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HYDROPOWER
BAL KANS

BALKAN HYDROPOWER
OVERVIEW

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The EU has a target to achieve a share of at least 27% renewables in final energy consumption by 2030, which includes a 50% share of renewable electricity,

– Miguel Arias Cañete, the Commissioner for Climate Action and Energy (EC).

Renewable energy now accounts for 24% of global power generation.

To achieve decarbonisation, by 2050, renewables should be 80% of power generation.

Additions in installed renewable power capacity set new records in 2016, with 161 GW installed globally, increasing total global capacity to nearly 2017 GW.

In fact, renewables are becoming the least cost option.

The Energy Community Secretariat and the European Bank for Reconstruction and Development (EBRD) signed the Memorandum of Understanding strengthening their cooperation in the field of sustainable development with a focus on sustainable energy policy development in the Western Balkans, Moldova, Ukraine and Georgia.
Facts and figures

8400 MW
Hydropower capacity of Western Balkans

SLOVENIA
568 plants
the aim of Slovenia by 2020

CROATIA
1655 MW
Croatian hydropower capacity goal by 2020

BOSNIA AND HERZEGOVINA
>6,000 MW
Hydropower potential of Bosnia and Herzegovina

SERBIA
2835 MW
Installed hydropower capacity of Serbia

MONTENEGRO
18%
Installed hydropower potential

KOSOVO
140 MW
Hydropower capacities to be constructed in Kosovo by 2020

MAKEDONIA
5,505 GWh
Hydropower potential of Macedonia

ALBANIA
436 HPPs
to be built in Albania by 2025

ROMANIA
6,715 MW
Installed capacity of hydropower of Romania

BULGARIA
522 MW
New capacity — target of Bulgaria by 2018

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1655 MW
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New capacity — target of Bulgaria by 2018

24 bn
The overall investment in the Balkan hydropower before 2025

240 m
The investment of EBRD in the construction of 51 HPPs in Western Balkans

437 m
The investment of EIB in 5 HPPs in Western Balkans

Request a full version of the free report on results of the study of Balkan Hydropower 2017 here
The latest industry developments and trends in the region

The Balkans are generally referred to as a new continental hub for renewables. Hydropower is already widely used across the region and thousands of new projects are scheduled for the immediate future. 8400 MW is the existing and under-construction hydropower capacity in the Western Balkans, generated by 53 middle and large HPPs and 203 SHPPs.

A number of countries have already tendered concessions in areas with promising geographical and hydrological conditions.

Bosnia and Herzegovina has approximately 3500 MW of untapped hydropower potential. Macedonia has a technical hydropower potential as of 5,500 GWh, only 27% of which is currently exploited. In Romania, there are over 550 small hydropower plants and the number is steadily increasing, driven by the recent financial incentives for the development of renewable energy.

A rapidly boosting investor interest in new projects, and the eagerness of public financial institutions to provide loans and support energy efficiency measures and renewable energy, are the good case to the point. The EBRD is the major investment player in the Balkan hydropower. The bank has supported a total of 51 plants with €240m.

The intensification of Chinese investment in the region speaks to an increasingly growing interest as well. However, China is not a top investor, with Norway, Italy, Hungary and Russia leaving it behind.

A total of 2000 HPPs are anticipated to be built in the Balkan region by 2025, with considerable €24bn to be invested in this context.
Albania

In the last two years, there has been an increasing interest from Chinese companies to invest in Albania and based on such growing interest, Albania could become a “focal point” in the Western Balkans for Chinese investments, whether public or private. Concerning the attraction of foreign and Chinese investors in Albania, the Albanian government is undertaking steps regarding the improvement of the investment climate. Albania is an attractive country, a growing market with stable economic, political and legal structure, as well as a liberalized economic framework and good conditions for doing business,

38 small and medium HPPs were launched in Albania in 2016, with 436 HPPs to be built by 2025. The Albanian Ministry of Energy and Industry published a tender for the construction of the Kalivac hydropower plant on the river Vjosa and concession to produce power for the national grid over a period of 35 years. The private/public partnership project includes the construction of a dam along with the power plant. The hydropower plant will be built near the Kalivac village, in southern Albania. Albania gets 100% of its electricity from hydropower plants but no new major power generation facilities have been built in the country for more than 30 years.

— Genti Beqiri, Head of the Albanian Investment Development Agency (AIDA).
Montenegro

Only 18% of total hydropower potential is installed in Montenegro. There are currently **27 projects** being implemented on some 25 water courses. EUR 740m is the amount of investment in new hydropower plants in the country. Recent information on the Government of Montenegro’s official website stated intention to build four hydropower plants on the Morača river, with a combined installed capacity of **238 MW** and projected annual output of **694 GWh**. The total estimated cost is EUR540m and the estimated construction period is six years.

Slovenia

“Slovenia is preparing for adoption of a new energy concept,”

– Slovenian MP Igor Zorčič.

The country’s aim is to have **568 plants** with a total installed capacity of 192 MW (758 GWh) by 2020. By 2018, 41 MW HE Brežice and 30 MW HE Mokrice hydro power plants will be built on the Sava River. Construction of ten hydropower plants on the Sava River with a cumulative capacity of **338 MW** is planned to be finished by 2030. A large pumped-storage hydropower plant Kozjak on the Drava River is in the planning stage.

Croatia

“Croatia will probably review its goal of 20% share of renewable energy in final energy consumption since it has already exceeded it,”


By experts’ opinion, hydropower potential is Croatia’s best chance for more energy independence. The country currently imports around **30%** of electricity consumed.
Macedonia

As part of activities to bolster Macedonia’s share of power generation from hydro facilities, currently at 1/5, the EBRD has placed a call for services of a consulting company. Its responsibility will be to assist the government of Macedonia in conceptual design for the best hydropower development option from an environmental, social, economic and financial bankability perspective.

**80 MW of small HPPs** will be built in Macedonia before 2020, according to the Energy Development Strategy of Macedonia. Macedonian Government is determined to fully utilize country’s hydro potential for generation of electricity.

Serbia

“Montenegro, Bosnia and Herzegovina, and Serbia all have a great opportunity to increase power trade,”

– professor Mark Howells from the Royal Institute of Technology (KTH).

*Synchronised operation of power plants along the Drina and its tributaries could markedly increase production downstream.*

The utilized hydropotential in Serbia accounts for **55%**. Serbia has the highest installed hydropower capacity in the region, with some **2,835 MW** currently operational. With financial assistance from the European Bank for Reconstruction and Development (EBRD), Serbia has announced plans to install new hydropower plants and two existing dams, and to rehabilitate and **further rehabilitate 15 existing power plants totalling around 30 MW.**
BiH

“I am strongly convinced that a close collaboration of IRENA and other key regional stakeholders will significantly contribute to our ongoing efforts in better harnessing the renewable energy potential currently largely untapped”,

—the Minister of Foreign Trade and Economic Relations of Bosnia and Herzegovina, Mirko Šarović.

Hydropower is the cheapest renewable energy option in Bosnia and Herzegovina.

The Austrian company SCHALL Group has expressed interest in building renewable energy power plants in the Republic of Srpska (RS). They plan to build water-powered and solar-powered plants along the Vrbanja river basin in Herzegovina with combined investment in those plants around EUR6m. Minister of Industry, Energy and Mining of RS Petar Đokić said that seven more SHPPs have been under construction in this entity and that another two are in the test phase. He added that all of them will become operative by the end of 2018 at the latest.
Conclusions

We have seen remarkable progress on the political level, both in the readiness to adopt difficult, but necessary measures, and in the willingness to initiate the dialogue with neighbouring countries. What is needed now is a comparable economic boost which delivers adequate and tangible results to the people of the region,

- Suma Chakrabarti, EBRD president.

To sum it all up, the Western Balkan countries can harness their huge potential through long-term planning, reform, liberalization of the energy market, cooperation, coordination and investment.

Greenfield and brownfield HPP projects with 2018-2025 implementation period in the Balkan region, as well as projections of governments, project initiators and investors, along with innovative solutions for hydropower development, and other relevant issues, will be discussed at the International Summit and Exhibition “Hydropower Balkans 2017”, held on 15-17 November in Podgorica, Montenegro.

The international Summit “Hydropower Balkans 2017” is a professional platform, bringing together chief ministers, major investors, decision-makers of the leading hydropower plants and investment project initiators, as well as regulators, to consolidate efforts focused on efficient implementation of key projects for the construction and reconstruction of HPPs across the Balkan region.
Summit highlights:

- **Balkan greenfield projects with 2018-2025 implementation period:** Albania, Serbia, Bosnia and Herzegovina, Macedonia, Croatia, Slovenia, Montenegro, Bulgaria, Romania and Kosovo
- **Energy Ministerial Meeting** on international cooperation and effective implementation of the investment projects in the Balkans
- **Onsite visit to one of the most progressive HPPs in the Balkan region** – explore effective project execution strategies!
- **Meeting the investors:** prescheduled meetings with international investors (institutional, financial, industrial etc.)
- **Leaders’ debate:** Single region implies consolidated energy market! Projections of governments, initiators and investors. Finance and investment landscape
- **Case studies** from companies, successfully carrying out their projects for HPPs’ construction and modernization across the region
- **Tailor-made session and exclusive exhibition:** innovative solutions and equipment in the context of greenfield and brownfield development
- **Unparalleled networking opportunities:** gala dinner, exhibition, champagne roundtables, and face-to-face meetings
- **Fast and efficient!** Road-Show of innovative technologies and equipment

The projects mentioned above and other industry specific issues will be discussed within the International Summit and Exhibition «Hydropower Balkans 2017», 15-17 November, Montenegro
Vostock Capital is a leading provider of consulting and event management services with a 15-year history, focusing on international conferences, experience sharing programmes and in-house trainings for the professionals of oil and gas, agroindustrial, IT and power engineering industries from Russia, CIS, Europe and Asia.

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Vostock Capital features a proficient analytical team. Consistent high quality of our events pays back with immaculate reputation among the market leaders, due to the exclusively reliable industry-specific information and analytics rendered. The majority of programmes delivered by Vostock Capital are one-of-a-kind. Vostock Capital is committed to encouraging diverse views, relying on verified information and addressing the most critical industry challenges.

Among participants:
You can contact our managers regarding the following inquiries:

Discussion of effective sponsorship and exhibition options for your company:

Darya Motornova, Business Development Director
dmotornova@vostockcapital.com
+7 (499) 505 1 505 (Moscow)
+44 207 394 30 90 (ext. 123) (London)

Participation as a speaker:

Inessa Shahnazarova, Project Director
osoboleva@vostockcapital.com
+7 (499) 505 1 505 (Moscow)
+44 207 394 30 90 (ext. 150) (London)

Participation as a journalist and media partner:

Irina Stepanova,
Marketing Manager
istepanova@vostockcapital.com,
+7 (499) 505 1 505 (Moscow)
+44 207 394 30 90 (London)

Alina Fatchikhina,
Media relations Manager
afatchihina@vostockcapital.com
+7 (499) 505 1 505 (Moscow)
+44 207 394 30 90 (London)