

Croatia: Analysis shows the unprofitability of TPP Plomin C, HEP & Marubeni-GE Alstom Power under new pressure

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The revenue rate of the investment is below 10% and with growth towards billion euro the project is unprofitable. Green activists are warning that the project is sensitive to critical parameters and, even with a questionable evaluation of the impact of Plomin C on health and the environment, its implementation is not recommended.

The cost-benefit analysis of the construction of the thermal power plant "Plomin C", which was done by Society for Sustainable Development for Green Action, shows that the project brings greater social costs than benefits.

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The result of the economic analysis, which used the methodology of the European Commission for investment projects shows that the project begins to generate negative cash flow already in the first 10 years of operation. The analysis took into account the investment value of 834 mil. Euros, the cost of coal of 23 euros / MWh, the fixed costs of 2.5% for investment annually, variable OPEX of 3.6 euros / MWh and the price of emission permits at the level of 8 euros / t, which is a very conservative approach, and applied a financial discount rate of 4%.

In the baseline projection, an assumption that HEP will buy all the electricity (3608 GWh per year) at a price of 70 euros / MWh was applied. "According to the baseline scenario, the project is profitable, the net present value is positive as well as the internal rate of return. The annual rate of return for the project is 9.3 to 9.4%, which is significantly less than the guaranteed return that is realized by RWE for Plomin 2, which was in the range of 14-17%. If the cost of capital is lower than the rate of return, the project can be financed on a commercial basis and does not require state aid", concludes the financial analysis. However, economic analysis examined the economic feasibility of the project and estimated costs and benefits to society by taking into account external costs and benefits, and its findings are not positive. In general, it appears that in 2027 the project already begins to generate negative cash flow. There have been tests of sensitivity to the change of the purchase price from 60 to 100 euros / MWh, the change in the quantity purchased, increase of the cost of operation (especially emissions), delay of construction and increase of the cost of construction. Revenues of the project cover the operating costs as long as the price of CO₂ is below 64 € / t, and then energy price of 70 euros / MWh is not enough. According to one of the applied models and these prices of emissions could be reached around 2037, with the "black" scenario price of emissions by the EIB, this level is expected around 2022. Based on the



financial indicators Plomin C should stop operating due to losses. Changes in the cost of construction changes the internal rate of return in a negative way so with a 20 percent increase in the cost of construction the rate of return is 7%, which is 3 percentage points higher than the applied discount rate, and the possibility of commercial financing becomes questionable. It turns out that with the 50 percent increase in total in the investment the project becomes unprofitable because the internal rate of return falls to 5%.

The conclusion of the author of the analysis is that the project is too sensitive to the critical variables, and if we take into account external costs of environmental damage caused by air pollution economic net present value is less than zero, and the project brings more damage than benefit. Maja Božičević Vrhovčak director of DOOR said that the analysis was made impartially and that its results are subject to questioning, and their goal was to encourage an informed debate about the project. She complained that HEP did not define the project objectives of building Plomin C clearly nor communicated them to the public, but mainly spoke of the project out of declarative needs. She thinks that Plomin C should not be build, but considers it necessary to do a comparative analysis of other options with the participation of interested parties.

Toni Vidan from Green Action recalls that MOST came to power advocating to stop the project and the adopt a new energy strategy, which was backed up by Domoljubna koalicija. "If there is a change in these attitudes it would violate the credibility of the energy policy of the Government, and if they agree to a purchase price of 85 euros / MWh from Plomin C, I do not know what the motive would be for that, but it had to be corruptive because the energy can be purchased for 30 to 40 euro , in the market "said Vidan. He wondered if the motive for advocating this project could come from disguised plunging into the privatization of HEP, which would be stuck in a bad agreement that would force it to place a part of the profits earned by selling energy from hydropower to cover losses from Plomin C. It would also reduce the ability of the electricity system to accept greater amounts of energy from RES, which would prevent energy transition to low-carbon energy. Green action will send this analysis to the relevant ministries, the Government, Parliament and MP clubs that call to abandon the project which they consider extremely harmful to society, transmits Serbia-energy.eu