connect the generation facility to their own internal installations.

Once it receives the prosumer's application, EPS verifies whether the facility meets connection approval requirements that can be checked while it is powered down. If facility complies with these conditions, EPS

Summary

- Installation of PV panels with a capacity of up to 50 kW does not require planning permission but only works approval.
- Prosumers start the procedure by applying for approval to connect their generation facility to the distribution grid.
- After preparing the technical documentation and receiving works approval, the prosumer applies with EDS for connection approval.
- The prosumer receives statements from the contractor certifying that the devices, installations, and metering point are free from defects and conform to regulations and standards, and forwards originals of these certificates to EDS.
- The prosumer then applies with the supplier for an agreement on full supply with net metering or net billing and the two parties enter into this agreement.
- The production facility is put into trial operation, and, after EPS approval is received, into permanent operation. The prosumer formally acquires "self-producer" status by being registered with the Self-Producer Register.

approves trial operation for up to six months, connects the facility to the grid, and registers the prosumer with the Self-Consumer Register. If the facility does not meet the requirements, EPS will withhold trial operation approval and notify the prosumer of the issues it needs to remedy.

If the production facility demonstrates compliance with the requirements of the trial operation approval, EPS will approve permanent operation.

Prosumers connected to distribution applying for connection to transmission grid

A prosumer already connected to the distribution grid is required to apply for a facility connection study using the prescribed form (Article 14(2) of the Prosumer Regulation). After the connection study and technical documentation are completed, and once construction of the generation facility is approved, the prosumer applies for connection approval.

Installed capacity lower than 10.8 kW

According to the Prosumer Regulation, prosumers other than households and homeowners' associations with facilities that have an installed capacity lower than 10.8 kW are subject to simplified approval procedure. These facilities do not need planning permission, as set out in Article 2 of the Rulebook on Buildings and Works not Requiring Planning Permission.

The simplified procedure means no specific decision is issued to approve connection and no connection agreement is entered into. The facility is constructed and the metering point modified pursuant to EPS's General Connection Requirements.

Once the facility is complete and the metering point modified, the prosumer applies with the supplier for a full supply agreement with net billing. After being notified of this agreement, contract, EDS connects the prosumer's facility within five days if there are no issues with the works and documentation.

Generation facilities with an installed power of up to 10.8 KW are mainly intended for households and cannot meet the needs of consumers who require larger quantities of energy.

Installed capacity exceeding 50 kW

According to Art. 2(37) of the Rulebook on Buildings and Works not Requiring Planning Permission, installing PV panels requires only works approval rather than full-scale planning permission. Under Art. 2(34), this exemption also applies to prosumers' PV facilities with an installed capacity exceeding 50 kW.

Once it has received works approval under Article 145 of the PCL, before commencing the works the prosumer notifies the approving authority of the works using the CIS. In parallel, along with the works notification, the prosumer completes and signs a model distribution grid connection agreement and submits it to EDS through the Central Record of unified procedures (CEOP).

The remainder of the procedure identical as for generation facilities with an installed capacity of between 10 and 50 MW.



Practical challenges

Differing interpretations of VAT and excise duty base by Ministry of Finance and Ministry of Mining and Energy¹⁶

Prosumers may receive higher-than-expected electricity bills, which reveals a lack of clarity in how the various fees are assessed. While the Ministry of Finance (MoF) relies on total electricity supplied, the Ministry of Mining and Energy (MME) assesses the fees using the difference between electricity supplied to the prosumer and the electricity fed back into the grid by the prosumer. The latter view is also shared by prosumers.

The Prosumer Regulation reflects the opinion of the MME, where VAT is assessed only on the difference between energy delivered and that fed back into the grid. By contrast, the Value Added Tax (VAT) Law stipulates that the prosumer's VAT assessment will be based on the total quantity of electricity received from the supplier in a given billing period, as determined using active energy tariff periods. The MoF re-affirmed this view in an opinion solicited by EPS.

The following paragraph provides a practical illustration of the differences.

Assuming the VAT Law applies, a consumer who had previously paid 2,500 dinars monthly in electricity bills would see their cost cut to 1,750 dinars as a prosumer, while the final bill would amount to 1,300 dinars under the Prosumer Regulation. The savings would equal 30% and 50%, respectively.

¹⁶ Prosumer Q&As, Bloomberg, [mre.gov.rs/aktuelnosti/pitanja-i-odgovori/pitanja-i-odgovori-u-vezi-sa-prozumerima](https://www.mre.gov.rs/aktuelnosti/pitanja-i-odgovori/pitanja-i-odgovori-u-vezi-sa-prozumerima).

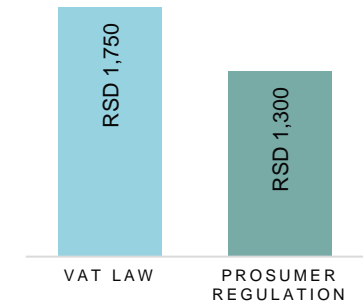
The MoF and the MME met on multiple occasions to discuss these differences. The MoF remained firm in its interpretation and reiterated the Prosumer Regulation did not conflict with laws from its remit.

As noted above, under the VAT Law prosumers are charged VAT on the quantity of electricity received from the supplier in any given billing period, as determined using active energy tariff periods. Electricity supplied cannot be offset (“netted”) against that fed back into the grid to reduce the prosumer's VAT liability.

The quantity of electricity received from the supplier is also used to assess excise duty, subsidies for preferential electricity producers, and energy efficiency improvement charges.

Prosumers' grid access fees are also based on the total electricity received from the supplier in any given billing period. These costs are reported in two parts: the price of electricity supplied and the “grid access fees for the difference between total energy supplied and energy consumed”, which is shown as a separate item on the electricity bill.

Electricity cost savings (VAT Law vs Prosumer Regulation)



Electricity that prosumers feed into the grid is sold by the distributor to other consumers, who pay VAT on it in the tax period in which they buy the energy.



Best practices

The increasing popularity of solar panels in Serbia and growing interest in prosumer status can be seen as best practices in and of themselves.

Two major projects have been developed in Serbia by commercial prosumers. Eko Step Pellet has built a 999.5 kW facility in Petrovac na Mlavi, and Gruner Serbian has constructed a 500 kW generation plant in Vlasotince. These high-voltage generation projects will allow their investors to reduce their energy dependence and make cost savings in production while also reducing greenhouse gas emissions.

With many interesting and creative projects expected in Serbia, some EU developments also deserve to be highlighted.¹⁷

The first is a project in the Slovenian village of Luče. Residents of this mountain village regularly experienced power outages due to an unstable connection to the public grid. With the support of the municipality, the local energy supplier, Biomasa, and one of the largest Slovenian energy companies, Petrol, launched the Compile pilot project. By promoting intelligent management of electricity demand and supply, the project aims to improve energy security and explore new ways of providing ancillary services to the distribution system operator and transmission system operator with fair compensation for all involved.

The project received local support in the village as it promised to be a step towards energy independence and energy security benefiting local agricultural enterprises. Two companies, Petrol and Biomasa, have invested in renewables-based electricity generation plants, home and

communal battery storage, and electric vehicle charging stations, combined with intelligent energy management tools. Petrol acts as an aggregator and supplier and offers contracts with net metering schemes for end users. Petrol applies technology to manage local network balancing within and between connected households. Citizens who wish to participate must sign an electricity contract with Petrol and can choose to co-finance the installations. Compile offers the opportunity for consumers to participate more actively in the energy system than traditional supplier-consumer relationships. The next example is Som Energia, a renewable energy community organized into local groups across Spain. This energy cooperative has more than 77,000 members participating in the energy transition. Community members pay 100 euros in advance and sign a contract that guarantees the supply of 100% renewable energy sources. Som Energia is supplied with electricity from its own RES plants, and surplus electricity from Som Energia plants is sold on the market.

Further voluntary investments by members are possible, and every year the shareholders' meeting decides how the profit is used and how much interest the members receive on the invested capital.

These examples prove that, with the support of the legislative framework and a lot of creativity and motivation of the community, serious progress is possible with democratizing electricity production, reducing the community's dependence on fossil fuels, and contributing more to climate neutrality.

¹⁷ Examples taken from: European Environmental Agency, Energy prosumers in Europe, Citizen participation in the energy transition, eea.europa.eu/publications/the-role-of-prosumers-of, pp. 21-26.

Conclusion

Serbians are increasingly exposed to air pollution in almost all major cities, mostly due to poor and outdated electricity and heat generation technology. In addition, the impact of climate change is increasingly becoming clear and is a constant reminder that climate neutrality should be prioritized to safeguard conditions for life as we know it today.

For years, the EU has been a leading actor in the fight against environmental pollution and climate change, setting ambitious goals and insisting on the introduction of new, green technologies that make businesses profitable. The goals of climate neutrality remain a priority in the context of the war in Ukraine and the energy crisis, and the diversification of energy supply sources relies on accelerating the development of renewables.

Given the exigencies of the climate and energy crisis and the EU's endeavors to overcome them and taking into account the Serbian aspiration to join the bloc, it is crucial to shape the legal framework so as to enable an easy and profitable transition to renewables.

Self-consumer status is extremely important as it allows households, homeowners' associations, and other entities to become prosumers through a fairly simple procedure and thus reduce their dependence on the central distribution grid, reduce their costs, and most importantly - contribute to cutting greenhouse gas emissions and climate neutrality in the future.

Households and businesses are increasingly expected to recognize the numerous benefits of prosumer status, while the government is likely to

redouble its efforts to reform the statutory framework with the aim of facilitating the energy transition and ensuring a greener future.

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