



Analysis on Public Infrastructure Bosnia and Herzegovina



**BALKAN
MONITORING
PUBLIC
FINANCES**

www.wings-of-hope.ba

CREDITS

Author:

Amra Skramončin, Project Assistant, Centre for Ecology and Energy (amra.skramoncin@ekologija.ba)

Formatting:

Emina Hasanagić, Administrative Manager, Krila nade (emina.hasanagic@wings-of-hope.ba)

This document has been produced as a part of the project “CSOs as equal partners in the monitoring of public finance“ which started beginning of 2016 and is implemented by a consortium of 10 organizations from 7 countries and will last for four years.

The aim of the project is to improve the transparency and accountability of policy and decision making in the area of public finances through strengthening the role and voice of NGOs in monitoring the institutions that operate in the area of public finances. In this way, the project will strengthen CSO knowledge of public finance and IFIs and improve CSO capacities for monitoring. Additionally, it will help advocate for transparency, accountability and effectiveness from public institutions in public finance. Moreover, this project will build know-how in advocating for sustainability, transparency and accountability of public finance and IFIs. This project will also increase networking and cooperation of CSOs on monitoring of public finance at regional and EU level. Lastly, it will increase the understanding of the media and wider public of the challenges in public finance and the impacts of IFIs.

Key project activities are research and monitoring, advocacy, capacity building and transfer of knowledge/practices and networking in the field of the 4 specific topics: public debt, public-private partnerships, tax justice and public infrastructure.

More information about the project can be found on <http://wings-of-hope.ba/balkan-monitoring-public-finance/> and on the Facebook Page Balkan Monitoring Public Finances





CONTENT

INTRODUCTION	3
1. OVERVIEW OF THE TRENDS IN PUBLIC INFRASTRUCTURE PROJECTS.....	4
2. CASE STUDIES	6
2.1. Corridor Vc	6
2.1.1. The motorway as a political game	7
2.1.2. Environmental impacts and cultural heritage threats.....	8
2.1.3. PPP model as a way of financing the construction of Corridor Vc.....	9
2.1.4. Further plan on construction of Corridor Vc	10
2.2. Energy infrastructure projects in Bosnia and Herzegovina	10
2.3. Lack of good practice in Bosnia and Herzegovina	14
2.4. Negative example of public infrastructure projects - Revitalization of existing thermal power plants.....	14
RECOMMENDATIONS.....	19
REFERENCES	20



**BALKAN
MONITORING
PUBLIC
FINANCES**

www.wings-of-hope.ba

INTRODUCTION





1. OVERVIEW OF THE TRENDS IN PUBLIC INFRASTRUCTURE PROJECTS

Infrastructure typically refers to the technical structures and systems that support society, such as roads, bridges, tunnels, water supply, sewers, electrical grids, telecommunications, etc. It can be owned and maintained by the local and central authorities, but also by private companies or as part of a public-private partnerships. It can be defined as the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions.

In BiH, there is an urgent need for improvement of infrastructure. Much of Bosnia's infrastructure – roads, bridges, tunnels – was damaged during the war in the 1990s. In 1991, Bosnia had 21,168 kilometers of highways, half of which were paved. The war destroyed 35% of these highways and 40% of their bridges. The collapse of the socialist infrastructure in the early 1990s and the ravages of war in the 1990s set high demands for investment in infrastructure in BiH, including the reconstruction and/or expansion of networks (roads, railways, airport, arch, water supply, sewage). Requirements for investments are determined by the need for reconstruction of existing networks and changes in demands for infrastructure services, as well as political affiliations¹.

4

The transport infrastructure is of great importance for economic development, but the quality of transport infrastructure in Bosnia and Herzegovina is less than satisfactory, which is an obstacle to strengthening the long-term competitiveness of BiH. The road and railway infrastructure require significant upgrades while the waterway transport is not used in an optimal way. With regards to transport infrastructure, both entities aim at restructuring their state-owned railway companies (JP ŽFBiH and JP ŽRS). The main reforms the FBiH proposed in this area refer to improving the financing scheme of the road infrastructure and the construction of the three subsections of the strategic corridor Vc. The key obstacle in the overall road management at the territory of the Federation BiH is a complete absence of strategic documents established under the law – the strategy and action plan and spatial plan of the Federation BiH. In addition, a major problem is the incomplete realization of the collection, as well as the equitable sharing and earmarked spending of original revenues for financing of roads.

The lack of a single, state-level energy strategy hinders the ability to coordinate policies between the entities to improve the overall security of supply, particularly in the oil and gas sector. In order to fulfil

¹ Javno-privatno partnerstvo u razvoju infrastrukture u BiH, Mr.sc. Ivana Domljan, dipl.ing.građ. Sveučilište u Mostaru, Građevinski fakultet, December 2011. Accessed 27 March 2017



the assumed commitments taken by signing the Energy Community Treaty in the coming period, both the RS and the FBiH have planned the infrastructure reforms with regard to energy, namely the development of new electricity generation capacities. The construction of two windfarms financed by a loan from KfW is planned in the Federation BiH, while the beginning of the construction of thermal -, hydro-power and wind-power plants, is expected in the RS².

While theoretically open to foreign investment, Bosnia and Herzegovina struggles to attract investors. A complicated political structure, non-transparent regulatory regime, high level of corruption and inadequate judicial and regulatory protections deter any investments, both foreign and domestic. International financial institutions, especially the World Bank, has played a major catalytic role in financing infrastructure in the years of postwar reconstruction, but it was/is not sufficient to satisfy actual demands. BiH continues to face significant infrastructure needs, mainly road construction and energy generation. EBRD has been one of the biggest investors in the past years and provide millions of euros for construction of the motorway project – Corridor Vc. In the recent years, Chinese state banks such as China Development Bank (CDB) and some Chinese companies are expressing big interest for investments in energy sector.

² Economic reforme programme 2016-2018 (ERP BiH 2016-2018), Sarajevo, January 2016, Accessed 3 May 2017



2. CASE STUDIES

The study will give overview of the key sectors that raise concerns in Bosnia and Herzegovina such as transport (BiH's motorway - Corridor Vc) and energy (coal power plants).

2.1. Corridor Vc

The Bosnian section of the Corridor Vc is planned to be 330 kilometers long, running from Svilaj on Bosnia and Herzegovina's northern border with Croatia to the southern border with Croatia near Ljubuski. The route falls mostly within the Federation of Bosnia-Herzegovina Entity, with only a short section in Republic of Srpska. In the area of corridor in its width of 40 km (on less than 20% of the territory), there are more than 50% of the population, which achieves more than 60% of the total GDP of Bosnia and Herzegovina.

The motorway is divided into four Lots, running north to south:

LOT 1: Section Svilaj (Northern Border with Croatia) - Doboj South

LOT 2: Section Doboj South - Sarajevo South (Tarcin)

LOT 3: Sarajevo South (Tarcin) - Mostar North,

LOT 4: Mostar North - Southern Border with Croatia.

The EBRD has supported the construction of motorways on this route, complimented by EIB loans and support to prepare the project from the EU and Italy³.

In 2008, the EBRD signed a loan for EUR 180 million for several sections of the planned 330 km long Corridor Vc motorway in Bosnia-Herzegovina:

- the Kakanj to Drivusa section (15.2 km) (north of Sarajevo)
- the Vlakovo to Tarčin section (18.9 km) (just west of Sarajevo)
- the Pocitelj to Southern Border with Croatia (21.4 km)
- the Odzak to Northern Border with Croatia (10.9 km)⁴.

³ <http://www.ebrd.com/news/2015/better-infrastructure-for-bosnia-and-herzegovina.html>, Accessed 5 April 2017

⁴ <http://www.ebrd.com/work-with-us/projects/psd/corridor-vc.html>, Accessed 28 March 2017



The EIB co-financed the Kakanj - Drivusa section with a loan of EUR 75 million.

In November 2014, the agreement was signed between the EIB and Bosnia and Herzegovina in the amount of EUR 100 million for construction of the section Počitelj –Zvirovići. Construction of the subsection Pocitelj – Zvirovici is necessary for the traffic from the main road M17 to shift to the highway towards Bijaca. This should ensure full functionality of the constructed subsection Bijaca – Zvirovici and increase its profitability. Pečuj-Klopče subsection represents a continuation of the construction of the highway in order to achieve full functionality of the subsection Klopce – Drivusa, which is currently under construction. Loan agreements between the OFID-OPEC and Bosnia and Herzegovina in the amount of EUR 60 million were signed in September 2014⁵.

Again in 2016, the EBRD signed a loan for EUR 76 million for:

- the Svilaj to Odžak section (on BiH's north) and
- the Donja Gračanica to Klopče section (near Zenica, in central part of BiH)⁶.

In April 2017, the EIB signed an Agreement on investment grant in amount of EUR 25 million for Svilaj – Odžak section⁷.

7

2.1.1. The motorway as a political game

The construction of motorway on Corridor Vc was intended to improve connectivity of Bosnia and Herzegovina with neighboring countries and advance the potential for economic development. However, it turned out to be a political game. Over the last 13 years BiH has built about 143 km of the motorway on the corridor that goes through our country, which means that less than 10 km of the motorway was built per year⁸.

⁵ Economic reforme programme 2016-2018 (ERP BiH 2016-2018), Sarajevo, January 2016, Accessed 3 May 2017

⁶ <https://www.klix.ba/vijesti/bih/novih-86-miliona-eura-kredita-za-koridor-5c-i-luku-brcko/161222049>, Accessed 29 March 2017

⁷ <http://www.slobodna-bosna.ba/vijest/51168/potpisan-sporazum-sa-eib-om-stize-25-miliona-eura-za-autocestu-svilaj-odzak-foto.html>, Accessed 28 April 2017

⁸ <https://www.klix.ba/biznis/terzic-plan-je-da-2021-godine-bude-zavrsono-145-kilometara-autoceste/170326014>, Accessed 5 April 2017



There are multiple problems that hinder the construction of the Corridor Vc. One of the problems is that instead by a state, the corridor Vc is built by entities and constitutive nations. On the level of bh entity the construction is conducted by regions or cantons, where dominant political parties have a last word. Corridor Vc is actually a subject of the political turmoil in which one of the players is international community. According to the Constitution of Bosnia and Herzegovina, international traffic is in the area and interests of institutions at the state level, so the responsible institutions for the construction of motorways should be the Ministry of Transport and Communications of Bosnia and Herzegovina. However, due to the absence of the state's interests, the construction is left to entities, where, as the end product, we have entity highways in Bosnia and Herzegovina. The specific aggravating factor in the realization of international corridor project is the fact that BiH entities, instead of the highway, build road enclaves. Motorways are not build strategically from the state level, but construction is entrusted to entities who organization and priority of construction conduct according to their own interest. That is the reason why the construction of Corridor Vc is conducted partially⁹. Additional problem was that Republic of Srpska did not have any intentions to build this motorway. Instead, they were forcing the entity's project of the highway Banja Luka – Doboj. However, recently the government of RS gave their approval for a loan amounting to EUR 70 million in order to finance the construction of the first phase of the Corridor Vc from the loop Johovac (Tovira) to loop Rudanka (Kostajnica). The project will be financed by the EBRD¹⁰.

It is clear that the Ministry of Transport and Communication of BiH should never let international corridor routes to entities, which unfortunately happened and slow down the construction of the Corridor Vc, and disbursed the focus on less important road projects which additionally aggravated already unenviable conditions for financing such projects.¹¹

2.1.2. Environmental impacts and cultural heritage threats

The other issue is related to environmental impacts of construction of the Corridor Vc. There are also problems with reactions of the local citizens, unresolved property relations, etc. Concerns about environmental impacts and threats to cultural heritage were raised by local people and cultural figures. The public discussions about the project have led to a series of scandals and a deadlock of the motorway's

⁹ <http://balkans.aljazeera.net/vijesti/umjesto-drzave-koridor-5c-grade-entiteta-i-konstitutivni-narodi>, Accessed 28 April 2017

¹⁰ <https://www.klix.ba/biznis/investicije/rs-konacno-pocinje-radove-na-koridoru-5c-prihvaceno-zaduzenje-od-70-miliona-eura/170323120>, Accessed 5 April 2017

¹¹ <http://balkans.aljazeera.net/vijesti/umjesto-drzave-koridor-5c-grade-entiteta-i-konstitutivni-narodi>, 7 April 2017



development. Recently is presented a route, adopted by the House of Peoples of the Federal Parliament, which goes through an arable valley and across the rivers Buna and Bunica. The route of the Corridor Vc was changed several times and with drowned and returned to the beginning, and now the worst option for local citizens is adopted. The fact is that the route is planned over a valuable arable valley and two remarkably beautiful and rich with water rivers, Buna and Bunica, which are, considering their short flow and the absence of industrial capacities, drinkable from spring to delta. In addition, the future highway would go through the community. To the local citizens and to many experts, especially hydrologists, it is not clear why, with so many rugged hills and deserted regions or unusable land, only a few kilometers in the vicinity, the route is planned through orchards and vineyards and other crops, of which the population in this area ensure its existence.¹²

2.1.3. PPP model as a way of financing the construction of Corridor Vc

There are proposals that some sections of the Corridor Vc should be financed through public - private partnership. Given the mixed experiences with such contracts in other countries, not to mention Bosnia and Herzegovina's high levels of corruption combined with low regulatory capacity, this is a cause for concern.

The FBiH government is currently considering a Public-Private Partnership ('PPP') concession for the Karuse - Poprikuse section of Corridor Vc which has been prepared with the assistance of the IFC Advisory. The EBRD is interested to consider providing further support for developing this PPP.¹³

The involvement of the IFIs in any PPP process would help to ensure the transparency of the tender procedure, however there are other reasons for concern. If a toll is charged on the relevant sections the concessionaire's income will be dependent on the volume of traffic, and experience in many central and eastern European countries has proven that it is extremely difficult to predict the level of traffic. This has led to either concessionaires obtaining guarantees from the state that it will top up their income if it is less than expected, or to arrangements involving availability fees, in which the state pays the concessionaire rather than the motorway users doing so. Either way, after the construction is finished

¹² <http://balkans.aljazeera.net/vijesti/autoput-ka-politicka-igra>, Accessed 2 April 2017

¹³ <http://www.ebrd.com/work-with-us/projects/psd/corridor-vc-2.html>,



there is almost no risk transferred to the private sector, as the operation of a motorway is not an especially complex matter so performance targets are not difficult to fulfil.¹⁴

2.1.4. Further plan on construction of Corridor Vc

Construction of sections on the corridor Vc is the most important infrastructural project, enabling and initiating the development of other sectors of the economy, employment and GDP growth. The government of FBiH intends to continue the construction of the corridor Vc but all new projects require longer period for implementation and significant financial resources. The director of FBH Motorways announced rapid construction of 145 km of the highway in the next 4 years. But, is it realistic? Those are expensive and demanding projects whose implementation and realization takes time and BiH has a problem due to a lack of spatial planning documentation, the FBiH does not have adopted spatial plan, there are problems with reactions of the local citizens, unresolved property relations, etc. And finally, there is a question of funding of the highway. The beginning of the implementation of the new subsection projects on the corridor Vc is conditioned by increase in excise duties on fuel by KM 0,15. Namely, one of the conditions and promises that our government wrote in the Letter of Intent to the IMF was the increase in excise duties on fuel for KM 0.15, so our country can withdraw the second tranche of the agreed loan and provide funds for the construction of new sections of motorway on Corridor Vc. The creditors could provide EUR 800 million, but they now ask for increase of excise duties on fuel and oil products as a guarantee and a proper documentation. New Law on excise duties is now in adoption procedure but some political parties are against it and the deadline that IMF gave for the adoption of the amendments is already breached.

2.2. Energy infrastructure projects in Bosnia and Herzegovina

While most EU countries are giving up of coal, Bosnia and Herzegovina is planning new thermal power plants instead of using renewable energy sources. More than half of BiH's electricity generation capacity is made up of lignite power plants. Current level of production from all sources is more than enough to cover local consumption of electric power and the rest is being exported. The coal power plants are

¹⁴ Report from fact-finding mission on Corridor Vc motorway, Bosnia and Herzegovina, 23 - 25 February 2010, July 2010. Accessed 26 March 2017 http://bankwatch.org/sites/default/files/FFMReport_Vc_02Feb2010.pdf,



situated in Tuzla (715 MW installed capacity), Kakanj (466 MW) Gacko (300 MW), Ugljevik (300 MW), and the new plant Stanari, near Doboj (300 MW), all with their own mines nearby.

Existing domestic thermal power plants operates with lost and have non-rentable, non-economical and low - productive output due to which the domestic consumers will have to pay more and more expensive electricity. Due to untimely reaction of the Elektroprivreda RS in the previous period, ie because the replacement power plant was not built in time (Ugljevik 2) which would ensure stability in providing electricity to domestic consumers at reasonable prices, and until new capacities for production of energy from renewable sources are built, they started to revitalize and extend the lifespan of existing thermal power plants. Revitalization of existing thermal power plants includes, among other things, significant investments in environmental protection in order to respect current European directives and obligations taken by the Energy Community on the basis of harmful emissions of gasses and particles. Extending the work of non-rentable thermal power plants, combined with the necessary investments related to revitalization and respect for environmental regulations, will make these capacities even more non-rentable, which will have to be compensated by the growth of electricity prices on the domestic market for end consumers of at least 15%. The similar situation is in FBiH. Due to loses that Elektroprivreda BiH suffered in the first quarter of this year, amounted to EURO 9 million, they are planning to increase the prices of electricity for households in the Federation by up to 20%¹⁵. All of this will jeopardize already low life standard of citizens and increase the operative costs to the economy which is already and without this in a poor state and uncompetitive.

According to data, only in RS the total social damage that will arise in the next 15 years by extending the work of existing thermal power plants, calculated so that the social costs of their work are deducted from the social benefits of their work, is estimated on at least 677 million marks or approximately EURO 350 million. In the meantime, the Republic of Srpska has given two concessions to foreign investors for construction of new thermal power plants: Stanari with capacity of 300 MWh and Ugljevik 3 with capacity of 2x300 MWh, and negotiations have begun on construction of a replacement thermal power plant Gacko 2 with capacity of 350 MW.¹⁶

However, while most EU countries are giving up building new coal plants and seven EU states are already coal-free, Bosnia and Herzegovina is still planning new lignite power plants during the next few years. Since the European Investment Bank, the European Bank for Reconstruction and Development

¹⁵ <http://tuzlanski.ba/infoteka/struja-za-domacinstva-poskupljuje-za-20-posto/>, Accessed 24 April 2017

¹⁶ Ekonomska analiza, Korištenje uglja i termoelektrana na uglj u energetskom sektoru Republike Srpske, Presentation of Damir Miljević, dated 20 April 2017



and the World Bank have virtually halted lending for new coal power plants, most of them are due to be financed by Chinese state banks – the China Development Bank (CDB).¹⁷

New lignite-fired units are planned as follows: Tuzla unit 7 (450 MW), Banovici, near Tuzla - new plant (300 MW), Ugljevik III (600 MW), Kakanj 8 (300 MW), Gacko 2 (300 MW).

Stanari lignite power plant project is promoted by Energy Financing Team (EFT) and financed by the China Development Bank. The construction, carried out by Dongfang Electric Corporation, started in 2013 and it was finished and started to operate in 2016. Due to its use of a dry cooling system, the plant's net efficiency level will be very low 34.1 percent, compared to 40 percent required by the best available techniques standard.

Ugljevik III lignite power plant is promoted by Russian billionaire Rashid Sardarov's Comsar Energy and would be constructed by the China Power Engineering and Consulting Group Corporation (CPECC). Like Stanari, Ugljevik III would have a very low net efficiency of 34.1 percent. An analysis published by Center for Environment in October 2014 shows that the environmental impact assessment is missing key information and that the data on likely emissions of SO₂, NO_x and dust are false. This issue is currently being examined by the Energy Community Secretariat.

Tuzla 7 lignite power plant - In August 2014, publicly-owned electricity company Elektroprivreda Bosne and Hercegovine (EPBiH) signed an EPC (Engineering, Procurement, Construction) contract with China Gezhouba Group and Guangdong Electric Power Design for the construction of a new unit at Tuzla, after Japan's Hitachi - also shortlisted - dropped out of the project partly due to its poor economics. The price tag for construction at the time was EUR 785.7 million, but it was later admitted that the project was not economically feasible in this form. Tuzla 7 is currently in the process of obtaining an updated environmental permit as the original one expired in November 2015. However, in the study provided for public comments at the end of 2015, no updates had been made since the original 2009 environmental impact assessment study, rendering it out of step with new legislative requirements and failing to examine the impact of the Banovići power plant. In addition, local people from Šićki Brod are resisting the construction of the ash landfill for the new plant. In early April of 2016 they delivered a petition with 2100 signatures against the proposal to the Ministry of Environment and Tourism.

¹⁷ China-SEE energy projects update, July 2016, Accessed 5 April 2017: <http://bankwatch.org/sites/default/files/briefing-China-SEE-coal-31Jul2016.pdf>



Banovići lignite power plant - the new plant is planned by RMU Banovići (Banovići Brown Coal Mines), a primarily state-owned company, alongside the Banovići mine near Tuzla. On 24.11.2015 an EPC contract was signed with China's Dongfang. There appears to be a serious lack of energy planning and co-ordination between the Tuzla 7 and Banovići projects. It is very unlikely that two plants within just a few kilometres of one another can both be feasible, yet the FBiH government has so far supported both projects.

Gacko 2 lignite power plant – In April of 2017 the minister of industry, energy and mining of Republic of Srpska, in the name of Government of RS, signed an agreement on cooperation for the realization of the project of construction of Thermal power plant Gacko 2 with Chinese companies „China Africa Investment and Development Co.“ and „China Machinery Engineering Corporation“. The construction of the thermal power plant Gacko 2 will cost about EUR 500 million and will have 300 MW of installed power.¹⁸

It can be concluded that there are many issues with existing and planned thermal powerplants. As much as foreign investments, especially in energy sector, seem attempting because they contribute to increase of production and new employments, the calculation of social benefits and social costs shows that the new investments in thermal power plants will bring more damage than good.

Over the past year, CSOs initiated 6 lawsuits against planned and existing thermal power plants, as follows: 3 lawsuits for TPP Banovići, 1 lawsuit for TPP Tuzla 7, 1 lawsuit for TPP Tuzla and 1 lawsuit for TPP Kakanj. All lawsuits are addressed to the Ministry for giving bad Environmental permits.

In addition, as well as new coal capacity, Bosnia and Herzegovina plans a large amount of new hydropower capacity, which is proving equally controversial as the coal plants. There are 244 rivers in BiH and 300 already built or planned hydropower plants. Why so much? Those who follow these processes said that impact studies are poorly prepared and mostly transcribed, during the construction the rivers are being destroyed as well as large part of land around the rivers where are mostly forests, and all that under the pretext of building access roads.

¹⁸ <http://www.akta.ba/bs/Vijest/vijesti/kineske-kompanije-grade-termoelektranu-gacko-2/76176>, Accessed 20 April 2017



The relevant institutions do not listen the opinion of local communities and experts who are mostly against the construction, but favours the investors who only benefit from the construction of powerplants.¹⁹

2.3. Lack of good practice in Bosnia and Herzegovina

Complex political – administrative situation in BiH, often contradictory or overlapping legal and regulatory frameworks, non-transparent business procedures, corruption, insufficient protection of property rights and a weak judicial system are obstacles to development and foreign direct investment, and reasons why there are lack of good projects in BiH. There are no good cases of infrastructure on state level nor entities level as well. Only few good cases can be found on a local level.

2.4. Negative example of public infrastructure projects - Revitalization of existing thermal power plants

Name of the project	Tuzla (715 MW installed capacity), Kakanj (466 MW) Gacko (300 MW), Ugljevik (300 MW), and the new plant Stanari, near Doboj (300 MW), all with their own mines nearby.
Location of project	All around BiH
Short description	Existing domestic thermal power plants operates with losses and have non-rentable, non-economical and low - productive output due to which the domestic consumers will have to pay more and more expensive electricity. Due to untimely reaction of the Elektroprivreda RS in the previous period, ie because the replacement power plant was not built in time (Ugljevik 2) which would ensure stability in providing electricity to domestic consumers at reasonable prices, and until new capacities for production of energy from renewable sources are built, they started to revitalize and extend the lifespan of existing thermal power plants.

¹⁹ Centar za životnu sredinu, Kome gradite hidroelektrane?. Accessed 15 April 2017: <http://czzs.org/kome-gradite-hidroelektrane/>



Technical details

Republic of Srpska has given two concessions to foreign investors for construction of new thermal power plants: Stanari with capacity of 300 MWh and Ugljevik 3 with capacity of 2x300 MWh, and negotiations have begun on construction of a replacement thermal power plant Gacko 2 with capacity of 350 MW[1].

[1] Ekonomska analiza, Korištenje uglja i termoelektrana na ugalj u energetske sektoru Republike Srpske, Presentation of Damir Miljević, dated 20 April 2017

New lignite-fired units are planned as follows: Tuzla unit 7 (450 MW), Banovici, near Tuzla - new plant (300 MW), Ugljevik III (600 MW), Kakanj 8 (300 MW), Gacko 2 (300 MW).

Stanari lignite power plant project is promoted by Energy Financing Team (EFT) and financed by the China Development Bank. The construction, carried out by Dongfang Electric Corporation, started in 2013 and it was finished and started to operate in 2016. Due to its use of a dry cooling system, the plant's net efficiency level will be very low 34.1 percent, compared to 40 percent required by the best available techniques standard.

Ugljevik III lignite power plant is promoted by Russian billionaire Rashid Sardarov's Comsar Energy and would be constructed by the China Power Engineering and Consulting Group Corporation (CPECC). Like Stanari, Ugljevik III would have a very low net efficiency of 34.1 percent. An analysis published by Center for Environment in October 2014 shows that the environmental impact assessment is missing key information and that the data on likely emissions of SO₂, NO_x and dust are false. This issue is currently being examined by the Energy Community Secretariat.

Tuzla 7 lignite power plant - In August 2014, publicly-owned electricity company Elektroprivreda Bosne and Hercegovine (EPBiH) signed an EPC (Engineering, Procurement, Construction) contract



with China Gezhouba Group and Guangdong Electric Power Design for the construction of a new unit at Tuzla, after Japan's Hitachi - also shortlisted - dropped out of the project partly due to its poor economics. The price tag for construction at the time was EUR 785.7 million, but it was later admitted that the project was not economically feasible in this form. Tuzla 7 is currently in the process of obtaining an updated environmental permit as the original one expired in November 2015. However, in the study provided for public comments at the end of 2015, no updates had been made since the original 2009 environmental impact assessment study, rendering it out of step with new legislative requirements and failing to examine the impact of the Banovići power plant. In addition, local people from Šićki Brod are resisting the construction of the ash landfill for the new plant. In early April of 2016 they delivered a petition with 2100 signatures against the proposal to the Ministry of Environment and Tourism.

Banovići lignite power plant - the new plant is planned by RMU Banovići (Banovići Brown Coal Mines), a primarily state-owned company, alongside the Banovići mine near Tuzla. On 24.11.2015 an EPC contract was signed with China's Dongfang. There appears to be a serious lack of energy planning and co-ordination between the Tuzla 7 and Banovići projects. It is very unlikely that two plants within just a few kilometres of one another can both be feasible, yet the FBiH government has so far supported both projects.

Gacko 2 lignite power plant – In April of 2017 the minister of industry, energy and mining of Republic of Srpska, in the name of Government of RS, signed an agreement on cooperation for the realization of the project of construction of Thermal power plant Gacko 2 with Chinese companies „China Africa Investment and Development Co.“ and „China Machinery Engineering Corporation“. The construction of the thermal power plant Gacko 2 will cost about EUR 500 million and will have 300 MW of installed power[1].

[1] <http://www.akta.ba/bs/Vijest/vijesti/kineske-kompanije-grade-termoelektranu-gacko-2/76176>, Accessed 20 April 2017



The benefits of the project?		Domestic electricity production will continue. New jobs at the mines and plants. Possible exports and revenues. Increased GDP.
The costs of the project?		Several billion Euros for all the planned TPPs.
Who is financing the project?		Different investors, most of them from China (Chinese companies and banks).
Key actors		Investor: China Interested parties: Republika Srpska, FBiH Key opposing parties (local groups, NGOs, citizens...)
Key problems with the project?		Revitalization of existing thermal power plants includes, among other things, significant investments in environmental protection in order to respect current European directives and obligations taken by the Energy Community on the basis of harmful emissions of gasses and particles. Extending the work of non-rentable thermal power plants, combined with the necessary investments related to revitalization and respect for environmental regulations, will make these capacities even more non-rentable, which will have to be compensated by the growth of electricity prices on the domestic market for end consumers of at least 15%. The similar situation is in FBiH. Due to loses that Elektroprivreda BiH suffered in the first quarter of this year, amounted to EURO 9 million, they are planning to increase the prices of electricity for households in the Federation by up to 20% . All of this will jeopardize already low life standard of citizens and increase the operative costs to the economy which is already and without this in a poor state and uncompetitive. According to data, only in RS the total social damage that will arise in the next 15 years by extending the work of existing thermal power plants, calculated so that the social costs of their work are deducted from the social benefits of their work, is estimated on at least 677 million marks or approximately EURO 350 million.



		<p>As much as foreign investments, especially in energy sector, seem attempting because they contribute to increase of production and new employments, the calculation of social benefits and social costs shows that the new investments in thermal power plants will bring more damage than good.</p> <p>Over the past year, CSOs initiated 6 lawsuits against planned and existing thermal power plants, as follows: 3 lawsuits for TPP Banovići, 1 lawsuit for TPP Tuzla 7, 1 lawsuit for TPP Tuzla and 1 lawsuit for TPP Kakanj. All lawsuits are addressed to the Ministry for giving bad Environmental permits.</p>
Alternative solutions?		Invest in renewables and energy efficiency measures.



RECOMMENDATIONS

The route of the Corridor Vc through Bosnia and Herzegovina is not in question and it will be built as a whole - whether it will be in five, ten or twenty years, depending on the country. One thing is important - that these 200 kilometres, that is left of the corridor's route, should be built on the basis of long-term strategy, starting with the cost-effective shares, which will allow rapid recovery and accelerate the establishment of the remaining routs.

With regard to energy infrastructure projects, the governments of FBiH and Republic of Srpska need to consider the total twist in the strategy of energy development and current policies. They urgently need to review their plans for new thermal power plants as EU adopted tougher pollution standards. If they fail to comply with the new standards they will be landed with expensive investment costs within just a few years. The money from the inevitable increase in electricity prices in the domestic market should be invested in renewable energy sources and strategically turn to the production of electricity from solar and wind power and increase energy efficiency.



**BALKAN
MONITORING
PUBLIC
FINANCES**

www.wings-of-hope.ba

REFERENCES

