

REFORMS FOR ECONOMIC GROWTH AND BUSINESS RESILIENCE 2025

ENERGY COMMITTEE



AMCHAM SERBIA
A LEADER IN CHANGE

ENERGY COMMITTEE

The Serbian economy faces issues that will have a decisive impact on its ability to sustain its pace of growth, such as **securing a stable and predictable energy supply, creating a business environment conducive for the rapid and effective development and construction of energy generation plants, infrastructure, and related facilities, improving the legal framework for green energy needed to accelerate the green transition based on best European practices, and enhancing energy efficiency.** The global energy crisis and developments in the Serbian energy sector seen in late 2021 have propelled these issues to the very top of the agenda, and as such it comes as no surprise to see **the green agenda and green energy transition ranked a high second on the list of AmCham members' priorities for improving the business environment.**

Serbia has recently launched an irreversible energy transition by enacting a special regulatory framework for delivering renewable energy projects, commencing investments into the transmission and distribution network, developing major infrastructure projects, and kickstarting reforms to how energy companies are managed and organised. Conversely, a major challenge for businesses, especially exporters and firms operating as part of large multinational corporations, is the fact that at least two-thirds of Serbia's electricity is generated from fossil fuels. This issue is exacerbated by the limited options for companies to secure renewable electricity, which has been directly affecting the ability of firms to meet sustainability requirements, which are quickly becoming part of their strategic orientations, as well as adversely affecting their global competitiveness.

Serbian businesses are ready to shift from being passive observers to active participants in the electricity market. A break with the current practice of complete reliance on supply by state-owned firms, as well as proactivity in finding and implementing alternative solutions to meet companies' green energy needs, will both have a decisive effect on business performance, export competitiveness, and environmental quality. In this context, **the government ought to continue enacting and pursuing policies that will incentivise large-scale renewable energy projects, enable self-supply of electricity and permit businesses to play an active part in the electricity market, and limit the potentially adverse impacts of the Carbon Border Adjustment Mechanism (CBAM) on the economy.**

OBJECTIVE 1: INCENTIVISE NEW ENTRANTS INTO THE ELECTRICITY MARKET

...BY CLEARLY DEFINING THE CONCEPTS, ROLES, AND RESPONSIBILITIES OF NEW MARKET ENTRANTS, SUCH AS SELF-CONSUMERS AND ACTIVE BUYERS

CHALLENGE: Amendments to the Renewable Energy Law have capped installed capacity for generation facilities using renewable sources operated by non-household self-consumers (i.e. commercial and industrial facilities) at 150 kW, whilst production facilities that apply for a connection during a transitional period ending on 1 July 2024 will be allowed a maximum installed capacity of 5 MW.

At the end of 2024, amendments to the Energy Law were adopted, introducing the long-announced alternative solution—the concept of the “active customer.” This concept is intended to meet the needs of a large portion of the industry for self-supply of electricity. In addition, the Law opens new opportunities on the electricity market for “active customers”: feeding electricity surpluses into the grid and handing them over to the supplier, selling electricity on the market, participating in the flexibility market, etc. As such, an “active customer” can be the owner of a production facility or transfer this right to other parties, and may act independently or in cooperation with other “active customers” and aggregators. On the other hand, the law also introduces a new level of obligations for “active customers,” aiming to increase their accountability to the power system—all “active customers” must manage their balancing responsibility based on market principles and ensure the installation of metering equipment for their power plants, battery storage, or other mechanisms for providing ancillary services.

Although the 2024 legal amendments laid the foundation for broader application of the “active customer” concept and enabled new opportunities for industrial self-supply and market participation, their full implementation has not yet been realized in practice. As of May 2024, **no formal request has been submitted for the implementation of the “active customer” concept, nor is it clear how this framework will be applied in practice.** This is largely due to an underdeveloped regulatory framework, which should govern the administrative aspects of “active customer” connection requests. This requires amendments to specific secondary legislation (such as the Decree on Conditions of Electricity Delivery and Supply), technical documents (including the Distribution System Code, the Transmission System Code, and the Market Rules), and the methodology for determining access fees to the transmission and distribution systems, adopted by the Energy Agency as an independent authority. Given the current situation, **“active customers” still cannot fully exercise all the rights granted to them by the Law, especially regarding the provision of flexibility services.** Although the Energy Law provides clear guidelines to system operators and the independent regulator on the steps required to establish a flexibility market, open the ancillary services market, and define the rights and responsibilities within that process, these markets are still not functional.

On the other hand, it is important to emphasize that **most businesses are still primarily interested in producing electricity solely for their own needs**, as well as storing generated energy without feeding it into the transmission, distribution, or closed distribution system (**the so-called zero-injection model**). The existing legal limit of 150 kW of installed capacity also applies to this category of “prosumer” customers, even though they do not feed surplus electricity into the system and therefore cannot negatively affect its stability. In practice, this means that companies wishing to invest in production capacities above 150 kW to cover a slightly higher share of their energy needs from renewable sources are forced to operate as “active customers,” which entails additional obligations and costs, thereby reducing the attractiveness of investing in own energy sources.

In a context where the profitability of zero-injection “active customer” investments remains uncertain, the complex administrative requirements and the length of the connection process further discourage zero-injection end customers. This can deter them from actively participating in the electricity market, slow down Serbia’s energy transition, and, in the medium term, negatively affect the competitiveness of Serbian exports to the EU—especially regarding the implementation of the Carbon Border Adjustment Mechanism (CBAM). From the perspective of the network and its stability, these actors are variable consumers, just as they were before, limited only by their approved connection capacity—just like any other consumer who reserves network capacity based on their approved load. The responsibility for any potential electricity injection into the system and any damage caused thereby is clearly defined by laws and secondary legislation, and system operators prescribe the necessary equipment for monitoring and controlling the operation and production of the electricity-generating facility. Given that, in accordance with the Distribution System Code, the system operator reviews the technical criteria individually for each small power plant connection request, and that prosumers with over 160 kW of power must provide a connection-switching facility with a remote monitoring station for real-time tracking of production and consumption, as well as submit annual production plans, we believe that all the prerequisites already exist to ensure predictability and control over their production and consumption.

RECOMMENDATIONS:

- **Finalizing the regulatory framework** that would enable full implementation of the “active customer” concept as a matter of urgency—and at the latest within the legally prescribed deadline—including amendments to the **Decree on Conditions of Electricity Delivery and Supply** (adopted by the Government of the Republic of Serbia), the **Distribution System Code**, the **Transmission System Code**, the **Electricity Market Rules**, and the **Methodology for Determining Access Fees to the Transmission and Distribution Systems** (adopted by the Energy Agency). Until the adoption of the new Decree, the provisions already applicable to producers should be applied *mutatis mutandis* to active customers, in line with the transitional and final provisions of the Energy Law.

- **Establishing specific rules** for the operation and grid connection of “prosumer” and “active customer” categories that **do not inject electricity surpluses into the grid**—the so-called **zero-injection** model—by ensuring simplified and less administratively burdensome procedures for this category of end-users.
- It is also recommended to carry out **comprehensive technical and legal analyses** to identify the main barriers to the establishment and further development of the “active customer” concept in Serbia, and to introduce **incentives for end-users** to provide **flexibility services**.
- A **key priority** is the **opening of currently closed markets** where active customers and other new participants could engage—particularly the **ancillary services market**, the **balancing market**, and the **congestion management market**.
- In this context, the **Distribution System Operator** should conduct an **assessment of available flexibility resources** to determine whether there is sufficient potential and justification to establish a flexibility market (at zonal or national level), ensuring that all activities are aligned with the **Transmission System Operator’s Code** and subject to approval by the **Energy Agency**.

...BY STRENGTHENING CAPACITY OF THE DISTRIBUTION AND TRANSMISSION NETWORK AND OPTIMISING ADMINISTRATIVE PROCEDURES FOR CONNECTION TO THE GRID

CHALLENGE: Limited capacity has been an increasingly important issue for South-Eastern Europe, causing grid overload and constituting an obstacle to new entrants into the electricity market. In Serbia, the capacity needed to respond to the large number of applications for connection significantly exceeds the available regulatory reserve that guarantees stable operation of the power grid.

According to the draft Serbia Transmission System Development Plan, 2023-2032, the maximum renewable energy capacity that the transmission system is able to effectively balance amounts to 5.8 GW. Balance reserves are sized for balancing 1 GW of solar and 4.8 GW of wind capacity, accounting for some 52 percent of all current applications for connection to the transmission grid (at 11.1 GW). Latest figures released by transmission system operator Elektromreža Srbije suggest generation capacity has fallen significantly, from 21.5 GW in November 2023 to just 11.1 GW in February 2024. This sudden decline has been driven by new regulations that mandate additional guarantees from investors and seek to address the ballooning number of applications. Publicly available figures indicate the distribution system is currently processing more than 2,500 applications with a total installed power capacity of 1.9 GW, also substantially in excess of available balance capacity.

Excessive connection applications have proven a problem for both the distribution and the transmission system, with particular challenges posed by applications incomplete in terms of both project design and finance. With regard to connection to the distribution system, one of the major challenges contributing to the long waiting list has been the **lack of any requirement to submit security instruments when filing a connection request**, as well as the **absence of explicitly defined deadlines** for initiating and completing the project.

The new Energy Law introduces provisions aimed at **relieving the transmission and distribution systems** from connection requests that are unlikely to materialize, and at **resolving long-standing issues** that end users have faced in the past—namely, the **length, unpredictability, and complexity** of the connection process. The goal of these changes is to **free up reserved capacity, shorten the connection time, and reduce administrative costs** for committed investors. However, as previously mentioned, the **regulatory framework that would define the new connection rules in more detail is still incomplete**, and the new provisions **have not yet been fully implemented**, which creates **uncertainty for end users and hampers planning of new investments**.

RECOMMENDATIONS:

- **Full and consistent implementation of the Energy Law** regarding the procedure for connecting to the transmission and distribution grids, the role and obligations of system operators in this process, and the required deadlines for action. This includes the adoption of all **bylaws and technical documents** referenced by the new Energy Law—particularly the **Decree on Conditions of Electricity Delivery and Supply**, the **Distribution System Code**, and the **Transmission System Code**. The aim is to resolve long-standing issues such as the **overproduction of connection requests**, **uncertainty about the feasibility of connection**, and lack of clarity regarding **connection conditions and timelines**.
- **Optimization of workflows and internal procedures** for processing connection requests to the distribution grid. This entails **timely workforce planning** and **hiring a sufficient number of employees** to avoid bottlenecks caused by understaffing. The **implementation of software solutions** is also essential, to **digitize the network** and **automate complex tasks** such as conducting simulations and analyses—currently the most demanding parts of the process.
- With the **integration of renewable energy sources**, the distribution network has transformed from passive to active, requiring a new approach to **network development and management**. The current and especially future share of renewables in the energy mix demands the use of modern tools and expertise, including the **creation of dedicated organizational units** focused solely on the **integration of renewable energy sources** and the **development and operation of active networks**.
- The **Government of the Republic of Serbia** should continue efforts to **expand the capacity** of the transmission and distribution networks. This includes further **digitalization of the grid** and the **deployment of smart meters and smart grid technologies**, particularly within the distribution system.

OBJECTIVE 2: CONTINUE DEVELOPING AND DELIVERING RENEWABLE ENERGY PROJECTS

...BY CREATING A REGULATORY ENVIRONMENT CONDUCIVE TO THE DEVELOPMENT OF RENEWABLE ENERGY PROJECTS

CHALLENGE: Serbia has proven able to kickstart its energy transition by finalising the regulatory framework needed for attracting investment into the renewable energy sector. Amendments to the Renewable Energy Law adopted in 2023 have improved legislation for the energy transition, aligning it with the highest European standards. These steps have sent a positive message to investors in renewable energy, guaranteeing effective and transparent reforms and decarbonisation of the country's energy sector. These developments have led to the first successful auctions being held in 2023.

Apart from serving as the foundation for a robust investment climate, the current legal framework ought to produce large-scale benefits for consumers and businesses alike by minimising the need for energy imports and boosting market liquidity. No less importantly, an increased share of renewables in the overall energy balance would significantly improve air quality and the environment. Nevertheless, continuing green energy transition still faces obstacles, including the issue of **balancing electricity generation and the attendant challenge of constructing additional storage capacity**, together with the underdeveloped high-voltage grid and the large volume of connection applications, both of which are discussed at length in the foregoing section.

Amendments to the Renewable Energy Law enacted in 2023 have introduced the requirement for investors into renewable generation facility to provide **secondary reserve services** as a precondition for being allowed to connect to the grid. This has proven disproportionately onerous for investors, increasing investment into new wind farms and solar generation capacity by between 20 and 30 percent (by way of an illustration, 0.4 MWh/MW battery capacity can increase investment by up to 70 percent compared to 0.2 MWh/MW for the same installed active power). These large capacity requirements and the high attendant costs may cause investors to move to countries with less demanding criteria. Overall, Europe boasts only some 500 MW in battery capacity integrated with renewable energy generation facilities (with 270 MW of these located in the UK, which has a well-developed system services market), although such facilities totalling 40 GW were constructed during last year alone.

The global energy crisis has proven the necessity of accelerating the Bistrica and Đerdap 3 pumped-storage hydroelectric power plants, projects that are now nearly half a century old. **These hydropower plants are crucial to the stability of the electricity grid**, not only as they will generate additional electricity but also because they offer the ability to balance wind and solar generation, in particular given the high cost of battery storage.

Finally, although the adoption of new legislative and strategic documents in the energy sector aims to improve the regulatory framework and steer energy development toward sustainability, **certain legal innovations may simultaneously introduce additional uncertainty into investment processes**. For example, **new provisions of the Energy Law regulating the issuance of energy permits** introduce an added level of unpredictability, requiring that a **renewable energy power plant project must meet the targets set out in the strategy referred to in Article 4 of the Law and in the Integrated National Energy and Climate Plan (NECP)**. The proposed amendments thus introduce a **potential administrative barrier** to further project development, the risks of which **cannot be anticipated prior to applying for an energy permit**—an application that typically occurs in the **mature or late phase of project development**, after **significant capital investments have already been made**. This creates the possibility that, based on **discretionary assessments by authorities** regarding whether the strategic targets have been met, **the development of mature renewable energy projects could be halted**. Such a scenario may jeopardize both **Serbia's continued progress in its green energy transition** and the **legal certainty and predictability of the investment climate**.

RECOMMENDATIONS:

- AmCham believes that setting the threshold for storage capacity in last year's amendments of the Renewable Energy Law was premature. Any such more ought to be preceded by an assessment of the adequacy of the system to strike the right equilibrium between balancing needs and the necessity of sustaining an environment conducive to the creation of new green energy generation capacity. Since current requirements for installed generation capacity and battery storage greatly increase the cost of these investments, consider amending the statute to envisage that **the regulation range for providing ancillary services should amount to at least 10 percent of the installed active power of the facility using variable renewable energy sources, or, alternatively, reducing the required battery capacity to at least 0.2 MWh/MW of the installed power of the facility**, which should meet the requirement for secondary reserve services. Moreover, **this article of the law ought to be construed strictly in the sense that the batteries will only be available for use in the free market for ancillary services and balance energy, pursuant to the Energy Law and the Energy Market Operating Rules**.
- **Consider whether the integrated storage facility system is appropriate or whether storage could be regulated otherwise, for instance on the Greek model**. If integrated storage facilities are retained, clearly spell out the rules of the game so that the source of income for the facilities is known.

- **Consider letting a tender for stand-alone battery electricity storage systems similar to those operated by countries in the region** (such as Greece, Romania, and Bulgaria). Create a regulatory framework for large-scale electricity generation facilities (batteries, hydrogen, and the like) that will allow rapid permitting for these units, especially in terms of their connection to the grid.
- **Consider amending Articles 33 and 34 of the Energy Law** in order to establish objective criteria for applicants requesting energy permits and to introduce transparency in the verification of these criteria. This could be achieved by allowing the fulfillment of the targets set in strategic documents to be demonstrated through a grid connection study, which, among other aspects, assesses compliance with security-related measures, including supply security. Other conditions and measures could be verified during the procedure for issuing location requirements, wherein public authorities provide planning and connection requirements aligned with public policy measures. These location requirements also include provisions related to environmental protection, including energy efficiency, renewable energy use, and climate protection. Regarding the requirement to assess the existence of alternative solutions to the construction of new electricity generation facilities, this analysis could be performed through a justification study. Given that, under construction regulations, justification studies are not mandatory for projects not financed with public funds, an alternative approach could be to use a feasibility study, which is typically prepared for the financing of facilities developed by private investors.

...BY STREAMLINING ADMINISTRATIVE PROCEDURES TO REIGNITE THE GREEN TRANSITION

CHALLENGE: Complicated procedures and excessive administrative requirements often hold back the development of renewable energy projects.

RECOMMENDATIONS:

- Eliminate the undue administrative burden on renewable energy projects (such as, for instance, the outdated Cultural Heritage Law, which requires approval for solar power projects even though these investments require no earth-moving). Ensure compliance with time limits in the construction permitting procedure, including fines and other penalties for permitting officials who fail to adhere to the prescribed timeframes.

OBJECTIVE 3: SAFEGUARD COMPETITIVENESS OF THE SERBIAN ECONOMY IN THE FACE OF CBAM

...BY ASSESSING THE IMPACT OF CBAM IN DETAIL AND ENSURING CONTINUED DECARBONISATION OF THE ECONOMY

CHALLENGE: A major challenge for businesses, especially exporters and firms operating as part of large multinational corporations, is the fact that at least two-thirds of Serbia's electricity is generated from fossil fuels. Companies have long faced efforts to limit their carbon footprint, even where doing so directly affects their competitiveness and profitability. These attempts reached a peak in December 2022, when the European Council and the European Parliament agreed on the introduction of the Cross-Border Adjustment Mechanism (CBAM). The CBAM seeks to promote decarbonisation in non-EU countries, so overcoming the issue of carbon shifting and helping the European economy remain competitive by ensuring the cost of carbon dioxide (CO₂) emissions is the same for products made in the EU and imported ones. In practice, the

CBAM will constitute an additional tariff on imports into the EU of products whose manufacture in third countries generates significant carbon emissions. Currently, the list of goods subject to the CBAM includes electricity, cement, aluminium, steel, and fertiliser, and is only expected to grow. Electricity is subject to the CBAM as it accounts for a large part of GHG emissions if generated in thermal power plants using coal or other fossil fuels.

Regulation (EU) 2023/956 establishing the CBAM was adopted on 10 May 2023 by the European Parliament at the proposal of the European Commission. The Regulation took effect on 1 October 2023, when an initial monitoring phase began, whilst the actual fees are first expected to be levied in 2026.

Given their high export dependence on the EU and low decarbonisation levels, countries of the Western Balkans will be among the hardest hit by the CBAM. Full-fledged CBAM implementation can lead to large-scale job losses if companies in the affected sectors become price uncompetitive in the EU due to the high cost of their exports.

The ways in which businesses can decarbonise further remain limited, and addressing some regulatory obstacles could help reduce carbon footprints across CBAM-affected industries, cut production costs, and boost competitiveness in goods markets.

RECOMMENDATIONS:

- Produce economic, legal, technical, and financial analyses of how the CBAM will affect electricity generation and other industries in Serbia.
- Include businesses in consultations about alternative arrangements that would allow alignment with the CBAM and allow companies sufficient time to adjust.
- Ensure the free exercise of options for direct supply of renewable electricity, such as the corporate power purchase agreements envisaged by the Renewable Energy Law.
- Remove regulatory barriers that hinder stability of supply whilst focusing on alternative sources of energy: for instance, amend the Waste Management Law to reverse the current ban on imports of non-hazardous waste for use as fuel.