



ANALYSIS of PUBLIC INFRASTRUCTURE

REPUBLIC OF MACEDONIA



Project funded
by European union



BALKAN
MONITORING
PUBLIC
FINANCES

**EDITOR OF THE STUDY:**

PhD Sasho Kjosev

AUTHOR OF THE STUDY:

Sonja Risteska, Analytica think tank

TABLE OF CONTENTS

Abbreviations	3
Introduction	4
Recent trends and public financial flows for infrastructure	7
Ifi's involvement in Macedonia	9
The Indicative Strategy Paper (2012–2020)	11
The role of civil society	17
Case studies – good and bad practices of public infrastructure	18
Bad practice – TPP Oslomej	18
Bad practice – Corrdior X, highway Demir Kapija – Smokvica	20
Good practice – Wind park Bogdanci	22
Conclusions and recommendations	23
Sources	25



This document is produced with financial support from the European Union. For the contents of this document Analytica is fully responsible and in no case does it reflect the views of the European Union.



ABBREVIATIONS:

CSOs – civil society organisations
EBRD – European Bank for Reconstruction and Development
EC – European Commission
EIB – European Investment Bank
ELEM – Macedonian power plant
EU – European Union
EVN Macedonia – Power Distribution Company
GDP – Gross national product
GWh – giga watt hour
IFI – International financial institutions
IPA – Instrument for pre-accession
KfW– German government-owned development bank
MEPP – Ministry of Environment and Physical Planning
MEPSO – Electricity Transmission System Operator of Macedonia
MW – mega watt
NTS – National transport strategy
SEE – South East Europe
SEETO – South East Europe Transport Observatory
TEN-T – The Trans-European Transport Networks
TPP – Thermal power plant
UN – United Nations
WBIF – Western Balkans Investment Framework



Introduction

Infrastructure refers to the basic structures that facilitate and support economic activity. As such, infrastructure is an indispensable input in a national economy's production, one that is highly complementary to other, more conventional inputs such as labor and non-infrastructure capital. Indeed, it is hard to imagine any production process in any sector of the economy that does not rely on infrastructure. Conversely, inadequacies in infrastructure are quickly felt—in some countries, power outages, insufficient water supply, and decrepit or nonexistent roads adversely affect people's quality of life and present significant barriers to the operation of firms.

Very few economists would argue that good infrastructure does not enhance a country's economic potential. Good transport infrastructure can enhance labour mobility, for example, whilst good energy infrastructure can deliver low-cost power to fuel industry. When it comes to macroeconomic health, however, large numbers of politicians and economists now make the case that a lot more *state-led infrastructure investment* is needed to boost growth.

There tend to be two separate arguments for this, which are often conflated but should be analysed distinctly. The first is that when an economy is in recession or slowing, and unemployment is high, government spending to finance and/or build infrastructure can help alleviate unemployment directly and have a strong multiplier effect on the economy more generally. The second is that infrastructure spending can actually enhance the productive potential of the economy – improving its supply-side. This argument says that greater state-financed investment in infrastructure can boost the productive potential of the economy by

greasing the wheels of economic activity in future.

Public infrastructure is important not only for the growth and development of one country but also for the quality of life of its citizens. For instance, Mercer survey on quality of life in 2017, stated that “City infrastructure, ranked separately this year, plays an important role when multinationals decide where to establish locations abroad and send expatriate workers. Easy access to transportation, reliable electricity, and drinkable water are all important considerations when determining hardship allowances based on differences between a given assignee's home and host locations”. Hence why one of the most expensive sectors of each country's public spending is the funding of public infrastructure. It usually involves vast projects, which are capital intensive, take years to finish and oftentimes require foreign assistance in starting and/or finishing them. Under public infrastructure usually fit projects in the transport sector, energy, public health, education etc.

Broadly speaking, public infrastructure falls into two categories: “economic infrastructure”, which refers to facilities that directly affect economic activities, including power supply, transportation and telecommunication; and “social infrastructure”, which denotes facilities that mainly affect people's living standards, including education, sanitation and social welfare.

When it comes to determining the economic growth of a given country, the advancement of public infrastructure is one of the key indicators. A nation with well-developed systems in transport and communication, energy, water, sewerage among other public utilities creates an environment that encourages trade and investments.



As most of the countries from South East Europe (SEE) have not yet joined the EU¹, and them being developing without the capacity financial or human, to by themselves work on such intensive projects they usually depend on foreign donors and assistance into helping them build and/or rebuild their infrastructure after years of conflicts in the 90es but also underinvestment. The main outside donors remain the EU through its different funding opportunities such as the Instrument for Pre Accession (IPA) and its banks the European Bank for Reconstruction and Development (EBRD) and European Investment Bank (EIB) as well as the USA through the World Bank and in smaller scale USAID.

Traditionally, infrastructure investments have been financed with public funds. Governments were the main actor in this field, given the inherent public good nature of infrastructure and the positive externalities often generated by such facilities. However, public deficits, increased public debt to GDP ratios and, at times, the inability of the public sector to deliver efficient investment spending, have in many economies led to a reduction in the level of public funds allocated to infrastructure.

As a consequence, it is increasingly acknowledged that alternative sources of financing are needed to support infrastructure development. In this context, much attention is being focused on the institutional investor sector, given the long-term nature of the liabilities for many types of institutional investors and their corresponding need for suitable long-term assets. For various reasons,

including a lack of familiarity with infrastructure investments, institutional investors at present allocate a very small fraction of their investments to infrastructure assets. These investors have traditionally invested in infrastructure through listed companies and fixed income instruments.²

Infrastructure financing can present particular challenges owing to the nature of infrastructure assets. The following are some common characteristics of infrastructure assets that differentiate them from other assets:

1. **Capital intensity and longevity:** Capital intensity, high up-front costs, lack of liquidity and a long asset life generate substantial financing requirements and a need for dedicated resources on the part of investors to understand the risks involved and to manage them.
2. **Economies of scale and externalities:** Infrastructure often comprises natural monopolies such as highways or water supply which exhibit increasing returns to scale and can generate social benefits. While the direct payoffs to an owner of an infrastructure project may be inadequate for costs to be covered, the indirect externalities can still be beneficial for the economy as a whole. Such social benefits are fundamentally difficult to measure.
3. **Heterogeneity, complexity and presence of a large number of parties.** Infrastructure facilities tend to be heterogeneous and unique in their nature, with complex legal arrangements structured to ensure proper distribution of payoffs and risk-sharing to align the incentives of all parties.

¹ Serbia, Montenegro, Albania, Kosovo, Macedonia and Bosnia and Herzegovina are still waiting to join the EU one day. The last three countries that entered the EU from this region were first Bulgaria and Romania in 2007, and last Croatia in 2013.

² OECD (2015): Infrastructure Financing Instruments and Incentives, <http://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>



4. Opaqueness: Infrastructure projects tend to lack transparency due to opaque and diverse structures. This also applies to Public Private Partnerships (PPP) models. The information required by investors to assess these risk-structures and the infrastructure market in general is lacking or highly scattered, creating uncertainty.³

Public infrastructure is meant to serve the needs of the wider public. However, it often happens that the public infrastructure projects are not designed with public well-being in mind. Sometimes they are designed more for the needs of the investor or the lobby group behind the project. The study wishes to explore how the public infrastructure can benefit the whole of society without overspending the public budgets. It wishes to contribute towards resource-efficient and decentralized infrastructure, but also towards making public infrastructure decision-making processes open, accessible, transparent and accountable. The study builds mainly on case studies to show the poor practices and put them side-by-side with the good practices. However, the study also analyses trends in public infrastructure projects and their funding.

The objective of the study is to provide an overview of different cases from Macedonia in relation to public funding for public infrastructure, based on which to draw some conclusions and recommendations on what type of infrastructure is needed, and what are the conditions that need to be fulfilled in our view.

The first part will do an overview of the trends in public infrastructure projects, more concretely it will try to answer the following questions: what is public infrastructure; recent trends and public financial flows for infrastructure – who are the main players (for example EU pre accession funds,

Chinese financiers, e.g. highway in Montenegro, IFIs) – brief overview of the region (see Bankwatch publications); the role of civil society in decision-making on public infrastructure and putting forward other proposals for public infrastructure based on needs (country specific); whose priorities is it that the EU funds are financing? E.g. when we discuss priorities for EU funding within countries, it is often that the priorities of the government/lobbies are taken on board, not the civil society. How much representativeness is there? Is participation in the monitoring committees sufficient?; which are the key sectors, which are cross-cutting for the region, such as energy including hydro, transport (examples on cases are motorways in Bulgaria and Macedonia, Corridor Vc in BiH); and what are other types of infrastructure important for the region?

The second part will deal with the two case studies – good and bad practices of public infrastructure in Macedonia. In sum it will try to answer when looking into the projects: who determined that there is a need for a project and how?; Who benefits the most from the public infrastructure project? Is it the whole public or just some groups of people? If so, which are the groups?; How were public consultations conducted, were they well represented?; Is it transparent who is behind the project? Is it transparent who and how gets the contracts? Is the financing transparent?; What is the source of funding, conditions, and who has taken the decision? Does the project have a clear and realistic economic picture? Does it make economic sense? Is the Cost-Benefit Analysis done and it shows good results? Also it will try to find out if there are any common characteristics between the poor projects and how does poorly designed project affect public finances?

³

Ibid.,



Recent trends and public financial flows for infrastructure

Public infrastructure is infrastructure owned by the public or is for public use. It is generally distinguishable from private or generic infrastructure in terms of policy, financing, purpose. Public infrastructure investments present the development component of the fiscal policy with intent for improving the economic perspectives and quality of life of the citizens. The crucial objective of these type of investments is to advance the transportation network in the country (highways, railroad tracks, regional and local roads), as well as to improve the energy and utilities infrastructure, education, social and health system. These capital investments, in addition to the recent positive effect on the economic activity, also contribute for strengthening and boosting the competitiveness of the country in the long term period, thus being of key importance for increasing productivity and production.⁴ The importance of public infrastructure is immense since without a solid one, the country's economic development is not possible. "Failure to invest means failure to grow and develop our social and economic fabric - we all have a stake in this. Experts estimate that about \$40tn (£25tn) is needed globally to build or upgrade roads, railways, power plants and other infrastructure in order to keep up with demand".⁵

The relationship between infrastructure development and economic growth has been a controversial one. While there is little consensus about the magnitudes of the effects of public investment

in infrastructures, there is also little doubt that they are positive and significant but substantially smaller than the earlier estimates. In addition, the magnitude of the effects tends to be substantially higher for less developed countries. Another interesting pattern is that as the geographic focus narrows, the effects of public capital become smaller. Finally, the aggregate results whatever they may be tend to hide a wide variety of disaggregated effects. Empirical results suggest that public investment affects long-term private-sector performance in a way that is rather unbalanced across industries and regions. It contributes therefore in an important manner to changes in the regional and industry mix in the economy and may contribute to the concentration of economic activity in the largest sectors and regions.⁶

However in which direction those investments would go is a different matter and not always the interest of the investor, the bank and the people are the same. There have been cases, where investing in certain public infrastructure projects has done more damage than good and where badly needed construction has been omitted (for instance there is still no bike lane throughout the whole capital of Macedonia - Skopje and at the same time the EU is investing in Corridor 10 and China in highways along Corridor 8). "Simply increasing the amount of public spending in infrastructure is not necessarily the solution; Public investment must be productive and efficient in order to achieve real eco-

4

Bojana Mijovic Hristovska, Tamara Mijovic Spasova, Macro analysis, Case study Macedonia, Skopje 2016, http://analyticamk.org/images/Files/Reports/Macro_analysis_of_public_finances_in_SEE_6f24c.pdf

5

BBC, The importance of infrastructure investment, <http://www.bbc.com/news/business-11642433>, accessed on 30.03.2017.

6

Alfredo Marvão Pereira and Jorge M. Andraz, On the economic effects of public infrastructure investment: A survey of the international evidence, College of William and Mary, Department of Economics, Working Paper Number 108, July 2013, http://economics.wm.edu/wp/cwm_wp108rev1.pdf



conomic and social value, and to contribute to building sustainable and inclusive growth. Influence by vested interests in the decision may result even in negative return of productivity or excessive infrastructure, creating “white elephant” projects.”⁷

Regarding recent trends and public financial flows for infrastructure – the main players in building new and renovating old infrastructure projects in Macedonia, apart from the Government are the EU through its Instrument for Pre-Accession Fund (IPA), the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB) as well as the World Bank. In smaller amount also involved are German Banks such as KfW, and Chinese Banks which assisted with the building of two new highways Kicevo-Ohrid and Miladinovci – Stip.

On regional level, apart from the World Bank, the IPA funding and other individual donors, there is also the Western Balkans Investment Framework. The Western Balkans Investment Framework (WBIF) is a joint blending facility of the European Commission, participating Financial Institutions (FIs), bilateral donors and Western Balkans countries to deliver funding for strategic investment projects in beneficiary countries. Eligible sectors include infrastructure development within the environment, energy, transport and social sectors as well as private sector development. The WBIF was launched in December 2009 by the European Commission, together with the Council of Europe Development Bank (CEB), the European Bank

for Reconstruction and Development (EBRD), the European Investment Bank (EIB) and several bilateral donors. KfW and the World Bank subsequently joined the Framework.⁸

The WBIF focuses on key sectors of the Western Balkan economies including energy, environment, transport, social and private sector development. The Framework awards, based on competitive procedures, grants for infrastructure project preparation activities as well as for investments. Applications are assessed by the WBIF Project Financiers’ Group who recommends selected applications for approval by the Steering Committee. Approved grants are then implemented by the Infrastructure Project Facility teams or the IFIs themselves. WBIF operations are based on the Consolidated Terms of Reference for the Joint Grant Facility. The WBIF impacts through a coordinated effort invested in the preparation and selection of priority projects for financing by blending:

- grants from the European Commission’s Instrument for Pre-Accession (IPA) and 20 Bilateral Donors; with
- loans from the participating financial institutions; and
- national finance.

At inception, the CEB, EBRD, and EIB contributed to the WBIF’s grant activities.⁹

7

OECD, Integrity Framework for Public Infrastructure, <https://www.oecd.org/corruption/ethics/Integrity-Framework-For-Public-Infrastructure-Brochure.pdf>, page 4.

8

Western Balkans Investment Framework, <https://www.wbif.eu/home>, accessed on 30.03.2017.

9

About the WBIF, <https://www.wbif.eu/about-the-wbif>, accessed on 30.03.2017



Ifi's involvement in Macedonia

Development Finance Institutions (DFIs) are bilateral, regional or multilateral institutions that are supported by states with developed economies. DFIs generally have a mandate to provide finance to the private sector for investments that promote development. The purpose of DFIs is to ensure investments where otherwise the commercial markets would not invest. DFIs aim to be catalysts, helping companies get funding in countries where there is restricted access to domestic and foreign capital markets and provide risk mitigation products that enable investors to proceed with plans they might otherwise abandon. DFIs provide loans with longer maturities and other financial products. Examples of DFIs are International Finance Corporation (IFC), European Bank for Reconstruction and Development (EBRD), CDC Group (UK's development finance institution), DEG (the German development finance institution), Proparco (the French DFI) and European Investment Bank (EIB).¹⁰

Macedonia, same as all the rest SEE countries, depends heavily and predominantly on foreign investments in its infrastructure, no matter if the projects are in transport, energy, health or education. Concerning energy infrastructure projects, unlike many other SEE countries, Macedonia is one of only two not to have had any IFI-financed fossil fuel investments during the period in question (the other is Albania and the period in question is 2006/2012 – author's remark), which is a curious occurrence knowing the fact that around 70–75% of its electricity production comes from coal. In any case this can be seen as a positive outcome although the other investments had and have their shortcomings.

The EBRD has invested most of its EUR 131.7 million country portfolio in hydropower, while the World Bank has invested almost EUR 120 million in transmission and distribution improvements. The

EIB's only energy project has been a EUR 3 million allocation for the Green for Growth Fund, and IPA has not carried out any energy infrastructure-related projects in the country. One major issue with IFI investments in the energy sector in Macedonia is the impacts of hydropower plants. The EBRD in November 2011 approved financing for a 68 MW plant at Boskov Most in the Mavrovo National Park, while the World Bank is currently considering financing another plant at Lukovo Pole in the same park. Alongside these, no less than 29 hydropower plants under 10 MW are planned within the national park, and there is already an existing hydropower complex with three dams there. In September 2012 the International Union for the Conservation of Nature (IUCN) adopted a resolution calling on the Macedonian authorities to abandon plans to construct hydropower plants in the Mavrovo National Park.¹¹

In addition to the IFIs it is useful to note that Germany's KfW supported the construction of a 50 MW wind power project in the country with a loan of almost EUR 33 million. Since 2015 it is also supporting for instance the District heating project in Bitola which is aimed at replacing the usage of electricity, oil and wood for heating, which will cut greenhouse gas emissions and improve the safety and reliability of the distribution network. The amount of the project is 39 million Europe. The beneficiary is ad ELEM.¹²

The Chinese gave loans through the Exim Bank from China for the construction of two highways in Macedonia to the Macedonian government in the amount of 580 million Euros, with a repayment period of 20 years, five-year grace period and 2% interest rate. The Government budget funds accounted for 10 percent of the total value of the projects. The two highways are Miladinovci–Stip and Kicevo–Ohrid and are one of the most capital intensive projects in the country. The highway Skopje – Sveti Nikole – Stip cost is 206 million

¹⁰ <http://ppp.worldbank.org/public-private-partnership/financing/investors-developing-countries>

¹¹ Pippa Gallop, SEE SEP, Invest in Haste, Repent in Leiusre, Red Flag Report, June 2013, <http://www.analyticamk.org/images/stories/files/seesep-final-webR.pdf>

¹² On-going projects financed by German Development Bank – KfW March 2016, <http://finance.gov.mk/files/u252/KfW%20proekti-en.pdf>



Euros and the length is 53. The motorway section Kicevo–Ohrid is worth 374 million Euros and 56.7 kilometers long. The agreement includes a provision which provides for additional ten percent for contingency. Construction began in 2014, and the construction period is three years.¹³

In the last two years there was some shift in the position of the IFI's due to substantial pressure from the civil society in Macedonia, who fought hard and long to prove the damaging impacts these HPP would have on the country. After a five years long campaign, the EBRD cancelled the EUR 65 million loan intended for the Boškov Most hydropower project in Macedonia. As a result this controversial project is now highly unlikely to be realised. In a statement posted last week on the EBRD's website, the bank said that the loan agreement had been valid for five years but "*conditions for disbursement were not met.*"¹⁴

When it comes to funding IFI's provide to the transport sector, on the first sight it may seem that unlike energy, here they provide bigger assistance in projects. This can be explained by the strategic goal of the EU to see the continent of Europe connected in the TEN – T¹⁵ network, hence it is heavily involved the reconstruction and building of Corridors VIII¹⁶ and X¹⁷ in SEE. Hence there is an entire **Sector Operational Programme for Transport 2014–2020 under IPA II for the period of 2014–2020 for Macedonia**. The main identified national policies and strategies in transport are taken from the National Transport Strategy (NTS), which was adopted by the Government in July 2007 determining the national transport development priorities for the period 2007–2017 and is updated every two years. There is a plan

to adopt a new strategy from 2018 as the old one ends in 2017.

The focus of the National Transport Strategy is on the following objectives:

1. Promotion of the economic growth by building, enhancing, managing and maintaining transport services, infrastructure and networks to maximize their efficiency
2. Improvement of the safety of journeys by reducing accidents and enhancing the safety of pedestrians, cyclists, drivers
3. Improvement of integration by making journey planning and ticketing easier and working to insure smooth connection between different modes of transport
4. Protection of the environment and improved health by building and investing in public transport and other types of efficient and sustainable transport which minimize emissions and consumption of resources and energy.
5. Promotion of the social inclusion by connecting distant and disadvantaged communities and increasing the transport network accessibility.

These objectives shall be achieved by:

1. Modernisation and extension of the infrastructures on Corridors X and VIII to enable transport service delivery to be improved both in qualitative and quantitative terms
2. Building modern transport infrastructure and facilities with enhanced safety features that,

¹³

Faktor, <http://faktor.mk/kineskite-kredit-pod-lupa-na-sjo-kako-se-gradat-avtopatite-niz-makedonija/ovoj-infografik-pokazuva-kako-samo-10-kompanii-gi-poseduvaat-site-brendovi-hrana-vo-svetot>, 26.04.2016, accessed on 30.03.2017.

¹⁴

Bankwatch, Destructive hydropower project in Macedonia loses its only source of funding <http://bankwatch.org/news-media/for-journalists/press-releases/destructive-hydropower-project-macedonia-loses-its-only-so>, accessed on 14.03.2017

¹⁵

The **Trans-European Transport Networks (TEN-T)** are a planned set of road, rail, air and water transport networks in the European Union. The TEN-T networks are part of a wider system of Trans-European Networks (TENs), including a telecommunications network (eTEN) and a proposed energy network (TEN-E or Ten-Energy). The European Commission adopted the first action plans on trans-European networks in 1990.^[1] TEN-T envisages coordinated improvements to primary roads, railways, inland waterways, airports, seaports, inland ports and traffic management systems, providing integrated and intermodal long-distance, high-speed routes. A decision to adopt TEN-T was made by the European Parliament and Council in July 1996.^[2] The EU works to promote the networks by a combination of leadership, coordination, issuance of guidelines and funding aspects of development. <https://ec.europa.eu/inea/en/ten-t>

¹⁶

Pan European Corridors https://en.wikipedia.org/wiki/Pan-European_corridors

¹⁷

Ibid.,



together with modern targeted safety awareness campaigns, contribute to safer and more secure transport;

3. Initiation of a public transport operators' forum to address ways to promote better integration between modes and thereby increase public transport patronage by providing easy and convenient ways to use the various modes;

4. More and better opportunities through improving the transport networks, to provide improved mobility for all and provide better access

to goods and services, particularly for those in the rural areas leading to improved social cohesion;

5. Better quality and more transport links that will enable improved access to health centres and facilities.

In this line goes the financing that most of the foreign donors give in the country. The finishing of Corridors X and VIII are mentioned also in the Indicative Strategy Paper of the EU, and they are the main points of the strategic planning of infrastructure projects in Macedonia.

The Indicative Strategy Paper (2014–2020)

The Indicative Strategy Paper (the Strategy Paper) sets out the priorities for EU financial assistance for the period 2014–2020 to support Macedonia on its path to EU accession. It translates the political priorities, set out in the enlargement policy framework, into key areas where financial assistance is most useful to meet the accession criteria. Financial assistance under IPA II pursues the following four specific objectives: (a) support for political reforms, (b) support for economic, social and territorial development, (c) strengthening the ability of the beneficiaries listed in Annex I to fulfil the obligations stemming from Union membership by supporting progressive alignment with, implementation and adoption of, the Union *acquis*, (d) strengthening regional integration and territorial cooperation. Furthermore, the IPA II Regulation states that financial assistance shall mainly address five policy areas: a) reforms in preparation for EU membership and related institution- and capacity-building, b) socio-economic and regional development, c) employment, social policies, education, promotion of gender equality, and human resources development, d) agriculture and rural development, and e) regional and territorial cooperation.¹⁸ As the Operational Programme¹⁹ showed, one of the areas that the EU is heavily financing is public

infrastructure moreover transport network with the focus on Corridors X and VIII. According to this document, the establishment of an integrated transport system will boost economic growth and increase the competitiveness of companies through improving the mobility of people, goods and services, which creates added value and productivity gains, and expands economies of scale and scope. Efficient transport connections promote also social inclusion by connecting distant and disadvantaged communities and by offering a cheaper and more accessible transport network for the citizens. The transport sector in the country contributes by 3.5% to the GDP, which is lower than the EU average level (around 5%²⁰). Hence, the optimisation of the transport system and network in the country has an important potential in terms of wealth creation.

The improvement of the railway infrastructure should furthermore contribute to a reduction in CO₂ emissions. Other types of efficient and sustainable transport which minimize emissions and consumption of resources and energy need also to be promoted through respective economic instruments. This approach can balance the negative consequence of transport on environment, particularly in the context of Paris agreement of December 2015.

¹⁸ The Indicative Strategy Paper for Macedonia, revised version, (2014–2020) (DRAFT), page 2

¹⁹ Sector Operational Programme for Transport, 2014–2020, Macedonia, 4.11.2014

²⁰ EU transport policy https://europa.eu/european-union/topics/transport_en



The results to be achieved include:

- ◉ Improved alignment with and implementation of the EU transport acquis;
- ◉ Strengthened administrative capacity for making and implementation of transport policy
- ◉ Increased mobility of persons, freight and services and improved contribution of transport to GDP
- ◉ Improved rail and road infrastructure systems along the Indicative extension of the TEN-T Comprehensive/Core Network to the Western Balkans
- ◉ Increased cooperation with neighbouring countries on transport issues
- ◉ Reduced CO₂ emissions from transport, reduced air and noise pollution from transport systems
- ◉ Improved road safety.

Reforms will be supported through Twinning, service, supply, works, and grant contracts, implemented under direct and/or indirect management. TAIEX can be employed for *ad hoc* and short-term technical assistance. WBIF and JASPERS can be used to support investment related activities. Regional cooperation and coordination can further

be supported through relevant regional institutions and fora, such as SEETO, and through multi-country IPA assistance such as WBIF.²¹

Greater part of the IFI's assistance in Macedonia, i.e. the bulk of the funds will go to the renovation and building of the railway sector. According to the paper "The condition of the transport and energy sectors in Macedonia, how to accelerate the reform process"²² the following projects have been completed and are planned in the railway sector:

I. CORRIDOR 10 and BRANCH 10 D

Budget: The estimated value is 2.5 million Euros. The project is financed by IPA funds.

II. CORRIDOR – 8 some work is underway for the first section Kumanovo Beljakovce (L=30,8km) where construction works are currently in progress. For the second section Beljakovce-Kriva Palanka (L=39.5km), at the moment there is an ongoing tender procedure for selection of a contractor. For the third section Kriva Palanka-Deve Bair border with Bulgaria (L=23.5km), one has to submit a project first.

Budget: The estimated value is 8 million Euros. The project will be financed by IPA funds.

²¹

The Indicative Strategy Paper for Macedonia, revised version, (2014-2020) (DRAFT), pp. 31-33.

²²

Sonja Risteska, The state of affairs in the transport and energy sectors in Macedonia, how to accelerate the reform processes (in Macedonian), April 2017 <http://www.analyticamk.org/images/2017/transport-i-energetika.pdf>



Planned projects for Corridors 10 and 8²³

IIIa CORRIDOR 10 BRANCH 10 D

IIIa CORRIDOR 10 BRANCH 10 D

Project	Costs	Funding	Comments
SUPPLY AND INSTALLATION OF EQUIPMENT FOR GLOBAL MOBILE COMMUNICATION SYSTEM IN RAIL – GSMR (GSMR) (so called RADIO MANAGER) along the corridor 10 (TABANOVCE–Gevgelija) and PURCHASE AND INSTALLATION OF EQUIPMENT FOR THE EUROPEAN SYSTEM FOR TRAIN CONTROL – ETCS (ETCS) (so called automatic regulation of the speed of trains) along the Corridor 10 (TABANOVCE–GEVGELIJA).	6 million Euros	IPA FUNDS	On going
PREPARATION OF THE PROJECT DOCUMENTATION FOR RECONSTRUCTION AND REHABILITATION OF CONSTRUCTION WORK AND SUPERVISION OF RAILWAY section Veles–Bitola as part of Branch 10 D of Corridor 10	1.5 million Euros	IPA FUNDS	On going
Preparation of project studies and project documentation for railway sections along Corridor 10 and branch 10 D (Kumanovo – Deljadrovce, Dracevo – Veles)			Within this, the project documentation for railway sections along the Corridor 10 should be prepared. The prepared documentation will be the basis for future investments in the improvement of railway infrastructure.
Fast track Tabanovce – Gevgelija, min speed 160 km/ hour	1,000,000,000.00 Euros for the entire project	China	The project is an idea still and should be financed by the Chinese government for which Serbia and Hungary have already signed a contract with China for the section Belgrade–Budapest.

²³

Sonja Risteska, The state of affairs in the transport and energy sectors in Macedonia, how to accelerate the reform processes (in Macedonian), April 2017 <http://www.analyticamk.org/images/2017/transport-i-energetika.pdf>



<p>Preparation of main projects and other necessary technical documentation for the construction and supervision of the new railway line of branches to the industrial zones and to the airport Alexander the Great.</p> <ul style="list-style-type: none">- branch Miladionvci from the train station to the Alexander the Great airport;- branch Miladionvci from the train station to the technological industrial development zone Bunardzik;- branch from the train station Stip to the technological industrial development zone Stip;- branch from the train station Tetovo to the technological industrial development zone Tetovo.	Still just a plan	
<p>Solar railway stations. Energy efficiency modernization of railway stations and facilities on the Corridor 10.10D and Corridor 8</p>	IPA FUNDS	Still just a plan

Source: Macedonian Railways



IIIb CORRIDOR 8

IIIb CORRIDOR 8

Project	Costs	Funding	Comments
PREPARATION OF PROJECT DOCUMENTATION FOR RECONSTRUCTION AND REHABILITATION FOR THE CONSTRUCTION WORK AND SUPERVISION of railway Skopje-Kicevo AS PART OF CORRIDOR 8.	is 1.5 million Euros	IPA FUNDS	On going
CONSTRUCTION OF NEW AND RECONSTRUCTION OF EXISTING SECTION Beljakovce-Kriva Palanka L=39.5km	147.5 million Euros	EBRD	The Obermaer company from Austria developed the project. At this point there is an ongoing tender procedure for selection of contractor
CONSTRUCTION OF A NEW LINE: Kriva Palanka-Deve Bair border with Bulgaria L=23.5km.	340, 5 Euros	EBRD, IPA, EIB and other plans	Planning phase
PREPARATION OF PROJECT DOCUMENTATION FOR RECONSTRUCTION AND REHABILITATION FOR CONSTRUCTION WORK AND SUPERVISION of the railway Skopje-Kicevo as part of Corridor 8.	1.5 million Euros	IPA FUNDS	On going
PROJECT: PREPARATION ON MAIN PROJECT DOCUMENTATION AND OTHER REQUIRED DOCUMENTATION FOR THE CONSTRUCTION AND SUPERVISION OF A NEW RAILWAY SECTION Kicevo-Lin-Albanian border as part of Corridor 8.	8 million Euros	IPA FUNDS	Main project documentation for a new single-lined electrified railway line will be prepared within this project, from the existing railway station in Kicevo to the Albanian border, according to the existing Feasibility Study, the preliminary design and the Elaborate for the environmental impact assessment in accordance with EU's best practices. Also, one will prepare and complete the documentation for the preparation of the tender documentation for the construction works and supervision of the construction works.

Source: Macedonian Railways



Unfortunately, the above mentioned priorities of financing show that the country has no main goal of greening the transport sector and especially the urban transport sector for the time being. However with transport contributing 12% of all emissions in the country in 2010, and with signing of the Paris Agreement this must change. It is pertinent to focus, in the new strategy, on modal shifts in the transport, as well as shifting from passenger cars to other modes of transporting people and to focus on using especially the railways in transport of goods.

Most of the priorities in infrastructure in Macedonia are mentioned in the main strategies for transport/energy/etc. The quality of these strategies and the percentage of projects implemented is not measured. There are no standardised measurements of how, through the project action plans, the strategies are really implemented. There is also no standardised procedure for involvement of civil society, even though Macedonia has ratified

the Aarhus convention.²⁴ Apart from that, the EU has its own priorities in the transport sector such as the development of the TEN-T Network on the continent of Europe which means investments in highways and motorways and not so much in urban transport. The issue with this policy is that most of the pollution from transport actually happens in the urban areas where there is no properly developed public and/or alternative transport network and the reliance on passenger vehicles with low Euro standards is too high. However, due to the strategic policies of the EU, the funds in the whole region of SEE, including Macedonia have been focused on to development of road and railways (lately in the rail sector), leaving the urban transport underdeveloped as municipalities grapple with having no interest, money and insufficient human capacities to green the urban transport. What was stated above about the priorities needs to change if the EU wants to see actual lowering of the emissions from transport in the region of SEE.

24

The Aarhus Convention establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective. The Convention provides for:

- the right of everyone to receive environmental information that is held by public authorities (“access to environmental information”). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. Applicants are entitled to obtain this information within one month of the request and without having to say why they require it. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession;
- the right to participate in environmental decision-making. Arrangements are to be made by public authorities to enable the public affected and environmental non-governmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it (“public participation in environmental decision-making”);
- the right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general (“access to justice”).

(Information gathered from European Commission – Environment <http://ec.europa.eu/environment/aarhus/>, accessed on 30.03.2016).



The role of civil society

From the formal point of view, civil society as well as the general public is informed and involved when projects of national importance are being designed. However, the practice shows different situation. In the next section, where the bad practices are discussed, we will show how the systematic exclusion of CSOs occur, thus neglecting their opinions and recommendations on the selection of projects that will be financed and implemented.

Analytica, in its previous research on transparent financial operating of the energy sector, came to the conclusion that the civil society is in many cases left out of the decision making processes in this capital intensive sector. “The study showed and confirmed the hypothesis that the state-owned institutions and companies are very closed off in terms of public relations, sharing of information and data. This is the case especially in the financial segment, where transparency and accountability are more the exception than the rule in their work.”²⁵

In addition, the research by the Center for Research and Policy Making from Skopje within the project: *Advocacy for open government, supporting the right to know in South East Europe*, came to the following conclusions: “... all challenges Macedonia faces in the chain of good governance contribute to the ineffective policies for public engagement and the reason for non-participation of citizens in the public consultations. The participation in the policymaking is only useful if it is institutionalized and structured, regardless in which stage of the policy making process that will occur. Also, there should be well-defined mechanisms for how to access the stakeholders, how to note their feedback and how they should be processed further. There must be clear guidelines for all citizens and stakeholders on how to give their

comments and advice, and clear guidelines on how the institutions will process their feedback in order to achieve the real objective of good governance. However, even when there is systematized and formalized consultation process and opportunities for the public to be involved, it should not be limited only to commenting on draft laws. At the same time, the focus must be placed on enhanced cooperation with CSOs. They would be extremely useful in the policy making process, partly due to the experience that they have, and partly because of the close contact with citizens. The manner in which consultations are done in Macedonia, where the favour is on civil society organizations that operate in Skopje, compared with other organizations and citizens in the country, is one of the main challenges of the existing procedures. Besides these procedures, the main challenge in the participatory policy is that there are no legal means to incorporate the recommendations of the citizens and CSOs into the final decisions of the governments.”²⁶

Usually the foreign donors and the EU especially always underline the importance of civil society in the creation of policies in the countries of SEE. For instance, the final declaration by the Chair of the Vienna Western Balkans Summit states: “... the participating States welcome the holding of a civil society segment in the margins of the Summit and the substantial civil society contributions which were made on main topics of the Summit. It is a voice which needs to be nurtured and present in the EU integration process of the Western Balkan countries. The participants welcome the proposal to make civil society an additional important element of the Berlin Process.”²⁷

However, what the exact role of civil society would be and if there will be any role for it in shaping

²⁵

Sonja Risteska, *The road to financial transparency and accountability of the institutions and companies in the energy sector in the Republic of Macedonia*, Analytica think tank, February 2015, page 68. http://analyticamk.org/images/Files/Reports/Transparency-FINAL_en_07d1c.pdf

²⁶

Qendresa Sulejmani, *Public Participation: People's government, from the people to the people*, Center for Research and Policy Making, Skopje, Macedonia, December 2015. <http://www.crpm.org.mk/wp-content/uploads/2015/12/Analiza-36-mk.pdf>

²⁷

Final declaration by the Chair of the Vienna Western Balkans Summit, 27.08.2015. https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/pdf/policy-highlights/regional-cooperation/20150828_chairmans_conclusions_western_balkans_summit.pdf, accessed on 30.03.2017



and influencing proposals for public infrastructure based on the needs of each specific country was not mentioned. Even-though declaratively the importance of civil society organisations is always confirmed by the EU and the Western Balkan countries, there is no substantial involvement by

their side into shaping the infrastructure future of their countries, i.e. there is no standardized way for including CSOs opinions into the public policy process creation in the Western Balkans.

Case studies – good and bad practices of public infrastructure

Bad practice – TPP Oslomej

Energy infrastructure in the region has suffered from underinvestment for more than two decades, and huge investment sums are claimed to be necessary. Recent estimates from the countries participating in the Energy Community put the figure at EUR 28.8 billion by 2020 for the Western Balkans together with Moldova, which represents an increase in electricity generation capacity by approximately 64 percent from 2009. This figure is based on energy demand growth predictions that seem overstated given the economic context and the potential for energy efficiency and demand management. However, no reasonable up-to-date analysis of the real needs is available ²⁸

TPP Oslomej is the second thermal power plant according to its installed capacity in Macedonia (REK Bitola is the first), which once accounted for approximately 10% of the total domestic production of electricity. Oslomej consists of one block with a total installed capacity of 125 MW, which started operations in 1980. This TPP is currently using as a primary fuel the remaining quantities from the local lignite mine Oslomej – West (Kicevo basin) with an average calorific value of 7600 kJ / kg, with a specific fuel consumption of 1,5 kg/kWh and additional specific consumption of oil from 2,16 gr /Wh.

Due to emptying of the existing stocks of coal, as well as serious obstacles resulting from the socio – cultural environment in terms of exploration of the site Popovjani (Kicevo Basin, with exploitation

reserves 9,000,000 tons), this power plant is facing a uncertainty regarding the supply of fuel. In order to extend the life of TEC Oslomej, ELEM hired consultants in 2015 who prepared a feasibility study for the plant modernization, study which recommends the use of imported coal with higher calorific value. The strategic objective is precisely determining the current state of Oslomej to extend the life of the plant in accordance with the national and EU environmental requirements while providing long-term and sustainable supply of coal.

The objectives of the project should cover the following aspects:

- extending the life of Oslomej for at least 30 years;
- providing fuel for work, including market research;
- compliance with EU directives (IED Directive 2010/75 / EU) and providing the highest standards regarding environmental protection with the reduction of emissions of CO₂, SO_x, NO_x and dust in accordance with permissible emissions in the EU by 2016;
- use of best available technology (BAT).²⁹

Last October 2016, there was a public debate on this issue, for which an official request was sent to ELEM by Analytica and there was no answer to the

²⁸ Pippa Gallop, 2013

²⁹ Ad ELEM, TPP Oslomej, accessed on 20.03.2017. http://elem.com.mk/index.php?option=com_content&view=article&id=122&Itemid=151&lang=mk



question who was invited and who were the present stakeholders. According to ELEM: “a Feasibility Study was prepared for the modernization of the TPP using imported coal with high calorific value but also the option for usage of low calorific value coal from local deposits around Oslomej was considered. With this project there will be a solid balanced domestic production capacity, affordable electricity, independent of negative and turbulent movements of shares and changes in the global energy market and it also will extend the life of Oslomej for an additional 30 years. It increases the efficiency of the unit and reduces the emissions of SO_x, NO_x and dust emissions in accordance to the limit of emissions set by the European Union. The modernization envisages replacing the old boiler with a new, designed for burning coal with higher calorific value and consumption of approximately 350,000 tons per year, automation block and revitalization of the generator, wastewater treatment and installation of new equipment to reduce emissions in accordance with the applicable European directives.³⁰ The total investment for revitalizing Oslomej according to the Feasibility Study is estimated at 126 million Euros.”³¹

The feasibility study estimated that the sites with lignite in Macedonia are minor, hence why it suggests importing coal from Russia, Ukraine or Poland which would be transported by rail or waterway. The Thessaloniki Port in Greece was said to be the most economically viable port. “According to the document it is envisaged that the domestic low calorific lignite deposits, which have been used in the past for the operation of the installation, be replaced by high-calorific bituminous imported coal. Further modernization of Oslomej includes:

- Replacing the old boiler with a new one which will be the type CFB- Circulated Fluidized Bed (designed for burning imported coal with higher calorific value and consumption of approximately 350,000 tons/year);

- Modernization of all three (3) parts from the turbine;
- Automation of the block and the revitalization of the generator;
- Auxiliary equipment for handling coal;
- Wastewater treatment;
- Equipment to reduce emissions in line with the new European regulations and LCP Directive.

Access to fuel for Oslomej is through the closest ports, which meet the requirements and capacity needs for the required quantities of coal. Further transport of the fuel from the ports to the plant is possible by road transport and rail transport. In addition, it is necessary to build or adapt the conditions for unloading, handling and storage of coal reserves.

Delivery of coal to Oslomej from the global coal markets is divided into three steps:

- a) Import of coal to the nearest port with the included procedures for unloading and storage;
- b) Transport by road to the facilities for unloading in TPP Oslomej;
- c) Admission and keeping the fuel in TPP Oslomej.”^{32 33}

According to Aleksandra Bujaroska, environmental lawyer from Macedonia, the TPP Oslomej project has all the preconditions for bad infrastructure project. The main problem is that there are almost no consultations with the public on the strategic level – when proper assessment of the cumulative impact can be conducted. It is important to defy general directions and principles of the national electricity development goals (for example decarbonisation or coal future) before project ideas are turned into a development projects.

Another issue is that once there is a proposed project (in process of permitting), it is very

³⁰ ad ELEM (link in Macedonian), http://www.elem.com.mk/index.php?option=com_content&view=article&id=630%3A2016-10-10-08-49-12&catid=1%3Alatest-news&Itemid=125&lang=mk

³¹ Sitel TV (link in Macedonian), <http://sitel.com.mk/vo-kichevo-javna-rasprava-za-modernizacija-na-tec-oslomej>

³² Study for the environmental impact assessment and socio-economic assessment (ESIA) of the project Modernisation of TPP Oslomej, (link in Macedonian) <http://www.moep.gov.mk/wp-content/uploads/2014/10/ESIA-TEC-Oslomej1draft.pdf>

³³ The whole document was published on Analytrica’s webpage in January 2017. Sonja Risteska, Macedonia is not giving up coal – http://www.analyticamk.org/images/Files/Commentary/2017/comm1701-en_773b2.pdf



difficult for the civil society and others to revised or stop the project. Authorities often include the public in the procedures to “stage” the legitimacy of an (already adopted) decision. The Aarhus Convention demands, to have meaningful – real – and effective public participation procedure before any decision take place. Unfortunately, when it comes to energy projects or strategies this is not the case. The public was absolutely excluded from the discussions regarding the “modernization” of TPP Oslomej. The provisions of the Law for environment were breached in the environmental impact assessment (EIA) procedure for the project. Complaint against the Ministry of Environment and Physical Planning (MEPP) regarding this breach was submitted and decision for approval of the project is the pending. The complaint is submitted to the State Administrative Commission for complains. According to the Law on Environment, the MEPP is obliged to organise wide consultations for the EIA of the project.

This project is mentioned in the Strategy for Energy from 2010, but there it states that the power plant might operate with local coal (lignite) or on imported gas, however the import of coal option was not

introduced in the strategy. The project does not have a clear and realistic economic picture as there is no cost–benefit analysis, taking into account all aspects of producing energy with imported coal, not mentioning the emissions and Macedonia’s obligations within the Energy Community, EU accession and the Paris agreement into cutting them. It is also not transparent who is behind this project and where the state will get the planned 126 million Euros for its implementation. According to Ms. Bujaroska, no document related to the finances of this project is publicly available. The same goes for any cost–benefit analysis of the project.³⁴

Instead of investing funds where they are mostly needed, they end up in projects that have direct consequences (pollution for instance) and make no profit and cost the state. The conclusion is that when it comes to public participation in the consultations process for public infrastructure projects of importance for the whole country, the authorities do their best to keep it on minimum or just to tick the box in the law where it says that they included the public. Usually this is done so the bare minimum of public participation is allowed without it having any meaningful impact on the projects.

Bad practice – Corrdior 10, highway Demir Kapija – Smokvica

Corrdior X is a Pan–European corridor running from Salzburg Austria, through Macedonia, to Thessaloniki Greece.. It is financed through the Regional Development Programme, which is actually the third component of the pre–accession Funds for Macedonia. The European Union participates in the realization of the construction of part of Corridor X, the highway between Demir Kapija and Smokvica with a grant of 45 million Euros. According to the Macedonian Government: “... The project for construction of the Corridor 10 highway, section Demir Kapija – Smokvica, is a project that foresees the construction of a new, modern highway section from Demir Kapija to Smokvica with a length of 28.18 km and in accordance with European standards, thus completing the main axis of Corridor 10 crossing the Republic of Macedonia. Due to the complexity of the

terrain for construction works, this project has been assessed as very complex, involving construction of bridges, tunnels, overpasses and road nodes.

Corridor 10 is the most important element of the central transport network connecting the Hellenic Republic and Austria. Its length is 1,451 km. The total investment for construction of this section is 271 million Euros, 130 out of which have been allocated by the European Investment bank, 45 are an IPA grant of the European Union, and 107 million Euros have been allocated by the European Bank for Research and Development and 6 million Euros from the Budget of the Republic of Macedonia. The construction of the Demir Kapija – Smokvica section will finalize the construction of Corridor 10 at the level of highway.³⁵

³⁴

Interview with environmental lawyer Aleksandra Bujaroska, conducted on 22.03.2017.

³⁵

Government of RM, Construction of Corridor 10: Demir Kapija – Smokvica <http://vlada.mk/node/301?language=en-gb>, accessed on 20.03.2017



There were two major issues with this project. One was the alleged corruption case of the company responsible for implementation of the project and the other was the issue with the environmental impact assessment of the project. Both are extensively discussed in the paper “Scrutiny over the European mechanisms against corruption and environmental protection in Macedonia. Case Corridor X, written by Ana Colovic Leshoska, Stojan Leshoski, Vesna Ilievska Utevska, Eko-svest.³⁶

Regarding the corruption case, the contract for the construction work was signed in August 2012 in the amount of 210,148,177.33 Euros and will end in August 2016. The duration of the construction contract is 4 years not including the 2 year period to detect defects along the route. The project is co-financed by funds of the European Union through the IPA assistance and national participation through loans from the European Bank for Reconstruction and Development and the European Investment Bank. Construction work is performed by the company AKTOR S.A. Greece.³⁷ However by the time this report has been finished the highway has still not been completed.

According to Eko-svest there is alleged corruption in this case and the chronology of the events that happened during construction that goes in line of that claim is:

- March–August 2013 large amounts of funds are withdrawn from the bank in Negotino by Greek citizens from their accounts paid by the subsidiary of Aktor in Skopje. The bank notified the Unit for Financial Intelligence about the withdrawn money;
- November 11, 2013 the Unit launched an investigation;
- March 13, 2014 The Prosecutor’s Office opened pre-trial proceedings and blocked a the property and accounts of two companies owned by Aktor;
- April 1, 2014 The media report about the case of construction of the highway;
- April 23, 2014 the accounts of Aktor are unblocked after the statement by the prosecutor that the case has a low level of substantiation;
- April 23, 2014 media reports that the work on the highway has started and that there are planned new 350 hirings.³⁸

There is a case in Greece against the company Aktor which is ongoing, but in Macedonia as stated in the report by Eko-svest such thing did not happen³⁹.

36

Ana Colovic Leshoska, Stojan Leshoski, Vesna Ilievska Utevska, Scrutiny over the European mechanisms against corruption and environmental protection in Macedonia. Case Corridor X, Eko svest, 2015, <http://ekosvest.com.mk/images/publikacii/Demirkapija.pdf>

37

Finishing the Corrdior 10 on the level of highway Demir Kapija – Smokvica (Доизградба на Коридор 10 на ниво на автопатска делница Демир Капија – Смоквица); <http://cfcd.finance.gov.mk/?projects=construction-of-new-motorway-section-demir-kapija-smokvica-as-part-of-the-pan-european-corridor-x&lang=mk>, accessed on 20.03.2017

38

Eko-svest, 2015

39

Allegedly according to Macedonian media, in June 2017, the European Anti-Fraud Office (OLAF) has charged the Greek company “Aktor” for fraud and laundering 50 million Euros in connection with the construction of a highway Demir Kapija – Smokvica, reported Greek media outlets “Protothema” and “Kathimerini”. The case found itself under scrutiny by the public prosecutor after evidence was collected by OLAF. Source: Meta.mk, <http://meta.mk/en/greek-company-aktor-fined-50-million-euros-for-money-laundering-for-demir-kapija-smokvica/>, accessed on 30.06.2017



Good practice – Wind park Bogdanci

The only positive example of implemented projects is the Wind Park Bogdanci. The wind park is the first one in Macedonia. According to the JSC “Macedonian Power Plants”: “The erecting and construction of the wind turbines on the location Ranavec was finalized as of 20th of February when the most complex part of the 76 day construction officially was concluded. By the end of March 2014th in a coordinated operation of the three power companies, ELEM, MEPSO and EVN – Macedonia, the WPB was connected to the power grid through the Valandovo substation. With this procedure all preconditions for the test of the entire equipment were fulfilled and the test production of electrical energy started by the beginning of April when the first kWh were delivered to the Macedonian power grid...The turbines are product of Siemens – Denmark and are considered among the best of their class. The installed capacity of each turbine is 2.3 MW, the height of the pole is 80 meters and the diameter of the rotor blade is 93 meters. WP „Bogdanci” is expected to deliver at least 100 GWh renewable energy, sufficient for households of more than 60.000 people in RM annually. Simultaneously, they will increase the installed capacity for 36,8 MW.⁴⁰

According to the main funder the German KfW Development Bank, they funded the following actions:

- Installation of 16 wind turbines with a combined capacity of 36.8 MW.
- Setting up the necessary infrastructure to connect the wind farm (construction of a 5.5 km long 110 kV transmission line, a substation and access roads).

On behalf of the German Federal Government, KfW made an amount of EUR 48 million available – about 80 % of the total costs. The Bogdanci wind farm reaches an annual production of about 100 GWh. This means that 25,000 households or a larger Macedonian city can be supplied with electrical energy.⁴¹

This project was finished in record 18 months, it goes into line of promotion of renewable energy production, it costs 3 times less than the planned renovation of the TPP Oslomej (hence for 126 million Euros the country can build 3 wind parks), and it does not pollute or endanger the environment. It is also not built on a protected land, it does not use agricultural products and precious water resources and at the same time it provides electricity for 25,000 households. Hence, the project is an example of what kind of activities should be pursued in the future, decarbonised, smaller scale, with the protection of the resources in mind, in line with EU and UN goals of lowering emissions, however in line also with stable home production of electricity.

⁴⁰

ELEM, Wind Power http://www.elem.com.mk/index.php?option=com_content&view=article&id=361&Itemid=153&lang=en

⁴¹

KfW Development Bank, Project Information https://www.kfw-entwicklungsbank.de/PDF/Entwicklungsfinanzierung/L%C3%A4nder-und-Programme/Europa/Projektinformation_Mazedonien_Windpark_EN.pdf



Conclusions and recommendations

The analysis in this document shows that there are many open questions in regards to how public infrastructure projects are realized in Macedonia. Focus of the analysis are the trends in public infrastructure projects, more specifically public financial flows for infrastructure – who are the main players, the role of civil society in the decision-making process on public infrastructure and putting forward other proposals for public infrastructure based on needs, as well as three case studies, which provided an overview of different cases from Macedonia in relation to public funding for public infrastructure, upon which conclusions and recommendations were made on the type of infrastructure that is needed, and what are the conditions that should be met.

Having in mind all the above presented, one can conclude that there is a direct need for a wider definition of the Aarhus Convention and establishing good practices in regards to civil society involvement in the realization of public infrastructure projects. The current situation reveals that the Government, mostly by itself and mainly excluding the rest of the relevant stakeholders, decides where it will invest and for what projects it will ask money from the IFIs. The involvement of other stakeholders is random, not clear enough and sometimes completely insufficient, hence the problems that arise from such

poorly conducted projects. The main focus remains on heavy infrastructure projects such as highways and coal or big hydro power plants. Even though the country is a EU candidate country and signatory of the Paris Agreement, the focus has not yet shifted to greening and decarbonising the two heavily emission emitting sectors: energy and transport. The main strategies are outdated and there is a discrepancy between what the EU's strategies are in these sectors and what they are financing in South East Europe. There is lack of coordination between donors, civil society and the Government into what the real priorities for financing in public infrastructure in Macedonia are and hence these channels of communication need improvement.

The analysis had the intention to give a general picture about public infrastructure projects in Macedonia which provides further opportunity to perform more concentrated analyzes on the identified problems. The final part of the study portrays the recommendations that state institutions and the IFI's should take into consideration in order to realise better, safer, greener and more environmentally friendly public infrastructure projects. The recommendations are not final, but further additional analysis can be conducted on their basis or on the basis of each identified problem for each stakeholder separately.



Recommendations related to the International financial institutions:

1. Urgently adopt the missing strategies in transport and energy sector.
2. Meaningfully and broadly include all relevant stakeholders while preparing the strategies and actions plans.
3. Include the civil society recommendations into the strategies.
4. Focus on de-carbonising the transport and energy sector with the goal of lowering the emissions for up to 80% in 2050 following EU's policies and own obligations taken under the Paris Agreement.
5. The Parliament urgently needs to adopt the Paris Agreement and no capital intensive public infrastructure projects should be realized until that takes place.
6. Coordinate the transport and energy strategies having in mind the de-carbonisation of the whole country in which priority will have public infrastructure projects which are green and sustainable.
7. Put a hold on public infrastructure projects connected to coal power plants.
8. Regulators need to have a better understanding of the investment channels for infrastructure investment and related risks in order to calibrate the risk-based regulatory frameworks adequately to the risks of such investments.⁴²



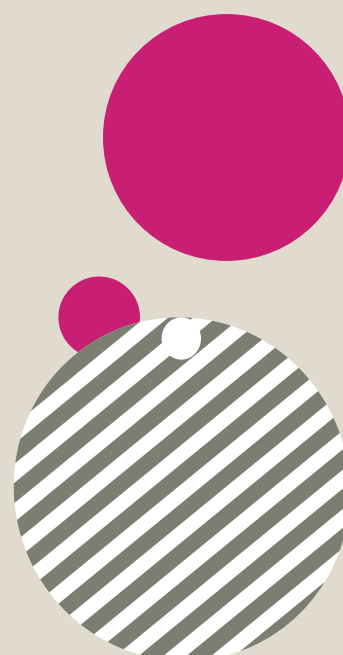
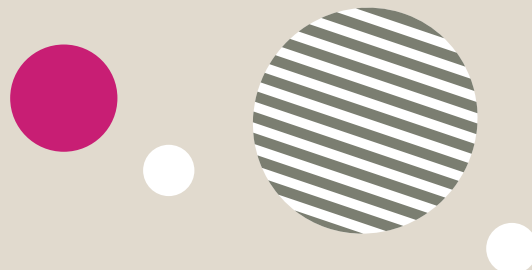
⁴²

OECD (2015): Infrastructure Financing Instruments and Incentives, <http://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>



Sources:

1. Bojana Mijovic Hristovska, Tamara Mijovic Spasova, Macro analysis, Case study Macedonia, Skopje 2016, http://analyticamk.org/images/Files/Reports/Macro_analysis_of_public_finances_in_SEE_6f24c.pdf
2. BBC, The importance of infrastructure investment, <http://www.bbc.com/news/business-11642433>, accessed on 30.03.2017.
3. OECD, Integrity Framework for Public Infrastructure, <https://www.oecd.org/corruption/ethics/Integrity-Framework-For-Public-Infrastructure-Brochure.pdf>
4. OECD (2015): Infrastructure Financing Instruments and Incentives, <http://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf>
5. Western Balkans Investment Framework, <https://www.wbif.eu/home>
6. Pippa Gallop, SEE SEP, Invest in Haste, Repent in Leiusre, Red Flag Report, June 2013, <http://www.analyticamk.org/images/stories/files/seesep-final-webR.pdf>
7. On-going projects financed by German Development Bank – KfW, March 2016, <http://finance.gov.mk/files/u252/KfW%20proekti-en.pdf>
8. Faktor, <http://faktor.mk/kineskite-kredit-i-pod-lupa-na-sjo-kako-se-gradat-avtopatite-niz-makedonija/ovoj-infografik-pokazuva-kako-samo-10-kompanii-gi-poseduvaat-site-brendovi-hrana-vo-svetot,26.04.2016>
9. Bankwatch, Destructive hydropower project in Macedonia loses its only source of funding <http://bankwatch.org/news-media/for-journalists/press-releases/destructive-hydropower-project-macedonia-loses-its-only-so>
10. Pan European Corridors https://en.wikipedia.org/wiki/Pan-European_corridors
11. The Indicative Strategy Paper for Macedonia, revised version, (2014-2020) (DRAFT)
12. EU transport policy https://europa.eu/european-union/topics/transport_en





13. Sonja Risteska, The state of affairs in the transport and energy sectors in Macedonia, how to accelerate the reform processes (in Macedonian), April 2017

<http://www.analyticamk.org/images/2017/transport-i-energetika.pdf>

14. European Commission – Environment <http://ec.europa.eu/environment/aarhus/>, accessed on 30.03.2016).

15. Sonja Risteska, The road to financial transparency and accountability of the institutions and companies in the energy sector in the Republic of Macedonia, Analytica think tank, February 2015, page 68.

http://analyticamk.org/images/Files/Reports/Transparency-FINAL_en_07d1c.pdf

16. Qendresa Sulejmani, Public Participation: People's government, from the people to the people, Center for Research and Policy Making, Skopje, Macedonia, December 2015.

<http://www.crpm.org.mk/wp-content/uploads/2015/12/Analiza-36-mk.pdf>

17. Final declaration by the Chair of the Vienna

Western Balkans Summit, https://ec.europa.eu/neighborhood-enlargement/sites/near/files/pdf/policy-highlights/regional-cooperation/20150828_chairmans_conclusions_western_balkans_summit.pdf

18. AD ELEM, TPP Oslomej,

http://elem.com.mk/index.php?option=com_content&view=article&id=122&Itemid=151&lang=mk

19. AD ELEM (link in Macedonian),

http://www.elem.com.mk/index.php?option=com_content&view=article&id=630%3A2016-10-10-08-49-12&catid=1%3Alatest-news&Itemid=125&lang=mk

20. Site1 TV (link in Macedonian),

<http://site1.com.mk/vo-kichevo-javna-rasprava-za-modernizacija-na-tec-oslomej>

21. Study for the environmental impact assessment and socio-economic assessment (ESIA) of the project Modernisation of TPP Oslomej, (link in Macedonian)

<http://www.moepp.gov.mk/wp-content/uploads/2014/10/ESIA-TEC-Oslomej1draft.pdf>

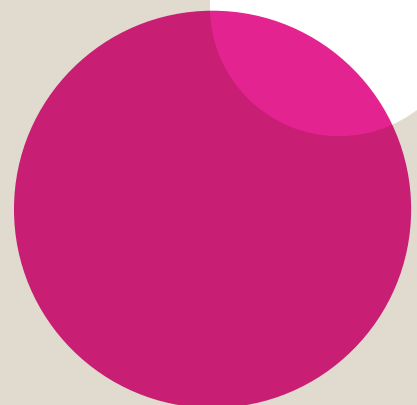
22. Sonja Risteska, Macedonia is not giving up coal

http://www.analyticamk.org/images/Files/Commentary/2017/comm1701-en_773b2.pdf

23. Interview with environmental lawyer Aleksandra Bujaroska, conducted on 22.03.2017.

24. Government of RM, Construction of Corridor 10: Demir Kapija – Smokvica

<http://vlada.mk/node/301?language=en-gb>, accessed on 20.03.2017





25. Ana Colovic Leshoska, Stojan Leshoski, Vesna Ilievska Utevska, Scrutiny over the European mechanisms against corruption and environmental protection in Macedonia. Case Corridor X, Eko svest, 2015, <http://ekosvest.com.mk/images/publikacii/Demirkapija.pdf>

26. Finishing the Corrdior 10 on the level of highway Demir Kapija – Smokvica (Доизградба на Коридор 10 на ниво на автопатска делница Демир Капија – Смоквица); <http://cfd.finance.gov.mk/?projects=construction-of-new-motorway-section-demir-kapija-smokvica-as-part-of-the-pan-european-corridor-x&lang=mk>

27. ELEM, Wind Power http://www.elem.com.mk/index.php?option=com_content&view=article&id=361&Itemid=153&lang=en

28. KFW Development Bank, Project Information https://www.kfw-entwicklungsbank.de/PDF/Entwicklungsfinanzierung/L%C3%A4nder-und-Programme/Europa/Projektinformation_Mazedonien_Windpark_EN.pdf

29. Alfredo Marvão Pereira and Jorge M. Andraz, On the economic effects of public infrastructure investment: A survey of the international evidence, College of William and Mary, Department of Economics, Working Paper Number 108, July 2013, http://economics.wm.edu/wp/cwm_wp108rev1.pdf

30. Meta.mk, Greek company “Aktor” charged for laundering 50 million euros for Demir Kapija – Smokvica highway, <http://meta.mk/en/greek-company-aktor-fined-50-million-euros-for-money-laundering-for-demir-kapija-smokvica/>

