

Analysis of direct and a selection of hidden subsidies for coal-fired electricity generation in the Energy Community contracting parties

At the time when the European Union is firmly moving towards the decarbonisation of the energy sector by 2050, coal - the most polluting electricity source - still accounts for more than 46% of the total installed electricity generation capacity in the Energy Community contracting parties. Enormous efforts and financial resources are used to support the continuation of an unsustainable energy policy. In fact, around € 2.4 billion is provided annually for direct and certain types of indirect (hidden) government subsidies to support the coal sector in the Energy Community.

Due to the high level of direct subsidies, with very questionable compliance with state aid rules, and the lack of a convincing reform strategy, contracting parties risk moving away from the European Union. Artificially cheap coal-based electricity generation impedes the functioning of the electricity market and impedes market reforms.

Of particular concern is the lack of a carbon pricing mechanism. The Energy Community, which aims to create an internal common energy market with EU Member States, has failed to take over the EU's flagship instrument in the fight against climate change, the Emissions Trading Scheme (ETS).

Direct subsidies

The total amount of direct subsidies during the analysed period from 2015 to 2017 reached \notin 1.2 billion (or \notin 400 million per year on average) in the analysed contracting parties. The analysis also shows that hidden subsidies can reach \notin 1.9 billion annually.

Fiscal support accounted for 67% of total direct subsidies. This category most often includes direct financing from the state budget and subsidies based on write-offs and reprogramming of arrears, as well as subsidies based on the provision of government loan guarantees, debt write-offs or repayment of loans from the budget on the basis of issued guarantees, reduction of fees paid to the state and VAT exemption. The most common beneficiaries of direct subsidies in this category are state-owned coal mines.

Overview of the Contracting Parties

Bosnia and Herzegovina

In Bosnia and Herzegovina (B&H), coal-fired electricity generation is carried out in five



thermal power plants, four of which are majority state-owned and one privately owned by the EFT Group. The state-owned company Elektroprivreda RS is the owner of Gacko TPP and RITE Ugljevik, while Elektroprivreda B&H owns Tuzla TPP and Kakanj TPP, with a total installed capacity of 1,256 MW.

Coal-fired electricity generation throughout the period under review was supported by the reprogramming and exemption of coal mines from taxes and social security contributions; waiving fees for the utilisation of natural resources to generate electricity in thermal power plants; providing state guarantees for loans; and providing capital, loans and advance payments to continue mine production.

In early 2018, the Law on Fees for Exploitation of Natural Resources for Electricity Generation in Republika Srpska was repealed. Earlier amendments to this law required coal producers to pay a fee of € 0.0015 per kWh of electricity generated.

In 2018, the EPB&H continued to support coal mines, and the Government of the Federation drafted a restructuring program for the electricity sector. According to available information, the Program does not envisage the closure of non-profit mines, indicating that the existing subsidy policy will continue.

In August 2018, the Government of the Federation adopted a decision to issue a guarantee to EPB&H for the construction of a new 450 MW Unit Tuzla TPP, valued at EUR 613,990,000.

Kosovo*

Kosovo* is dominated by lignite electricity generation, which reaches 92.5% of the total installed capacity for electricity generation.

The state-owned Kosovo Energy Corporation (KEK) operates two coal-fired power plants (Kosovo A and Kosovo B), both vertically integrated with the mines.

Within the observed period, subsidies were identified for the production of coal-fired electricity in the form of debt write-offs, budget borrowings and government guarantees for loans. In 2015, the Government of Kosovo* wrote off interest on loans granted to KEK.

The Kosovo Energy Corporation plans to invest \in 445 million in the expansion and modernization of the coal mine, and an investment of \in 270 million is planned to extend the life of the Kosovo B thermal power plant and remediate the environment.

The Government of Kosovo* has continued activities to build a new 450 MW thermal power plant, in collaboration with private investor Contour Global Terra 6 Sarl, valued at over one billion euros.

Under the agreement with the investor, the Government of Kosovo* will guarantee the purchase of electricity produced at a price of 80 euros per MWh, compensation for project



development costs, exemption from VAT and customs duties and reimbursement of environmental rehabilitation costs.

Montenegro

Coal capacity accounts for 22.5% of the electricity generation sector in Montenegro. As of June 2018, the only thermal power plant – Pljevlja TPP – has been operating as part of the state-owned company Elektroprivreda Crne Gore. The Pljevlja TPP is currently supplied with coal from the Pljevlja coal mine, owned by EPCG.

Subsidies for electricity generation from coal in Montenegro are provided in the form of reprogramming and exemption of coal mines from taxes and contributions, state guarantees for the thermal power plants and investment support for coal mines.

In 2018, the EPCG started implementing an investment program to rehabilitate one of the Pljevlja TPP units and to perform reclamation of the slag and ash landfill, totalling EUR 60 million. This investment should be completed in 2021.

North Macedonia

In North Macedonia, coal-fired power plants account for 40% of the total installed capacity for electricity generation. Coal-fired electricity is produced in two thermal power plants (REK Bitola and REK Oslomej), which together with coal mines operate as a vertically integrated part of the state-owned company Elektrane Severne Makedonije (AD ESM). During the period covered by the study, there were no direct subsidies for the electricity generation from coal, except support in the form of government guarantees for loans. In the coming period, ESM plans to invest € 41 million in the modernization of existing mines and € 140 million to continue modernization of the Bitola thermal power plant and environmental protection.

The opening of a new coal mine is planned and the investment is estimated at EUR 122.5 million. ESM is considering the conversion of Oslomej TPP from coal to gas and the feasibility of its revitalization for the supply of high quality coal from imports. The value of the first phase of the Oslomej thermal power plant revitalization project is estimated at & 45 million. Given the financial position of AD ESM, the implementation of these ambitious plans will require additional government assistance. Serbia



In Serbia, coal production accounts for 54% of the total installed capacity and is operated in two segments by the state-owned company Elektroprivreda Srbije. Nikola Tesla thermal power plants include Nikola Tesla A TPP (6 units), Nikola Tesla B TPP (2 units), Kolubara TPP (5 units) and Morava TPP (1 unit). The Kostolac Thermal Power Plant segment includes Kostolac A TPP (2 unit) and Kostolac B TPP (2 unit). Coal is transported from EPS mines in the vicinity of thermal power plants. EPS also supplies coal from Resavica underground mines.

Coal production is subsidized by direct budget transfers, grants from international financial organizations, rescheduling and exemption from coal mines tax and social security contributions, debt write-offs, government loans, government-controlled institutions loans and government loan guarantees.

In the coming period, EPS plans to continue to modernize and revitalize its mines and thermal power plants, and build a new 350 MW Kostolac B3 unit.

Construction of the Kostolac B3 unit began in November 2017 and should be completed by the end of 2020. The value of the investment is \$ 613 million, of which 85% is financed by China Exim Bank (20-year loan, 7-year grace period, interest rate 2.5%) and 15% by EPS. In line with the Environmental Action Plan, EPS intends to invest € 650 million in thermal power plants and environmental restoration projects. Given the financial position of EPS, the implementation of these ambitious plans will require additional government assistance. Ukraine

Coal is the second most important source of electricity generation in Ukraine, in addition to nuclear power. Coal production capacity accounts for 47.44% of total installed capacity, but some plants do not operate year-round or run on other fuels.

Generation is organized into three companies: Donbasenergo (one 0.88 GW thermal power plant), privately owned, DTEK (nine 16.3 GW thermal power plants), and Centrenergo (three 7.6 GW thermal power plant), majority state-owned.

Subsidies for electricity generation from coal were provided in the form of direct budget transfers, tax and contribution exemptions, VAT exemptions and investment support. In terms of fiscal support, state-owned mines receive direct subsidies from the state budget for salaries, modernization costs and raising security levels.

In 2017, the Government adopted Ukraine's Energy Strategy for 2035, which envisages the restructuring of the coal sector by closing down unprofitable mines, privatizing and establishing a coal market.

It is envisaged to harmonize thermal power plants with environmental standards in order to extend their operating life.



In 2018, the Government issued a state guarantee of \in 35.15 million to implement investment projects in five state-owned mines.

Hidden subsidies

As part of the study, the Energy Community Secretariat analysed two types of indirect subsidies: operating at low or negative profitability levels; and non-payment of CO_2 or other external costs.

These two hidden subsidies alone, based on data on average annual generation between 2015 and 2017, amount to a total of & 1.873 billion.

Summary

The cost calculation of electricity generation from thermal power plants conducted as part of this study, including identified direct subsidies and two hidden subsidies analysed, shows that any thermal power plant in the Energy Community that charges less than \in 40 per MWh is likely to have operational losses in a competitive environment. The net operating costs of generating electricity in state-owned coal-fired power plants range from \in 30 to \in 55 per MWh, excluding financial costs such as interest on loans and investments. In addition, the low level of profitability of coal-fired electricity generation is a particularly challenging issue due to investment in the modernization of thermal power plants and environmental rehabilitation, an obligation arising from membership of the Energy Community.

The additional investment required to comply with the Large Combustion Plants Directive is not included in the generation cost of coal-fired power plants in this study.

The required investments are estimated at six billion euros, of which only five billion is needed in Ukraine.

The level of subsidies for coal is astounding compared to the total of subsidies for RES generation.

The three contracting parties (Bosnia and Herzegovina, Kosovo* and Serbia) using coal the most, significantly subsidize coal over renewables.

Source: energy-community.org