

## Comments to the Strategic Environmental Assessment Report of the Spatial Plan of the Republic of Serbia 2021-2035

### I. General comments - procedural

1. The Romanian public was only provided the Report on the Strategic Impact Assessment of Serbia's Spatial Plan (2021-2035) and not the actual Spatial Plan itself<sup>1</sup>. It is impossible for the interested public to give concrete comments on the contents of the SEA Report, without being able to read and understand what the proposed measures and projects are in the Spatial Plan. The Spatial Plan is de facto, the object of the consultation, so presenting only half of the information doesn't meet the requirements for effective public consultation in a transboundary procedure.
2. Providing the SEA Report in English only, not in Romanian, hinders effective public participation in the affected country, as per the Espoo Convention.
3. The SEA Report developer use a disclaimer for its role in the future Spatial Planning development process in Serbia: *"its role can also be achieved by giving up those strategic commitments that may imply significant problems in space and environment, which is however beyond the scope of the document and represents and issue of national politics of future spatial development in the context of environmental protection"* but fails to recommend that such harmful activities should be given up. It only mentions 10 out of the 39 proposed solutions with negative impact, describes them, but gives no recommendation for dropping such solutions or improving the situation concretely: *"[...] a small part of the planning solutions (10 out of 39) will imply certain conflicts in terms of space. A summary of the impact of the planning solutions included in the Strategic Assessment is given below for each individual planning solution."*

The 10 planning solutions assessed with a serious cumulative negative environmental impact and in conflict with the goals of the SEA are:

- Safe and reliable supply of coal
- Increasing the production of energy from liquid and gaseous energy minerals and geothermal energy
- Development of coal exploitation in Kolubara and Kostolac basins
- Construction of new thermal capacities
- Development of mountain tourism
- Development of road traffic
- Development of the railway network (in conflict with SEA goals)
- Development of air traffic (in conflict with SEA goals)

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<sup>1</sup> <http://www.mmediu.ro/articol/notificarea-si-raportul-de-mediu-pentru-planul-spatial-al-republicii-serbia-pentru-perioada-2021-2035/4257>

- Reconstruction and construction of small hydro power plants (in conflict with SEA goals)

## II. General comments – contents of the SEA Report

4. The assessment starts from a completely illogical premise of comparing the actions proposed in the Spatial Plan with a “no plan and action”, therefore it mistakes the “business as usual” scenario with a “do nothing” scenario. A “do nothing” scenario is legally impossible, as the country has committed itself to multiple international, Energy Community Treaty and EU accession obligations (decarbonisation, pollutant emissions reduction, uptake of renewable energy sources, increase of energy efficiency etc.), so it has to do *something* to comply with these obligations. Therefore, the SEA Report only provides a comparison to a worse-than-current environmental protection level, instead of assessing various levels of ambition towards achieving a higher status of environmental factors protection. The only possible options in an SEA report should be “business as usual”, i.e. the minimal legal requirements in all fields covered by the Spatial Plan, and on top of that higher ambition scenarios, reflecting Serbia’s efforts towards improving environmental, public health and well-being of its citizens and those in affected neighbouring countries.

Page 61 SEA SPRS: *The assessment has also included a key, only conceptually set, dilemma: whether the option without the implementation of the Spatial Plan is more acceptable for the protection and sustainable development of the planning area (‘no plan and action’) than the option with full implementation of the Spatial Plan (‘protection, business as usual’). For the first option, without the implementation of the Spatial Plan, solutions by thematic units from the Spatial Plan 2010-2020 were taken into account, which, according to the evaluation given in the Implementation Programs (and accompanying reports on their implementation) were carried out to a greater or lesser extent. For the second option within the Strategic Assessment, solutions in the same thematic units were evaluated, prescribed through the Draft Spatial Plan. Therefore, the Strategic Assessment considers the alternative of spatial development without the application of the New Spatial Plan (current situation, implemented solutions from the previous Spatial Plan 2010-2020 – alternative A) and spatial development with the application of the Plan (alternative B) with special respect for all sectors of planning development.*

5. Within the chapter 3.6.12. *Environmental protection measures from transboundary impacts* in SEA Report the developer wrongly claims that: *“At the strategic level of planning, such as the Spatial Plan of the Republic of Serbia, it is not possible to identify specific projects that may imply cross-border impacts. In this context, it is possible to identify only areas of spatial development within which certain projects located in the border zone with other countries, whose mode of operation could cause cross-border impacts. The area of energy stands out above all due to the possible transboundary impact on the air, watercourses, internationally protected flying fauna (ornithofauna and chiropterofauna). Border areas in the segment of environmental protection should be considered in the context of the entire ecosystem, i.e. in cross-border cooperation with neighboring countries, with which we should work together to prevent transboundary environmental impacts, especially in the project documentation phase, i.e. Environmental Impact Assessment for a project. Only in this phase, when all*

*relevant inputs are available, is it possible to determine on the basis of appropriate simulation models whether and what kind of cross-border impacts can be expected during the implementation of specific investment projects.”*

The developer of the SEA Report ignores the fact that the Law on Ratification of the Protocol on Strategic Environmental Assessment with the Convention on Environmental Impact Assessment in a Transboundary Context provides for the same projects for which a strategic impact assessment is performed, as well as the provisions of Article 10 of the mentioned Law governing the procedure of cross-border consultations. It is not clear on the basis of which data, reports, studies, analytical documents or any documents, the developer of the SEA report concludes that it is not possible to identify specific projects that could have a cross-border impact? Page 302 of the draft Spatial Plan lists potential projects for the construction of new generation capacities in the electricity sector in the period until 2035, of which all the listed thermal power facilities with a capacity of over 300 MW may have a significant cross-border impact. The developer of the SEA did not provide evidence that in terms of spatial distribution of these thermal power facilities it is possible to exclude transboundary impacts, or to conclude that these impacts are uncertain and cannot be determined at this planning stage. It is possible to determine the transboundary impact in the phase of developing SEA not only EIA (otherwise the Protocol would be pointless) and there are already numerous reports and studies showing that coal generation capacities, which do not necessarily have to be in the cross-border zone, have a significant cross-border impact. In addition, the TPP Novi Kovin, having in mind the spatial dimension of the coal deposits, is located in a transboundary region with Romania and the SEA report developer was obliged to determine the transboundary nature of the impact. Determining transboundary impacts is the obligation of the SEA report developer, which is determined by the law. This aspect of the SEA report will be evaluated by the authority responsible for approving the report, and, since the determination of transboundary impacts has been missed, it will have no choice but to refuse to approve a report not prepared in accordance with the Law on Strategic Environmental Assessment.

It is certain that the Energy Community Treaty will introduce ambient air quality acquis in the nearest future. With the planned increase in lignite generation capacities, which far outweigh the capacities planned for closure, Serbia obviously intends to shift the burden of achieving good air quality and greenhouse gas emissions reductions to its neighboring countries. This is unacceptable.

6. Page 27 of the SEA Report: *“Serbia has a negative record in terms of air pollutant emissions in relation to the countries of Central and Eastern Europe (CEE). We are clearly lagging behind also in relation to the relatively low standards of air quality in CEE and at the moment large emissions of pollutants released into the air are recorded. Emissions of sulphur dioxide per capita were higher by 350% compared to the CEE average, suspended particles - by about 70%, and nitrogen dioxide, ammonia and non-methane volatile organic compounds - by an average of about 30%.”*

Considering that air pollution is seen as the major environmental problem in Serbia, and that the SEA report acknowledges the energy sector's contribution to the country's poor air quality, it is extremely worrying to notice that in section 1.2.3 of the report, "Connection with other documents", the National Emissions Reduction Plan is not mentioned. This represents **the** most relevant national document – with transboundary implications – in the sector of energy sector emission reductions, and has been prepared by the Serbian Government already five years ago. We therefore request to update the Spatial Plan and SEA report, correlating the obligations of the NERP emissions ceilings by 2027, with the indicators in the SEA report so that it is clearly assessed what reducing pollution from the existing large combustion plants will achieve and by when, in a transboundary context.

### III. Specific comments

#### 1. Coal sector development

1.1. The construction of new thermal power plant Novi Kovin is envisaged in the transboundary region as a priority activity. This project<sup>2</sup> includes the construction of an underwater coal mine and a thermal power plant of estimated 700 MW installed power. The project site is located 11 km from the city of Kovin, on the left side downstream along Danube, in the area between the municipalities of Malo Bavanište and Dubovac, 70 km away from Belgrade in the area that covers 40 km<sup>2</sup>. The project is in the direct transboundary area of Romania.

1.2. Within the draft Spatial Plan of the Republic of Serbia it is envisaged, as priority activities, the reconstruction and revitalization of existing lignite thermal power plants with capacities over 300 MW and construction of new coal thermal power plants. Some of the foreseen projects are: Novi Kovin (estimated 700 MW installed power); Štavalj (estimated 300 MW installed power); Kostolac B3 (estimated 350 MW installed power); TE-TO Novi Sad (estimated 340 MW installed power); TENT B3 (estimated 750 MW installed power); Kolubara B (estimated 2 x 375 MW installed power) some of them being in transboundary regions.

It is clear as daylight that all these projects run counter to the commitments by both Serbia to the Paris Agreement and the Green Agenda for the Western Balkans, and also to the EU's 2030 decarbonisation ambition as well, considering Serbia aims to be a member by that time. A combination of falling renewables prices, higher pollution control standards and carbon pricing has made coal uneconomic in the EU already a few years ago. The EU countries are also reaping the fruits of having dropped the most polluting source of energy as well as those of applying stricter emissions controls "Emissions for all primary and precursor pollutants contributing to ambient air

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<sup>2</sup> <https://www.esi.co.rs/en/projects.php>

concentrations of PM, O<sub>3</sub> and NO<sub>2</sub>, as well as arsenic (As), cadmium (Cd), nickel (Ni), lead (Pb), mercury (Hg) and BaP, decreased between 2000 and 2018 in the EU-28<sup>3</sup>.

Serbia may not have carbon pricing in place today, but it will need to introduce it in the next few years as a prospective EU member. Failure to do so may also see it hit by the EU's planned carbon border adjustment mechanism, aimed at preventing imports from countries with no carbon pricing from undercutting EU producers.

A particularly burning example of carbon lock-in with serious transboundary impacts is the 350 MW [Kostolac B3](#) lignite power plant, which is currently under construction by the China Machinery Engineering Corporation. The project's own feasibility study found that it would generate losses with a carbon price of just EUR 5 per tonne. Today's price in the EU is around EUR 50 per tonne. Very little information is publicly available on how the project is progressing, but in March 2021 Serbia's Energy Minister [announced](#) that neither the speed nor – worryingly – the quality of the equipment was of the desired and expected standard.

1.3. Chapter 2.4 LONG-TERM STRATEGY OF SPATIAL DEVELOPMENT OF THE REPUBLIC OF SERBIA of the Draft Spatial Plan states:

*"The next long-term strategic commitment is the sustainable development of mining with the application of modern technologies aimed at the rational use of mineral deposits and environmental protection. The development of the mining sector in the field of energy minerals will be focused on the continuation of lignite coal production within three basins - Kolubara (at five surface mines Field C, Field D-South Wing, Tamnava-West Field and Field G) Kostolac (Drmno field) and Kosovo - the Metohija basin."*

Furthermore, Chapter 2.5.1.4.2. - *The development of the mining sector in the field of mineral resources* within the Draft Spatial Plan states the following: *"Having in mind the resource potential of coal, in the overall development of the electric power industry, it is possible to include the development of surface coal exploitation at new surface mines in the western part of Kostolac basin with a capacity of 9 Mt and in the lignite coal deposit Kovin with a capacity of about 6 Mt of coal. These resources enable the energy independence of the Republic of Serbia. In the long run, the geological reserves of coal in the Kosovo-Metohija basin are also taken into consideration, where about 12.5 billion tons of lignite are balanced."*

Harmful environmental and health impacts are increased and prolonged with such a strategic commitment to the development of the mining and energy sector, instead of reducing the intensity of exploitation and consumption of lignite.

The impact of this sector on the environment within the SEA Report is also recognized in Chapter 1.4. *The considered issues and problems of environmental protection in the plan and the presentation of the reasons for omitting certain issues and problems from the assessment procedure*, within the Report, the following facts were pointed out: *"The electricity sector is the largest air polluter in Serbia due to the obsolescence and age of the plants and the large share of coal in*

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<sup>3</sup> Air quality in Europe - 2020 report — European Environment Agency (europa.eu), page 32

*electricity production. Consumption is dominated by fossil fuels with 87.9% (coal as much as 47.2%, oil 26.1%), while the share of renewable energy sources is 12.1%. The energy sector is by far the largest emitter of greenhouse gasses with producing 80,6% of all emissions.”*

Also, in the Report (table 3.2. An overview of positive and negative impacts of variant solutions), a comparative overview of the impacts of planning solutions for spatial development variants with and without the application of the new Spatial Plan indicate the following negative effects:

*“The new Spatial plan predicts the construction of new thermal capacities, which, without the application of measures attributed through this SEA and the Spatial Plan, could cause significant negative impacts on the environment. It is expected that the planned new thermal energy capacities will continue with the trend of pronounced negative impacts on the quality of the environment and the health of the inhabitants, which was given as an assessment of a variant solution with the implementation of the Spatial Plan.”*

Bearing in mind the fact that the Republic of Serbia is a signatory to the Paris Agreement, and that it has joined the Sofia Declaration on the Green Agenda for the Western Balkans, which contains a vision of carbon neutral Europe until 2050 , it is necessary to remove and stop further planning for the construction of new coal thermal power plants, all of which are listed in the Draft Spatial Plan, because their construction is not in line with internationally accepted obligations under the Paris Agreement and long-term goals of the European Union which Serbia also accepted through the process of EU accession. During the construction, use and closure of thermal power plants, it is impossible to avoid degradation and occupation of space and environmental pollution. The construction of thermal power plants in Kovin and Sjenica are especially problematic from the point of view of protection of water resources and protected natural resources in their immediate vicinity.

1.4. Page 16 of the SEA report refers to cross-border connectivity: *“As a concept of the development of the transmission system, the introduction of the 400 kV network in the region of Western and Central Serbia remains as a goal in the forthcoming period, which will ensure – in addition to the strengthening of inter-connecting relations with our neighbors, before all Romania [...] high level of safety of power supply”.*

This project is also one of the Projects of Energy Community Interest (PECI) and while the integration of the Cibuk wind farm and Djerdap-Portile de Fier would be compatible with a decarbonisation agenda, the question is whether this investment also supports the Kostolac coal power complex (the four units totalling 1 GW installed capacity) which releases 7.37 million tonnes of CO<sub>2</sub> annually (2018 data), with an additional 350 MW unit planned to be constructed which would generate an additional 2 million tonnes CO<sub>2</sub> /year. Electricity interconnections must prioritise on trading renewable sources electricity and hence meet cross-border demand peaks, not export coal-based electricity which is produced at uncompetitively low prices due to the lack of 1. any

carbon pricing in Serbia, and 2. non-compliance<sup>4</sup> with the Large Combustion Plants Directive emissions limits for SO<sub>2</sub>, dust and NO<sub>x</sub>, therefore not on a level playing field.

## 2. Soil and water contamination with heavy metals - grounds for transboundary impacts - not assessed

According to the E-PRTR data on mercury emissions into water from 2017 (see screenshot below) large quantities of mercury attributed coal power plants in immediate the area of transboundary impacts were reported. These power plants are on the Danube, upstream from Romania.

**Pollutant:** Mercury and compounds (as Hg)  
**Year:** 2017  
**Area:** All Reporting States for E-PRTR  
**Facilities:** 171

— All values are yearly releases.

**Show facilities releasing to:**

Air (145)
  Water (32)
  Soil (0)

Facility	Quantity	Accidental	Accidental %	Main activity	Country
<input type="checkbox"/> Ogranak Termoelektrane Nikola Tesla - TE Morava	615 kg	0		- 1.(c) Thermal power stations and other combustion installations	Serbia
<input type="checkbox"/> Ogranak Termoelektrane i kopovi Kostolac - TE Kostolac B	409 kg	0		- 1.(c) Thermal power stations and other combustion installations	Serbia
<input type="checkbox"/> Ogranak Termoelektrane i kopovi Kostolac - TE Kostolac A	197 kg	0		- 1.(c) Thermal power stations and other combustion installations	Serbia

Additionally, while the Joint Danube Survey 3 (JDS3)<sup>5</sup> water samples did not show any breaches of mercury EQS, the fish samples however showed values 5 to 18 times higher than the EQSD biota standards. (N.B. mercury tends to accumulate, that is why the [Environmental Quality Standards Directive](#) is asking for samples also in biota).

The Serbian Water Quality Index, the index used to assess water quality, does not take into account mercury or other heavy metals levels in water or biota<sup>6</sup>. However, according to the SEA report itself, excessive mercury deposition in **soil** is found in 23,7% of samples done around industrial sites<sup>7</sup>. Even though soil pollution is not considered to have transboundary impact, it is fair to assume that heavy metal pollution in soil can end up in the ground or surface water and be transferred to the neighbouring countries.

<sup>4</sup> [https://bankwatch.org/wp-content/uploads/2020/06/COMPLY-OR-CLOSE-How-Western-Balkan-coal-plants-breach-air-pollution-laws-and-what-governments-must-do-about-it-2020-Update\\_final\\_eng.pdf](https://bankwatch.org/wp-content/uploads/2020/06/COMPLY-OR-CLOSE-How-Western-Balkan-coal-plants-breach-air-pollution-laws-and-what-governments-must-do-about-it-2020-Update_final_eng.pdf), page 25

<sup>5</sup> jds3\_final\_scientific\_report\_1.pdf (danubesurvey.org), page 239

<sup>6</sup> [According to the Serbian Environmental Protection Agency](#), Serbia uses the *Water Quality Index (WQI)* method (*Development of a Water Quality Index, Scottish Development Department, Engineering Division, Edinburgh, 1976*), and measures ten parameters: oxygen saturation, BOD<sub>5</sub>, ammonium, pH value, total nitrogen, orthophosphates, suspended substances, temperature, electrical conductivity and coliform bacteria.

<sup>7</sup> page 43 of the SEA Report

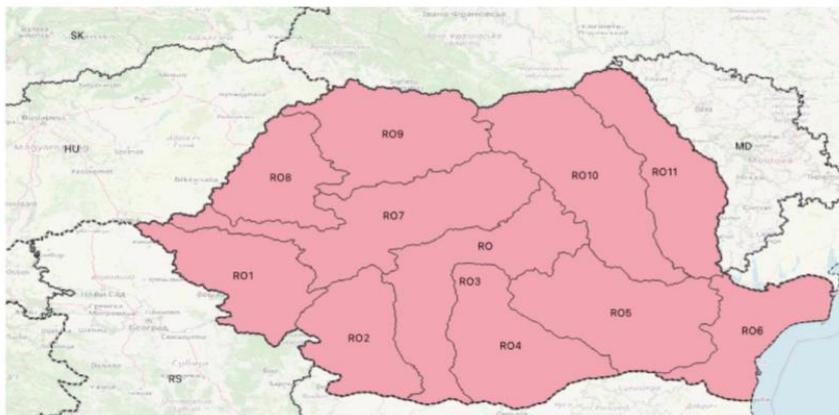
Romania reports mercury levels from “unknown anthropogenic sources” in subunits that cover the Danube catchment area, including RO1, bordering Serbia, exactly the area where high concentrations of mercury were reported as originating from the Serbian coal power plants Kostolac A and B and Morava.

Romania reporting in WISE data base:( for surface water bodies)

Mercury as a substance is reported causing failure of chemical status in RBD ro1000, and for the sub units RO1, RO2, RO3, RO4, RO7, RO8, RO9,RO10, RO11 . ( 9 out of 11 bodies)

There is no atmospheric deposition reported.

However, unknown anthropogenic sources are cited as a reason in 7 sub units, RO1, RO2, RO3, RO4, RO7, RO9 RO10 and RO11.



Considering that the Kostolac B existing coal units, as well as the new unit, Kostolac B3, are close to the Romanian border and Danube river, we find it unacceptable that the SEA Report for Serbia’s Spatial Plan does not assess the transboundary impacts of heavy metal (Mercury in particular) contamination of water, despite acknowledging that water and waste management is an issue. We request that this additional pollution is assessed within the SEA Report.

### 3. Air pollution transboundary impacts

In 2019, based on 2016 emissions data (of SO<sub>2</sub>, NO<sub>x</sub> and dust), a first-of-its-kind modelling was released, looking into the transboundary health impacts of the coal power plants in the Western Balkans. 3906 premature deaths can be attributed altogether in Europe to the coal power plants of the Western Balkans, and an annual public cost of approximately 3 billion EURO<sup>8</sup>. Romania was the most impacted EU neighbouring country, with 380 premature deaths and an annual burden on the public budget estimated between 0.5 - 1.1 billion EURO.

Out of the total 3906 premature deaths from all the region’s plants, a huge number of 2038 deaths were attributed to Serbian plants alone<sup>9</sup>. A simple calculation indicates that the existing coal fleet of Serbia was responsible for 198 premature deaths in Romania, based on 2016 Large Combustion Plants emissions data.

<sup>8</sup> <https://www.env-health.org/wp-content/uploads/2019/02/Chronic-Coal-Pollution-report.pdf>

<sup>9</sup> <https://www.env-health.org/wp-content/uploads/2019/02/Chronic-Coal-Pollution-report.pdf>, page 43

The situation has not significantly improved since 2016, the only de-sulphurisation project that was finalised, at the Kostolac B power plant, has hardly ever worked, and in fact emissions have been on the rise in Serbia<sup>10</sup>. A video<sup>11</sup> using atmospheric modelling is available to best visualise the transboundary impacts of the unabated pollution from Serbia's (and the Western Balkan region's) coal power plants in 2019.

The air pollution reduction measures envisaged in the SEA Report and in the draft Spatial Plan are in fact the bare minimum legal obligations that Serbia has had to comply with since 2018 (entry into force of the Large Combustion Plants Directive), and which it has not abided by, but actually breached flagrantly. In the absence of tangible measures and actions that will 1. identify (in the case of mercury pollution to transboundary water bodies) and 2. reduce the transboundary impacts of Serbia's energy sector, it is our request that the SEA Report is rejected by Romanian authorities.

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<sup>10</sup> [https://bankwatch.org/wp-content/uploads/2020/06/COMPLY-OR-CLOSE-How-Western-Balkan-coal-plants-breach-air-pollution-laws-and-what-governments-must-do-about-it-2020-Update\\_final\\_eng.pdf](https://bankwatch.org/wp-content/uploads/2020/06/COMPLY-OR-CLOSE-How-Western-Balkan-coal-plants-breach-air-pollution-laws-and-what-governments-must-do-about-it-2020-Update_final_eng.pdf), page 23

<sup>11</sup> <https://vimeo.com/436396745>