



# CONNECTIVITY AGENDA

Co-financing of Investment Projects  
in the Western Balkans

2017



# CONNECTIVITY AGENDA

## Co-financing of Investment Projects in the Western Balkans in 2017



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European Commissioner  
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Policy and Enlargement  
Negotiations

Dear Reader,

Three years ago, the leaders of the Six Western Balkans countries – Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Kosovo\*, Montenegro and Serbia – met in Berlin to bring a new dynamism to regional cooperation. Since then, the European Commission has been working with them on concrete measures that benefit citizens throughout the region, with a focus on improving transport and energy links within the Western Balkans as well as between the region and the EU.

In 2015, we set aside up to one billion Euro in grants until 2020, from the EU's Pre-Accession Instrument, to support this 'Connectivity Agenda.' These grants will leverage EUR 4 billion in investments and create more than 45,000 jobs.

To date, including the seven new projects presented in detail in this package, we have already committed half of the EUR 1 billion pledge, giving grants for 20 infrastructure projects in the region. Works have already started or are about to start on the ground in more than five locations this year. The EU's support has already generated EUR 1.4 billion in investment, creating more than 20,000 jobs in the process.

The European Union's commitment to improving connectivity with and within the Western Balkans builds on past support given to the region: by 2014, EU had leveraged investments worth more than EUR 3 billion for infrastructure projects in the Western Balkans through EUR 660 million in grants.

Connectivity covers more than building transport and energy corridors. Cross-border infrastructures make sense if they are complemented by regional, institutional and regulatory reform measures which allow people and businesses to take full advantage of these. The WB6 leaders have agreed to implement reform measures to open markets, create a transparent regulatory framework that builds investor confidence, and remove barriers so utilities are managed effectively and efficiently. These ongoing reforms are an essential part of the countries' European Integration process and significant progress has been made over the past year. It is essential that efforts continue, adding value to the infrastructure investments supported to date.

For the past 3 years, we have worked on connecting physical infrastructure as well as transport and energy systems. At the Trieste summit, we will also open a complementing chapter on connecting markets and economies, by creating a Regional Economic Area. Our connectivity agenda also includes putting more citizens in touch with each other. In this context, we are for example supporting the regional youth cooperation office, as well as running an exchange programme among the most talented young civil servants of the region.

I am pleased to share with you the current state of the connectivity agenda. It represents significant progress made by our partners towards regional prosperity and better neighbourly relations as well as a further milestone on their path towards EU membership.

\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.

## Connectivity Agenda

Improving connectivity within the Western Balkans, as well as between the Western Balkans and the European Union, is a key factor for growth and jobs and will bring clear benefits for the region's economies and citizens. The Western Balkans Six (WB6) has made the connectivity agenda one of its highest priorities, with a special emphasis on the preparation and financing of concrete regional infrastructure investment projects, but also on the implementation of technical standards and reform measures such as aligning/simplifying border crossing procedures, railway reforms, information systems, road safety and maintenance schemes, unbundling and third party access.

The National Investment Committees (NICs) are responsible for defining and managing the prioritised Single Project Pipelines, and serve as a basis for programming of all available financing sources (including national and other donors). The European Commission will, via the Western Balkans Investment Framework (WBIF), co-finance mature energy projects from the PECIs (Projects of the Energy Community Interest) and the PMIs (Projects of Mutual Interest) as well as mature transport projects from the TEN-T (Trans-European Transport) Core Network, together with loans from Financial Institutions.



## The Western Balkans Investment Framework (WBIF)

The WBIF is a joint blending facility of the European Commission, participating Financial Institutions (FIs), bilateral donors and Western Balkans countries to deliver funding for strategic investment projects in beneficiary countries. Eligible sectors include infrastructure development within the environment, energy, transport and social sectors as well as private sector development.

The WBIF was jointly launched in December 2009 by the European Commission, together with the Council of Europe Development Bank (CEB), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB) - the partner IFIs, and the bilateral donors. KfW and the World Bank Group subsequently joined the Framework. In June 2017, the KfW became a partner organisation.

[www.wbif.eu](http://www.wbif.eu)

## JOINT PARTNERSHIP OF:



## IN COOPERATION WITH:



## BILATERAL DONORS:





## CONNECTIVITY AGENDA

### Co-financing of Investment Projects in the Western Balkans in 2017<sup>1</sup>

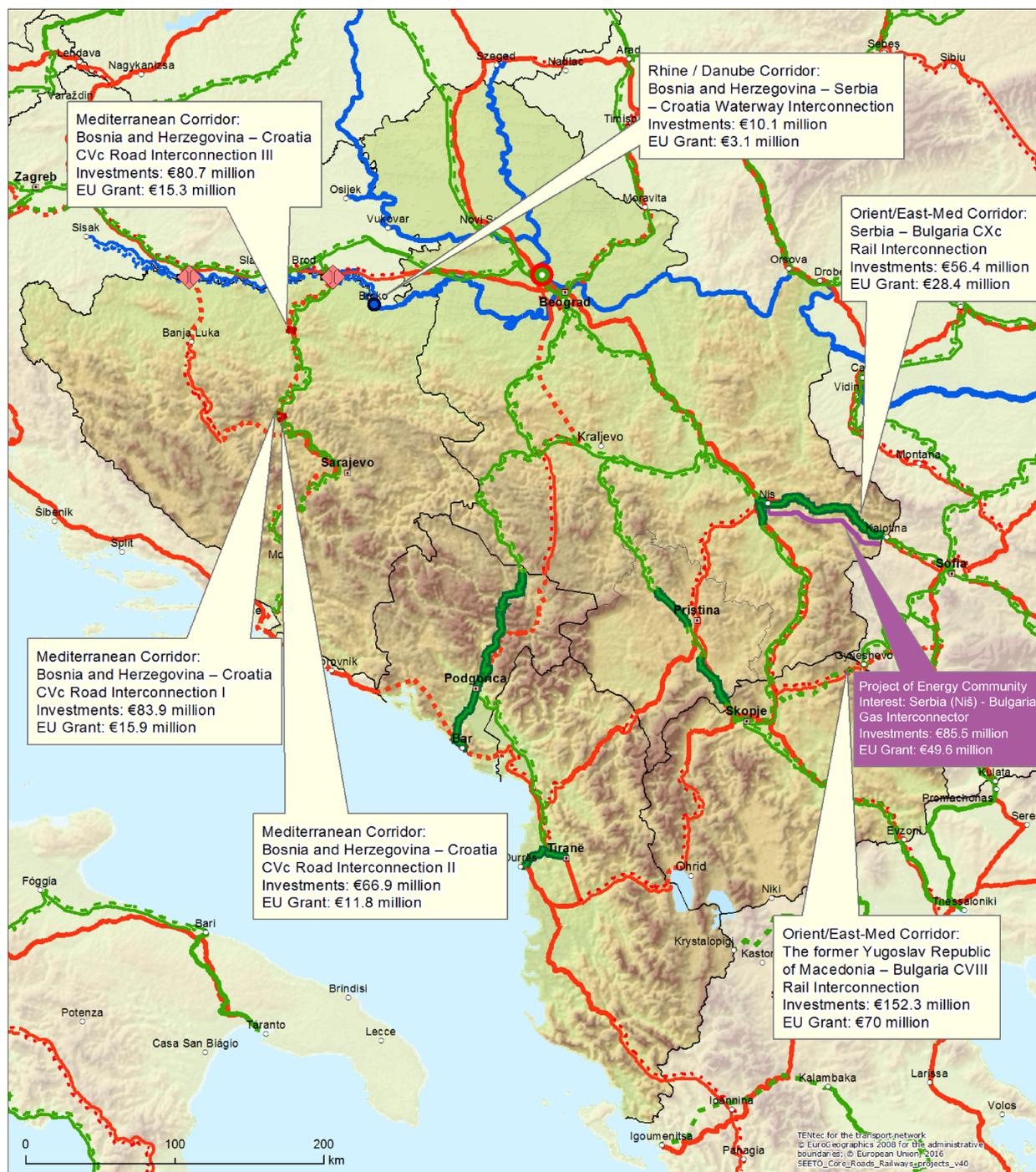
#	Reference	Beneficiary	IFI	Description / Title	Investment Leveraged (€ million)	EU Grant (€ million)	EU Grant (%)
<b>IPA 2017 Serbia</b>							
<b>ENERGY PROJECTS</b>					<b>85.5</b>	<b>49.6</b>	<b>59%</b>
1	IPA 2017/040-500.6	Serbia	n/a	Project of Energy Community Interest: Serbia (Niš) - Bulgaria Gas Interconnector	85.5	49.6	59%
<b>IPA / WBIF 2017 Co-financing</b>							
<b>TRANSPORT PROJECTS</b>					<b>450.3</b>	<b>144.5</b>	<b>30%</b>
2	WB-IG01-BIH-TRA-01a	Bosnia and Herzegovina	EIB	Mediterranean Corridor: Bosnia and Herzegovina – Croatia CVc Road Interconnection I (Ponirak – Vraca/Zenica Tunnel Segment)	83.9	15.9	19%
3	WB-IG01-BIH-TRA-01b	Bosnia and Herzegovina	EBRD	Mediterranean Corridor: Bosnia and Herzegovina – Croatia CVc Road Interconnection II (Tunnel Zenica – Donja Gračanica Segment)	66.9	11.8	18%
4	WB-IG01-BIH-TRA-03	Bosnia and Herzegovina	EBRD	Mediterranean Corridor: Bosnia and Herzegovina – Croatia CVc Road Interconnection III (Johovac Interchange – Rudanka Interchange)	80.7	15.3	19%
5	WB-IG01-BIH-TRA-04	Bosnia and Herzegovina	EBRD	Rhine / Danube Corridor: Bosnia and Herzegovina – Serbia – Croatia Waterway Interconnection (Port of Brčko) <sup>2</sup>	10.1	3.1	30%
6	WB-IG02-MKD-TRA-01	The former Yugoslav Republic of Macedonia	EBRD	Orient/East-Med Corridor: The former Yugoslav Republic of Macedonia – Bulgaria CVIII Rail Interconnection (Beljakovce – Kriva Palanka)	152.3	70	46%
7	WB-IG02-SRB-TRA-01	Serbia	EIB	Orient/East-Med Corridor: Serbia – Bulgaria CXc Rail Interconnection (Niš – Dimitrovgrad – Border with Bulgaria)	56.4	28.4	50%
<b>TOTAL</b>					<b>535.8</b>	<b>194.1</b>	<b>45%</b>

<sup>1</sup>Subject to a final decision by the budgetary authorities.

<sup>2</sup> Pending outcome of ongoing clarification process by Bosnia and Herzegovina local authorities with regard to the financial engagement linked to the necessary corresponding loan agreement.



## 2017 Investment Projects Co-financed through the Instrument for Pre-accession Assistance/Western Balkans Investment Framework<sup>1</sup>



<b>Road</b>	<b>Conventional Rail</b>	<b>Inland Waterways</b>	<b>Completed</b>	<b>Bridge</b>	<b>Road Interconnection</b>
			<b>To be upgraded</b>	<b>Intermodal Terminal</b>	<b>Waterway Interconnection</b>
			<b>Planned</b>		
				<b>Rail Interconnection</b>	

<sup>1</sup> Subject to a final decision by the budgetary authorities. The map provides co-financing details on 2017 investment projects only. Road and rail sections as well as associated facilities financed under the 2015 and 2016 IPA / WBIF investment projects are also shown in accordance with the legend above.



## SERBIA

### Partners:

- Ministry of Finance, and Ministry of Energy and Mining in Serbia
- Public Enterprise Srbijagas

### Estimated investment:

- €85.5 million

### EU contribution:

- €49.6 million (works and supplies; technical assistance)

### Beneficiary contribution:

- €35.9 million

## 2017 CONNECTIVITY PROJECT

### Project of Energy Community Interest: Serbia (Niš) - Bulgaria Gas Interconnector

Natural gas is one of the main energy sources in Serbia. It is supplied from the Russian Federation via the gas pipeline that crosses Ukraine and Hungary and then connects to the Serbian network at Horgoš. Natural gas thus originates exclusively from this one entry point. In addition, this source covers more than 80% of current demand, with the remaining capacity provided for by local resources. Such exclusive arrangements make Serbia vulnerable to fuel price shocks and/or concrete capacity issues.

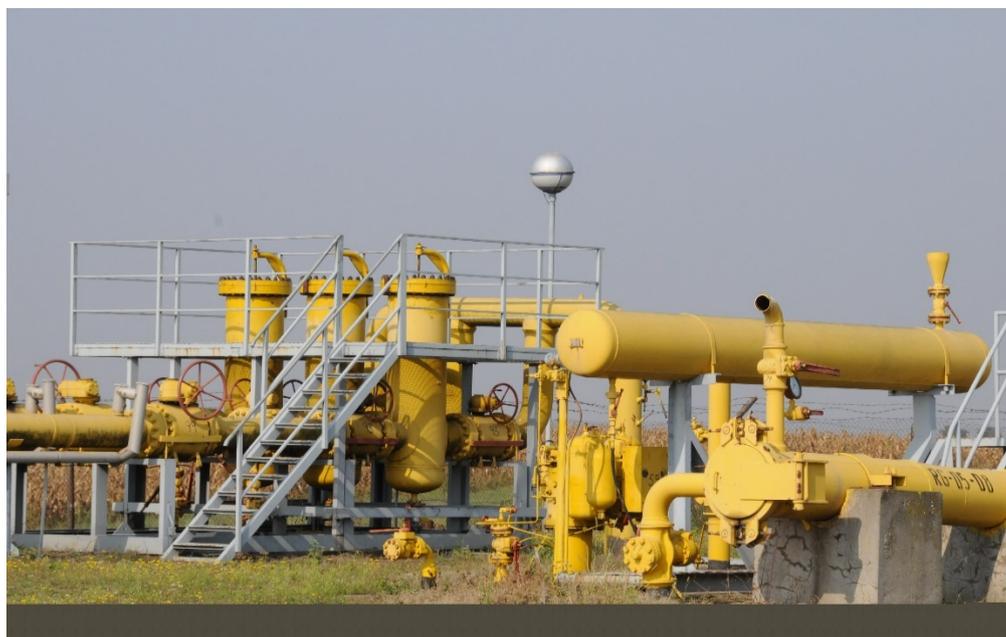
This investment project<sup>1</sup> concerns the construction of approximately 108 kilometres of bi-directional gas pipeline between Niš and Dimitrovgrad as well as from Dimitrovgrad to the border with Bulgaria. The new development will cater for about 2 billion cubic metres per year and will thus contribute to the diversification of energy sources to Serbia and the wider Western Balkan region, as well as to the creation of trans-European energy networks.



Existing gas network in Serbia.

### Results:

- 108 km of bi-directional gas pipeline and associated line break valve stations and a transceiver plant close to the border with Bulgaria.
- More secure and competitive energy supplies for the people and businesses in the region.



View of existing facilities in Serbia, which would be connected to the Serbia – Bulgaria gas interconnector, once complete.

<sup>1</sup> Subject to a final decision by the budgetary authorities.

Previous EU (WBIF) contribution:

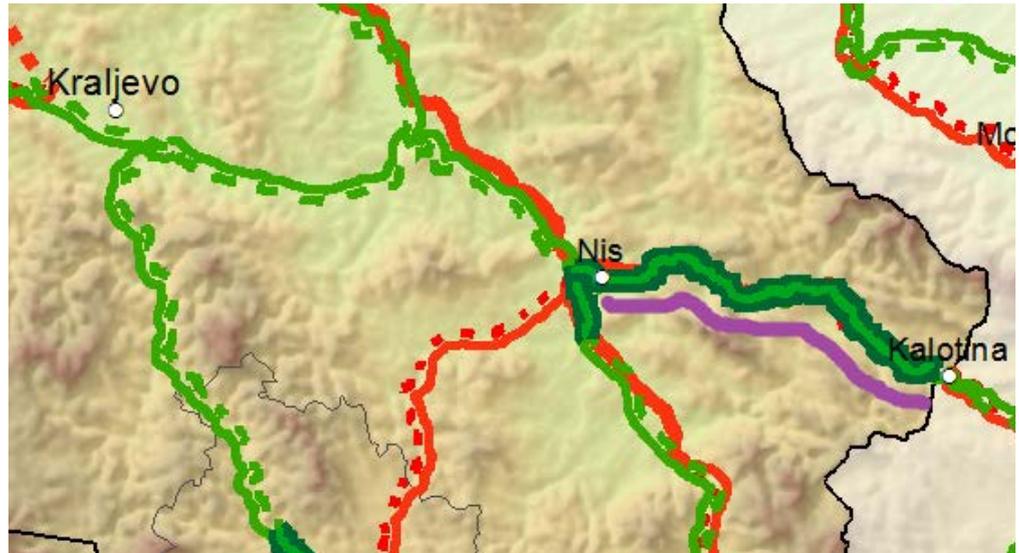
- €1 million (project preparation)

Estimated start date:

- Early 2019

Estimated end date:

- End of 2022



Map of Serbia – Bulgaria Gas Interconnector.

The project is now at detailed environmental and social impact assessment as well as preliminary design stage, following the completion of the feasibility study in 2012. The feasibility study has also been reviewed recently, against the new Law on Planning and Construction in Serbia and against current market conditions.

Existing environmental studies show that the pipeline will not be built in protected natural areas but will largely follow existing road and railway infrastructure. More than 80% of the space required for the implementation of the project has been provided for under the existing spatial plans; it mostly covers forested areas and agricultural land. Impact mitigation measures have already been included in the preparatory project documents, in accordance with EU best practices.

Land acquisition, construction permitting, and works tendering are thus expected to start in the second half of 2018, after the completion of the main design. A detailed environmental monitoring plan, in accordance with EU standards, will be in place once construction works start.

The project has been endorsed by Serbia and Bulgaria and ranks high on the infrastructure agendas of both countries.

## Benefits

- More than 250 new jobs created during construction, operation, and maintenance periods.
- Stable and secure gas supply to Serbia and Bulgaria, as well as to Greece and other countries in the Western Balkans.
- Increased availability of gas supply to regions in Serbia that are not currently connected to the system.
- Diversification of power supply for the population in Serbia and hence increase in competition over the same customer pool.
- Reduced greenhouse gas emissions by allowing for a shift from oil and coal to natural gas. This will improve air quality and hence the health conditions for the people in the region.
- Better opportunities for socio-economic growth for one of the poorest regions in Serbia.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of Serbia.



## BOSNIA AND HERZEGOVINA

### Partners:

- Ministry of Finance and Treasury and Ministry of Communications and Transport in Bosnia and Herzegovina;
- Ministry of Transport and Communications of the Federation of Bosnia and Herzegovina
- Public Company Motorways of the Federation of Bosnia and Herzegovina (JP Autoceste FBiH)

### Estimated investment:

- €83.9 million

### EU contribution:

- €15.9 million (works and supplies)

### Estimated EIB loan:

- €45 million

## Transport

## 2017 CONNECTIVITY PROJECT

### Mediterranean Corridor: Bosnia and Herzegovina – Croatia Cvc Road Interconnection I (Ponirak – Vraca/Zenica Tunnel Segment)

The Mediterranean Corridor links the Iberian Peninsula with the Hungarian – Ukrainian border. Its extension into the Western Balkans, mostly associated with what is regionally known as Corridor Vc, connects Hungary and eastern Croatia to Bosnia and Herzegovina and the Adriatic Sea.

With increasing pressure on the infrastructure through high daily average traffic volumes and a corresponding increase in freight, Bosnia and Herzegovina embarked on an ambitious motorway construction programme along Corridor Vc, in cooperation with its neighbours.

This investment project<sup>1</sup> concerns the construction of a 2.8 km motorway on the Zenica North – Žepče South section, between Ponirak and Vraca (exit of Zenica Tunnel), along Corridor Vc in Bosnia and Herzegovina. The new development includes the 2.4 km Zenica Tunnel, a 0.1 km viaduct, and ancillary structures.



Existing two-lane road along Corridor Vc in Bosnia and Herzegovina.

### Results:

- 2.8 km motorway, including twin tunnel, viaduct, and ancillary structures.
- Increase in passenger and freight travel speed from 60 km/h to 100 km/h and 120 km/h.



Newly built motorway on the Tarčin – Sarajevo – Zenica section on the Mediterranean Corridor in Bosnia and Herzegovina.

<sup>1</sup> Subject to a final decision by the budgetary authorities.

Estimated EBRD loan:

- €21.8 million

Beneficiary contribution:

- €1.2 million

Previous EU contribution for this section:

- €1.8 million for detailed design (IPA 2011)

Estimated start date:

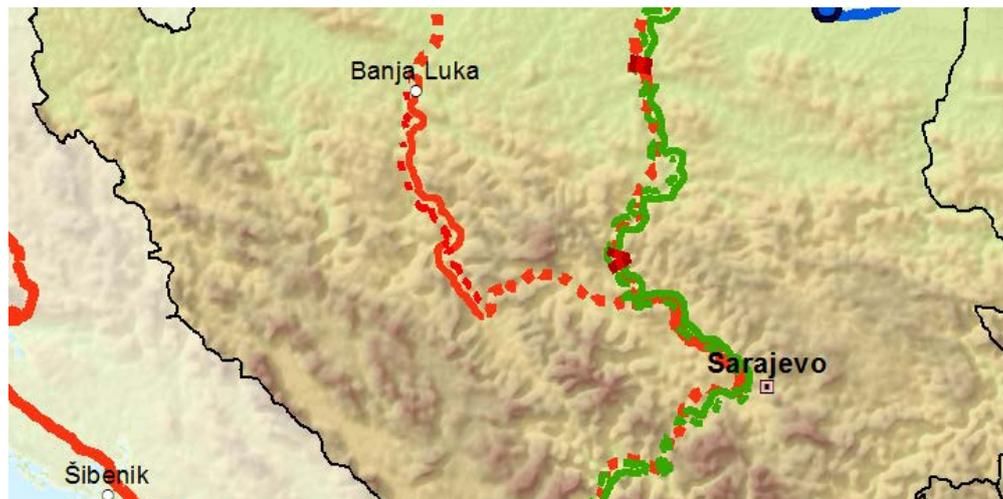
- Mid 2018

Estimated end date:

- End of 2020

Estimated loan repayment period:

- 15 years



Map of Bosnia and Herzegovina – Croatia CVc Road Interconnection, Ponirak – Vraca Segment.

The project is now at detailed design stage, with feasibility and environmental impact assessment studies completed in 2006, and subsequently updated in 2014. The environmental permit was obtained in February 2014.

Tender documents are under preparation and loans are being negotiated with the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).

Detailed environmental impact mitigation measures have been planned for during and post-construction, including soil and water pollution prevention and noise monitoring programmes.

The project complements the newly built motorway on the Zenica South - Sarajevo South – Tarčin section along the Mediterranean Corridor (Vc) in Bosnia and Herzegovina.

Once completed, this section will be operated and maintained by the Public Company Motorways of the Federation of Bosnia and Herzegovina through a closed toll collection system. A modern health and safety system will also be put in place, according to best European practices, particularly within the tunnel area.

## Benefits

- More than 400 jobs created during construction as well as operation and maintenance periods.
- An increase in annual traffic by more than 23%, matched by adequate safety and security conditions.
- Reduction by 7% in accident rate and 6% in vehicle operating costs.
- Better access for smaller towns and villages located along the route to larger industrial and transport hubs, such as Zenica and Sarajevo.
- Better routes into tourist areas in and around Vranduk and Žepče.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of Bosnia and Herzegovina.



## BOSNIA AND HERZEGOVINA

### Partners:

- Ministry of Finance and Treasury, and Ministry of Communications and Transport in Bosnia and Herzegovina;
- Ministry of Transport and Communications of the Federation of Bosnia and Herzegovina
- Public Company Motorways of the Federation of Bosnia and Herzegovina (JP Autoceste FBiH)

### Estimated investment:

- €66.9 million

### EU contribution:

- €11.8 million (works and supplies)

### Estimated EBRD loan:

- €50 million

## Transport

## 2017 CONNECTIVITY PROJECT

### Mediterranean Corridor: Bosnia and Herzegovina – Croatia Cvc Road Interconnection II (Tunnel Zenica – Donja Gračanica Segment)

The Mediterranean Corridor links the Iberian Peninsula with the Hungarian – Ukrainian border. Its extension into the Western Balkans, mostly associated with what is regionally known as Corridor Vc, connects Central Europe, specifically Hungary and eastern Croatia, to Bosnia and Herzegovina and the Adriatic Sea.

The longest section of Corridor Vc lies in Bosnia and Herzegovina. In response to high daily average traffic volumes, the country embarked on a multi-billion motorway construction programme, in cooperation with its neighbours. To date, more than 100 km have been built or are under construction.

This investment project<sup>1</sup> concerns the construction of a 4.1 km modern road on the Zenica North – Žepče South section, between Zenica Tunnel and Donja Gračanica/Entrance to Pečuj Tunnel. The new development includes two tunnels (350m and 422m), four viaducts (93m, 78m, 380m, and 76m), an access road to Zenica (140m bridge), and an interchange to Zenica North, with tolling facilities.



Aerial view of Donja Gračanica in Bosnia and Herzegovina.

### Results:

- 4.1 km of modern road, including: two tunnels, four viaducts, access road to Zenica, and interchange to Zenica North with tolling facilities.
- Increase in passenger and freight travel speed from 60 km/h to 100 km/h and 120 km/h.



Newly built motorway on the Tarčin – Sarajevo – Zenica section on the Mediterranean Corridor in Bosnia and Herzegovina.

<sup>1</sup> Subject to a final decision by the budgetary authorities.

Beneficiary contribution:

- €5.1 million

Previous EU contribution for this section:

- €1.8 million for main design (IPA 2011)

Estimated start date:

- Mid 2018

Estimated end date:

- End of 2020

Estimated loan repayment period:

- 15 years

## Transport



Map of Bosnia and Herzegovina – Croatia CVc Road Interconnection, Tunnel Zenica – Donja Gračanica Segment.

The project is now at (main) design stage, with feasibility and environmental impact assessment studies completed in 2006 and subsequently updated in 2014. The environmental permit was obtained in February 2014.

Tender documents will be prepared based on existing designs and according to Yellow FIDIC conditions of contract. The loan has been agreed with the European Bank for Reconstruction and Development (EBRD).

Detailed environmental impact mitigation measures have been planned for during and post-construction, including soil and water pollution prevention and noise monitoring programmes.

The project complements the newly built motorway on the Zenica South - Sarajevo South – Tarčin section along the Mediterranean Corridor in Bosnia and Herzegovina. Once completed, this section will be operated and maintained by the Public Company Motorways of the Federation of Bosnia and Herzegovina through a closed toll collection system. A modern health, safety, and security system will be put in place, according to best European practices, particularly in the tunnel area.

### Benefits

- More than 600 jobs created during construction as well as operation and maintenance periods.
- An increase in annual traffic by more than 23%, matched by adequate safety and security conditions.
- Reduction by 7% in accident rate and 6% in vehicle operating costs.
- Better access for smaller towns and villages located along the route to larger industrial and transport hubs, such as Zenica and Sarajevo.
- Better routes into tourist areas in the region.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of Bosnia and Herzegovina.



## BOSNIA AND HERZEGOVINA

### Partners:

- Ministry of Finance and Treasury in Bosnia and Herzegovina; Ministry of Finance and Ministry of Transport and Communications of the Republic of Srpska
- Public Company Republic of Srpska Motorways (JP Autoputevi Republike Srpske)

### Estimated investment:

- €80.7 million

### EU contribution:

- €15.3 million (works and supplies; technical assistance)

### Estimated EBRD loan:

- €59.6 million

## Transport

## 2017 CONNECTIVITY PROJECT

### Mediterranean Corridor: Bosnia and Herzegovina – Croatia Cvc Road Interconnection III (Johovac Interchange – Rudanka Interchange)

The Mediterranean Corridor links the Iberian Peninsula with the Hungarian – Ukrainian border. Its extension into the Western Balkans, mostly associated with what is regionally known as Corridor Vc, connects Central Europe, specifically Hungary and eastern Croatia, to Bosnia and Herzegovina and the Adriatic Sea.

In response to high daily average traffic volumes, Bosnia and Herzegovina has embarked on a multi-billion motorway construction programme, in cooperation with its neighbours. To date, more than 100 km have been built or are under construction.

This investment project<sup>1</sup> concerns the construction of a 6-km motorway on the Svilaj to Doboј section of Corridor Vc, between Interchange Johovac, in Tovira, and Interchange Rudanka in Kostajnica. The proposed development includes the interchanges and a two-lane 1-km long access road in Kostajnica, over the River Bosna, which provides motorway access to existing local transport network.



Kostajnica Village in Bosnia and Herzegovina; the Rudanka Interchange will be built in its vicinity.

### Results:

- 6 km motorway, including two interchanges and 1 km of two-lane access road to existing local road network.
- Increase in passenger and freight travel speed from 60 km/h to 100 and 120 km/h.



Newly built Mahovljani Interchange on the Banja Luka – Doboј motorway in Bosnia and Herzegovina.

<sup>1</sup> Subject to a final decision by the budgetary authorities.

Beneficiary contribution:

- €5.8 million

Estimated start date:

- Early 2018

Estimated end date:

- End of 2021

Estimated loan repayment period:

- 15 years

## Transport



Map of Bosnia and Herzegovina – Croatia CVc Road Interconnection, Johovac Interchange – Rudanka Interchange Section.

The project is now at land acquisition stage, with feasibility and environmental and social impact assessment studies as well as detailed design completed between 2006 and 2010. The environmental permit was obtained in 2015.

Tender documents will be prepared based on existing designs. The loan has been agreed with the European Bank for Reconstruction and Development (EBRD).

Detailed environmental impact mitigation measures have been planned for during and post-construction, including soil and water pollution prevention and noise monitoring programmes. A detailed resettlement plan in accordance with EU best practices is to be prepared in the immediate period.

Once completed, this section will be operated and maintained by the Public Company Republic of Srpska Motorways through a closed toll collection system. It will ensure direct connection to Bana Luka – Doboј motorway and to the existing M17 main road in Bosnia and Herzegovina.

The project complements three other motorway sections which are to be built by Republic of Srpska Motorways along the Mediterranean Corridor in Bosnia and Herzegovina, as follows:

- Odžak to Podnovlje, 22.3 km;

- Podnovlje to Johovac, 13.7 km; and
- Rudanka to Karuše (Doboј bypass), 7.2 km.

The total investments are estimated at around €500 million.

### Benefits

- More than 500 jobs created during construction as well as operation and maintenance periods.
- Direct access to safer and faster transport routes for more than 1 million people who live along the route.
- An increase in annual average daily traffic by more than 50%, matched by adequate safety and security conditions.
- Significant reductions in accident rate and in vehicle operating costs.
- Better access for smaller towns and villages located along the route to larger industrial and transport hubs.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of Bosnia and Herzegovina.



## BOSNIA AND HERZEGOVINA

### Partners:

- Ministry of Communication and Transport in Bosnia and Herzegovina and the Government of Brčko District
- Public Company Port of Brčko

### Estimated investment:

- €10.1 million

### EU contribution:

- €3.1 million (works and supplies; technical assistance)

### Estimated EBRD loan:

- €7 million

## 2017 CONNECTIVITY PROJECT

### Rhine/Danube Corridor: Bosnia and Herzegovina – Serbia – Croatia Waterway Interconnection (Port of Brčko)

The Rhine-Danube Corridor, with the Main and Danube as its backbone, connects Germany to Ukraine and the Black Sea. Its extension into the Western Balkans is mostly associated with the River Sava, apart from the Danube stretches which are jointly managed by Serbia with Hungary and Romania.

This investment project<sup>1</sup> concerns the first phase of a complex rehabilitation programme planned for Brčko Port on the Sava, including:

- 2.5 km of new harbour crane track and 4.5 km of fully rehabilitated industrial railway track to the Brčko Novo station.
- 4,500 m<sup>2</sup> asphalt plateau on the Port premises.
- 0.9 km of fully rehabilitated access road from the Bijeljinska Cesta to the Port.
- New port crane with a capacity of 16.0/27.5 tons.



Existing harbor crane and associated railway track in the Port of Brčko.

### Results:

- 7 km of new railway track on the crane path as well as to the Novo Brčko industrial railway station.
- 0.9 km of fully rehabilitated access road from the Bijeljinska Cesta to the Port.
- 4,500 m<sup>2</sup> asphalt plateau on the Port premises and a new 16.0/27.5-ton port crane.



Existing 2,5-ton harbor cranes in the Port of Brčko. They have been in operation for more than 50 years.

<sup>1</sup> Pending outcome of ongoing clarification process by Bosnia and Herzegovina local authorities with regard to the financial engagement linked to the necessary corresponding loan agreement, and subject to a final decision by the budgetary authorities.

Estimated start date:

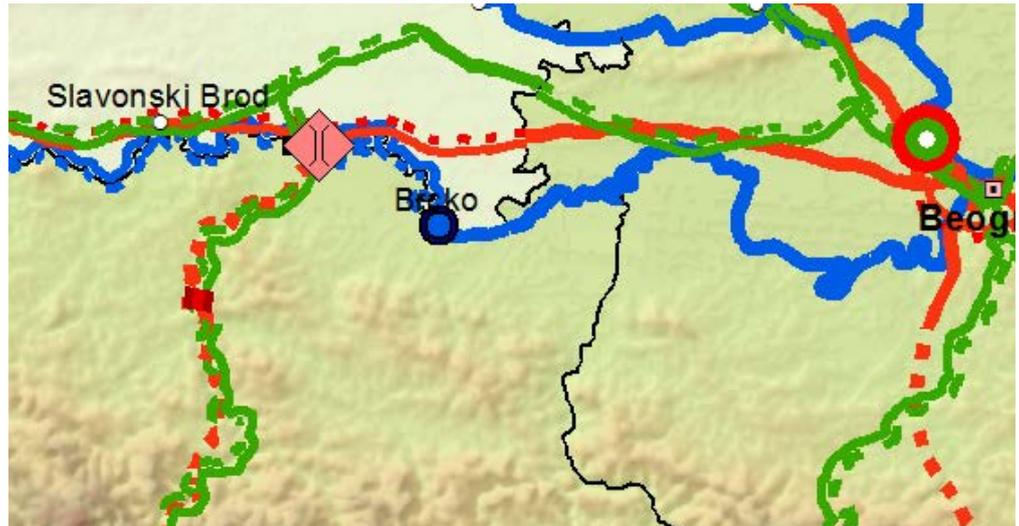
- Early 2018

Estimated end date:

- End of 2020

Estimated loan repayment period:

- 15 years



Map of Port of Brčko on the Rhine/Danube Corridor.

The project is now at construction permitting stage; the feasibility and the detailed design were completed over a five-year period beginning with the early 2000.

Tender documents will be prepared based on existing designs. The loan has been agreed with the European Bank for Reconstruction and Development (EBRD).

Detailed environmental impact mitigation measures have been planned for the construction period, including soil and water pollution prevention, and noise monitoring programmes.

Once executed, the new infrastructure will replace existing facilities which have been in place for more than 50 years, with no major overhaul since commissioning.

At the same time with the execution of the infrastructure improvements included in this project, the Beneficiary intends to plan for two more investments:

- Aquatorium cleaning and maintenance; and
- Infrastructure improvements for the safe transfer of diesel and liquid cargo.

These further improvements will contribute to the creation of a multi-modal transport corridor connecting

Bosnia and Herzegovina to Croatia and Serbia and further to the EU.

### Benefits

- More than 100 jobs created during construction as well as operation and maintenance periods.
- An increase in cargo volume by more than 25%, i.e. by 100,000 tons/year.
- Lower operational costs for the Port of Brčko and thus more competitive cargo handling fees for the private sector active in the region.
- Reduction of greenhouse gas emissions by developing a competitive multimodal transport corridor along the Sava.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of Bosnia and Herzegovina.



## THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

### Partners:

- Ministry of Finance and Ministry of Transport and Communications in the former Yugoslav Republic of Macedonia
- Public Enterprise for Railway Infrastructure (Makedonski Železnici – Infrastruktura)

### Estimated investment:

- €152.3 million

### EU contribution:

- €70 million (works and supplies; technical assistance)

### Estimated EBRD loan:

- €75 million

### Beneficiary contribution:

- €1 million

## Transport

## 2017 CONNECTIVITY PROJECT

### Orient/East-Med Corridor: The former Yugoslav Republic of Macedonia – Bulgaria CVIII Rail Interconnection (Beljakovce – Kriva Palanka)

The Orient/East-Med Corridor runs between Hamburg and Bremen in Germany and Thessaloniki and Varna in Greece and, respectively, Bulgaria. In the former Yugoslav Republic of Macedonia, the Corridor includes an 89 km-long rail section between Kumanovo and the border with Bulgaria. Plans to develop this route date back to nineteenth century, with various segments built and/or overhauled until 2004, when all construction ceased because of a substantial shortage in funding.

This investment project<sup>1</sup> concerns the rehabilitation of approximately 34 km of CVIII railway track to modern standards on the Beljakovce – Kriva Palanka section in the former Yugoslav Republic of Macedonia.

The planned development includes several railway bridges and over/under-passes, 5.5 km-long tunnels, 5 railway stations and halts, and new signalling and telecommunication systems.



Train station in Kumanovo, the former Yugoslav Republic of Macedonia.

### Results:

- 34 km of CVIII railway track upgraded to modern standards, including 5 km railway bridges and over/under-passes, 5.5 km tunnels, and new signalling and telecommunication systems.
- 2 railway stations and 3 halts fully rehabilitated.
- Increase in passenger and freight travel speed from 30 km/h to 100 km/h.



View of railway track construction works on Kumanovo – border with Bulgaria railway section, the former Yugoslav Republic of Macedonia.

<sup>1</sup> Subject to a final decision by the budgetary authorities.

Previous EU and WBIF contribution:

- €6.3 million (technical assistance for project preparation and implementation)

Estimated start date:

- Early 2018

Estimated end date:

- End of 2022

Estimated loan repayment period:

- 15 years

## Transport



Map of Beljakovce – Kriva Palanka section on the Orient/East-Med Corridor in the former Yugoslav Republic of Macedonia.

The project is now at detailed design stage, with feasibility study and preliminary designs completed in 2012. A loan agreement with the European Bank for Reconstruction and Development (EBRD) is already in place.

The works will not have significant social or environmental impacts as the new facilities will be built on the route of the existing rail track. On the contrary, as travel time as well as operational costs will decrease once the project is complete, a modal shift to rail from road transport is expected to happen on the route, particularly in the case of long-distance transit traffic.

The project complements previous financing allocated to CVIII by the European Union and WBIF donors and partners, as well as planned and/or ongoing investments in two other railway sections on the same corridor route, as follows:

- Kumanovo – Beljakovce, 30.8 km;
- Kriva Palanka – Deve Bair – Border with Bulgaria, 24 km.

Once complete, the new railway interconnection will shorten the railway link between the former Yugoslav Republic of Macedonia and the Black Sea by approximately 200 km.

### Benefits

- More than 300 new jobs created during construction, operation, and maintenance periods.
- Direct access to modern means of transport for more than 350,000 people living along the railway route proposed for rehabilitation.
- Decrease in travel time between Kumanovo and Kriva Palanka to approximately 35 minutes, compared to the current travel time by road of approximately 50 minutes.
- Increase by 20% in annual freight volume.
- Reduction of current air and noise pollution levels caused by diesel operations as well as by road transport on the entire route.
- Reduced operational and maintenance costs for railway operators.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of the former Yugoslav Republic of Macedonia.



## SERBIA

### Partners:

- Ministry of Construction, Transport, and Infrastructure in Serbia
- JSC Serbian Railways Infrastructure (Železnice Srbije Akcionarsko Društvo)

### Estimated investment:

- €56.4 million

### EU contribution:

- €28.4 million (works and supplies; technical assistance)

### Estimated EIB loan:

- €24 million

### Beneficiary contribution:

- €4 million

## 2017 CONNECTIVITY PROJECT

### Orient/East-Med Corridor: Serbia – Bulgaria CXc Rail Interconnection (Niš – Dimitrovgrad – Border with Bulgaria)

The Orient/East-Med Corridor runs between Hamburg and Bremen in Germany and Thessaloniki in Greece. In Serbia, the Corridor accounts for 872 km of track, i.e. approximately 23% of the entire Serbian railway network. It includes a 97 km-long Serbia – Bulgaria interconnection along the CXc route between Niš and Dimitrovgrad, which has not been electrified. Moreover, the signalling and train control system has been in use for more than 50 years, slowing travel speeds to 30 km/h and 50 km/h and posing serious transport safety risks.

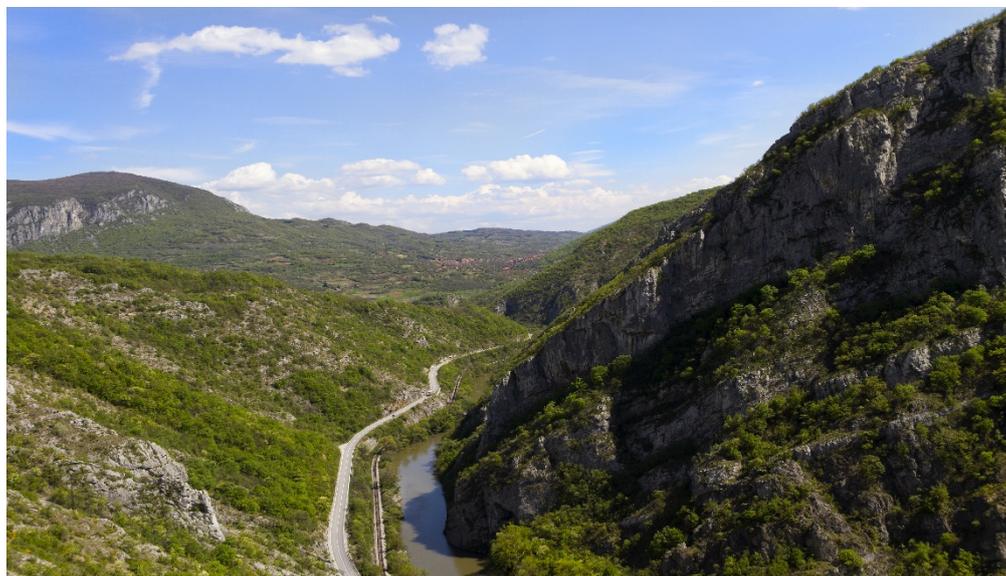
This investment project<sup>1</sup> concerns the electrification of the entire railway line on the Niš – Dimitrovgrad – border with Bulgaria section along the Orient/East-Med Corridor in Serbia (i.e. Crveni Krst – Pantelej to Sićevo via the Niš bypass route). It also provides for the modernization of signalling-interlocking and telecommunication systems on the Sićevo to Dimitrovgrad route, in line with European Rail Traffic Management System (ERTMS) standards.



Train station in Niš on Corridor X, Serbia.

### Results:

- 97 km of CXc railway track upgraded to modern, ERTMS standards.
- 9 railway stations fitted with modern signalling – interlocking devices.
- Increase in passenger and freight travel speed from 30 km/h to 120 km/h, as well as in freight capacity, throughout the CXc Niš - Dimitrovgrad - border with Bulgaria section.



View of non-electrified railway track (as well as two-lane road) in Sićevo Gorge, on Corridor Xc, Serbia.

<sup>1</sup> Subject to a final decision by the budgetary authorities.

Estimated start date:

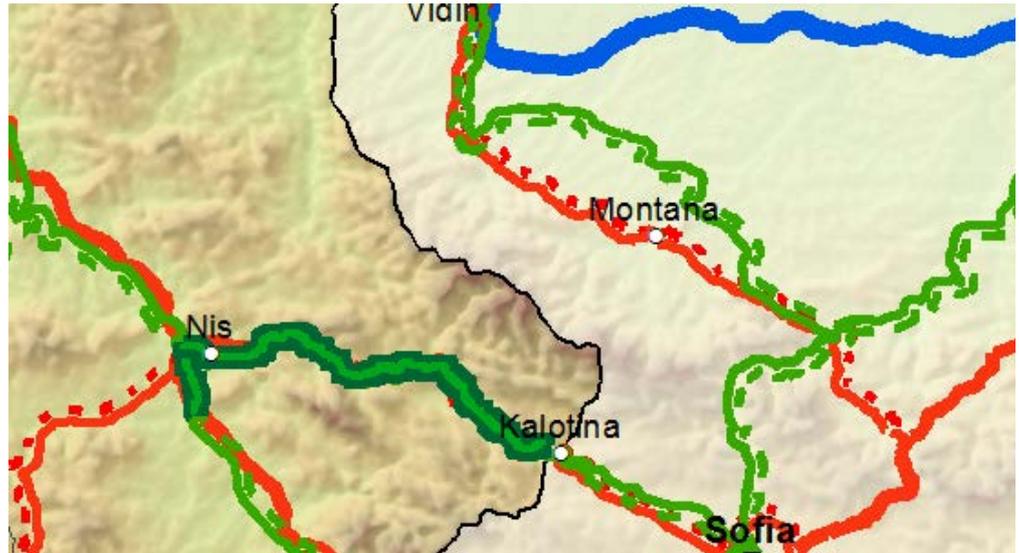
- Early 2018

Estimated end date:

- End of 2022

Estimated loan repayment period:

- 15 years



Map of Niš – Dimitrovgrad – border with Bulgaria Rail Interconnection.

The investment will be executed in two stages:

- Electrification of the Crveni Krst – Pantelej - Sićevo section, via the Niš Bypass; and
- Electrification and modernisation of the signalling-interlocking and telecommunication systems on the Sićevo to Dimitrovgrad segment.

It complements previous financing allocated to the same route by the EU and the EIB, including by means of an EU/WBIF investment grant under the 2016 Connectivity Agenda.

Preliminary designs and other technical and financial documentation were prepared in 2008 and 2010 respectively; these are currently being reviewed against the new Serbian Construction Law. Work on the building permit design as well as on the land acquisition process is also under way.

The rehabilitation works will not have significant social or environmental impacts as the new facilities will be built on the route of the existing rail track.

The successful completion of proposed works on the Niš – Dimitrovgrad – border with Bulgaria section, together with the other ongoing investments on the same route, will bring the entire CXc route to modern, TEN-T standards.

Benefits

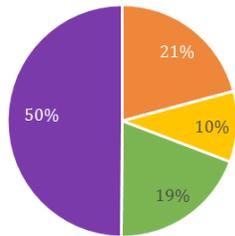
- Approximately 250 new jobs created during construction, operation, and maintenance periods.
- Direct access to modern means of transport for more than 340,000 people living along the railway route proposed for rehabilitation.
- Increase by 30% in annual freight volume, to more than 2.2 million tons / year.
- Decrease in travel time by 2 hours.
- Reduction of current air and noise pollution levels caused by diesel operations on the entire route.
- Reduced operational and maintenance costs for railway operators.
- Better opportunities for socio-economic growth for one of the poorest regions in Serbia.
- Improved trade flows with countries in the region and thus a positive impact on the broader economy of Serbia.



# EU PLEDGE FOR CONNECTIVITY AGENDA PROJECTS (2015 - 2017)

**Implementation of overall pledge of €1bn (2015 - 2020)**

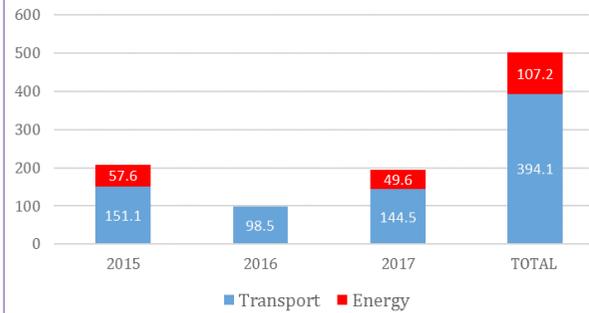
EU Grant Allocated to Date/Total Pledged (%)



2015 Grants 2016 Grants 2017 Grants Uncommitted to Date

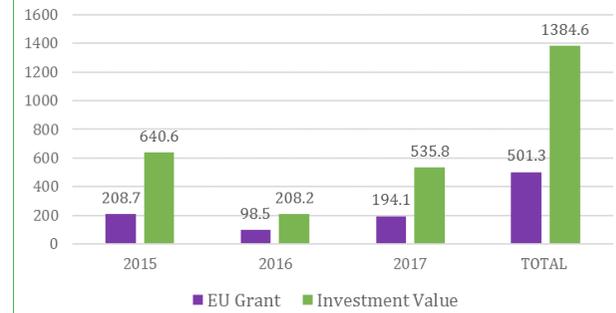
**EU grant per sector to date**

EU Grant/Sector&Year (€M)



**Investment leveraged to date**

EU Grant/Investment Leveraged (€M)



## OVERALL SUPPORT 2015 TO DATE?

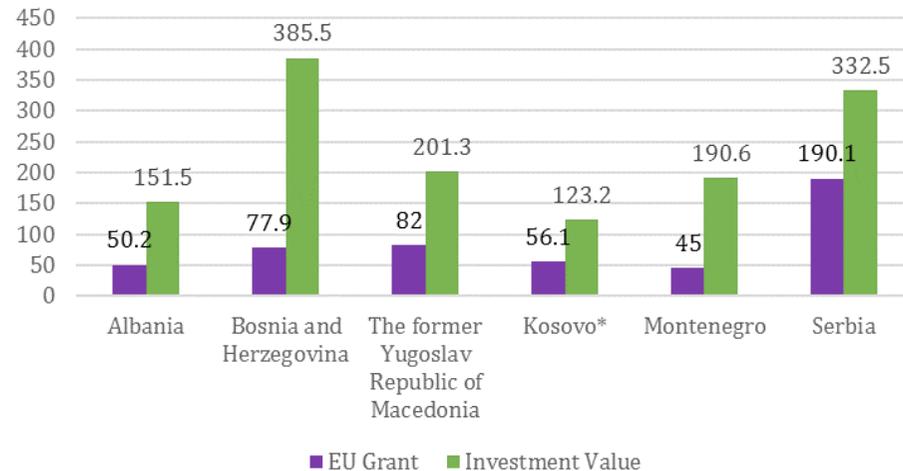
**Total EU Grant (€M) 501.3**

**Investment Leveraged (€Bn) 1.4**

## AND IN ADDITION

**Preparatory & Horizontal Technical Assistance (€M) 37.7**

EU Grant & Investment/Beneficiary (€M)

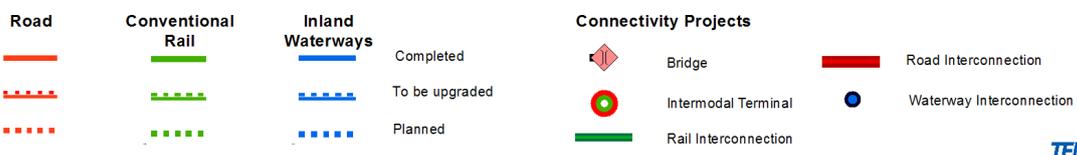


\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.



# European Union's Support to the Development of Transport and Energy Sectors in Western Balkans

## Sector Reforms and Infrastructure Projects to Date<sup>1</sup>



EU Grant in €million      Investment leveraged in €million



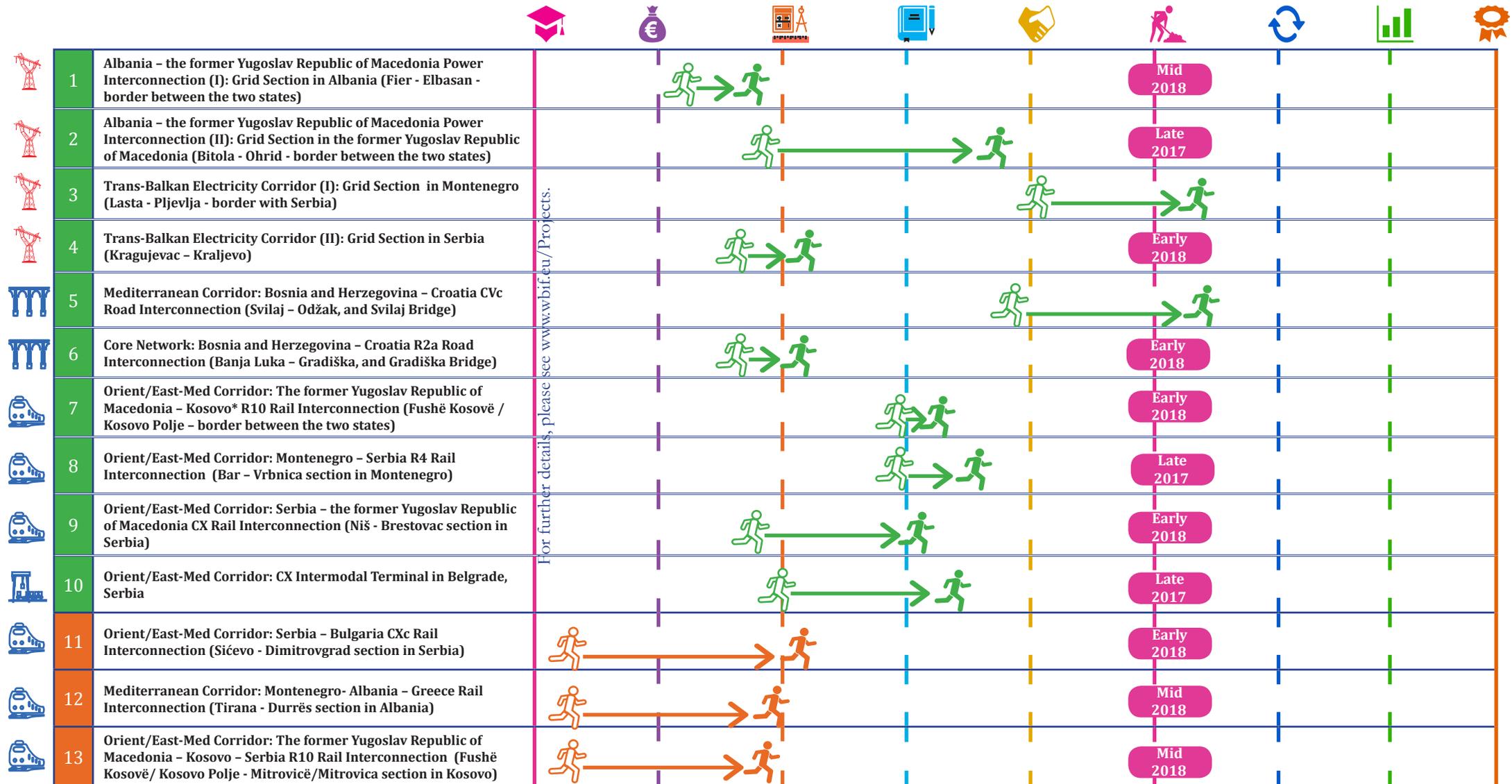
<sup>1</sup>The overview is limited to EU grant support associated with the development of core transport and energy networks in the region and the integration of the transport and energy markets into the EU, including grants awarded through the WBIF.

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.



# 2015 and 2016 CONNECTIVITY AGENDA PROJECTS

## Progress to Date



Application approved   
 Financing agreement signed   
 Design complete   
 Works tender launched   
 Works contract signed   
 Works Commence   
 Works 50% complete   
 Works 100% complete   
 Loan/Grant Disbursed

July 2016 Status   
 Railways   
 Freight Terminal   
 Electricity Transmission   
 Road & bridge

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.



## 2015 and 2016 Investment Projects Co-financed through the Instrument for Pre-accession Assistance/Western Balkans Investment Framework<sup>1</sup>



<sup>1</sup>This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.



# CLEAN ENERGY FOR THE WESTERN BALKANS

## Overview of EU-funded Facilities, 2007 - 2017



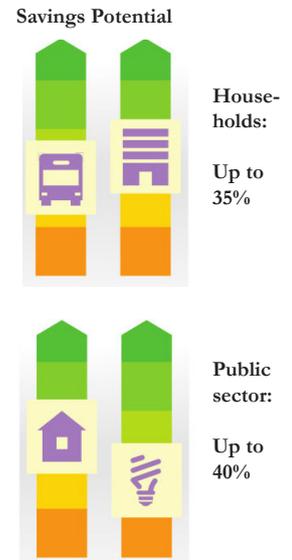
The **energy intensity** of the six Western Balkan countries (WB6) is around three times higher than the average for the European Union, often as the result of aged and obsolete energy infrastructure and poorly maintained and/or outdated energy-using capital stock. Moreover, there is a growing need amongst the WB6 for cleaner energy while reducing dependence on imported energy sources.

Various reports produced by the International Energy Agency and the World Bank point to the **potential savings** in the Western Balkans, which may reach: 10% in the transport sector, 10-35% for households, 35-40% in the public sector, 10-30% in services, and 5-25% in industry and commerce. According to the Energy Community,

public buildings and households alone could yield savings valued at €805 million by 2020.

The **European Union** has provided support to several facilities financing energy efficiency and renewable energy investments in the region, including a **€50 million grant in 2016** to the **Regional Energy Efficiency Programme (REEP Plus)** and the **Green for Growth Fund (GGF)**.

The impact is visible: cleaner air and waters, more competitive SMEs, lower energy bills for citizens, and overall significant contributions to the region's economic growth and national energy efficiency targets.



### EU CONTRIBUTION IN BRIEF, 2007 - 2017<sup>1</sup>



**PLEDGED €152 MILLION FUNDING**

**PLANNED LEVERAGE €1.2 BILLION**

**ACHIEVED LEVERAGE €971 MILLION**



**36 NEW GREEN BANKS IN WB6**



**MORE THAN 80,000 JOBS SUPPORTED<sup>3</sup>**



**1.6 TWH/YEAR IN ENERGY SAVINGS<sup>2</sup> = 4 MONTHS OF ALBANIA'S ELECTRICITY CONSUMPTION**



**56,000 END-BENEFICIARIES (M/SMES, HOUSEHOLDS, AND PUBLIC SECTOR)**



**1 MILLION TONS CO<sub>2</sub>/YEAR IN EMISSION SAVINGS = MORE THAN 1 YEAR OF MONTENEGRO'S CAR FLEET EMISSIONS**

<sup>1</sup>This overview includes contributions to WB6, Croatia and Turkey over the period 2007 - 2017, as well as the allocations to GGF and REEP Plus under the 2016 Connectivity Agenda.

<sup>2</sup> Indicator measured in terms of final energy, i.e. total energy consumed by end users. It is the energy that reaches the final consumer and excludes what is used by the energy sector itself for conversion, generation, and/or transport purposes.

<sup>3</sup> Estimate based on an industry assumption that each €1 million of energy efficiency/renewable energy investments supports 10-12 jobs.

## ENERGY INTENSITY<sup>1</sup> AND RENEWABLE ENERGY POTENTIAL IN THE WESTERN BALKANS

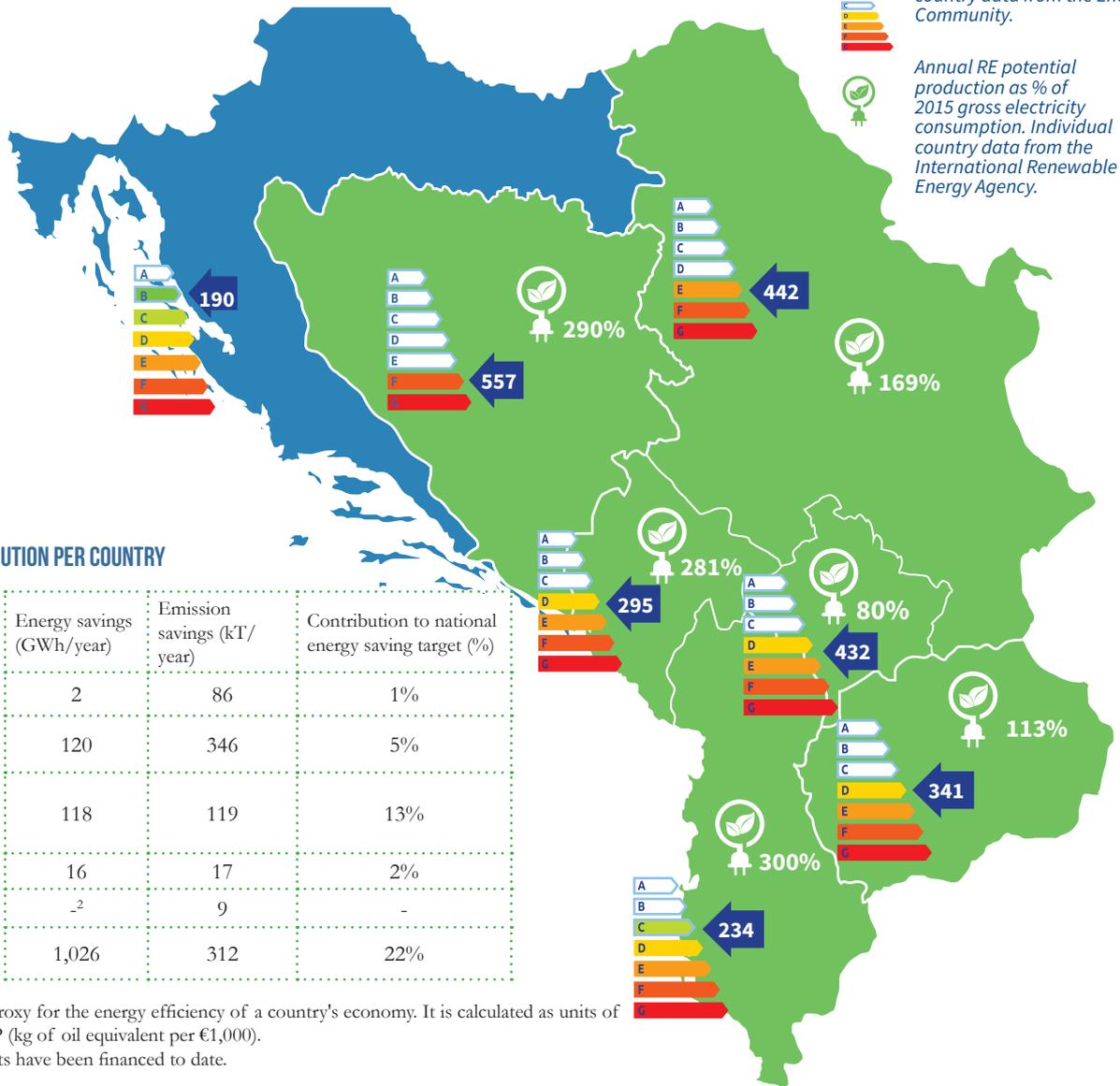
### LEGEND

Energy intensity. Individual country data from the Energy Community.

A  
B  
C  
D  
E  
F  
G

Annual RE potential production as % of 2015 gross electricity consumption. Individual country data from the International Renewable Energy Agency.

A  
B  
C  
D  
E  
F  
G



### IMPACT OF EU CONTRIBUTION PER COUNTRY

	Energy savings (GWh/year)	Emission savings (kT/year)	Contribution to national energy saving target (%)
Albania	2	86	1%
Bosnia and Herzegovina	120	346	5%
The former Yugoslav Republic of Macedonia	118	119	13%
Kosovo*	16	17	2%
Montenegro	- <sup>2</sup>	9	-
Serbia	1,026	312	22%

<sup>1</sup> Energy intensity is a proxy for the energy efficiency of a country's economy. It is calculated as units of energy per unit of GDP (kg of oil equivalent per €1,000).

<sup>2</sup> Only renewable projects have been financed to date.

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.

### GREEN FOR GROWTH FUND (GGF)

Green for Growth Fund (GGF) was initiated by the EIB and KfW in December 2009 to promote energy efficiency and to reduce CO<sub>2</sub> emissions in its target region. GGF's investments seek to achieve a 20% reduction in energy consumption and/or a 20% reduction in CO<sub>2</sub> emissions.

It is the first specialised fund focusing on energy efficiency and renewable energy in Southeast Europe. GGF is supported by EIB, KfW, IFC, the German Federal Ministry of Economic Cooperation and Development, EBRD, Netherlands Development Finance Company (FMO), Oesterreichische Entwicklungsbank AG (OeEB), private institutional investors, and the European Commission.

The EU contribution to GGF amounts to €58.6 million in risk capital (including €20 million in fresh capital contributed in 2016) and €10.8 million for technical assistance.

GGF supports approximately €400 million of loans in total, including nearly €250 million in the WB6 countries, Croatia and Turkey.

[www.ggf.lu](http://www.ggf.lu)

### REGIONAL ENERGY EFFICIENCY PROGRAMME (REEP)

The Regional Energy Efficiency Programme (REEP) is an integrated package of finance, technical assistance and policy dialogue, launched in 2013 by the European Bank for Reconstruction and Development and the European Commission, joined in 2016 by the German Development Bank (KfW). It is implemented jointly with the Energy Community Secretariat.

REEP operates across all countries in the region, both directly and through financial intermediaries.

A new €30 million EU contribution announced in 2016 will support REEP Plus, an extension of REEP policy dialogue and technical assistance activities and a new residential lending facility available through local intermediaries.

REEP Plus is expected to deliver €160 million of loans, including to 29,000 households and housing associations for projects in energy efficiency and renewables. A new municipal direct lending window has also been introduced, alongside with continued support to the private and public sectors.

[www.wb-reep.org](http://www.wb-reep.org)

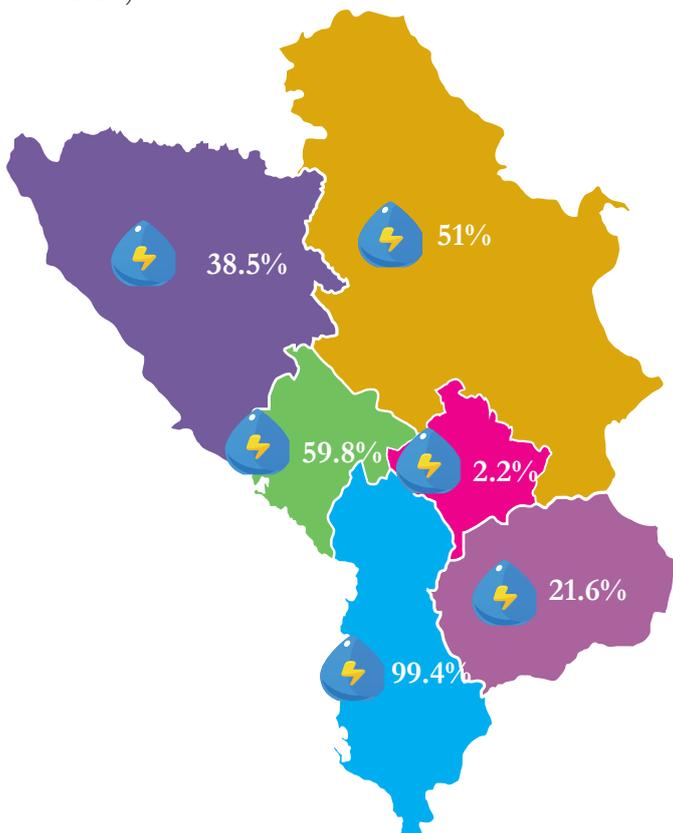


## A Regional Strategy for Sustainable Hydropower in the Western Balkans

The Western Balkans region needs new sources of energy production. In the coming years, it must decommission aging and polluting fossil-fuel generation capacity and reduce the energy intensity of economies. It must also improve the proportion of renewable energies in its generation mix.

All renewable energy sources will play a strategic role in the new energy mix. Hydropower already plays a significant role in the renewable energy contribution, and it could be strengthened given the considerable potential of the region due to its topographic and hydrologic characteristics.

**Share of hydropower generation in total power generation**  
(average values for 2005 - 2014, International Energy Agency statistics)



The Western Balkans region has a strong tradition of hydropower development, which already represents 49% of all installed power generation capacities in the region. With 90% of this capacity constructed before 1990, infrastructures are aging and at risk after years of under-investment. Rehabilitating existing structures is crucial to safeguard the contribution that hydropower already makes to the region's energy mix. However, this rehabilitation will not add many new megawatts.

In order to meet growing energy demands, new generation plants are likely to be developed across the region. However, further hydropower development poses a number of challenges.

Hydropower is a relatively clean energy, mostly free of CO<sub>2</sub> emissions during operation, but it can have negative impacts on the environment and, in particular, on water resources, the ecological quality of the rivers, and the associated ecosystems and biodiversity.

The uniqueness of the region, in terms of nature and biodiversity means on all partners have to preserve the environment as well as the social, economic and ecological services it provides. Any new plants must be developed carefully to prevent environmental damages and to mitigate risks, in particular when they are planned on protected or high natural value sites.

In addition, the Western Balkans will suffer disproportionately from climate change. Precipitation will decrease during the summer months, compromising hydropower generation. At the same time, changes in climate patterns and more frequent and extreme weather events will have to be integrated in future development of hydropower. Existing assumptions about the viability of hydropower plants will need to be updated to take account of changes to water availability resulting from climate change.

To balance the future role of hydropower in the region's energy choices – building up a low-carbon generation capacity and using indigenous resources which can reduce external energy dependency – with the need to develop hydropower in a much more sustainable fashion than in the past, is what the study 'A Regional Strategy for Sustainable Hydropower in the Western Balkans' is about. The study was requested in the Declaration of the 2016 Western Balkans Summit in Paris.

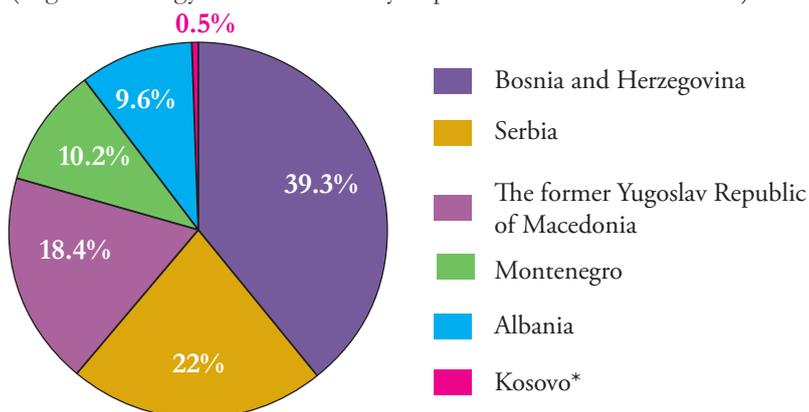
While the study is under development<sup>1</sup> and will be further discussed with all partners, some aspects can already be highlighted:

- Hydropower development is one element of a broader strategy to achieve the countries' binding renewable energy targets, which should also include wind, photovoltaic and biomass, in parallel with the implementation of energy efficiency measures.
- Rehabilitating existing hydropower infrastructure is the first, immediate priority for investments, to preserve those megawatts that hydropower already contributes to the region's energy mix, and to upgrade the existing capacity.
- Only a limited number of the projects planned will materialise, due to the necessity to preserve the environment, and also due to the difficulty for greenfield projects to be financially viability in the current market. Also, most of the best sites for hydropower plants have already been occupied.
- The 50 largest hydropower plants in the region represent approximately 95% of the installed hydropower capacity, while the other 200 small hydro power plants generate the remaining 5%. What contribution can small hydro power plants make to the global energy production compared to their multiple impacts on the environment?
- Hydropower development needs to be accompanied by adjustments to the transmission and distribution networks and, ultimately, with the development of the regional electricity market to ensure that project developers have a wider market for their production. The transmission network is largely ready, and attention should mostly focus on the distribution network, in particular on reducing technical losses.
- The unique nature and biodiversity of the region, and the services it provides to its inhabitants, mean that any hydropower development has to preserve that environment. Existing plants were developed during a time when technical considerations were prioritised over environmental considerations. New projects need to respect present international standards. The EU Water Framework Directive, the EU Birds and Habitats Directives, and the EU Environmental Impact Assessment and Strategic Environmental Assessment Directives should act as a reference.
- Any future projects will have a cumulative effect with existing infrastructures. Therefore, those future projects need significant amount of additional information, to complete missing data or refresh it. This includes systematic development of river basin management plans, in line with the requirements of the EU Water Framework Directive.
- Some areas are of particularly high nature and biodiversity value and vulnerability, and not all impacts can be mitigated. Therefore, the countries of the region should consider designating zones from which hydropower development is excluded.
- A trans-boundary approach to hydropower is essential in a region where most, if not all, river basins are shared. This confirms the need to plan at the level of river basins which cross several countries.

**Sustainable development obliges hydropower project developers strike a balance between: (a) the advantages of sustainable hydropower energy in facilitating growth and jobs in a modern society and economy; and (b) the need to preserve sensitive natural ecosystems.**

**The study will be finalised in the autumn 2017 and a WB6 Meeting of Energy and Environment Ministers will be organised before the end of the year to discuss further, with a view to endorse its results.**

**Estimated share of additional hydropower potential**  
(Regional Strategy for Sustainable Hydropower in the Western Balkans)



<sup>1</sup> Additional details on the Study may be found at: [www.wbif.eu/Projects](http://www.wbif.eu/Projects).

\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.

[ec.europa.eu/neighbourhood-enlargement](https://ec.europa.eu/neighbourhood-enlargement)