

Fossil Fuels and Climate Justice

Keywords

- > Coal power plant
- > Coal extraction
- > CO₂ emissions
- > Slovenia

Project TES6

Sostanj, in northern Slovenia, is 30 kilometres (19 miles) from the Austrian border, and home to Termoelektrarna Sostanj (TES)—a lignite-fired power plant—the property of state-owned Holding Slovenske elektrarne (HSE). The plant is presently comprised of five blocks. Blocks 1 and 2, built in the 1950s have been closed down, 3 is about to be, and 4 and 5 are set to close down in 2016. A sixth new, 600-megawatt block is now being planned, known as TES6. It will mainly be financed with public money, mostly through loans from European banks—the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

The plant is located in a region with extensive coal reserves, near the Premogovnik Velenje (PV), the Velenje Coal Mine that produces coal exclusively to meet the power plant's present and future needs.

The TES6 Project was proposed in 2003 and included in the 2007 government development programme. It has so far received all relevant permissions from the Slovenian government. The Engineering, Procurement and Construction Contract for the power island was signed between TES and Alstom in June 2008, following a € 25 million payment in September 2007. The Project was originally expected to cost € 700-900 million. However, project costs have escalated to € 1.3 billion due to the recent overall rise in coal plant capital expenses. The Slovenian government has not yet provided loan guarantees to facilitate the loan from EIB, a large part of which—€ 440 million—has to be backed by a state guarantee.

It was expected that the new Unit 6 and all its necessary auxiliaries and connections will be commissioned by the end of 2014. Despite the fact that state guarantees have not yet been secured, construction work is already underway.

The new unit will be operational from 2027 to 2054, which translates to increased CO₂ emissions during the



Satellite picture of TES area,
Source: Google Maps, 2012

lifespan of the power plant. Another problematic aspect is that majority of financial resources in the Slovenian energy industry will be invested in this controversial project instead of renewable energy sources.

Operating TES6 without carbon abatement will result in 3.1 metric tons of CO₂ emissions per year, equivalent to almost all of Slovenia's emissions in 2050 (if emissions are reduced by 80 percent in line with European targets). It will emit 0.85 kilograms of CO₂/kWh and burn approximately 3 metric tons of coal per year.

Several NGOs (Focus, Greenpeace Slovenia, Umanotera, Se-F, EBM, Bankwatch and others) are trying to influence the decision-making process (at the national level and European banks) and to strengthen public opinion against the project. However, their arguments are not taken seriously enough and their position is too weak compared to state-owned companies and the government.

Problems with project impact

The cost of mining lignite, purchasing CO₂ certificates, CO₂ sequestration and fluctuations in electricity prices all mean the profitability of the Project is uncertain. If operational costs vary from what was outlined in the investment plan, the rate of return might drop to a non-economical level. Support infrastructure such as carbon capture and storage (CCS) equipment—not yet included in the investment plan—is also a significant risk.

The Saleska Valley, where Sostanj and Velenje are situated, could benefit from





TES6 would continue burning coal in the region until 2054, Photo by Kale, 2011

restructuring; shifting from coal mining and burning coal to more sustainable development. If TES6 is built, it will be locked to the carbon emission industry until 2054. By then, it will probably be too late for restructuring and gaining an advantage from early transformation to sustainable development.

The Environmental Impact Assessment (EIA) process was affected by a number of procedural and substantive errors. For one, the EIA limits TES6's environmental impact area to the borders of the TES power plant. Such a definition is inappropriate since it would be impossible for environmental impacts to remain only within the borders of TES. Furthermore, the EIA does not present an alternative to coal. Article 5 of EU Directive 97/11/EC requires that alternative solutions be defined and presented in the EIA. This is also required by the Slovene Nature Conservation Act.

The EIA also does not assess Project impact on climate; impacts on air quality and health are not fully defined, and the cross-border impact assessment is inadequate. By failing to inform Austria about the Project, Slovenia violated European law—and Slovenian law that transposes European law into Slovenian legislation—and the Espoo Convention. In this way it made it impossible for Austria to participate in the process “when all options were still open”.

There are several risks that are highlighted even in reviews by IMC-Montan Consulting and POYRY. In terms of the coal mine, there might be problems concerning the existence of a network of geological turning points, a steady stream of water in the mine and possible intrusion of water in the mine. Another problem might be high methane content. The uneven subsidence of the terrain is very much visible in the Valley and will continue to be so as long as the mine is active.

The conflict

Public participation in the process was made difficult. It was muddled through, which meant that actors against the Project were unable to react in a timely manner since they had no information on the project phase or the decision-making process. Currently, the cooling tower of the new unit has reached over 100 metres (330 feet), and the decision-making process is at the stage of adopting the law for state guarantee—and since the project has come along this far, it seems it is too late to reverse the decision in favour of state guarantee.

There was and still is visible opposition to the Project. National and international NGOs are trying to influence public opinion and decision-makers in parliament and the government to oppose either the Project or state guarantee for it.



Lignite power plant in Sostanj
– TES

Source: Kale, 2011



Saleska Valley lakes impacted
by coal mining

Source: Kale, 2011

EJO actions included the compiling of alternative reports, development of networks and collective actions, generation of alternative proposals, judicial and media-based activism, objections to the EIA, public campaigns, and street demonstrations.

The public procurement complaint asserts that TES did not follow the procedures prescribed for awarding public procurement as dictated by Directive 2004/17/EC, which coordinates procurement procedures for entities operating in the water, energy, transport and postal services industries. On 2 November 2011, Focus filed the complaint against TES for not following the Directive.

The CCS complaint asserts that the requirements of Article 33 of the CCS Directive 2009/31/EC were not met in the course of project development. It was filed on 3 October 2011 by the Environmental Legal Service and Focus Association for Sustainable Development.

Because in any investment plan calculations essentially depend on the assumptions on which the model is based, the Central and Eastern European (CEE) Bankwatch Network and Focus asked CE Delft to review the investment plan for the Sostanj lignite-fired power plant and evaluate whether crucial variables had been rightly assessed. The report, entitled 'A critical examination of the investment proposal for Unit 6 of the Sostanj power plant', reveals that there are several methodological mistakes in the calculations. Lignite prices are too low, lignite consumption estimates for Unit 6 are too low from 2028 onwards, and CO₂ costs are underestimated because the process emissions from the desulphurisation unit will be auctioned from 2020 onwards.

The investment programme also claims to increase mine efficiency, but this is not substantiated, resulting in an underestimation of lignite prices. The report also points out that investment programme does not adhere to the principles of cost-benefit analysis, as no realistic alternatives for the investment have been formulated. This means that the investment programme proves that neither is investing in Unit 6 is the best alternative for the government to risk by backing it with a state guarantee, nor is TES6 the best alternative for securing Slovenia's energy supply.

The Project has been controversial in Slovenia because of the climate and economic costs. Unions and the government overall have supported it and there is local support in the Sostanj area. The current situation regarding the Project is rather confusing; the controversy surrounding it escalated in 2010, largely due to the non-transparency issues and the political gambles related to it. The cost issue also contributes to the controversy as well as the climate and health impacts of the project, albeit to a lesser extent.

More on this case

- CEE Bankwatch Network bankwatch.org
- Focus, association for sustainable development focus.si
- Ustavimo TES 6 ustavimotes6.si

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Zivcic L., & Tkalec T. 2014. TES6—New coal power plant unit in Sostanj, EJOLT, Factsheet No. 018, 4 p.

Outcome of the process

Currently, project development could be described as delayed. The company is waiting for the law on state guarantees to pass so that they may secure loans from EIB and EBRD, which could happen by autumn. The construction is proceeding rapidly, and the cooling tower is already over 100 metres (330 feet). Unfortunately, this means that the controversial project will likely be completed. Although EJOs and other actors emphasise various irregularities and the government agrees there were major problems in project implementation, they will mostly likely support TES6.

Hopefully this process will generate some positive results. NGOs and EJOs will have gained more experience in how to deal with similar projects in the future. However, institutional or legal changes in favour of wider participation by relevant actors, who at present do not have access to the decision-making arena, are very unlikely.

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