REPUBLIC OF SRPSKA
MINISTRY OF INDUSTRY, ENERGY AND MINING

REPUBLIC OF SRPSKA ENERGY SECTOR
INVESTMENT POTENTIALS
Due to its natural features, the Republic of Srpska ranks among the areas rich in hydropower potential.

- Technical potential of the Republic of Srpska amounts to about 10,000 GWh per year, and only about 30% is currently being used.
- Largest share of the unused potential belongs to the energy facilities of power exceeding 10 MW, but there are also significant potentials in the hydropower facilities of power up to 10 MW (about 300 MW).

The Republic of Srpska also has sufficient coal reserves for construction of larger capacities for electricity production;

There is a need for development of gas network and use of natural gas.

Also, the Republic of Srpska has significant unused potentials in renewable energy sources, and investment opportunities in the field of energy efficiency.
In order to regulate the field of energy and to create conditions for investments, the following laws and strategy documents have been adopted:

- Law on Energy of the Republic of Srpska
- Law on Electricity
- Law on Renewable Sources and Efficient Cogeneration
- Law on Energy Efficiency
- Law Establishing the BiH Electricity Transmission Company
- Law Establishing the BiH Independent System Operator
- Law on Gas
- Law on Petroleum and Petroleum Products
- Law on Concessions of the Republic of Srpska
- Republic of Srpska Strategy of Energy Development until 2030
- Republic of Srpska Action Plan for use of renewable energy sources and other subordinate legislation regulating the use of renewable energy sources in further detail,
- Energy Efficiency Action Plan and subordinate legislation, etc.
In accordance with regulations, electricity producers in plants using RES and ECP can enjoy the following incentives:

- facilities in connecting to the grid,
- advantage in dispatching,
- right to mandatory electricity purchase and
- guaranteed purchase price or premium.

Electricity producer may exercise the right to an incentive provided that:

- they produce electricity at a production plant using RES, with power up to 10 MW inclusive, and/or ECP with power up to 30 MW inclusive and
- that they obtained a certificate issued by the REERS proving that the production facility produces energy using RES and/or ECP.
The Government of the Republic of Srpska has identified the energy sector as one of the strategic sectors to drive the overall economic and social development of the Republic of Srpska in the forthcoming period.

The Energy Development Strategy until 2030 provides for the value of investment in the RS energy sector in the amount of about 11.5 billion BAM (5.88 billion €).
The most important business entity in the field of electric power is the Power Utility of the Republic of Srpska, organized as a mixed holding with head office in Trebinje.

The Power Utility of the Republic of Srpska comprises five production and five distribution companies.

Each of the companies is a joint stock company with majority state-owned capital (about 65%) and the RS Government is committed to maintaining such situation in the coming period.
## Power Utility of the Republic of Srpska Present Capacities

<table>
<thead>
<tr>
<th>Plant Description</th>
<th>Installed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPP on Vrbas Mrkonjic Grad</td>
<td>110 MW</td>
</tr>
<tr>
<td>HPP on Drina Visegrad</td>
<td>315 MW</td>
</tr>
<tr>
<td>HPP on Trebisnjica Trebinje</td>
<td>179 MW</td>
</tr>
<tr>
<td>Distribution and MHPP</td>
<td>14 MW</td>
</tr>
<tr>
<td>Mine and Thermal Power Plant Ugljevik</td>
<td>300 MW</td>
</tr>
<tr>
<td>Mine and Thermal Power Plant Gacko</td>
<td>300 MW</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1218 MW</strong></td>
</tr>
</tbody>
</table>
Year 2013 was the year of **record production** of electricity since establishment of the Utility, and it amounted to **6,364.19 GWh**.

- Total quantity of balance surplus was **2,680.05 GWh**, where generated revenue amounted to **227.2 million euro**.

- Year 2013 saw implementation of investments in the amount of **150.12 million BAM** which include:
  - own funds 119.87 million BAM,
  - loans 26.01 million BAM,
  - donations 4.04 million BAM.

- Planned investments during the period 2014-2016 – more than one billion BAM (1,349.4 million BAM).
In view of the age of the existing facilities and significant unused potential, and in order to provide secure electricity supply to consumers, the Power Utility of the Republic of Srpska has initiated activities on the implementation of new energy facilities.

HPP *CIJEVNA III* on the river Bosna

- Installed power 13.9 MW
- Investor: JC *Elektro Doboj a.d. Doboj*
- Investment value: 85 million euro – *funding provided*

Activities are ongoing on the preparation of main design and resolution of property ownership issues.
HPP DABAR - UPPER HORIZONS PROJECT

- Installed power 159.15 MW
- Investment value: 179.9 million euro

Funding structure
- 25% own funds
- 75% loan

Concession agreement was signed in July 2013.

Preparatory works are ongoing in the field as well as obtaining of all necessary permits.
In addition to the HPP Dabar, the Upper Horizons project also includes the construction of another two hydropower plants in the territory of the Republic of Srpska, as follows:

**HPP NEVESINJE**
- Installed power **60 MW**
- **Investment estimate 99.5 million €**

**HPP BILECA**
- Installed power **33 MW**
- **Investment estimate 48.11 million €**

The above hydropower plants will be implemented after construction of the HPP Dabar
HPP SYSTEM ON THE UPPER DRINA

- HPP Buk Bijela, installed power 114.64 MW
- HPP Foca, installed power 51.66 MW
- HPP Paunci, installed power 36.64 MW
- HPP Sutjeska, installed power 34.95 MW

▪ Investment value estimate: about 435 million euro.

WIND PARK HRGUD

▪ Installed power: 48 MW
▪ Investor: MH ERS MP a.d. Trebinje
▪ Investment value: 70 million euro – funding provided

Activities necessary for concession grating are ongoing.
In order to provide more participants at the market, the Government of the Republic of Srpska has granted concessions to private investors for the implementation of a number of energy facilities, most importantly:

- **TPP STANARI**
  - Installed power: 300 MW
  - Project agency/concessionaire: *EFT Stanari Mine and Thermal Power Plant*
  - Total investment value: **about 950 million BAM**

The project is implemented under the turnkey principle, and it will be completed during 2015.
MIXED FINANCING

TPP UGLJEVIK III

- Installed power from 400 to 600 MW
- Project agency: COMSAR ENERGY REPUBLIKA SRPSKA
- Investment value estimate: 1.1 billion BAM – funding for implementation has been provided in full.

HPP SYSTEM ON BISTRICA

- Installed power of three hydropower plants amounts to about 40 MW
- Project agency: HPP Bistrica a.d. Foca
- Investment value estimate: 50 million euro

Activities are ongoing on providing of financing.
MIXED FINANCING
NEW PRODUCTION FACILITIES

HPP SYSTEM ON THE UPPER DRINA

- HPP Buk Bijela, installed power 93.52 MW
- HPP Foca, installed power 44.15 MW
- HPP Paunci, installed power 43.21 MW
- HPP Sutjeska, installed power 44.08 MW

- Investment value estimate: about 577.2 million euro.
HPP MRSOVO

- Estimated installed power 37.3 MW
- Annual production 140.6 GWh
- Estimated investment value of about 200 million BAM
- Concessionaire/investor: COMSAR ENERGY HYDRO Banja Luka

Works on construction of the Mrsovo HPP facility were started on 23 June 2014.
Funding for project implementation have been provided in full.
HPP ULOG ON THE RIVER NERETVA
- Installed power: 35 MW
- Total investment value: about 126 million BAM
- Concessionaire/investor: EFT Switzerland

HPP SYSTEM UPPER NERETVA ON THE RIVER NERETVA
- Total installed power of 7 small hydropower plants about 17.2 MW
- Total investment value: about 70 million BAM
- Concessionaire/investor: Marvel East Sarajevo
Features of the transport gas pipeline of the Republic of Srpska

The gas pipeline system used by the Republic of Srpska comprises main, supply and distribution gas pipelines, and urban medium- and low-pressure distribution networks, gas receiving and dispatching stations, main metering and regulating stations (MMRS) and metering and regulating stations with consumers (MRS).

- gas pipeline length 62 km
- gas pipeline cross-section 406.4 mm (16”)
- projected pressure 50 bar
- projected capacity 11 bln Nm³/year and real capacity of 0.7 bln Nm³/year.
Strategic orientation of the Republic of Srpska is to gasify the municipalities and cities in the Republic of Srpska, in order to diversify energy sources, reduce pollution and upgrade quality of life of its citizens.

Republic of Srpska gasification plans rely on construction of a branch of the international gas pipeline South Stream interconnection with the Republic of Serbia.

The project of construction of the South Stream gas pipeline branch in the Republic of Srpska was granted the status of a strategic project of national interest for the Republic of Srpska.
The existing and planned directions of gas supply of the Republic of Srpska (BiH) from the South Stream gas pipeline from the territory of the Republic of Serbia are presented below Figure 1. Main concept of Republic of Srpska gasification
Figure 2. Route of the planned gas pipeline Centa (South Stream Serbia) - Bijeljina - Novi Grad - about 320 km westward
According to the present analyses, energy intensity in the Republic of Srpska is up to 4 times higher than the average of the European Union member states, or 2.5 times higher than the world average, and this data is an indicator of potential for investments in this field.

Most energy is consumed by housing sector, over 50%, where the potential for the application of energy efficiency measures is the largest.

The sector of distance heating follows by importance, and sectors of industry and transport should not be neglected either.
In compliance with the obligations arising from the Agreement on the Energy Community for Southeastern Europe, legislative framework in the field of energy efficiency has been adopted, including Action Plan and necessary subordinate legislation.

The aim of those activities is to:
- promote and improve energy efficiency;
- establish a fund intended for energy efficiency projects;
- institutionalize and adopt regulations for the energy efficiency field.
There are large potentials in all sectors of final energy consumption – total estimated investments in introduction of energy efficiency measures amount to over 2 billion BAM.

Due to a constant growth of energy prices, an increasing number of energy consumers opt for the improvement of energy efficiency.

By launching energy efficiency projects, the Republic of Srpska will become a significant market for:

- production of materials and components (mostly in construction sector);
- performance of works in project implementation;
- procurement, mounting and maintenance of equipment;
- consultancy services;
- human resources education.
Energy consumption in the housing sector of the Republic of Srpska is significantly above the average of the European Union and amounts to 220 kWh/m² on average, where most energy is consumed for heating of premises and preparation of hot water (about 200 kWh/m²).

It is estimated that in terms of energy, renewal is required in about 137 thousand old housing units, i.e. total area of 12.25 million m².

Expected investment in energy efficiency upgrading in an average building, in order to achieve savings of 60%, is estimated at 100 BAM per m² of area on average, which would require total investment in energy renewal of more than one billion BAM.
Industrial sector is characterized by irrational use of thermal energy, large energy distribution losses, and obsolete electric motor drives.

Specific energy consumption per unit of finished product in the Republic of Srpska is up to three times higher than the European average.

Possible investments in energy efficiency improvement in this sector in order to increase competitiveness of the economy and cost-effectiveness of the price of heating by city heating plant, are estimated at more than one hundred million BAM.
THANK YOU FOR YOUR ATTENTION!

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