In the era of switching to other energy sources, how profitable and expedient is it to build a coal-fired power plant?
Kolubara B is represented as the bright spot of development, a coal-fired thermal power plant, which will be built by Elektroprivreda Srbije (EPS) with the help of the Chinese company Power Construction Corp. of China Ltd. and their investments worth 385 million euros. The location of the Kolubara B thermal power plant will be located only 40 kilometers southwest of Belgrade. Although EPS assures that the thermal power plant will comply with all domestic and international regulations in the field of environmental protection, the question arises whether this is sufficient, and even possible?
The public discussion in Lazarevac, which was supposed to present the objections of civil society organizations to the Spatial Plan for the construction of the thermal power plant "Kolubara B" and the Report on the strategic assessment of the impact of the spatial plan on the environment, was canceled due to the epidemiological situation. In the absence of a public debate on the expediency of such a project – here is what civil society has to say about Kolubara B and the future it provides to the citizens of Serbia.

An unprecedented environmental bomb

As a signatory to the Energy Community Treaty, Serbia has an obligation to achieve a 27% share of renewable energy in gross final consumption by the end of this year – and is already struggling to achieve that goal. The construction of a plant such as Kolubara B contributes to the increase of fossil fuels in the energy plan of Serbia and directly endangers the process of harmonization with the climate goals of the European Union, which is a precondition for membership in the organization. According to the Center for Ecology and Sustainable Development (CEKOR), the plan envisions that the ash disposal site, mine and landfill for silicate and other tailings are located a few hundred meters to several kilometers from a large number of settlements, including Lazarevac and Ub. Experiences so far with Obrenovac, Kostolac and Veliki Crljeni show that such ash is almost impossible to control.
"Knowing the experiences of the Tamnava-Zapad mine, other mines and a large number of ashtrays, we claim without any hesitation that EPS is not able to ensure that ash and tailings are not distributed tens of kilometers around the ash heap," says Zvezdan Kalmar from CEKOR.
Another problematic element of this plan is the conversion of the Kolubara basin into a water supply channel for this and other EPS facilities.
"In this way, in addition to diverting all the water, the same water is polluted to a level dangerous to the environment," they say in CEKOR. "Another extremely big problem is that

all groundwater reserves in the Kolubara region are completely cut off in this way, and we come to the situation that a large amount of water must be drained. In addition to the huge damage to the living world and agriculture, this will have extremely dangerous consequences for the flooding of the entire region. ”

The comments point out that the report on the state of water in the given area refers to a document made in 2012, not taking into account the floods from 2014, when most of that area was flooded, and the electricity infrastructure and safety of the population were seriously endangered. Finally, one of the most problematic parts of the plan concerns the assessment of the impact of such a facility on the concentration of pollutants in the air. The remarks note that such an impact cannot and must not be observed only locally, but also at the state and cross-border level.

“The assessment that the impact of the Thermal Power Plant Complex on the demographics and health of the population will be of a local character is not accurate, given that emissions from thermal power plants have been proven to affect the health of the population thousands of kilometers away,” warns the Belgrade Open School.

The plan takes only two reports from the Electric Power Industry of Serbia as data sources, without taking into account the reports of the competent bodies for monitoring air quality in the given area. Also, the information from the EPS report was used selectively. The comments of BOS also raise the question why the official measurements of the city of Belgrade available for each month of 2018 and 2019 were not used.

“The results of these measurements show that at the measuring stations in Veliki Crljeni and Lazarevac during the winter months, it was registered that the concentrations of pollutants exceeded the limit values, as well as that the PM10 in Lazarevac began to increase significantly. During the summer months, the average monthly values of PM10 reached heights of up to 120 µg / m3, ”the remarks state.

It was also pointed out that the available data on air quality published by the Environmental Protection Agency, the City Institute for Public Health Belgrade and the Institute for Public Health Valjevo, which give a clearer picture of the state of air quality in the observed planning area, are missing. Similar remarks were made on the assessment of the state of biodiversity in the area planned for construction. Namely, there are no data on field research, monitoring and applied methodologies on the basis of which it is possible to assess the impact of the construction of a thermal power plant on the overall biodiversity. At the same time, the report relies on regulations that expired 10 years ago.

“The claim that the negative effects on the quality of the environment and the population in the planning area are the inevitable cost of development is not supported by arguments and

analyzes, and it seems that the drafter of the Report tries to justify the content of PPPN Kolubara B, despite recognizing that PPPN will have significant negative impacts on the environment and the health of the population, ”the comments conclude.

Although the plan emphasizes the construction of the Kolubara B thermal power plant in several places as a contribution to the energy future of Serbia and its sustainable separation, objective circumstances indicate a completely different reality.

The Regulatory Institute for Renewable Energy and the Environment (RERI) warns that only the maintenance of the coal industry has a huge price – which will be paid by the citizens of Serbia. According to the analysis of the Energy Community on subsidies for the production of electricity from coal, between 2015 and 2017, Serbia subsidized this branch of industry with an average of 99.78 million euros per year through budget transfers, grants, international loans, debt write-offs and more.

In addition, the operating costs of Kolubara B would include the costs of carbon dioxide and sulfur dioxide emissions, which can only be prevented by applying advanced (and expensive) storage technologies for this compound.

“For the operation of this facility, it is necessary to install extremely expensive and sensitive desulphurization systems that cost a minimum of 300 million euros, plus annual maintenance, which can reach a price of several tens of millions of euros. It is important to note that the desulphurization plant must be rebuilt after 10 to 15 years, so that during the life of the plant from 40 to 50 years, it will be necessary to renew the technology at least three times,”explains Kalmar.

Without adequate filters – penalties are an alternative. Coal-fired power plants in Serbia emit about 24 million tons of carbon dioxide a year. Taxes on current emissions at the current price in the European Union (24 euros per tonne) would cost around 600 million euros a year.

Despite all that, the report states that Serbia, which relies mainly on fossil fuels in energy production, is not able to focus on other energy sources in the short term envisaged by joining the EU. In BOS and RERI, they claim the opposite.

“At a time when the global energy market is rapidly turning to renewable energy sources, which are currently more competitive than fossil fuels, especially coal, at a time when most international financial institutions are suspending financing for coal plants, it is incredible that the plan maker claims that the development of thermal energy Coal plants contribute to “modernization of production and service capacities and diversification of economic activities” and improve support for all innovations! What exactly is innovative about technology that is over 70 years old? ” states BOS in the comments.

RERI reports that there is publicly available data on wind and solar potentials – but the plan maker does not use it.
"The potential of small producers (prosumers) is not considered at all, although this way of developing the electricity market has become a common practice in the EU. Albania plans to install a new 200 MW of electricity generation capacity through a net metering scheme, "RERI's suggestions state.
CEKOR has additional proposals – the transition from climate-intensive gas and coal technologies through the construction of several large regulatory hydropower plants, which would serve as a solution for the integration of otherwise changing sources of sun and wind. This primarily refers to the ĐERDAP 3 project, which has huge potential.
"Besides, Serbia has a huge wind potential of at least 2 GW of installed power. That is practically 70% of the total installed coal. In addition, solar energy is an exceptional potential because Serbia has one of the best sunshine in Europe. "Serbia has practically not even started the process of isolating houses and residential buildings where the greatest potential for savings in Serbia is hidden, which would certainly achieve savings at the level of at least 3 blocks of this power," Kalmar points out.

Non-transparent decision-making process

Was the public informed about the decision to restart the project for the construction of the Kolubara B thermal power plant? This is one of the main issues that runs through all the remarks and suggestions on the spatial plan of Kolubara B. At the same time, dozens of remarks concern questionable sources of information from which conclusions were drawn that justify the launch of such a large and demanding infrastructure project. In the middle of 2019, Serbia began preparations for the development of a new Spatial Plan of the Republic of Serbia, and at the same time a decision was made to make a strategic assessment of its impact on the environment for the period from 2021 to 2035. Therefore, the development of the plan for Kolubara B creates preconditions for the realization of the project which will not be in accordance with the solutions from that new spatial plan and the guidelines concerning the environment.
"It is certain that the project for the construction of the Kolubara B thermal power plant, if not completely rejected, will not be realized before 2021, and it is unclear why the competent ministry will start drafting such an important spatial plan, although it is aware that it will not comply with the new Law on Spatial Planning." plan of the Republic of Serbia, "it is stated in the remarks of BOS.
"It is necessary to develop a new Spatial Plan of the Republic of Serbia, which will calculate

the recorded carbon and environmental footprint of all EPS plants and which will be harmonized with all the most challenging environmental and climate regulations and EU plans," CEKOR said in a statement. "Serbia's goal is to join the EU, and in that sense it is uncompromisingly necessary for Serbia to harmonize with its goals."

Questionable future in the European Union

The European Union is resolutely striving for a new energy future – and this policy has far-reaching consequences for the energy sector in Serbia, regardless of membership. According to available data from the Republic Bureau of Statistics, Serbia places most of its electricity exports on the European Union market. Given that the EU market strives for zero carbon dioxide emissions, this will not be possible for a long time.

"Having in mind the new EU energy and climate policy, as well as the European Green Agreement – a new development strategy adopted at the end of 2019, it is clear that Serbia will not be able to continue exporting its products (including electricity) to the EU market under the same conditions." Warns RERI.

Financing the energy sector through lending will also be disabled. With a new emission standard of 250 grams of CO2 per kilowatt-hour (kWh), which will replace the current standard of 550 g CO2 / kWh, the European Investment Bank aims to end financing the production of electricity from coal. The bank will focus on financing projects that contribute to decarbonisation, innovative energy storage, as well as strengthening the electricity grid necessary for variable energy sources such as wind and solar. The organizations that submitted objections to the report are unanimous in concluding that the spatial plan, especially the report on the project's impact on the environment, relies on a multitude of flat assessments, outdated documents, selectively presented information and laws that are no longer in force.

"The drafter of the Report, in fact, leaves his job to other actors, in the later stages of drafting technical documentation, neglecting that his task is to point out significant environmental impacts at the stage when it is possible to influence the decision to adopt a planning act. With this in mind, it is necessary to reject this Report in the consent procedure because it was not prepared in accordance with the Law, "concluded the civil society organization.

Source: ekosistem.mis.org.rs