

## Just transition process in Serbia - When, how and who will pay the price?

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### Just transition process – the main concept and background information relevant for Serbia

The climate crisis makes a just transition urgently needed. As of February 2021, 197 countries, including the Republic of Serbia, have signed the Paris Agreement<sup>1</sup> (UN, 2015). The agreement aims to keep global temperature rise to a maximum of 1.5 degrees Celsius above pre-industrial levels. Another key legal document is the Sofia Declaration on the Green Agenda for the Western Balkans<sup>2</sup> (RCC, 2020), signed in November 2020 by countries pledging to implement measures along five pillars:

- Climate, energy and mobility
- Circular economy
- Environmental pollution
- Sustainable agriculture and food production
- Biodiversity

Central to a just transition are measures to reduce dependence on fossil fuels and improve the security and efficiency of energy supply through the use of renewable energy sources such as hydropower, biogas and biomass. It is a sustainable energy policy that includes Increase energy efficiency such as solar and wind power. A step-by-step process towards a sustainable transition will have significant long-term social, economic and environmental benefits.

A full signatory to the Energy Community Treaty and since its application for membership was accepted in March 2012, Serbia, as a candidate for EU membership, supports the Paris Agreement on Climate Change and has signed the Sofia Declaration on the Green Agenda for the Western Balkans. The country has made an international commitment to phase out coal-fired energy in stages with specific targets and milestones. However, the policies and actions leading to decarbonization by 2050 have not yet been defined in the National Energy and Climate Integration Plan (NECP). Although the NECP legal basis has been adopted<sup>3</sup>, the preparation of the Republic of Serbia Development Energy Strategy up to 2040, including projections up to 2050, is still underway. Once adopted, these strategic documents will set the direction, measures and targets for implementing the green energy transition and define guidelines for the development of the energy sector. Currently, the energy sector of the Republic of Serbia, especially the power generation sector, is dominated by the consumption of domestic coal resources, mainly lignite which accounts for about 70% of the electricity generation, and these coal resources are mainly

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<sup>1</sup> <https://www.un.org/en/climatechange/paris-agreement>

<sup>2</sup> <https://www.rcc.int/docs/546/sofia-declaration-on-the-green-agenda-for-the-western-balkans-rn>

<sup>3</sup> <https://www.energy-community.org/news/Energy-Community-News/2023/03/26.html>

distributed in two regions of the country namely the Kolubara and the Kostolac coal basin. These two regions inevitably have poorer air quality, and the energy sector as a whole, remains less efficient and carbon-intensive compared to European standards. Following the above presented issues, greening of the local economy should be considered as a both vertical and horizontal priority.

The main challenges regarding implementation of the just transition in Serbia could be classified into two broad categories. The first category refers to financial requirements given that the whole transition is extremely exhausting from the financial point of view. Although it would be extremely difficult to provide reliable estimate of the financial resources that would be necessary to conduct clean energy transition, depending on the time horizon, economic sectors that have been taken into account, level of protection of directly/indirectly exposed population and selected policy priorities, estimates vary from 10.6 bln EUR<sup>4</sup> (by 2030) for completion of the requirements stated within the EU negotiation Chapter 27 which covers environment and climate change (Coalition 27, 2018), to 32 bln EUR worth investments over the next 25 years as recently reported by the Minister of Mining and Energy in December 2022<sup>5</sup> (Ceeenergynews, 2022). The whole process will inevitably depend on proactive and forward-looking public budget planning as well as tailored support of international financial organisations. The second category refers to the establishment of the governance mechanism that will be necessary to coordinate and guide the Just Transition Process as such. The appropriate governance mechanisms include development of the national strategic framework and operating plans, and establishment of the decision-making bodies and organizational units in charge of managing and monitoring the whole process. An important element of the reform also includes the restructuring of the national company EPS, the single largest electricity producer which is currently producing more than 90% of the electricity traded (BOS, 2023). Over the last year, EPS made losses estimated at 1 bln EUR<sup>6</sup>, primarily resulting from imports of electricity. Import of electricity has been largely a consequence of operational inefficiencies of the EPS and practically a cost of the delay in structural reforms.

Immanent to any transition process, the whole reform would not be equally spread but will bring both positive and negative effects to the particular economic sectors and population groups. Positive effects would primarily refer to supporting sustainable economic development processes. Over the long-term perspective, positive effects will be spread to the whole population and the economic sectors which operate or rely on renewable energy sources. On the other hand, reducing production from the traditional energy sources would result in creating “transition losers”. Therefore, a coalition of the stakeholders aiming to protect their interest related to the current electricity production patterns would probably try to slow down or block the process. For the time being, this coalition has been represented by the EPS and the economic entities related to EPS, which consider the whole process unfair and harmful particularly for the employees working in the mining sector. EPS is currently building a new thermal plant in Kostolac and have plans for further expansion of the production facilities which could seriously affect possibility of conducting just transition<sup>7</sup> (BOS, 2023).

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<sup>4</sup> [https://www.koalicija27.org/wp-content/uploads/2019/10/izvestaj\\_K27\\_2018\\_ENG\\_WEB.pdf](https://www.koalicija27.org/wp-content/uploads/2019/10/izvestaj_K27_2018_ENG_WEB.pdf)

<sup>5</sup> <https://ceenergynews.com/finance/serbia-32-bln-euros-needed-for-clean-energy-transition-says-minister/>

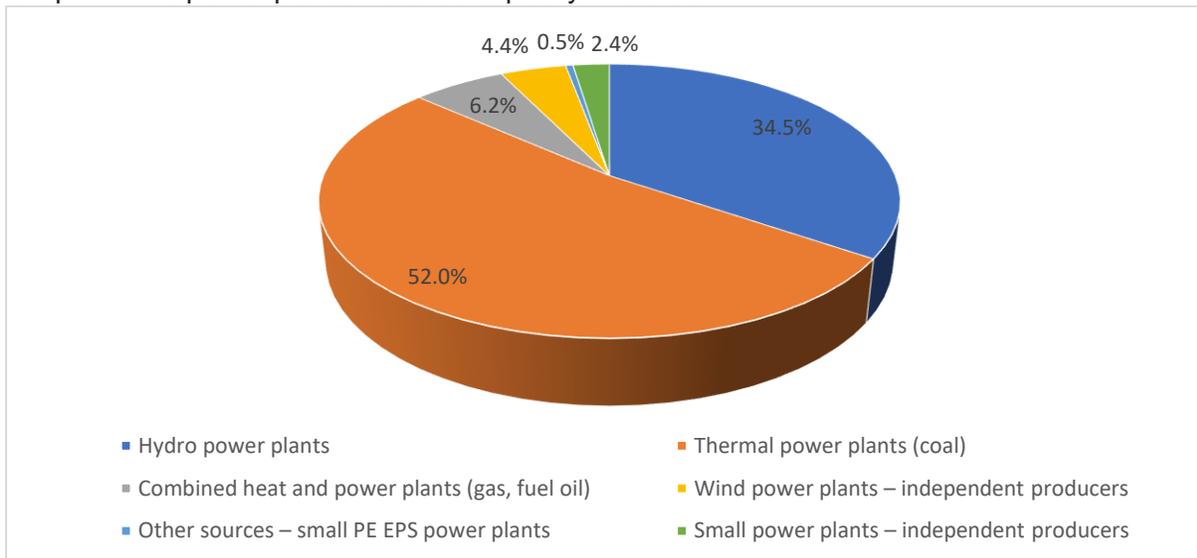
<sup>6</sup> <https://www.serbianmonitor.com/en/are-public-energy-companies-going-to-ruin-serbian-budget/>

<sup>7</sup> <https://www.bos.rs/ekz-eng/news/425/8852/just-transition-in-serbia-off-to-a-difficult-start.html>

## Just transition in Serbia - Ways to go?

Central to a just transition are measures to reduce dependence on fossil fuels and improve the security and efficiency of energy supply through the use of renewable energy sources such as hydropower, biogas and biomass. It is a sustainable energy policy that includes Increase energy efficiency such as solar and wind power. A step-by-step process towards a sustainable transition will have significant long-term social, economic and environmental benefits. Reserves of coal, which account for 52% of the primary energy consumption (Graph 2) and more than two thirds of the total electricity consumption, are estimated to last for the next 60 years<sup>8</sup> (FES, 2020). Given that energy intensity in Serbia is up to four times higher if compared to the EU average, it is clear that even without commitments arising from international agreements, Serbia needs to seriously reconsider its energy policy for the sake of future development perspectives. So, what are the alternatives?

Graph 1. The power plants installed capacity in Serbia



Source: AERS, 2022, Serbian Energy Sector Report for 2021

Natural gas could not be seriously considered as an alternative to coal for several reasons. First of all, natural gas is ultimately a fossil fuel and thus not purely appropriate in terms of meeting sustainable development goals. Moreover, the gas currently accounts for around 15% of the overall energy supply, out of which Serbia imports 85%, which makes Serbia dependent to Russia as the main exporter. On the other hand, potentials of using biomass could be considered more realistic due to large quantities of this resource being generated as nus product of the primary agriculture production, primarily in Vojvodina region. Potential of biomass are therefore solid since being assessed to 40% of the value of coal currently produced in Serbian mines. Another alternative energy source represents solar and wind power production. The main issues with regards to solar and wind refer to relatively high financial resources required for building production facilities and intermittent character of this power source. However, in the long-term

<sup>8</sup> <https://library.fes.de/pdf-files/bueros/belgrad/17539.pdf>

perspective, taking into account the expected decrease of technology costs and local availability of these sources should be seriously taken into account. Another advantage of solar energy production refers to the possibility of translating production to the local level as being appropriate for satisfying household energy demand. Finally, Serbia has untapped potential of hydroenergy production which could be further used. Currently, as shown in Graph 1. Serbia already relies heavily on hydropower, having the highest installed hydropower capacity in the Western Balkan region. In general, hydropower supplies large amounts of energy. Following the recent energy crisis, acceleration of new large scale hydro capacities could be expected. However, the problem related to greater reliance on this energy source represents its potentially adverse environmental impact.

As per recent World Bank report<sup>9</sup> (World Bank, 2022) on the opportunities for Serbia to create greener and more resilient growth, urgent action in three interrelated areas have been suggested. The first component indicates the role of prices, as they need to reflect the carbon content in selected goods. In line with the EU Carbon Border Adjusted Mechanism (CBAM), to be introduced in 2026, a fee to carbon-intensive products will be imposed, thus providing financial incentive for reducing carbon-intensive production. Macroeconomic estimates produced within this report indicate that Serbian economy in overall will not be seriously affected by the CABM, although some sectors could be seriously hit. For example, steel production could be reduced by a third by 2035 as a result of this mechanism. The second component assumes introduction of the set of sectoral reforms including air pollution, waste management and energy efficiency. Some of the aforementioned areas were already included in the legislative changes over the last years, but many of them are still missing such as air pollution. In addition, monitoring the implementation and law enforcement should be prioritized as Serbia could be hardly considered champion in this area. Directly related, stronger institutions represent third component and a “conditio sine qua non” for effective reforms.

### **Social component of the Just transition**

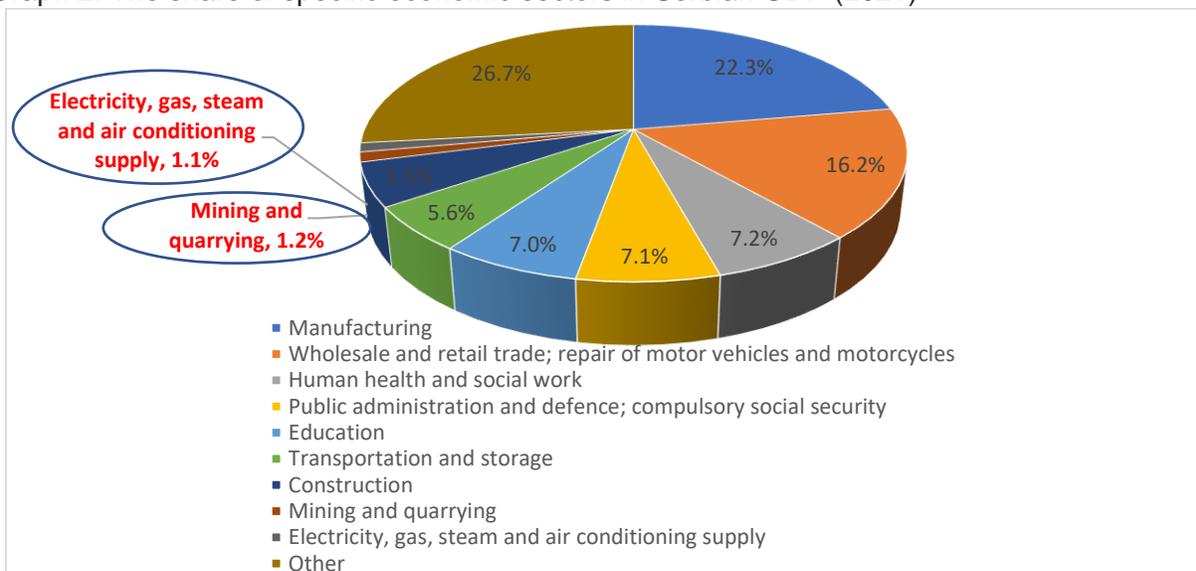
The social component of the Just transition process, including the effects on the labour market and future jobs, are not negligible and should be considered as one of the central issues to be tackled throughout the reform process. The main challenges refer to the number of jobs that will be lost and related compensation policies, as well as the needs and potentials for upskilling and reskilling of employees. Territorial aspect and local development challenges within the areas where the existing energy production is located are also important as the process will inevitably hit not only directly affected economic sectors, but other indirectly related economic sectors in the supply chains. Closing of the energy facilities influences not only household incomes of the employees in the supply chains, but indirectly the whole local ecosystem. Decrease in consumption power can negatively influence economic activity in the wider area, with severe consequences as general unemployment increase, depopulation, poverty increase etc. Energy transition could disproportionally influence older people, women, youth without work experience and population in rural areas in general. On the other side, principles of just transition open wide scale of opportunities for economic empowerment of vulnerable groups trough reskilling and

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<sup>9</sup> <https://blogs.worldbank.org/europeandcentralasia/three-ways-serbia-can-create-greener-and-more-resilient-growth>

upskilling for occupations in needs, as switching to green economy would also create opportunities for the jobs of new generation. These issues make the whole reform process quite challenging and highly intersectoral, requiring diversification of the local economies and reducing reliance on one economic sector. However, one of the main challenges in Serbia is relatively modest interinstitutional cooperation, which makes this challenge potentially difficult to be solved in reasonable term. Lack of statistical data for local economies and communities is also a challenge relevant to be addressed here.

Graph 2. The share of specific economic sectors in Serbian GDP (2021)



Source: Statistical office of the RS

Preliminary estimates indicate that jobs at direct risk due to just transition amount to around 8,000 (FES, 2020). However, not all of them are supposed to lose their job, at least within the first phase of the transition process. The overall burden that will be put on the municipalities under coal-related areas is quite high and requires program interventions to compensate for the external shock. The main areas for intervention include measures aimed at supporting economic inclusion and entrepreneurship development programmes. They should be specifically tailored to the couple of municipalities in which energy and mining sector account for one third of the local GDP.

### Final remarks

The mining and quarrying sector does not account for a significant share of the overall economy if the share of GDP and total employment are considered. However, its reform lies at the very heart of the energy reform processes. It represents a strategic direction with regards to sustainable development and a broad social issue. The reform of the energy sector in accordance with principles of Just transition will inevitably have growing importance in terms of catching up with global technological progress and developing innovation-based carbon neutral economy. Just transition requires significant financial investments, but rigorous cost-benefit analyses that still need to be performed, would indicate that the price of non-acting. This is the price that Serbian economy already started paying through unhealthy living environment or temporary imports of

electricity that might be regular if the status-quo continues. For that reason, just transition should be positioned as critical political and social issue when setting the ground for the responsible development policy. Following the intervention logic and theory of change perspective, if asked to advocate for the energy sector reform, one would not present it as a final goal, but more as intermediary outcome through which Serbian society would achieve desired final outcomes – health, education and good living standard, while the key factor of success are efficient and independent institutions.