

Analysis on Public Infrastructure Slovenia



CREDITS

Authors:

Lidija Živčić, Project Coordinator, Focus (lidija@focus.si)

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



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1. OVERVIEW OF THE TRENDS IN PUBLIC INFRASTRUCTURE PROJECTS

1.1. Definition of public infrastructure

Objects or networks that are used for public services or economic infrastructure which have been identified as public by law or degree, as well as all other objects and networks in general use, are considered as public infrastructure in Slovenia¹. In practice, this means the following: transport infrastructure (roads, railroads, airports, harbors), energy infrastructure (transfer and distribution infrastructure for electricity, gas, heat or oil), communal infrastructure (water lines, canalization, waste disposal sites), water infrastructure, infrastructure for management of natural resources or environmental protection and other public objects (communication infrastructure)².

1.2. Recent trends and public financial flows for infrastructure

Slovenia is currently planning several projects of common interest including the reinforcement of the electricity transfer interconnection between Slovenia, Croatia and Hungary and interconnection between Slovenia and Italy; development of gas transfer interconnections between Hungary and Slovenia and between Croatia, Slovenia and Austria³. Apart from those, the most visible public infrastructure projects that Slovenia is currently planning are⁴: second line of the Karavanke tunnel, second rail on Divača-Koper section, third development axis (fast road/highway Koroška-Dolenjska), Koper Harbor expansion, expansion of access roads in Ljubljana, second block in Nuclear Power Plant Krško and new hydro power plants on the Sava River. Majority of the listed projects is planned to be financed from EU funds in combination with Slovenian funds, but there are also several projects that are looking into the direction of PPPs (e.g. second rail Divača-Koper).

Seznam investicijskih projektov v RS2015.pdf

¹ http://company.kaliopa.si/kaliopa/index.php/gospodarksa-infrastruktura

² http://company.kaliopa.si/kaliopa/index.php/gospodarksa-infrastruktura

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:JOL_2016_019_R_0001&from=EN

⁴ http://www.mzi.gov.si/fileadmin/mzi.gov.si/pageuploads/Kabinet ministra/15 10 13-



1.3. The role of civil society in decision-making on public infrastructure

The civil society is active in the field of planning of public infrastructure, one of the most visible initiatives being the so-called Plan B. Plan B is a network of Slovenian environmental non-governmental organizations (NGOs) and experts, forming a broad civil society platform for sustainable development in Slovenia, along with other interested stakeholders⁵. The first alternative proposal of Plan B⁶ was made in 2007, as an answer to the governmental Plan A, the Resolution on National Development Projects for the period 2007-2030⁷, which the government passed in 2006. Responding to the non-inclusive and nontransparent process of the government, which identified construction of business zones, artificial island, additional highways and new blocks of coal and nuclear power plants as some of the prioritised infrastructure projects, Plan B proposed projects that would have wider societal benefits than the ones listed in the Plan A: development of renewables use and infrastructure, better public transport, sustainable freight transport, waste water treatment in small settlements and in urban areas. In 2010 Plan B launched a set of new proposals, Plan B 2.0,8 followed by Plan B 4.09 in 2012, which was meant as an input from the civil society in the process of preparing the Development strategy of Slovenia for the period 2014-2020. In 2015 the initiative organised a discussion on large infrastructure projects, resulting in proposals and recommendations to the government¹⁰. Some of the alternative proposals found way into the official plans, but not in the field of public infrastructure (e.g. proposal on wood processing chain was adopted as a national priority). There the plans are mainly done by interest groups and lobbies that influence the government (e.g. second rail line Divača-Koper was the most often topic of lobby meetings in 2016¹¹). There is an active group of experts and civil society members monitoring the project of second line Divača-Koper, ¹² just like there was an active civil society network monitoring ¹³ the TEŠ6 project (6th block in Šoštanj coal power plant). However, in the case of TEŠ6 project, the civil society was not listened to and already now the scenarios about generating huge losses and not being economically viable that the civil society were predicting¹⁴ are being materialized.¹⁵

⁵ http://www.planbzaslovenijo.si/english

⁶ http://www.planbzaslovenijo.si/upload/dokumenti/2007/plan%20b%201.0-povzetek-ang.pdf

⁷ http://www.slovenijajutri.gov.si/uploads/tx publikacije/061127 resolucija.pdf

⁸ http://www.planbzaslovenijo.si/upload/dokumenti/2010/zbornik-plan-b-2.0.pdf

⁹ http://www.planbzaslovenijo.si/upload/SRS/plan-b-zeleni-razvojni-preboj.pdf

¹⁰ http://www.planbzaslovenijo.si/upload/mreza/veliki-projekti-poziv-vladi.pdf

https://www.dnevnik.si/1042765139/slovenija/lobiranje-na-drugi-tir-se-lepijo-kot-muhe-na-med

¹² http://koalicijacivilnedruzbe.si/nadzorni-organ-civilne-druzbe/

¹³ http://www.umanotera.org/kaj-delamo/pretekle-kampanje-projekti/tes-6/

¹⁴ http://focus.si/files/programi/energija/2014/mythbuster.pdf

¹⁵ https://www.dnevnik.si/1042762196



2. CASE STUDIES

	2.1. Second rail Divača-Koper ¹⁶
Name of the project	Building second rail on Divača-Koper section
Location of project	Divača – Koper
Short description	The Divača–Koper section is an integral part of the Trans-European
	Transport Network (TEN-T network). Its main purpose is to provide
	modern and efficient railway link between the cargo port of Koper
	and the rail network in the Republic of Slovenia, and consequently
	also the wider European rail network.
Technical details	27.1 kilometres long route between Divača and Koper descends from
	Divača on the Karst plateau to the coastal area with an altitude of a
	few meters above sea level. Because of the difficult terrain,
	environmental constraints and more than 400 metres of altitude
	difference, the so-called tunnel variant is claimed to be the most
	appropriate, with 75% of the route in tunnels, the longest being 6,714
	metres. The proposed track has different route over much more
	difficult terrain than the existing line.
The benefits of the	Economic benefits: to meet the increasing needs of Port of Koper
project?	for cargo transportation through SL corridors. The purpose of the
	second track of the Divača—Koper railway line is to provide a
	modern and efficient railway link between the cargo port of Koper
	and the rail network in the Republic of Slovenia, and consequently
	also the wider European rail network; finally abolish all limitations
	of throughput and transport capacity of the railway line from Koper
	to the junction in Divača; increase reliability of the operation of the
	railway line from Koper to Divača; increase the level of traffic safety;
	shorten travel times; reduce environmental impacts and risks to the

¹⁶ References: www.drugitir.si, http://www.mzi.gov.si/fileadmin/mzi.gov.si/pageuploads/Kabinet ministra/15 10 13-Seznam_investicijskih_projektov_v_RS2015.pdf, http://www.mladina.si/164616/drugi-tir/,

http://www.delo.si/gospodarstvo/infrastruktura/izdano-je-gradbeno-dovoljenje-za-drugi-tir.html,

http://www.delo.si/mnenja/gostujoce-pero/drugi-tir-pastorek-med-infrastrukturnimi-projekti.html,

http://www.rtvslo.si/okolje/umanotera-proti-drugemu-tiru-zeleznice-divaca-koper/357442,

http://www.rtvslo.si/gospodarstvo/oecd-gradnja-drugega-tira-bo-zgolj-obremenila-davkoplacevalce/373709



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	environment; additionally increase the proportion of cargo
	transported by rail; and enable and increase the use of
	environmentally friendly modes of transport.
The costs of the	In line with the investment programme proposal, which was made in
project?	October 2013, the estimated investment cost of constructing the
	second track between Divača and Koper is EUR 1,289,878,629.00
	(including VAT, fixed prices in April 2013). Up to 1st January 2016,
	some EUR 49.04 million including VAT, i.e. 3.8 % of the estimated
	investment value, was invested in the project and investment
	documentation, geologic and geo-mechanical, hydrological,
	karstological, archaeological and other research, purchases of land
	and compensations, changes of purpose of land, external quality
	control, audits, reviews, supervision etc.
Who is financing the	On the basis of findings that the construction of the second track with
project?	public financial resources, due to other urgent investment projects
project.	which must run in parallel on the road and rail infrastructure, cannot
	be implemented in the period of financial perspective 2014-2020 in
	terms of macro-fiscal consolidations, at the 27th regular session on
	18 March 2015 the Government of the Republic of Slovenia
	-
	appointed an inter-ministerial working group to prepare a set of
	possible forms of public-private partnership. Approximately 300 mio
	will be funded by EU funds. In June 2015 CEF (Connecting Europe
	Facility) declined financing the rail due to lack of private partnership.
	To resolve this problem, the ministry of infrastructure established
	2TDK company which will look for private partners.
Key actors	Investor: Republic of Slovenia, in accordance with the
	aforementioned conclusions of the Government most probably in the
	capacity of public partner and promoter;
	Project designer: SŽ – projektivno podjetje Ljubljana
	Consulting Engineer: DRI upravljanje investicij, Družba za razvoj
	infrastrukture, d.o.o
	International and/or financial institutions: 2TDK will look for private
	partners.
	Key opposing parties (local groups, NGOs): Umanotera: more
	efficient to renovate Slovene railway system than building another,
	, , , , , , , , , , , , , , , , , , ,



	nontransparent; Coalition for sustainable transport policy: not against
	but has to be more transparent; Visible individuals, experts: some
	believe it would be much cheaper to build a track on the existing
	route, some estimate it is too expensive and money could be spent
	more sustainable – to renew the existing rail system in Slovenia.
	There is also a civil initiative FOR second rail: by delaying the
	process Slovenia is losing in competitiveness.
Key problems with	The most problematic environmental aspect of the project is that the
the project?	planned route is located in the vulnerable karst area. The social aspect
	is that only the economy will benefit from the project, not passengers.
	If the new rail will serve only needs of Port of Koper, passenger trains
	will be disadvantaged and have lower speeds. It directly affects
	farmers whose land is on the route - they will be disowned.
	Indirectly, with more cargo arriving in and out of Koper's port, it will
	affect people depending on exports/imports and consumers. The
	proposed route is very demanding and very expensive. Non-
	transparent decision-making and financing of the project.
Alternative	Some believe it would be much cheaper to build a track on the
solutions?	existing route, some think it is to expensive and money could be spent
	more sustainable – to renew the existing rail system in Slovenia.



	2.2. 3 rd development axis ¹⁷
Name of the project	3 rd development axis
Location of project	3 most problematic areas along the planned route: Koroška region, Velenje-Celje region, Novo mesto
Short description	The 3 rd development axis is defined as one of the development priorities of the Republic of Slovenia. It is identified as one of the secondary transport links, which relate to the Mediterranean and the Baltic – Adriatic corridor. 3 rd development axis is the road network in Slovenia from the direction of Koroška region through Slovenj Gradec and Velenje linked to the A1 motorway near Celje, and then proceeds to Novo mesto and towards Karlovac, or link to the Zagreb - Rijeka. The procedure »The Placement of The Third Development Axis« started at the end of year 2004 by the Ministry of Transport. Different levels of regional development imposed integrated planning of spatial measures within the project of third development axis. Since the procedures of placement are of long duration (it has been planned for more than 10 years), the aim of the national infrastructure planning institution is to finish the preparatory procedure of the spatial plan of national importance despite the resistance of the organized public and certain subjects of the spatial placement.
Technical details	3 rd development axis is divided into 3 sections: Northern part (4-lane) will run from the Austrian border to highway A1 Koper-Šentilj (app. 62km), middle section (2-lane) is located between A1 and A2 highway (app. 61km), southern section (4 and 2-lane) is located between Novo

¹⁷ References:

http://www.mzi.gov.si/fileadmin/mzi.gov.si/pageuploads/DC_splosno/Microsoft_Word_-

Modernizacija drzavnega cestnega omrezja na prioritetnih razvojnih oseh.pdf

http://www.mzi.gov.si/fileadmin/mzi.gov.si/pageuploads/javne_objave/2016-Nacionalni_program/nac-program-objava.pdf http://www.mzi.gov.si/fileadmin/mzi.gov.si/pageuploads/Kabinet_ministra/15_10_13-

Seznam_investicijskih_projektov_v_RS2015.pdf

http://www.drc.si/Portals/6/prispevki/I/106-116.pdf

http://cibraslovce.blogspot.si/

http://tretjaos.com/cesta/

http://www.hitronakorosko.si/



The benefits of the project?	mesto and Vinica on Croatian border (app. 79km). Few tunnels are planned. Variant analysis was made for each section. Unfortunately, some already selected variants are not sustainable (too close to settlements, too expensive, running through fertile agricultural areas etc.) and thus create conflicts in some municipalities. Shorter travel time, better connection of Koroška region with the rest of Slovenia. But environmental organizations find the project causing more problems that solving. New roads induce more traffic, more transit and cargo on road, which causes low air quality, higher GHG emissions and destruction of arable land. Some groups also doubt in economic development of the municipalities along the axis. Building the new highway will increase the competitive position of the area located by the development axis, it will promote the accessibility and on the other hand the reinforcement of institutional as well as economic connections. The new highway will also promote the spatial integration outside the present Paneuropean traffic corridors. Of high significance is the fact that due to the better traffic connections the duration of road
	travelling will decrease whereas on one hand the quality of travelling
The easts of the	will improve, on the other hand the traffic safety will be better as well.
The costs of the project?	Northern section: 1,300,000.00€ Southern section: 1,378,000.00€
projecti	Planning/constructing of the middle section and few parts of southern
	section is not a priority and it is postponed after 2022.
Who is financing	The majority will be covered by DARS (state motorway company,
the project?	collecting tolls), DRSI (Slovenian infrastructure agency) and little
Voy actors	Ministry of infrastructure. EU funding will contribute smaller share.
Key actors	DARS Ministry of infrastructure, DRSI
	International and/or financial institutions: EU
	Key opposing parties (local groups, NGOs):
	North section: Civil initiative Braslovče – CIB (group of locals,
	farmers, mayors, experts): against the selected route (F2-2) because it
	is not in line with Slovene transport strategy, it is more expensive
	(has tunnels) than its alternative through Arja vas and would pass fertile arable land.



	South section: Initiative Tretjo os na zahod (group of locals, mayors):
	opposes the route that passes east of city Novo mesto, suggests route
	passing west of city.
	Coalition for sustainable transport policy (experts, NGOs,
	individuals): against building new roads where investments in rail
	and public transport would be more sustainable.
	Other individuals and less active initiatives, also in the middle section
	are also opposing the project.
Key problems with	Slovene transport strategy has two faces: it promotes sustainable
the project?	mobility on the paper but reality and measures show that the focus is
	still on building road infrastructure, supporting old transport paradigm.
	Building infrastructure for motor vehicles is still the measure with the
	largest investment, neglecting public transport, railways and other
	sustainable transport means. Renewal of existing roads maybe better
	solution in some sections. Building 3 rd development axis would
	connect some remote towns with capital and highways but on the other
	hand it would cause many environmental problems: more roads induce
	more traffic and this means more GHG, arable land degradation and
	social / economic problems: unsustainably spent public money,
	indebtedness and the burden on the shoulders of taxpayers. The project
	will affect local people who live in municipalities passed by
	expressway (farmers whose land is on the route, citizens harmed by
	extra noise, pollution etc.), all taxpayers who will pay a burden of
	building roads, also people affected by climate change.
Alternative	Renewal of existing roads maybe better solution in some sections.
solutions?	Renewal of existing and building new railway would be more
NO THE VALUE OF THE PROPERTY O	sustainable measure. CIB proposes another route that would be less
	harmful for agricultural land and proven cheaper. Initiative from Novo
	mesto proposes another route – with less impact on people living near
	the road.
	uio roug.



	2.3. 2 nd block of Nuclear Power Plant Krško ¹⁸
Name of the project	2 nd block of Nuclear Power Plant Krško
Location of project	Vrbina, Municipality of Krško
Short description	Construction of NPP Krško II was first listed in Resolution on national development projects for 2007-2023 in 2006 as a substitute project for project on Sustainable energy and hydrogen economy. The key arguments, with which the project developers justify the construction, are the climate objectives, reducing import dependency and competitive electricity price, which increases competitiveness of Slovene economy. Development analysis of the sector of electricity production shows that in spite of energy efficiency, renewables and thermal power plants it will not be possible to satisfy the growing needs for electricity without a new block of nuclear power. This analysis is clearly refuted by the analysis for National Energy Plan ¹⁹ , which shows that even without a new block Slovenia can export electricity, but the
Technical details	explorations for an additional nuclear block remain active. PWR technology; installed capacity of 1000 MW; annual production between 7,5 and 8,5 TWh; use of combined dry and wet cooling towers; construction between the eastern fence of NPP Krško and river Sava on the south; connected to the existing 400kV switchyard at NPP Krško. A pre-investment analysis was done for several different types of reactors. Focus was put on pressurised water reactors (PWR), mainly because this is a technology which is already present and accepted in Slovenia and there is know-how and experience with this

¹⁸ References: http://www.world-nuclear.org/information-library/country-profiles/countries-o-s/slovenia.aspx,



	tachnology. The solutions for DWD recetor years cought in the newer
	technology. The solutions for PWR reactor were sought in the power
TD1 1 604 641	segment of 1000 MW and 1600 MW or 2x1000 MW.
The benefits of the	Cover the needs of increased consumption of electricity and limit the
project?	dependency on imports while lowering the fossil fuel emissions. Due
	to a competitive price of electricity from such a facility, a
	competitiveness of Slovenian economy will supposedly be increased.
	Another claimed benefit is that the project will not proportionally
	increase the costs due to synergistic effects of already existing NPP
	Krško (experiences, security, maintenance, radioactive waste etc.).
The costs of the	According to the pre-investment analysis, the investment cost is
project?	estimated to be between $1.6 - 2.9$ billion EUR, depending on the size
	of the reactor. However, in later estimations, the investor shows the
	price range of $3-5$ billion EUR, which seems to be more realistic.
	Examples of the energy projects in Slovenia, such as Block 6 of
	Thermal power plant Šoštanj, show, that the cost of the project can
	increase substantially. Greenpeace Slovenia estimated the costs up to
	€ 6 or € 7 billion. From € 10 to € 11 million euros have already been
	spent on the analysis and assessments of all the technologies for
	electricity generation.
Who is financing	It will be state funded and owned. Thus far, no concrete financial plan
the project?	was put forward. The investor company plans to finance the
	construction with its own funds, funds from sales of energy bonds and
	equity capital. It plans to invite partners and co-investors and hence
	establish an investment company, which will manage the NPP after the
	construction. The main risks for the profitability of investment are
	changes in the investment value, sales price of electricity and reduction
	of production. One major public call for selecting the supplier is
	planned. The supplier would be requested not only to supply the
	technologic equipment, but to implement the whole project, from the
	planning and permitting to the construction phase.
Key actors	The existing NPP Krško is divided into two equal business shares
	owned by GEN energija d.o.o. (100 % owned by the state of Slovenia)
	and Hrvatske elektroprivrede d.d. Weather this will be the case with
	the second block remains unclear. In December 2013, representatives
	of US company Westinghause (who build the existing NPP Krško)



held a presentation about the proposed type of nuclear power plant that could be implemented in Krško. From the diplomatic documents leaked by Wikileaks it was evident that the Slovenian president, Borut Pahor, in his meeting with Barack Obama, expressed willingness about allowing the Westinghouse to upgrade the existing block and build the second one. He said this despite the strong competing offer from a French company. Directorate for Energy, Ministry of Economy, Ministry of Finance, Ministry of Environment and Spatial planning, Nuclear Safety of the Republic International and/or financial institutions: As no specific financial plan is known, involvement of other institutions would not be identified. Key opposing parties (local groups, NGOs...): With exception of Združena levica, all the political parties are supporting the project. Združena levica is advocating for energy self-sufficiency based on renewable energy and its efficient use. All the prominent Slovenian environmental organizations (Greenpeace Slovenija, Association for sustainable development, Umanotera) are opposing the project. Austrian government and civil society are also against the project as well as some parts of Croation society, like for example green NGOs and city of Zagreb.

Key problems with the project?

The only document on a state level, which presupposes the construction of the second Block of NPP Krško is the Resolution on National Development Projects for the period 2007-2023 adopted by the government in 2006. The constitutional court decided that the resolution is not a legal document and it is thus not legally binding. Furthermore, the Resolution wasn't adopted according to Aarhus Convention and was never published under Governmental documents. Environmental impact assessment was done as an expert evaluation by compiling all available data and evaluations from the previous environmental studies, analyses and environmental impact assessment. The assessment shows that the planned construction is welcome also from environmental aspect, as the project will have marginal impacts on environment, which are acceptable in terms of all legislative standards. The mentioned environmental impact assessment was,



	however, not a part of official procedure, but rather a preliminary EIA.
	For this reason the EIA process was not open to the public and its
	scrutiny and remained more of a promotion document for the
	construction of a new NPP than a real EIA. The second block of the
	NPP Krško will drive Slovenia into nuclear lock in for the next 40 year.
	It will also make electricity expensive, since the costs of the project
	will have to be justified. That is problematic in particular if we take
	into account the effects of new installed capacities of renewable
	energy, which can produce electricity at much lower price since it does
	not have a lot of maintaining costs. If we take into account further
	decrease of the prices of energy from renewable energy, which IRENA
	study found, any investment into nuclear energy can't be justified on
	economic terms. Financially speaking, everybody who is a buyer of the
	Slovenian electricity.
Alternative	Decentralized electricity system together with energy efficiency
solutions?	measures and renewable energy installations owned by individuals and
	communities.

2.4. Cross-case analysis

Many of the listed projects are subject to one or more problems, of which the most cross-cutting and visible ones are presented here.²⁰

Lack of transparency

One key problem is lack of transparency in making decisions about the public infrastructure projects. Many of them were not a part of country's policy or strategy, but appeared on the list of public investments without prior public consultations and a proper decision-making process. Also the project development and implementation phases are usually wrapped in veils of secrecy, which do not allow the public to be fully and timely informed about the various aspects of the projects.

²⁰ Unless specified otherwise, sources for this section are: http://www.mp.gov.si/fileadmin/mp.gov.si/pageuploads/mp.gov.si/pDF/zakonodaja/150526_ZSPPDP.pdf, http://www.transparency.si/javna-narocila



Access to decision making

Apart from lacking in transparency, the public infrastructure projects are usually characterized also by limited access to decision-making. Even when the processes do open up (or have to be open because of the regulations), the access to participation is limited in various manners (e.g. notification about public consultation on the new Slovenian coal power plant was only published in the municipality of the power plant, whereas notification about the consultation about the new Croatian coal power plant was widely announced in various manners).²¹

Corruption, lobbies and political pressure

In many cases of public infrastructure there are strong interest groups pulling the strings from the backstage. Even when the public managed to make the decision-making process open and transparent, these groups have managed to distort the process in ways that would lead them to obtaining their goals. All the recent major public infrastructure projects (coal power plant TEŠ6, highway construction, second rail line Koper-Divača, additional block of nuclear power plant Krško, etc.) are heavily smeared by the interest groups' political pressure and corruption.

Poor economic rationality of the projects

Another outstanding issue with many public infrastructure projects – probably related to the previously listed challenges – is poor economic rationality of the projects. Many projects tend to run significantly over the budget and the budget is already not rational in the first place. One of the most visible cases is the newly built coal power plant in Šoštanj, where the initial estimation and the final price differ by more than factor of 2.²² Many analysts warn that a similar story is likely to repeat with the second rail Koper-Divača²³ and second block of Krško nuclear power plant.²⁴ What is striking is that even when the authorities and public are faced with the rising costs of the projects, there are no repercussions.²⁵

²¹ http://focus.si/okoljski-vplivi-hrva%C2%B9kega-projekta-plomin-tep-c/, http://okolje.arso.gov.si/ippc/uploads/File/Javno%20naznanilo%20TES%20B6%2030sep2010.pdf, http://www.koper.si/index.php?page=staticplus_s&item=296&id=19843

²² http://focus.si/files/programi/energija/2014/mythbuster.pdf

²³ http://www.mladina.si/164616/drugi-tir/, http://www.mladina.si/165093/ne-drugi-ampak-slepi-tir/, http://www.mladina.si/175702/drugi-tir-za-telebane/, http://www.mladina.si/164099/vsi-obrazi-neumnosti/

²⁴ http://val202.rtvslo.si/2015/05/se-pri-drugemu-bloku-je-krsko-ponavlja-tes-6/, http://www.zdruzena-levica.si/266-ali-v-sloveniji-res-potrebujemo-drugi-blok-nuklearne-elektrarne-krsko

²⁵ Case of TEŠ: the revision of project by the court of accounts showed problems, but due to the limited power of the court of accounts there were no reactions or measures taken.



Lack of discussion on alternatives

While in most cases there are possible alternative solutions for the proposed infrastructure projects (be it less harmful/costly solutions or completely different solutions), there is hardly any discussion possible about the alternatives. In most cases this is because those proposing the projects do analysis of alternatives in a manner to show that their proposed solution is the most favorable, and when the public presents alternative possible solutions, they are discredited.

In the field of **energy infrastructure** there are some further highlights to be mentioned. One issue is the issue of state support, which is provided in different formats for most of the energy infrastructure. Another issue is that energy lobby often takes Slovenia as a hostage, claiming that electricity fall-out will happen if the government does not support the proposals of the project developers, or simply starting the investments without public consent (e.g. in the case of additional block in Krško nuclear power plant, in which over 10 million EUR have been spent for feasibility and other studies, without having any public discussion on the issue of the additional block).

In the field of **transport infrastructure** there are also some important aspects to be highlighted. One is that the transport infrastructure is mainly focused on cargo transport not on passenger transport, which is further deepening the problem of mobility for people in Slovenia. Another issue is that Slovenia is a transition country, which means that it carries high costs of the transport that is only in transit in Slovenia, but are unable to reap proper benefits, mainly because the government does not know how to use the few opportunities that EU rules allow it in this field.



3. CASE OF GOOD PRACTICE

3.1. Ljubljana	a Regional Waste Management Centre (RCERO Ljubljana) ²⁶
Name of the project	Ljubljana Regional Waste Management Centre
Location of project	Ljubljana
Short description	(RCERO Ljubljana) is the most modern facility for waste treatment in Europe, processing waste from a third of Slovenia. The regional centre comprises an expanded landfill, leachate treatment plant and waste recovery facilities. The new landfill has been used since 2009, the treatment plant has been in operation since 2011, while the construction of the mechanical-biological waste treatment facility was completed in 2015. The main part of the regional centre consists of three facilities for mechanical-biological waste treatment, where two types of waste are processed: separately collected bio-waste and residual mixed municipal waste. Bulky waste is also accepted and assorted.
Technical details	The facility processes waste from 37 municipalities, which cover about one third of total Slovene population. The facility can process 170.000 tonnes of waste annually or 6.000 tonnes per day. The landfill gas is captured and used in 4 cogeneration units with combined installed heat production capacity of 589 kW and electricity production of 1.063 kW.
The benefits of the project?	Waste recovery is needed in order to extract raw materials and reduce the quantity of disposed waste. The regional centre has the crucial mission of extracting the greatest possible amount of usable material and of composting separately collected biowaste. The centre solves the waste management problem for one third of Slovenia. Annually the cogeneration units produce 17.000 MWh of electricity and 36.000 MWh of heat. Apart from that, the facility turns waste into 30.000 tonnes of raw, recyclable materials, up to 60.000 tonnes of fuel, 7.000

²⁶ References: http://www.rcero-ljubljana.eu/upload/dokumenti/rcero_ljubljana_brusura_ang.pdf, http://www.rcero-ljubljana.eu/upload/dokumenti/rcero_ljubljana_brusura_ang.pdf, http://www.izs.si/prirocniki-publikacije/glasilo-izsnovo/letnik-2016/letnik-19-stevilka-77/reportaze/nadgradnja-regijskega-centra-za-ravnanje-z-odpadki-ljubljana/#">http://www.izs.si/prirocniki-publikacije/glasilo-izsnovo/letnik-2016/letnik-19-stevilka-77/reportaze/nadgradnja-regijskega-centra-za-ravnanje-z-odpadki-ljubljana/#



	tonnes of compost, 35.000 tonnes of digestate and 6.000 tonnes of wood. The facility recovers almost all the waste it receives: less that 5% (7,350 tonnes) ends up at the landfill. The project also showcases good practice in cooperation among municipalities and regions in Slovenia. Lastly, it provides green jobs.
The costs of the project?	The investment totals 155 million euros.
Who is financing the project?	22.91% Local authority budgets 13.00% Central government budget 3.07% Environmental waste disposal EU Cohesion Fund
	charges In the 2007–2013 programme period, the EU's Cohesion Fund contributed 77.5 million euros through its Environment and Infrastructure Operational Programme, while the remainder was financed from the central government and local budgets, and from the environment waste disposal charge.
Key actors	Municipality of Ljubljana Snaga d.o.o. International and/or financial institutions: EU Cohesion Fund 37 municipalities: Ljubljana, Brezovica, Dobrava-Polhov Gradec, Dol pri Ljubljani, Horjul, Medvode, Škofljica, Ig, Velike Lašče, Vodice, Domžale, Mengeš, Trzin, Lukovica, Moravče, Komenda, Kamnik, Cerklje na Gorenjskem, Grosuplje, Ivančna Gorica, Dobrepolje, Ribnica, Loški potok, Sodražica, Gorenja vas-Poljane, Žiri, Bloke, Koper, Ankaran, Šmartno pri Litiji, Vrhnika, Borovnica, Log- Dragomer, Idrija, Postojna, Pivka, Cerkno.





What makes the	There are several aspects that make this project a good practice case:
project a good	transparency in financing
practice case?	cooperation among Slovene municipalities
	modern and efficient facility
	> apart from reducing disposal of waste, the centre is actively
	promoting the reduce-reuse-recycle/upcycle priorities in waste
	management
Alternative	There was an alternative plan to construct a waste incinerator in
solutions?	Ljubljana instead of RCERO.



RECOMMENDATIONS

The analysis of the past examples and mistakes done shows that there are several ways to implement public infrastructure projects more efficiently. There are several proposals for systemic measures and guidelines for the selection and design of infrastructure projects:

a) Systemic measures

Strategic planning needs to be strengthened

The national strategic and development planning is one of the most important functions of government. Transparent, professionally managed and inclusive development planning processes are a reflection of the well governed, transparent and democratic country. Such processes are a way to guarantee that we will pursue strategic objectives that in the long-term public interest and not subject to ongoing pressure from individual stakeholders. Strategic planning is also one of the prerequisites for rationality and efficiency of the public sector and public spending.

The process of planning and implementing the projects should follow good practice

Major projects are, in terms of managing, very demanding, so they should treated as such. Project management needs to be strengthened to include state institutions, the private sector and science. Investing in a quality project planning is rewarded by easier and cheaper execution with reduced risk. Professional investment management and financial control of all public projects should be carried out in accordance with European and international standards.

b) Guidelines for selection and design of projects Innovative approaches

When looking for solutions, the government should go beyond a narrow understanding of infrastructure as large facilities. The government should also look into alternative scenarios and solutions that are based on the so-called soft measures. Innovative organizational solutions and business models are generally also more cost effective.

Small can be more useful

Before investing in large infrastructure projects it should be checked what their development effects on the economy are - due to the specific structure of the Slovenian economy, the economic benefits of smaller projects can be bigger than big projects, because they allow a larger share of domestic supplies and services.



Compliance with clear criteria

The selection of infrastructure projects, which are mainly or fully financed from public funds, must be based on clear criteria, so that projects:

- originate from verifiable real needs of society and contribute to the achievement of strategic objectives and priorities of the country;
- ensure sustainable development, which means that they contribute to lower energy consumption, efficient use of resources, higher ecosystem services, higher self-sufficiency and quality local jobs, while reducing pollution;
- secure flexibility and adaptability to future uncertainties and risks due to external factors climate change, shifts in the global economy, security, technological breakthroughs, etc.;
- in the verification process show an optimal balance between costs and anticipated benefits to society, environment and economy of the entire cycle of construction and decommissioning;
- allow year-on-year steady investment and thereby support stable economic environment.

Compliance with these criteria must be checked in the public process of ex-ante evaluation in line with European standards or advanced standards, which includes checking the impact on the economy, environment and society and independent analysis of the environmental impact and costs throughout its lifetime. The economy may not be prioritised over the environment and society. Due to the traceability of decisions and the possibility of verification of assumptions all technical studies have to be public.

Moratorium on 'fait accompli' projects

In order to avoid repeating the mistakes of the past and stop the irrational outflow of public funds, the government should immediately stop the use of public funds and assets of state-owned companies for the preparation of projects that do not meet internationally comparable sustainability criteria and are not based on real needs. An example of such a waste of public money are numerous studies and analyzes of the second block of the nuclear power plant, which in recent years were ordered by the state company GEN energija. The Government should not allow making decisions prior to public consultation and pushing project that do not fulfil criteria because of the pressures from interest groups.



REFERENCES