WESTERN BALKANS INVESTMENT FRAMEWORK

Compendium 2009 - 2014

Western Balkans Investment Framework WBIF PROJECTS

It is my pleasure to present this compendium of projects funded under the Western Balkans Investment Framework, a programme launched five years ago to support infrastructure development in the Western Balkans. The compendium gives a flavour of the results achieved during the past five years. A significant number of projects have made it through the complex cycle of project preparation, funding and construction, with the WBIF helping at each stage. The first concrete results can now be demonstrated.

Since its start in December 2009, the WBIF has made considerable progress. 169 grants have passed through the rigorous selection and approval process supporting some 154 projects across the region and its seven countries - six since the 1st July 2013 when Croatia acceded to an EU Member State. The total value of grant support is more than € 300 million which has attracted additional loan funding of € 2.7 billion. This relation is very significant as it reflects a key principle of WBIF: using scare grant resources to leverage loans. The level of leverage of approximately 1:9 should further improve as projects become mature and proposed loans are signed. The total investment value of all projects in the current pipeline is more than € 13 billion.

All these results could only been achieved by close cooperation and coordination between all relevant partners. Partnership lies at the core of WBIF's philosophy. The framework was born out of recognition that much more can be achieved by bringing the key players together: the European Union, bi-lateral donors to the Western Balkans and the financial institutions specialised in funding infrastructure. The WBIF provides a unique forum for working together in close cooperation with regional organisations and for pooling resources and know-how with a view to achieve common goals. Most important is, however, ownership by the beneficiary countries and their institutions. The WBIF helps by focusing on the priority investments which will bring maximum economic and social benefits to the beneficiary countries while also being aligned to their EU accession aspirations.

But now is not the time to rest on our laurels. With so much investment needed in the region, we need to look to the future with even greater vigour. I am confident that the WBIF, having reached maturity, will remain the leading vehicle for infrastructure development in the Western Balkans throughout the European Union's current Multiannual Financial Framework taking us up to 2020. After a thorough review of the WBIF methodology we are currently implementing the necessary changes to further increase efficiency and impact. More focus will be put on enhanced local ownership through National Investment Committees, resulting in a single pipeline of projects in line with sector strategy priorities. We will also pay more attention to ensuring timely completion of projects in the current WBIF pipeline and focus more on projects which improve connectivity within the region and with the neighbouring Member States.

I look forward to the next five years of the Western Balkans Investment Framework with even more projects brought to completion for the benefit all the people of the region.

Gerhard Schumann-Hitzler

Director ELARG D

WBIF snapshots

Headline Figures

€ 310 million grant award value

> € 2.6 billion signed loans

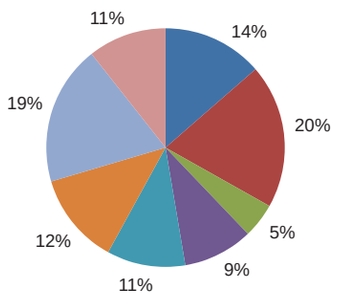
169 grants for 154 projects

> € 7 billion forecast loans

> € 13 billion forecast investment

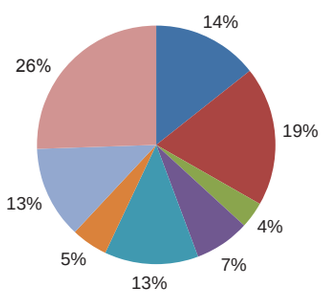
Projects by Beneficiary

Number



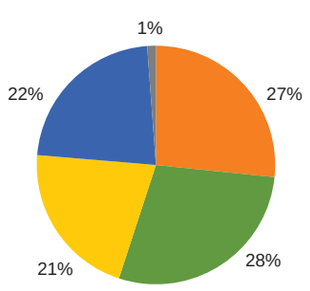
- Albania
- Bosnia and Herzegovina
- Croatia
- the former Yugoslav Republic of Macedonia
- Kosovo*
- Montenegro
- Serbia
- Regional

Value



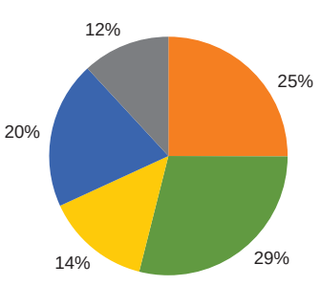
Projects by Sectors

Number

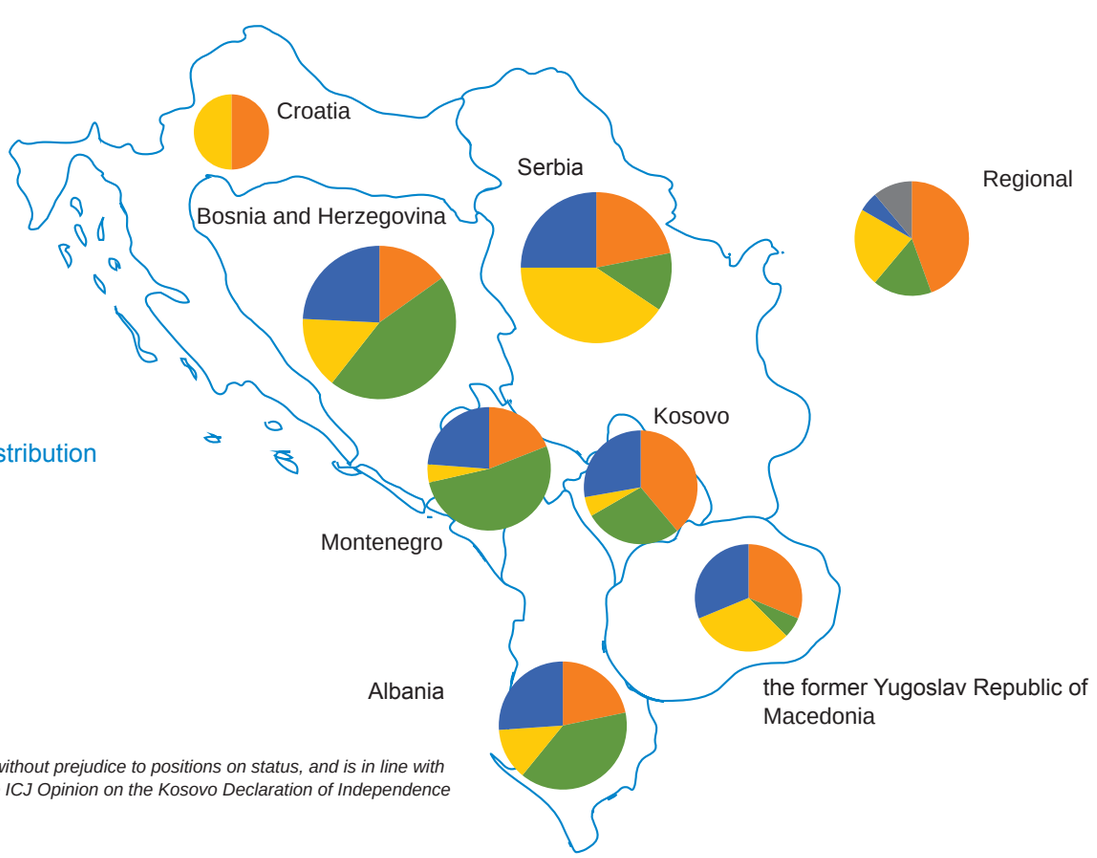


- Energy
- Environment
- Social
- Transport
- Private sector development

Value

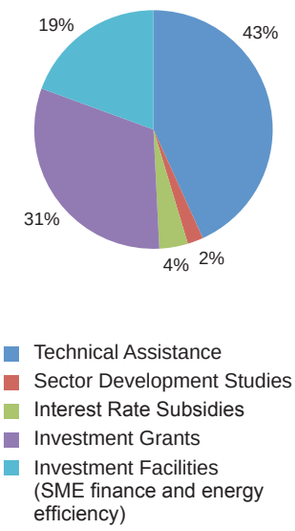


Proportional distribution of projects

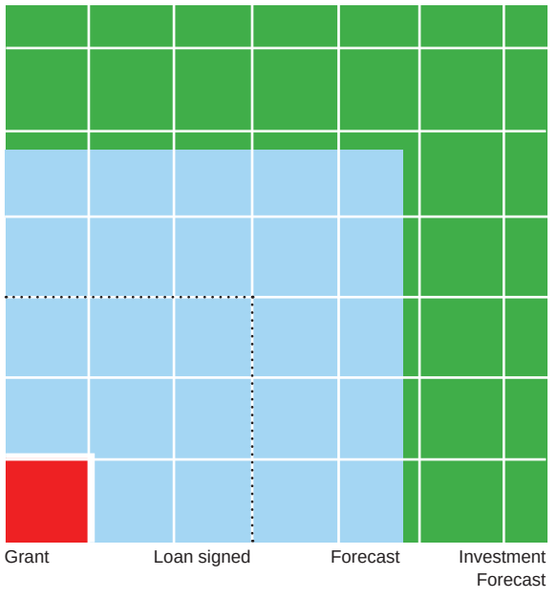


** This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence*

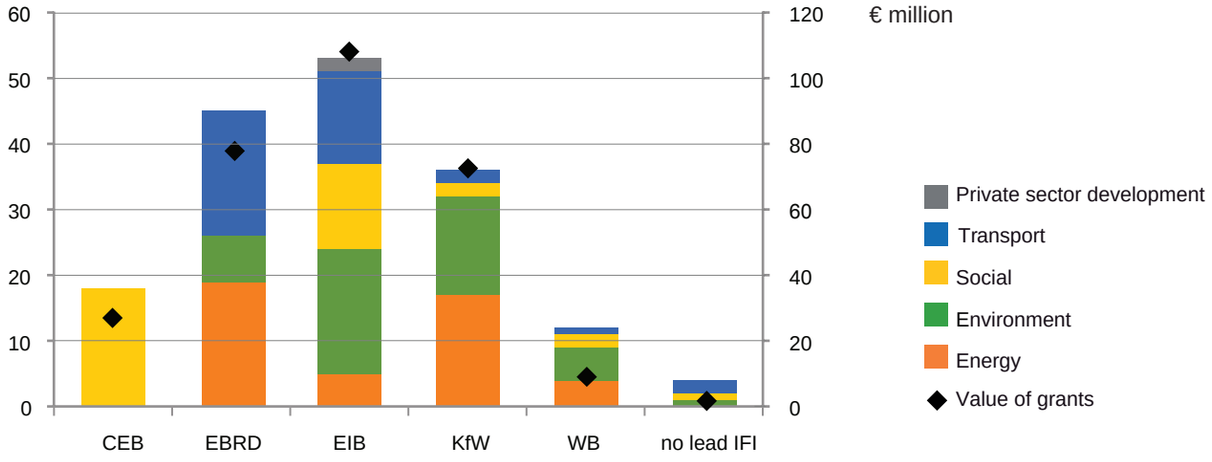
How the grant is used



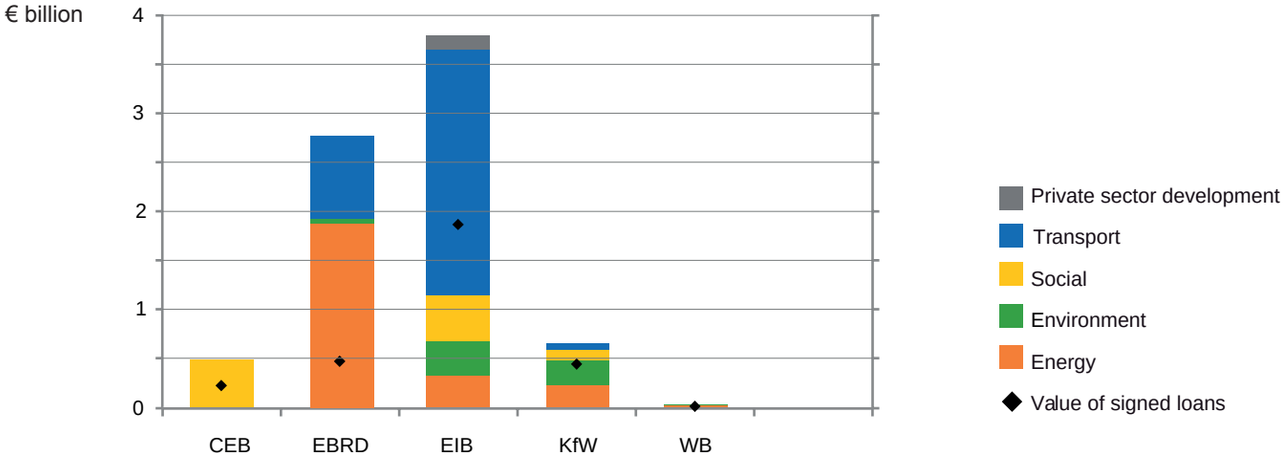
Grant leverage effect



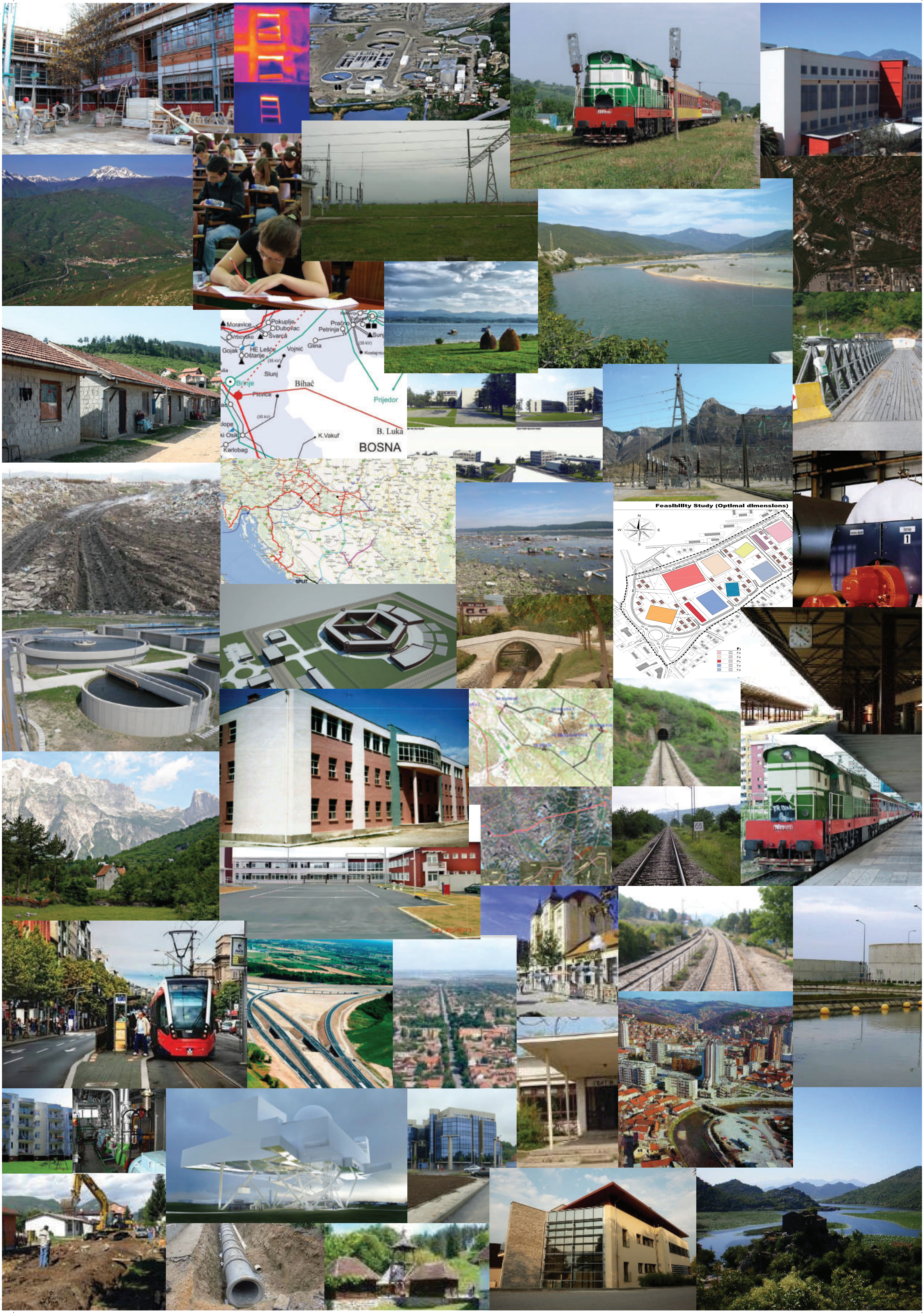
Grants by IFI



Forecast loans by IFI



Source: WBIF MIS


Moravice
Pokuplje
Dubovac
Švarča
Vrbovsko
Gojak
HE Lešće
Oštarije
Vojnić
Glina
Petrinja
Slunj
Brinje
Bihać
Prijedor
K.Vakuf
B. Luka
BOSNA
Karlobag
Feasibility Study (Optimal dimensions)

Content

CROATIA

the former YUGOSLAV REPUBLIC of MACEDONIA

KOSOVO

MONTENEGRO

SERBIA

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WESTERN BALKANS

Western Balkans
Energy Sector

Building regional electricity connectivity

The project covers a 400kV interconnection between Albania and the former Yugoslav Republic of Macedonia. WBIF support was provided for a feasibility study for the proposed electricity line between these two neighbours.

The study identified and assessed different potential develoment options based on technical, financial, economic and socio-environmental considerations. The objective of the study was to prepare a system analysis and detailed technical assessment of the project that includes budgeting and cost benefit assessments, evaluation of risks and sensitivities, a project implementation and procurement plan and an environmental and social impact assessment. The foreseen transmission line would run for 95 km from Bitola, in the former Yugoslav Republic of Macedonia to the border between the two countries and for 56 km from the border to Elbasan in Albania. In addition to the line and the accompanying 390 pylons, the project includes a substation extension in Bitola and two new connections in Elbasan and Ohrid, which are all crucial for the development of the transmission systems and regional interconnections. All elements are covered in the feasibility study.

The direct beneficiaries are the transmission system operators (TSOs) in both countries, since the new line will enable both system operators, OST (the Albanian TSO) and MEPSO (the former Yugoslav Republic of Macedonia TSO), to operate their generating units in a more efficient way. The end beneficiaries are the existing and future end users of the planned 400 kV transmission in both Albania and the former Yugoslav Republic of Macedonia. The electricity line is also of considerable national and regional significance. The project is related to the major East – West power transmission corridor between Bulgaria, the former Yugoslav Republic of Macedonia, Albania and Italy. The section between Bulgaria and the former Yugoslav Republic of Macedonia has been completed, and the submarine cable between Italy and Montenegro is now being laid. Once complete the enhanced and considerably extended network will significantly improve production, transmission and utilisation flexibility and add to the creation of a much more efficient energy market across the region.

Building regional electricity connectivity

The 400 kV interconnection, the construction of which is estimated to take about five years, will enable the direct connection of the power systems of the former Yugoslav Republic of Macedonia and Albania. It will also improve the connection of Albanian power system with the South East European region through the East – West corridor already described. Additionally, as the Albanian power generation system is predominantly based on hydro power, while the system in the former Yugoslav Republic of Macedonia is mostly powered by coal (currently 85 %), the interconnection between the two systems will help to balance these two power markets well as reduce the hydrology risk in Albania. The project would provide improvements in reliability of electricity supplies, a significant reduction of electricity losses as well as an improvement of GDP in both countries.

Key Facts

Title	Albania to the former Yugoslav Republic of Macedonia 400kV interconnection
Code	WB4bis-REG-ENE-01
Data approved	December 2010
IFI	EBRD

WBIF Support

Feasibility study + Environmental and social impact assesment

Finances

WBIF grant	€ 650,000
Loan estimate	€ 30,000,000
Total investment estimate	€ 65,000,000

Western Balkans
Energy Sector

Regional transmission connectivity links with Member States to east and west

The project examines the feasibility of constructing a new 400 kV connection between the electricity transmission systems of Serbia, Bosnia and Herzegovina and Montenegro.

Technical assistance has been provided for a feasibility study to analyse the existing 220 kV connections, now largely ready for replacement, focussing in particular on the route Višegrad – Vardište – Bajina Bašta – Bistrica – Požega. Additionally, a preliminary assessment of the option to strengthen the 400 kV network towards Niš in the East and Gacko in the West was also undertaken. Six potential connection scenarios between the three countries were analysed as part of the study and, following agreement on the selected option, a full economic and financial assessment and an environmental and social impact assessment were prepared.

This project is regionally very significant. Its construction supports, with parallel WBIF supported projects undertaken in Serbia and Montenegro, a strategic electricity transmission corridor running northeast – southwest through the Balkan countries. The project has significant energy market benefits, and will allow the transfers of power, including new renewable sources, between countries in South East Europe and Italy. The technical assistance work, followed by project implementation, will result in a structured approach to justifying, constructing and developing this 400 kV transmission connection with regional transmission system improvements which greatly enhance power transfers.

Regional transmission connectivity links

Indirectly, the investments will provide the basis for the improvement of net transfer capacity to facilitate anticipated load and transit growth in this region, new conventional and renewable generation connections. Moreover, the project will contribute to improving the stability and reliability of the regional network, leading to improvements in the overall security of supply, losses and energy quality. As such it supports the potential to develop the regional energy market in South East Europe and create trading opportunities between SEE and EU countries.

The main beneficiaries of this project are the three national transmission system operators (TSOs) who are interested in constructing this connection – these are EMS in Serbia, CGES in Montenegro and Elektroprenos in Bosnia and Herzegovina. However, as a regional connection, there are other TSOs and market actors who will benefit when this connection is established. These are power trading companies, generators and suppliers. The participation of Terna, the Italian TSO, is included due to its new submarine Montenegro – Italy interconnection (CGES-TERNA) for energy supply/exchange; this line is currently being put in place. Due to its regional significance, the project is endorsed by the European Energy Community.

Key Facts

Title	400kV interconnection Serbia-Montenegro- Bosnia and Herzegovina
Code	WB5-REG-ENE-02
Data approved	June 2011
IFI	EBRD

WBIF Support

Feasibility study + Scenario analysis + Environmental and social impact assessment + Economic and financial assessment + Technical designs

Finances

WBIF grant	€ 850,000
Loan estimate	€ 84,000,000
Total investment estimate	€ 95,000,000

Western Balkans
Energy Sector

Building a regional gas transmission pipeline

The Ionian Adriatic Pipeline (IAP) connects the existing and planned gas transmission system of Croatia with the planned Trans Adriatic Pipeline (TAP). The project aims to establish a new supply route for natural gas from the Middle East and Caspian region, along the Adriatic coast.

WBIF are supporting this project with technical assistance for a feasibility study that includes an environmental and social impact assessment and a commercialisation study for the pipeline. The pipeline will be constructed of steel pipes DN 500 and 75 bar working pressure. Specifically, several measuring-reduction stations are planned on the main gas pipeline as well as the necessary compressor stations.

The construction of the IAP, over 500 km long, will provide a sustainable, diversified and reliable supply of natural gas for Albania, Montenegro, southern Croatia and Bosnia and Herzegovina. This transmission connection, for the benefit of the European market, would also provide a significant economic development incentive to the transited countries, therefore enabling much needed environmental benefits, such as the reduction of emissions. The pipeline will serve a market corresponding to an estimated annual 5 billion cubic metres which is the total for the four beneficiary countries. The beneficiaries are the existing and future end users.

Presenting study results

This project is considered by the European Energy Community, the regional sector representative authority, as a priority project of regional significance. Its broad regional importance can also be demonstrated by its compliance with the criteria established by the EU for Trans-European Networks for Energy. The project is fully in line with the EU's pre-accession strategy, to develop the regional energy market and strengthen energy security, national IPA programmes for Croatia, BiH, Montenegro and Albania as well as relevant EU Regulations and Directives concerning measures to safeguard security of gas supply. In Croatia the project is in line with the Croatian energy strategy concerning its goal for securing new supply options for oil and natural gas by participating in international projects. In Bosnia and Herzegovina, the project supports energy development priorities although a strategic document for the energy sector does not yet exist at the country level. In Montenegro the project is in line with plans to secure a sustainable gas supply for the country, which has been described in the Energy Development Strategy of Montenegro to 2025 and relevant Action Plan. Finally, in Albania the project complies with priorities in the National Energy Strategy of Albania (2003).

Key Facts

Title	Regional Project Ionian Adriatic Pipeline
Code	WB5-REG-ENE-03
Data approved	June 2011
IFI	EBRD

WBIF Support

Feasibility study + Environmental and social impact assessment + Business development study + Institutional development study

Finances

WBIF grant	€ 3,500,000
Loan estimate	€ 580,000,000
Total investment estimate	€ 650,000,000

Western Balkans
Energy Sector

Building international gas connections

The project, linked with other WBIF supported gas transmission lines, deals specifically with the south interconnection of Bosnia and Herzegovina and Croatia. It examines and evaluates options for the interconnection of the existing and planned natural gas systems of BiH and Croatia capitalising on the planned gas pipeline along the Adriatic Coast, the Ionian Adriatic pipeline (IAP).

WBIF is supporting the project with technical assistance which will analyse the technical, financial, economic and environmental aspects of the project and set out the preliminary rationale for the investment. The study considers two potential routes that have been identified. The first is Zagvozd (Croatia) via Posušje (BiH) to Travnik with a branch to Mostar. The second runs from Ploče (Croatia) to Mostar and to Sarajevo (BiH). Currently, the existing gas transmission system of BiH consists of the main high-pressure (50 bar) gas transmission pipeline running from Zvornik to Sarajevo, with a branch pipeline leading from Semizovac to Zenica. The extension of the existing transmission pipeline in the direction Zenica - Travnik is under construction. The main objectives of the study are to determine:

Key Facts

Title	South Interconnection of B&H and Croatia (Option 1: Zagvozd – Posušje – Travnik; Option 2: Ploče – Mostar)
Code	WB6-REG-ENE-08
Data approved	December 2011
IFI	EBRD

WBIF Support

Route option assessment + Environmental impact analysis + Economic and financial analysis

Finances

WBIF grant	€ 400,000
Loan estimate	€ 100,000,000
Total investment estimate	€ 114,000,000

Gas connections

i) the optimal configuration for the interconnection,
ii) the connection within BiH, and
iii) the most feasible pipeline route.

This transmission pipeline, approximately 136 km long (21 km in Croatia and 115 km in BiH) with a 48 km branch connection to Mostar, would create the preconditions for the development of the natural gas markets of the southern part of BiH to a volume estimated at 1 billion cubic metres per year. The direct benefits include:

- providing an improved and reliable gas supply to a considerable part of BiH
- introducing an environmentally more acceptable energy source in the existing industrial and residential consumption sector
- providing a diversified gas supply and access to Croatia and surrounding countries.

Moreover, the assessment of the potential gas market in this region will improve the results of the market analysis for the study currently underway for the international Ionian Adriatic Pipeline route (also supported by WBIF, see WB5-REG-ENE-03) and will contribute to creating the preconditions for completing the EC Gas Ring. The project will also provide transit capacity and income to both BiH and Croatia, supporting further economic development of the region.

In September of 2008, the Federation of Bosnia and Herzegovina adopted a strategic plan and programme for the development of the energy sector of the Federation of Bosnia and Herzegovina, as the basis for the implementation of projects in the energy sector in the future. The strategic plan has foreseen the extension of the existing gas transmission system, and this southern connection to the Croatian system has been defined as an important new supply route. A Memorandum of Understanding between Plinacro (Croatian operator) and BH-Gas was signed on June 2006, and reconfirmed in 2011, which covers energy project interconnections between Croatia and Bosnia and Herzegovina.

Western Balkans
Energy Sector

Region wide energy efficiency programme

Significant potential for energy efficiency investments remain untapped in the Western Balkans. Such potential is higher than in many other countries going through economic transition due to neglected maintenance of equipment and the presence of a large amount of broken and / or obsolete equipment. The Western Balkan countries also have a very high potential to exploit renewable energy (RE) sources. These resources, if employed, would reduce the adverse environmental impact of current dirty production while also making countries less dependent on expensive energy imports.

The objective of the WBIF Energy Efficiency Window is to support national governments in their efforts to meet their commitments under the Energy Community Treaty (ECT) and assist them with implementation of their National Energy Efficiency Action Plans (NEEAPs). The WBIF grant of EUR 23.35 million is provided to support the development of a Regional Energy Efficiency Programme, which builds on the success of two existing EBRD initiatives: the Western Balkans Sustainable Energy Direct Financing Facility and the Western Balkans Sustainable Energy Financing Facility. These existing facilities need to be modified in order to:

New energy efficient equipment

i) encourage lending to the public sector,

ii) include a new public sector energy efficiency institutional capacity building, and

iii) include a business development component with a particular focus on energy efficiency in the public sector.

The new programme will address the market gaps in the provision of innovative financing for energy efficiency and provides comprehensive assistance to the regulatory and institutional framework of support for national regulatory reform.

The overall aim is to establish a sustainable market for energy efficient financing of the private and public sectors. It will enable the public sector to take leadership in energy efficiency investments and facilitate access to medium and long-term credits for municipalities needed to implement infrastructure investments and improve the investment climate for business development.

The main beneficiaries will be the central governments and municipalities and other public building owners, as well as institutions taking leadership in energy efficiency. The central governments will be supported with technical assistance, as part of the WBIF support, to put in place the primary and secondary legislation to facilitate public sector energy efficiency measures. This capacity building support will also be provided for municipalities and other public building owners together that should significantly raise awareness of the needs and significant benefits – economic as well as more comfortable living conditions.

Key Facts

Title	Establishment of a regional Energy Efficiency Programme for the Western Balkans
Code	WB7-REG-ENE-09
Data approved	June 2012
IFI	EBRD

WBIF Support

Technical and management assistence + Economic and financial appraisal + Investment grant

Finances

WBIF grant	€ 23,350,000
Loan estimate	€ 186,500,000
Total investment estimate	€ 160,000,000

Western Balkans
Energy Sector

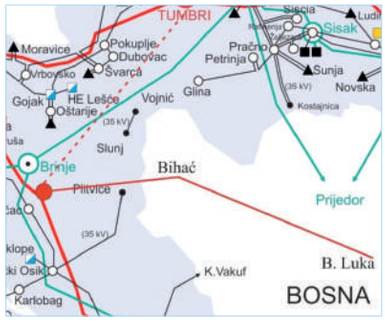
National and international benefits from electricity corridor upgrade

Fulfilling this project will strengthen the regional electrical transmission grid in Croatia along a north-south axis. This will allow additional long-distance power transfers from existing and new planned power plants in Croatia and Bosnia and Herzegovina to major consumption areas in Italy and north Croatia. This electricity transmission project has two components. The first is the Croatian national component, which includes the strengthening of the main transmission corridor between Brinje, Velebit and Konjsko. The second component provides the regional dimension: between Lika and Banja Luka in Bosnia and Herzegovina.

A WBIF grant of EUR 1.5 million will be used to develop an implementation plan for the investments, to undertake a feasibility study, an environmental and social impact assessment and a cost-benefit analysis. The completion of a viable feasibility study is a precondition for the provision of an EBRD loan of approximately EUR 26 million in support of the proposed investments.

Benefits of the project are both national, for Croatia, and regional for the wider Western Balkans area. Transmission market integration will be improved by increasing the transfer capacity primarily on the BiH-Croatia and Croatia-Slovenia borders; and security of supply is improved with the diversification of supply sources and alternative routes. Overall, there is an increased reliance and flexibility of the transmission network in the region.

Cross border electricity links



The need to provide additional high voltage electricity transmission capacity from Bosnia and Herzegovina (Banja Luka) to Croatia has long been recognised, and the construction of this line would greatly improve the potential for electricity trade between BiH and Croatia. This new line will also enhance regional grid stability, and would assist in the development of renewable energy resources in the region. Such a strong network will also support other infrastructure development projects, for example new railway electricity substations for supplying a modernised railway line Zagreb-Rijeka, and in future further strengthening of transmission grid by upgrade of 220 kV lines towards Zagreb and Rijeka.

The beneficiary of the project is the Croatian electricity transmission system operator - HEP Operator Prijenosnog Sustava (HEP-OPS). HEP OPS owns and operates the Croatian high voltage electricity network. The proposed project is consistent with the long term strategy of the Croatian government for the development of the energy sector, and with the European transmission system agency (European Network of Transmission System for Electricity, ENTSO-E) the Ten Year Network Development Plan.

Key Facts

Title	Strengthening of main Croatian transmission north-south axis
Code	WB7-REG-ENE-11
Data approved	June 2012
IFI	EBRD

WBIF Support

Feasibility study + Economic and financial appraisal + Environmental impact analysis

Finances

WBIF grant	€ 1,500,000
Loan estimate	€ 26,000,000
Total investment estimate	€ 150,000,000

Western Balkans
Energy Sector

Flexibility in gas provision from region wide gas ring

The concept of an Energy Community Gas Ring was first proposed in the South East Europe Regional Gasification Study, 2009, a piece of work sponsored and managed jointly by the World Bank and KfW. Building on this initial concept a WBIF grant was provided to examine development options and to develop financing arrangements for the implementation of the Energy Community Gas Ring, and the associated gas-to-power initiative, through public private partnership (PPP) consortia.

The development of the gas ring would include the creation of gas anchor loads, which are envisaged to be combined cycle gas turbine power stations amounting to 2 - 3 billion m^3 per annum of gas demand and located at strategic points on the proposed gas ring. This concept is a relatively new approach to attracting the private sector to participate in the development of gas power plants through the establishment of a consortium of investors. These investors could be private energy companies, IFIs, state-owned companies (electricity generators, suppliers, gas suppliers, and traders), big electricity consumers and municipalities. In the net of contracted sales to the national utilities, each shareholder would have the freedom and the responsibility to sell his share of the electricity to distribution companies and / or eligible consumers, in the territory of the corresponding contracting party and / or in the regional electricity market, depending on their preferences (within the constraints of the regional network). This approach (contrasting with the more normal practice of selling to national utilities under long-term power purchase agreements) is chosen to promote and support both investment and competition in the national and regional electricity markets. The consortium would determine the required gas infrastructure needed to deliver gas to its national PPP companies which would build the power plants. This infrastructure would be in line with the development intentions of the Energy Community (EC supported agency supporting energy development in the Western Balkans) Gas Ring.

Gas Ring in South East Europe

Implementation of the gas ring would bring significant regional benefits:

- countries across the Western Balkans would get access to gas;
- gas supply diversity would be increased and the development of a regional gas market would be supported as the gas ring would allow supply from multiple potential sources;
- new gas-fired generation plants would be built to help meet electricity demand in national and regional markets;
- significant environmental improvements from containing the use of lignite in power generation;
- enhanced energy security.

This project is expected to lead to significant investments in South East Europe. The principal estimated investments would be for:

- the gas power plants, approximately EUR 1.5 billion (providing about 2,000 MW);
- the Energy Community Gas Ring, approximately EUR 850 million for a 24-inch, 1,200 km pipeline developed in phases; and
- a synchronized gas power plant development and the Gas Distribution (up to 20 cities), up to EUR 1.4 billion.

Key Facts

Title	Gas to Power Initiative and the Energy Community (EnC) Gas Ring in South East Europe
Code	WB7-REG-ENE-SD-14
Data approved	June 2012
IFI	WB

WBIF Support

Sector development study

Finances

WBIF grant	€ 1,000,000
Loan estimate	-
Total investment estimate	-

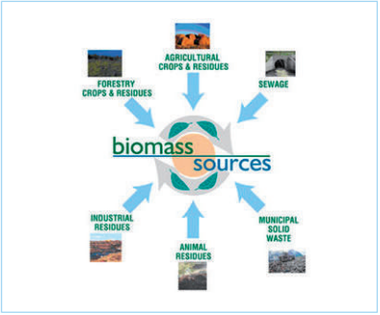
Western Balkans
Energy Sector

Study to assess biomass opportunities for the region

Within the Western Balkan region, providing secure and reliable energy supply is critical to sustain economic growth. The region relies heavily on imported hydrocarbons that puts a strain on producers to meet demand and, when this is not satisfactorily met, aggravates end-users who suffer from under-supply. The electricity sector is largely dominated by coal, predominantly dirty highly polluting lignite, except for Albania which gets almost all of its electricity generation from hydropower. The region is experiencing significant electricity shortages and rationing during peak times in winter. This is due to insufficient investments and maintenance of ageing infrastructure and the widespread use of electricity for space and water heating. The latter is partly a consequence of unreliable heating services for households as well as increased prices and reduced availability of fuel wood during winter months due to higher demand. As a result, households often use electric heaters as supplementary or back-up to other heating forms, which leads to added loads on the strained electricity networks.

Responding to this problem WBIF has provided a grant for a regional sector study on biomass-based heating in the Western Balkans. The study will:

Potential biomass sources



i) conduct a market assessment for biomass supply and demand potential in the region;

ii) identify and evaluate cost-effective and sustainable biomass-based heating options;

iii) analyse barriers and options to improve the use and supply of biomass; and

iv) make recommendations on specific investments (including costs and financing options) as well as on measures to improve the framework for efficient, sustainable and secure use and supply of biomass energy in the region.

The beneficiaries of this project are Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Kosovo, Montenegro, and Serbia. The project has both environmental and economic benefits for the beneficiary countries. Increasing the sustainable use of biomass and improving end-use efficiency throughout the Western Balkans will make an important contribution to enhancing energy security in the beneficiary countries as well as to improving the reliability and sustainability of energy supply and supporting countries in achieving national renewable energy (RE) targets. Further, the study is expected to identify economical, cost-effective biomass based heating options, identify specific investment options and identify key barriers and specific options to increase economically, socially and environmentally sustainable and efficient use of biomass for heating.

Key Facts

Title	Biomass-based Heating in the Western Balkans sector study
Code	WB9-REG-ENE-SPD-01
Data approved	June 2013
IFI	World Bank

WBIF Support

Sector development project

Finances

WBIF grant	€ 875,000
Loan estimate	-
Total investment estimate	-

Western Balkans
Environment Sector

A comprehensive plan for the Drina River basin

Drina River

The Drina River Basin (DRB), with its total surface area of just over 19,500 km^2, is shared between four WBIF beneficiary countries. It covers the northern half of Montenegro and spreads into Bosnia and Herzegovina and Serbia, while less than 1% of the basin belongs to Albania. With its high flow rate and still rather good water quality, the Drina River Basin scores high on the list of areas with high endowments of natural resources and development opportunity in the region. It has a significant hydropower generation potential (of which 60 % is still unused) as well as tourist attractions (such as the UNESCO Heritage Site of the Tara Canyon), and it is an abundant source of biodiversity.

The DRB has experienced major floods with the loss of lives in the past decade. 2010 was particularly bad in all three principal DRB countries due to inadequate flood preparedness and protection. In parallel with the emergency response, it was decided to start putting in place more robust policies, capacity and infrastructure to help minimize flood damages in a sustainable and cost-effective manner. The absence of cooperation between two predominant sectors in the basin, namely water management and energy, was declared as major weakness for implementation of flood protection and control activities. At the same time, many areas in the basin also experience recurrent seasonal droughts. This affects biodiversity and fisheries, water supply from groundwater (the groundwater levels being affected by the draw-down of hydropower reservoirs in the summer), and agriculture.

The WBIF support aims to respond to these deficiencies. The overall objective of this project is to support more effective water resources management in DRB with a special focus on flood and drought mitigation, and hydropower and environmental management, based on “good practices” and within the framework of integrated water resource management. This project proposes to give special consideration to plans and strategies in the energy sector in the wider region, in order to determine the most important operational and investment interventions in the basin.

The project beneficiaries are almost one million people living in settlements concentrated along the Drina and its major tributaries. The cooperation on river water is very sensitive, yet in Central Europe and in the EU Neighbourhood countries there exist numerous cases where the Drina experiences would be particularly relevant and welcome. Launching of this project and arriving at the development of a jointly agreed management framework will generate significant regional benefits of political and economic nature. In addition, the river forms the border between the three countries, however, as the river is a shifting course, the border between Serbia and BiH, and between BiH and Montenegro remains to be re-defined, and the River Basin Management Plan for Drina River (RBMP) will help prepare a resolution of this diplomatic challenge.

Key Facts

Title	Support to Water Resources Management in Drina River Basin
Code	WB8-REG-ENV-03
Data approved	December 2012
IFI	World Bank

WBIF Support

River basin management plan

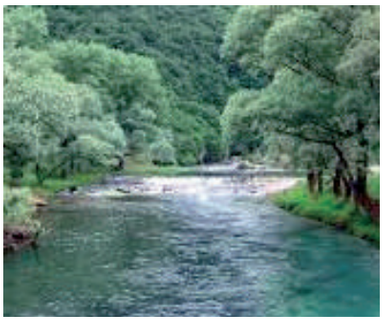
Finances

WBIF grant	€ 1,200,000
Loan estimate	-
Total investment estimate	-

Western Balkans
Environment Sector

Protecting a water source for dual country benefit

Klokot water



The Una River Basin is situated in northwest Bosnia and Herzegovina. It belongs to the Dinaric karst area that is part of the Dinaric Alps, a mountain chain straddling Southeast Europe. The underlying rock is predominantly made up of limestone that has many groundwater aquifers and spring sources. The groundwater body (GWB) of Klokot and Privilica spring sources cover the region of the Pljesevica mountain, and Krbavsko, Korenicko and Homoljsko districts. The whole area is about 685 km^2, 14 % of the territory of Bosnia and Herzegovina with the rest in the Republic of Croatia. The town of Bihać has a number of water extraction points for potable water supply in the area of the GWB. The most significant is the Klokot water source where the average extraction rate is 225 l/s. As the spring GWB is located in an extremely sensitive area, it requires sufficient protection measures in order to preserve a quality of the underground water. The results of water quality tests, however, suggest water quality is continuing to deteriorate with presence of ammonium, oils, detergents, metals, and faecal pollution. This has serious consequences for public health in Bihać.

WBIF are supporting a project that should be implemented in both countries which includes infrastructure projects in national and regional contexts. In this respects, this initiative will create a platform for direct cooperate and joint work in the field of water protection and particularly drinking water sources protection. The support work is for a study intended to establish a protection zone to the Klokot water source. The aim of the study is to examine technical, legal, administrative, infrastructure and financial instruments for future protection measures of the Klokot potable water source, in both countries, and contribute to improvement in public health.

The study will prepare a list of priority measures, required in Bosnia and Herzegovina and the Republic of Croatia for establishing the protection zones, such as:

i) Rehabilitation of existing (non)sanitary landfill sites;

ii) Construction of an adequate sewage system to transport the waste water to the WWTPs located out of the protection zone; and,

iii) Agriculture and forestry measures. The study will also make an initial assessment on the costs of the identified priority measures.

This intervention will have a strong positive environmental and public health impact in both Bosnia and Herzegovina and Croatia, with an overall benefit to quality of life. The estimated number of direct beneficiaries in Bosnia and Herzegovina is approximately 61,000 inhabitants in the Bihać Municipality. The second project beneficiary is the Republic of Croatia, and more precisely the legal entity for water management and the local communities.

Key Facts

Title	Klokot water source (Bihać) protection zone study
Code	WB9-REG-ENV-SPD-01
Data approved	June 2013
IFI	World Bank

WBIF Support

Study for water source protection

Finances

WBIF grant	€ 750,000
Loan estimate	-
Total investment estimate	-

Western Balkans
Environment Sector

Sava River flood risk management plan

The Sava River, one of Europe's largest, is a tributary on the Danube. It flows from Slovenia through Croatia and into Bosnia and Herzegovina and Serbia, where it forms part of the national boundary, ending in Belgrade where it joins the Danube. It is the Danube's largest tributary by volume of water; it drains much of the Dinaric Alps and the river basin has a population in excess of eight million. It is navigable for larger vessels for approximately two-thirds of its length between Belgrade and Sisak in Croatia. As a major arterial waterway crossing international boundaries, it has major regional economic and social significance.

WBIF are supporting a project dealing with Sava River flood management. The project's proposed activities comprise a strategic study, policy development, and development of technical capacity in the form of forecasting capability with respect to seasonal river discharges and flood events. This information will be jointly developed and utilised by the Sava riparian countries and the ISRBC (International Sava River basin Commission; charged with fostering an international regime, river management and hazard limitation). Such capacity and information are pre-

Sava flooding 2014

eminently public goods and are critical to properly inform decision-makers and communities regarding flood events and future investments and other measures. With economic development moving forward in the river basin, basic decisions on the basin management and the water use need to be taken urgently; the proposed flood risk management plan will be an essential step to allow further support measures to be effected.

The regional significance of the project is considerable. The proposed project has a very high level of cross-border and regional interaction and will clearly lead to benefits to each nation and to the region. The flood risk management plan and the improved understanding of climate change effects will allow the countries to standardize their data, share technical data, and to closely coordinate their investment programmes and management measures. The project would harmonize with related planned activities in the region, notably the GEF-SCCF Drina Basin Project. The nature of the project suggests that its outcomes would be seminal and that its lessons can be very well replicated in other countries and regions.

The project directly stems from the Framework Agreement on the Sava River Basin (FASRB) and the Protocol on Flood Protection to the FASRB. Given that all countries have signed the Protocol implies that is in accordance with their national legislation and plans. The actions envisaged by the Protocol are in line with the EU Directive 2007/60/EC and the EU Directive 2000/60/EC. The project components are also on the list of priority projects of the EU Strategy for Danube Region. The study work is envisaged to run between 2014 and 2017.

Key Facts

Title	Sava River basin flood management
Code	WB11-REG-ENV-01
Data approved	June 2014
IFI	World Bank

WBIF Support

River basin flood risk management plan

Finances

WBIF grant	€ 2,000,000
Loan estimate	-
Total investment estimate	-

Western Balkans
Private Sector Development

Financial resources to boost high-growth enterprises

Small and medium sized enterprises (SMEs) in the Western Balkans represent the backbone of the respective local economies. At the same time, however, they are very exposed to volatile markets and often lack access to finance available in more mature markets. This underdeveloped SME infrastructure puts local businesses at a significant disadvantage, thus also hindering a sector which is an important source of economic growth and provider of jobs. WBIF is responding to this deficiency by providing support for private sector development. This support will foster economic development in the region through the creation of preconditions for the establishment and growth of innovative and high-growth potential companies.

In order to be competitive, companies need investment capital for equipment and working capital such that they can respond to ever demanding market forces and competitive pressures. Part of remaining competitive within the agenda of joining the EU is the need to meet the EU acquis and related standards; fulfilling these also requires investment.

The initiative supported by the WBIF is the Western Balkan Enterprise Development and Innovation Facility (EDIF). EDIF focuses on two specific target business sectors based on their stage of development:

Enterprise Inovation Fund

Enterprise Expansion Fund

Loan Guarantee facility

i. equity financing early stage innovative companies with the Enterprise Innovation Fund (ENIF), and

ii. equity financing for potential high growth companies with the Enterprise Expansion Fund (ENEF).

Furthermore a third debt instrument, the guarantee facility is available via WB EDIF whereby Western Balkans financial intermediaries are provided with guarantees and counter guarantees to facilitate on-lending to high growth potential SMEs. These three instruments are complemented by a horizontal instrument, the advisory and support services pillar, whereby projects (new or existing) are brought under the EDIF umbrella and financed in order to further foster and develop a venture capital ecosystem, investment readiness, innovation, policy making and other cross cutting areas in need of development.

In late 2012 WBIF seed funded the EDIF with a EUR 34.2 million grant. The scheme's partners are the EBRD and EIB with management delegated to the European Investment Fund (EIF). Capital resources for investment now stand at EUR 145 million which is expected to translate to EUR 300 million of investment funds for SMEs as the funds are cycled and recycled. Financial intermediaries, banks and venture capital firms, will be contracted to operate the scheme and will be the main interface with SMEs.

More information on WB EDIF can be accessed via *www.wbedif.eu.*

Key Facts

Title	Establishment of Western Balkans Venture Capital Fund (WBVCF) and Guarantee Facility (WBGF)
Code	WB5-REG-PSD-01
Data approved	June 2011
IFI	EIB

WBIF Support

Enterprise Innovation Fund (ENIF) – venture capital + Enterprise Expansion Fund (ENEF) + Loan guarantee facility + Advisory and support services

Finances

WBIF grant	€ 34,200,000
Loan estimate	-
Total investment estimate	-

Western Balkans
Private Sector Development

Helping establish the framework for public-private partnerships

Public Private Partnership in the Western Balkan

Public procurement in the form of public-private partnerships (PPPs) use private sector methods and tools to deliver modern public services, creating value for money and reducing fiscal risk. A prerequisite for a successful delivery of projects and a reasonable balance between the public and private sector is the establishment of an adequate institutional framework. Most of the Western Balkans countries are currently in a transition period during which the state structures are harmonised and adapted to the requirements stemming from potential membership to the European Union. Apart from the increase in the efficiency of the administration, these complex changes also entail the harmonisation of the complete legal and institutional framework with the European Union. Hence, the norms and structures related to public-private partnerships also need to be addressed.

The project brings some of the European PPP Expertise Centre's (EPEC) expertise to the region, both its experienced executives and its network of 40 public sector members, from within the EU and border countries. It also helps to share knowledge and experience among the PPP public stakeholders of the region's countries. By doing so, the countries covered by the WBIF will be able to establish harmonised institutional structures as well as go forward with their PPP programming and PPP project readiness assessment to procure and deliver projects at the right stage of development. In particular, the project focuses on

i) obtaining access to and extending the current EPEC network structures and databases to all countries governed by WBIF;
ii) assessing current PPP and related institutional structures and making some recommendations for improvement; and
iii) developing a methodological tool for PPP project readiness assessment.

The project beneficiaries are all the countries of the Western Balkans. The first phase has provided access to the current EPEC network structures, databases and activities to all countries where WBIF operates. Although the second and third phases, which look at assessing and revising institutional structures, have originally been implemented with Croatia and Montenegro, the 'lessons learned' product from these countries would be helpful across the wider WBIF. The fourth phase aimed at developing a project readiness tool that can be used across the whole region. The project has enabled a general increase in PPP-related knowledge to all WBIF countries which will help them both to increase their level of usage of private funds, as well as their effectiveness. The readiness tool project will help to secure the quality of PPP projects before they come to market.

The project was completed in June 2014. Reports are available on the EPEC Website: *http://www.eib.org/epec/wbif/index.htm*

Key Facts

Title	PPP Institutional Strengthening in the Western Balkans
Code	WB7-REG-PSD-SD-02
Data approved	June 2012
IFI	EIB

WBIF Support

Technical and management assistance

Finances

WBIF grant	€ 1,000,000
Loan estimate	-
Total investment estimate	-

Western Balkans Social Sector

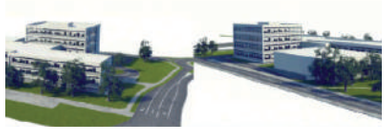
Building entrepreneurial training excellence for the whole region

The SEECEL - South East European Centre for Entrepreneurial Learning - is an initiative providing for structured co-operation among participating countries (Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Kosovo, Montenegro, Serbia and Turkey) on lifelong entrepreneurial learning. SEECEL has been functional since October 2009 with the support of the European Commission (receiving IPA funds 2009-2010) and the Croatian Government.

In order to secure the sustainability and further development of SEECEL's activities, the requirement for a dedicated physical facility was identified. Its construction can be considered as a good basis for the possible transformation into a European Entrepreneurial Learning Centre, which would be the first European institution established in the Western Balkans.

Under WBIF supported technical assistance, a feasibility study and project definition were prepared. According to Croatian laws an architectural competition was launched and subsequently a contract awarded for the preparation of the conceptual design. Based on the results of this competition, further WBIF support is enabling the preparation of preliminary and main designs for the centre, the tender documents and the supervision of construction.

SEECEL Conceptual design



The SEECEL centre will be located in Zagreb and the anticipated size of the centre's building has been estimated to be 14,506 m^2. It will comprise the following functional units: learning and training centre, centre of expertise, technology and innovation park, administration, dormitory, restaurant, and other general utility areas. The facility will be a low energy consuming "green" building, using renewable energy. Office space, working and meeting rooms, conference rooms, hospitality facilities and the dormitory will also be built to satisfy high user requirements and high quality standards.

The beneficiaries of the project are the citizens of SEECEL member countries who will benefit from the SEECEL programme that includes assistance with policy alignment and practice of lifelong entrepreneurial learning to that of the EU. In addition SEECEL is expected to support activities related to identifying global models that may enhance the role of entrepreneurial learning in the context of knowledge-driven, small enterprise-dominated and highly competitive economies of the SEE member countries.

SEECEL's mission is rooted in the EU policy framework for SMEs and aimed at the development of entrepreneurship in general. It has already set the precedent for wider international and regional cooperation for enterprise-education, a key recommendation in all relevant EU documents, most notably EU 2020 and EU 2030 strategy.

Key Facts

Title	i. Construction and Development of the Centre for Entrepreneurial Learning and strengthening Competition ii. SEECEL implementation support
Code	i. WB5-REG-SOC-01 ii. WB11-REG-SOC-01
Data approved	i. June 2011 ii. June 2014
IFI	EIB

WBIF Support

Feasibility study + Environmental assessment + Conceptual, preliminary and main design + Assistance with tendering + Supervision of construction

Finances

WBIF grant	i. € 1,584,000 ii. € 1,200,000
Loan estimate	€ 4,260,000
Total investment estimate	€ 33,500,000

Western Balkans
Social Sector

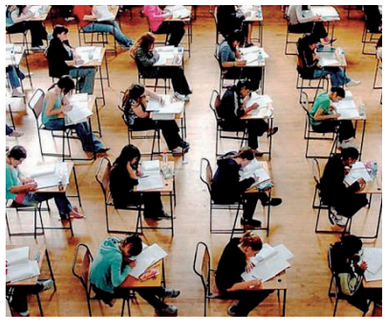
Financial means to broaden and improve access to higher education across the region

The WBIF grant is provided for the preparation of a feasibility study, which aims to explore possibilities of establishing a regional programme to provide better access to higher and professional education for academically qualified but economically disadvantaged students in disciplines relevant for the local labour market in Southeast Europe.

Developing human capital is widely recognised as a key factor for successful economic development. However, public resources dedicated to equal access into higher education proves to be (increasingly) insufficient in the countries of the region. This is specifically true when looking at the situation of students with a lower socio-economic background, who have neither sufficient own financial resources nor have access to adequate alternative (private sector) sources of financing.

In the absence of adequate governmental support programs, a cost efficient solution to bridge the financing gap is private sector involvement. Examples in European countries (e.g. Germany) show the relevance of such financial offers for equitable access to higher education.

Finance for higher education



It is intended to conduct an in-depth feasibility study to analyse current financing sources for higher education studies in Southeast Europe and propose possible mechanisms to leverage additional financing from the private sector without putting an additional burden on public budgets. The expected outcome of the feasibility study includes an in-depth country-specific analysis of higher education finance covering each of the WBIF beneficiary countries and a detailed qualitative survey providing information on the demand for student financial assistance in each country.

This detailed analysis will be used to develop a project concept for the preparation of a pilot project. The project concept will explore ways of securing the participation of suitable partner institutions from both, the financial and the higher education sector and public and governmental institutions such as the Ministries of Education and other local public bodies. Partners will be consulted and closely involved in the process of the feasibility study and pilot project preparation.

Based on the survey and estimates of the feasibility study it is estimated that a potential number of about 1,500 loans could be granted annually through a specific risk mitigation structure in the six countries during the pilot phase of the study alone. This source of additional financing would promote access to higher education for economically disadvantaged students, help reduce high youth unemployment by providing an easier access to a better education, and decrease the number of dropped-out students for financial reasons.

The direct project beneficiaries are the future students, specifically those with a lower and medium socio-economic background and the Ministries of Education in the six WBIF Beneficiary Countries receiving additional sources of financing for the higher education sector.

Key Facts

Title	i. Pilot Project for Higher and Professional Education Finance in Southeast Europe ii. Higher and Professional Education Finance in Southeast Europe – pilot project
Code	i. WB7-REG-SOC-03 ii. WB9-REG-SOC-SDP-01
Data approved	i. June 2012 ii. June 2013
IFI	KfW

WBIF Support

Feasibility study + Technical and management assistance

Finances

WBIF grant	i. € 600,000 ii. € 400,000
Loan estimate	€ 100,000,000
Total investment estimate	€ 101,000,000

Western Balkans
Transport Sector

Strategic planning for region transport development

The South East Europe Transport Observatory (SEETO) is the Western Balkans' regional transport organization which is charged to promote cooperation on the development of the main and ancillary transport infrastructure facilities and enhance the local capacity for implementation of investments in transport. In order to investigate and analyze regional transport in the Western Balkans, the EU commissioned the Regional Transport Study (REBIS) which was completed in 2003. The study prepared cost estimates for the rehabilitation and upgrading of the transport infrastructure. To date there has been no comprehensive review or update of the original data, information, and analysis. A WBIF grant is provided for the update of REBIS.

Development of updated traffic forecasts is needed to identify the potential impact of future capacity bottlenecks and define alternative routes in a prioritized and logical sequence.

Considering changes in regional transport flow patterns and the EU accession perspective it is necessary to improve, refine and validate directions for development of Trans-European Transport Network (TEN-T) Comprehensive Network in Southeast Europe (SEE). Towards the development of reliable systems for transport infrastructure planning, two important initiatives have been launched. Under the first initiative, SEETO aims to harmonize data definitions and standards and to support regional participants in implementing these standards. The second initiative, under the SEETAC project, is to develop a comprehensive transport planning model for SEE that would help better link Europe to the Far East.

Regional transport planning

This project will conduct a limited update of traffic projections in key transport corridors in SEE, using the existing REBIS forecasting model as a starting point. The REBIS forecasting model, based on the earlier work, used population and GDP growth assumptions, with some correction factors, to determine future traffic along key transport corridors, and with this information an investment plan was developed. This project proposes to add other factors, including trade flows, in order to ascertain the most important traffic corridors and where investments need to be made. The outcome will be a priority action plan for the SEETO network, identifying measure to reduce physical and non-physical barriers of the transport system in the Western Balkans. The analysis of trade flows for and freight movements as well as non-physical barriers will be informed by current work being undertaken by CEFTA.

SEETO Regional Participants (Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Kosovo, Montenegro and Serbia) would be the major beneficiaries of this project. The benefits of the study are multiple, including environmental and economic benefits achieved through increasing investments in the development of transport infrastructure in the Western Balkans region.

Key Facts

Title	Updating the Regional Transport Study (REBIS)
Code	WB7-REG-TRA-SD-02
Data approved	June 2012
IFI	World Bank

WBIF Support

Regional transport study update

Finances

WBIF grant	€ 600,000
Loan estimate	-
Total investment estimate	-

ALBANIA

Albania
Energy Sector

Planning the upgrade of the national electricity transmission system

Albania's electricity transmission system has been starved of investment over the last few decades and as a result is both dilapidated and inadequate. The broader consequences on the economy and quality of life have been severe. Since 2000, severe load shedding has occurred and many businesses dependent on a reliable energy supply have experienced shutdowns. Albania has experienced an abnormally high growth rate of electrical consumption which has placed considerable strain on the transmission network. The country has become an electricity importer but has not been able to get all the electricity it needs partly due to transmission interconnection constraints.

As a precursor to specific projects being undertaken an overall national system review was made that would lead on to detailed project-level feasibility studies. This review, supported by WBIF, identified the priority electricity transmission projects and ranked them in order of priority. This review comprised a full assessment of the transmission bottlenecks in the Albanian electricity transmission system managed by the national transmission operator OST, with a specific reference to load growth forecasts, and planned new generation effects on network topology.

Key Facts

Title	Upgrade of transmission system
Code	TA-ALB-11
Data approved	June 1008
IFI	KfW

WBIF Support

Sector asset review + Priority project identification

Finances

WBIF grant	€ 180,000
Loan estimate	€ 33,000,000
Total investment estimate	€ 75,000,000

Hydropower

The conclusions of this study were that the transmission network is in critical need of overhaul to improve electricity supplies, especially in the south of the country, and that investment is long overdue to replace plant that has exceeded its lifetime or its capacity to transmit the required energy. 50 projects were identified and screened using multi-criteria analysis which produced a shortlist of 20 priority projects. Overall, of these 20 most pressing electricity investment projects, up to 6 projects have been taken through to feasibility study stage, either with additional WBIF support, or directly via the lead IFI, KfW. Up to now, no investments have been made, due in part to the limited sovereign-guaranteed borrowing capacity of Albania, and ongoing projects including the international transmission connections: Albania to Montenegro and Albania to Kosovo 400kV connection projects.

The projects that were identified in this study that have progressed to feasibility studies under the WBIF include:

- Tirana to Rrashbull 220kV
- Tirana Ring project
- The former Yugoslav Republic of Macedonia – Albania 400kV interconnection
- Elbasan to Fier upgrading

The Albanian power sector (as was known as KESH, the vertically integrated company) has been completely unbundled into three main companies: restructured KESH is now responsible for production of the electricity and to maintain and develop the generation assets; OST the transmission, system and market operator with responsibility to operate, maintain and develop the transmission system; and OSSH the distribution system operator responsible to operate, maintain and develop the distribution system.

Albania
Energy Sector

Upgrading the electricity transmission network to increase supply reliability for almost half the population

Albania and in particular the Tirana area suffers from significant limitations in the electric transmission system. In addition to system losses there are regular power cuts affecting almost 50 % of the population and 33 % of private business. The result is lost revenues to the electricity company OST, very damaging high costs to businesses and inconvenience to domestic users. To remedy this poor performance the Government of Albania has embarked on a programme of transmission system improvements and strengthening including the installation of new substations and linkages to neighbouring countries.

The two WBIF supported projects help with feasibility studies' preparation. The first project concerns the construction a 220 kV double circuit line from SS Tirana 2 to Rrashbull and a new 220/220 kV substation in Rrogozhina as well as power transformer upgrade in SS Rrashbull. This will result in dramatic improvements of reliability of electricity supply from the capital Tirana towards the Durrës area. The second project covers the construction of a new 220/110 kV substation (SS Tirana 3) with an installed capacity of 120 MVA (Sauk area) and the reinforcement 110 kV Tirana ring which will reduce the overloading of the existing transmission system serving Tirana. Technical assistance services delivered included: budgeting and cost benefit assessments; evaluation of risks and sensitivity analyses; implementation plans; procurement plans; financial plans; environmental and social impact assessment.

The transmission system

The beneficiaries are the existing and future end users of the planned new double circuit 220 kV line from SS Tirana 2 to SS Rrashbull, the new SS in Tirana 3 and the reinforcement of Tirana Ring as the new lines and SS's will provide more secure and reliable energy transfer.

The new transmission lines are also of considerable national significance, since the new lines will replace the existing lines, which have high transmission losses and significant amounts of non-served electricity.

General living conditions together with environmental improvements (mainly from reduced pollution due to less use of diesel generators during power outages) will benefit the greater Tirana area along with the Durrës coastal regions, combined up to 1,000,000 people, through an adequate electricity supply that will also encourage and enhance economic growth through improved services.

Negotiations between the Government of Albania and KfW for the financing of these projects together with a number of other transmission projects have not produced anticipated results even if projects are within the country's overall electricity improvement programme.

Key Facts

Title	i. FS for construction of 220/110 double circuit – Tirana 2 (Rashbull) ii. FS for construction of new substation Tirana 3 with 120 MVA capacity for reinforcement of Tirana ring
Code	i. TA3-ALB-ENE-01 ii. WB4-ALB-ENE-01
Data approved	i. December 2009 ii. June 2010
IFI	KfW

WBIF Support

Preliminary design + Feasibility study + Environmental and social impact assessment

Finances

WBIF grant	i. € 577,000 ii. € 577,605
Loan estimate	i. € 15,500,000 ii. € 10.500,000
Total investment estimate	i. € 20,820,000 ii. € 18,150,000

Albania
Energy Sector

New power line to bring improved electricity supply to 800,000 inhabitants in Fier region

Increases in electricity power load and the addition of several new generation sources to the Albanian grid have led to the gradual straining of the transmission systems leading to frequent interruptions in supply. In response, the state company responsible for the management of the transmission system – Operatori i Sistemit te Transmetimit SH. A (OST), has identified (with the support of an earlier WBIF funded grant) twenty investment projects which, once implemented, should result in continuous power supply to customers along with higher revenues from potential electricity exports to the former Yugoslav Republic of Macedonia and Italy.

The Fier, Elbasan Prefecture and Berat / Kucova region is home to approximately 800,000 people. In addition, there are oil based industries together with agricultural and construction enterprises whose activities depend on a reliable power supply. WBIF are assisting with OST's upgrading work on the Elbasan – Fieri line. The project has so far benefited from two rounds of grant funding provided by the EU, aimed at financially, technically and environmentally substantiating the investments and thus attracting further financial resources. KfW are considering financial support for the project with an in-principle commitment to advance a loan for the rehabilitation and / or extension of the electricity system.

Double Circuit Elbasan1 – Fieri

WBIF support provided a feasibility study which considered two technical options and, after consultation with OST and KfW, concluded a preferred option: the construction of a new high voltage overhead-line between Elbasan and Fier at 400 kV with substation upgrades adjacent to the existing Fier and Elbasan substations. Additional to the feasibility study, WBIF support prepared a cost-benefit analysis and an environmental impact assessment.

The project will provide a 74 km long 400 kV single circuit line between Elbasan and Fier and also upgrade of a spare bay in substation Elbasan 2 and the extension and upgrade of substation Fier to 400 kV. The new high voltage supply system will enhance the capacity and reliability of the power supply system in the region, as well as reduce the current transmission losses. A minimum of 800,000 people and numerous industries in the Fier and Berat/ Kucova regions and Elbasan Prefecture will benefit from uninterrupted electricity supply. Moreover, the proposed upgrade will allow for the addition of new power generation sources planned for development in southern Albania (e.g. hydropower plants in Devoll, Vjosa, and Osumi river cascades; introduction of gas-powered electricity plants). The new transmission lines will also facilitate future regional network interconnection with Italy and the former Yugoslav Republic of Macedonia. The project could thus bring significant economic and social benefits to Albania.

The institutional arrangements have been reviewed with respect to OST's capacity to manage and operate the infrastructure improvements. The infrastructure improvements associated with this project have been estimated to cost EUR 33.1 million.

Key Facts

Title	Feasibility study for 220Kv double circuit Elbasan1 – Fieri
Code	WB6-ALB-ENE-03
Data approved	December 2011
IFI	KfW

WBIF Support

Feasibility study + Cost benefit analysis + Environmental impact analysis

Finances

WBIF grant	€ 850,000
Loan estimate	€ 21,000,000
Total investment estimate	€ 32,000,000

Albania
Energy Sector

A plan for gas in Albania

Albania has a small and run-down domestic gas supply network. It is not connected to the regional and European gas network and as a consequence, there is no gas market in the country. The diversification of sources and routes of the energy supply is a strategic objective of Albanian Government with the prime aim of increasing the security of energy supply. Within the existing energy strategy for Albania, the exploitation and development of natural gas is foreseen supplied by the Trans Adriatic Pipeline (TAP Project) and the Ionian Adriatic Pipeline (IAP, subject to another WBIF grant, see WB5-REG-ENE-03). The routes are expected to bring gas to Albania by 2019. Both the TAP and IAP are "Projects of Energy Community Interest" (PECI, highest impact to the largest number of people) as defined by the Energy Community Secretariat (ECS), the region-wide mutual energy support and development organisation.

This WBIF supported project will help realise Albania's gas development by assisting with the production of an identification study which will define the priority investment projects. The study will be broken into two phases. Phase I will develop a comprehensive medium term natural gas development master plan together with the supporting institutional measures in the Ministry and Energy Regulatory body. The master plan will include:

Planning for gas

- gas demand and supply scenarios by specific major sectors (power generation, industrial, commercial, residential, institutional, etc.);
- gas infrastructure priority investment plan (both transportation and distribution systems) including cost estimates;
- pre-feasibility level analysis of potential infrastructure projects, including UGS opportunities;
- the promotion of utilisation of natural gas;
- gas pricing policy, tariffs and regulations;
- capability building within relevant institutions.

Phase II will develop the prioritized gas investment projects including financial analysis and implementation plans.

The implemented project should bring many benefits:

- a cleaner energy source and improving energy efficiency;
- a diversified energy supply and to the wider region, so bringing enhanced energy security;
- ability to use planned Albanian storage capacities, either salt domes or depleted gas fields;
- reduced greenhouse gas emissions by fuel-switching;
- reducing CO_2 emissions in the region;
- a boost for economic development;
- opportunity for Albania to become a gas hub at the nexus of the IAP and TAP pipelines, and establish the preconditions for a gas market to develop in Albania;
- support the EC gas ring project, with the potential further development of TPP Vlora or other CCGT electricity generation in the Vlora / Fier region.

The project is fully in line with the EU's pre-accession strategy - to develop the regional energy market and strengthen energy security - and the national IPA programme for Albania.

Key Facts

Title	Gas master plan for Albania
Code	WB10-ALB-ENE-01
Data approved	December 2013
IFI	EBRD

WBIF Support

Gas master plan + Prioritized investments + Capacity building

Finances

WBIF grant	€ 1,100,000
Loan estimate	-
Total investment estimate	-

Albania
Environment Sector

Kavaja and Golemi sewerage network serving 100,000 people and improving the coastal environment

The sewerage system of Kavaja is inadequate for the demand made by the population of the area serviced. The wastewater treatment plant (WWTP) has a capacity to meet the needs of 25,000; it needs to serve 100,000 people. WBIF are assisting with a project that will improve provision. Technical assistance is provided with the overall objective of preparing detailed designs and tender documents for the extension of Kavaja's WWTP to have the capacity to serve the increased need. In addition, the sewerage network of the nearby Golemi Beach area will be completed.

Based on the detail design prepared under the scope of the project the following investments have been defined and are now being implementation:

- an extension of the 25,000 people equivalent biological wastewater treatment plant to 100,000 population equivalent, including a pre-treatment station, two anaerobic ponds, two trickling filters and two sedimentation tanks;
- the construction of sludge management units including one sludge storage tank and four roof covered sludge drying beds;

Kavaja WWTP

- the construction of one disinfection building and storage facility for treated water;
- the construction of a secondary network in Golemi's trunk sewer section measuring 1,351 m in length, secondary and tertiary sewers measuring 29,495 m with diameters ranging from 200 to 500 mm, the installation of 494 HDPE manholes for sound operation and maintenance and construction of three wastewater pumping stations.

Upon successful implementation of the project, Kavaja and Golemi's residents and visitors will have beaches with clean bathing water and alleviated environmental hazards. This will help promote economic growth and tourism development. Other benefits can be noted:

- Public health improved and decrease in waterborne diseases;
- Protection of marine environment and aquatic life;
- Increase of the service quality of the water company;
- Reduction in land pollution by negated septic tank flooding;
- Decrease of energy and water consumption after potential use of the treated water for irrigation.

The study work was completed in May 2011 and work started on the Kavaja WWTP in October 2012. The total investment is EUR 4.8 million which is IPA funds provided by the European Union. The Golemi sewerage network is financed by the Albanian Government. The project satisfies the requirements of the Urban Wastewater Treatment Directive and the EU's Bathing Water Directive and therefore is an important environmental milestone in supporting the EU accession process.

Key Facts

Title	Upgrading of Kavaja WWTP & Completion of the sewerage network for Golemi
Code	TA2-ALB-ENV-03
Data approved	March 2009
IFI	-

WBIF Support

Preliminary and detailed design + Assistance with tendering

Finances

WBIF grant	€ 350,000
Loan estimate	€ 4,800,000
Total investment estimate	€ 9,700,000

Albania
Environment Sector

Expanded water system to meet rapid population growth in Kamza

Kamza is a large district 7km north of the capital, Tirana, to which it is joined administratively. The current poor provision of water and wastewater services make it a very worthwhile case for support and two WBIF grants have been awarded.

The Municipality of Kamza is located in the Greater Tirana Region and includes the town of Kamza, five villages and two unplanned settlements. The population of the Municipality's urban and peri-urban areas has grown very rapidly over the past few years as a consequence of increasing migration from other parts of the country. The current population of Kamza Municipality totals around 95,000, of which around 40,000 live in the town and the remaining 55,000 in the peri-urban and rural areas. As a result of the rapid increases in population, the provision water supply and wastewater services have fallen considerably behind the levels needed for a rapidly growing population.

The water and sanitation infrastructure in Kamza only services a minority part of the population, with 30% of the population of Kamza serviced directly by the water system, and only 18% connected to a sewerage system.

Water for Kamza

Around 80% of the sewage waste is discharged in the Tirana River, which joins with the Ishem River and then onto the sea, adding to the pollution of coastal areas. Investment in the Kamza water and sanitation systems should ensure a reliable water supply and safe drinking water for this suburb, and enable the utilities to set tariffs that cover their operational costs while also being socially affordable. The project aims to provide a significant positive public health impact, to contribute to meeting Albania's future needs for compliance with EU and national environmental legislation, and to safeguard potable water resources and environmental quality for areas downstream of the River Tirana.

The project is supported by two WBIF grants: the first technical assistance provided a feasibility study for water supply and wastewater collection and treatment facilities for Kamza. The proposed investment for Phase 1 in Kamza is approximately EUR 12 million with WBIF support from the IPF Municipal Window Investment Grant of EUR 5.5 million together with a CEB loan of EUR 6.5 million provided through KfW. The Phase 1 investments will primarily fund the distribution network and installations of new connections. A design consultant was appointed in late 2013, construction started late 2014 with completion set for 2016 - 17. The feasibility study also developed a comprehensive project for wastewater collection and treatment, which is expected to be implemented at a future date.

Key Facts

Title	i. Kamza water and sanitation ii. Project of Water Supply & Sewerage of Kamza
Code	i. MW-ALB-ENV-CEB/KfW-06 ii. TA2-ALB-ENE-02
Data approved	i. and ii. March 2009
IFI	KfW and CEB

WBIF Support

Feasibility study + Technical and management assistance

Finances

WBIF grant	i. € 5,500,000 ii. € 450,000
Loan estimate	€ 15,000,000
Total investment estimate	€ 20,500,000

Albania
Environment Sector

50,000 to get safer wastewater services

The sewerage network of Shengjin was built about 40 years ago in the town centre. The network has not been expanded in parallel with the growth of the town and tourist facilities, particularly hotels. The present Shengjin sewerage network is a "combined" system that evacuates both wastewater and storm water. The network is generally in a poor and dilapidated condition, due to age and lack of maintenance of the pipes and manholes. Renewal, upgrade and expansion of the system is vitally important for environmental protection and sustainable development of the Shengjin. This is particularly important given that the area is highly dependent on tourism and recreational activities as a source of wealth for the town.

WBIF are responding to this need with a grant that will support a project with technical assistance. This help will prepare detailed designs and tender documents for the provision of wastewater collection systems (primary, secondary and tertiary sewers) within in the administrative boundaries of the town of Shengjin and cover an area of approximately 20 km^2.

The detail design prepared under the scope of the project records the following works:

- Just over 12.5 km of sewerage pipes which will enable approximate 50,000 people to benefit from the wastewater collection services;

Laying new pipes in Shengjin

- 84 manholes;
- All houses within the project are connected to the system;
- Old pumping station renovated;
- A new pumping station with a capacity of 176.3 l/s.

The project will bring many benefits; it will:

- Make a positive contribution to public health and decrease of waterborne diseases;
- Increase of the service quality of the water company;
- Reduce land pollution by eliminating flooding of septic tanks;
- Reduce energy use and greenhouse gas emissions by separating the sewerage and storm waters.

The redevelopment of Lezha and Shengjin sewerage collection system is a coordinated collaboration between three WBIF IFIs. The sewerage collection system is financed by KfW, the wastewater treatment plant financed by World Bank and main sewerage interceptors financed by EIB. The project can be seen as an essential part of a vital integrated system.

The integrated project satisfies the requirements in the Urban Wastewater Treatment Directive and Bathing Water Directive of EC and therefore is an important milestone among the high cost investments in environment sector during the EC accession process.

Key Facts

Title	Wastewater and sanitation in Lezha and Shengjin
Code	TA2-ALB-ENV-01
Data approved	March 2009
IFI	KfW

WBIF Support

Detailed design + Assistance with tendering

Finances

WBIF grant	€ 180,000
Loan estimate	€ 2,800,000
Total investment estimate	€ 3,580,000

Albania
Environment Sector

Pogradec and area get water supply and wastewater treatment systems

Wastewater infrastructure in Albania is inadequate: either non-existent or of very limited extent and very poor quality. The result is dangerous and deleterious to human health and the environment. To rectify this the country has embarked on a wide ranging number of projects. Here in Pogradec WBIF is helping with a capital investment grant of EUR 3.5 million.

This project builds on previous and ongoing efforts for environmental protection of Lake Ohrid and its coastal towns, in this case Pogradec. Human and industrial waste and wastewater is generally not adequately treated in Albania. In Pogradec the waste water generated by the town has been discharged untreated into Lake Ohrid. The waste water in the area of Pogradec represented the single largest water quality challenge to the lake, significantly contributing to excessive plant growth that disrupts its eco-system and threatening human health through contamination by harmful bacteria and viruses in faecal material.

In 2001, the German government, through KfW and the Swiss government through Staatssekretariat fur Wirtschaft (SECO) launched a first phase of investments providing funding to design and construct a sewerage collection and waste water treatment plant for Pogradec and the surrounding villages, covering - now in the third phase

Pogradec's new wastewater treatment plant

of the project - the treatment of wastewater of about 80 % of the town of Pogradec and the villages of the Bucimas Commune. This WBIF supported element of the project concerns the extension of the sewerage system in Pogradec, to allow the treatment of all the wastewater produced in the Pogradec area.

Pogradec wastewater treatment plant (WWTP) was completed under phase I (which included adding more connectors to the southeast and east of Pogradec and adding phosphorus removal by chemicals.) The network will be further extended in Bucimas Commune, and water supply improved in the villages of Gurras, Remenj and Verdove; their existing water supply network will be rehabilitated. On completion of phase III all villages of Pogradec supply area will benefit from reliable drinking water. The project deals with the environmentally and hygienically sound wastewater collection and treatment in Pogradec as well as reliable drinking water provision to Gurra, Remenj and Verdove. These measures will contribute to the protection of Lake Ohrid water quality and reduce health risks to the populations of Pogradec and surrounding villages.

The estimated total investment for the project (phase III) is approximately EUR 13.5 million, which will be made up of funds provided by the CEB through a KfW loan of up to EUR 10 million and a EUR 3.5 million grant provided through the EU's WBIF-IPF Municipal Window Investment Grant. A consultant was recruited in September 2011 and after preparing the design works and equipment followed by assistance with tendering in 2012 a contracts awarded in April 2013. Construction is forecast to complete in 2015.

Key Facts

Title	Wastewater Pogradec
Code	MW-ALB-ENV-CEB/KfW-03
Data approved	March 2009
IFI	KfW

WBIF Support

Investment grant

Finances

WBIF grant	€ 3,500,000
Loan estimate	€ 10,000,000
Total investment estimate	€ 13,456,250

Albania
Environment Sector

Clean water and treated sewerage for Gjirokastra and Fier

The Albanian water and wastewater systems are not efficient. While the majority are connected to a mains supply the in-system water loses are huge. Around half are connected to a wastewater system, however very little discharge is processed through a wastewater treatment plant leading to health an environmental risk. To address this, and meet other water supply and discharge needs, the government has embarked on a programme of refurbishment and new installations. WBIF is supporting a number of these initiatives. This particular project is helped by a WBIF capital investment grant of EUR 4.68 million.

The majority of the Albanian population, 78 %, is connected to a water supply system. A serious problem however, is the high "unaccounted for water", water which is lost and wasted once it has entered the system, which is more than 60 % and the highest in Europe. This is caused by the large technical losses due to the outdated water supply infrastructure and the large number of illegal connections. The use of high volumes of water for the purpose of crop production, public parks, cleaning of towns and other ancillary activities aggravates the situation. Almost half of the population is connected to the sewerage system but only the waste water of a very few is treated in a waste water treatment plant. As a result surface and ground waters

Water source in Gjirokastra

are highly contaminated by direct discharge of polluted urban and industrial wastewaters into surface watercourses.

This project is part of the German government's "Municipal Infrastructure I" programme implemented by KfW, which aims to improve the water supply and sewage management in Lezha, Fier, Saranda and Gjirokastra, by rehabilitating several water reservoirs, construction of water mains, connection of several neighbourhoods and nearby villages of these towns to the water supply system and sewerage network. The total investment of the entire programme taking in the four locations amounts to about EUR 31 million (of which EUR 13.5 million is for Fier and Gjirokastra), whilst financing includes a CEB loan (up to EUR 16 million) is provided through KfW. The investments in Fier and Gjirokastra are co-financed by the WBIF's Municipal Window Investment Grant of EUR 4.5 million.

The entire programme will have a positive impact on the development of water and sanitation sector management. It will contribute to a better and sustainable use of water as well as providing environmental and health benefits related to the correct management of wastewater and partly sewerage.

Construction works are scheduled to be tendered in the 2nd quarter of 2014 and shall be completed by end 2016 or beginning of 2017.

Key Facts

Title	Water supply and sewerage, Gjirokastra, Fier
Code	MW-ALB-ENV-CEB/KfW-02
Data approved	March 2009
IFI	KfW

WBIF Support

Investment grant

Finances

WBIF grant	€ 4,500,000
Loan estimate	€ 16,000,000
Total investment estimate	€ 31,111,500

Albania
Energy Sector

Flood protection measures to safeguard 10,000 along the Mati River

Albania has recently suffered from severe flooding. This was particularly acute in the Mati River basin to the north of the country. To start planning for remedial action WBIF are supporting the government of Albania with a study to assess flood risks and establish a management regime for flood mitigation measures. The aim is to establish processes for sustainable management of natural resources, agriculture together with rural development in line with environmental protection criteria, through infrastructure installation and rehabilitation.

A feasibility study was undertaken that will assist the efforts of the Government of Albania to prepare for long-term land protection investment planning and provide better provision for flood control and management. The study was performed between May 2011 and early May 2012. Over this one year period the project team, working in close cooperation with the beneficiaries, concluded a thorough analysis of the current situation in the Mati River basin. The study provided comprehensive details on river characteristics together with population distribution and human activities in the affected area. The characteristics of floods through hydraulic flood impact models were assessed and flood response measures to avoid damage were proposed. The study prepared a mid-term cost-effective priority plan for interventions in flood control along the river in order to reduce flood risks; the infrastructural and institutional measures for a more successful flood management were also outlined. The main points for action are:

- Regulation of the river bed and banks, for a 12 km stretch, by construction and/or rehabilitation of longitudinal embankments, weirs and cross panels along the rivers in the Mati River basin;
- Rehabilitation of flood protection infrastructure which protects 80,000 ha of agriculture land;
- Protection of urban area assets (buildings, vehicles, etc.) and infrastructure (roads, bridges, water and wastewater networks) in the Mati River basin which has a catchment area of 2,441 km^2.

Mati River

Implementation of the proposed measures would bring benefits:

- Reduction of risks resulting from floods for 210,000 people living in the catchment area;
- Decrease threats on loss of human lives and wealth within the basin;
- Promotion of sustainable agriculture and sound and risk-free settlements;
- Increase in the possibilities for employment in the surrounding communities;
- Reduction of soil and riverbank erosion on these areas and along the river basin;
- Decrease of financial and economic losses from flooding by eliminating cost of evacuation, cleansing and disinfection, emergency housing and working time loss.

The study indicated that unless necessary improvements are made, flooding could affect around 10,000 people and cause over EUR 11 million damage.

Key Facts

Title	Improvement of flood protection infrastructure in Albania
Code	TA3-ALB-ENV-03
Data approved	December 2009
IFI	-

WBIF Support

Flood impact estimation + Flood management plan + Investment plan + Feasibility study

Finances

WBIF grant	€ 400,000
Loan estimate	-
Total investment estimate	€ 800,000

Albania
Environment Sector

Integrated solid waste management for Vlora Region

Vlora landfill site

The Vlora Region is split into three districts, Vlora, Delvina and Saranda, with seven municipal and 19 communal governments and has an estimated population of 184,000 residents. The project area includes the city of Vlora, which is a major seaport and commercial and industrial centre. Vlora Region has also become an important agricultural area supporting processing of locally grown agricultural products for exports. More recently it has also become a major tourist destination for foreign and national tourists. Originally, the project was designed to cover the entire Vlora region. However, currently within the scope of the World Bank financed "Integrated Coastal Zone Project", a waste management component is implemented including the construction of a sanitary landfill for the whole southern part of the Vlora region, i.e. Saranda and Delvina districts as well as Himara Municipality. Consequently, the project area for the integrated solid waste management (ISWM) Vlora project will cover all municipalities and communes in the northern part of the Vlora Region (Vlora district excluding Municipality of Himara) with a population of 123,303 residents.

The existing infrastructure for treatment and disposal of municipal waste in the project area is inadequate. There are neither regulated sanitary landfills nor associated facilities essential for the management of solid waste such as transfer stations and sorting and recycling facilities. Seven large dumpsites are used for the disposal of municipal waste in the region. These dumpsites also serve as dumping grounds for industrial and construction waste together with hazardous waste. In the close vicinity of Vlora City, there is an abandoned site for hazardous industrial waste. None of the dumpsites are fenced or controlled.

The problems connected with solid waste management in the project area pose a serious threat to the development of the region, its environmental resources and public health. To address the existing problems WBIF are providing funds for the elaboration of a comprehensive feasibility study. The study will address the challenges of ISWM and the preparation of development options for the Vlora Region which are economically viable and environmentally sustainable.

The total value of the subsequent investments is estimated to be EUR 13 million, EUR 6 million of which will be financed through a loan from KfW. The feasibility study as well as the environmental and social impact assessment report are expected to be completed in early 2015.

Key Facts

Title	Feasibility study for construction of sanitary regional landfill – Vlora region
Code	WB6-ALB-ENV-10
Data approved	December 2011
IFI	KfW

WBIF Support

Feasibility study + Environmental and social impact assessment

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 6,000,000
Total investment estimate	€ 13,000,000

Albania
Environment Sector

70 water supply systems to benefit over 75,000 rural inhabitants

Water supply infrastructure in Albania is inadequate: either incomplete provision or of very poor extent and quality. The result can be deleterious to human health. This is particularly acute in rural communities where development typically follows provision for urban areas. To rectify this the government of Albania, through the Albanian Development Fund (ADF), aims to construct and rehabilitate water supply systems to improve living conditions in rural areas. To aid this project support has been sought from the WBIF.

Following political and socio-economic changes in Albania in the 1990s, the responsibility for existing water supply systems has been transferred under the authority of Local Government Units (LGUs). The decentralization of water enterprise management to LGUs, which often lack sufficient management capacities, and the fact that most existing water service providers are in urban areas, have led to the situation that water supply in rural areas has been largely neglected for many years. The majority of supply systems in rural areas have been built over 30 years ago while during the last 20 years only a small number of water supply systems have been built. As a result of the above described context the majority of the rural systems is either out of order, largely defective or functioning deficiently and on a provisional basis. Consequently the majority of rural communities have limited access to an orderly and hygienically safe drinking water supply.

Rural water supply

Inadequate access to hygienically safe drinking water is one of the main growth bottlenecks in the rural areas, inducing difficult living conditions and contributing among others to health hazards and poverty.

The estimated cost for this project is approximately EUR 40 million. The WBIF support provides technical assistance to identify suitable communities for development and prepare feasibility studies for them. The investments under this project cover the construction or reconstruction water supply systems (consisting of spring captures, transmission lines, reservoirs, distribution networks, and house connections) and complementary emergency waste water measures. With the available budget at least 70 water supply systems serving more than 75,000 people in the rural areas of Albania will be reached.

This project will draw on the successful experience gained and approach established by ADF and KfW within the framework of the rural water supply projects in rural areas of northern Albania. Furthermore, ADF has successfully implemented over 1,730 infrastructure projects throughout Albania, including over 300 projects involving rural water supply in the past 17 years.

Key Facts

Title	Water supply systems in rural areas
Code	WB10-ALB-ENV-01
Data approved	December 2013
IFI	KfW

WBIF Support

Identification of target communities + Feasibility studies

Finances

WBIF grant	€ 750,000
Loan estimate	€ 24,000,000
Total investment estimate	€ 40,000,000

Albania
Social Sector

A framework for building better education facilities for the Nation

Albania is undergoing a deep transformation process and, like other transforming countries, lacks sufficient public expenditure capacity across all economic sectors with the social sector being one of the most heavily and adversely affected. This in turn limits access to and provision of basic services, quality of education, health care and social protection for children and youth. Education is one of the biggest problems of transition, especially considering that migration from rural to urban and peri-urban areas of developed and rapidly expanding cities is a common phenomenon.

WBIF are assisting the government of Albania in their aim of improving the education sector, most particularly focusing on schools' infrastructure and the processes needed to ensure that the correct investment decisions are made at the right time and to best effect. The project aims to assist the Albanian Ministry of Education and Science, local administrations and individual education facilities to develop a management framework to be used as a comprehensive planning and management tool for informed decisions regarding investments in education facilitates.

Key Facts

Title	Education, Excellence and Equity (EEE-P) & rehabilitation of Tirana Schools, 2nd Phase
Code	TA-ALB-10
Data approved	June 2008
IFI	CEB and EIB

WBIF Support

Education capital asset planning model + MIS for asset database + Education Management Information System (EMIS) + Geographical Information System (GIS) + Capacity building

Finances

WBIF grant	€ 1,500,000
Loan estimate	€ 30,740,000
Total investment estimate	€ 50,000,000

A secondary school in Tirana

The technical assistance provided: an assessment of current ICT and future needs in the ministry; an assessment of geographic information system (GIS) needs; a schools' inventory covering 4,800 establishments; delivered a schools' information system (SIMS) and GIS; and held training and workshops for national and regional ministry staff.

The GIS application is a key component of the project; it visualizes statistical data into different map scenarios that can be used to inform policy decisions. By using the GIS application, MoES management authorities can quickly turn data into information that can sharpen the intelligence as well as accelerate and foster decision-making. The SIMS is similarly a complimentary key component; the system's functionalities and characteristics are designed to give key scenarios for different administrative levels. This interactive and multi-user IT-based tool provides access to up-to-date searchable information on the infrastructure status and needs of each of Albania's 4,000 pre-University schools. The information reports generated through SIMS are configured in a pre-formatted layout covering 14 thematic areas. Each of these reports is ready for on-screen visualization, downloading in different accessible formats and printing on office size stationery.

These powerful tools are now ready for the ministry to use in determining a prioritised programme for school infrastructure development. A follow-up request for further grant support to build on this work has been made to WBIF and is currently being considered.

Albania
Social Sector

Reform of Albania's largest health facility in Tirana

The Government of Albania is in the process of modernising the Tirana University Hospital Centre (TUHC), the largest public healthcare facility in the country. The WBIF support consists of two specific thematic studies which are an integral part of the updated master plan (MP): i) the environmental study (ES), and ii) the energy supply study (ESS). It also includes a training component focused on maintenance and waste management.

The first phase of the hospital's development covered the construction of a new main building of the hospital including the emergency unit, radiology, intensive care, laboratories, central sterilization, and functional diagnostics. The second phase consists of two additional floors on the main building and the rehabilitation of the General Medicine Building. The ultimate beneficiaries of the projects are mainly the citizens of Tirana region and other potential users from all over the country, since TUHC is the most important tertiary medical unit in Albania.

TUHC has around 1,450 beds and serves 65,000 patients every year, out of which at least 50% are from outside Tirana. In addition, TUHC management, medical and administrative personnel benefited from the project training,

Tirana University Hospital Centre

which improved their knowledge and skills for efficient and effective utilisation of resources and work flow.

The environmental study determined the extent of the healthcare facility's impact on the environment, both in terms of its current operational status and in terms of the proposed future impact based on the scenarios outlined in the new hospital MP. An evaluation report, an environmental management and investment plan report, and an environmental statement were prepared.

The energy supply study led to an energy supply strategy with solutions for reliable energy supply at the TUHC in accordance with identified demands. The study includes a detailed review of the existing infrastructure with a critical assessment of the existing equipment and facilities. An evaluation report, a review of master plan requirements report and a feasibility study with option selection and an energy supply strategy report were submitted.

The training component of the project comprised 11 modules delivered to about 50 selected staff. Training topics included: waste management issues; management and utilisation of the new spaces in accordance with the progress flow and special medical functions; proper utilisation of the new medical equipment, and functional and organisational aspects for modern day hospitals.

Key Facts

Title	Tirana University Hospital Centre Reform Programme, Phase 2
Code	TA-ALB-04
Data approved	June 2008
IFI	CEB

WBIF Support

Environmental study + Energy supply study + Capacity building

Finances

WBIF grant	€ 580,000
Loan estimate	€ 15,930,000
Total investment estimate	€ 24,900,000

Albania
Social Sector

Growth plan for touristic Alps region

The Albanian Alps area is located in the northern part of Albania and borders Montenegro to the west. It is an area of unblemished beauty and considered to have rural tourism potential but has suffered from lack of basic services' investment. The area consists of ten rural communes with a population of around 35,000. The lack of diverse economic activity, high unemployment, coupled with the poor state of infrastructure in the area (unfortunately including a comprehensive panoply of road networks, water supply and wastewater collection and treatment, health provision, education facilities, and flood protection) form the major obstacle to the development of this region and is causing depopulation.

The Government of Albania has recognized the need to invest in the improvement of basic municipal infrastructure and services in the Alps' communes, in order to improve the living conditions of the residential population and contribute to economic growth, mainly through improving the potential for tourism. Selective road reconstruction activities have already begun (under the Feeder Roads program), increasing access and opening the area to agro-tourism activities. The communal administrations of the Alps are committed to strengthening their territory management capabilities and enhancing the quantity and quality of administrative services in support of the development aims for this region.

Albanian Apls: huge potential for tourism growth

The total planned investment in the regeneration of this area is estimated to be around EUR 15 million. A EUR 10 million loan is planned by the Council of Europe Development Bank (CEB) for the civil works. A WBIF grant of EUR 1 million is provided for technical assistance which supports the development of:

- a master plan for the development of the area - with a focus on tourism - which includes local strategies and socio-economic assessment of the communes, development plan drafts, a communal infrastructure investment plan focused primarily on waste management, water and waste water treatment, flood protection, erosion control and similar, and the preparation of detailed thematic maps for potential development options;
- a feasibility study for major communal infrastructure works which will be supported by the CEB loan and which includes a programme for detailed design.

In addition to the loan, the CEB may be able to provide an interest rate subsidy of up to EUR 1 million to add to the financial sustainability of the project.

Key Facts

Title	Master plan and feasibility study for Albanian Alps
Code	WB6-ALB-SOC-14
Data approved	December 2011
IFI	CEB and EIB

WBIF Support

Master plan + Feasibility study

Finances

WBIF grant	€ 2,000,000
Loan estimate	€ 10,000,000
Total investment estimate	€ 17,000,000

Albania
Transport Sector

A comprehensive assessment of railway development needs with priority projects proposed

The project dealt with addressing Albania's too long investment starved railway network. Currently, the railway infrastructure is in very bad condition, many components of the track are not functioning satisfactorily and the safety systems suffer from many deficiencies. For safety reasons the train have to run at very low speed, typically 25 to 40 km / hr. These low speeds result in longer transport times, increased costs of freight transport, and the capacity of the single track lines is severely restricted. The passenger service is not an attractive proposition and as a consequence traffic is diverted onto the roads. The system needs a major overhaul to start bringing it up to internationally comparable standards. As well as bringing benefits of reducing road traffic and offering an efficient service to both passenger and freight customers alike it is noted that there is an opportunity as the number of freight trains are already growing due to the revival of mining, mineral and metal in Albania.

The WBIF is assisting the Albanian government with a grant to assess needs. The technical assistance work has been used to identify the essential works, covering track, structure and signalling, required to improve the operational capability of the system and to begin the process of fully complying with the European standards for railways.

An Albanian passenger train

The initial improvements were prioritized to provide the best opportunity for development, not only of the railway infrastructure, but also to encourage use of the system for both freight and passengers, to assist in the country's economic development. The study established the condition of the existing infrastructure and identified a range of improvements. The study, based on cost-benefit appraisal technique, addressed the issue of incremental improvement on a section-by-section basis to provide flexibility for budgets and still provide the most appropriate improvements early in the project. The study included a preliminary assessment of the railway business based on transport scenarios and an assessment and understanding of the development trends in the Albanian economy. Cash flow analysis was conducted to assess the options and indicate which is the most advantageous to the economy. The socio-economic implications of the project were also assessed.

The Albanian railway network is an important part of the South East Europe Transport Observatory (SEETO) core railway network. The vision of Albanian railway transport strategy is to be part of Corridor VIII and the high performance regional network.

As a result of the study a follow-up WBIF project, managed by EBRD, focuses on the key line between Tirana and Durres, Albania's main port. See WB4-ALB-TRA-09.

Key Facts

Title	Track renewal & signalling & communication systems for entire Albanian railway network
Code	TA-ALB-06
Data approved	June 2008
IFI	EBRD

WBIF Support

Feasibility study + Project identification and prioritisation

Finances

WBIF grant	€ 1,500,000
Loan estimate	-
Total investment estimate	€ 200,000,000

Albania
Transport Sector

Remote areas to get better access to services and markets

Albania has an ambitious programme of road upgrading. The programme will provide: a more comprehensive network, upgrades of existing roads in very poor condition and construction of interconnecting new links. WBIF supports a number of projects with four grant awards* focusing on roads with the involvement of four IFIs: EBRD, EIB, CEB and KfW. This project, where KfW is the lead IFI in collaboration with the CEB, deals with feeder roads.

The overall length of the road network in Albania totals about 15,500 km, comprising 3,400 km of national roads and about 12,000 km of secondary and local roads. The priority given to the expansion of the national road network in recent years has resulted in an inadequate maintenance of the majority of the local roads. The problems facing the local road network are significant, as only a small number of sections are paved and about 75 – 80 % of the system is in a poor or very poor condition. To compound the problems a number of sections are impassable for parts of the year, so restricting access to essential services, primarily health and education. This poor provision also hinders economic growth: the conditions represents a barrier to the private sector development of the rural areas, particularly by acting as a constraint on agricultural competitiveness.

Upgrading a feeder road

This project is part of a multi donors' programme to support the rehabilitation of 1,500 km of secondary and rural roads in Albania. The aim of the programme is to improve the transport conditions in the rural areas of the country, with about 25 % of the Albanian population, in order to ease the linkages with the markets, health and education services, as well as to contribute to economic development through employment and creation of opportunities to develop the rural economy. These benefits include reduction in travel time, vehicle operating costs and increase in traffic volumes. One main outcome will be improved maintenance practises on the regional and local road network. The primary beneficiaries of the investment will be the inhabitants and businesses in areas served by the rehabilitated sections.

This project financed by German Financial Cooperation and EU funds is part of the overall investment programme in the rehabilitation of the secondary and rural roads in Albania. It is valued at EUR 24.4 million and aims at the improvement of priority sections of the secondary (regional) road network across Albania.

*See also WB1-ALB-TRA-01 and WB4-ALB-TRA-08

Key Facts

Title	Feeder roads
Code	MW-ALB-TRA-CEB/KfW-07
Data approved	March 2009
IFI	KfW

WBIF Support

Investment grant

Finances

WBIF grant	€ 9,000,000
Loan estimate	€ 20,000,000
Total investment estimate	€ 29,000,000

Albania
Transport Sector

Regional and local roads upgraded

The regional and local roads' upgrade project is part of Albania's comprehensive road improvement programme. The programme will provide: a more comprehensive network, upgrades to existing roads in very poor condition and create new interconnecting links. The project focuses on two core parts of the network: regional and local roads. Two WBIF IFIs, the EBRD and EIB, are supporting some parts of this initiative with loan finance.

The overall length of the road network in Albania totals about 15,500 km, comprising 3,400 km of national roads and about 12,000 km of secondary and local roads. The priority given to the expansion of the national road network in recent years has resulted in an inadequate maintenance of the majority of the local roads. The problems facing the local road network are significant, only a small number of sections are paved and about 75 – 80 % of the system is in a poor or very poor condition. To compound the problems a number of sections are impassable for parts of the year, so restricting access to essential services, primarily health and education. This poor provision also hinders economic growth: the conditions represents a barrier to the private sector development of the rural areas, particularly by acting as a constraint on agricultural competitiveness.

This project is part of a multi-donors' programme to support the rehabilitation of 1,500 km of secondary and rural roads in al Albania. The aim of this investment is the integration of rural areas into national and regional transport networks. The project contributes to spreading economic growth and social wellbeing in rural areas of Albania by helping private sector development and improving access to essential services. The European Bank for Reconstruction and Development (EBRD) and European Investment Bank (EIB) are jointly providing a EUR 100 million loan, supported by an investment grant of approximately EUR 34 million through the EU's IPA 2010 and IPA 2011 programmes. Up to 500 km of the regional and local network will be rehabilitated via the provision of quality road infrastructure. Technical assistance in the amount EUR 4 million is also being provided from the WBIF with the aim of improving the management and financing of road infrastructure.

Recently upgrade rural road

The technical assistance services funded through this WBIF project are provided for the preparation of tendering documentation, supervision, project monitoring and implementation support. The project is forecast to be implemented over five years.

A short video describing the project can be seen at: *http://bcove.me/u1aswkyu*

Key Facts

Title	Regional and local roads
Code	WB1-ALB-TRA-01
Data approved	December 2009
IFI	KfW

WBIF Support

Assistance with tendering + Implementation monitoring and supervision

Finances

WBIF grant	€ 4,000,000
Loan estimate	€ 100,000,000
Total investment estimate	€ 138,500,000

Albania
Transport Sector

Overhauling rail line between capital Tirana and major port Durrës

The Albanian railway network suffers from neglect, a result of low investment with maintenance restricted to essential work only. The result is a dilapidated system needing upgrade and overhaul of track, signalling, rolling stock and stations. An existing WBIF project reviewed the system needs for network rehabilitation and modernisation and prioritised investments (see TA-ALB-06). The Tirana – Durrës line was identified a priority, Tirana being the capital and Durrës the second city and main port to the capital with nearly 1.5 million people – one third of Albania's population - living in the line's catchment area. This WBIF project picks up on this recommendation, accepted by the Albanian railway company (Hekurudha Shqiptare, HSH), and deals with the detailed design work for the refurbishment of the Durrës to Tirana line. The line is part of the region wide authority, the Southeast Europe transport Observatory (SEETO), and its defined core network agreed suitable for development; it forms part of the Corridor VIII aiming to link with the former Yugoslav Republic of Macedonia and Bulgaria terminating at Varna on the Black Sea. The project can also be seen from a regional perspective as a component to create a lateral Balkan route.

Passanger train in Tirana's main station

The investment, valued at EUR 40,250,000, is essential to begin the process of upgrading the railway to a viable form of public transport, that is a reliable faster regular and more comfortable passenger service. The outcome from the investment will be an improved railway infrastructure over the main line between the capital city of Tirana and the main port of Durrës, the most highly trafficked route in the country. This in turn should lead to a reduction in the volume of passenger freight and road traffic carried between these two cities with consequent economic, social and environmental benefits. The qualitative benefits will include the provision of a viable operating public service unit providing a reliable, regular and more comfortable service for passengers. The project will also lead to a substantially improved service for people requiring affordable transport, resulting in a subsequent reduction in the volume of road traffic between the two cities. This should, in turn, lead to environmental benefits via emission reductions.

The project is supported through EUR 37.5 million made up of bilateral loans and loans from international financial institutions. A WBIF grant of EUR 1,250,000 is provided for technical assistance to support the development of a detailed design for the Tirana-Durrës railway line and an economic – financial appraisal for the whole rail network. An integral part of the detailed design work is the preparation of tender and contract drawings, enabling the procurement of suitable contractors and the implementation of the physical works.

Key Facts

Title	Detail design for Tirana – Durrës railway and economic financial appraisal for whole rail network
Code	WB4-ALB-TRA-09
Data approved	June 2010
IFI	EBRD

WBIF Support

Detailed design + Economic and financial appraisal + Assistance with tendering

Finances

WBIF grant	€ 1,250,000
Loan estimate	€ 27,500,000
Total investment estimate	€ 42,500,000

Albania
Transport Sector

Ensuring effective upgrading of the road network

Albania has an ambitious programme of road upgrading. The programme will create a more comprehensive network, upgrade existing roads in very poor condition and provide interconnecting new links. All road users will benefit and economic growth will be boosted. Two WBIF IFIs, the EIB and EBRD, are supporting some parts of this initiative with loan finance. Most road improvements are part of the core network of agreed routes suitable for development defined by the region wide authority, the Southeast Europe Transport Observatory (SEETO).

The WBIF supported technical assistance focuses on management and administrative input that will ensure effective roads' upgrading through good planning, tendering, implementation and monitoring. Specifically, it provides technical assistance with support to the project implementation unit (PIU) during the preparation and implementation of investments financed by EIB and EBRD. The aim of the project is to provide expert advice and assistance on project implementation and contract management related to roads investment and construction projects; to provide continued on-the-job training to project managers in the Albanian Roads Authority and to assist in the preparation of future road investment projects eligible for IFI finances. A EUR 800,000 grant was provided by WBIF for the technical assistance project which started in December 2011 and is expected to be completed in 2015.

Upgraded road with new crash barrier

The total value of on-going and planned investments is more than EUR 200 million. This includes:

- the project rehabilitation and upgrading of some 70 km of road between Fier and Tepelenë on the north-south Albanian corridor for which a EUR 70 million loan has been provided by EIB and EBRD;
- the construction of around 24 km long new two lane motorway between Levan and Vlorë, for which a EUR 48 million loan is provided by EIB and EBRD;
- the construction of the Fier bypass at an estimated EUR 80 million which is co-financed by a new EIB loan of EUR 35 million signed in 2012;
- the construction of the Tepelenë and Gjirokastër by pass which is estimated to be worth EUR 45 million.

Apart from building the capacity of the Albanian Roads Authority through the technical assistance, these improvements in the road sector will contribute to plans to link Albania with Montenegro to the north and Greece to the south. Additionally there will be a positive impact on the economic development of Southern Albania. A beneficial social impact will come from enhanced road safety and reduced travel time and from improved access to business and leisure opportunities. Reduced vehicle operating costs will also prove economically advantageous.

Key Facts

Title	TA for Project Implementation Roads Sector
Code	WB4-ALB-TRA-08
Data approved	June 2010
IFI	EIB

WBIF Support

Assistance with tendering

Finances

WBIF grant	€ 750,000
Loan estimate	€ 35,000,000
Total investment estimate	€ 60,000,000

Albania
Transport Sector

A new bypass to alleviate Tirana's traffic congestion

Albania has seen a massive increase in the level of vehicle ownership, from a base-line of virtually zero in 1990. Private car ownership particularly has increased 152 % in the period 2000-2008, yet still stands well below the European average. A continuous rise in car ownership is therefore inevitable. This increase has had a huge impact on the straining road infrastructure and in particular the severe congestion experienced in the capital, Tirana. The congestion has knock-on detrimental effects: lost time for travelling in the city and inevitably air pollution.

Alleviating this problem is the objective of this WBIF supported project. A Tirana 20 km bypass is proposed running between Kashar and Mullet via Vaqarr. The study work will:

- Select the best road alignment among alternative options at conceptual design level and calculate the cost of construction and estimate future traffic volumes;
- Carry out a socio-economic and financial evaluation (cost – benefit analysis) of the project with a risk assessment, to assess its feasibility, including the potential usage of tolls;

Presenting study findings

- Perform a preliminary environmental and social assessment;
- Prepare the preliminary design of the selected alignment.

The feasibility study was prepared on the basis of a conceptual design and showed high return on investment. The study showed the use of tolls does not give positive results.

The bypass is to be designed to contemporary international standards. The implementation of the bypass will relieve the highly congested road network of Tirana which is used not only by local traffic but also by transit traffic. The reduced congestion is expected in turn to improve environmental conditions, especially in terms of reduced emissions, as traffic will be reduced in the city centre and with higher faster speeds. Road safety will be also improved by channelling through traffic, currently using local and urban network with low safety standards, onto the bypass which will be built with appropriate safety and security features. Travel times will be decreased in the Tirana wider region and vehicle operating costs will be reduced, thus contributing to increased productivity, higher economic development and energy efficiency.

The by-pass is part of the endorsed national transport master plan and is in line with the sector strategy for transport 2008 - 2013. It is also part of Corridor VIII and hence part of Southeast Europe Transport Observatory, SEEETO, Comprehensive Network. To improve the performance of the national road network, the Albanian Government in 2009, established Albanian Roads Authority to oversee the sector's development.

Key Facts

Title	Feasibility Study for Tirana By-pass (Kashar – Vaqarr - Mullet)
Code	WB7-ALB-TRA-12
Data approved	June 2012
IFI	EBRD

WBIF Support

Feasibility study + Preliminary design + Preliminary environmental and social impact assessment

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 32,500,000
Total investment estimate	€ 100,000,000

BOSNIA AND HERZEGOVINA

Bosnia and Herzegovina
Energy Sector

Renewable energy source development

The project aids the establishment of a second pilot wind park in Bosnia and Herzegovina, which is being developed in order to increase the portfolio of renewable generation assets in the electricity generation and supply company, based in Mostar (EPHZHB). Wind energy will be complementary to the company's existing hydro generation capacity.

For the site at Poklečani, previous measurements of wind energy potential have been conducted, and indicate that this location has a potential capacity of around 72 MW (estimated by using 36 machines with 2 MW capacity each), and has the potential to generate 248 GWh per year.

WBIF is supporting the project with the preparation of a feasibility study starting with an independent wind energy assessment of the raw wind energy data, and will consider technical factors such as site and access characteristics, the proposed layout and class of the wind turbines, access to land including roads, access to electricity transmission lines, the economic and financial viability of the project, financing options and capacity of the promoter (EPHZHB) to take a loan. An important element is a detailed site-specific environmental and social impacts assessment with mitigation strategies.

Key Facts

Title	BiH Windfarm development – Poklečani
Code	WB5-BIH-ENE-05
Data approved	June 2011
IFI	EIB

WBIF Support

Feasibility study + Environmental and social impact assessment

Finances

WBIF grant	€ 380,000
Loan estimate	€ 110,000,000
Total investment estimate	€ 123,000,000

Poklečani

The overall objective is to determine if the project is viable, and if so to elaborate the project documentation to the extent that is required to facilitate the loan process to the satisfaction of the IFI's, and benefit EPHZHB in its planning and implementation. One beneficial outcome of the study is that the wind energy assessment has improved the energy output forecast by adjusting the machine height, locations and spacing, and has proposed to increase output at the concession site to 108 MW by installing 3 MW machines. This higher capacity option is attractive and the final configuration will be left to the tenderers proposals.

In addition to the financial benefits to the developer EPHZHB, the main benefit to society is in switching to renewable energy from more traditional fossil fuel types of generation. These benefits relate to the well-perceived need to reduce $C0_2$, particulates and other environmentally damaging combustion products into the atmosphere. Reducing these emissions will improve air quality and will contribute to climate change mitigation. In addition, there are several social benefits to the local community such as improved access to the mountain and potential employment opportunities during construction.

This project supports the EU climate change initiatives and Kyoto protocols, and is one of several such projects under development in BiH at present. In addition, the project is aligned with the national strategies and policies of BiH to develop new renewable energy. The project's promoter, EPHZHB (JP Elektroprivreda HZ HB d.d. Mostar) has experience in renewable energy production, mainly hydro-power, and this second wind generation facility with the WBIF technical input means that the project has good prospects for sustainable implementation.

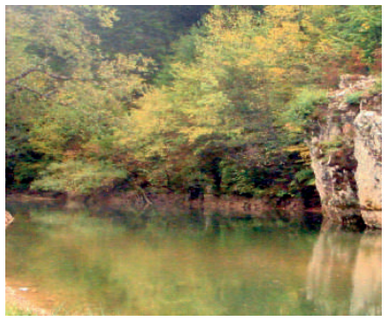
Bosnia and Herzegovina
Energy Sector

Clean hydropower for 380,000 inhabitants

As part of its commitments to progress towards joining the European Union, Bosnia and Herzegovina has formally decided to increase the share of electricity generation from renewable resources by pursuing the development of hydropower plants, wind farms and sustainable cogeneration sources. The creation of additional capacity would thus allow the Government to reduce the share of generation from the thermal plants now in operation – a source of greenhouse emissions and particulates. Specifically, the construction of hydropower plants would not only contribute to the development of a sustainable power supply and a cleaner environment but also contribute to mitigate flooding risks by regulating river bodies and improve overall socio-economic benefits by generating additional jobs for the local population.

The preparation of the Kruševo and Zeleni Vir hydropower projects started in 2010 with preliminary investigations into the project's suitability by JP Elektroprivreda BiH d.d. Sarajevo – a joint stock company charged with the production and distribution of electricity in Bosnia and Herzegovina. The studies showed that the project would generate sufficient electricity to cover the needs of the 385,067 inhabitants of the Srednjo – Bosanski canton and would also bring about the estimated environmental and social benefits. The hydropower plants would be built on Bioštica River - a tributary to the Krivaja River, in the vicinity of Olovo Municipality, the largest urban settlement in the Canton. The investment costs have been estimated at approximately EUR 40 million, to cover the construction of

Zeleni Vir



i) Kruševo hydropower plant with an installed capacity of 9.75 MW and annual generation of electricity of 21.70 GWh; and

ii) Zeleni Vir hydropower plant, which will work as a compensation basin for Kruševo and will have an installed capacity of 2.12 MW, with an annual generation of 8.40 GWh.

The new hydropower plants would be connected to new transmission lines: Kruševo to the new 110 kV transmission line to substation 110/35/10 kV Kladanj, and Zeleni Vir to the newly built 35 kV cable Nišići-Olovo.

As additional studies were needed for the development of the project towards construction in accordance with local legislation, JP Elektroprivreda successfully applied for a WBIF grant. The technical assistance includes geological and geotechnical investigations, economical and socio-environmental feasibility of the project and the preliminary design of the hydropower plants, that would enable JP Elektroprivreda to obtain the permits required under the law.

Key Facts

Title	Hydro - electric power plants - Kruševo & Zeleni Vir
Code	WB6-BIH-ENE-07
Data approved	December 2011
IFI	EIB

WBIF Support

Feasibility study + Environmental and social impact assessment

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 30,000,000
Total investment estimate	€ 41,000,000

Bosnia and Herzegovina
Energy Sector

Renewable energy production

The focus of this project is the production of alternative energy from wind power in the Vlašić region of Bosnia and Herzegovina. The country's power sector is presently dominated by fossil fuels. For long term energy conservation and environmental preservation, the identification of alternative sources of energy production is a priority. The main objective of the project is to promote renewable energy sources, by exploiting wind in this high altitude area of BiH, for the purpose of electricity generation. In addition to environmental benefits, the project would have a significant economic and social impact on the local community, including generation of employment opportunities and infrastructural development.

The wind farm site is located on a plateau of Vlašić mountain (approx. 15 km north-west of Travnik), at about 1,200 m altitude. Testing, which has been done on a pilot wind turbine, has indicated significant wind potential of the Vlašić region. This is recognised by the local government who, in 2011, agreed a concession agreement with the public enterprise Elektroprivreda BIH (JP EPBIH) for a 30 year period, which covers the amount of up to 50 MW of installed wind capacity, at 10 potential micro-locations.

Vlašić

The total investment required for this project is approximately EUR 63 million. The WBIF is providing support for this project through a grant of EUR 875,000 for technical assistance covering wind measurements and analysis of wind measurement results, the preparation of a bankable feasibility study, an environmental impact and social assessments and the development of a conceptual wind farm design. Based on the results of the feasibility study the EIB would consider providing a loan for further project implementation.

A more rational use of resources would contribute to improvements in emission reduction and resource utilization in Bosnia and Herzegovina, playing a supporting role to energy conservation and environmental preservation, therewith fostering further economic development and growth. The benefits will primarily be those of the local communities: land owners, municipalities, local population and governments, but also of other entities such as: power utilities, equipment suppliers and manufacturers, benefitting from the economic development of this sector, as well as the associated infrastructural changes and the demonstration character of the project.

The project promoter is JP EPBIH, but the project benefits will positively impact all the citizens in the region and will support BIH in meeting its international obligations in the energy sector.

Key Facts

Title	50 MW Wind Farm Vlašić-Travnik
Code	WB7-BiH-ENE-09
Data approved	June 2012
IFI	EIB

WBIF Support

Feasibility study + Environmental and social impact assessment + Preliminary design

Finances

WBIF grant	€ 875,000
Loan estimate	€ 43,000,000
Total investment estimate	€ 63,000,000

Bosnia and Herzegovina
Energy Sector

Efficiencies with new smart meters for electricity customers

JP Elektroprivreda BiH d.d. Sarajevo is one of three public power companies in Bosnia and Herzegovina responsible for the generation and distribution of electricity to domestic and industrial consumers alike. It has 1,682 MW of installed generating capacity, of which 517 MW (30.7 %) in hydropower and 1,165 MW (69.3 %) in thermal power plants. As of March 2012, the company has 708,166 customers in total, located in seven cantons in Bosnia and Herzegovina. Approximately 95 % of customers are charged based on electromechanical meters. More than 25 % of these electromechanical meters are approximately 40 years old and hence rather unreliable in terms of registering electricity consumption to be billed to customers. Moreover, the reading of these meters and subsequent invoicing is currently performed by about 200 dedicated employees, whose costs add to the electricity tariff. The remaining 5 % of the meters are electronic, with some smart metering functionality, albeit the same reading and invoicing procedure is applied when it comes to billing consumption.

Bosnia and Herzegovina has amended national regulations and conditions for the supply of electricity so that the state gradually meets the Acquis communitaire on energy and thus contributes to better environmental and socio-economic conditions for its population. Amongst others, the state would gradually put in place a smart metering system on the electricity supply network, i.e. an automated meter reading system. Such provisions would encourage a more rational use of electricity by its customers, decrease the company's operational costs and hence potentially keep the cost of electricity within affordable limits for overall population connected to the grid.

MRS system

For the purpose of meeting this requirement, JP Elektroprivreda BiH d.d. has successfully applied for grant financing from the Western Balkans Investment Framework to cover the costs of a feasibility study, including the design and procurement of an intelligent metering system in its service area. If the system is proven viable by the study, the WBIF grant will also include the preparation of the loan application documents as the company will contract a loan to construct and install the systems. The design of the metering system will need to allow for its interconnection to the other metering systems that may potentially be put in place as well as its interoperability, given that beginning January 2015 the electricity consumers in Bosnia and Herzegovina will be able, gradually, to choose their electricity supplier. The preparation of the feasibility study commenced in January 2013 and lasted for 12 months.

Key Facts

Title	Smart metering/AMR system design and implementation support
Code	WB8-BIH-ENE-11
Data approved	December 2012
IFI	EIB

WBIF Support

Feasibility study + Design and procurement of metering system

Finances

WBIF grant	€ 460,000
Loan estimate	€ 15,000,000
Total investment estimate	€ 30,000,000

Bosnia and Herzegovina
Energy Sector

Clean renewable energy from hydropower plant at Babino Selo

Bosnia and Herzegovina has great renewable energy potential and currently only 40 % of BiH's economically and environmentally feasible hydro potential has been developed. Projects like HPP Babino Selo will play an important role in replacing old and inefficient thermal capacity and will significantly contribute to reductions in CO_2 emissions (estimated around 50,000 tonnes of avoided CO_2 emissions annually). The planned installed capacity of HPP Babino selo is 11.2 MW and expected yearly production 58.9 GWh.

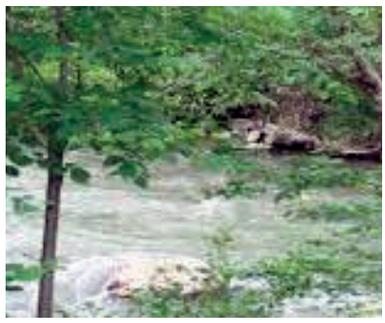
The EUR 750,000 grant provided through the WBIF will support the preparation of a feasibility study (including environmental and social impact assessment (ESIA)), for the construction of HPP Babino Selo, which will allow the utility company and EBRD to adequately assess the project and decide whether to proceed. The feasibility study will consist of:

i) a multi-criteria analysis, which will assess different technical solutions for HPP Babino Selo;

ii) analysis of the optimal solution, which will include detailed technical, financial, environmental and socio-economic analysis, annual electricity production figures, organisation of construction, detailed breakdown of costs and assessment of impact on downstream HPPs;

iii) Full ESIA study, non-technical summary and stakeholder engagement plan.

Babino Selo



The feasibility study will provide a basis for the preparation of the preliminary design and tender documents.

Promoting and developing renewable energy in BiH will benefit the entire region. The project will create the preconditions for regional economic development with an adequate, clean and sustainable hydro energy supply for the wider region. Increased social standards will be achieved in the region, with increased electricity supply as well as an enhancement in security in electricity supply. Constructing this project will help with the reduction of flood impacts in the region and will increase breeding of fish within these waters. It will also increase opportunities for regional development with associated benefits to agriculture, tourism and general employment.

The region of South East Europe is in need of replacing its aging generating capacity and also in need of new capacity to meet its growing energy demand. HPP Babino Selo will provide sustainable additional capacity for the entire region. BiH is an important member of the Energy Community of South East Europe and a member of the Coordinated Auction Office and committed to electricity trade.

The project's promoter is a public utility company JP Elektroprivreda BIH ("EPBIH"). The company has significant experience and capacity to ensure successful implementation of the feasibility study and potential investment.

Key Facts

Title	HHP Babino Selo
Code	WB9-BIH-ENE-01
Data approved	June 2013
IFI	EBRD

WBIF Support

Feasibility study + Environmental and social impact assessment + Multi-criteria analysis

Finances

WBIF grant	€ 750,000
Loan estimate	€ 20,000,000
Total investment estimate	€ 28,850,000

Bosnia and Herzegovina
Environment Sector

Plava Voda – providing clean water to over 150,000 inhabitants

Central Bosnia and Herzegovina suffers from water shortages and poor water quality. Currently mains water supplies are characterized by intermittent interuptions, poor water quality and relatively high cost of production and distribution.

WBIF are supporting a project that aims to improve water provision. The Plava Voda initiative is a Danube and Black Sea Task Force (DABLAS) priority project within the Priority Environmental Programme for South Eastern Europe (PEIP). The project will provide secure, sufficient and sustainable water to five municipalities in Bosnia and Herzegovina: Travnik, Novi Travnik, Vitez, Busovaca and Zenica. The water source is the Plava Voda spring at Travnik. A new mains supply pipe running along the Lasva river will deliver water by distributor mains pipes to the municipalities. This is a very significant project for BiH as it is the first regionally based solution to water provision where all municipalities are collaborating. A joint stock company, co-owned by the participating municipalities, has been established to manage the water supply and delivery to the five municipal water supply companies.

Plava Voda

A second WBIF project provides related support by detailed studies for leakage reduction and remedial measures for the five municipalities to maximise the benefits of the Plava Voda regional water supply system.

The project will serve the needs of over 150,000 inhabitants in the five municipalities over the long term by providing them with quality water which complies with EU Drinking Water Directive. The cost efficient supplies from the Plava Voda system will help to replace multiple sources of supplies, usually requiring water treatment and pumping which are not cost efficient and produce poor quality of supplies. The supplies from Plava Voda will also contribute to reducing the high incidence of water borne diseases currently prevalent in the municipalities and thus further contributing to the welfare of over 150,000 people.

The provision of reliable and good quality water supplies will lay the foundation for attracting and developing enhanced commercial and industrial activities in the municipalities. This will provide additional employment activities for the residents and contribute to development of local economies. The construction of 22 km of transmission pipeline and associated infrastructure will kick start the income generating opportunities.

The complementary project to Plava Voda for leakage includes significant on-site training components for the staff of the municipal water companies. The hands on training includes improved leak detection and repair techniques and improved distribution network maintenance, which will contribute to reduced operating costs and maximize the benefits of water supplies from the Plava Voda System.

Key Facts

Title	i. Plava Voda Regional Water Supply Project ii. Reconstruction of distribution networks in the municipalities connected to the Plava Voda regional water supply project
Code	i. TA-BIH-03 ii. TA3-BIH-ENV-05
Data approved	i. June 2008 ii. December 2009
IFI	EBRD and CEB

WBIF Support

Preliminary and detail design + Hydrological studies + Environmental and social impact assessment + Assistance with tendering

Finances

WBIF grant	i. € 600,000 ii. € 300,000
Loan estimate	i. € 22,400,000 ii. € 2,000,000
Total investment estimate	i. € 27,000,000 ii. € 6,000,000

Bosnia and Herzegovina
Environment Sector

400,000 in Bijeljina to benefit from wastewater system upgrade

Bijeljina is the second largest city and municipality in Republika Srpska (RS), located in northeastern Bosnia and Herzegovina (BiH). Due to the environmental and health hazards, the current wastewater system in Bijeljina is not in accordance with either EU directives for urban wastewater and sludge or relevant local regulations. Two WBIF grants support the project, both are related to phases II and III of the overall project, aiming to expand the sewage collection network and construct a wastewater treatment plant (WWTP) in Bijeljina. One grant provides co-finance investment capital, under the Municipal Windows facility, and the other technical assistance.

Construction of the sewerage system together with work on the water supply network were implemented in phase I, which was completed in 2010. Phase II focuses on construction of the system for collecting and purifying waste water in the municipality as well as expanding the network supplying drinking water. Phase III of the waste water system development covers the construction of the main sewage collector to the proposed wastewater treatment plant. WBIF technical assistance included: procurement services for the construction of three main collector lines with the tributaries of a water network; the WWTP and, procurement services for the supervision of the construction of the WWTP. In addition, sustainability studies and capacity building programmes were carried out. Contracts for construction of the water network and one of the two sewage collectors were completed. The initial WWTP construction contract was terminated and the project was assigned in August 2013 to a new contractor; works are still ongoing. The supervision contract for all above activities was also awarded and is on-going.

Bijeljina wastewater treatment plant implementation

The main project beneficiary is Bijeljina municipality and the municipal Water and Wastewater Company. The project will also benefit 400,000 inhabitants of Bijeljina that will be directly connected to the sewerage system after completion of Phase II and 85,000 inhabitants connected to the water supply system. The project will make a positive contribution to public health and decrease of water-borne diseases as well as having a positive impact on the environment. With regard to the reduction of pollution of underground water and river water in the Drina-Dašnica channel and river Sava, it will have positive regional and cross border impact. The project also has institutional benefits, including the enhanced service quality of the water and wastewater company following the establishment of an environmental management system and increased capacity among staff as a result of the capacity building programs and study tour. Moreover, the project satisfies the requirements in the Urban Wastewater Treatment Directive and Sludge Directive of EC and therefore is an important milestone among the high cost investments in environment sector during the EC accession process.

Key Facts

Title	i. Bijeljina wastewater system project – Phase II ii. Bijeljina wastewater treatment plant implementation
Code	I. MW-BIH-ENV-EBRD-02 II. TA3 BiH ENV 03
Data approved	i. March 2009 ii. December 2009
IFI	EBRD

WBIF Support

Investment grant + Assistance with tendering + Preparation of a sludge management study + Capacity building and study tour

Finances

WBIF grant	i. € 3,000,000 ii. € 500,000
Loan estimate	i. and ii. € 5,000,000
Total investment estimate	i. € 23,102,141 ii. € 26,000,000

Bosnia and Herzegovina
Environment Sector

85,000 in six comunities to get water supply and wastewater systems

The Federation of Bosnia and Herzegovina (FBIH) suffers from serious negative impacts on public health and the environment from underdeveloped services in the sector of urban water and wastewater. Currently 60 % of the population have access to a public water supply, 33 % to a sanitation system and 3 % are connected to a wastewater treatment plant (WWTP).

Poor infrastructure, deficient operation of wastewater facilities in municipalities, and undesirable interconnection between water systems leave public water supplies and bathing waters exposed to contamination, which can spread widely, from discharges of untreated water.

The project, valued at EUR 30 million, encompasses the rehabilitation and construction of water and waste water infrastructure of 6 municipalities, namely: Velika Kladuša, Orašje, Bosanski Petrovac, Posušje and Široki Brijeg. The projects on these six municipalities are the most advanced part of a large investment programme (FBiH Water and Sanitation Project) for the water and wastewater sector in FBIH that will result in an improvement and expansion of water supply and sewerage systems and the construction of WWTPs with total investment of EUR 121.3 million

Velika Kladuša

co-financed by an IFI loan of EUR 60 million (WBIF are supporting the FBIH programme with two related grants awards, see TA3-BIH-ENV-02 and WB9-BIH-ENV-03; a similar programme with WBIF support runs in Republika Srpska).

A EUR 17 million grant was awarded in 2009 through EU's IPF Municipal Window programme (now incorporated into the WBIF) for the construction and upgrading of water and wastewater infrastructure in the six municipalities, for which feasibility studies had been prepared under the EC Environmental Project Preparation Facility. Additional grants were provided through the EU IPA programme and Swedish agency SIDA. Construction started in 2012 in two municipalities and in 2014 construction has been ongoing in six municipalities. Project completion is planned at end 2016.

The benefits from the project include protecting public health and the environment from water pollution, maintaining a balanced development of water supply and sanitation as well as safeguarding the financial and operational viability of the water companies. Specific benefits can be summarised:

- Improved public health
- Improved service provision from public utility companies (PUCs)
- Better public awareness regarding environmental issues
- Uninterrupted water supply
- Reduced water losses
- Increased operational efficiency
- Established conditions resulting in greater autonomy for PUCs

The total population benefitting from improvement in water and wastewater services in the six municipalities is 85,000.

The improvements will help BIH achieve compliance with relevant EU Environmental Directives.

Key Facts

Title	Water and sanitation (Velika Kladuša, Orašje,Bosanski Petrovac, Posušje, Široki Brijeg)
Code	MW-BIH-ENV-EIB-01
Data approved	March 2009
IFI	EIB

WBIF Support

Investment grant

Finances

WBIF grant	€ 17,000,000
Loan estimate	€ 60,000,000
Total investment estimate	€ 121,300,000

Bosnia and Herzegovina
Environment Sector

Sustainable water for Banja Luka

Banja Luka is the administrative capital of Republika Srpska entity in Bosnia and Herzegovina with a population of 230,000 residents. The project aims to combat existing problems in the city of Banja Luka regarding high losses in the present water supply system and the lack of adequate sewage collection. Currently, 80 % of residents have access to piped water. Furthermore, only about 50 % are connected to a sewer system. Frequent leaks and pipe bursts in the transmission and water supply distribution system are attributable to both age and quality of the existing networks. The discharge of untreated sewage into the Vrbas river poses a risk for the drinking water quality of the inhabitants of the City and harms the environment of Banja Luka.

The objective of the project is to secure an environmentally sound and sustainable water supply in Banja Luka at socially acceptable costs. This is to contribute to an improvement of the living conditions for the population of Banja Luka.

The measures of the programme therefore concern:

i) Extension of the water supply system in the residential area of Tunjice (a refugee area);

Laying new pipes in Banja Luka

ii) Rehabilitation of the mains and secondary network of the water supply system (Čaire); and

iii) the construction of sewage interceptors along the left and right banks of the river Vrbas, which aim to create a shutoff for the sewage, therefore protecting the well-fields in Novoselija which are used for drinking water.

In summary, the measures encompass the expansion and upgrade of the city's water supply network and construction of new sewage collectors and two water reservoirs.

The total value of the project, approximately EUR 19.1 million, is made up of EU (IPA and WBIF-funds totalling EUR 4.5 million) and KfW funds (EUR 4 million grant and EUR 10 million loan) as well as contributions from the Banja Luka authorities (EUR 600,000). Part of the EU funds were allocated through the EU IPF Municipal Window programme in the form of a EUR 2 million grant for consultancy services related to the preparation of final design and tender documents and for the investment measures.

The project has two components: The construction and improvement of the water supply system, which started in April 2012, and the repair and construction of the sewerage collection system, which started in June 2012 and for which EU-funds are used. The water supply component is expected to be completed in April 2015 and the sewage component is scheduled to be completed in December 2014.

The beneficiaries of the project are the Banja Luka waterworks company, VODACOM and the city. Moreover all the inhabitants of Banja Luka will benefit from the investments, as the water resources of the City are protected through the wastewater collection component of this project. In addition, new communities will benefit from the new connections to the water supply network.

Key Facts

Title	Water supply and sewage collection in Banja Luka
Code	MW-BIH-ENV-CEB/KfW-04
Data approved	March 2009
IFI	KfW

WBIF Support

Investment grant

Finances

WBIF grant	€ 2,000,000
Loan estimate	€ 10,000,000
Total investment estimate	€ 19,000,000

Bosnia and Herzegovina
Environment Sector

Water and wastewater systems upgrade across the Federation of Bosnia and Herzegovina

The Federation of Bosnia and Herzegovina (FBiH) suffers from poorly developed water and wastewater infrastructure with detrimental effects on public health and environment. WBIF is helping remedy this situation with two grants focused on developing municipality level water and / or wastewater systems. A similar programme runs in the Republika Srpska (see TA3-BIH-ENV-01) making the combined WBIF support a major factor in developing clean water and safe wastewater disposal across Bosnia and Herzegovina. This programme collaborates with the EIB's water and sanitation framework initiatives in each entity.

The project is executed in three components.

- Component A concerns technical assistance support to the project management unit (PMU) as well as preparation of feasibility studies (FS) and quality assurance of the tender documents for the implementation of water and sanitation projects in the following municipalities: Orašje, Bosanski Petrovac, Bosanska Krupa, Široki Brijeg, Tomislavgrad and Velika Kladuša.

New water pumps for water supply at Doboj

- Component B concerns the preparation of several procedural manuals, scoping missions and preparation of project fiches for the following 14 additional municipalities: Doboj Jug, Usora, Prozor-Rama, Jajce, Glamoč, Tešanj, Livno, Konjic, Gračanica, Lukavac, Kupres, Stolac, Bosansko Grahovo and Čitluk.
- Component C concerns the capacity building of the PMU and project implementation personnel, contract and procurement management, a feasibility study for Bosanska Grahovo water system and the preparation of technical specifications for the water treatment plants (WTP) of Orašje and WWTP of Bosanski Petrovac.

The main expected outcomes of the investment include the construction of 85 km of water transmission lines, over 100 km of water distribution network, over 150 km of wastewater and / or storm water collectors, and 180 km of wastewater network, 3 drinking WTP, rehabilitation of 1 drinking WTP and the construction of 14 wastewater treatment plants.

The benefits of the project include protecting public health and the environment from wastewater pollution, while maintaining a balanced development of water supply and sanitation as well as improving the performance of water utility companies and safeguarding their financial and operational viability. The result is the establishment of conditions for increased autonomy of the water utility companies. In addition, the improvements will help BiH achieve compliance with relevant EU Environmental Legislation.

The beneficiaries of the project are the PMU, which is part of the Ministry of Agriculture, Forestry and Water Management (FMoAWMF), the 20 participating municipalities located in FBiH, the water utility companies and some 500,000 inhabitants serviced by them.

A complimentary project runs in the Republika Srpska, see TA3-BIH-ENV-01 and WB8-BIH-ENV-27.

Key Facts

Title	i. Water and Sanitation in Federation of Bosnia and Herzegovina – 16 municipalities ii. Water supply and sanitation in FBiH
Code	i. TA3-BiH-ENV-02 ii. WB9-BIH-ENV-03
Data approved	i. December 2009 ii. June 2013
IFI	EIB

WBIF Support

Feasibility studies + Assistance with tendering + Technical and management assistance + Capacity building

Finances

WBIF grant	i. € 1,250,000 ii. € 1,250,000
Loan estimate	€ 60,000,000
Total investment estimate	€ 120,000,000

Bosnia and Herzegovina
Environment Sector

450,000 to benefit from water and sanitation upgrades

The project comprises a range of water and sanitation schemes for 27 municipalities widely spread throughout Republika Srpska (RS) entity in Bosnia and Herzegovina. The objective of the project is the protection of public health and environment from water pollution, while maintaining a balanced development of water supply and sanitation as well as safeguarding the financial and operational viability of the water companies.

In close consultation with the project management unit (PMU) and EIB, the WBIF support has developed a highly productive modality for implementation of technical assistance based on identifying municipalities that require major infrastructure development such as a sewerage system, wastewater or drinking water treatment plants and source development, and those that need smaller intervention to extend and improve existing infrastructure such as extension of water supply mains or collectors, increased capacity of water wells, reduction of losses, and metering.

The former group of municipalities received detailed project preparation feasibility studies while the latter group were supported through short project appraisal missions to examine detailed designs and other planning documents to check for consistency that they are in line with EIB financing requirements. Both feasibility studies and the project appraisal reports together with the project fiches are instrumental in leading to EIB loan financing and allocation of grant funding from IPA and other potential bilateral donor funds for proposed projects. To date the deliverables of technical assistance include scoping reports for 23 municipalities, project appraisal reports and project fiches for priority sub-projects for 12 municipalities, feasibility studies for water supply and wastewater collection and treatment for four municipalities, tender dossiers for two municipalities, and a wide range of other activities to support the work of PMU in management and implementation of the programme.

Building new pumping station

The project is expected to benefit a total 450,000 inhabitants in the selected municipalities. The large number of proposed projects for improvements and extension of water supplies and development of adequate wastewater collection and treatment will make a significant contribution to improvement in public health and the reduction of pollution in several trans-boundary rivers in Republika Srpska. The projects will also contribute to Bosnia and Herzegovina's pre-accession needs for compliance with the EU Drinking Water and Urban Wastewater Treatment Directives. The proposed projects in all municipalities are expected to benefit from supporting financial and operational performance improvement programmes. These programmes will be instrumental in contributing to practices of good governance throughout the water companies currently participating in the programme.

A complementary project runs in the Federation of Bosnia and Herzegovina, see TA3-BIH-ENV-02 and WB9-BIH-ENV-03.

Key Facts

Title	i. Water and sanitation in Republika Srpska- 15 Municipalities ii. Water and sanitation project in Republika Srpska
Code	i. TA3-BIH-ENV-01 ii. WB8-BIH-ENV-27
Data approved	i. December 2009 ii. December 2008
IFI	EIB

WBIF Support

Feasibility studies + Assistance with tendering + Technical and management assistance

Finances

WBIF grant	i. € 1,250,000 ii. € 1,250,000
Loan estimate	€ 50,000,000
Total investment estimate	€ 100,000,000

Bosnia and Herzegovina
Environment Sector

Improved water supply for Tuzla

Water leakage from supply networks are a problem and particularly so in older systems that have suffered neglect and under-investment. To address this particular deficiency in Tuzla the water company has embarked on a programme supported by KfW and WBIF.

The overall objectives of the project are:

1. The identification of investment measures to substantially reduce non-revenue water (NRW) in the water supply system of a pilot zone in Tuzla Municipality. The measures will result in:

- Improved economic efficiency of the water utility. This will be done by substantial reductions in cost for water production and distribution.
- Improved technical conditions and operational improvements to the water supply systems. This will reduce their vulnerability for contamination through infiltration of chemical or faecal contamination. In turn, this will reduce the health risks from waterborne diseases.
- Reduced water losses. This will mean less water consumption by the utility and therefore greater protection of water resources.

Key Facts

Title	Water leakage reduction in Tuzla
Code	WB5-BIH-ENV-15
Data approved	June 2011
IFI	KfW

WBIF Support

Identification of investment priorities + Conceptual design + Master plan

Finances

WBIF grant	€ 400,000
Loan estimate	€ 18,000,000
Total investment estimate	€ 28,400,000

The problem

2. The preparation of a conceptual design and master plan of the primary water supply systems for those inhabitants within the Municipality boundary but who are not currently connected to the main water supply system.

The master plan for water supply to settlements to the north of Tuzla was finished in May 2013. The final report if the NRW study was issued in November 2013.

The project is already showing benefits: the NRW is already reduced by 50%, while illegal connections to the water supply network and physical losses have been identified. Precious water and energy resources are being saved while water revenues to the Municipality have increased. Given these positive results, the Municipality has asked the WBIF technical assistance consultant to carry out NRW detection in one more district.

According to the conceptual design of the master plan for water supply to communities to the north of Tuzla, the following investments are envisaged:

- Nine water reservoirs with a total capacity of 1,450 m^3 volume
- Eight pumping stations with a total power of 46.3 kW
- Five booster stations with a total power of 5.14 kW
- Approximately 29 km of water transmission mains.

The project's promoter is Tuzla Municipality's Tuzla Water Company (ViK Tuzla). The water supply master plan study was prepared in accordance with the relevant national regulations which are mostly in line with the EU legislation. The pilot NRW study was implemented in accordance with the accepted International Water Association (IWA) "Water Balance – Bottom to Up" methodology.

Bosnia and Herzegovina
Environment Sector

Clean sewerage system for over 62,000 in Cazin

Cazin is a regional town in north west Bosnia and Herzegovina, with a population of approximately 62,500. The city's current public sewerage system is in poor condition and not sufficient for both waste and rainwater. Due to lack of funds over the years, the operation and maintenance of the sewage system has been limited to emergency interventions and emergency works and repairs.

Reconstruction of parts of the sewage system, as well as the expansion of the system is a priority for the municipality. The investments needed are valued at approximately EUR 15.6 million. So far, EUR 700,000 in grants has been provided for technical assistance for the preparation of the project documentation, including a feasibility study, design preparation and implementation support.

The feasibility study was completed in autumn 2012. Based on its findings, EBRD is due to approve a loan for project construction up to EUR 5 million. Additional co-financing is envisaged from the Swedish International Development Cooperation Agency (SIDA, EUR 2 million grant) and the Government of the Netherlands (EUR 3.5 million) for financing the operation and maintenance costs.

The overall objective of this project is to assist Cazin in its sustainable development of wastewater infrastructure. Additionally, the project will contribute to environmental protection, protection of water resources in Cazin and downstream Croatian waters in particular, minimise the risks to public health and improve the quality of drinking water through the implementation of sewage and wastewater treatment infrastructure in the municipality. Moreover, the investments should positively impact on the quality of utility services provided to existing private businesses in the region. Additionally, the conditions of doing business in the municipality will be improved, very important for future business and economic development of the municipality.

Work on new pipes

The project beneficiary is the Cazin public utility company, in charge of water and wastewater (JKP Vodovod Cazin). The direct beneficiaries are the inhabitants of Cazin Municipality that will be connected to the wastewater collection network and wastewater treatment plant. The project will also directly benefit an additional 20,000 citizens.

The investment is compliant with BiH's Water Management Strategy, which identifies construction of urban wastewater treatment facilities for all areas of more than 15,000 population equivalent as one of the priorities. The project will also improve good governance as the investment will be based on a binding Public Service Contract between the Cazin Municipality and the Cazin Public Utility Company, which will depoliticise and professionalise their relationship.

Key Facts

Title	Construction of sewage collectors and WWTP and disposal plant in Cazin
Code	WB5-BiH-ENV-16
Data approved	June 2011
IFI	EBRD

WBIF Support

Feasibility study + Preliminary and detail design + Assistance with tendering

Finances

WBIF grant	€ 700,000
Loan estimate	€ 5,000,000
Total investment estimate	€ 15,600,000

Bosnia and Herzegovina
Environment Sector

Flood protection and risk mitigation for 640,000 inhabitants

The Bosnia and Herzegovina entity, Republika Srpska (RS) has repeatedly suffered serious damage caused by having an inadequate flood prevention system during high water levels. In recent years it has been particularly bad in 2010 and in Spring 2014. Following the 2010 floods, the authorities declared an emergency and sought financial support from European Investment Bank (EIB) for finance for remedial action.

The Sava River valley together with areas along lower parts of its tributaries - Drina, Una, Ukrina, Bosna and Vrbas – are all prone to flooding. Many structural measures have been taken to protect people and their belongings but with limited success. It is therefore necessary to rehabilitate and upgrade the damaged structures, to provide risk mitigation measures, and to protect against future flooding.

The list of activities proposed for investment include: rehabilitation of river dykes, channels, river banks, small bridges; replacement and upgrade of pumping stations; preventive measures including erosion protection, flood risk mapping and management plans, flood protection and early warning systems. WBIF are assisting with these needs with a grant for technical assistance that includes

Flooding in Bijeljina, 2010

the preparation of the proposed measures, classified as a) immediate measures and b) urgent measures, to get the project ready for implementation. They include feasibility studies, detail designs and tender documents wherever necessary. The documents for tendering the overall supervision of the implementation of these measures are also being prepared and the short list has been formulated.

The investment will improve the performance and reliability of the flood protection system in RS. Thus the project will have a strong positive impact on the economy, society, environment and on public health. Moreover, it will contribute to the quality of life of more than 640,000 inhabitants. It will, also, contribute to meeting Bosnia and Herzegovina's needs in relation to compliance with the European Partnership, Interim Agreement and SAA whose main emphasis is to continue work on progressive transposition and implementation of the Acquis, to be in accordance with the Flood Directive that insists on a coherent cross-border approach.

Finally, through enhanced collaboration with IFIs and internalization of project preparation techniques by local counterparts and the transfer of know-how in project development and financing techniques to local beneficiaries, the talents and skills of local human resources within government institutions, but also local authorities, municipalities, will be significantly enhanced.

Key Facts

Title	Flood Risk Management for Republika Srpska
Code	WB5-BiH-ENV-17
Data approved	June 2011
IFI	EIB

WBIF Support

Feasibility studies + Preliminary and detailed designs + Assistance with tendering

Finances

WBIF grant	€ 2,500,000
Loan estimate	€ 74,000,000
Total investment estimate	€ 98,400,000

Bosnia and Herzegovina
Environment Sector

Service and environmental benefits from Mostar's upgraded water and sewerage system

Mostar is one of the largest cities in Bosnia and Herzegovina, home to over 100,000 citizens. However, its water and sewerage system is not adequate to support the city needs. For instance, only certain parts of the city, mainly its central zone, are connected to the sewer network, whose total length is about 50 km. This wastewater is also drained directly into the Neretva and Radobolja rivers with serious detrimental environmental impact and endangering water quality. Areas not connected to the sewer network use septic tanks. The construction of a wastewater collector and a wastewater treatment plant is the first priority and the construction of the missing water supply network the second.

The existing system needs to be repaired and expanded and a new urban water system partially developed, which should ensure a normal water supply to all parts of the Mostar region (all municipalities), as well as ensure the safe drainage and waste water treatment in urban areas of the city.

WBIF is assisting with a grant to provide technical support for:

Mostar

i) the preparation of technical documentation for the repair and improvement of the existing infrastructure and new facilities,

ii) tendering documents for the execution of works and tendering process, and

iii) work supervision.

WBIF's grant will also be used for the construction of a collector and secondary sewer network and missing water supply network which would follow the construction of the waste-water treatment plant.

The main beneficiary of the technical assistance is the City of Mostar. In particular, this project should contribute to strengthening the sustainability of the water operation in Mostar, including with adequately adjusted and affordable tariffs. Moreover, the project will support the Federation of BiH to comply with EU directives on environmental and social aspects.

The project will improve the quality of the water in the Neretva and Radobolja rivers, as well as improving standards and quality of life in this region. Residents of Mostar City, and people living downstream from primary sources of pollution, will be the end beneficiaries. Furthermore, the project will contribute to the protection of the sensitive ecosystem of the Neretva river, including the swampy region near the Adriatic Sea, as well as contributing to the development of tourism in the region.

The EIB has committed loan funding to the project in Mostar. The World Bank, through its Global Environment Facility, is also involved with the financing of a component of the project. Other institution, including SIDA, and possibly CEB, are ready to support the project.

Key Facts

Title	Water and sewer systems in the City of Mostar
Code	WB6-BIH-ENV-19
Data approved	December 2011
IFI	EIB

WBIF Support

Technical designs + Assistance with tendering + Supervision of works

Finances

WBIF grant	€ 2,500,000
Loan estimate	€ 8,000,000
Total investment estimate	€ 16,000,000

Bosnia and Herzegovina
Environment Sector

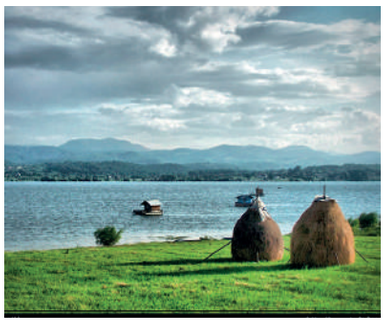
Protecting Modrac Lake

Modrac lake is an artificial lake in Tuzla Canton, in north-east Bosnia and Herzegovina. The lake is suffering from increasing pollution caused by long- term discharge of almost untreated industrial waste discharged in the upstream rivers flowing into the lake. This pollution is threatening the lake's long-term health.

The WBIF supported project concerns the development of wastewater collection and treatment facilities in five municipalities bordering and upstream from Lake Modrac. The lake, which covers an area of some 1,200 km^2, is one of the sources of public water supply in Tuzla, the fourth largest city in BiH, and the main water source for a large number of industries in the Tuzla Canton. The objective is to protect the Modrac Lake basin from the increasing pollution.

Technical assistance, to the value of EUR 1 million, is being provided by WBIF for project preparation covering: i) feasibility study; ii) environmental and social impact assessments; iii) conceptual designs for wastewater treatments; and iv) detailed designs for sewage collectors; together with v) implementation support. The project preparation studies will lay the basis for the infrastructure investments. The EBRD and SIDA are considering providing part of the investment in the form of a EUR 7.5 million loan (EBRD) and EUR 2.5 million investment grant (SIDA) for the collection and treatment of wastewater from communities located around the Modrac Lake. The total investment value of the project is EUR 10 million.

Modrac Lake



The investment will significantly reduce direct pollution by introducing treatment of wastewater from settlements located at the shores of the Modrac Lake. In the longer-term there will be further pollution prevention of the Lake through construction of WWTP in the municipalities of Banovići, Kalesija and Živinice and prevention of pollution from other polluters (surface coal mines, cattle farms, wood industry etc.). This, in turn, is expected to have positive economic impacts by encouraging tourist trade in the area.

The ultimate goal is full compliance with EU directives for the quality of water intended for human consumption and urban wastewater.

The beneficiary of the investment will be the public company JP Spreča dd Tuzla, who is directly responsible for providing clean water to the inhabitants of Tuzla and Lukavac. The project will provide benefits for the 150,000 inhabitants of the towns of Tuzla and Lukavac. Indirect beneficiaries include the population in settlements located at the shores of Modrac Lake, citizens of Banovići, Kalesija and Živinice, who will receive improved service.

This would be the first municipal infrastructure project in Bosnia and Herzegovina financed through a commercially priced loan to a utility company backed by a municipal guarantee.

Key Facts

Title	Optimisation of sewerage collectors and WWTPs in Modrac Lake basin
Code	WB8-BiH-ENV-29
Data approved	December 2012
IFI	EBRD

WBIF Support

Feasibility study + Economic & financial analysis + Environmental impact assessment + Preliminary and detail designs

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 5,000,000
Total investment estimate	€ 7,500,000

Bosnia and Herzegovina
Social Sector

Greater state security with new prison

Prisons in Bosnia and Herzegovina (BiH) are insufficient in number and standards. Studies by international organisations showed that BiH prisons are used to double-capacity and barely meeting minimum conditions. The objective of the project is to provide support to the development and upgrading of infrastructure in the social sector by creating additional inmate capacity needed for the escalating tasks and results of the activities by the State Court.

The prison is intended for adult males, detained or sentenced by the State Court. It will be a high security closed prison for persons accused or convicted for severe war crimes and high-level corruption and organised crime offences. The WBIF assisted with support to the Ministry of Justice (MoJ) for the preparation of an operational plan, feasibility report, preliminary designs, main and construction designs and procurement documentation based on European Prison Rules. Project preparation was concluded in the summer of 2012, tenders for works and works supervision were launched in 2013. Construction commenced in August 2014, with completion foreseen in mid-2016.

Work on the access road

The development of the new prison facility will have primarily social benefits, as it will provide adequate imprisonment and detainment facilities for male inmates. The direct project beneficiary is the MoJ and the State Court. However the project will benefit current and future inmates, as it will provide adequate and secure detainment facilities for 350 adult male inmates. The detention unit will have capacity for 50 detainees, in single cells. The convicted unit will have capacity for 300 convicted prisoners in single cells for security reasons. In order to meet current European standards, each of the cells will have integral sanitation, washing and showering facilities. Wheel chair access is also provided for 4 cells. There will be vehicle parking for special visitors, management staff, general visitors and emergency operations. There will also be buildings for administration, visitors' reception, prisoners' accommodation, activities, services, storage and staff quarters. The investment will also benefit security and other staff working in the prison facility. Indirectly, the facility will benefit citizens of BIH, especially those currently located around existing prisons.

Fulfilling this development is a step towards BiH implementing EU standards. The project will facilitate BiH's legal approximation with the EU Acquis, and international human rights standards in this area, as the project has a national and international strategic basis. It is in line with Pillar II of the BiH Justice Sector Reform Strategy 2008-2012 (JSRS BiH) concerned with execution of criminal sanctions. It also conforms to the National War Crimes Strategy, the Strategy of Bosnia and Herzegovina for the Fight against Organised Crime and is in line with the EU pre-accession strategy.

Key Facts

Title	i. State Prison project in Bosnia and Herzegovina ii. Support to the construction of a maximum security prison
Code	i. TA-BIH-01 ii. WB4-BIH-SOC-02
Data approved	i. June 2008 ii. June 2010
IFI	CEB

WBIF Support

Operational plan + Preliminary and main designs + Assistance with tendering + Interest rate subsidy

Finances

WBIF grant	i. € 500,000 ii. € 3,200,000
State budget participation and CEB Loan	i. and ii. € 19,300,000
Total investment estimate	i. and ii. € 39,600,000

Bosnia and Herzegovina
Social Sector

Improving medical education and research in Banja Luka

The upgrading of hospital premises, education of medical professionals and medical research has been identified as a priority in Republika Srpska (RS) in Bosnia and Herzegovina (BiH), and WBIF are assisting with grant support.

The specific objective of this assignment is related to the Clinical Centre in Banja Luka, the capital of Republika Srpska. The planned health sector reforms were defined in two recent policy documents prepared by the Ministry of Health and Social Welfare. In October 2011 BiH signed a financing agreement with the EIB for EUR 100 million to undertake the reconstruction of the clinical centre in Banja Luka and the construction of a new hospital in Bijeljina. These new buildings will replace or upgrade existing obsolete facilities. While the two hospitals will have the capacity to treat more patients, the main aim is to improve the quality of care provided. The recently developed strategy additionally envisages an education reform with a stronger focus on practical experience in the curricula for medical training, including a reform of nursing education.

Technical assistance has been provided in two phases for the medical faculty facilities. Phase 1 concerned the preparation of a feasibility study for the facilities to be developed and the project definition including the conceptual design of the buildings. Following successful completion and approval of phase 1, phase 2 concerned the preliminary design of the Medical Faculty, the R&D Centre, the Faculty for Healthcare Professionals and of the Secondary Medical School. Also included is an update of the equipment list and the budget for the construction and operation of the facilities. Finally, an analysis of education of health care professionals in RS has been performed leading to guidelines for the education of nurses and other health care professionals.

Banja Luka clinical centre and future facilities (in red)

The general beneficiaries of the project are the citizens of the Republika Srpska, in particular patients, health care professionals and employees of the facilities. They will benefit from higher quality and safer health care services, and better and secure working conditions. The project is contributing to the reform of the RS healthcare system. Together with the primary health care reform, the reform of the hospital sector has a central position in the further strengthening and development of the health system in the RS. Developing the medical faculty, medical research centre and medical school is in line with the RS Heath Care System Reform and Reconstruction Strategic Plan 1997–2000 and the Europe 2020 Strategy of the EU that stresses education, research and innovation.

Key Facts

Title	Designing the Medical Faculty, Medical Research Centre, Faculty for Health Care Professionals and Secondary Medical School
Code	WB5-BiH-SOC-03
Data approved	June 2011
IFI	EIB

WBIF Support

Feasibility study + Environmental screening + Conceptual and preliminary design + Capacity building

Finances

WBIF grant	€ 800,000
Loan estimate	€ 38,600,000
Total investment estimate	€ 38,600,000

Bosnia and Herzegovina
Social Sector

Housing for the displaced and vulnerable

Despite almost 20 years of humanitarian assistance in Bosnia and Herzegovina there still remains today approximately 113,000 displaced people, with over 8,000 living in temporary collective accommodation. Within the Dayton Peace Accords, an entire Annex (VII) is devoted to addressing the situation of internally displaced people (IDPs) and the BiH Ministry of Human Rights and Refugees' revised strategy for the implementation of Annex VII recognises those IDPs living in collective accommodation as a priority.

Building on the results of previous and on-going projects, the aim of this project is to establish durable housing solutions for at least 7,200 IDPs which currently occupy about 72 % of the collective accommodation centres. The total investment for the project is planned at EUR 104 million. It will be financed through a loan and an interest rate subsidy from the CEB (EUR 60 and EUR 2 million respectively), a WBIF grant (EUR 1.2 million) and a BiH contribution. One segment of the project, funded by this grant, will be administered by a UNHCR team which will conduct beneficiary verification and assist the beneficiaries in their integration into the local social care systems, as well as assist the project implementation unit in everyday activities such as procurement.

Secure housing for displaced persons

In addition to supporting the implementation of Annex VII, this project also will contribute to the future development of social housing policy in BiH to benefit vulnerable groups more broadly, including but not limited to IDPs. Further, the project will aid in clarifying the roles and responsibilities of institutions and agencies to assist vulnerable groups with specialised housing needs and thereby support the creation of a clearer framework for partnership between relevant governing authorities at all levels, in line with current policy reforms to decentralise and strengthen the management and administration of the housing sector.

The beneficiaries of this project are IDPs living in collective accommodation in over 77 municipalities in BiH. 7,200 IDPs currently live in collective centres (CCs) and alternative accommodations (AAs) throughout the country. About one-third of these IDPs suffer from psychological problems, are handicapped, or chronically ill, and the remaining two-thirds are considered socially vulnerable due to age, employment, marital and/or economic status. Implementation of the project will enable the closing of 121 CCs and AAs, or 76 % of those still remaining.

Key Facts

Title	Housing and social integration of vulnerable persons living in collective accommodation
Code	WB7-BIH-SOC-04
Data approved	June 2012
IFI	CEB

WBIF Support

Implementation support + Interest rate subsidy

Finances

WBIF grant	€ 3,200,000
Loan estimate	€ 60,000,000
Total investment estimate	€ 104,000,000

Bosnia and Herzegovina
Social Sector

A sports and cultural centre to help integrate communities

Although Mostar is home to a large number of cultural societies and sporting clubs, it lacks sufficient capacity for cultural and sporting events, as present facilities are almost non-existent or are inappropriately small for the city of its size. This project relates to the construction of a cultural and sports facility, CSC Integra, in the city of Mostar with the aim of helping with the integration of three ethnic communities following the 1990's war, while also providing a quality sports and cultural assembly and exhibition facilities.

The planned CSC Integra will have a total of 46,000 m² of useful space, out of which 24,000 m² will be underground parking area and 12,000 m² cultural and sports facility space that will include office and entertainment provision. The building will offer 4,000 seats and garage facilities for 600 parking places. The project is challenged by a small land plot and its central city location, thus making traffic management difficult.

The project is carried out in three components that included:

i) the completion of the revisions to the main design and drafting of operational and sustainability plans;

ii) amending the main construction design and completing relevant related documents;

Construction underway

iii) completing the feasibility report;

iv) reporting on savings in investment and operational costs directly attributed to the revisions of the tender dossier.

The facilities will benefit the population of the City of Mostar and its surrounding area, especially the youth and amongst them the disadvantaged and disabled population. The direct beneficiaries include some 18,000, including 3,500 members from approximately 50 cultural societies and 15,000 members of 105 sporting clubs.

Social benefits include decrease in delinquencies, and drug and alcohol abuse that is widespread due to the lack of recreational facilities Mostar. Moreover, the centre will extend to the wider community allowing educational and civic use, as schools and universities are expected to utilise this facility for cultural, sport, and other events together with 40 cultural civic groups and 120 sporting clubs. The ultimate benefit of the project is the development of a social infrastructure platform that will facilitate integration of divergent ethnic and social groups. The project should fill the gap in the provision of cultural, sports and assembly capacity, strengthen social integration by improving living conditions and quality of life in the urban area of Mostar and contribute further to creation of conditions for a sustainable development of this highly important city for the whole southern region of Bosnia and Herzegovina.

The technical assistance for project preparation phase is now completed and CEB is waiting to receive a formal loan application from BiH authorities. However, given the political situation in the country, and the Mostar constitutional deadlock in particular, it is unlikely that the City Council would be in place to submit a request for a loan anytime soon.

In addition to WBIF technical assistance in preparation phase, funding was provided by the Embassy of Netherlands and CEB-managed Norway Trust Account.

Key Facts

Title	Support for construction of Integra sport and cultural facility
Code	WB7-BIH-SOC-05
Data approved	June 2012
IFI	CEB

WBIF Support

Revision of main design + Operational and sustainability plans + Feasibility report update + Assistance with tendering

Finances

WBIF grant	€ 2,550,000
Loan estimate	€ 12,730,000
Total investment estimate	€ 13,094,000

Bosnia and Herzegovina
Transport Sector

Bosnia and Herzegovina gets strategic links with seaport Ploče in the west and Member States to the north

The roads in Bosnia and Herzegovina were severely damaged during the war in the 1990s. Corridor Vc is the backbone of the country's road network, connecting it to the Adriatic port of Ploče and to Central Europe to the North. As such it is of great national strategic importance and a top priority for development by the government.

Corridor Vc is one of three branches of Motorway Corridor V, part of Trans-European Network for Transport. It is a major North – South transit road between the countries of the region through Bosnia and Herzegovina. Following the E73, Vc starts in Budapest, runs via northern Croatia (Osijek), through Bosnia and Herzegovina via Doboj, Zenica, Sarajevo and Mostar, and ends in the Croatian port of Ploče. A feasibility study establishing a motorway on the entire Corridor Vc was completed in December 2006. It included the BiH section of the Vc motorway, with a total length of 340 km. The feasibility study demonstrated that the construction of the motorway is economically justified.

The WBIF has provided two grants to help with Corridor Vc's development, contributing to the project preparation and realisation (including traffic study, design review, tender documents preparation, tendering, works supervision, reporting and liaison with the IFIs), part of the detailed design (Počitelj-Zvirovići section) and the development of terms of reference and detailed design for the motorway management system.

Construction of Vijenac tunnel

The project has a strong cross-border component and will have significant economic and social benefit for both Croatia and BiH. In addition to reducing travel times, vehicle operation costs and increasing road safety, it will increase accessibility and promote regional as well as local economic and social development. Corridor Vc motorway will connect BiH to one of the main intercontinental trade routes. The project has strong support from the BIH Government and four priority sections for construction are key steps in the long term Federation of Bosnia and Herzegovina motorway strategic plan. Part of the Zenica – Sarajevo section has already been completed, while other sections are currently under construction. The total cost of sections financed by loans signed with EIB and EBRD, is approximately EUR 497 million.

Road administration in BiH is complicated by the political structure and governmental hierarchy. There is no road network categorized in Bosnia & Herzegovina as national. In each of the entities, the main, regional and local roads are managed by the Road Directorate and the Public Enterprise respectively. At a lower administrative level, roads are managed by administrative units established within Cantons (in the Federation) and Municipalities (in the Republic of Srpska). Implementation of the construction is on entities level. The WBIF technical assistance contributed to strengthen the motorway companies which manage the project, JP Autoceste FBiH & JP Autoputevi RS.

Key Facts

Title	Corridor Vc
Code	i. TA-BIH-08 ii. WB1-BIH-TRA-01
Data approved	i. June 2008 ii. December 2009
IFI	EIB and EBRD

WBIF Support

Feasibility study + Technical and managerial assistance + Detailed designs + Assistance with tendering

Finances

WBIF grant	i. € 500,000 ii. € 2,000,000
Loan estimate	€ 421,000,000
Total investment estimate	€ 497,000,000

Bosnia and Herzegovina
Transport Sector

Border road upgrade to improve international links

Roads across the region have suffered from a lack of investment and neglect over the recent past decades. The consequences are serious: poor service of users with a particular adverse impact on more remote communities, excessive journey times, holds-ups from fire-fighting temporary cheap fixes, higher levels of accidents and a poor offer for tempting business and inward investment. It adds up to a deleterious effect on both the economy and social well-being.

All governments of the WBIF beneficiaries have embarked on the programme of road upgrade and WBIF is involved in supporting many of the new or improvement schemes. Two particular WBIF supported projects in neighbouring countries, Bosnia and Herzegovina and Montenegro, are linked with a common border crossing. The connecting road is the shortest connecting line between the two capitals: Sarajevo and Podgorica.

The technical assistance support in Bosnia and Herzegovina deals with the road upgrade between Brod na Drini (Foča) and Hum on the border. In Montenegro the project covers the road upgrade between Šćepan Polje, on the border, and Plužine (see TA2-MNE-TRA-03 and TA3-MON-TRA-01). Both sections are in a very poor state and characterised by severely inferior safety levels.

Key Facts

Title	Construction of main road Foča (Brod na Drini) to Hum
Code	TA-BIH-06
Data approved	June 2008
IFI	EBRD

WBIF Support

Pre-feasibility and feasibility studies + Technical surveys and preliminary designs

Finances

WBIF grant	€ 700,000
Loan estimate	-
Total investment estimate	€ 62,250,000

The existing bridge at the border crossing shows the need for upgrade

The two linked projects deal with preparation studies for a main road link between the two countries that makes up the shortest route between the respective capitals that then leads on to Tirana. The two sections meet at the border crossing over the river Drina.

The WBIF supported technical assistance work was made up of two phases: Phase I assessed route and border crossing options and pre-feasibility assessments; Phase II covered more detailed technical investigations – topographical, geological, geotechnical, road and tunnel engineering and environmental impact – together with economic viability reporting. The design for a new bridge was also part of Phase II.

The potential benefits are revealed in the Bosnia and Herzegovina study: the 20-km long road on the Bosnia and Herzegovina side will be used daily by some 1,600 vehicles, transporting 4,000 passengers. Additionally, it will attract more than 100 trucks per day which currently are unable to use this route at all. Reconstruction is expected to provide annual savings of EUR 6 million from vehicle operating costs, EUR 5 million from travel time, EUR 0.5 million from traffic accidents and significant road maintenance savings. New traffic is also expected to bring EUR 0.5 million of economic benefits. Similar benefits will accrue to Montenegro.

As well as directly improving road safety and reducing travel time the upgrade should also bring broader regional benefits: social and wider economic opportunities together with greater community and international cohesion.

Bosnia and Herzegovina
Transport Sector

Railway track rehabilitation from Podlugovi to Sarajevo

The Bosnia and Herzegovina's railway system needs finance to rehabilitate long neglected and investment starved lines; war damage also played a detrimental part. As part of a strategic redevelopment programme WBIF is helping the state rail company with a programme dealing with the Sarajevo to Podlugovi section. This section is approximately 25 km long and is on the line from Ploče to Budapest which is part of Pan European Corridor Vc.

The operating speed along the single electrified line is 30-70 km/h and the signalling system is to a great extent out of order and outdated. In addition there are 3 locations with landslides that jeopardize the line safety and operations. The technical assistance study is divided into two steps. The first step is the preparation of a feasibility study, including cost benefit analysis, which, if favourable, will justify the scope for the rehabilitation – a complete track overhaul - of the Sarajevo to Podlugovi section. In general, the idea is to continue the same rehabilitation practices as used on other sections of the Corridor Vc; that is:

- track overhaul to bring back the line into original design speeds of between 80 and 100 km/h and even to increase this to 120 km/h, where possible, without re-alignment;
- new track and switches in stations;
- repair of bridges, culverts, slopes and sub grade;
- installation of signalling and interlocking on stations and level crossings where this is missing;
- adaptation of level crossings.

Passenger train

The second step is the preparation of the main design including the preparation of tender documents for track overhaul and signalling.

EIB, as major funders of other sections of railway Corridor Vc (EUR 40 million in 2001 and EUR 86 million in 2005) is negotiating a third phase (Railways III) of funding for other section of which the Sarajevo to Podlugovi would be part.

The investment will result in:

- the rehabilitation of the existing line such that the original speeds can be reinstated;
- a modern signalling and telecommunication's system
- increased capacity;
- rehabilitated substructure and drainage;
- rehabilitated superstructure: rails, switches, sleepers, ballast); 11 bridges, five stations (including platforms and electronic interlocking) and nine level crossings with electronic interlocking;
- slope stabilization three locations.

The main beneficiaries from a better rail system will be the existing and future end users of the rail services along the rail line, both passengers and freight operators. The line has a catchment of some 1.5 million inhabitants, around 33 % of BiH population, as well as numerous mines and industrial plants. The line serves mostly bulk freight traffic, of which 60 % is international. The traffic along the line is around five million tons. In contrast, the line utilization by passengers is small (3 % modal share or 0.5 million passengers.) Under the planned line overhaul it is estimated that by 2025 passenger traffic will have tripled to 360,000 passengers and freight traffic doubled to 7.6 million tons.

Key Facts

Title	Railway Sarajevo to Podlugovi
Code	TA2-BiH-TRA-02
Data approved	March 2009
IFI	EIB

WBIF Support

Feasibility study for overhaul to design speed + Main design + Assistance with tendering

Finances

WBIF grant	€ 600,000
Loan estimate	-
Total investment estimate	€ 22,500,000

Bosnia and Herzegovina
Transport Sector

Mahovljani Interchange connects two motorways

The motorways in Republika Srpska, together with the whole of Bosnia and Herzegovina, are in an early phase of development. As a result, the governments of both entities in BiH have prioritised the development of the national motorway network. One of the recent developments is the Mahovljani interchange, which is the intersection on the E – 661 Gradiška to Banja Luka motorway and the Banja Luka to Doboj motorway in Republika Srpska. The interchange is a key regional link, which connects the north-west region of the country to the inter-regional motorway Corridor X (Zagreb-Belgrade) and is part of BiH's large-scale expansion and improvement of its core transport network.

The European Bank for Reconstruction and Development (EBRD), funded a comprehensive programme of institutional support for the newly formed public company Republika Srpska Motorways, charged with managing the construction of the interchange. Assistance was also provided with business planning, the development of a tolling strategy and the introduction of management systems. EUR 300,000 was provided through a WBIF grant. The total investment value of the project is approximately EUR 30 million, of which EUR 21 million is provided by an EBRD loan.

Key Facts

Title	Mahovljani Interchange: assistance with Institutional strengthening of RS motorways
Code	WB1-BiH-TRA-03
Data approved	December 2009
IFI	EBRD

WBIF Support

Technical and management assistance

Finances

WBIF grant	€ 300,000
Loan estimate	€ 21,000,000
Total investment estimate	€ 34,000,000

The interchange photographed just after construction completion

The new interchange is designed to provide an enhanced connection system between two motorways by creating a better aligned road network enabling higher traffic speed flows. The benefits are improved traffic levels on the Banja Luka to Gradiška motorway, which are already high by regional standards. The interchange, which was successfully completed in 2012, is designed on 3 levels and stands 13.9 m in height.

The completion of the Gradiška – Banja Luka motorway and the Mahovljani interchange has improved the traffic flow on local and transit routes in the region, decreased levels of accidents, reduced traffic congestion, air emissions and noise levels in the locality. A fuel levy was implemented and complementing this, road tolls have been introduced in accordance with international best practice.

The government of the RS has made important strides in enhancing the efficiency of the road sector, largely through the creation of a road company, which was a condition of one of the previous Bank financed projects. This has also been mirrored in the Federation of Bosnia and Herzegovina. The investments provided for the institutional strengthening of the public company Republika Srpska Motorways, through the provision of assistance in the development of the company's own environmental, health, safety and social management systems.

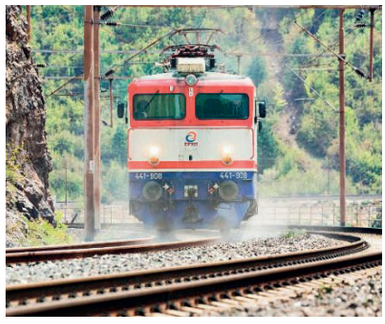
Bosnia and Herzegovina
Transport Sector

Better service for Bosnia and Herzegovina's railway

Corridor V is one of the ten Tran-European corridors in Central and Eastern Europe prioritised for investment at the 1997 Helsinki Conference. One section going through Bosnia and Herzegovina, Branch C, belongs to the regional core transport network developed by the South East European Transport Observatory (SEETO). Branch C, goes from Budapest through Croatia and Bosnia and Herzegovina, to the port of Ploče on the Adriatic sea. The sections Doboj – Maglaj (23.5 km double track) and Jelina – Zenica (9 km single track) belong to this railway line section and are the subject of a project of modernisation and rehabilitation of railway infrastructure on this corridor, supported by the BIH government and the governments of both entities in BiH.

The upgrading of the railway on Corridor Vc is a priority for BiH and the EU since it connects BiH with Central and South-Eastern Europe. Earlier prefeasibility studies financed by the EU have proposed to overhaul the railway lines on these sections. The purpose of the project is a study to investigate the feasibility, with economic justification, for track overhaul, signalling and interlocking systems on these sections, and accordingly to prepare the main designs and draft tender documents.

Corridor Vc Railways



The study is divided into two phases: the first phase covers preparation of the feasibility study. The option chosen in the feasibility study is to continue the rehabilitation practice as used on other sections of the Corridor Vc; that is: track overhaul to bring the line back to its original design speed (80-100 km/h) and to 120 km/h, where possible, without re-alignment and to rehabilitate and repair other elements including new track and switches in stations, bridges, culverts, slopes, signalling and interlocking mechanisms at stations and level crossings. The second phase covers the main design and the preparation of tender documents. The possibility of smoothing the transition curves to increase the speed to 120 km/h, where possible will be assessed, while the lengthening of the train stations and the introduction of the European Rail Traffic Management System will be also considered.

The project promoter is the BiH railway public corporation and the entity railway institutions. The project will benefit the entire population of BiH, as well as have wider benefits for regional economic development. At the national level, there is no agreed transport policy and strategy in BiH. The project is however in line with the South East European Transport Observatory network and is important for the development of the region. Moreover, the project is in line with the EU policy to support more environmentally -friendly modes of transport.

Key Facts

Title	Corridor Vc Railways. Track overhaul Bosanski Šamac/ Šamac-Sarajevo, Section: Doboj-Maglaj, Jelina-Zenica
Code	WB5-BiH-TRA-14
Data approved	June 2011
IFI	EIB

WBIF Support

Feasibility study + Detail design + Assistance with tendering

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 30,000,000
Total investment estimate	€ 72,800,000

Bosnia and Herzegovina
Transport Sector

Bypass to ease congestion in Brčko District

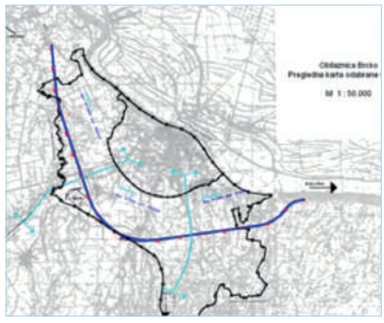
Brčko District (BD) has an important geographical location within Bosnia and Herzegovina (BiH) and the wider region. Lying along the Sava river in north BiH, it forms part of the border with Croatia. BD is an independent self-governed district of BiH reporting directly to State Council of Ministers, a result of the Dayton Peace Accord.

EBRD has signed a loan agreement for the construction of the Brčko by-pass in BD and WBIF is supporting the project with technical assistance. The proposed bypass route will run to the south of the city's urban limit and have a single 2 lane carriageway. The by-pass forms part of the east - west route running from Lončari, Brčko, Bijeljina to the Serbian border, which is a 18.7 km long single carriageway with 4 junctions. The investment cost of the by-pass is EUR 45 million.

The technical assistance covers:

i) preparation of tender documents and procurement of the works and supervision contracts for the by-pass construction including assistance during the evaluation of proposals and other reporting requirements;

Proposed alignment for Brcko by-pass



ii) institutional development of the road sector administration; and

iii) assistance with introducing multi-annual output and performance based road maintenance contracts (PBMC), including tendering for the first such contract.

The institutional strengthening focused on the creation of an independent legal entity specifically dedicated for this task and improvement in funding of this sector. The new legal entity will be fully operational with between 15 and 20 trained staff and will be supported with a comprehensive business plan.

The construction of the bypass will reduce congestion for the city of Brčko and its 90,000 inhabitants by redirecting through traffic onto the new road. It will therefore improve environmental and safety conditions in the area, reduce travel times and vehicle operating costs and will facilitate intermodal movement of goods through the port of Brčko. As a result of the technical assistance and transformation of the roads division into a separate entity, the road management and road maintenance practices in BD will be improved, enhancing institutional development and increasing transparency. The introduction of the novel PBMC will render the District a pioneer in Bosnia and Herzegovina.

The general beneficiaries of the project are the existing and future end users of the road network of BD, passengers and road hauliers, cargo owners and freight forwarders. The latter will also benefit from direct access of Brčko port along Sava river and the Port Authority from improved road access.

Key Facts

Title	Brčko bypass technical assistance for the construction of the bypass
Code	WB6-BIH-TRA-15
Data approved	December 2011
IFI	EBRD

WBIF Support

Preparation of performance based maintenance contract + Capacity building + Assistance with tendering + Contract supervision

Finances

WBIF grant	€ 500,000
Loan estimate	€ 28,500,000
Total investment estimate	€ 45,000,000

Bosnia and Herzegovina
Transport Sector

A harmonised motorway toll system for Republika Srpska

The motorway network in the Bosnia and Herzegovina entity of Republika Srpska (RS) is at various stages of development. The project concerns the desire to implement a harmonised, efficient and effective system of collecting tolls on the entire future motorway network. Having a harmonised system is complicated by the differing sources of finance that is funding the network's various development sections. The study includes recommendations on the type of tolling method to be used, open or closed, and the system for toll collection. Moreover, the recommendations include the equipment and software to be used at collection points and in the toll collection booths. A key principal is harmonizing the system making it compatible with other systems used in the country and in the greater region.

The study examined and compared road pricing options, assessed road pricing impact and recommended a pricing strategy and fee collection options. It also analyzed the regulatory context under which road charging will be functioning, including toll technology options, as well as relevant costs and benefits. The study assessed traffic forecasts for the proposed motorway system which were used in evaluating the tolling system options and made available for planning motorway development and implementation in the future.

New toll station

A feasibility study was undertaken over 2012 - 2013 to examine options and propose the most appropriate tolling system for the motorways, taking account of the long-term motorway development programme. The study was a step towards implementing a road charging system for the use of motorways and presented the proposed strategy and action plan for the implementation of tolling on the three most developed motorway corridors in the RS, namely: motorway E661 Banja Luka - Gradiška (33 km); motorway M16.1 Banja Luka - Doboj (76 km) and motorway E73 Doboj - Modriča (corridor Vc; 47 km).

The study included:

- the preparation of a traffic forecast model; a review of tolling system options;
- an analysis on a multi-criteria basis; and
- a cost-benefit analysis of the selected recommendation.

A suitable pricing and discount policy, recommendations on necessary legislative measures for operating the tolling system and an action plan for establishing the proposed tolling system were also prepared. The project was successfully completed in May 2014.

The project promoters are the Republika Srpska Motorways agency and the RS Ministry of Traffic and Communications. The project will ensure the smooth operation of traffic on future motorways and will facilitate efficient revenue collection that will contribute towards the repayment of IFI loans provided for the construction of the motorway network.

Key Facts

Title	Study on Toll Collection Possibilities and System Design for Republic of Srpska Motorways
Code	WB6-BiH-TRA-18
Data approved	December 2011
IFI	EBRD

WBIF Support

Feasibility Study + Draft action plan

Finances

WBIF grant	€ 300,000
Loan estimate	€ 10,000,000
Total investment estimate	€10,300,000

CROATIA

Croatia
Energy Sector

A new LNG facility providing alternative energy sources for Europe

The geographic position of the Republic of Croatia gives good access to the Central Europe Gas Hub (CEGH) based at Baumgarten in Austria that, in turn, provides excellent access to the markets of Central and Western Europe - Austria, Slovenia, Hungary, Slovakia, and Czech Republic - as well as Western Balkan countries - Serbia, Bosnia and Herzegovina, Montenegro etc. Potential key users of LNG are the countries in the region and their demands have defined the size and design of the terminal. Because of this large potential hinterland the quantities of natural gas, which will be delivered into the gas transmission system through the LNG facility, have been estimated to increase from one billion cubic metres (bcm) to six bcm per year in the first six years of operation.

WBIF are assisting with the development of the LNG terminal. The support consists of assessing various alternative locations and configuration options for the terminal:

- an LNG regasification vessel; a floating store and regasification unit;
- a floating storage unit and an on-shore regasification LNG unit; or
- a complete LNG terminal with storage and regasification onshore, creating an appropriate “Migration Concept”.

Artist’s impression of the LNG Terminal in Omisalj, on Krk Island

In addition to the LNG terminal, the WBIF support is used to evaluate the gas pipeline connection from the terminal to the Croatian gas network. A conceptual solution as well as a market study was prepared.

The LNG terminal is intended to be constructed in three phases (“migration concept”). Phase 1 which will cover capacities up to one bcm will be either a LNG regasification vessel and a floating storage unit or a complete FSRU (floating, storage and regasification unit). In Phase 2, which would cover capacities up to four bcm, the regasification units would be moved on-shore and only a floating storage unit will be off-shore. In Phase 3, covering capacities up to six bcm, the storage unit would be constructed on-shore and the LNG terminal would be fully developed.

Quality improvements include diversity and security of gas supply as well as introduction of an ecologically sound energy source in the region (replacement for firewood, coal, fuel oil and back-up for renewable energy – wind in the first place), reduction of CO_2 emissions in the region and facilitating economic development.

The project is considered by the EC and the Energy Community Secretariat as a priority project of regional significance, most particularly given the current unstable wider security predicament and some parts of Europe’s dependence on single source gas supplies.

Key Facts

Title	LNG Regasification Vessel – Conceptual Solution, Feasibility Study and ESIA and Conceptual Design
Code	WB5-HR-ENE-01
Data approved	June 2011
IFI	EBRD

WBIF Support

Conceptual design + Feasibility study + Environmental and social impact assessment + Commercialisation Study

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 100,000,000
Total investment estimate	€ 600,000,000

Croatia
Energy Sector

New pipelines to link domestic gas network with Slovenia, Italy and Central Europe

The project of LNG terminal in Omišalj on the island of Krk is of exceptional energy strategic significance for the Republic of Croatia. The undoubted need for the transmission of natural gas, after the regasification at the planned terminal, taking gas to neighbouring countries in addition to the domestic market, creates opportunities to develop the Croatian gas transmission system. The construction of new transit gas pipelines with the effective use of the existing national gas transmission system opens large development and business possibilities.

WBIF is assisting with the development of this opportunity with two grants. One deals with the terminal (see WB5-HR-ENE-01), while this this project deals with the pipeline. The LNG evacuation gas pipelines consist of:

- The gas pipeline Omišalj – Zlobin, 18 km long. This will be the main and initial gas pipeline for natural gas transmission and transit from the LNG terminal in Omišalj on the island of Krk to the existing Croatian gas pipeline network.
- The international gas pipeline Zlobin – Rupa, 34 km long. This connects the main gas pipeline Omišalj - Zlobin in Zlobin with the Slovenian gas transmission system in Kalce, thus providing natural gas transmission and transit from the LNG terminal to Slovenia, Italy and Central Europe.

LNG terminal in Omišalj

The overall objective of the project is to verify the feasibility of implementing the pipelines. A comprehensive cost-benefit analysis will be conducted covering both financial and socio-economic aspects, including risk analysis.

Construction of the evacuation pipeline enables natural gas transmission from the future LNG terminal on the island of Krk to the customers; natural gas transmission to European market; and provides options for gasification of the island of Krk. Further improvements include: reduction of CO_2 emissions in the region; facilitation of economic development; and an introduction of an ecologically sound energy source in the region (replacement for firewood, coal, fuel oil.)

Being a bi-directional pipeline (from Zlobin to Rupa), this interconnector provides a diversified and secure basis for natural gas supply not only in Croatia but also in neighbouring countries.

The project is fully in line with the Energy Strategy of the Republic of Croatia, the Energy Community Treaty, which defines the creation of a single market without internal frontiers for Network Energy as the principal goal, the new regulation concerning measures to safeguard security of gas supply as well as the Plan of Development of the Gas Transmission System of the Republic of Croatia 2010 - 2014. The evacuation pipeline from Omišalj to Zlobin is also in line with the Physical plan of Primorje-Gorski Kotar County.

Project results depend on the findings of the LNG terminal study noted above.

Key Facts

Title	LNG Evacuation Gas Pipelines Omišalj – Zlobin – Rupa (Slovenia)
Code	WB5-HR-ENE-02
Data approved	June 2011
IFI	EBRD

WBIF Support

Financial and economic cost benefit analysis + Risk analysis

Finances

WBIF grant	€ 180,000
Loan estimate	€ 95,500,000
Total investment estimate	€ 107,000,000

Croatia
Energy Sector

Better flood protection systems and augmented power generation capacity on Sava River

Overflows on the Sava River, such as those registered in 2010 and 2014, significantly affected Zagreb and neighbouring settlements. This drew the Croatian Government's attention to the need for improved flood protection schemes. The Croatian concern with the flood protection systems on Sava River dates back to 1970s and had seen regular investment until the 1990s. As Zagreb expanded significantly on both sides of Sava River, so making the river lie at the heart of the city, the need for regulating it became more stringent.

In order to continue the 1970s river regulation plans for the Sava, the Croatian Government through the state-owned enterprise HEP RVNP d.o.o. has initiated, with WBIF funding, a new study on the feasibility of enhancing the existing works and arrangements from the Slovenian border to the City of Sisak. The study will consider additional river embankment and regulation works, including the use of the flood relief channel Sava-Odra, as well as the possibility of developing hydropower plants which would ensure, as a minimum, more than 25 % of Zagreb's current electricity demand. It is envisaged at this point that such hydropower facilities would consist of four plants - HPP Podsused, HPP Prečko with the Lučko flood gate, HPP Zagreb 1 to 4, and HPP Sisak. The foreseen overall electricity production capacity is 120 MW, with an annual output of about 610 GWh.

Arial View of Sava River in Zagreb

The new river schemes would ensure constant water supply to the City and would stabilise Sava's riverbed which is now severely affected by structural changes in the catchment area upstream. In addition, the river regulation works will result in 350 hectares of land that could be used for further urban and state development, envisaged at this stage to include public social infrastructure facilities with recreational and cultural functions. The total value of the investments is in excess of EUR 1.2 billion, out of which EUR 300 million would represent the cost of developing the hydropower plants.

Should the project prove viable, it is likely that it will be split in three components corresponding to:

- the flood protection schemes;
- hydropower generation facilities; and
- social infrastructure development plans.

Subsequently, the Croatian Government would seek EU grant financing for the first component, while for the other two WBIF could provide financial assistance to the development of an implementation plan, preliminary and detailed design. The feasibility study is ongoing but due to be finalized by the end of 2015.

Key Facts

Title	Regulation and development of the Sava river in Zagreb
Code	WB8-HR-ENE-11
Data approved	December 2012
IFI	EBRD

WBIF Support

Feasibility study + Environmental and social impact assessment

Finances

WBIF grant	€ 1,500,000
Loan estimate	€ 500,000,000
Total investment estimate	€ 1,200,000,000

Croatia
Energy Sector

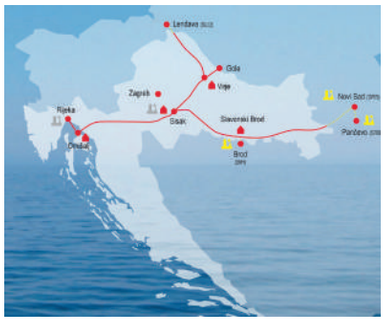
Upgrade for strategic oil pipeline

Diversifying Europe's fuel sources is an imperative in today's political and economic climate and increasing the security of oil and gas supplies is a key EU energy policy. This project, upgrading and rehabilitating the JANAF oil pipeline in Croatia, is a means to reduce dependence on over-dominant oil sources along a vulnerable over-dominant pipeline by allowing feed-in at the port of Omišalj on the island of Krk. In addition to supplying Croatia, the pipeline feeds three other Member States: Hungary, Slovakia and Czech Republic, and two South East Europe countries aspirant member states: Bosnia and Herzegovina and Serbia. The JANAF pipeline will also help the establishment of Central and South East Europe oil ring that will connect to Germany and Poland and allow for a North-South oil supply corridor by connecting to the Gdansk feed-in terminal in Poland.

The JANAF pipeline was built between 1974 and 1979. The system is 759 km long of which 622 km is in Croatia. It has a capacity in excess of 12 million tonnes of oil annually to feed refineries in Hungary, Slovakia and the Czech Republic.

The WBIF supported activities reflect the two main project components. The first component relates to the inspection, evaluation, rehabilitation and upgrade of the entire Croatian network, supporting both the overall evaluation (which will include a technical assessment, a commercial and economic evaluation, and developing potential solutions) and those parts selected for development (to include preliminary design, economic and financial evaluation and environmental and social impact analysis). The second component deals with a new 5 km connection between Krk and the mainland that includes 730 m of undersea pipeline to replace the existing overland route via a bridge. The WBIF will support the preparation of the tender documents and assist with the bid evaluation.

Oil transmission lines



The benefits of the project are huge particularly in today's unsettled and unpredictable climate. The upgraded pipeline provides oil supply diversity and security, better environmental protection together with potential economic development with consequential increases in social well-being.

The project's promoter is Jadranski naftovod, a joint stock company, responsible for crude oil transportation in Croatia. In 2009, the company successfully built and implemented a supervisory control system, SCADA, which allows the whole system to be monitored and controlled in real time using the latest ICT. This benefits operational efficiency and human safety. The company has a successful operational and financial track record and is well placed to fulfil the project's development.

Key Facts

Title	Upgrade and reconstruction of JANAF oil pipeline
Code	WB9-HR-ENE-01
Data approved	June 2013
IFI	EBRD

WBIF Support

Rehabilitation plan for oil pipeline network + Preliminary design + Environmental and social impact assessment + Assistance with tendering

Finances

WBIF grant	€ 1,600,000
Loan estimate	€ 11,300,000
Total investment estimate	€ 14,100,000

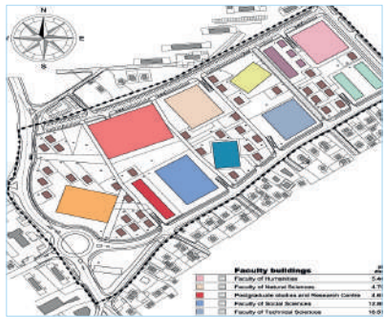
Croatia
Social Sector

Developing higher education and research facilities in one of Europe's oldest universities

The University of Zadar was registered on 29 January 2003, which makes it the second youngest university in contemporary Croatia. However, the tradition of higher education in Zadar goes far back in time to the establishment of the Dominican general institution (Studium generale, later called Universitas Jadertina) on 14th of June 1396. Although Universitas Jadertina was formally disestablished in 1807, some faculties were sustained, thus ensuring uninterrupted continuation of the university tradition in Zadar and endowing it with the prestigious status of being one of the oldest university centres in Europe. Today the University of Zadar is the largest fully integrated university in Croatia: a university with all faculties on a single site. There are 5,550 students enrolled in undergraduate, graduate, postgraduate and doctoral studies organised in 26 departments. In July 2012 there were 573 employees at the University, 414 of them teaching staff. Two companies with 32 employees are also part of the University, as well as three scientific and research centres.

The University of Zadar faces a number of challenges in relation to its future growth as Croatia seeks to raise tertiary education attendance to EU levels. The core activities of Zadar University currently lie in social sciences and humanities, but national and regional priorities are driving Zadar University to consider expanding in natural and technical sciences with the introduction of new programmes. Physical conditions at the University increasingly hinder its development. Lack of space and equipment are constraints for both the expansion into new fields of science and maintaining high quality teaching in existing fields of expertise. Under these circumstances, the University successfully applied to WBIF for the funding required to plan for adequate facilities for existing and future students and staff.

Concept design for campus



The planned developments include new buildings for natural and technical sciences, including innovation support, an extended library with up to date digital and cultural facilities and dormitories and canteen facilities for an expanded number of students. The library would constitute the University Learning Resource Centre (ULRC) and will provide a unique facility incorporating all existing departmental libraries and the 'science library', run by the City of Zadar, which is a legal deposit library. The campus expansion and the addition of the ULRC will allow for the University to organise international summer schools and other academic events which will attract international visitors, apart from the regular students. The project has been awarded two WBIF grants: the first for the development of a feasibility study, including outline design, and the second to support the University with the procurement of design services and implementation of design contracts. The construction phase is envisaged to be co-financed from EU Structural Funds allocated to Croatia and EIB loan.

Key Facts

Title	i. New campus and university learning resource centre ii. Zadar University: new campus and learning resource centre
Code	i. WB6-HR-SOC-03 ii. WB9-HR-SOC-02
Data approved	i. December 2011 ii. June 2013
IFI	EIB

WBIF Support

Feasibility study + Outline designs + Assistance with tendering + Technical and management support

Finances

WBIF grant	i. € 800,000 ii. € 1,200,000
Loan estimate	€ 15,000,000
Total investment estimate	€ 90,000,000

Croatia
Social Sector

Student accommodation at Rijeka and Osijek Universities

Croatia has a severe shortage of student accommodation in higher education. It is estimated that only 11 % of students have access to purpose designed residential accommodation and the provision for those with special needs is even worse. To remedy this the universities of Rijeka and Osijek have, as part of their development plans, embarked on a programme of increasing the rooms primarily for accommodating domestic students but also visitors, for example through the ERAMUS programme, together with visiting lecturers and researchers.

The two universities are roughly equidistant from Zagreb with Rijeka to the west on the Adriatic coast and Osijek to the east close to the Serbian border. Rijeka together with its technology park and innovation centre has over 18,000 undergraduates, 900 researchers and 1,600 staff; while Osijek, with its technology development centre and offshoot in Slavonski Brod, has over 21,000 undergraduates and almost 1,600 staff. Both are growing and both have plans for expansion.

WBIF is helping this expansion focusing on accommodation. Technical assistance will assist with the preparation of feasibility studies and cost benefit analysis and follow-up work on designs and tender documentation. At Rijeka campus the plans are phased: the first envisages three new buildings with 758 beds, with 10 apartments for special needs students, and the second a further 8 buildings with 2,400 beds; this is an increase of 2,528 over the existing 630. At Osijek the aim is to double the beds available from 963, covering only 4 % of the student population, to 1,723.

Refurbished student accommodation

The project will bring many benefits, not least the enhanced facilities students will experience. As well as personal well-being, allowing a more conducive learning experience, the results should also impact positively in reducing drop-out rates that are currently high in Croatia, an estimated 50 %. University access will be broadened to poorer students who cannot afford private facilities and to those with special needs. The new facilities and increased capacity will be an added attraction to foreign visitors, - exchange students, academics and researchers - that add to the stature of the universities in particular and the Croatian education sector in general.

The project's promoter, the Ministry of Science, Education and Sports together with the two university authorities have the capacity and ability to fulfil the universities' expansion plans and meet the requirements to expand student accommodation. WBIF support will enhance the process.

Key Facts

Title	Student accommodation at Rijeka & Osijek universities
Code	WB7-HR-SOC-04
Data approved	June 2012
IFI	EIB

WBIF Support

Feasibility studies + Designs + Assistance with tendering

Finances

WBIF grant	€ 2,800,000
Loan estimate	€ 17,000,000
Total investment estimate	€ 70,930,000

Croatia
Social Sector

Major overhaul to emergency medical provision

Croatia is restructuring and upgrading its medical facilities in respect of infrastructure and services. A key component is the Emergency Medical Departments (EMD) which, so defined in the Hospitals' National Master Plan (financed by the World Bank), will be provided at twelve hospitals spread around the country. In order to move forward this initiative, the WBIF is providing technical assistance resources to help four hospitals. These are:

i. Split. A new integrated EMD will be constructed and equipped providing just under 9,000 m^2 of new floor space on five levels.

ii. Sisak. A new central pavilion will be constructed that will connect to three existing stand-alone departmental pavilions. The design will be bring integration and service efficiency.

iii. Vrapče. Construction of a new building to house clinical department for forensic psychiatry to replace existing old, dilapidated and inadequate provision. The new structure, of 5,200 m^2, will have up to 80 beds.

iv. Varaždinske Toplice. A new spinal unit will be constructed and equipped to replace the existing very old and poorly provided unit. This will provide 5,700 m^2 of new space over six floors.

Split's new hospital

The WBIF support will, for each hospital, prepare technical feasibility studies together with environmental and social impact assessments followed up with tender and contract documents. In addition for Split and Varaždinske Toplice, designs and technical specifications will be prepared.

The benefits, over and above the quantitative new space and equipment provided, will be the hugely improved quality of service provided and the consequent well-being engendered. A fuller service with a broader range will be made available to more of the nation's population to a higher level of service (for example, the new spinal unit will considerably upgrade the facilities for such traumas). In the long-term the generally healthier patient beneficiaries will participate more productively and for longer in the economy. As well as patient benefits the new provisions will considerably improve the conditions all the hospital workers.

The project's promoter is the Ministry of Health. The work under the WBIF umbrella is part of the Ministry's broader development programme. The provided technical assistance will strengthen the Ministries capacity to deliver the new building at the four hospitals.

Key Facts

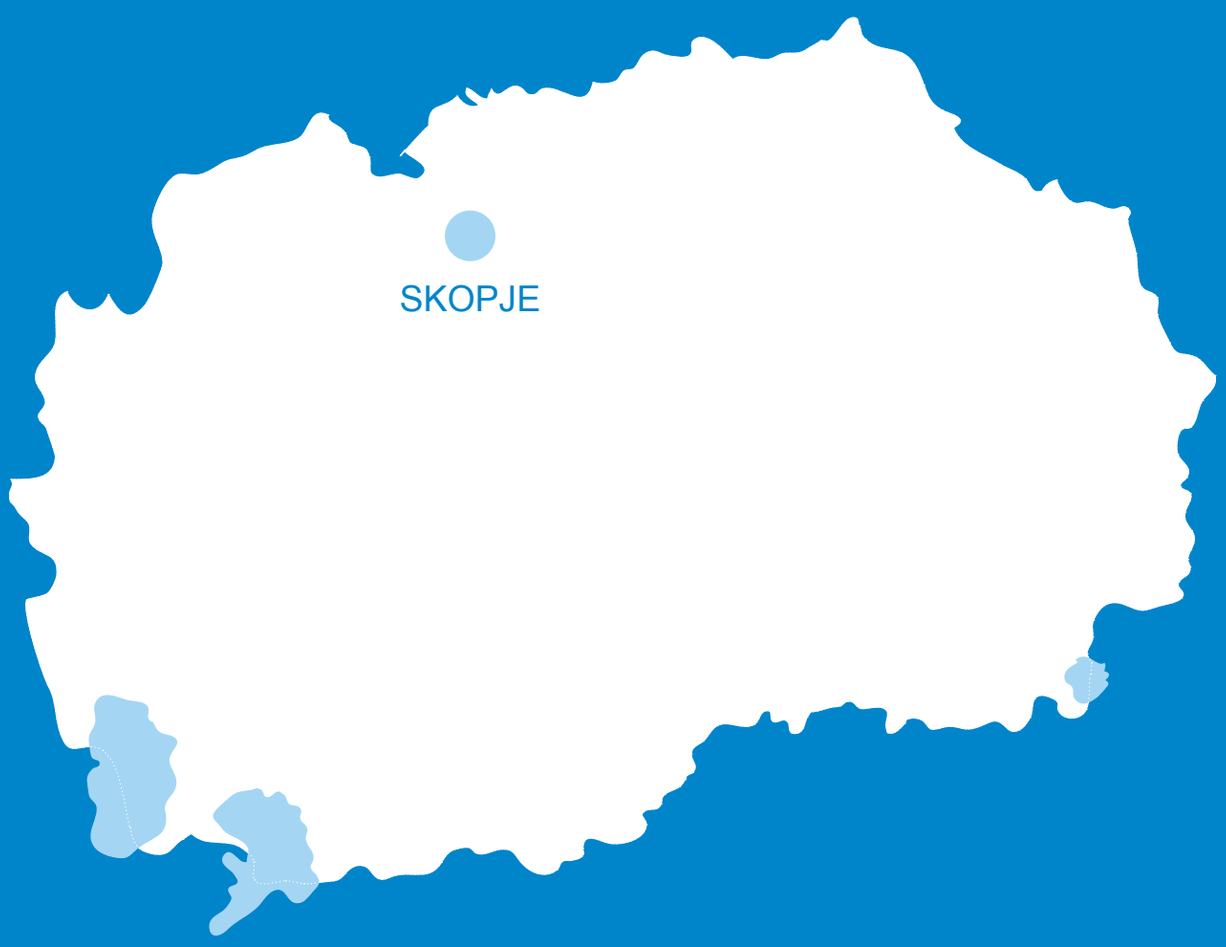
Title	Reconstruction and construction of departments within health institutions
Code	WB9-HR-SOC-01
Data approved	June 2013
IFI	CEB

WBIF Support

Feasibility studies with environmental and social impact assessments + Designs and technical specifications + Assistance with tendering

Finances

WBIF grant	€ 1,500,000
Loan estimate	€ 30,000,000
Total investment estimate	€ 60,000,000



the former YUGOSLAV REPUBLIC of MACEDONIA

the former Yugoslav Republic of Macedonia
Energy Sector

52 MW of renewable energy generation

The former Yugoslav Republic of Macedonia is keen to establish new renewable energy generation. The electricity generation company, ELEM (AD ELEM Macedonian Power Plants Elektrani na Makedonija), has progressed this aim with the help of WBIF: a feasibility study was undertaken for a pilot wind farm that will demonstrate the technology, prove the viability of wind energy, and encourage private investment in further such renewable energy projects.

The selected site, Bogdanci windfarm, is the first to be built in the former Yugoslav Republic of Macedonia and is located in the south east of the country close to the border with Greece. This position was chosen after extensive evaluation of wind data and the carrying out of two wind measurement campaigns, the first of which lasted 3.5 years and covered a large area of the country. As part of the feasibility study a thorough environmental impact analysis together with a social impact study was done; there were no adverse findings.

The project will add generating capacity contributing to the goal of improving the security of energy supply while at the same time reducing the negative environmental impacts of energy use and helping to mitigate climate change. The feasibility study justified an investment of approximately EUR 75m in 25 machines with a total capacity of 52.5MW, providing a renewable source of electricity production for about 7,000 average households.

52 MW of renewable energy generation

Since the conclusion of the feasibility study, two loan agreements were signed between ELEM and KfW to finance a first phase of the project implementation – one in the amount of EUR 32.9 million in April 2012 and one in the amount of EUR 15 million in July 2013. The total investment volume amounts to EUR 55 million, with the remainder of EUR 7.1 million being financed by ELEM. The first phase comprises 16 turbines with a total capacity of 36.8 MW and an expected annual output of 100 GWh. Over the last year construction of the first phase of turbines was undertaken and completed in March 2014. Turbines are now functioning and producing power.

The electricity sector has been unbundled with separate companies being responsible for generation and transmission. ELEM, the project's promoter, is a successful operator of thermal and hydro power plants and has the capacity, ability and experience to ensure successful long-term sustainability of the project. They have targeted 2% of current generation capacity to be from wind generation. With Bogdanci now producing, they have successfully embarked on reaching this target.

This project is of particular note from a WBIF perspective. The grant was in the first batch of awards back in 2008 when the project was just at a conceptual phase. Over the intervening six years the project has moved through all the development cycle stages: concept, study and assessment, design and specification, funding, tendering, construction, commissioning and becoming operational.

Key Facts

Title	Windfarm – Bogdanci – development
Code	TA-MKD-02
Data approved	June 2008
IFI	KfW

WBIF Support

Feasibility study + Wind measurement study + Environmental and social impact assessment + Site layout

Finances

WBIF grant	€ 400,000
Loan estimate	€ 127,000,000
Total investment estimate	€ 131,000,000

the former Yugoslav Republic of Macedonia
Energy Sector

New 400 kV transmission line benefits international connectivity

The former Yugoslav Republic of Macedonia is upgrading its electricity transmission network. Part of this process is linking with neighbouring countries for better efficiency, flexibility and customer service. WBIF is helping with one scheme that links the former Yugoslav Republic of Macedonia's electricity transmission network with the network of Serbia so improving service to customers, domestic and industrial, in both countries through the flexibility that interconnectivity provides.

The line runs from Štip in centre-east to the northern border with Serbia. In Serbia, the 400 kV line has been extended in stages from Niš south to the border. By the time WBIF became involved MEPSO, the electricity transmission system operator, had already developed a feasibility study justifying the project and international financial support through the World Bank. The only piece of the jigsaw missing was an environmental impact assessment (EIA) satisfactory for the World Bank to conclude financing. WBIF funded technical assistance provided the means for satisfying the demands of national, World Bank and EU regulations concerning EIAs.

The EIA process examined a number of route options for the 70 km long corridor between Štip and Kumanovo, and

New overhead line installation

assessed factors such as noise, electromagnetic radiation, geology, flora and fauna, cultural heritage and other impacts of the line. The total affected population in the five municipalities the line passes through is about 180,000. In preparing the EIA, 16 individual mitigation measures were identified to reduce the impact of the project on flora and fauna, as well as other measures relating to preservation of natural heritage and avoidance of sensitive areas.

This EIA is of particular importance to the former Yugoslav Republic of Macedonia as it is the first of its kind in the country meeting the regulatory framework that allowed relevant permits and authorisations to be met. This model of structuring EIA to simultaneously satisfy IFI and national requirements has been used in many subsequent projects implemented under WBIF across the region and is an excellent learning module using know-how transfer for the country. This WBIF support input, together with MEPSO's existing capacity ensures that the project will be successfully implemented and sustained.

This planned connection is consistent with national priorities in both Serbia and the former Yugoslav Republic of Macedonia, and from a regional context, aligns with the development plans of the European group of transmission system operators in electricity (ENTSO-e) and other development initiatives being monitored by the Energy Community Secretariat, the region-wide sector agency, in Vienna.

The transmission line is currently being constructed.

Key Facts

Title	EIA for OHL 400 kV MKD-Serbia border
Code	TA2-MKD-ENE-02
Data approved	March 2009
IFI	World Bank

WBIF Support

Environmental impact assessment

Finances

WBIF grant	€ 100,000
Loan estimate	€ 11,000,000
Total investment estimate	€ 14,000,000

the former Yugoslav Republic of Macedonia
Energy Sector

Making the most of Zletovica's water

The northeast region of the former Yugoslav Republic of Macedonia suffers from seasonal shortages of water. To respond to this problem the government established in 2001 an agency charged with improving water supply with a sustainable long term source while at the same time maximising the efficient use of the Zletovica river.

This project concerns the sustainable provision of water to municipalities and farmers and renewable energy in the catchment of Zletovica river. The project, valued at EUR 131 million, is made up of three phases covering:

I. the construction of Kneževo dam;

II. irrigation in Probištip and Kratovo municipalities;

III. the construction of small hydroelectric power plants.

The Japan Bank for International Cooperation is financing the first phase: the construction of the dam and water supply infrastructure for drinking water. This work is substantially completed and the project is now mature for further stages of development: the hydropower and irrigation components. Full economic and financial benefits are expected once all three components have been implemented.

Zletovica reservoir

A EUR 1 million grant, co-funded by the EIB and EWBJF, is provided through the WBIF for technical assistance for appraising phases II and III. This includes an update of the feasibility study related to the irrigation component, a feasibility study related to the hydro power component, an integrated economic analysis for all three project components and an environmental and social assessment study for the hydro power component. Based on the outcome of these studies, the EIB will consider providing loan for the construction of phases II and III.

The "Zletovica" project will contribute to the social and economic development in the region by providing new employment and reducing poverty. Irrigation will encourage agricultural development through increased product quantity and quality. The production of hydroelectricity will increase renewable energy supply, so reducing CO_2 emission of the country, and contributing to actions mitigating climate change. Additionally the integrated nature of the project will contribute to a better adaptation to climate change by reducing flood damage and ensuring production of agricultural products and energy during dry seasons.

The project promoter is the public enterprise HS Zletovica, established in 2001 and based in Probištip. They have developed the integrated project and overseen the completion of phase I. The development complies with EU standards and sits in the draft national strategy on use of renewable energy sources. The technical assistance will assist in supporting the agencies competences.

Key Facts

Title	Electricity production and irrigation components of Zletovica project
Code	WB4bis-MKD-ENE-03
Data approved	December 2010
IFI	EIB

WBIF Support

Feasibility studies + Environmental impact assessment + Economic assessment

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 127,000,000
Total investment estimate	€ 131,000,000

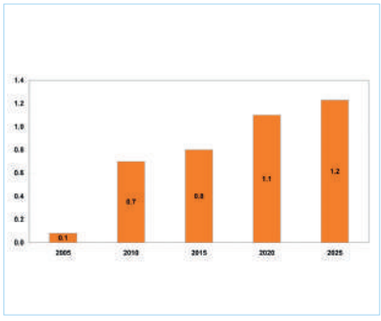
the former Yugoslav Republic of Macedonia
Energy Sector

Planning for gas

Most countries in the Western Balkans do not have the gas transmission infrastructure found in the rest of Europe and in the surrounding countries. Much power and heat generation is based on old, inefficient systems all too often using fuels (e.g. lignite coal) that result in high levels of CO_2, NO_x, SO_x and dust emissions. As a response, all countries are actively pursuing energy diversification and natural gas plays a major role in this process as a cleaner and more efficient energy source. The former Yugoslav Republic of Macedonia has embarked on a programme to connect major gas demand centres or anchor loads through a transmission network that can tap into Europe's priority transnational pipelines: TAP, TANAP, IAP and South Stream, with connections internationally through Bulgaria and Greece, and potentially Kosovo, transporting gas from the Caspian region or via planned LNG terminals on the Adriatic Coast and Greece. WBIF is supporting this process with a grant for technical assistance that help advance a pipe network of 371 km in the former Yugoslav Republic of Macedonia.

The WBIF support is in relation to a feasibility study on the gasification of the country that was prepared by an international consortium. The WBIF technical assistance focusses specifically on one key element of the project's preparation: the environmental and social impact assessment (ESIA). A review is undertaken of the existing national ESIA in order to identify and correct the existing gaps such that it can be brought into compliance with an international standard ESIA and structure and meet an IFI's requirements.

The country's gas growth forecast



The project will bring many benefits both for the end users and for the country as a whole. The customers will benefit from diversity of energy sources and more competition, as well as new efficient and clean system.

The secure and continuous supply of gas will be attractive to business and industry and thus will help economic growth. The gas system will have a positive economic benefit in making the country less dependent on comparatively more expensive imported electricity. And very importantly, there will be a big environmental dividend with the opportunity to displace the very large current dependency, over 80 %, on electricity generation from more polluting and environmentally damaging fossil fuels. A wider benefit also accrues from diversifying energy supply, not only for the country but also for the wider region, in developing and providing alternative sources of gas that should ensure there is a reduced dependence on any single source of gas.

The project promoter is the Ministry of Transport and Communications. The programme of establishing a gas network started in 2009. It is expected that the construction of the priority national routes should be done by 2017 with the provision of additional routes completed by 2022.

Key Facts

Title	National gasification system
Code	WB5-MKD-ENE-04
Data approved	June 2011
IFI	EBRD

WBIF Support

Environmental and social impact assessment

Finances

WBIF grant	€ 170,000
Loan estimate	€ 133,000,000
Total investment estimate	€ 266,170,000

the former Yugoslav Republic of Macedonia
Energy Sector

Transmission line with local and cross-border benefits

The former Yugoslav Republic of Macedonia has embarked on an overhaul of its energy sector with an emphasis of diversifying generating modes and fuel sources together with an upgrade of the transmission and distribution networks. This WBIF supported project provides technical assistance for a detailed design for a new 400 kV transmission line running between Bitola and the Albanian border in the south-east of the country. It builds on an existing WBIF regional project that prepared a feasibility study and environmental and social impact assessment that demonstrated the viability of a 400 kV interconnector line running between Bitola and Elbasan in Albania (see WB4bis-REG-ENE-01).

The project is strategically very significant. It is recognised as a priority project of the Energy Community (the regional energy support agency) and is part of the country's strategy for energy production through to 2030. The technical assistance is broken into two parts: the first deals with the design of the overhead transmission line, including supporting infrastructure such as access roads, from Bitola to the border while the second deals with the design of a substation and supporting infrastructure at Ohrid. The substation at Ohrid is fed via a branch from the new line to reinforce the electricity supplies in the Ohrid area and the city itself which has a population of 42,000 and is an important tourist location.

Transmission pylon installation

The east-west power corridor will build flexibility and efficiency in electricity use by allowing connections between two national systems. It will decrease technical losses and provide a more stable, reliable and secure supply. The interconnection between the two countries will also assist with the creation of better trading opportunities through an enhanced regional market, while also providing a reserve capacity for sharing and mutual emergency support. The environment will benefit as, in the former Yugoslav Republic of Macedonia, electricity generation is very heavily dependent on highly polluting fuels with over 80 % coming from coal and heavy oil; by contrast Albania's generating power source is almost entirely, over 90 %, from hydro plants. This clean source together with generating diversification will go some way to improving CO_2 NO_x, SO_x and particulate emissions.

The project promoter is "MEPSO", the former Yugoslav Republic of Macedonia transmission system operator. MEPSO have long standing experience is transmission line development and management with the necessary technical and administrative capacity to complete and operate the facility. The support of WBIF technical assistance will add to their existing capability.

Key Facts

Title	400 kV interconnection Bitola (the former Yugoslav Republic of Macedonia) – Elbasan (Albania) detail design for the former Yugoslav Republic of Macedonia section
Code	WB9-MKD-ENE01
Data approved	June 2013
IFI	EBRD

WBIF Support

Detail design

Finances

WBIF grant	€ 900,000
Loan estimate	€ 37,300,000
Total investment estimate	€ 43,500,000

the former Yugoslav Republic of Macedonia
Environment Sector

Best practise implementation for upgraded water and sewerage systems

The former Yugoslav Republic of Macedonia has embarked on a programme of water and sewerage improvements in medium sized cities. The aim is to improve the living conditions of the people in the participating municipalities and to improve public water services wider afield so ensuring a sustainable supply of drinking water at socially acceptable costs. The programme is divided into two phases, together with an additional interim phase, whereby access to the interim phase and the second phase is conditional on achievement of specific performance indicators in Phase 1. Construction activities of Phase 1 have been completed and Phase 2 is currently being prepared.

Eight municipalities took part in Phase 1: Bitola, Gevgelija, Gostivar, Kavadarci, Kočani, Negotino, Radoviš, and Tetovo. Phase 1 had limited investment funds, up to EUR 6.4 million and based on up to EUR 65 per house connected, for identified priority improvements with immediate impact. Typical initiatives were improvements to water supply by the installation of measuring and regulation equipment e.g. bulk and house water meters, as well as procurement of necessary hardware and software to improve the public utilities companies' (PUC) overall performance and financial standing.

Key Facts

Title	Water & sewerage programme
Code	WB10-MKD-ENV-01
Data approved	December 2013
IFI	KfW

WBIF Support

Investment plan reviews + Designs + Assistance with tendering + Supervision of works

Finances

WBIF grant	€ 400,000
Loan estimate	€ 8,635,000
Total investment estimate	€ 13,099,143

Pipe ready for installation

The best performing PUCs from Phase 1 can access additional funds under very favourable conditions amounting to a total of around EUR 3.0 million. An independent auditor was employed to identify the star performers.

It is in the interim phase that WBIF's support will be applied. The grant is to be used to finance technical assistance supporting the application of funds of the interim phase. For the successful PUCs the support will: review investment plans, prepare project designs, assist with tendering and supervise the works implementation.

The project will bring many benefits:

- social wellbeing – customers will receive a better service and a continuous supply of hygienic water at affordable prices. Healthier conditions will also result is less contamination and potential disease.
- economic perspective – the utilities will have improved finances from reduced water losses (both, technical and administrative), improving collection efficiency, adjustment of the water and waste water tariff, developing correct water balances and last but not least reducing the non-revenue water, which in the former Yugoslav Republic of Macedonia is varying between 50 % - 80 %.
- environmental – recent climate change reports suggest water scarcity is an issue facing the country, more effective water utilisation must help alleviate this predicament.

The programme lays heavy emphasis on ensuring successful project implementation and sustainability. A two pronged approach is used: i) applying incentives whereby successful municipalities are rewarded; and ii) support with technical advice targeted at strengthening the PIU management and administration; the institutional strengthening measures part of Phase 1 were successfully completed in 2013.

the former Yugoslav Republic of Macedonia
Social Sector

Improving prison conditions for inmates and staff

Reform of the former Yugoslav Republic of Macedonia's penitentiary facilities started in 2005 with the aim of improving living conditions for inmates, consistent with the European Prison Rules. This is being achieved by rehabilitation of the existing infrastructure, construction of new facilities, and improving security and safety systems.

The WBIF assisted this initiative through a EUR 0.5 million technical assistance grant to provide support to the preparation of the project. The project support deals with four institutions:

i. Idrizovo Penal Correctional Facility,
ii. Skopje Prison,
iii. Kumanovo Penal Correctional Facility, and
iv. Tetovo Juvenile Educational Correctional Facility.

The objective of the project is to facilitate the planning, building and reconstruction of prison premises. The WBIF technical assistance provided advisory and review services of the main designs that were drawn up by local design companies. In addition technical assistance was provided to facilitate the prison service adjust and align their operational practices to those operated in the EU. To assist with maximising knowledge and best practise transfer a study tour to UK was undertaken with visits to prisons operated by private entities and by government and local authorities.

Kumanovo Prison construction completed

The total gross areas of secured prison space together with the number of prisoners that can be held is respectively: Idrizovo: 42,245 square metres for 1,510 inmates, Kumanovo: 5,500 square meters for 250 inmates, Skopje Prison: 14,796 square metres for 692 inmates, and Tetovo: 3,376 square metres for 110 inmates. Altogether this is over 64,000 square metres with a capacity for 2,562 inmates.

The improved infrastructure is expected to bring several benefits. The physical conditions and provision of healthcare services for inmates at the four facilities is raised and will be in line with European standards. Prison staff will experience improved working conditions in line with local and EU prison standards. The European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) recommendations referring to the capacity, living, educational, health and safety conditions for all inmates will be met. The study enabled the local team to get acquainted with the operational practices in UK and to assist the establishing of a Drug Free Unit for Idrizovo Penitentiary.

The four prisons have reached differing levels of advancement. Kumanovo prison construction has been completed and the ceremony for its opening took place in September, 2013. The Idrizovo works' tender has been granted and a contract signed. The works started at the beginning of 2014. The contract for Tetovo prison works and supervision have been signed and works started.

Key Facts

Title	Idrizovo Prison Reform Project in the former Yugoslav Republic of Macedonia
Code	TA-MKD-01
Data approved	June 2008
IFI	CEB

WBIF Support

Feasibility report + Advising and review of preliminary and main design + Adjusting operational practices + Study tour to UK prisons

Finances

WBIF grant	€ 500,000
Loan estimate	€ 46,000,000
Total investment estimate	€ 51,300,000

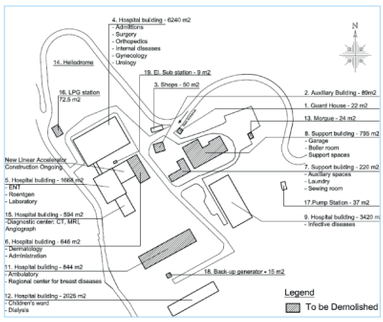
the former Yugoslav Republic of Macedonia
Social Sector

Assistance for comprehensive reform of the health sector

This WBIF supported project deals with the comprehensive reform to the country's healthcare sector. The Ministry of Finance together with the Ministry of Health (MoH) have adopted a three phased structure to reform that covers 90% of the health sector building stock made up of hospitals, clinics and specialised institutes. CEB provides co-financing of Phase I, where 20 Health Provider Institutes (HPIs), made up of 27 separate buildings, are to be rehabilitated and equipped. 17 of the HPIs have been rehabilitated through mid - 2014. All remaining works are expected to be finalised by end of 2015. WBIF is assisting with two grants: a technical assistance grant to assist in the preparation of Phase II; and an investment grant.

The WBIF technical assistance grant was implemented in two stages. During the first stage a "Survey Report for the Health Provider Institutions phase II" covering 50 HPIs was conducted providing the MoH with estimates on the necessary healthcare infrastructure investments on all healthcare levels in the country. In phase II, a clear and integral environmental solution for the treatment of clinical waste was prepared and implemented. Phase II had 2 components. Component 1 covers construction, rehabilitation and furnishing of another 20 HPIs located in 12 towns, including construction of six new buildings. Component 2 covers provision of medical equipment for the 20 HPIs to be (re-)constructed under component 1 along with environmental equipment for HPIs covered under phases I and II.

Clinical Hospital Campus in Štip



The second stage of phase II provided support to the administering project implementation unit (PIU) in a number of areas. For component A, three matters were addressed: the selection of the most suitable and most favourable architectural concept solution; the provision of mid-term and final reviews of the designs for construction of the New Clinical Block and renovation and rehabilitation or readjustment of the surgery clinic's building within the UCC Mother Teresa in Skopje. For Component B two matters were dealt with: provision of continuous advisory and review activities during all design phases of Štip Clinical Hospital and active guidance and consultation with the selected designer contracted by the MoH. A detailed assessment of the biomedical equipment was carried out in both health facilities, which provided input to the finalisation of the feasibility study.

Tendering for construction and supervision of work at Skopje and Štip is ongoing.

The WBIF investment grant provided EUR 3 million complementary funding for completion of the reconstruction of the Institute for children lung diseases "Kozle" in Skopje, part of the of HPIs rehabilitation phase I project.

Key Facts

Title	i. Health Provider Institutions (HPIs) – phase II – TA for Project Preparation ii. Health Provider Institutions (HPIs) – phase I - complementary funding for completion of Institute for children lung diseases "Kozle" in Skopje
Code	i. TA3-MKD-SOC-01 ii. WB6-MKD-SOC-04
Data approved	i. December 2009 ii. December 2011
IFI	CEB

WBIF Support

Survey Report + Assistance with a feasibility report + Environmental screening and assessment + Technical and management assistance

Finances

WBIF grant	i. € 2,000,000 ii. € 3,000,000
Loan estimate	i. € 97,000,000 ii. € 23,000,000
Total investment estimate	i. € 156,600,000 ii. € 46,000,000

the former Yugoslav Republic of Macedonia
Social Sector

Sports facilities for schools

The former Yugoslav Republic of Macedonia has very limited provision for physical education in schools, shown by it lagging behind in comparative regional indicators. The lack of facilities' provision – gym halls, open and closed playgrounds and sports fields - varies geographically across the country and is generally poorer in rural areas. Many schools lack space for facilities and where facilities do exist they are often obsolete and in poor condition. The government has embarked on a programme to respond to this predicament which includes upgrading existing facilities, providing new physical education premises and installing new equipment. As an add-on, the authorities agreed that every school that would receive a new physical education facility, would also be refurbished in terms of regular maintenance to meet the minimum requirements for learning.

WBIF is helping with the upgrading of physical education provision through investment grants that compliment CEB loans and national financing. WBIF's support is part of a large programme aimed at fostering rural development by offering a better environment for learning, including physical education through the construction of 145 physical education facilities (PEFs). Two WBIF grants are provided with both focusing of those education establishments in greatest need, most are over 50 years old and suffer from lack of recent refurbishment with many in a dilapidated state. Examples of work include: removing asbestos, providing sanitary ware, window and floor replacement and rehabilitation of heating systems. The first grant supports the rehabilitation of seven secondary schools and the second the rehabilitation of a further ten schools together with provision of new equipment for 50 PEFs and the rehabilitation of 30 PEFs. In both cases the WBIF support will, as well as providing a capital investment grant, also provide for works' contract preparation and the supervision of works.

Purpose designed school sports hall

The immediate beneficiaries of the grant assistance are 11,000 children and 700 teachers. The benefits will, over the facilities' lifetime, increase these numbers many times. The whole programme's first phase is anticipated to benefit 29,000 students and 1,700 teachers. As well as providing more amenable conditions for physical education there will also be a long term improvement in general health and well-being.

The project's promoter is the Ministry of Education and Science. The programme benefits from having a ready established and capable project implementation unit (PIU) charged with managing the schools' upgrading. The WBIF technical assistance support will enhance the PIU's capacity.

Key Facts

Title	i. Physical education facilities in secondary schools, acquisition of equipment and Infrastructure refurbishment of those below minimum basic standards – Phase I ii. Phase II
Code	i. WB6-MKD-SOC-02 ii WB6-MKD-SOC-03
Data approved	December 2011
IFI	CEB

WBIF Support

Environmental impact analysis + Assistance with tendering + Supervision of works + Investment grant

Finances

WBIF grant	i. € 1,000,000 ii. € 2,000,000
Loan estimate	i. € 14,300,000 ii. € 45,000,000
Total investment estimate	i. € 12,500,000 ii. € 30,000,000

the former Yugoslav Republic of Macedonia
Transport Sector

East – west rail link upgrade brings significant regional impact

Two important internationally significant rail corridors cross the former Yugoslav Republic of Macedonia: Corridor X runs north-south and Corridor VIII runs east-west. WBIF is helping the latter with four grants.

Corridor VIII will connect the Black Sea with the Adriatic running through Bulgaria, the former Yugoslav Republic of Macedonia and Albania. Its regional significance is recognised by being one of the ten pan-European transport, TEN-T, corridors and it is on the South-east Europe Transport Observatory "SEETO" comprehensive network; within this framework the government has placed a high priority for its development. Currently the line is functional either side of the capital Skopje but the connecting links to both east and west borders are missing. The WBIF support deals with the eastern link from Kumanovo – some 40km east of Skopje and where Corridor X heads north – to Deve Bair on the border with Bulgaria, a total distance of 88 km.

Key Facts

Title	i. Construction of rail line on eastern part of Corridor VIII, Kumanovo to Deve Bair on Bulgarian border; Kumanovo – Beljakovce section ii. Rail line on eastern part of Corridor VIII, Beljakovce – Deve Bair section iii. Rail line on eastern part of Corridor VIII, Kumanovo – Beljakovce section iv. Railway corridor VIII Kumanovo to Deve Bair, section Baljakovce – Kriva
Code	i. WB5-MKD-TRA-01 iii.WB7_MKD-TRA-03 ii.WB7-MKD-TRA-02 iv.WB11-MKD-TRA-01
Data approved	i. June 2011 ii.&iii. June 2012 iv. June 2014
IFI	EBRD

WBIF Support

Detailed design + Assistance with tendering + Construction supervision+ Monitoring and reporting

Finances

WBIF grant	i. € 1,500,000 iii. € 2,500,000 ii. € 2,700,000 iv. € 3,000,000
Loan estimate	i. € 46,400,000 ii. € 145,000,000 iii. As i.
Total investment estimate	i. € 59,556,000 ii. € 200,000,000 iii. As i.

Old derelict tunnel on Beljakovce – Kriva Palanka section for upgrade for speeds up to 100 km/h

The Kumanovo – Deve Bair section is, for development purposes, split into three parts; these are, running west to east: Kumanovo – Beljakovce (31 km) – Kriva Palanka (34 km) – Deve Bair (23 km). Two grants deal with the first section, one helps develop detailed engineering design services and assistance with tendering while a follow-up grant provides contract supervision for this work. The third grant covers the remaining two-thirds of the line between Beljakovce and Deve Bair on the border with a similar service of detailed engineering design. The line is designed as single track for speeds up to 100 km/h.

The benefits and impact of the project will be very significant. From an international and regional development perspective it creates an east – west link that will boost trade, both in volume and travel time, not only between the contiguous countries but further afield. Economic growth will be stimulated along the line and through its hinterland while inhabitants will benefit from the service and facilities. Broader benefits will come from displacing higher polluting and congesting traffic from roads.

There are two project promoters: the Ministry of Transport and Communications and MRI, the public enterprise for railway infrastructure. The ministry has responsibility for the project's management. Existing organisational capacity will be enhanced with the WBIF support from the transfer and dispersion of skills in procurement and supervision. The promoter is committed to the application of open tender procedures and wishes to improve the procurement skills of its staff. Additionally, the assignment will lead to the demonstration of new replicable behaviour and activities, so providing expertise and competences in other areas of rail operations.

the former Yugoslav Republic of Macedonia
Transport Sector

Road upgrade to improve regional connectivity

The motorway A4 in the former Yugoslave Republic of Macedonia runs north from Skopje to the boundary with Kosovo. This WBIF supported project deals with the 12.5 km section from the interchange “Stenkovec” to Blace, the boundary crossing with Kosovo. It is a part of the SEETO (Southeast Europe Transport Observatory) Comprehensive Network route 6A which runs between Ribarevina (Montenegro), Ribarice (Serbia), Pristina and on to Skopje. The Route 6A connects routes 4 and 7 with Corridor VIII and has a vital role in economic and social development in the north-east region of the former Yugoslav Republic of Macedonia.

The A4 road between Skopje - Blace is burdened with a high concentration of traffic, particularly heavy freight traffic directed to and from Kosovo. The traffic is categorized as international and is constantly increasing, this trend will only continue to rise. The traffic and the carriageway profile of this road section with its elements and oversized aspect from traffic flow, level of service and security is no longer adequate. There is a need to upgrade the road and the WBIF support is based on this need. The support will finalise all necessary documentation in order to have a mature project for further construction works. The necessary work includes updating of the existing feasibility study and preparation of an environmental and social impact assessment, and preparing a preliminary design and detailed design for a 3 km part of the section.

The new road

The project will have positive impacts on the economic, social and environmental aspects of the region and the following benefits are expected from its implementation:

- Facilitated international transport and trade in the region, especially between the former Yugoslav Republic of Macedonia and Kosovo;
- Vital connection from Kosovo to the former Yugoslav Republic of Macedonia, linking markets to the Thessaloniki port on south and contributing to economic growth of the region;
- Direct, safer and faster traffic link between the two capitals, Skopje and Pristina;
- Reduced energy consumption and of vehicle operation costs;
- Reduced emissions and improvement of the quality of environment;
- Reduced travel time, boosting regional trade and tourism;
- Implemented safety road measures along the Motorway;
- Vehicle operating cost savings and accident cost savings;
- Economic development in the northwest region of the country;
- Social integration and employment of local workforce on the project and engagement of local suppliers.

The project promoter is the Public Company for State Roads. The project will be developed in close cooperation with the Ministry of Transport and Communications. The synergy between the two institutions provides skilled staff and strong expertise to manage the project.

Key Facts

Title	Motorway A4 Skopje- Blace, Section: Interchange Stenkovec – Blace
Code	WB9-MKD-TRA-01
Data approved	June 2013
IFI	EBRD

WBIF Support

Updating feasibility study +Environmental and social impact assessment + Preliminary design

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 100,000,000
Total investment estimate	€ 100,000,000

KOSOVO*

** This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence*

Kosovo
Energy Sector

New co-generation heat provides efficiency and better service

Kosovo's district heating sector is inadequate and underdeveloped meeting only 5 % of total heat demand in the country. There are three district heating (DH) systems supplying urban areas of the municipalities of Pristina, Gjakova and Mitrovica. The Pristina DH system accounts for over 80 % of the total DH capacity in Kosovo. Currently it is not technically or financially sustainable and future demand needs to be taken into account as the population is predicted to rise significantly. To remedy this poor provision the Kosovar Ministry of Mining and Energy together with the Pristina District Heating Company, Termokos, have embarked on a complete overhaul of the capital's system which includes capturing power station steam to displace highly polluting heavy oil. WBIF is helping with two grants: first a capital investment grant and second with technical assistance.

The project is focused on further improvements to the district heating system in Pristina. The project has two key components, first the rehabilitation of the heating system in Pristina and second connecting the heating system with Power Plant "Kosova B" in order to enable the use of steam to heat the city. The overall value of the investment is around EUR 28.7 million, consisting of a EUR 13.8 million grant provided by the EU through the WBIF Infrastructure Project Facility Municipal Window scheme, municipal funds, funds from the Swedish International Development Agency (SIDA), and a loan of approximately EUR 5 million together with a grant of EUR 6 million provided by the German government through KfW.

New insulated pipes

The project has three very significant benefits:

i) it will have a dramatic environmental impact by reducing the CO_2 and other noxious gas emissions which are the cornerstone of the EU policy on climate change;

ii) it will increase the efficiency of the overall energy system by using the heat extracted from Kosovo B power plant for heating water which is circulated in the district heating network; and

iii) the project helps to reduce the operational cost of the district heating company, Termokos, by about 50 % due to the replacement of heavy fuel oil, "mazut", which has been the main source of power up to now with a clean technology based on combined heat and power cogeneration.

Additionally, the project will refurbish the district heating network which is currently suffering major water loss as a result of old pipes. Overall, the citizens of Pristina will receive a better heating service which will in turn reduce the electricity consumption for heating and will make available more electricity for supply of other Kosovo regions.

The WBIF technical assistance support provided market analysis, best option for heat capture from Kosovo B and subsequent revisions to economic and financial aspects, environmental and social impact assessment and legal and regulatory matters. Construction and overhaul works started in June 2013 and completion is due by end of 2015.

Key Facts

Title	i. Improvement of District heating in Pristina ii. Improvements of district heating Phase 2 – CHP
Code	i. MW-KOS-ENE-KfW-02 ii. TA3-KOS-ENE-03
Data approved	i. March 2009 ii. December 2009
IFI	KfW

WBIF Support

Investment grant + Market analysis + Technical and financial assessment

Finances

WBIF grant	i. € 14,000,000 ii. € 300,000
Loan estimate	€ 5,000,000
Total investment estimate	€ 27,000,000

Kosovo
Energy Sector

Energy efficiency in public buildings

In Kosovo, heating of facilities comprises around 70 % of the overall thermal energy consumption. Most public sector buildings have very poor construction standards, maintenance and thermal insulation. District heating systems, where they extend to public buildings, are inefficient and because of lack of capital most public sector buildings have had no investments made in energy efficiency (EE) measures.

The project focusses on the improvement of the heating, lighting and thermal insulation in municipality public buildings. Implementing the project will benefit Kosovo, in reducing energy expenditure and improving living standards, mainly in schools and health centres.

WBIF are assisting the Ministry of Economic Development with a programme to improve EE in public municipal buildings through two linked grants. The first was used for the financing of a feasibility study and the second shall provide additional financial resources necessary to implement measures in the identified buildings, through investment incentives and consulting services.

The feasibility study included energy efficiency audits for 30 selected public buildings and resulted in proposals to introduce a programme of thermal insulation and other measures to promote more rational use of energy, including the introduction of energy efficient light bulbs, replacement of space heating systems and installation of solar water heating. The energy audits were undertaken by local engineers, formally trained and certified in energy auditing techniques. In addition the project investigated the modalities of finance to implement projects at the municipality level, and provided further training to auditors and awareness building in the municipalities with the capacity to take investment loans.

Greatly improved efficiency from a new boiler

Following the completion of the feasibility study, the project is now in the implementation phase supported by the second WBIF grant. The German Government, through KfW, has approved a loan of up to EUR 5 million which will be distributed through intermediary banks, in addition to the second WBIF grant of EUR 2.5 million for implementation investment incentives (EUR 1.5 million) and technical assistance to the participating municipalities during the design, construction and operation, measurement and verification phases of the project (EUR 1 million).

Physical works are anticipated to start in the second half of 2015 and be completed within approximately two years.

Key Facts

Title	i. Energy Efficiency measures in public buildings ii. Implementation of Energy Efficiency measures in public buildings at municipality
Code	i. WB4-KOS-ENE-05 ii. WB7-KOS-ENE-09
Data approved	i. June 2010 ii. June 2012
IFI	KfW

WBIF Support

Feasibility study including energy audits + Investment incentives + Management and technical assistance

Finances

WBIF grant	i. € 600,000 ii. € 2,500,000
Loan estimate	i. € 7,000,000 ii. € 2,500,000
Total investment estimate	i. € 7,000,000 ii. € 7,500,000

Kosovo
Energy Sector

Energy efficiency in public buildings

In Kosovo, heating of buildings uses around 70% of the overall thermal energy consumption. Most public sector buildings have very poor construction standards, maintenance and thermal insulation. District heating systems, where they extend to public buildings, are inefficient and due to the lack of capital most public sector buildings have had no investments made in energy efficiency (EE) measures.

WBIF are assisting the Ministry of Economic Development, responsible for the energy sector, with a programme to improve EE in public buildings. Three grants have been awarded, two deal with municipal buildings (see WB4-KOS-ENE-05 and WB7-KOS-ENE-09), while this project tackles central public buildings.

Central level public service building stock in Kosovo can be broken down into three typological categories: constructions of the 1960's, 1980's and those after 2000. Buildings must be addressed in terms of energy efficiency, and this project gives priority to buildings with the highest energy efficiency potential. This is an obligation based on the Law on Energy Efficiency and the Administrative Instruction on energy auditing. A number of buildings have already been audited, and energy efficiency measures implemented, through projects financially supported by various funding mechanisms.

New efficient biolers

The Ministry of Economic Development wants to address EE in central public service buildings. The focus is on a wide range of buildings managed by central institutions. These include: the Ministry of Education, Science and Technology (MEST), Ministry of Health (MoH), Ministry of Labor and Social Welfare (MLSW), Ministry of Justice (MoJ), Ministry of Internal Affairs (MIA), Ministry of the Kosovo Security Force (MKSF), educational buildings (university faculty buildings, dormitories, and national libraries); health and social protection buildings (hospitals, social care homes, elderly care, collective apartment buildings for people on social assistance); facilities under the MoJ (courts, detention centers); buildings under MIA (Kosovo police buildings); and facilities under MKSF (such as civil service buildings, etc.)

The WBIF grant will undertake energy audits of about 150 buildings, resulting in the identification of their energy savings potential, an accurate calculation of the loan required for the implementation of the measures and advice on the implementation of project in phases. In addition, a part of the grant will be used for the monitoring of the project implementation, assessment and oversight of the measures undertaken in buildings. Based on the outcome of the audits, the World Bank has approved a EUR 23.5 million loan which includes EUR 16.7 million for investments in central government buildings.

Key Facts

Title	Energy Efficiency measures in central public building
Code	TA3-KOS-ENV-01
Data approved	June 2012
IFI	WB

WBIF Support

Energy audits with investment costs + Monitoring project implementation

Finances

WBIF grant	€ 700,000
Loan estimate	€ 80,000,000
Total investment estimate	€ 120,000,000

Kosovo
Energy Sector

Modernised district heating system for Gjakova

Gjakova lies in the west of Kosovo, has a population of 95,000 and an economy traditionally based on farming and agriculture. It has an antequated district heatiing system (DHS) burning expensive and highly polluting heavy oil, “mazut”. WBIF is helping with two grants to help modernise the system.

The District Heating Company commenced operations in 1982. The DHS was designed to supply heat to houses around 100,000 m^2, SME’s of 12,000 m^2 and public sector building of 80,000 m^2. It runs on heavy fuel oil, and the price of the fuel has risen significantly over recent years to make the operation of the plant uneconomic. All indications are that this trend will continue. Currently the company does not operate at full capacity, having in mind the high cost of fuel. The design capacity of the plant is 38 MW, and the plant currently operates at only 20 MW.

According to company forecasts, the heat demand will increase, mainly because of growing demands for a higher comfort level in both old and new buildings and because newly-constructed buildings will require to be connected to the DH network in the future.

The development of district heating is important because it will have the effect of reducing electricity demand growth

Working on new insulated pipes

by facilitating the switchover from electricity to district heating as source of heating. This is a vital consideration in Kosovo and in the region. Kosovo is committed to meet the relevant EU energy and environment directives, as well as norms, standards and provisions of the Energy Community Treaty, which requires investments to improve energy efficiency and use of RES in the heating sector.

The first WBIF grant funded in 2013 an identification study to examine and make recommendations on options for fuel switching and clarify the need for rehabilitation of the existing district heating network and also recommend on network expansions according to market analysis. The second WBIF follow-up grant takes the project to the next stage: the preparation of a detailed feasibility study on the technical proposals agreed upon in the identification study phase. After selection of the preferred option (technical and feasible) a complete environmental and social impact assessment (ESIA) will be developed, in accordance with the laws in Kosovo governing construction and spatial planning, including necessary design to apply for a construction permit. Additionally, support includes development of complete EPC tender document packages, prepared for the tendering process, for the approved technical solution.

Completion of the project will bring many benefits:

- Economic and financial sustainability of the DH Company
- Increased distribution network and ability to connect new customers
- Reconnecting passive consumers
- Doubled number of connected customers
- Increased heat delivery quality and improved DH services
- Reduced CO_2 emissions
- Reduced Sulphur emissions
- Fuel switching by customers from electricity to DH.

Key Facts

Title	i. Fuel switching and system expansion for DH in Gjakova ii. Rehabilitation in DH in Gjakova
Code	i. WB8-KOS-ENE-11 ii. WB10-KOS-ENE-01
Data approved	i. December 2012 ii. December 2013
IFI	KfW

WBIF Support

Pre-feasibility and feasibility study + Environmental and social impact assessment + Preliminary design + Assistance with tendering

Finances

WBIF grant	i. € 300,000 ii. € 600,000
Loan estimate	€ 8,000,000
Total investment estimate	€ 8,900,000

Kosovo
Environment Sector

A reliable and adequate water supply for Pristina and surrounds

Water supply systems in Kosovo have suffered from lack of investment leading to inadequate and dilapidated infrastructure following the breakup of Yugoslavia, the war and the subsequent transition period. There is now a wide programme in many municipalities addressing these weaknesses, often combined with wastewater provision. The capital, Pristina, has particular problems with supply that would only get worse with rapid population growth. A project has been embarked upon to make a secure and adequate long-term system and WBIF is assisting with two grants, one provides a capital investment grant while the other provides technical assistance.

The project concerns development of a new water supply source for the City of Pristina. The existing water supply services suffer from chronic water shortages for the residents of the City and those living in the surrounding 6 municipalities served by the Pristina Water Company. The situation is exacerbated by the high level of water losses, estimated at over 50 %, and very low collection ratios of below 50 %, a likely consequence of consumer dissatisfaction with the poor level of services. Low water pressures and daily rationing of supplies lasting between eight to 12 hours are common. In addition, some of the recent urban developments in the City cannot be served by the existing system. Existing water supply sources are therefore grossly inadequate for a modern city surrounding areas with a current population estimated at over 550,000.

Iber canal, Pristina water source

The objectives of the project are to provide a reliable long term water supply system and achieve significant socioeconomic benefits and improved public health impact through increased quantity and reliability of water supplies to the City of Pristina and surrounding municipalities.

WBIF assisted with two grants. A “Municipal Windows” investment grant, managed by KfW, concerns the rehabilitation of the water supply system and the sewerage system. There will be an improved sustainability of potable water and sanitation services by a more effective and efficient operation. Water losses will be cut by the rehabilitation of main pipelines and parts of the supply network, installation of water meters, rehabilitation of Badovc water treatment plant, as well as the rehabilitation of the sewerage system.

A complementary technical assistance project prepared a feasibility study that identifies the least cost option for meeting future needs. The study projected future demands, assessed sustainable yields from multiple existing sources of supply, and evaluated alternative development options based on technical and economic criteria with detailed cost estimates identify the most cost efficient option. The option selected recommended use of the multipurpose Iber Lepenc canal and pumping station, 13.5 km transmission pipeline and a water treatment plant.

The financing plan for the Iber Lepenc canal option has a total investment of EUR 35 million financed from: KfW loan of EUR 20 million with the remainder made up of IPA and national funding.

The contract for the construction of transmission mains and a water treatment plant has been awarded and the contractor mobilised in October 2014.

Key Facts

Title	i. Pristina water ii. Rehabilitation of Pristina water supply & sewerage network
Code	i. TA-KOS-01 ii. MW-KOS-ENV-KfW-01
Data approved	i. June 2008 ii. March 2009
IFI	KfW

WBIF Support

Feasibility study + Investment grant

Finances

WBIF grant	i. € 300,000 ii. € 11,000,000
Loan estimate	i. – ii. € 4,000,000
Total investment estimate	i. € 35,000,000 ii. € 15,000,000

Kosovo
Environment Sector

Multi-city attention on wastewater treatment plants

Water pollution in Kosovo has reached alarming levels. The Government of Kosovo is very concerned about the threat this poses to the economic and social welfare of the 2 million inhabitants of Kosovo and has taken action to remedy this poor state of affairs and WBIF is assisting.

Kosovo is surrounded by mountains, which divide the plains into four watershed areas, from where rivers flow to three seas: the Adriatic, Aegean and Black Sea. Kosovo is the source for four international rivers. The water quality of streams and rivers has deteriorated over the years that are heavily polluted due to lack of treatment of wastewater and indiscriminate disposal of solid waste. The rivers downstream of larger municipalities and especially downstream of Pristina, are so heavily polluted that the water cannot be used for water supplies and in some places even for irrigation. Remedial action is therefore urgent.

This WBIF supported project deals with a number of cities and towns:

- Pristina, population over 400,000, has old inadequate wastewater collectors and no wastewater treatment plants (WWTP). The wastewater is discharged to tributaries of the Ibar River which flows into Serbia and the Danube.

Raw sewage discharge in town centre

- The City of Mitrovica, population 70,000, is located on the Ibar River. The River divides the City and all raw sewerage is discharged into it.
- Ferizaj City, population 65,000, has almost non-existent wastewater collection and no treatment infrastructure. The untreated wastewater is discharged into the tributary of River Ibar. Wastewater also finds its way south into the River Lepenc, which flows into the former Yugoslav Republic of Macedonia and to Aegean Sea.
- The City of Gjilan, population 60,000, has little sewage collection infrastructure and WWTP and discharges untreated sewerage into Kriva Reka, which is a tributary of the South Morava River flowing into Serbia.

A feasibility study was completed in 2012 for Pristina, which addressed the future development needs by preparing a long term investment and identified a priority investment programme for development of adequate wastewater collection and treatment infrastructure for Pristina and neighbouring towns of Fushë Kosovë and Obilić. Similar project preparation feasibility studies are currently under progress for the Cities of Gjilan, Ferizaj and Mitrovica.

The benefits of fulfilling all these projects would be considerable: directly to those inhabitants serviced by new facilities, those living downstream in Kosovo and in countries through which rivers currently suffering untreated discharge along with inhabitants and visitors to coastal resorts where polluted rivers meet the sea. Significant knock-on benefits will accrue to business growth across many sectors and social wellbeing from improved health and a better environment.

Key Facts

Title	Project preparation feasibility studies for wastewater treatment plants
Code	TA3-KOS-ENV-01
Data approved	December 2009
IFI	KfW

WBIF Support

Feasibility studies

Finances

WBIF grant	€ 1,750,000
Loan estimate	€ 80,000,000
Total investment estimate	€ 120,000,000

Kosovo
Environment Sector

Planning for modern waste management

Waste management in Kosovo has big problems and falls far short of meeting Western European standards. While about 90 – 95 % of the urban population has a waste collection system the existing services are of a very low standard due to the lack of adequate facilities and equipment. Kosovo lacks proper waste management for virtually all solid waste types: domestic, industrial, health care, and hazardous. Waste collection, classification, recycling, and treatment systems as well as infrastructure for municipal waste are missing or where rudimentary provision is made it fails to meet even a basic satisfactory level of service. Data and accessible waste information systems are paltry. Cost recovery for services is low. A significant proportion of rubbish of various categories but especially domestic waste, and in particular in rural areas, is thrown away on illegal dumpsites or at various unauthorised places. Appropriately constructed and operated hazardous waste facilities are lacking.

A programme to respond to this catalogue of deficiencies by improving the management of waste will result in significant health, enviornmental as well as economic benefits. To this end WBIF have provided grant support.

The project concerns strengthening solid waste management capacity by addressing all pertinent issues including: technical, financial, institutional and legal aspects of waste management. There are four components aimed at determining the economic viability of priority improvements and long term strategic plans for waste management improvement. A EUR 400,000 grant is provided by WBIF, which will finance the production of pre-feasibility studies and environmental impact assessments for investments to improve collection and disposal infrastructure for domestic solid waste management and for the clean-up of local waste dumpsites, the preparation of a national plan for industrial and hazardous waste management and the preparation plan for reform of the waste management sector, including the legal framework.

Illegal fly dumping

This project is classed a WBIF sector development project – SDP, and as such the findings should have lessons and policy principals that can be spread farther afield. Given that the waste problems found in Kosovo are, if not as acute, prevalent in many the region's countries, the project's findings should be considered as a means of helping sort their waste disposal.

While the project is at a very early stage the ultimate benefits should be significant for all Kosovo's 33 municipalities:

- Improved quality and capacity of waste collection services for municipal waste,
- Improved conditions for waste management in regional landfills of municipal waste,
- Conditions for building infrastructure for waste collection and recycling,
- Cleaner environment and ecological products produced in Kosovo.

The project started in February 2013 and is due to be completed by the end of 2014.

Key Facts

Title	Strengthening waste management
Code	WB7-KOS-ENV-05
Data approved	June 2012
IFI	WB

WBIF Support

Sector development study + Pre-feasibility study + Environmental impact assessment + National plan

Finances

WBIF grant	€ 400,000
Loan estimate	€ 700,000
Total investment estimate	€ 1,200,000

Kosovo
Environment Sector

Plan to ensure adequate sustainable water supply

Lying in the southern Balkans, Kosovo is landlocked. While its mountainous western and southern fringes are plentiful in water, its central and northern high-lying plateau, that covers about half of the country's territory, is short of water, featuring only a few minor brooks. Yet it is precisely this area that holds the country's largest population, including its capital Pristina, as well as most of the mining activities, agriculture, and most of its industry. Water supply is therefore crucial and a key artery to supply water is the Iber-Lepenc Canal.

The canal is at the heart of Kosovo's capital Pristina. It supplies the commercial and administrative centre of the country with water bringing it from the large Gazivoda reservoir in the north. It was constructed in the late 1970's, is 50 km long and feeds the domestic water system, power plants, mining and industry. The canal is identified as top priority for protection and rehabilitation by the Water Task Force of the Office of the Prime Minister.

A recent study "Water Security for Central Kosovo", supported by the World Bank, assessed the existing structural integrity and construction quality of the bulk water conveyance systems, and in particular of the Iber-Lepenc canal. It was estimated that over 50% of water entering the canal is lost and the report concluded that this infrastructure needs rehabilitation, as well as protection against accidental blockages, pollution and other causes of disruption.

Iber canal

A WBIF grant of EUR 500,000 is provided for the production of a feasibility study to address the issues of water losses, pollution abatement and security of supplies from this essential water source. The result of the feasibility study will help to identify and subsequently develop an investment project which would be support by the World Bank, with a EUR 7 million loan.

This study would encompass a broader remit than earlier studies and would investigate related sectors, take into account climate variability and land use changes, and also recognize the growing risk from poor water quality. It would also take account of groundwater and its sustainable management, and propose an institutional strengthening component.

The protection and of Iber - Lepenc canal is crucial from an environmental, economic and social point of view. The project will improve the overall water security, and in particular it will improve the overall reliability and robustness of the physical water supply systems.

In addition to this project the water supply to Pristina is assisted by two other WBIF grants and the support of a KfW loan. One grant is providing a capital investment grant (see MW-KOS-ENV-KfW-01) and the other technical assistance preparing a feasibility study looking at the least cost option to meet the city's water need (see TA-KOS-01).

The study work is currently underway and should be completed by the end of 2014.

Key Facts

Title	Feasibility study for Iber canal protection
Code	WB7-KOS-ENV-06
Data approved	June 2012
IFI	WB

WBIF Support

Feasibility study

Finances

WBIF grant	€ 500,000
Loan estimate	€ 7,000,000
Total investment estimate	€ 10,000,000

Kosovo
Social Sector

Creating the basis for better education

The Kosovo education system serves nearly 1.5 million pupils, but it struggles to provide adequate curricula, instruction and a teaching and learning environment to produce the skills that the evolving labour market requires. Enrolment rates are nearly universal in primary education and much progress is noted in upper secondary education with gross enrolment rates at 88 % for girls and 92 % for boys (compared to 75 %). Despite progress, disparities still exist in access to education, especially among girls in upper secondary enrolment and pupils from low-income families. Kosovo's schools' infrastructure is insufficient with more than half of schools operating on double shifts and overcrowded classrooms in most urban areas.

The challenge ahead, therefore, is to further develop the education data systems, and their use in allocation of limited resources to address sector priorities, including infrastructure. Improving access of disadvantaged groups to education and developing targeted strategies to address this challenge requires an in-depth understanding of the cause and extent of the issue, and its implications on sector resources. Moreover, the implementation of the new competency-based curriculum requires in-depth analysis of the teacher profile and the immediate training needs in order to connect the existing levels of capacities implementation of new curricula.

Maximising acces to education

To aid this WBIF is providing a grant that will assist the Ministry of Education, Science and Technology (MEST) to address these most immediate needs in the education sector through a sector-wide assessment of the current situation. The technical assistance will:

- Develop an education information database for monitoring sector performance, and improving planning capacities to serve the needs of educational management, resource allocation, and policy formulation.
- Prepare a study to identify the main constraints facing girls' education issues including access and retention, and propose instruments and mechanisms to address this issue based on international best practices.
- Undertake a needs assessment for in-service teacher training to implement the new competency-based curricula by analyzing the profile of the existing teacher workforce and teaching methods used in schools, and developing a prioritized list of teacher training programs to facilitate new curriculum roll-out.

The project will provide the foundation for better investment planning in the education sector by providing MEST with the necessary tools, information, and capacities to lay the ground for institutionalisation of information-based decision making and practices in allocation of resources, and in monitoring implementation and impact on the education sector. Based on these findings the World Bank will consider approving further investments.

Key Facts

Title	Kosovo education improvement project
Code	WB8-KOS-SOC-06
Data approved	December 2012
IFI	WB

WBIF Support

Education management information system + Prepare study on girls' participation + Needs assessment of teachers

Finances

WBIF grant	€ 550,000
Loan estimate	-
Total investment estimate	-

Kosovo
Transport Sector

Rehabilitating Kosovo's main north – south rail line

Kosovo's railway network has deteriorated over recent decades because of very limited maintenance and underinvestment. Route 10, running north – south, suffered particular badly from damage during the troubles in the 1990s. WBIF is helping the Kosovo Rail Company with three projects of which two focus on Route 10. The line lies on the regional core network developed by SEETO (South-east Europe transport Observatory, the regional transport support organisation). This rail line is at present the only operational rail access in Kosovo with neighbouring the former Yugoslav Republic of Macedonia. The line allows transport of significant volumes of goods. Moreover, in the future the line is expected to play a major role in international freight and in domestic passenger transports.

The first WBIF grant, awarded in 2008, supported a study investigating the feasibility of: a) short term improvements and repairs to the existing railway route including signalling and interlocking (line occupancy protection on single track) for Fushë Kosovë rail node and bringing line speed up to120 km/h; and b) a medium to long term development plan, including proposals to increase the speed to 160 km/h, on an electrified double track.

Rail route 10

The results of the study's cost-benefit analysis show that the line rehabilitation option a) is feasible from an economic perspective so making it viable to be financed with grants or/and loans. By contrast, option b) is not for the time being viable; a significant further increase in railway traffic is necessary to justify its development.

On the basis of these findings and with the support of EBRD a second WBIF grant award was made in 2013. This will pursue the option a) scenario of repairing the line. The work will consist of a detailed design including:

- Topographical surveys
- Geological and geotechnical investigations
- Railway track (permanent way) design
- Structures design (tunnels, bridges, retaining walls, overpasses, underpasses, culverts)
- Signalling and telecommunications systems design
- Signalling design
- Electrification design

Additionally, tender documents for the construction will be prepared.

This project will enable an interoperable railway infrastructure providing safe railway transport. It will open the railway market for domestic, regional and international train operators. The main stakeholder affected by this project is the State Railway Operator of Kosovo, TRAINKOS. This will be the first major investment project in the railway sector in Kosovo and will be a catalyst for the much needed rehabilitation and upgrade of the railway infrastructure, after decades of neglect and damage during the troubles of the 1990s.

Key Facts

Title	i. Rehabilitation of Railway Route 10 (Leshak- Mitrovicë-Fushë Kosovë-Ferizaj-Hani i Elezit ii. Railway Route 10 rehabilitation
Code	i. TA-KOS-02 ii. WB9-KOS-TRA-01
Data approved	i. June 2008 ii. June 2013
IFI	EBRD

WBIF Support

Pre-feasibility and feasibility studies + Preliminary and detailed design + Assistance with tendering

Finances

WBIF grant	i. € 500,000 ii. € 1,840,000
Loan estimate	€ 35,000,000
Total investment estimate	€ 43,500,000

Kosovo
Transport Sector

Upgrading Kosovo's rail network

Kosovo's railway has suffered from very limited maintenance, war damage and underinvestment. To help with the network's upgrade WBIF are helping the Kosovo Rail Company with three projects. Two focus on Route 10 running north – south (see TA-KOS-02 and WB9-KOS-TRA-01) while this projects covers the east – west line. Both lines meet in the capital, Pristina.

The overall objective of the WBIF support is to improve the railway infrastructure and operations in Kosovo. This will be achieved through a short and medium term package of improvements enabling a return to original design speeds on the existing east - west railway line and its branches. The project covers aspects of the track, ancillary structures and the signalling and interlocking (line occupancy protection on single track) systems. For this reason a technical study, including preliminary design and a traffic study with passenger and freight capacity forecasts along the various sections of the line, was prepared. The study included an environmental assessment for the proposed interventions meeting both EU standards and local legislation requirements. Finally a cost benefit analysis, financial and economic, was prepared for the proposed rehabilitation package.

Pejë / Peć station

The geographical scope of the study includes the railway line between the Serbian boundary and Pejë / Peć in the west, together with its linked branch lines: Klinë / Klina to Prizren in the south and a line to Pristina airport. The total length is around 190 km. For the airport connection around 1 km of line is missing and alternative rail link options at conceptual level have been examined.

Such is the poor state of the network - operating speeds of just 20-60 kph, signaling system out of order, 154 unsecured level crossings – that project implementation would bring immediate and very noticeable benefits. These would include train speeds back up to 70-100 kph, new appropriate signaling with telecommunication system and increased capacity. More specifically, the investment would result in the rehabilitation of line substructure and superstructure along 185 km of rail line including 41 bridges, 10 tunnels, 23 stations and 154 level crossings.

The positive results of the study will help the project beneficiaries – INFRAKOS (the Infrastructure Manager of Kosovo Railways) and the Ministry of Transport and Telecommunications – to attract the interest of IFIs and other bilateral donors for further pre-investment studies, and the implementation of the rehabilitation of the railway links, for the benefit of the inhabitants of Kosovo.

Key Facts

Title	Rehabilitation of Key Railway Links East – West in Kosovo
Code	WB5-KOS-TRA-06
Data approved	June 2011
IFI	-

WBIF Support

Feasibility study + Conceptual and preliminary designs + Environmental assessment

Finances

WBIF grant	€ 600,000
Loan estimate	€ 182,000,000
Total investment estimate	-

Kosovo
Transport Sector

Kosovo road upgrade to bring improved local and regional connectivity

This WBIF supported Kosovo road upgrade project deals with the updating of an existing feasibility study and detailed design of a 30 km road section of Route 6B on the SEETO (South-east Europe transport Observatory, the region wide sector strategic coordination organisation) Comprehensive Network in Kosovo. The project needs the update in order to proceed towards construction.

A core regional transport network for Southeast Europe was established in 2003 after a regional study had been undertaken. Three routes of this network pass through Kosovo, namely:

- Route 6, connects Corridor VIII in the former Yugoslav Republic of Macedonia (Skopje) via Pristina to route 4 in the eastern part of Montenegro.
- Route 6B, connects Pristina International Airport with Route 7 and continues to Peja and Route 4 in Montenegro.
- Route 7, connects Corridor X in Serbia (Niš) via Pristina to the Adriatic and Ionian coast in Albania.

One of the prime objectives stated in the National Multi Modal Transport Strategy approved by Government of Kosovo in 2013 is to create links to the European transport network and - in line with this - to provide a priority road network linking the transport gateways to the areas of potential economic growth. Routes 6, 6B and 7 are defined by the Government of Kosovo as part of this priority road network.

Route 6b motorway

The section supported by WBIF funding is the remaining middle section of the link between Pristina and Peja, which starts 5 km from Peja. This links Kosovo's third largest city to the capital and will give access to the main corridors in the Western Balkans (Montenegro has contracted the first section of the Bar-Boljare highway on Route 4 and Route 6B will also connect with Kosovo). The road currently carries daily traffic between 9,900 and 12,200 vehicles. This is predicted to rise to 14,500 vehicles / day in 2015 and 18,600 2025 on the Peja – Klina – Kijevë section. This section will additionally serve many commuters for daily access to work. The section is congested during large parts of the day, with important queues at peak times.

The project will bring many benefits:

- Support for economic growth and social development
- Better trade and economic links with its neighbouring countries and EU member states
- Quicker travel times between main cities in Kosovo
- Improved road safety

The Ministry of Infrastructure is responsible for the implementation of the project. The proposed technical assistance will help to ensure smooth implementation and the quality of the output.

Key Facts

Title	N9 Pristina road, section Kijeva-Klina to Zahaq
Code	WB11-KOS-TRA-01
Data approved	June 2014
IFI	EIB

WBIF Support

Updated feasibility study and detailed design

Finances

WBIF grant	€ 800,000
Loan estimate	€ 40,000,000
Total investment estimate	€ 60,800,000

Kosovo
Transport Sector

Main arterial road upgrade to improve Kosovo's regional transport integration

The WBIF is helping Kosovo with key arterial roads. This project covers the road running north – south between the capital, Pristina and Merdare on the boundary with Serbia. Support is provided to update an existing feasibility study and preliminary design, which had been prepared in 2006, for the construction of a motorway. This road is Route 7 of the SEETO's road network (Southeast Europe Transport Observatory, the regional strategic coordination body.)

Route 7, connecting Corridor X in Serbia (Nis) via Pristina to the Adriatic and Ionian coast in Albania is one of three routes that are defined as part of a core regional transport network for Southeast Europe which was established in 2003 after a regional study had been undertaken (Kosovo has three routes altogether: route 6, connects Corridor VIII in the former Yugoslav Republic of Macedonia (Skopje) via Pristina to route 4 in the eastern part of Montenegro; and route 6B, connects Pristina International Airport with Route 7 and continues to Peja and Route 4 in Montenegro.) Route 7 is the shortest link between Corridor X and Adriatic Sea and has a great regional importance for the transportation of goods and passengers.

The support will update the preliminary general design and feasibility study for the construction of highway route 7 in accordance with Kosovan regulations and IFI and EU standards. The following activities will be undertake:

i) updating the results and outcomes of the existing feasibility study and preliminary design in order to confirm or identify the optimum route alignment,
ii) propose the geometric characteristics of the road,
iii) assess environmental impacts,
iv) perform geodetic work, geotechnical and hydrologic analysis and traffic analysis.

Leaving Merdare

The realization of the project will have direct impact on the improvement of the road connection with Serbia and will contribute to the integration of Kosovo into the transport system of the region and Europe. Additionally, in the region of Southeast Europe, the project will contribute to a significant volume increase transit traffic between the SEETO network and the rest of Europe. Direct benefits are:

- reduced of travel times,
- better road safety,
- a reduction in road infrastructure maintenance costs,
- better connection in Western Balkan Region,
- cost efficiency regarding environmental protection, accidents and congestions at border crossing Merdare and urban area near the existing road in comparison to competitive roads,
- fostering development of Western Balkans through improved connections.

The regional significance an importance of this route is reflected by another WBIF supported project: the connecting road in Serbia running between Merdare and Doljevac (see WB10-SER-TRA-02).

Key Facts

Title	Construction of the Highway (SEETO Route 7) section E from Pristina to Merdare
Code	WB11-KOS-TRA-02
Data approved	June 2014
IFI	EBRD

WBIF Support

Updating feasibility study and preliminary design

Finances

WBIF grant	€ 500,000
Loan estimate	€ 100,000,000
Total investment estimate	€ 150,000,000

MONTENEGRO

Montenegro
Energy Sector

Developing Montenegro's electricity network with interconnection links to neighbours and Member States

Montenegro meets about a third of its electricity needs through imports. The country's electricity demand is highly sensitive to electricity supply interruptions. A review of the transmission and distribution system undertaken in 2009 identified the need to strengthen the Montenegrin power system, particularly in view of the planned installation of a 1000 MW undersea cable to Italy. Construction on this undersea cable began in December 2012. Once functioning, it will help not only the Montenegrin electrical system, but also facilitate the energy exchanges between Italy, the Western Balkans and beyond.

The aim of the first phase of the project was to support the Montenegrin Electricity operators in identifying and prioritising individual transmission and distribution projects. Altogether, 22 priority investment requirements were identified and organized into 4 overall projects, which will improve the reliability and efficiency of the system. The WBIF supported the identification of priority investments for both the period of 2008 - 2012 and also the current period 2012 - 2017.

The project's second phase comprised a feasibility study for the line between Lastva and Pljevlja. This was agreed by the beneficiary and potential IFIs to be the key priority project and to have important regional significance due to the undersea cable connection between Montenegro and Italy. The study began in November 2010 and finished in December 2011, comprising of technical design, environmental and social assessments, and economic and financial analysis. This study demonstrated that the line is feasible and viable, and project promoter, Electric Power Industry of Montenegro AD Nikšić EPCG, intends to engage a loan for its construction, which is programmed to be developed in stages.

Existing transmission line in Montenegro's mountains

The submarine cable between Italy and Montenegro, the AC/DC converter station and the 400kV substation, the 400kV OHL together with all other associated sub-projects, diversions and modifications represent a significant infrastructure development not only for Montenegro, but also for the entire SEE region. Construction of the 400 kV line Lastva – Pljevlja will close the 400 kV loop within the Montenegrin transmission system which will make the entire network more reliable, stronger and capable to support future planned developments of electricity generation, new industrial plants and new tourist facilities. At the same time it will reduce the sensitivity of the Montenegrin power sector to supply interruption.

The Montenegrin power sector is completely unbundled into separate generation, transmission and distribution companies. The promoter of this project is the CGES - responsible for operating, maintaining and developing the transmission system.

Key Facts

Title	Electricity Network Development Programme
Code	TA-MON-02
Data approved	June 2008
IFI	EBRD

WBIF Support

Projects' scoping and prioritisation + Feasibility study + Environmental and social impact assesment + Economic and financial analysis

Finances

WBIF grant	€ 1,850,000
Loan estimate	€ 60,000,000
Total investment estimate	€ 100,000,000

Montenegro
Energy Sector

Sustainable heating for mountain tourist area of Kolašin

Kolašin Municipality, population 9,900, lies in the mountainous area of Montenegro's Gora national Park – one of Europe's largest virgin forests. Well connected to national road and rail transport routes and not far from the international airport in Podgorica, Kolašin is one of the major mountain tourist attractions in Montenegro. At an altitude around 950 m it experiences severe winters that require an eight-month heating season. Residents and industries use wood, oil, coal and electricity for heating. At the moment there are ten large heating boilers using oil and coal as their main energy source that service the needs of the hotels, schools, hospital and a number of municipal buildings. Most private houses use firewood for domestic heating and electricity to heat water. The uncontrolled burning of moist wood and the use of heating oil and coal endanger the environment as their combustion results in significant quantities of CO_2 (estimated at approximately 1,000 tonnes per annum), other harmful gases (NO_x) along with micro-particles. The Municipality has looked into the possibility of implementing a clean district heating (DH) system since the early 2000s. In line with Montenegro's commitments to achieving EU air quality and energy efficiency standards as well as international best practices in similar climate conditions (e.g. Austria), biomass has been chosen as a preferred source of energy.

Key Facts

Title	Biomass district heating – Kolašin
Code	WB6-MNE-ENE-05
Data approved	December 2011
IFI	KfW

WBIF Support

Feasibility study review and update

Finances

WBIF grant	€ 300,000
Loan estimate	€ 2,100,000
Total investment estimate	€ 2,400,000

Kolašin

WBIF are supporting this initiative with a grant for the review and updating of previous feasibility studies in line with available, newer biomass technologies and conclude on its viability for technical, socio-economic, financial and environmental factors. The study is ongoing with close liaison with KfW, the IFI potentially interested in further financing the project. As envisaged at this stage, the project will result in the construction of a district heating system connected to the majority of large consumers in Kolašin. This will consist, as a minimum, of a district heating plant, a heat distribution pipework system, water supply and treatment, substations, heat exchangers and meters, a biomass collection, storage and delivery system and ash disposal site, as well as DH connections.

If proven viable, the project will result in the provision of sustainable district heating services for an area of at least 55,500 m^2 representing the largest consumers in Kolašin. Previous studies have shown that savings of up to 40 % could be achieved by the largest consumers, if a biomass district heating system is in place.

To ensure effective project implementation the municipality is considering establishing a dedicated, municipally-owned, company to operate the district heating system and possibly the logistics operations of making the dried biomass available. The institutional arrangements will be reviewed by the WBIF consultants in order to ensure adequate governance structures are in place to execute the project.

Montenegro
Energy Sector

Planning for renewable energy sources

While Montenegro has an abundance of hydro and wind power generation potential it still needs to import about 35 % of the country's total energy consumption. One of main constraints on the development and the use of these renewable energy sources (RES) is an insufficiently developed transmission network, as the existing capacity does not allow significant amounts of new renewable electricity to be connected to the transmission network.

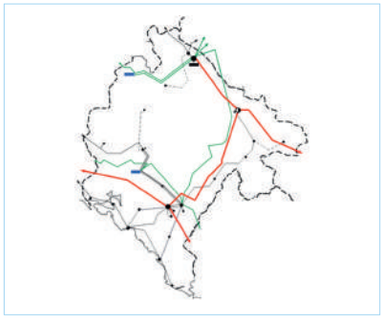
To help address this shortcoming two transmission line development projects have been identified as priorities. Their successful completion will facilitate the connection of new renewable energy sources and the evacuation of the power generated by such sources. The projects are:

i. The construction of OHL 110 kV Vilusi – Herceg Novi;
ii. The construction of SS 400/110/35 kV Brezna.

The WBIF supported technical assistance will prepare a feasibility study to determine if these priority projects are viable individually or as a whole, and when demonstrated viable, to provide assistance with financing and preparing the preliminary design.

The project is in line with the Energy Strategy for Montenegro 2025 and the Action Plan 2008-2012 (adopted by the Government of Montenegro in 2007), as well as the new EU Directive 2009/28/EC in 2010, which obliges each country to establish their own unique target for the share of renewable energy sources in the final energy consumption. This target, calculated by Energy Community for Montenegro, equals 29.5 % of renewable energy sources in the total final energy mix by 2020.

Transmission network



The development of the Montenegrin transmission network would have numerous economic and social benefits, ensuring the security of electricity supply, as well as enabling the development of renewable energy sources. Since the planned wind farms, at Možura and Krnovo, and small hydro power plants will be located in less populated and developed areas of Montenegro, the development of RES would improve the quality of life and the growth of these areas, due to the employment of young people, the reconstruction of the local roads and the improvement of electricity network.

The promoter of the project is the Montenegrin electricity transmission system operator (Crnogorski Elektroprenosni Sistem AD - CGES), who owns and operates the high voltage electricity transmission network in Montenegro, is responsible for the operation of the power system, and maintains and develops the electricity transmission network. Additionally, as well as the people of Montenegro, the regional countries will benefit from the development of RES, also bringing Montenegro one significant step closer to the EU.

Key Facts

Title	Electricity Network Expansion for the Development of Renewable Energy Sources (RES)
Code	WB6-MNE-ENE-06
Data approved	December 2011
IFI	EBRD

WBIF Support

Feasibility study + Preliminary design

Finances

WBIF grant	€ 600,000
Loan estimate	€ 17,000,000
Total investment estimate	€ 17,575,000

Montenegro
Energy Sector

A plan for bring gas to Montenegro

Montenegro, like most other countries in the region, does not have an expansive gas transmission and distribution network. Taking account of the country's existing energy strategy the exploitation and development of natural gas is foreseen. Supplies are likely to be supplied from LNG sources, potential new offshore exploitation and via the Ionian Adriatic Pipeline (IAP, subject to another WBIF grant, see WB5-REG-ENE-03). The latter is expected to bring gas to Montenegro by 2015. At the moment there are no concrete plans for the development of gas distribution systems and gas utilisation within Montenegro. This project responds to the need to identify infrastructure to enable effective gas use. It is an identification study which will define priority investment projects that are required to facilitate the gasification of Montenegro. It will also deliver the objectives of cleaner energy supplies with reduced CO_2 and greenhouse gas emissions by replacing the direct use of electricity for heating and cooling and the burning of, often dirty, coal for energy and heat.

The study will implemented in two phases. Phase I will cover the following:

- gas demand and supply assessment,
- intuitional and market review,
- tariff study,
- development of a master plan, and
- capacity build with training and consensus building.

Key Facts

Title	Gas development master plan
Code	WB10-MNE-ENE-01
Data approved	December 2013
IFI	EBRD

WBIF Support

Gas master plan + Economic and financial analysis + Environmental and social impact assessment

Finances

WBIF grant	€ 550,000
Loan estimate	-
Total investment estimate	-

A plan to bring gas to Montenegro

Phase II will, on the basis of the gas development master plan, do an economic and financial analysis of the transmission and distribution pipeline development. The goal of the study will be gas transmission and supply tariffs that are acceptable to customers. The cost-benefit and economic assessment will attempt to identify and quantify the broader economic aspects of the gas project, including: employment, social impact, environmental impact (e.g. carbon credits), economic effects of the gas system delivering in comparison to other sources, effects on the local and regional economy and substitution of electricity and fuel oil by gas. The work will include an environmental and social screening assessment of the priority projects to highlight any significant barriers that may impede project implementation, and will include a preliminary gap analysis of local legislation with respect to the IFI's (EBRD) performance requirements.

The project should bring many benefits: customers get a cleaner and more affordable supply of energy, through fuel switching from lignite and electricity to gas. In addition, the use of gas will provide opportunities for economic growth in the country, and may contribute to alleviating forthcoming energy shortages as demand for energy continues to increase. The benefits will contribute to:

- enhanced energy security in the target country,
- improved the reliability and sustainability of energy supply,
- reduced greenhouse gas emissions by fuel-switching,
- reduced environmental degradation, pollution and health problems by fuel-switching, and
- serving the objectives of the policy for a country that is environmentally friendly and where environmental protection and sound usage of resources is a first priority.

Montenegro
Environment Sector

Upgraded water and wastewater system for Podgorica

Podgorica's water and wastewater system has suffered underinvestment and consequently is in poor condition and inadequate for a modern growing city. WBIF have responded with two technical assistance grants for an integrated project that tackles the rehabilitation and expansion of water and wastewater infrastructure of the city.

The present facilities are inadequate for a city with a current population of 200,000. The water supply system suffers from low-pressures and shortage of service reservoirs within the city. Approximately 60 % of households are directly supplied, requiring almost continuous pumping, which significantly increases operation costs. The existing wastewater treatment plant has a capacity of 60,000 people equivalent, while there are approximately 200,000 people living in Podgorica. Only around 60 % of the urban population is connected to a sewerage network. The plant receives less than half of the wastewater flow from the city, the rest being discharged untreated via septic tanks or directly to river outfalls.

The objectives of the project are intended to benefit Podgorica's growing population and enable the economic development of regions downstream based upon a growing tourist industry with improved water resources. Project implementation will substantially reverse water quality deterioration and environmental degradation of economically and ecologically valuable tourist areas along the downstream reaches of the Morača river, Lake Skadar National Park, and the coastline adjoining the lake outlet, with attendant cross border benefits accruing to neighbouring Albania.

The ecologically important Morača river & Lake Skadar to benefit from the project

The project preparation feasibility study was completed in February 2010, which comprehensively addressed the needs for the development of water supply and wastewater collection and treatment infrastructure and demonstrated that the proposed project is affordable and sustainable over the long term. The study's recommendations present measures for operating efficiencies including leakage reductions, demand management, optimum use of scarce water resources and more transparent and cost effective services. All these factors will combine to increase consumer satisfaction and contribute to socioeconomic development of the City and help ensure long-term sustainability. The proposed project will comply with EU Drinking Water and Urban Wastewater Treatment Directives.

As a first phase of the project, the municipality has started construction of urgent investment in water supply, with an EIB loan.

Key Facts

Title	i. Podgorica water infrastructure project ii. Podgorica wastewater project
Code	i. TA-MON-05 ii. TA-MON-07
Data approved	June 2008
IFI	EIB

WBIF Support

Operational plan + Environmental scoping + Long term strategic investment plan + Economic and financial appraisal

Finances

WBIF grant	i. € 150,000 ii. € 150,000
Loan estimate	i. € 15,000,000 ii. € 35,000,000
Total investment estimate	i. € 30,000,000 ii. € 45,000,000

Montenegro
Environment Sector

New wastewater treatment plants for Berane, Rožaje and Kolašin

WBIF is helping Montenegro to improve water supply and waste water provision based on the assessment of cost efficient options for long term development of water supply and wastewater collection and treatment. The municipalities of Berane, Kolašin and Rožaje in Central Montenegro were prioritised for project preparation feasibility studies for water and wastewater development projects supported by an EIB framework loan for the water and sanitation sector.

In all three municipalities the water supply infrastructure suffers from high water losses and problems of poor drinking water quality. The wastewater collection infrastructure especially suffers from long term lack of investments and does not adequately cover the urban and adjacent areas. There are no wastewater treatment facilities and consequently raw sewerage is discharged untreated to local water courses or rivers. In Berane and Rožaje, the untreated sewage discharges are into the River Lim which is a tributary of the Danube. In the case of Kolašin, the discharges are into a lagoon adjacent to UNESCO protected

Untreated sewage discharge into River Lim in Berane

Tara River, and not far from the Biogradski National Park, an important international tourist destination.

The project preparation feasibility studies, which were completed by 2012, examined the existing status of infrastructure and operating practices of each water utility, and prepared long term strategic investment plans and included identified priority investment programmes for development measures for water supply and wastewater collection and treatment infrastructure. The objectives are to provide a significant positive public health impact through improved quantity and reliability of water supply and collection and treatment of wastewater in the three municipalities. This will benefit a combined population of 55,000. It will also contribute to safeguarding potable water resources and environmental quality for areas downstream of River Lim and River Tara.

The projects will contribute to meeting Montenegro's future needs for compliance with EC Environmental Legislation, in particular the EC Urban Wastewater Treatment Directive and Drinking Water Directive and safeguard potable water resources and environmental quality for ecologically sensitive areas downstream of River Lim and River Tara.

Extensive measures proposed as part of the project implementation for improvements in operating efficiencies, conservation of scarce water resources, and protection of ecologically sensitive areas downstream of cross-border, Lim and Tara rivers will help to promote good governance and transparency throughout the operations of the three water utilities.

Key Facts

Title	i. Wastewater treatment plant Berane ii. Wastewater treatment plant and network in Rožaje iii. Wastewater treatment plant and network in Kolašin
Code	i. TA2-MNE-ENV-04 ii. TA3-MON-ENV-04 iii. TA3-MON-ENV-02
Data approved	i. March 2009 ii. and iii. December 2009
IFI	EIB

WBIF Support

Feasibility Studies + Environmental, technical and financial sustainability analysis

Finances

WBIF grant	i. € 150,000 ii. € 200,000 iii. € 200,000
Loan estimate	i. € 5,200,000 ii. € 2,500,000 iii. € 3,300,000
Total investment estimate	i. € 11,200,000 ii. € 8,200,000 iii. € 3,500,000

Montenegro
Environment Sector

Five municipalities getting upgraded wastewater systems

The National Strategy for Sustainable Development of Montenegro highlights the importance of developing infrastructure, including wastewater treatment, as a precondition for further development of the country. The absence of such infrastructure directly inhibits the country's economic growth by jeopardizing its natural resources, by limiting the potential for foreign investment and restricting the development of tourism. Montenegro have serious problems with the water distribution system. Water consumption levels are too high, especially during the summer when water resources are limited. This water shortage is exacerbated by the poor condition of the water distribution network. Wastewater discharges to the water bodies are another serious problem. In almost all municipalities, wastewater either drains into rivers or the ground.

The aim of the project is to improve the quality and sustainability of Montenegro's environmental wastewater infrastructure base mainly in the north and interior of the country. A EUR 5 million grant is provided by the EU as a contribution to the construction and upgrading of water and wastewater infrastructure in five municipalities across Montenegro. This grant from the Municipal Window of the Infrastructure Project Facility will be combined with a loan from the European Investment Bank (EIB) in the context of the Western Balkan Investment Framework. This investment is part of the Montenegro Water and Sanitation Project, which already benefits from an EIB loan aiming at improving water and sanitation in some 12 municipalities of Montenegro for a total investment of EUR 114 million and an EIB loan for EUR 57 million.

New pipe laying

The contribution agreement with the EU was signed in 2009 and construction started in 2013. The improvements to water and wastewater infrastructure in the 5 municipalities are planned to be completed by the end of 2017.

The project has many environmental, economic and social benefits. Efficient and sustainable water supply and waste water systems are a precondition for the economic development and health wellbeing of the population. The new systems will improve the quality of water supply and wastewater service and contribute to the compliance with EU environmental standards in view of the eventual EU accession. The project will also improve the water quality in the rivers flowing to the Adriatic Sea and neighbouring countries. The wide range of beneficiaries of this project includes primarily households and industrial water consumers in the municipalities, but also the overall population of Montenegro and neighbouring countries.

Key Facts

Title	Rehabilitation & reconstruction of water & wastewater infrastructure in the north
Code	MW-MNE-ENV-EIB-02
Data approved	March 2009
IFI	EIB

WBIF Support

Investment grant

Finances

WBIF grant	€ 5,000,000
Loan estimate	€ 12,000,000
Total investment estimate	€ 20,000,000

Montenegro
Environment Sector

Landfills' development

WBIF supports two projects dealing with waste landfill in Montenegro. The two projects' overall objective is to develop an EU-standard integrated sustainable solid waste management scheme for the country, as defined in the national strategic master plan adopted in 2005.

The projects include several components. Component A concerns the EIA for a landfill in Nikšić. Component B concerns the preparation of a national tariff policy for Montenegro and cost benefit analysis of the alternative implementation methods of solid waste management. Components C and D deal with the preparation of tender documents (TDs) and technical assistance to the operator of the Livade Landfill for the construction and supervision of the Livade treatment plant for leachate (a liquid effluent that picks up particles as it moves). Component E covers the preparation of TD for the works and supervision contracts for the rehabilitation of the Ćafe dumpsite of Bar. Component F covers the comparative analysis of alternative transport methods of waste in Cetinje Municipality and the preparation of the TDs for the rehabilitation of the Vrtjeljka dumpsite. Technical solutions for an access road to the Vrtjeljka landfill site were also proposed. In addition, as a separate project, the feasibility study, conceptual design and environmental impact study for the construction of the landfill for the Municipalities of Pljevlja and Žabljak were prepared.

Illegal fly dumping

The projects directly address the promotion of improved environmental conditions and health of inhabitants in Montenegro and are in compliance with relevant EU Directives on waste management and landfill.

The direct benefits will be:

i) properly functioning sanitary landfills for Pljevlja and Žabljak serving 40,000 people plus on a monthly basis 2000 tourists, for the next 20 years;
ii) an environmentally sound sanitary landfill for Nikšić serving 82,500 people;
iii) over 60 well trained experts able to cope with the procurement strategies needed to give insight and understanding of the different methods to contract the construction of the regional sanitary landfills and have a tool for tariff setting related to operations taking into consideration procurement and contracting procedures;
iv) a properly functioning leachate treatment plant for Livade landfill at Podgorica, serving approximately 250,000 people; and
v) a properly rehabilitated dumpsite including gas collection, landscaping, and monitoring for Bar and Cetinje Municipalities with a capacity of 80 m^3/day.

These quantitative benefits will contribute to:

i) mproved public health;
ii) improved, air, groundwater and surface water quality at the neighboring environment;
iii) sustainable waste management capacity in the Municipalities and Public Utility Companies (PUCs);
iv) enhanced financial and institutional capacity of PUCs; all resulting in
v) increased service quality and higher customer satisfaction.

Key Facts

Title	i. Landfills in Pljevlja and Žabljak ii. Landfills in Montenegro
Code	i. WB4-MNE-ENV-11 ii. WB4-MNE-ENV-12
Data approved	i. and ii. June 2010
IFI	EIB

WBIF Support

Feasibility studies + Environmental and social impact assessment + Preliminary designs + Assistance with tendering

Finances

WBIF grant	i. € 150,000 ii. € 750,000
Loan estimate	i. € 27,000,000 ii. € 27,000,000
Total investment estimate	i. € 27,150,000 ii. € 54,750,000

Montenegro
Environment Sector

Old Royal Capital of Cetinje's water system improved

Montenegro's Old Royal Capital of Cetinje is known for particularly heavy rain, with substantial precipitation during spring and autumn. It is one of the rainiest towns in Europe with about 4,000 mm (157 inches) of annual rainfall (it can be even higher in surrounding areas). However, because of the karst topography and underlying limestone geology, Cetinje and its surrounding area does not have surface water flows and water sources are sparse. The city's existing water supply system is mainly characterized by outdated equipment, most particularly antiquated pipes, resulting in wasteful leakages and a serious waste of already scarce water resources. In addition, there are numerous illegal connections and collection rates for both domestic and industrial consumers are poor.

In order to address the investment needs in the water sector, the Government of Montenegro has negotiated a long-term framework loan of EUR 57 million with the European Investment Bank, and signed financing contracts for EUR 21.5 million for the "Montenegro Water and Sanitation Project". This project, which includes the rehabilitation of the water supply system in Cetinje, will contribute to resolving the main problems in the most vulnerable areas of the system as well as providing support for the main investment priorities.

A WBIF technical assistance grant is being used to support the preparation of technical documentation and designs for the reconstruction of the water supply system, including a review of the recently completed feasibility study and complimentary analyses to confirm or adjust the overall investment programme. The project aims to stop any further deterioration in water supply by resolving priority problems at the most vulnerable parts of the system. Upgrading the system and creating the preconditions for quality system monitoring and management will ultimately enable the provision of sufficient quantities of quality drinking water, while also following the principles of economic sustainability and energy efficiency within the water supply systems.

Cetinje is getting upgraded water supply system

The project has many environmental, economic and social benefits. An efficient water supply is essential for economic development and health wellbeing. The new system will improve the quality of service, and the beneficiaries of this project include primarily the industrial and commercial water consumers, the households and tourists in Cetinje area. The project is also important for Montenegro as it supports compliance with EU standards, in particular environmental standards in the context of the EU accession process.

Key Facts

Title	Reconstruction of water supply system in the Old Royal Capital of Cetinje
Code	WB6-MNE-ENV-17
Data approved	December 2011
IFI	EIB

WBIF Support

Feasibility study review + Detail design + Assistance with tendering

Finances

WBIF grant	€ 600,000
Loan estimate	€ 2,500,000
Total investment estimate	€ 4,000,000

Montenegro
Environment Sector

Ensuring effective implementation of Montenegro's wastewater programmes

Water source

The construction of wastewater management systems and the improvement of water supply have been recognized as one of the most important issues in the environmental sector facing Montenegro. In order to improve the insufficient administrative and project management capacities at both central and local levels, the Government of Montenegro has established a National Project Implementation Unit – PROCON, who are tasked with providing expertise for implementing programmes in the area of communal services and environmental protection. However, due to the wide range of expertise required for the implementation of these kinds of projects, technical assistance with preparation of tender dossiers is still needed and this is where WBIF are helping.

On the basis of the WBIF's support for the solid waste projects implementation, PROCON has acquired know-how in the preparation of terms of reference for technical assistance support, as well as know-how in preparation of FIDIC Yellow Book tender dossiers. Technical assistance in realisation of wastewater and water supply projects will additionally strengthen PROCON capacities in contracting of designer and constructor for such kind of demanding and complex projects.

The WBIF support refers specifically to the preparation of tender dossiers for the design and construction of the wastewater treatment plants in the municipalities of Bijelo Polje, the Old Royal Capital of Cetinje, Berane, Plav, Rožaje, as well as the preparation of tender dossier for the sewerage network in the municipality of Nikšić, together with upgrade of the water supply system in the Municipality of Andrijevica. Throughout the project duration, PROCON and participating municipalities, as well as the public utility companies supporting the implementation of project, will receive intensive support, aiming to improve the capacities of individuals and respective organizations dealing with management of wastewater and water supply systems.

The implementation of the project will contribute to numerous environmental and socio-economic benefits, such as significant improvement of the quality of drinking water, wastewater effluents and natural environment; the improvement of public health; the development of a sustainable tourism as well as subsequent economic growth.

The project is in line with the Strategic Master Plan for Waste Water Management on the Coast of Montenegro and the Municipality of Cetinje as well as the Strategic Master Plan for Waste Water Management in the Central and Northern Region of Montenegro. Moreover, the Multi-annual Indicative Planning Document for 2011 - 2013 emphasizes the preservation of natural resources and environmental protection by providing improvements in the solid waste and wastewater infrastructures as one of the priorities, while the Montenegrin Law on Water imposes an obligation to adequately treat wastewater.

This project complements other WBIF related grants; see TA2-MNE-ENV-04, TA3-MNE-ENV04, MW-MNE-ENV-EIB-02 and WB6-MNE-ENV-17.

Key Facts

Title	Technical Assistance for Wastewater and Water Supply in Montenegro
Code	WB7-MNE-ENV-24
Data approved	June 2012
IFI	EIB

WBIF Support

Assistance with tendering

Finances

WBIF grant	€ 700,000
Loan estimate	€ 14,466,667
Total investment estimate	€ 23,183,788

Montenegro
Environment Sector

Reconstruction of main water supply pipeline in Andrijevica

The municipality of Andrijevica, situated in the North-east part of Montenegro and having a population of approximately 5,000, is among the least developed Montenegrin municipalities. One particularly important issue is the deterioration of the main water supply pipeline from the water source “Krkori” to the urban settlement, causing difficulties with the overall water supply system. As future development of Andrijevica region is mostly based on tourism and agriculture, it is therefore necessary to implement this water improvement project and secure a reliable, good quality and sustainable water supply. It is a fundamental precondition for economic development as well as providing citizens with a satisfactory service.

WBIF are supporting this initiative by providing the means for technical assistance that will assist with the preparation of terms of reference and a tender dossier while also giving support during the tender and evaluations processes to ensure a successful selection of a contractor for the constructor of water supply system. Under this project an investment grant for EUR 400,000 is also provided by WBIF, for the reconstruction of the main water supply pipeline. The securing of the water source “Krkori” will increase the water supply capacity from 40 l/sec up to 70 l/sec, and so improve the water supply of the entire area, including schools, health centre and households. Reduction of losses in water supply system will also increase efficiency and rationalize the use water as a scarce resource.

Andrijevica

The direct beneficiaries of this project will be 900 inhabitants of urban and 1,200 inhabitants of rural settlements in the municipality of Andrijevica. The project implementation will bring significant improvement of potable water management, hence providing sustainability and quality of water supply for the existing and future consumers.

The reconstruction of this pipeline is recognised as a priority investment by the municipal Multiannual Investment Plan for the period 2009 - 2013. The document “Summary of community infrastructures priority projects in 2012” also recognised this project as a priority on the national level. Multi-annual Indicative Planning Document (MIPD) 2011-2013 for Montenegro recognises the protection of water resources by improving water supply systems, as one of the specific objectives in the field of environment and climate change. Investments in this sector are needed not only to address deficiencies in service quality, but also to comply with EU standards, in particular environmental standards in view of the eventual EU-accession.

Key Facts

Title	Reconstruction of Main Water Supply Pipeline in Andrijevica
Code	WB8-MNE-ENV-32
Data approved	December 2012
IFI	EIB

WBIF Support

Investment grant

Finances

WBIF grant	€ 400,000
Loan estimate	€ 300,000
Total investment estimate	€ 800,000

Montenegro
Social Sector

Purpose designed centre for Pljevlja's elderly

The municipality of Pljevlja is one of the biggest municipalities in Montenegro, and yet one of the most poverty affected ones. Pljevlja is recognized as the most pollution affected community in the country as well.

According to the 2003 census data out of 35,806 inhabitants, 5,651 are over 65 years old, indicating rapid grow in elderly numbers i.e. 16 % (58.10 % female and 42 % male). Out of this 39% reside in towns and 61 % in villages. Those who reside in villages are most often elderly households, single elderly households and households with elderly with disabilities. These households are heavily affected by poverty, social execution and isolation, especially in winter times when the remote villages are cut off from the rest of the world, due to heavy snow falls.

There is no social program to address the needs of the elderly. Therefore, the municipality has adopted the National Action Plan for Elderly (NAP 2008) in alliance with the National Strategy for Elderly. The NAP envisages construction of centre for elderly in Pljevlja which would be composed of a day centre and a residential part, while the centre would host elderly with disabilities, too. The centre would offer innovative social services in accordance with the best EU practices. The local social welfare centre has 71 requests for institutional accommodation, for people who are not longer able to live on their own.

Key Facts

Title	Centre for Elderly – Pljevlja
Code	TA2-MNE-SOC-08
Data approved	March 2009
IFI	CEB

WBIF Support

Business plan + detail design

Finances

WBIF grant	€ 150,000
Loan estimate	-
Total investment estimate	€ 1,200,000

Conceptual design for the centre

The facility is envisaged to be 2,000 m^2 in area with 50 rooms for the residential part, accommodating over 100 people. Room size is approximately 26 m^2 and the design takes into account special requirements of elderly with disabilities. In addition, there should be: a health centre unit, physical therapy unit, premises for vocational activities, restaurant, and day centre facilities. Beneficiaries accommodated on a residential bases will no longer be paid social welfare benefits, leading to approximately EUR 2,500 savings on monthly bases.

Both local and central government are allocating resources, recognizing this project as priority.

Other than being in line with the Strategy for Development of Social Protection for the Elderly in Montenegro 2008 - 2012, this project is also recognized as part of the action plan of the national Poverty Alleviation and Social Inclusion Strategy 2007-11.

Social benefits are enormous, especially in terms of poverty and social exclusion reduction, since the project would lift all beneficiaries out of poverty and social exclusion and improve their quality of life.

The CEB are considering providing financial support.

Montenegro
Transport Sector

Road upgrade improves cross-border links

Roads across the region have suffered from a lack of investment and neglect over the recent past decades. The consequences are serious: poor service for users with a particular adverse impact on more remote communities, excessive journey times, holds-ups from temporary cheap fixes, higher levels of accidents and a poor offer for tempting business and inward investment. It adds up to a deleterious effect on both the economy and social well-being.

All governments of the WBIF beneficiaries have embarked on the programme of road upgrade and WBIF is involved in supporting many of the new or improvement schemes. Two particular WBIF supported projects in neighbouring countries, Bosnia and Herzegovina and Montenegro, are linked with a common border crossing. The connecting road is the shortest connecting line between the two capitals: Sarajevo and Podgorica. The road is on the SEETO (South-east Europe transport Observatory) Core Road Network and is designated as E route (E762). The technical assistance support in Montenegro covers the road upgrade between Šćepan Polje, on the border, and Plužine. In Bosnia and Herzegovina the project deals with the road upgrade between Brod na Drini (Foča) and Hum on the border (see TA-BIH-06). Both sections are in a very poor state and suffer from severely inferior safety levels.

Key Facts

Title	Construction of main road Šćepan Polje – Plužine
Code	i. TA2-MNE-TRA-03 ii. TA3-MON-TRA-01
Data approved	i. March 2009 ii. December 2009
IFI	EIB

WBIF Support

Pre-feaibility and feasibility studies + Preliminary design

Finances

WBIF grant	i. € 150,000 ii. € 550,000
Loan estimate	€ 70,000,000
Total investment estimate	€ 75,000,000

Road and tunnel in winter

The two linked projects deal with preparation studies for a main road link between the two countries that makes up the shortest route between the respective capitals, and then leads on to Tirana. The two sections meet at the border crossing over the river Drina.

The WBIF supported technical assistance work was made up of two phases: Phase I covered route and border crossing options and pre-feasibility assessments; Phase II covered more detailed technical investigations – topographical, geological, geotechnical, road and tunnel engineering and environmental impact – together with economic viability reporting. The design for a new bridge at border crossing was also part of Phase II.

The potential benefits are revealed in the Bosnia and Herzegovina study: the 20-km long road on the Bosnia and Herzegovina side will be used daily by some 1,600 vehicles, transporting 4,000 passengers. Additionally, it will attract more than 100 trucks per day which currently are unable to use this route at all. Reconstruction is expected to provide annual savings of EUR 6 million from vehicle operating costs, EUR 5 million from travel time, EUR 0.5 million from traffic accidents and significant road maintenance savings. New traffic is also expected to bring EUR 0.5 million of economic benefits. Similar benefits will accrue to Montenegro.

As well as directly improving road safety and reducing travel time, the upgrade should also bring broader regional benefits: social and wider economic opportunities together with greater community and international cohesion.

Montenegro
Transport Sector

National and international benefits from a main road upgrade

Part of Montenegro's highway network, running for about 170 km, lies on Route 4 of the core road network defined by the South East Europe Transport Observatory (SEETO). After several unsuccessful attempts to build a motorway between Bar and Boljare at the Serbian border, through a 30 year public-private partnership (PPP) concession contract, the Government of Montenegro has decided to reconsider all technical options to improve the route. Their aim now is to identify an economically and financially feasible plan to bring the route to appropriate European standards.

Even though the country has already spent a significant amount of time and own resources in preparing the failed PPP project, the reconstruction of the critical parts of the route remains a high priority, given the unacceptably poor condition and level of service on these sections.

WBIF has been assisting with a EUR 500,000 grant for the purpose of additional preparatory work, expected to eventually lead to successful tendering of investment works on SEETO Road Route 4. The grant is being used for the preparation of a route investment plan, preparing technical options and an environmental and social impact assessment for the whole 170 km. The project broadly deals with five sections:

Key Facts

Title	Preparation of a SEETO road route 4 investment plan for Montenegro
Code	WB6-MNE-TRA-14
Data approved	December 2011
IFI	EIB

WBIF Support

Feasibility study + Environmental impact analysis + Financial affordability analysis

Finances

WBIF grant	€ 500,000
Loan estimate	€ 400,000,000
Total investment estimate	€ 500,000,000

3D model of Bar-Boljar motorway viaduct leading into tunnels

- Section 1: Bar (Đurmani) – Virpazar, 12 km
- Section 2: Virpazar – Smokovac, 38 km
- Section 3: Smokovac – Mateševo, 44 km
- Section 4: Mateševo – Berane, 34 km
- Section 5: Berane – Boljare, 41.3 km

The project will bring many benefits to Montenegrins as well as visitors to the country. There will be time savings; reduction in vehicle operating costs; reduction in accidents; environmental benefits for communities lying along the existing alignment (less noise, vibration and local pollutants); improved access to, and therefore relative attractiveness of, the Port of Bar; an enhanced offer to potential tourists accessing the Adriatic Coast as well Montenegrin hinterland. It also helps regional and national cohesion.

This project is fully consistent with key strategic documents: Memorandum of Understanding on the development of the South East Europe Core Regional Transport Network and cooperation with SEETO and under the auspices of DG MOVE of the European Commission. The project's promoter is the Ministry of Transport who, supported by the WBIF technical assistance, have the capacity and ability to ensure successful fulfilment of the project.

Following completion of the study, the Government has launched construction on a first section of the road.

Montenegro
Transport Sector

Upgrade of Montenegro's main rail line

The length of the Montenegrin railway network is 250 km, of which 223 km are electrified. The network consists of three lines: a broadly north to south line, Bar-Podgorica-Vrbnica (167 km electrified line); Podgorica-Nikšić (56 km electrified line); and Podgorica-Tuzi-state border with Albania (25 km, non-electrified line), while the main node of the network is Podgorica station. The Bar-Vrbnica section is the main railway line of Montenegro's rail network, carrying around 20% of all passenger volume and 60% of freight. This line was constructed as part of the railway corridor to Belgrade and opened to traffic in 1976.

Many elements on this line are now reaching the end of their economic life. The signalling system is technically obsolete and also most of the bridges are in need of rehabilitation. The most urgent need of signalling rehabilitation is the signalling in Podgorica station, as this is causing delays and is also increasing the risk of accidents. Another source of risk is the condition of the bridges on this line. Work has started on rehabilitation of steel bridges, financed by EIB, whereas the rehabilitation of concrete bridges will start with the current WBIF grant.

The project consists of three components:

i) Podgorica Railway Station signalling replacement detailed design;

Electrified dual track

ii) Concrete bridges' inspection along the railway line section Bar-Vrbnica; and

iii) Support to the Railway Infrastructure Company of Montenegro, ŽICG, in procurement.

Completion of the project should bring many benefits:

1. Time savings for existing passengers, both in shorter scheduled services as well as from a reduction in unscheduled operational delays;
2. Reduction in recurrent costs for the Railway Infrastructure Manager and possibly the Railway Operators;
3. Modal shift from road to rail resulting in time savings, vehicle operating cost savings, local and global environmental benefits and reduction in road accidents;
4. An improvement in safety on the railway line (reduced risk of a physical structural failure or operating failure leading to an accident)

The project will benefit directly 750,000 passengers using the line on annual basis and indirectly the broader economy by facilitating trade, regional integration and sustainable growth. The railway system will also be better placed to compete against road hauliers in the freight business, potentially improving the financial sustainability of the sector.

The project promoter is the Railway Infrastructure Company of Montenegro - ŽICG. ŽICG, through its infrastructure development department, will establish and maintain a team of suitably qualified and experienced staff dedicated to undertake the implementation of the proposed works.

The study work has just begun.

Key Facts

Title	Bar-Vrbnica Railway Line Upgrade
Code	WB10-MNE-TRA-01
Data approved	December 2013
IFI	EIB

WBIF Support

Detailed design + Assistance with tendering

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 40,000,000
Total investment estimate	€ 47,000,000

Montenegro
Transport Sector

Detail design for priority bypasses on Montenegrin coast

The road running along the Montenegrin coast was built in the 1960s and runs through the three main coastal towns: Herceg Novi, Budva and Bar. Over the past 50 years traffic volume has significantly increased and these three towns, being the main economic hubs, have similarly grown. International transit traffic has also increased, particularly from Croatia and Albania. The topography together with urban development do not allow adjusting the existing road dimensions to accommodate the current and future capacity. As a result the road suffers from heavy congestion with particular disruption during peak summer months when traffic doubles.

In order to overcome these constraints, the Government of Montenegro, through the Ministry of Transport and Maritime Affairs, launched in 2007 the Programme for Elimination of Bottlenecks. The programme identified 27 projects countrywide: 18 projects for extension from two to three lane roads and 11 projects for construction of new bypasses including the three towns of Herceg Novi, Budva and Bar. These three planned bypasses will become part of the expressway while the Budva bypass will serve as a connection to it.

WBIF are supporting this initiative with a grant that will develop a feasibility study for the first priority bypass identified during the inception phase after assessing Herceg Novi (8 km estimated length; located on border with Croatia), Budva (6.5 km estimated length, connecting to Podgorica road) and Bar (10 km estimated length). The feasibility study has two stages: first, an initial fact gathering to include technical, socio-economic, financial and environmental factors that will identify priorities and lead to stage two: a detailed bankable feasibility study of the priority selection. The detail design will progress the project to readiness for construction.

The coast road

The construction of road bypasses for Montenegrin Coast main towns would contribute to a seamless connection between Croatia, Bosnia and Herzegovina, Montenegro and Albania, removing the bottlenecks on SEETO Route 1 along the Montenegrin Coast. Town population, tourists, and transit traffic, private and business, will benefit from the investment.

The project's benefits are many. It will: reduce the detrimental environmental effect cause by heavy road congestion; reduce travel time; and increasing road safety. The benefits will be felt on: i) congestion, with reduced traffic bottle necks, especially during summer tourist season; ii) road safety, reduced road accidents; iii) the environment, reduced levels of noise and emissions; and iv) socio-economic impact, reduced vehicle operating costs and energy consumption plus reduced travel times leading to increased productivity.

The coastal road is the region's transport agency's priority Route 1 (SEETO, Southeast Europe transport Observatory). The project's promoter, the Ministry of transport and maritime Affairs, has the capacity and ability to manage the programme of road upgrading and ensuring this project's effective implementation. WBIF's support will aid this process.

Key Facts

Title	Detail design for priority bypass on Montenegrin coast
Code	WB10-MNE-TRA-02
Data approved	December 2013
IFI	KfW

WBIF Support

Feasibility study

Finances

WBIF grant	€ 500,000
Loan estimate	€ 50,000,000
Total investment estimate	€ 55,500,000

SERBIA

Serbia
Energy Sector

Transmission upgrade with connections to neighbours' networks and existing Member States

Serbia's electricity transmission network needs upgrading and expanding. One section, the existing overhead lines and substation equipment at Bajina Bašta, and the Over Head Lines (OHL) to Valjevo, Obrenovac and Belgrade 3, are in extremely poor condition after 50 years of continuous service. There is also a need to develop a new 400 kV corridor to accommodate potential projects and to allow for the future development of the electrical transmission system, not only in Serbia and the Western Balkan region, but also connecting to North-East and South-East Europe. WBIF are assisting the project's promoter, EMS, with the potential upgrade of the existing 220 kV network in Western Serbia to 400 kV.

The technical assistance started by preparing a pre-feasibility study to identify options and potential network topologies for the upgrade. This resulted in a plan to upgrade the 220 kV circuits to 400kV between Obrenovac and Bajina Bašta, with a potential loop into Valjevo. In the project's second stage, a full feasibility study was undertaken for this scenario, including site investigations, corridor definition, financial and economic assessments and a comprehensive environmental and social impact assessment. A 400 kV upgrade scheme proved to be the most cost efficient option compared to all 220 kV development options.

Current 220 kV transmission line will be upgrade to 400 kV

The proposed project will benefit the existing customers of EMS by improving the reliability and efficiency of the system. It will also have an important role in improving regional exchange of electricity in the Western Balkans, which will significantly increase with the commissioning of a 1000 MW undersea cable, between Italy and Montenegro and onto Serbia, presently under construction.

The major benefit of the proposed double circuit 400 kV transmission line is an increase in the network capacity to facilitate the growth load, new generation connections and regional exchanges of electricity in the Western Balkans. It will further develop the regional energy market and the system's operations such as flexibility and stability. There will be improvements in the reliability of the regional network and overall security of supply. The development will eliminate constraints in the region related to electrical energy transmissions and exchange. These benefits could include network capacity increases for important interconnections with Bosnia and Herzegovina, Montenegro, Italy in the south, and Romania and Ukraine in the north.

The project promoter is EMS - the national company responsible for the Serbian transmission network. This company has proven sound in financial and operational terms, given the main conclusion from the Financial and Economic Assessment was that EMS has sufficient financial strength to obtain the required loan and to repay all contractual payments on time.

This project is linked to two other WBIF supported projects; see TA-MON-02 and WB5-REG-ENE-05.

Key Facts

Title	Upgrading of transmission network in Western Serbia to 400kV
Code	TA-SER-26
Data approved	June 2008
IFI	EBRD

WBIF Support

Pre-feasibility study + Feasibility study + Environmental and social impact assessment

Finances

WBIF grant	€ 500,000
Loan estimate	€ 30,000,000
Total investment estimate	€ 50,000,000

Serbia
Energy Sector

Serbia - Bulgaria gas transmission connectivity

WBIF supported this bi-directional high pressure gas transmission pipeline between Bulgaria and Serbia in light of its considerable regional significance. The project will give Serbia access to a second import pipeline and Bulgaria access to Serbia's existing and planned gas storage, benefiting the energy security of both countries and the whole SEE region. The regional significance of this connection is endorsed by EC's Directorate General for Energy and the EBRD.

An investment is required for approximately 180 kilometres of gas pipeline, with about 2 billion cubic metres annual capacity at an estimated development cost of EUR 120 million (of which EUR 60 million is for Serbia) to be financed by EBRD. The gas pipeline will be built between Niš and Dimitrovgrad while a compressor station is planned on the Bulgarian side. The project has been held up by delays with the Bulgarian feasibility study. A commercial feasibility assessment provided insight on ways to implement the investment in Serbia.

The project beneficiaries are the existing and future end users of the planned bi-directional high pressure gas transmission pipeline. The construction of this gas transmission pipeline is a necessity for stable gas supply in a very broad geographical area that includes not only Serbia and Bulgaria, but also Kosovo and the former Yugoslav Republic of Macedonia as well as other countries in the Balkans. The construction of the interconnection will have the following direct and immediate benefits:

- Increased availability of gas supply;
- Increased quality of gas supply;
- Assuring that future gas supply can keep up with increasing demand;
- Supporting cleaner energy production by switching to less polluting fuel.

This project is in line with the provisions of the Energy Community Treaty and the National Strategy of Economic Development of Serbia (2006-2012). The project will also provide the basis for:

- Passing of bylaws on Law on Energy in Serbia;
- Adoption of new tariff system, designing new pricing and tariff policy for electricity and gas;
- Introduction of energy statistics according to "Eurostat" methodology;
- Adoption of the program for implementation of the Agreement on SEE Energy Community;
- Implementation of the provisions of the agreement on SEE Energy Community and further harmonization of the legal framework with EU Directives.

The project is in line with the provisions of the Energy Community Treaty and with the EU's pre-accession strategy for Serbia and is part of the Energy Community gas ring concept. The study will prepare Srbijagas to work in a competitive market, improving the trading function of the company and the identification of new equipment for system and market operations.

Serbia and Bulgaria have signed a memo of understanding on gas connection

Key Facts

Title	Feasibility Study and ESIA for Serbian Gas Transmission Pipeline to Bulgaria
Code	WB4-SER-ENE-04
Data approved	June 2010
IFI	EBRD

WBIF Support

Feasibility study + Environmental and social impact assessment + Commercial feasibility assessment

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 25,000,000
Total investment estimate	€ 60,000,000

Serbia
Energy Sector

Rehabilitating Serbia's district heating systems

District heating systems (DHS) are very significant in Serbia as a means of heating multiple domestic and commercial properties. Rehabilitating, replacing, or setting up new efficient DHS and keeping them well maintained is very important, given that 20 % of Serbian households are connected to one of the 50 systems across the country. Modernisation and rehabilitation of the current systems is desperately needed, since the long-term underinvestment has left many of the production and distribution facilities in poor technical conditions which in turn leads to inefficient heat production as well as high losses of valuable resources - water and energy.

WBIF has supported this project with two grants. Both deal with the fourth phase (stages 1 and 2) of an established programme: Rehabilitation of District Heating Systems in Serbia. The programme's task is to improve the technical and financial efficiency of the district heating companies (DHC) in Serbia, by a multitude of activities: replacing obsolete pipelines, substations and production facilities, as well as by modernizing and automating them. The programme also aims to introduce institutional and organizational reforms in the district heating companies, most of which are in a very difficult financial situation. These reforms shall enhance DHCs' business policies and sustainability. In particular, heat demand forecasts, hydraulic network calculations and business strategies will be prepared for the companies so enabling proper investment project preparation and management.

New insulated pipes

The project has substantial positive economic and environmental impacts: reduced fuel consumption, cost savings and more environmentally friendly heat production and distribution with significantly reduced CO_2 emissions. It will contribute to actions mitigating climate change. Various benefits of the programme have already been proven under previous successfully implemented phases.

The total investment is approximately EUR 62 million, of which EUR 45 million is provided as an interest rate subsidised loan by the German government through KfW. Moreover, EUR 9.25 million is provided by the Serbian government under a debt swap agreement with Germany and the remainder consists of own contributions by the DHC. WBIF provides a EUR 2 million grant for the financing of technical assistance for the preparation and implementation of the programme, which is co-financed by a grant of the German government of EUR 2 million.

The activities and provisions of this project are fully in line with the provisions of the Energy Community Treaty, as well as the Energy Sector Development Strategy of the Republic of Serbia, so it ultimately enhances EU integration efforts.

Key Facts

Title	i. Rehabilitation of District Heating Systems – Phase IV ii. Rehabilitation of District Heating Systems in Serbia – Phase IV – programme implementation , second phase
Code	i. WB4bis-SER-ENE-05 ii. WB5-SER-ENE-06
Data approved	i. December 2010 ii. June 2011
IFI	KfW

WBIF Support

Heat demand forecasts + Hydraulic modelling + Business modelling + Assistance with tendering + Construction Supervision

Finances

WBIF grant	i. € 500,000 ii. € 1,512,000
Loan estimate	€ 45,000,000
Total investment estimate	€ 58,262,000

Serbia
Energy Sector

Energy saving and warmer classrooms

Inefficient use of energy is a major concern in Serbia. Comparing consumption of primary energy between Serbia and the European Union shows how poor their position is: their energy use per dollar of GDP is two to three times greater. Three main areas of energy use are of particular concern: industrial, residential and public service facilities sector.

The government has embarked on a programme to improve the poor situation and WBIF are assisting with grant support for technical assistance. A proposed energy efficiency programme in public buildings will focus on selected public service buildings with an emphasis on schools. A key objective of the programme is that it acts as an example of best practice: it should demonstrate to municipal and government officials together with local communities the benefits of investment in energy efficiency measures. The programme is expected to contribute to at least a 20% reduction in energy consumption, providing economic and environmental benefits as well as having a positive social impact through an improved learning and working environment for pupils and teachers. The programme will be implemented in two phases and involve between 25 and 35 schools. The general approach is to concentrate on a relatively low number of schools and renovate them comprehensively - windows, roof and wall insulation, heaters and boiler – rather than partially renovating a lot of schools; the emphasis is to use the superior buildings as examples for others to follow. The programme builds on the experiences of the Serbia Energy Efficiency Project (SEEP) co-financed by the World Bank.

Thermal insulation to be fitted in school refurbishment

The project is a collaborative initiative involving central and local administrations. The Ministry of Education, Science and Technological Development (MoES) is in charge of the overall coordination and execution of the programme. The Ministry of Mining and Energy (MoME), as the line ministry for energy efficiency, has been closely involved in the project preparation.

The total value of the programme is estimated to be EUR 18 million, to be financed through a EUR 15 million loan from KfW, a contribution from the beneficiary municipalities and a WBIF grant of EUR 1.3 million for technical assistance. The WBIF support includes the elaboration of energy audits, detailed designs of the renovation works in the schools, development of tender documentation, construction supervision and targeted capacity building and implementation support. Additionally, the grant will be used to finance a local expert working in the project implementation unit of the MoES.

Key Facts

Title	Energy Efficiency in Serbian Public Building
Code	WB8-SER-ENE-11
Data approved	December 2012
IFI	KfW

WBIF Support

Feasibility studies + Detail designs + Assistance with tendering + Supervision of works

Finances

WBIF grant	€ 1,300,000
Loan estimate	€ 15,000,000
Total investment estimate	€ 18,000,000

Serbia
Energy Sector

Building regional electricity connectivity

The project comprises an upgrade of the existing 220 kV to a 400 kV overhead line (OHL) between substations (SS) Kraljevo 3 and SS Bajina Bašta, the centre of Serbia to the border with Bosnia and Herzegovina. It is seen as the first phase of a central Serbia system upgrade from 220 kV to 400 kV volts. The upgrade of SS Kraljevo is already in the last phase of preparation, along with the new 400 kV OHL in direction of SS Kragujevac in the north of the region, which together with the new proposed project will form a strong 400 kV circle in the middle of the most congested regional northeast-southwest and east-west transmission corridors. It has a direct influence on the overall regional transmission capacity. In the next phase, a further strengthening of the central Serbian network is foreseen in a northern direction (towards SS Kostolac) and eastern direction (towards SS Niš and Bulgaria – a new 400 kV interconnection is under consideration at the moment).

The Serbian transmission system, due to its geographical position, represents the interface between all other power systems in the region. The Serbian transmission system is interconnected with eight neighbouring transmission systems. This project will allow the transfer of energy from the eastern part of the South Eastern European region and from Moldova, Turkey and eventually Ukraine, an area with lower electricity prices, to the south-west part of the region and further to Western Europe (Italy, via a new undersea cable, and the rest of the Europe with much higher electricity prices) through a huge increase of grid transfer capacity in the mentioned corridor, thereby contributing to the overall economic development and social welfare.

Bajina Bašta power station

One of the reasons for the upgrade to 400 kV voltage level is the currently very old 220 kV network that connects major substations in that part of the Serbian transmission network. Security of supply and secure and reliable system operations will be enhanced enormously. Additionally, this project will make possible the operation of two pump storage facilities with more than 1.3 GW of installed capacity (the existing pump storage Bajina Bašta of 2 X 300 MW and a future, planned, pump storage facility, Bistrica, with at least 700 MW capacity). This is a key requirement, from a regional point of view, for the implementation of volatile renewable energy supplies from wind and solar energy in the region.

The new network has many benefits. It will:

- Improve net transfer capacity to facilitate anticipated load and transit growth, new conventional and renewable generation connections.
- Improve of the stability and reliability of the regional network.
- Decrease technical losses in the transmission system.
- Decrease CO_2 emissions.
- Improve the quality of electricity supply.
- Support the potential to develop the regional energy market in South East Europe and creating trading opportunities with Romania, Bulgaria and Italy.
- Reduce the cost of providing reserve capacity, and providing mutual emergency and balancing support.

Key Facts

Title	400 kV OHL from substation Bajina Bašta to substation Kraljevo
Code	WB9-SER-ENE-01
Data approved	June 2013
IFI	KfW

WBIF Support

Feasibility study + Environmental and social impact assessment + Preliminary design

Finances

WBIF grant	€ 800,000
Loan estimate	€ 35,000,000
Total investment estimate	€ 40,800,000

Serbia
Energy Sector

A new clean district heating system for Subotica

District heating is an important method of providing heating to domestic and commercial properties in Serbia. Many systems suffer from underinvestment, lack of maintenance and neglect leading to under-performing and faulty systems. However, many municipalities have set in motion initiatives to improve their systems and Subotica was an earlier starter and has made significant progress. Subotica is in the far north of the country on the border with Hungary; it is Vojvodina's second largest city with a population of over 100,000 inhabitants.

The district heating system is operated by the public enterprise JKP Subotička Toplana (District Heating Company Subotica). It supplies around 10,500 private households, commercial customers and public institutions with heat. The system currently operates with two hot water boilers dating from 1988 using natural gas backed up by traditional heavy fuel oil "mazut", a dirty energy source that is not environmentally friendly.

The company has prepared a long-term development strategy that aims at modernizing the technical installations and improving the energy efficiency of the system. Modern pipes have been installed and the company has implemented a consumption-based billing system.

WBIF is providing a grant to assist with the installation of a new biomass-fired combined heat and power (CHP).

Key Facts

Title	Biomass-fired cogeneration plant in Subotica
Code	WB10-SER-ENE-01
Data approved	December 2013
IFI	KfW

WBIF Support

Preliminary design + Assistance with tendering + Supervision of works

Finances

WBIF grant	€ 600,000
Loan estimate	€ 20,000,000
Total investment estimate	€ 24,800,000

Straw as a fuel source

This facility will increase capacity for heat production and reduce dependence on imported fuel. The fuel would be straw, a feedstock in ready supply in this agricultural region; indeed much local straw is disposed of at a cost and, unlike conventional forms of electricity and heat production, this combined heat and power plant will actively help protect the environment. The WBIF grant will be used to: i) prepare a preliminary design; ii) prepare tender documents; iii) supervise the works; iv) provide additional capacity to the company.

The project will bring economic and environmental benefits. Fuel and generating costs are reduced with improved air quality – reduced CO_2 and particulates – and a return of waste material to farmland. Specific benefits are:

- Reduction of fossil fuel consumption and imports
- Reducing costs of heat energy production
- Improvement of the financial situation of the DHC Subotica (generating free cash-flow for the financing of rehabilitation measures in the grid etc.)
- The improvement of overall energy efficiency
- Biomass can be sourced locally, contributing to security of supply
- Company will determine lower price for social categories and institutions
- Reducing CO_2 emissions (approx. 42,000 tonnes p.a.)
- Improvement of air quality in the city
- Produce ash which can be used for soil enhancement in farmland

The DHC Subotica has proven ability in pursuing and seeing through new projects. Additionally, WBIF is providing capacity building assistance.

Serbia
Environment Sector

Modern efficient wastewater treatment for Vranje and Užice

The Western Balkans Investment framework is supporting many water and wastewater improvement schemes across the region. This Serbian example covers two towns in different parts of the country with the rehabilitation and expansion of water and wastewater infrastructure in the Municipalities of Vranje and Užice. The wastewater services in particular in both municipalities suffer from long term lack of investments.

The Municipality of Vranje, population 100,000, provides adequate water supply services to about 95 % of the population in the urban area and plans to extend the network to cover the remaining more remote areas. In contrast to the water supply services, the wastewater collection and disposal services are grossly inadequate. There is no wastewater treatment plant and raw sewage is discharged untreated to the local water courses, which are tributaries of the South Morava River. A large proportion of the flows are thought to permeate through the karst surface thus contributing to pollution of ground water sources. Only about 80 % of the households in the city are connected to the sewerage system.

The water supply services in the Municipality of Užice, population 65,000, are adequate with good pressures to reach all areas on higher elevations. However, the distribution network is in poor condition, with high water losses, estimated at over 60 %. The wastewater collection and disposal services in the Municipality are very inadequate. The existing sewerage network covers 90 % of the town but the main collector is in poor condition that often leaks. There is no wastewater treatment plant with sewage being discharged untreated to open ground or directly to the River Đetinja, which runs through the middle of the city. The wastewater discharges often make up more than 50 % of the natural flows of the river in the low season.

Vranje – open sewage channel

The WBIF supported feasibility studies covered the complete operating cycles of the water and wastewater companies of Vranje and Užice. They examined their financial status, assessed the quality and reliability of the water supply services, investigated the adequacy of wastewater services and highlighted the current environmental concerns. The studies formulated long term strategic investment programmes for both water supply and wastewater collection and treatment infrastructure. They identified priority investment programmes for improvements in water supply and wastewater services and prepared financial models of the operations of the companies to demonstrate the actions needed to ensure the long term sustainability of operations in terms of technical, financial and environmental criteria.

Fulfilling the projects will bring direct benefits to over 200,000 in the two municipalities and improved water to those living downstream. The project promoters, the two water companies, have been helped by the detailed study work, including long-term planning and financing models, that should aid long-term sustainability.

Detailed designs are being prepared and pre-qualifications for construction tender is underway.

Key Facts

Title	FS for water & wastewater in Vranje and Užice
Code	TA-SER-17
Data approved	June 2008
IFI	KfW

WBIF Support

Feasibility studies

Finances

WBIF grant	€ 500,000
Loan estimate	€ 15,300,000
Total investment estimate	€ 36,500,000

Serbia
Environment Sector

Upgraded water systems for seven towns

As part of a widespread effort to upgrade water supply and wastewater disposal across Serbia attention is being focused on second tier medium sized cities and towns. This process is being assisted with finance and support from IFIs and the WBIF. The support is helping the second stage of an existing programme: water supply and sewage disposal in medium sized Serbian towns. This programme focuses on achieving long-term reductions in water losses, investments in water production and processing, as well as investments in expansion of existing networks. Funds in excess of EUR 39 million will be used for investments in seven Serbian medium sized cities and towns' water supply and sanitation systems; these are: Kraljevo, Loznica, Pančevo, Šabac, Smederevo, Sombor, and Vršac.

The programme's selected cities, towns and municipalities, through their respective water utilities, act as project implementation units (PIU). These PIUs are responsible for planning and implementation of the investments. They are supported by an implementation consultant who help with planning, tendering and construction supervision. They are also supported by a consultant for technical assistance to strengthen their internal administration and commercial performance. Both consultants assist the utilities in installing management information systems (MIS), updating tariff adjustment plans, developing human resources training needs analysis in billing and collection as well as leak detection, improving public relations with customers, detecting leaks through training leakage teams and following up leak detection surveys as well as developing preventive operation and maintenance plans.

Loznica pumping station

The programme is ongoing. Currently, construction is underway in six of the seven cities (Kraljevo, Loznica, Pančevo, Šabac, Smederevo, Sombor). In the remaining town Vršac, the water supply treatment plant, which is the only investment measure, is currently being tendered. Out of the total EUR 39.15 million investment, EUR 11.9 million of works are completed, EUR 12.1 million are ongoing, EUR 10.5 million are tendered, and EUR 4.7 million are in tender preparation.

The WBIF-funds were used to co-finance the ongoing investments in Kraljevo, Loznica, Pančevo, Šabac, Smederevo and Sombor. Use of WBIF funds freed German Government grant-funds to set up a performance incentive scheme. The scheme provides investment grants of up to EUR 120.000 for additional investment measures in each of those water utilities and/or municipalities that achieved agreed upon performance criteria. These criteria are essential because they target the commercial and technical performance to operate the systems in the long-term. Furthermore, the investment grants enhance the competition between municipalities getting the additional funds for investments thereby inciting the improvement of their commercial performance further. Five cities qualified for the investment grants: Kraljevo, Loznica, Šabac, Sombor and Vršac.

Key Facts

Title	Medium Sized Towns Water Supply and Sewerage Systems
Code	MW-SER-ENV-CEB/KfW-01
Data approved	March 2009
IFI	KfW

WBIF Support

Investment grant

Finances

WBIF grant	€ 3,000,000
Loan estimate	€ 25,000,000
Total investment estimate	€ 44,300,000

Serbia
Environment Sector

Major wastewater project in Novi Sad brings local and regional benefits

Novi Sad is the second largest city in Serbia located on the banks of the Danube; its population is over 250,000. The city has embarked on a major programme of water supply and wastewater network upgrade. Parts of the works are completed, parts with construction ongoing and parts with sub-projects being prepared.

Novi Sad does not have a wastewater treatment plant (WWTP). While over 80% of residential and commercial and industrial users are provided with sewer services, collected waste water is discharged untreated into the Danube river. This is highly detrimental environmentally and is a threat to human health and well-being. Indeed, this discharge is measured as being the highest source of pollution in the Danube along the river section stretching from the border with Hungary to Belgrade (technically the discharge amounts to 450,000 PE (population equivalent or over 27,000 kg BOD5/day.)

WBIF is providing a grant to Novi Sad's programme with support for a WWTP. The technical assistance will provide a pre-feasibility study with conceptual design as a first phase of the studies needed to prepare the project of the main wastewater treatment plant of the City.

Key Facts

Title	Novi Sad Municipal water
Code	TA3-SER-ENV-01
Data approved	December 2009
IFI	EIB

WBIF Support

Pre-feasibility study + Conceptual design

Finances

WBIF grant	€ 300,000
Loan estimate	€ 20,000,000
Total investment estimate	€ 75,200,000

The Danube in Novi Sad

The investments will target schemes included in a medium to long-term investment programme that will contribute to the regional development of Serbia and to the improvement of the water system of Novi Sad municipality. The investment programme will help improve the quality of the public water facilities and prepare for major investments in wastewater treatment in the future.

The project will bring very significant benefits to the immediate inhabitants of Novi Sad and its surroundings and to the much wider region with pollution being curtailed from discharge into the Danube. As well as the health and environmental benefits the improvement and upgrading of the water and wastewater system forms a pre-condition for the continuing social and economic development in the city, and a pre-requisite for improving its attractiveness to investors. It is estimated that at least the 350,000 inhabitants of Novi Sad and wider area will be affected positively by these investments.

The broader significance of the project is captured by Serbia participation in the Danube's strategic framework. The programme conforms to the Joint Overall Strategy for the Danube Region, and the Water Master Plan of the Republic of Serbia (2002). In 2003, Serbia became a member of International Commission for the Protection of the Danube River (ICPDR) and at the same time ratified the Convention on Cooperation for the Protection and Sustainable Use of Danube River. In December 2009, the Danube River Basin Management Plan was adopted with the respective measures, obliging Member States to realize the planned measures by 2015. Following this goal, during May 2010, Serbia adopted a new Law on Waters. This law regulates the Water Management Strategy, and protection of waters from pollution.

Serbia
Environment Sector

Helping with wastewater in Subotica

The City of Subotica, in the far north of Serbia on the Hungarian border, and its surrounding areas are facing difficulties with its existing wastewater treatment plant (WWTP). It suffers with the vagaries of the weather: high rainfall raises the groundwater which aggravates septic tanks and causes overflows leading to dangers of epidemics; by contrast, low flows to the WWTP in the summer cause significant problems with management of the facility as the system dries out. The current provision is also very limited: only 40 % of inhabitants of Subotica are covered by the sewerage system network.

This WBIF supported project will assist the construction of collectors to make better use of the capacity of the existing WWTP and provide support for the project preparation, tendering procedure and supervision for their construction. In addition, a feasibility study will be prepared for the construction of a sanitary landfill and a composting plant to help with the management of increasing quantities of sludge from the newly constructed WWTP. Fulfilling the project will contribute to the City of Subotica fully closing the wastewater cycle in its territory. The new system should increase coverage by connecting 60 % of the population, around 12,000 new users. An added advantage will be the mitigation of pollution into Palić Lake, one of the top five tourist destinations in Serbia situated eight kilometres to the east of Subotica.

Subotica's wwpt that will benefit from additional features

The beneficiary of this project is the City of Subotica, as well as the entire region. As well as the benefit of having an adequate and environmentally sustainable sewerage system added spin-off will be socio-economic benefits including :

i) an increased number of investors in the City;

ii) new opportunities for SME development and job creation;

iii) increased property value;

iv) decreased discrepancy and inequalities among the citizens residing and working in different areas of Subotica;

v) prevention of outflow of citizens to other cities with more developed basic infrastructure;

vi) reduction of costs for refurbishment and reconstruction of houses and buildings due to landslide occurrences related to the sewage system.

The overall value of the project is estimated to be EUR 24.6 million financed through a EUR 11 million loan from the EBRD, plus a beneficiary contribution and the WBIF investment grant of just over EUR 2 million.

Fulfilling the project will see the environmental and social benefits of sustainable management and disposal of sludge, which complement the environmental benefits of treating wastewater discharges to comply with the Serbian and EU regulations. The investment supports the National Programme for Environmental Protection 2010-2019, General Plan Subotica - Palić 2020, Multi-annual Indicative Planning Document for Serbia (2011-2013), and the Needs of the Republic of Serbia for International Assistance in the period 2011-2013.

Key Facts

Title	Construction of collectors II & VII and water well in Subotica and preparation of technical documents for sludge management system
Code	WB6-SER-ENV-03
Data approved	December 2011
IFI	EBRD

WBIF Support

Feasibility study + Assistance with tendering + Investment grant

Finances

WBIF grant	€ 2,040,000
Loan estimate	€ 11,000,000
Total investment estimate	€ 24,600,000

Serbia
Social Sector

Assisting small scale municipal infrastructure facilities

This project focused on creating the systems for advancing finance to small scale municipal infrastructure across Serbia. On the basis of an already agreed EIB loan targeting such small scale projects such as local roads and transport networks, social and health facilities, education and cultural and historical heritage centres, WBIF support was given to the Ministry of National Investments and Plans (MNIP) for assistance to project management and administrative capacity building.

Following the establishment of a project management unit (PMU) as a structure within the MNIP, the WBIF technical assistance team provided support in all tasks required in the finance contract between the MNIP and the EIB. This EIB loan provides resources for Serbia's municipalities to establish, replace and / or upgrade small scale infrastructure at the local level. Applications for money were made by individual municipalities with the scheme managed by the MNIP.

Supported tasks included:

i) the elaboration of all documents required by the EIB to approve allocation requests submitted by MNIP, and the disbursement of the loan during the implementation of the approved projects;

Facility for municipal infrastructure

ii) establishing a dedicated and specific financial data base, having as main goal the actual follow up of all on-going projects;

iii) establishing filing systems, including a systematic review of all procurement practices within the MNIP in order to achieve a fair, competitive and transparent tendering and contracting procedure;

iv) granting the compliance recognition of the selected projects with the main environment regulations issued by the EU; and

v) supporting the PMU to monitor the technical and financil follow up of the projects during the implementation phase.

Help was also given to establish PMU working methodologies and proceedings between the PMU and the project implementation units based in the participating Municipalities.

It is estimated that at least 500,000 inhabitants will be affected by these investments and the beneficiary institutions are municipalities, towns and cities, public utility companies and other public institutions. The EIB loan amounts to EUR 75 million.

The WBIF support acted as a catalyst to both formally create the PMU and to assist with the development of standard procedures as required under the project. The government developed the concept of a national investment plan to support beneficiaries which are entities operating in the communal sector (PUCs) and / or with other public services.

Key Facts

Title	Municipal & regional infrastructure
Code	TA2-SER-SOC-04
Date approved	March 2009
IFI	EIB

WBIF Support

Capacity building + Technical and management assistance

Finances

WBIF grant	€ 375,000
Loan estimate	€ 75,000,000
Total investment estimate	€ 150,000,000

Serbia
Social Sector

Improved modern judiciary buildings in Belgrade

The Government of Serbia has embarked on a National Judiciary Reform Strategy, which includes the upgrading and improvement of the physical judiciary buildings and facilities. The project will assist with country's EU integration and association. Focus will be placed on the implementation and further development of the Judiciary Reform Strategy, which aims at ensuring independence, efficiency, effectiveness and accountability of the judiciary system, and on the fight against corruption and organised crime.

The project concerns a programme of priority sub-projects throughout Serbia. The three key sub-projects, to be financed from an EIB loan, are located in Belgrade and have been supported under the WBIF through four sequential grants.

The judiciary investments in Belgrade are interconnected and aim at bringing the judiciary buildings up to adequate and modern standards and requirements which shall lead to a better and more secure functioning of the courts. In addition, the investments will reduce long-term operational costs. Given the interconnectivity of the sub-projects the project is highly complex.

Palace of Justice (Belgrade High Court)

In the initial phase in 2009, a feasibility study was carried out to assist preparing the project. In addition, a brief pre-feasibility study helped getting first information on the upgrading needs for the sub-projects in Belgrade. The first WBIF technical assistance concerned: i) the preliminary and detailed design for the prosecutor's offices attached to the Special Court in Ustanička Street, and ii) the preliminary and detailed design for a new building to accommodate the prosecutors from the Belgrade High Court. In addition tender documentation for construction and equipment were prepared. Furthermore support was given to the project implementation unit (PIU) created at the MoJ and the further development of the PIU's role in the investment programme's implementation.

Second WBIF funding was approved in December 2011 to further support the project's progress in the overall project cycle: it comprised:

i) the preliminary and detailed design for the reconstruction and upgrading of the Belgrade High Court building 'Palace of Justice' and

ii) continuing support to the PIU.

In summer 2012 the MoJ had to revise its investment programme due to major Government decision. WBIF implemented a feasibility study for the new sub-project in Belgrade, the conversion and refurbishment of the Katanićeva Street building. In June 2013, a third WBIF grant was approved that concerns: i) support to the PIU at the MoJ and ii) as supervision of works for the reconstruction and upgrading of the Belgrade High Court, the Palace of Justice.

In summer 2014 a fourth WBIF assignment has been approved which concerns the supervision of works of the sub-project in Katanićeva street and PIU support.

Key Facts

Title	Modernisation of Judiciary Facilities
Code	i. TA3-SER-SOC-02 ii. WB6-SER-SOC-08 iii. WB9-SER-SOC-01 iv. WB11-SER-SOC-01
Data approved	i. December 2009 ii. December 2011 iii. June 2013 iv. June 2014
IFI	EIB

WBIF Support

Preliminary and detailed design + Assistance with tendering + Support to PIU + Supervision of works

Finances

WBIF grant	i. € 720,000 ii. € 1,000,000 iii. € 800,000 iv. € 380,000
Loan estimate	i. € 41,000,000
Total investment estimate	i. € 84,000,000

Serbia
Environment Sector

R & D facilities to enhance knowledge capacity and scientific excellence

The Government of Serbia made a strategic decision to place much emphasis on developing its high level knowledge based education facilities and research capacity as a key driver for economic growth. WBIF embraced this initiative together with the EIB and supports a project made up of three Components:

- *Component A:* Petnica Science Centre, with support assisting with a review of the feasibility study. A main design for works, technical specifications for equipment and furnishings, and a procurement plan;
- *Component B:* Zvezdara Technology Park, with support for updating the feasibility study, the main design, bill of quantities and procurement plan; and
- *Component C:* Centre for promotion of science in Belgrade with support for a prefeasibility study, the preparation of a design brief and regulations for international architectural competition.

The direct outputs of the project are:

- at Petnica Science, the construction and equipping of i) a new dormitory for 170 beds for students and teachers; ii) a laboratory building physics, bio-sciences, and chemistry; and iii) the refurbishment of existing buildings: library, existing dormitories and restaurant. This work is completed;
- at Zvezdara Technology Park, the reconstruction of 5 buildings totalling 18,345 m^2 aiming to create an incubator area providing training for application of new technologies, transfer of new R&D results from institutes and universities to companies, or founding new companies based on R&D results; laboratories and test sites; a venture capital fund, legal and financial advice; and management training. This work is complete;
- at the Centre for promotion of Science in Belgrade, a design brief and regulations for an international architectural competition. The centre will generate a virtual process of scientific education, continuous training and a state of creation and stimulation of new jobs all leading to economic growth. The competition was launched on 15 September 2010. 232 projects were received and the winners were awarded in December 2010. The expectation is to have 200,000 visitors per year rising to 500,000 after five years. The project consist of 10,788 m^2 of various exhibition areas, laboratories, IMAX, offices and 3,000 m^2 outdoor exhibition areas. The total investment needs is EUR 58 million.

Architect's impression for the center for promotion of science in Belgrade

All three projects are planned to best internationally recognized standards, including energy conscious design, sustainability and environmental care, ease of maintenance, safety and security and full special needs access.

Key Facts

Title	Building the knowledge economy in Serbia, R&D infrastructure initiative
Code	TA3-SER-SOC-01
Data approved	December 2009
IFI	EIB

WBIF Support

Review of existing pre-feasibility and feasibility studies + Preliminary and main designs + Organisation of international architectural competition

Finances

WBIF grant	€ 600,000
Loan estimate	€ 200,000,000
Total investment estimate	€ 440,000,000

Serbia
Social Sector

New prison accommodation to European standards

The Serbian penal system includes 29 prisons holding over 8,500 prisoners and faces many problems after years of under-investment and out-dated legislation. The prisoner rate per population is high in Serbia compared to other countries in the region partly because there has been minimal use of non-custodial sentences. This has led to overcrowding and increased costs. Prisoners are not held in conditions in line with international and human rights' standards due to poor infrastructure and facilities, limited opportunities for rehabilitation programs and limited staff training.

The Serbian government has embarked on a programme of judiciary facilities' upgrading which includes prisons. Serbia's loan applications for the partial financing of the construction and equipping of the Pančevo (EUR 18 million) and Kragujevac (EUR 17 million) prison facilities were approved by CEB in January 2012 and March 2012. Signature of loan agreements is expected before the end of 2014.

Key Facts

Title	i Modernisation of prison facilities/ providing a humane and safe prison system ii. Extended TA for improvement of prison facilities iii. Prisons facilities extended TA
Code	i. TA3-SER-SOC-03 ii. WB8-SER-SOC-13 iii. WB11-SER-SOC-02
Data approved	i. December 2009 ii. December 2012 iii. June 2014
IFI	CEB

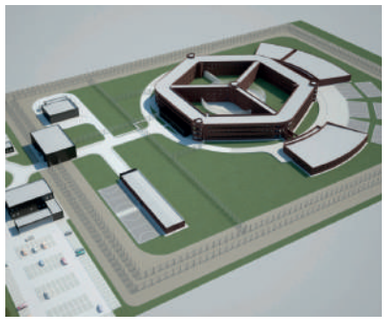
WBIF Support

Operational plan + Feasibility report + Preliminary and main designs + Assistance with tendering

Finances

WBIF grant	i. € 700,000 ii. € 700,000 iii. €110,000
Loan estimate	i. € 18,000,000 ii € 17,000,000
Total investment estimate	i. € 31,000,000 ii. € 29,000,000

Preliminary design for Pančevo Prison complex



The two new prisons will have the following characteristics:

- Pančevo: 500 adult males, of which 200 pre-trial detainees and 300 convicted prisoners (total built-up area of 25,000 m^2);
- Kragujevac: 400 inmates, who will be serving sentences of five or more years, together with a secure protected witness unit for about 20 persons (total built-up area of 21,500 m^2).

Technical assistance funded by the WBIF has already supported the projects' preparatory activities: elaboration of the feasibility report and operational plans for each prison; launch of a call for proposals and a competition for design ideas; provision of the complete design documentation needed for the execution of construction works; organisation of study tours and capacity building activities for staff members of the Ministry of Justice to introduce them to contemporary EU prison practices, and rules and recommendations for prison construction. A WBIF grant was also approved to cover the technical control of the local main design and assist in preparation of tender dossiers for works for the two prisons.

Construction works are expected to start in the spring 2015 for Pančevo and during summer 2015 for Kragujevac. Construction works and prisons' equipping will span the 2015 - 19 period. For the supervision of works and prisons' equipping to completion, an additional grant was requested and was approved in December 2014.

The new Pančevo and Kragujevac prisons will be built according to EPR recommendations and will: provide accommodation with two prisoners per cell; eliminate conditions which infringe prisoners' human rights; allow prisoners to engage in work activities and vocational training; and space for socialising.

Serbia
Social Sector

Schools' modernisation programme

Low levels of human capital - basically knowledge and ability - and poor education infrastructure have been identified as one of the major constraints to growth in Serbia. Serbia has not given education a high priority, reflected in the relatively low GPD allocation of 3.4 %; well below EU levels of 5.2 %. If this gap is maintained it is clear that Serbia will be at a comparative disadvantage when it comes to high quality value adding jobs and competing in increasingly global environment.

Rigid resource allocation mechanisms – schools and colleges are not easily (re-) developed - and insufficient funding from both national and local governments are exacerbating the situation. Added to this is a lack of involvement of the business sector that means courses are not responding to real relevant need.

Responding to this poor state of affairs, the Serbian government instigated the School Modernisation Programme (2010 - 2014). This aims at improving the quality of learning conditions for students at all levels of pre-university education, increasing equity in the education system and contributing to a more efficient allocation and investment in physical infrastructure. The programme consists of three components, with components 1 and 3 focusing on renewal and expansion of school infrastructure and building of new schools while the component 2 supports the strategic development of the Serbian education system through technical assistance.

New primary school Ivo Andrić, Niš

To aid this initiative WBIF provided a grant to assist the Ministry of Education and Science in preparing an implementation plan for the Education Sector Strategy, which lays out the vision for education and how to achieve the country's education development goals. Additionally, support is provided for the development and implementation of an education management and informational system. The project was also tasked with improving the investment decision making process in Serbia, relating to large-scale education infrastructure.

The value of the overall programme is estimated at EUR 100 million, co-financed by an EIB loan of EUR 50 million.

The project will contribute to the increase of enrolments in secondary education, and improve the quality of education, leading to more and better graduates entering the labour market with the required skills to be productive. As well as contributing to increasing growth and productivity, the project will also contribute, through better access to education for all, to reducing poverty.

Key Facts

Title	Schools Modernisation Programme
Code	WB4-SER-SOC-05
Date approved	June 2010
IFI	EIB

WBIF Support

Technical and management assistance + Identification of investment + Interest rate subsidy

Finances

WBIF grant	€ 800,000
Loan estimate	€ 50,000,000
Total investment estimate	€ 100,000,000

Serbia
Social Sector

Assuring inclusive access to education

Getting children from all backgrounds to attend school is an important issue across the Balkans. The challenge is particularly acute for children from minority and vulnerable sectors that, in the past, have at worst been purposely excluded or, less insensitively, just neglected. To apply a more inclusive policy, the Serbian Ministry of Education and Science (MoES) is undertaking a range of activities to establish ways for ensuring additional support for disabled children, children with learning difficulties, and children from families from challenging socio-economic backgrounds.

To ensure real results are being made the MoES needs to develop and implement a system for regular monitoring and evaluation (M&E) of inclusive practices. To assist the MoES the WBIF is providing a grant to design a quality assurance system to monitor and evaluate their inclusive education policy that can be used to support the daily work of education professionals at the school and municipal level. The M&E system will also assist with further inclusion-related policies and their implementation. In particular, the technical assistance will assist the MoEs with:

- Performing a needs assessment of the current situation related to the work of Inter-Sectoral Commissions at municipal level;

Inclusive education

- Designing the inclusion related tools for the relevant institutional actors, such as the MoES and its regional school administrations (pedagogical advisors), the Inter - sectoral committees at municipal level, the Institute of Quality Education and Evaluation, education professionals and other education stakeholders, including the schools;
- Developing standards and procedures for inclusion related M&E in regular external and school self evaluation, which will also involve other relevant institutional actors;
- Developing the training packages for capacity building of the relevant institutional actors in the education sector at all levels;
- Piloting the training packages for relevant institutional actors in the education sector; as well as
- Cross country learning and knowledge sharing on M&E of inclusive education.

The project introduces a system wide intervention where all of the pre-university students are the direct beneficiaries with particular benefits from those children who, under old practices, would have missed out of a good education. The project, classed as a WBIF “sector development project”, is designed to be an exemplar that can be copied and replicated in other countries in the region.

The outlined proposal is founded on the provisions of the 2009 Law on the Foundations of the Education System, and will be made part of the quality framework for external evaluation of schools. The WBIF technical assistance and capacity building should provide the MoES with the knowledge and means to ensure effective project implementation and its longer term sustainability.

Key Facts

Title	Development of a Concept for Monitoring and Evaluation of the Inclusive Practices in the Education System - Serbian example
Code	WB6-SER-SOC-09
Date approved	December 2011
IFI	WB

WBIF Support

Quality assurance monitoring and evaluation system + Training package development

Finances

WBIF grant	€ 350,000
Loan estimate	-
Total investment estimate	-

Serbia
Social Sector

Rehousing Kraljevo's earthquake homeless

On 3 November 2010 Serbia suffered an earthquake which caused server suffering for the city of Kraljevo. The quake, measuring 5.4 on the Richter scale, caused considerable disruption: the Damage Assessment Committee registered 15,333 individual houses with varying degrees of damage, some 800 irreparably destroyed and around 1,800 with serious structural damage. Additionally, 211 condominium buildings were damaged citywide, 33 with major structural damage and 188 with less serious damage. This WBIF supported project aims to provide compensatory permanent housing solutions to 360 families whose dwellings were so affected that they need alternative arrangements.

To address the dispossessed families' needs, Kraljevo Municipality propose a project, the "Pic Mala" settlement, which focuses on an urban housing estate of 3.4 ha, located 1.5 km away from the city centre and originally build to house factory workers in the 1950s. The project foresees the following activities:

- construction of 360 housing units in 4 housing buildings to be used for re-housing 360 homeowners and social housing tenants in lower-grade, small- to medium-sized apartments,

Earthquake damaged block to be replaced

- demolition of 21 houses which are no longer safe for living and do not meet decent housing standards,
- landscaping and infrastructure works for the entire estate.

The houses will be constructed according to all the contemporary design, anti-seismic, energy efficiency, accessibility and space-use regulations and norms, which will provide households with more spacious, safer, better equipped and more comfortable apartments. The average size of the apartments is planned to be of 45 m². Householder will be encouraged to actively participate in all the stages of the project's design and implementation.

The WBIF support will assist a project management unit (PMU, MHA Kraljevo), the local government of Kraljevo, Republic Housing Agency (RHA) and the Ministry for Construction and Urban Planning (MCUP) during the preparatory and implementation project phases. The most important inputs are expected in the preparatory phase during which the basic structure for project implementation will be established together with gathering all relevant data. The technical assistance for the implementation phase will support the PMU and LG in the technical aspects, engineering, designs, environmental matters, for development.

The technical assistance will enhance the beneficiary's capacity during project preparation and implementation phases to ensure it is in line with technical aspects, environmental and social standards, procurement, financial and economic profitability as well as legal aspects. The implementation and management of the project will be placed under the responsibility of the City of Kraljevo. In view of the complex social and technical aspects of the project, strong management and a significant level of multiple-profession support will be required at the earliest stage to prepare and carry out the operation, in particular to co-ordinate the stakeholders and participating actors, and report to CEB.

Key Facts

Title	Post-earthquake housing reconstruction in Kraljevo
Code	WB10-SER-SOC-01
Date approved	December 2013
IFI	CEB

WBIF Support

Technical and management assistance

Finances

WBIF grant	€ 880,000
Loan estimate	€ 8,000,000
Total investment estimate	€ 14,200,000

Serbia
Transport Sector

Niš to Preševo rail line - rehabilitation of a national main line and international transport corridor

Serbia's railways, like all the region's railways, have suffered from a lack of investment and neglect over the last few decades. The result is a network in poor shape that is ill prepared to offer the customer, whether passenger or freight supplier, a good service.

WBIF is responding to these deficiencies through a number of projects with grant support. This particular project deals with a railway line over 100 years old in such a poor state that train speeds are severely restricted. There has been no significant repair or development work done for more than 30 years beyond a minimum attention to keep the track open. The line is part of a pan- European transport corridor, Corridor X, connecting Europe to Serbia, the former Yugoslav Republic of Macedonia and Greece. The track under study runs for 160km between Trupale, near Niš, and Preševo on Serbia's southern border.

This line is an extremely important connection between South European countries and Europe. A reconstruction of the line would enable higher quality passenger and freight services, provide interoperability of the line along Corridor X, enhance traffic safety and bring improvements in carrying capacity of the line at the most critical sections.

The study for developing the track has been divided into three phases as follows:

The existing track; note speed restriction

- Phase I - Preliminary investigation that is sub-divided into two Steps. Step 1 identifies and analyses the development strategy options for the modernisation of the line and identifies the optimal strategy; Step 2 analyses this chosen strategy from the perspectives of technological, economic and financial evaluation.
- Phase II – Preparation of a Feasibility Study and Environmental Impact Assessment.
- Phase III – Preparation of documents for executing the works.

WBIF has supported the implementation of Phase I which has been completed.

In an effort to accelerate the reorganization process of Serbian Railways, the Government adopted a new founding act of the Joint Stock Company "Serbian Railways" in May 2011. The proposed future organizational structure consists of an Infrastructure Manager, Passenger transport services, Cargo transport services and a Company for Assets and Holding. The effects of adopting a new organizational structure will lead to the separation of infrastructure from transport operations and a complete separation of their accounting, which is in accordance with Directive 2001/14/EC. Serbia has yet to establish an independent accident investigation body.

Key Facts

Title	Railway construction of the line Niš to the former Yugoslav Republic of Macedonia Republic border (Corridor X)
Code	TA-SER-15
Data approved	June 2008
IFI	EIB

WBIF Support

Identification of optimal development strategy

Finances

WBIF grant	€ 500,000
Loan estimate	-
Total investment estimate	€ 263,000,000

Serbia
Transport Sector

Belgrade urban transport renewal

The City of Belgrade is the center of economic and cultural activities in Serbia and the wider region. The capacity and condition of the existing transportation system is close to saturation resulting in congestion and poor service provision. This is expected to worsen over time, given the rising urban population and constant increase in the number of registered cars in Belgrade, as well as the growing mobility demands of the population.

WBIF are providing a grant for a project that has the overall dual objective to i) provide more capacity; and ii) enhance the quality of urban public transport. This should help attract more passengers to use more sustainable modes of transport. This project is a continuation of an earlier phase, Phase I, which ran between 2004 and 2012 and was financed by the EIB. Phase I was assisted by a WBIF Municipal Windows capital investment co-finance grant of EUR 6 million; the work focused on the main transport corridors in the city, covering 17.5 km, which were rehabilitated into modern streets with revitalized tramway networks. This second phase will further improve road and tram infrastructure, assisting in traffic management, as well as improve the City's ability to manage and protect the street assets once these have been modernized. The priorities include tram track reconstruction and new track maintenance along the main city streets in Old Belgrade and New Belgrade with general street and square refurbishment and reconstruction, as well as traffic management installation on certain sections.

Impression of tram in new central position on Vojvode Stepe Street

The project is supported by a EUR 57 million loan provided by EBRD, while the remainder of the global Urban Renewal Programme II will be financed in by the City of Belgrade and other sources. The WBIF technical assistance will aid with:

i) an update to the City's transport master plan (including a Strategic Environmental Assessment in conformity with EU Directives);

ii) preparation for eligible investment projects (including feasibility studies and detailed design of the eligible investment components); and

iii) targeted capacity building and implementation support for a new integrated Project Management Unit.

The direct beneficiary is the City of Belgrade, and its growing population of nearly two million. The benefit from the improved public transport performance of Belgrade's main streets and roads include reduced congestion levels and improved manner in which roads and streets are managed to maximise economic benefits. Additionally, the project will promote new energy efficient technology that goes significantly beyond the current standards.

Key Facts

Title	i. Reconstruction of urban transport system (tram & road) in Belgrade ii. Belgrade Road and Tram Network Upgrade – Phase II
Code	i. MW-SER-TRA-EIB-03 ii. WB6-SER-TRA-10
Data approved	i. March 2009 ii. December 2011
IFI	EIB and EBRD

WBIF Support

Investment grant + Update master plan + Prioritised investment projects + Technical and management assistance

Finances

WBIF grant	i. € 6,000,000 ii. € 2,350,000
Loan estimate	i. € 15,000,000 ii. €114,000,000
Total investment estimate	i. € 32,000,000 ii. € 140,100,000

Serbia
Transport Sector

Major upgrade to key arterial motorway

Transport Corridor X, a key Pan-European arterial route running north-south, passes through Austria, Slovenia, Croatia, Serbia, the former Yugoslav Republic of Macedonia and Greece, and is the backbone of the TEN-T network (the European Union's north-south, east-west transport connection strategy) in the Balkan peninsula. It forms a part of the south eastern axis of the extensions of the TEN-T network to neighbouring countries. Aimed at developing quality infrastructure in Europe, this project therefore has a clear strategic dimension from the regional point of view, and has been confirmed as one of the key priorities in the core road network defined by the South East Europe Transport Observatory (SEETO).

The realisation of the project will allow completion of the main missing link on Corridor X Serbia on the route from Belgrade to Thessaloniki and Sofia, namely 2 sections:

1) A 98 km-long section on E80 between Niš and the Serbian border with Bulgaria at Dimitrovgrad (Corridor Xc);
2) A 75 km-long section on E75 between Grabovnica and Levosoje (Corridor X) leading to the border with the former Yugoslav Republic of Macedonia.

As such, the project is strategically important in the region, serving international and local traffic demand and improving one of the few remaining bottlenecks on the 1,500 km long Corridor. Time savings, reduced accidents and modest vehicle operating cost saving will contribute to the many economic benefits of this project. With improved links to the broader geographic area the benefits will be felt by locals and international travellers.

Construction is ongoing

The total estimated cost of the project is EUR 1,570 million, split between the two sections with EUR 970 million for the E75 section and EUR 600 million for the E80 section. Out of the total project cost, EUR 30 million is estimated for project preparation, management of construction and work supervision, covering both sections of E75 and E80. WBIF is providing EUR 4.5 million as a grant for project management activities and special studies. This includes EUR 3 million (with EIB as lead IFI) for geotechnical and structural expertise, detailed design, quantity surveying and traffic management systems, and EUR 1.5 million (with EBRD as lead IFI). In addition, this technical assistance is coordinated with the World Bank, who is also a co- financier for the project. This neatly brings three key WBIF IFI players together on this project.

The project is consistent with the Serbian National Plan for Road and Rail Infrastructure Development 2008-2012, which identifies the completion of the road portion of Corridor X as a first priority. Also, improvements on the TEN-T network are an important part of the Lisbon Strategy for competitiveness and employment in Europe and part of the Europe 2020 strategy.

Key Facts

Title	Corridor X Serbia
Code	WB1-SER-TRA-01
Data approved	December 2009
IFI	EIB

WBIF Support

Preliminary and detailed design + Supervision of works + Technical and management assistance

Finances

WBIF grant	€ 4,500,000
Loan estimate	€ 1,100,000,000
Total investment estimate	€ 1,570,000,000

Serbia
Transport Sector

Creating the framework and strategy for Serbia's railways

Serbia's geographical position makes it a regional transit hub, placing significant importance on the rail transport system for both goods and passengers. Unfortunately, years of underinvestment and poor maintenance have left the rail system in a deficient condition. This results in an underperforming service to the detriment of rail passengers and freight users that consequently undercuts the prospect of trade, industry and tourism flourishing. As Europe moves away from national operator models towards the separation of infrastructure and operator functions, the quality and reliability of the track infrastructure takes on an ever-increasing importance. The Serbian Directorate for Railways is still not fully carrying out its role as a regulatory body, so the separation of infrastructure management from provision of transport services is still pending.

To help remedy this poor state, WBIF are assisting with a grant to prepare the action plan for implementing the railway component of the Serbian General Transport Master Plan (GTMP) and to provide the related support to the Ministry of Transport for use of the transport model for prioritizing railway investments. In particular, the project assists the Ministry of Infrastructure and Railways of Serbia in:

Serbia's railways

i) revising the strategy for the development of Rail, Road, Water, Air and Inter-modal Transport in the Republic of Serbia (2008-2015);

ii) providing simulation of transport models;

iii) organizing training for selected members of respective institutions; and

iv) development of a corresponding project pipeline.

Additionally, the project provides capacity building to establish an effective coordination among involved Institutions in Serbia and to revise the legislative framework accordingly.

It is crucial for Serbian railways to increase their attractiveness in the region and regain market shares lost to other transport modes. The prioritised investments to be realised in Serbian railways, as an outcome of the technical assistance, will help prevent further deterioration of infrastructure assets beyond the point of recovery while increasing capacity and efficiency of the priority lines. The main beneficiaries of the project are all transporters and travellers through the SEE region.

Serbia is participating actively in the implementation of the 2004 Memorandum of Understanding on the development of the SEE Core Regional Transport Network, and in the SEE Transport Observatory (SEETO), particularly by updating and implementing the Multi-annual Plan 2009-2013. With the aim of satisfying European standards, market requirements and competitive performance, the Serbian EU Accession Strategy emphasizes the necessity to stimulate the development of railway infrastructure to enable faster fulfilment of accession requirements in the transport sector - making this project of strategic relevance.

See also the related project dealing with track and rolling stock upgrading (WB4-SER-TRA-04).

Key Facts

Title	Serbian Rail Infrastructure
Code	WB4-SER-TRA-06
Date approved	June 2010
IFI	EIB

WBIF Support

Technical and management support

Finances

WBIF grant	€ 800,000
Loan estimate	-
Total investment estimate	-

Serbia
Transport Sector

Railway upgrading for both domestic and international traffic

Having a good transport sector is very important for Serbia given the country's geographical position as a key transit hub for both goods and passengers. The country is crossed by the Pan-European Transport Corridor (Europe's arterial network X and important international routes (SEETO route 4, 10 and 11). Improvements in the railway sector, from renewal or rehabilitation of its infrastructure and rolling stock, will bring about benefits to the Serbian economy. This WBIF supported project, which includes improvements in the railway connections to Croatia, Hungary and Bulgaria, will contribute to the integration of Serbia with the neighbouring countries and with the European Union. Technical assistance will support the implementation of the project co-financed by EIB and EBRD loans.

The key rationale for the implementation of this project is the advanced state of deterioration of many stretches along Corridor X, caused by years of underinvestment resulting in impediments to a reasonably efficient rail service and eventually resulting in high maintenance costs. Structures are near the end of their physical life and threaten safety. Speed limitations have to be imposed: it is common for stretches designed for speeds of 80 to 120 km/h to be restricted to actual speeds of 30 to 40 km/h. This is most unsatisfactory, inefficient and costly to the economy.

Key Facts

Title	TA for Railways Rehabilitation II (operational component)
Code	WB4-SER-TRA-04
Data approved	June 2010
IFI	EIB and EBRD

WBIF Support

Technical and management assistance

Finances

WBIF grant	€ 1,000,000
Loan estimate	€ 140,000,000
Total investment estimate	€ 161,000,000

Serbia's new trains

The project comprises track rehabilitation and modernisation of rolling stock. EIB investment funding covers rehabilitation of three sections of the Serbian rail network which are in urgent need of improvement to remove bottlenecks on the system. The sections for improvement all lie on Corridor X, and total 93 km. The works involve primarily track overhaul and signalling renewal; some 7 km requires more drastic work with construction on a new alignment and some short single-track sections will be doubled to increase capacity. The EBRD investment funding enables up to 2,000 new freight wagons to be purchased.

The main benefits of this project can be summarized as: reduced infrastructure and rolling stock maintenance costs; reduced travelling time; improved rolling stock utilization and savings in environmental, accident and congestion costs thanks to expected modal shift from competing roads. The main beneficiaries include private and commercial customers from both domestic and international origins.

The project is consistent with the Serbian National Plan for Road/Rail Infrastructure Development 2008-2012, and the National IPA Programme. Being on the main backbone of the TEN T network in the Balkan peninsula, the project has an obvious strategic dimension from the regional point of view, which is the reason why it has been confirmed as one of the key priorities in the core transport network defined by the South East Europe Transport Observatory (SEETO). The project's promoter, Serbia Railways, has capacity and ability to effectively implement and maintain the project; WBIF's support will add value to their capability.

See also the related project dealing Serbian Railway's master plan (WB4-SER-TRA-06).

Serbia
Transport Sector

Removing railway bottlenecks

Serbia has approximately 3,800 kilometres of railway line at a density of 49.2 km / 1,000 km^2. However, only about one third of Serbia's railway network is electrified and only 272 km are double track. On 60 % of the line length the operational speed is less than 60 km/h and on 39 % the load capacity is less than 18 t/axle. As more than 50 % of transport operations in and through Serbia are made on the Pan-European Corridor X, but at inefficient speeds and loads, Serbia has given priority to its rehabilitation.

Corridor X runs between Salzburg in Austria and Thessaloniki in Greece, passing through Austria, Slovenia, Croatia, Serbia, the former Yugoslav Republic of Macedonia and Greece; its secondary lines branch into Hungary, Romania and Bulgaria. It thus constitutes an important transport route that could sustainably connect Western to Central and South-Eastern Europe. Serbian Railways, the state company responsible for the rehabilitation programme, has identified several bottlenecks along Corridor X route through Serbia, for which they are in the process of either planning or implementing rehabilitation and / or expansion works. The Stalać-Djunis section constitutes one such bottleneck. It is a 17 km long single-track line,

Đunis railway station

the only segment that is not double track on the railway line between Belgrade and Niš, which only allows for a maximum axle load of 22.5 t and a maximum speed of 65 km/h (Stalać-Braljina – km 176+311 – km 186+487) and respectively 85 km/h (Braljina-Đunis – km 186+487 – km 194+940). For the purpose of investigating further the feasibility of planned improvements, including the preparation of preliminary designs for the upgrades to the railway track, Serbian Railways successfully applied to the WBIF for a grant to cover project preparation activities and thus potentially facilitate a EUR 105 million loan with the European Bank for Reconstruction and Development. The feasibility study has only just started and it should be complete within 20 months.

Once the Stalać - Djunis section becomes double track and fully upgraded, the entire railway Corridor X through Serbia, from the Croatian border (Sid station) through Belgrade to Niš, would become double-track. Consequently, the trains would be able to travel at a maximum speed of 160 km/h on a route of around 50 km long, between Jagodina and Djunis, thus increasing the capacity of the track from 102 trains to 213 pairs of trains. The planned improvements will also contribute to decreasing the rolling stock maintenance expenditure, as well as overall environmental, maintenance and accident costs now incurred to Serbian Railways and implicitly to the Serbian central budget. And last but not least, they would improve Serbian railways efficiency and competitiveness on the freight and passenger market in the region and hence create the prospect for its socio-economic development.

Key Facts

Title	Reconstruction & modernization of existing railway track & construction of a second track on Belgrade - Niš, Stalać - Đuniš section
Code	WB8-SER-TRA-14
Date approved	December 2012
IFI	EBRD

WBIF Support

Feasibility study + Environmental impact analysis + Preliminary design

Finances

WBIF grant	€ 1,500,000
Loan estimate	€ 105,550,000
Total investment estimate	€ 107,660,000

Serbia
Transport Sector

Building links through road construction

The integration of the Serbian transport network with the SEETO (South East Europe transport Observatory, the regional body promoting cooperation and development) core regional transport network is recognized as a priority key policy objective for the economic and social development of the country. Serbia is crossed by Corridor X, which through its branches Xb (Belgrade – Budapest), Xc (Niš – Sofia) and X (Niš – FYROM) belongs to the SEETO regional Core network and together represent the most significant road and railway routes in Serbia. On Corridor X in Serbia, there are 792 km of roads and 760 km of railway lines.

Route 7, being one of the main east-west road corridors through Serbia, not only connects Niš and Pristina, but also represents the main connection with Corridor IV (which mainly crosses Bulgaria and Romania) and Corridor X with Route 6 (Skopje-Pristina) and Route 2b (Sarajevo-Podgorica-Vlora). This motorway section of E-80 belongs to Trans-European Motorway network (TEM). SEETO Route 7 is in addition to Corridor Xc, part of European road E-80 and included in the priority project list of the SEETO Five Year Multi Annual Plan 2014-2018 as part of the South-East Europe Core Regional Transport Network Development Plan, together with the link from Pristina to Merdare which is also benefitting from WBIF support (see WB11-KOS-TRA-02). With implementation of this plan the motorway on Route 7 will connect Tirana-Pristina- Niš providing an optimal road link between Bulgaria, Serbia, Kosovo and Albania.

Road arives in Merdare

The upgraded road will bring benefits in terms of:

- reduction of travel times
- reduction of the road infrastructure maintenance costs
- better connection in Western Balkan Region
- cost efficiency regarding environmental protection, accidents and congestion at the Merdare border crossing and urban area near the existing road in comparison to competitive roads
- fostering development of the Western Balkans through improved connections

In addition to the infrastructure development, the construction of the highway will be a good signal and stimulus for the future for the people in this impoverished region. It will also contribute to the further development and cohesion of the Western Balkans Region; the latter a particualry worthy aspiration given the region's delicate recent past.

The WBIF support will provide a general design and pre-feasibility study and will include the following tasks: identification of the optimum route alignment, proposal of the geometric characteristics of the road, assessment of environmental impacts, geodetic work, geotechnical and hydrologic analysis and traffic analysis. The study work has just begun.

Key Facts

Title	Construction of Highway E-80 (Merdare to Doljevac)
Code	WB10-SER-TRA-02
Data approved	December 2013
IFI	EIB

WBIF Support

Conceptual design + Pre-feasibility study + Preliminary environmental impact assessment

Finances

WBIF grant	€ 900,000
Loan estimate	€ 320,000,000
Total investment estimate	€ 320,000,000

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Grant awards by round

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WB5-REG-SOC-01	Construction and Development of the Centre for Entrepreneurial Learning and Strengthening Competitiveness Economy (Entrepreneurial Learning)	REG	SOC	25
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WB5-REG-ENE-03	Regional Project Ionian Adriatic Pipeline	REG	ENE	14
WB5-BiH-SOC-03	Designing the Medical Faculty, Medical Research Center and secondary Medical School	BiH	SOC	69
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WB5-BiH-ENV-15	Water Leakage Reduction Plan for the Municipality of Tuzla	BiH	ENV	63
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WB6-MKD-SOC-04	Complementary funding for competition of works related to HPIs - Rehabilitation Phase I	MKD	SOC	95
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