


# Bosnia and Herzegovina Country report presentation

JICA - Energy Policy (B)

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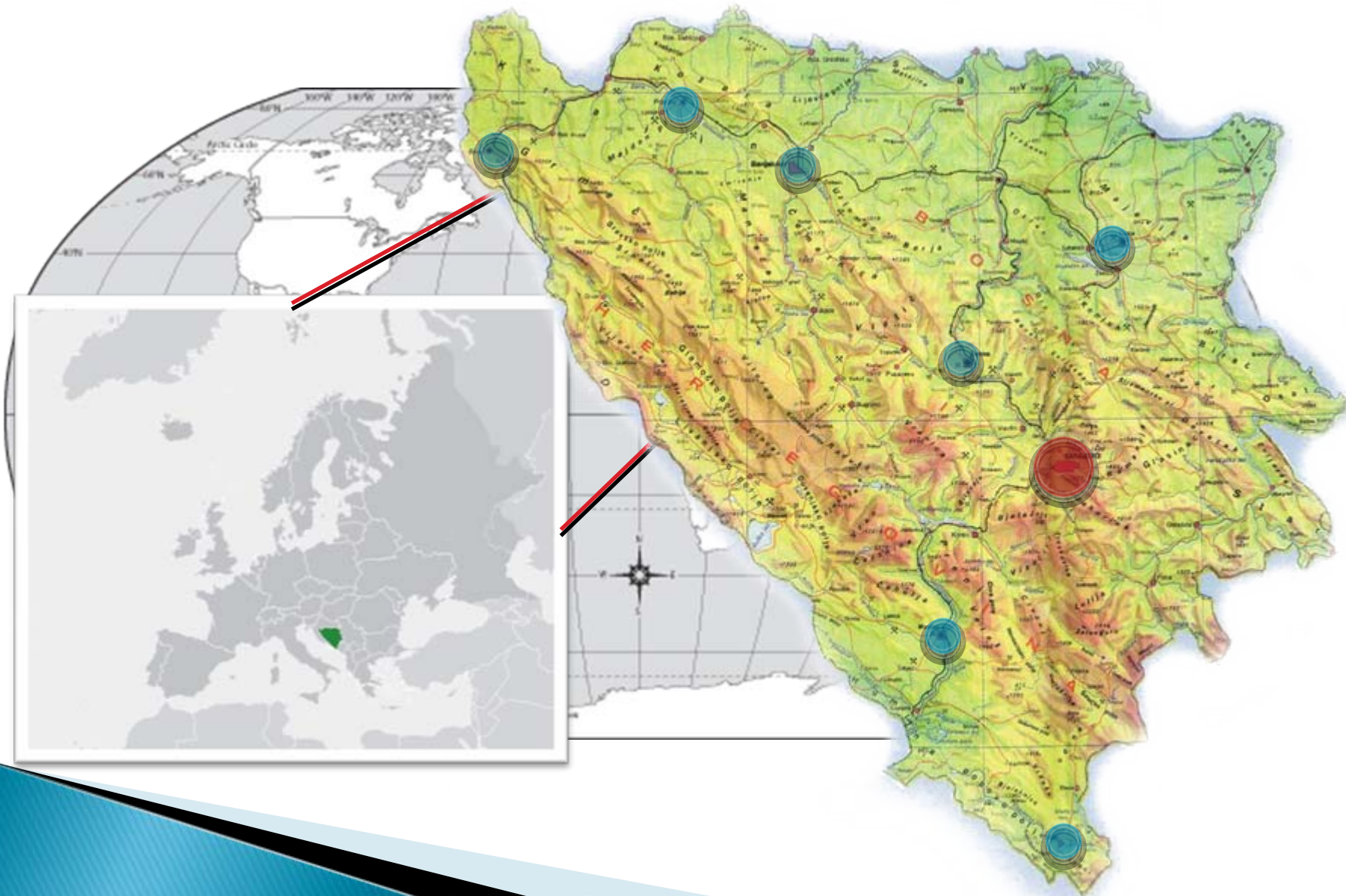
# Country Report Tasks

1. General information of each country
  2. Current energy policy and measures of each country
  3. Past energy demand and supply (statistics) of each country
  4. Outlook of energy demand and supply of each country
  5. Major difficulties and bottlenecks currently faced in formulating energy policies of each country
  6. Subjects you would like to study in the order of priority and the reason
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# Bosnia and Herzegovina (B&H)

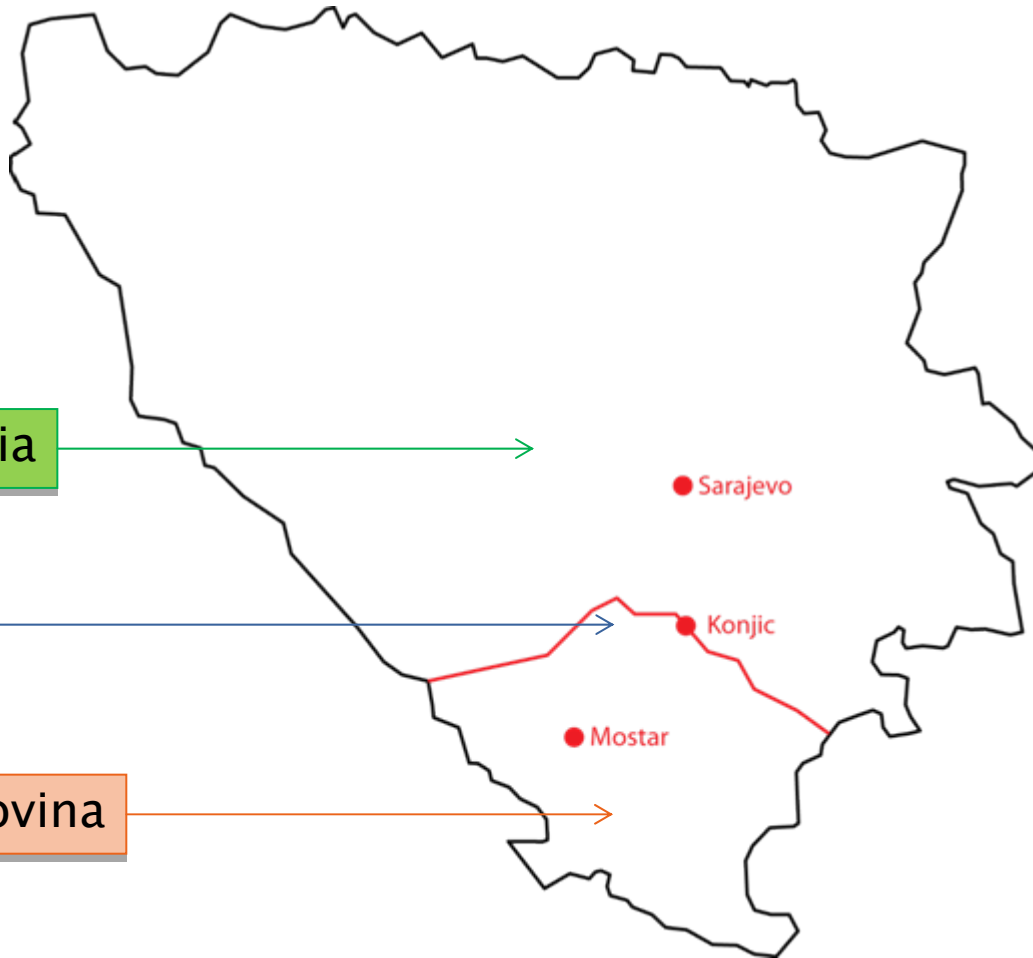
»» General information

# Location of B&H



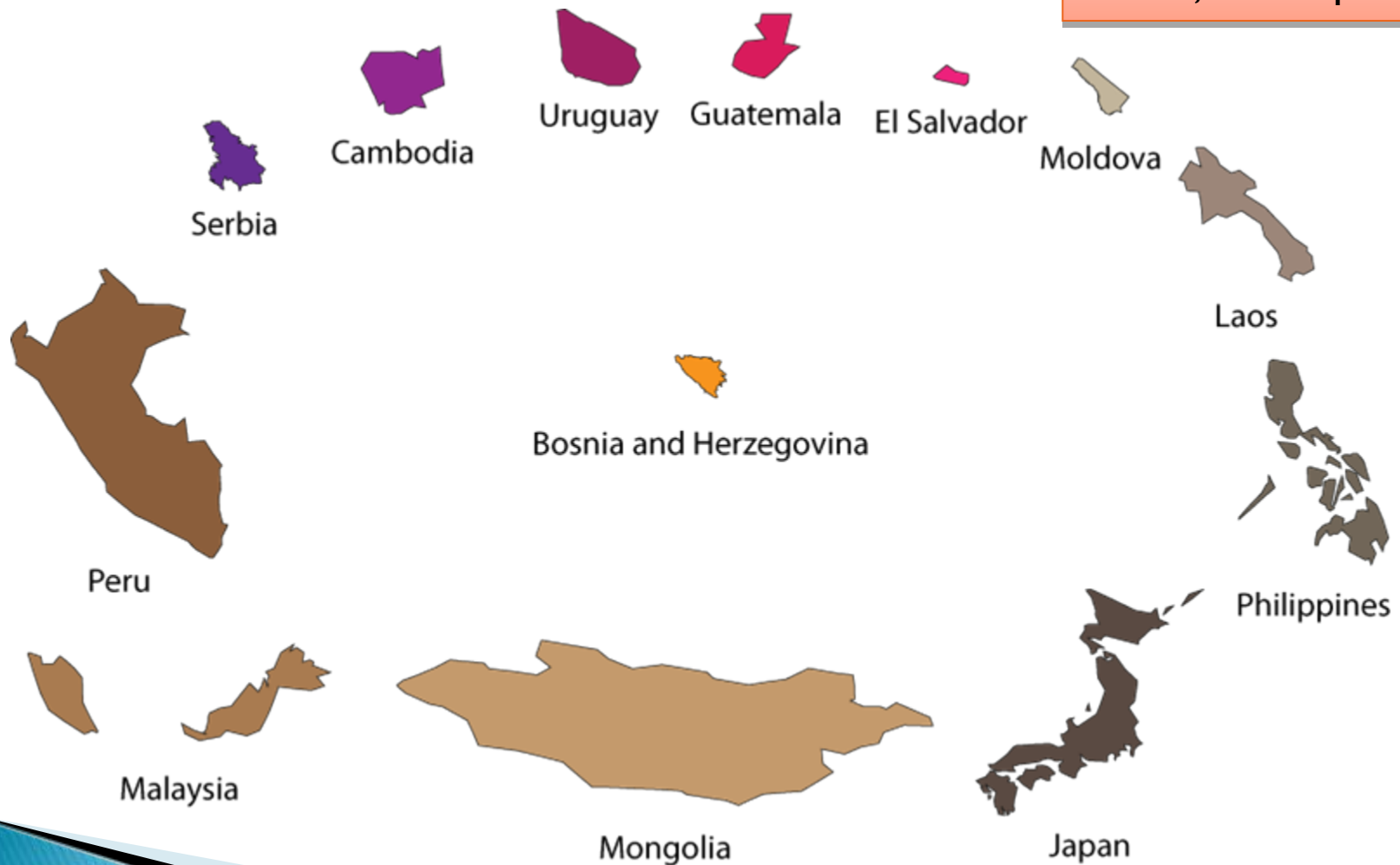


# Bosnia vs. Herzegovina



# Surface

Surface  
51,197 km<sup>2</sup> (127th)  
19,741 sq mi



# General information

## ▶ Population

- 1991 census 4,377,033
- 2011 estimate 3,839,737 (128th)
- Density 75/km<sup>2</sup> or 194/sq mi

## ▶ GDP – 2011 est.

- Total \$17.965 billion
- Per capita \$4,618

## ▶ Average net salaries ~420€ / ~530\$ / ~43000 JPY

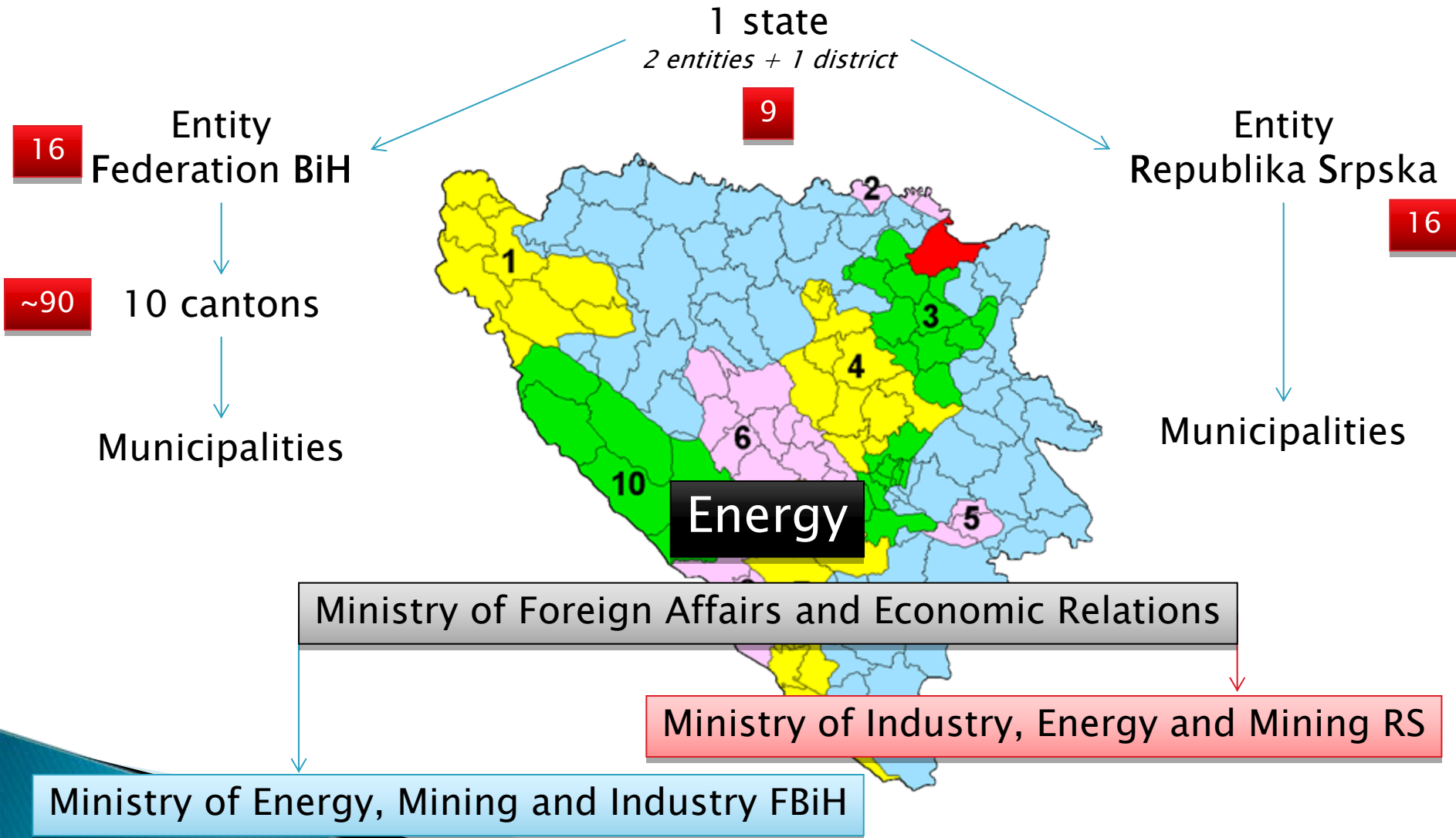
## ▶ Official languages

- Bosnian, Serbian, Croatian

## ▶ Official alphabets

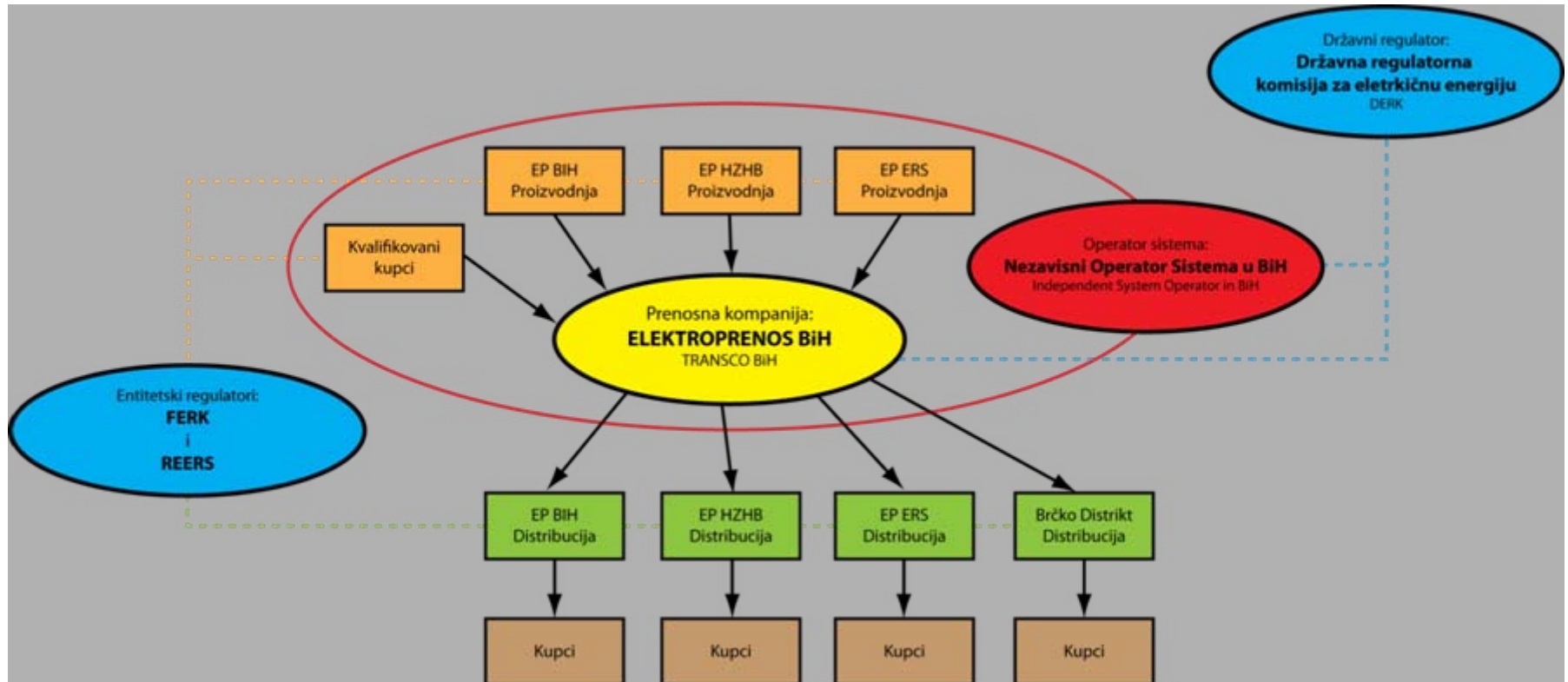
- Latin, Cyrillic

# Polical organization / Energy






# Electric Power System Organization



# Bosnia and Herzegovina (B&H)

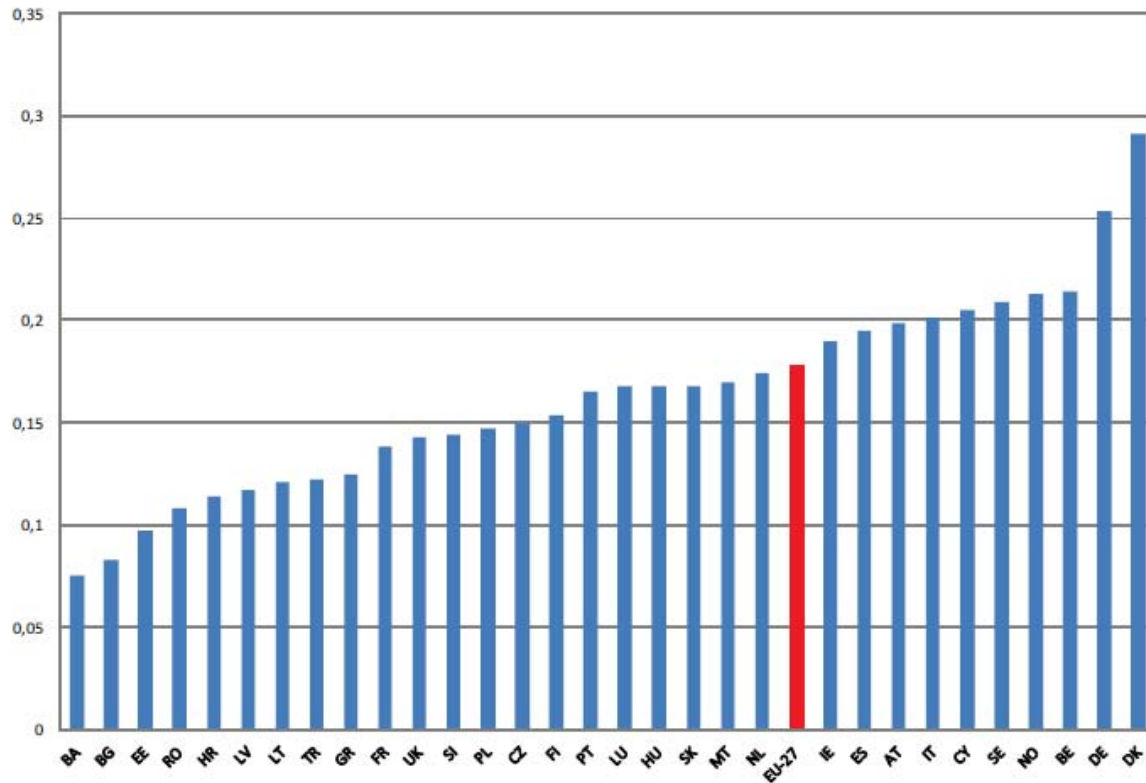
»» Current situation in  
power sector

# Current energy policy and measures

- ▶ National energy efficiency action plan (NEEAP) is not adopted.
  - ▶ Renewable targets are not yet adopted.
  - ▶ Problem is that state level policies are not being adopted because certain policies or measure already exist on entity level.
  - ▶ Incompatible existing entity policies (different section years, terms, etc...)
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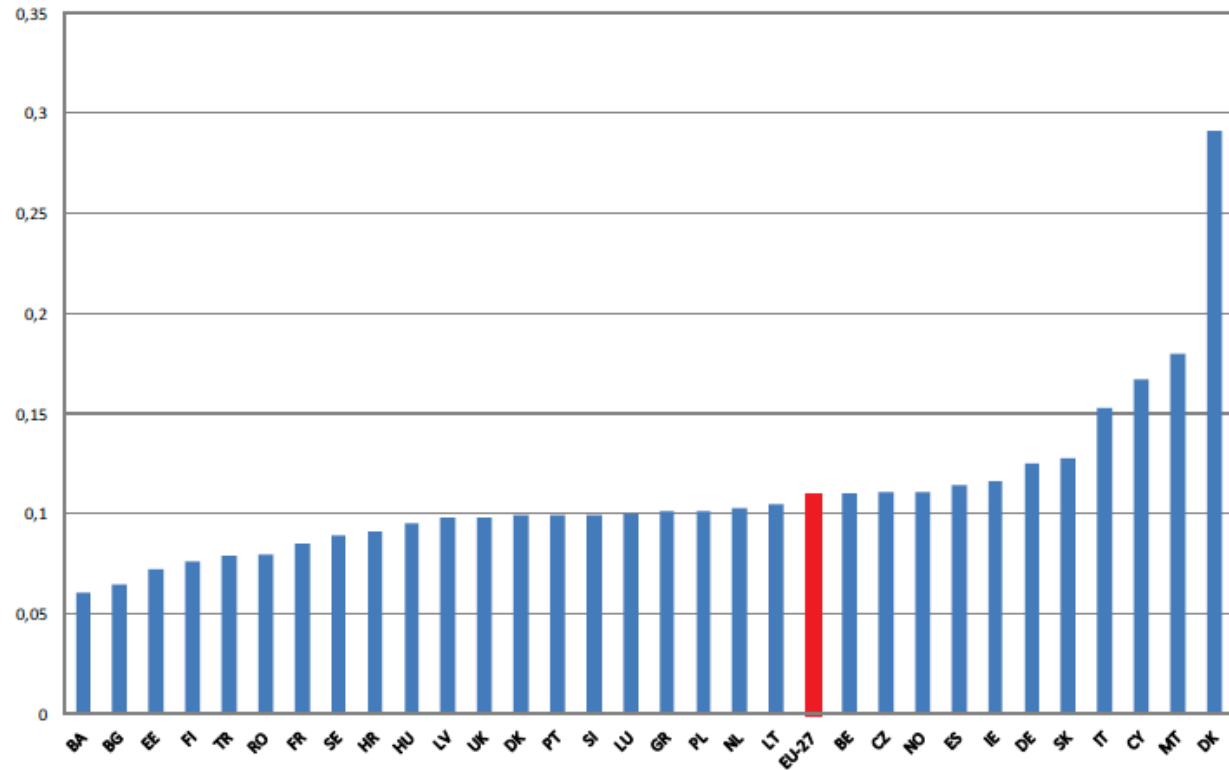
# Electricity prices

- ▶ Electricity price for households, EUR/kWh



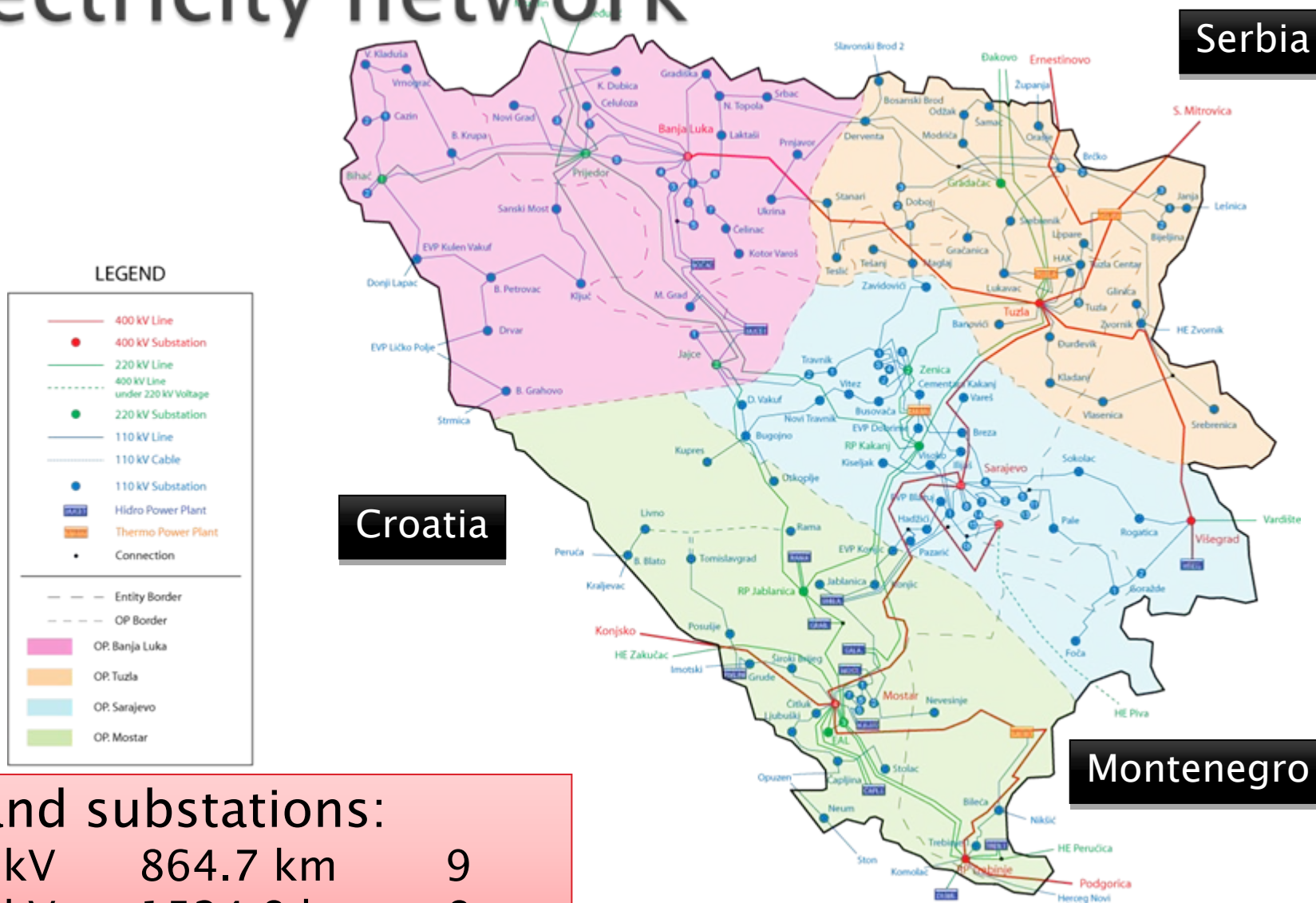
# Electricity prices

- ▶ Electricity price for industry, EUR/kWh



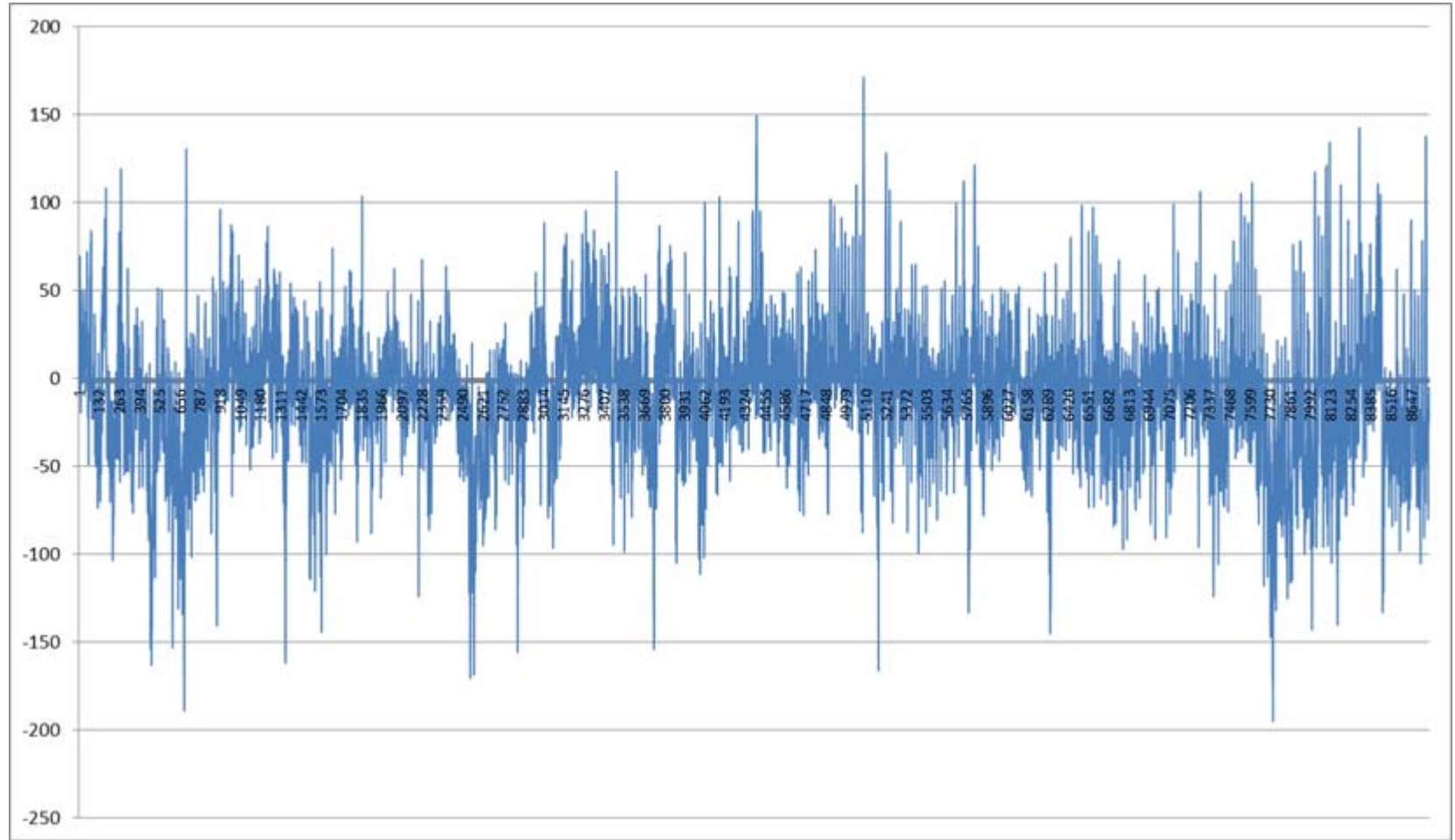


# Electricity network



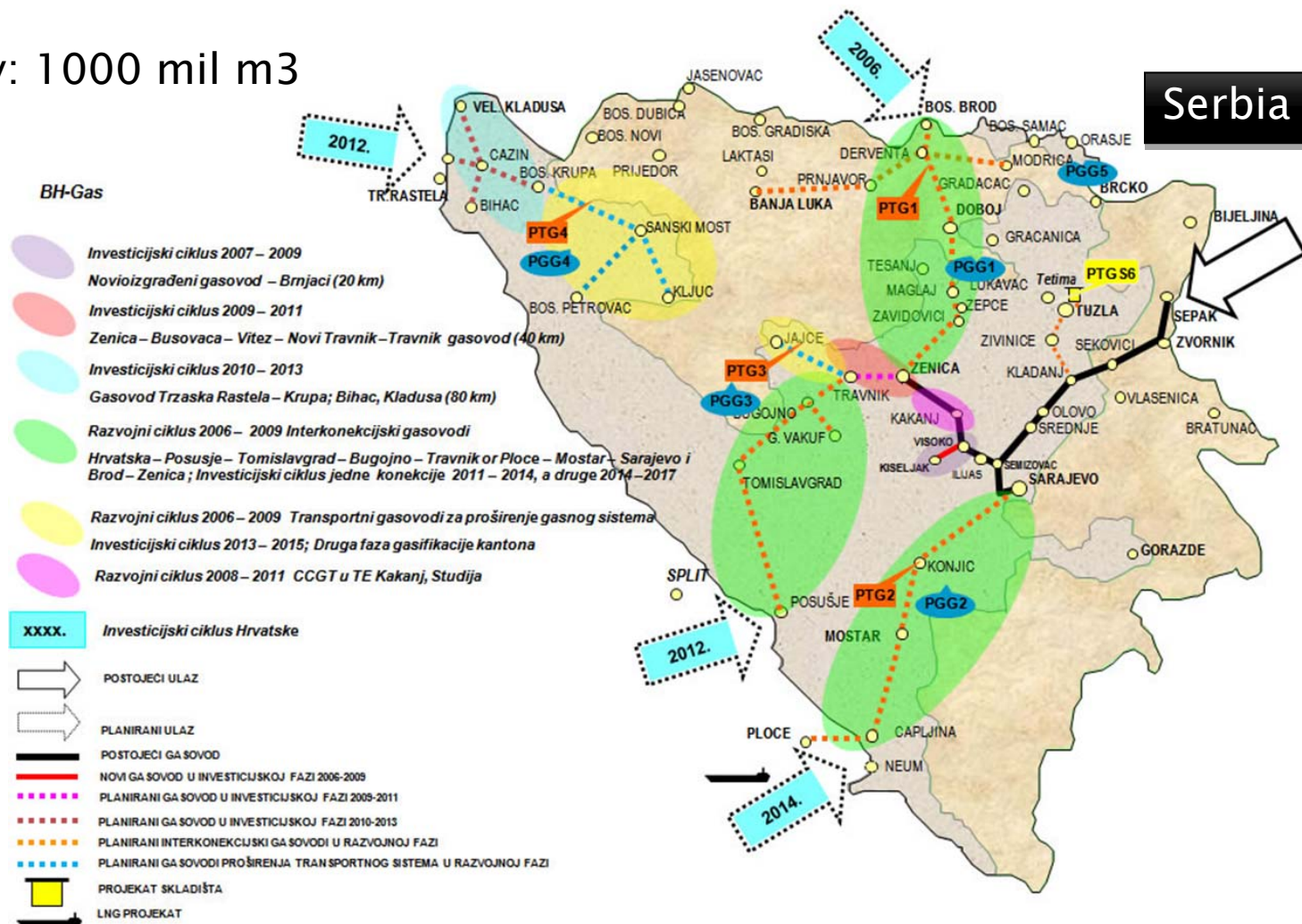
Lines and substations:		
400 kV	864.7 km	9
220 kV	1524.8 km	8
110 kV	3919.3 km	127

# Unwanted variations in 2011



# Gas network

Pipeline capacity: 1 000 mil m<sup>3</sup>



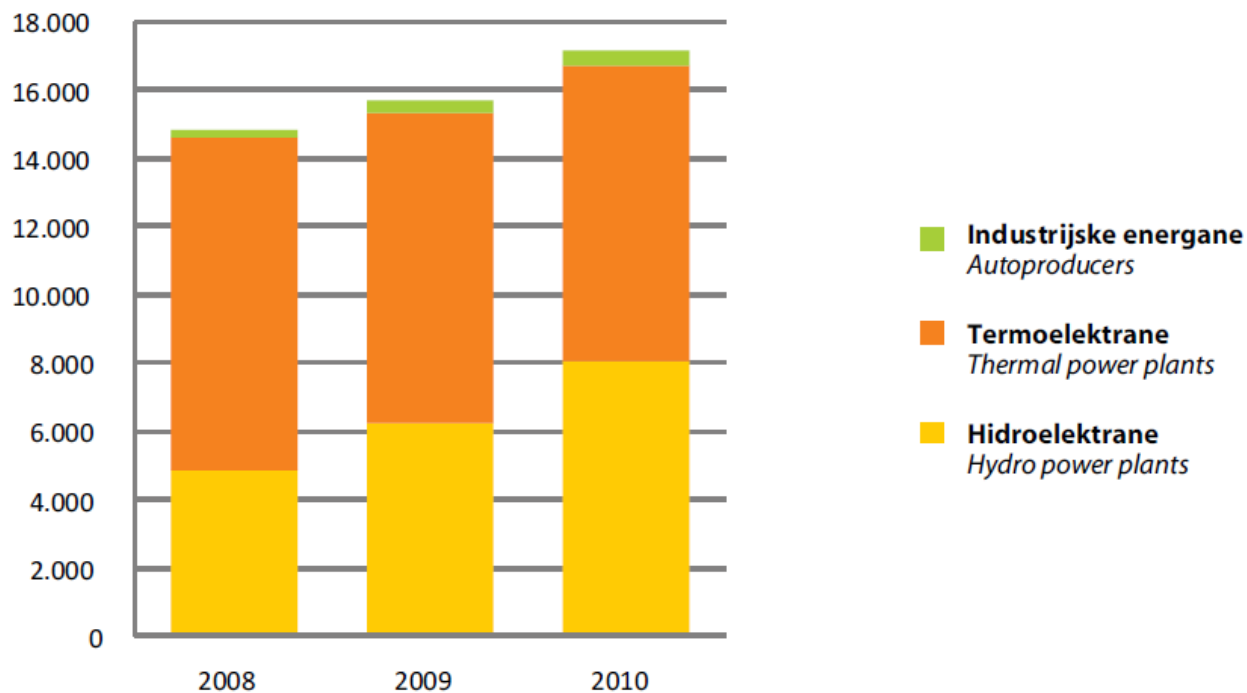
# Bosnia and Herzegovina (B&H)

- »» Past energy supply and demand



# Past energy demand and supply

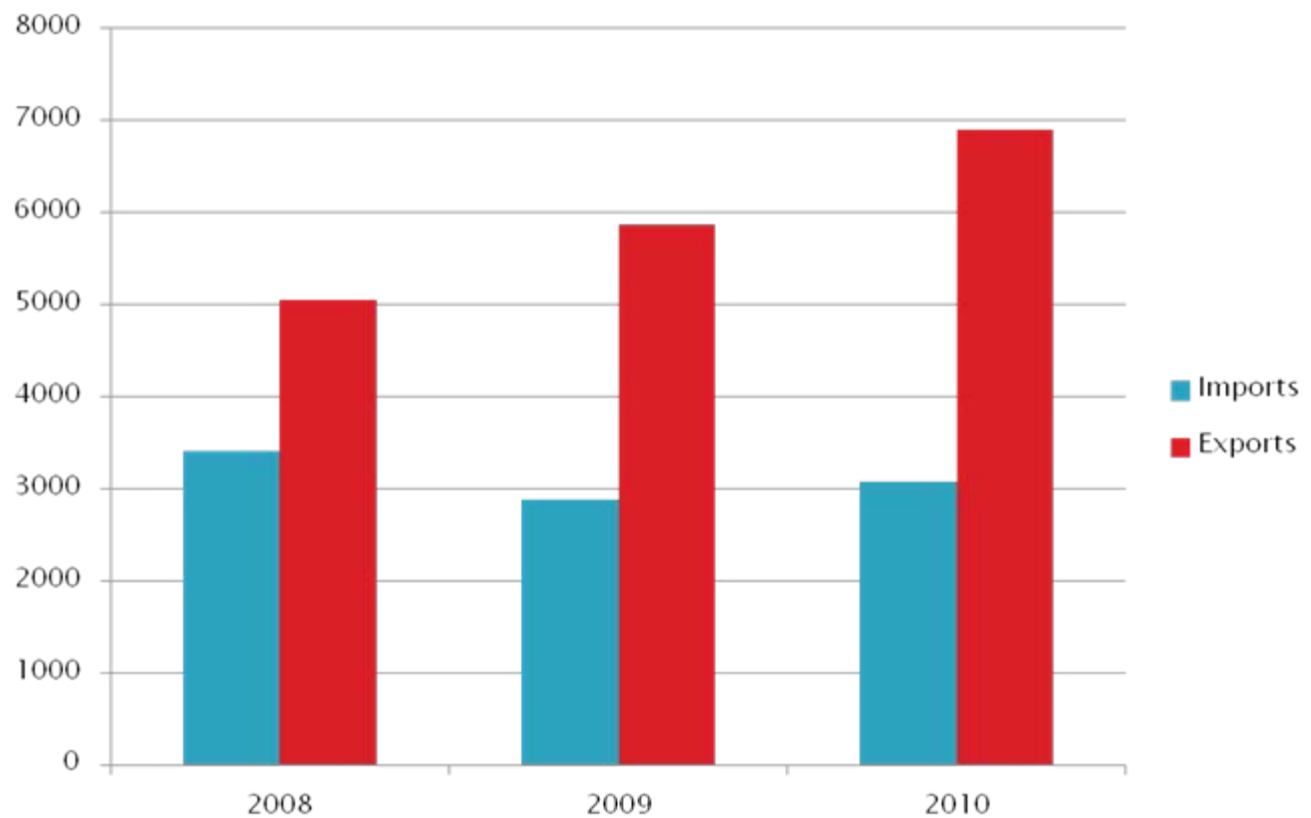
## ▶ Gross electricity production, GWh





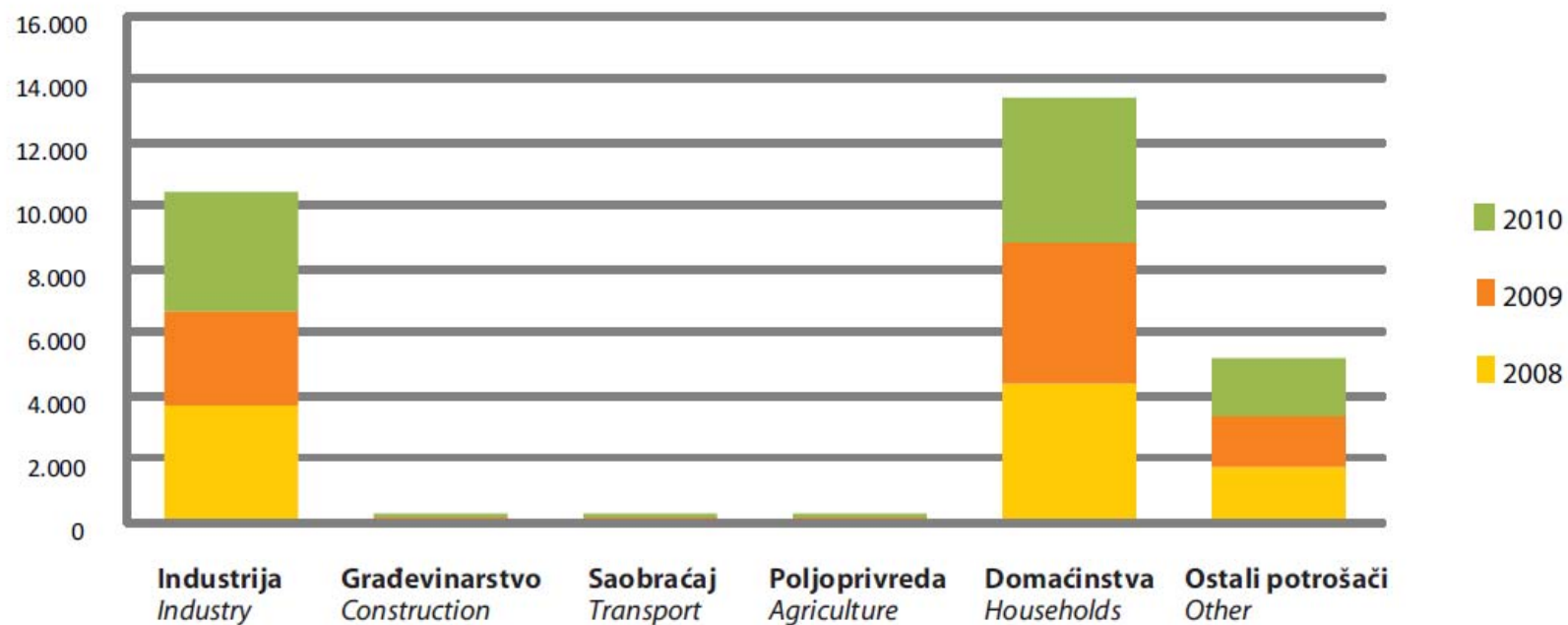
# Past energy demand and supply

## ▶ Imports/exports, GWh



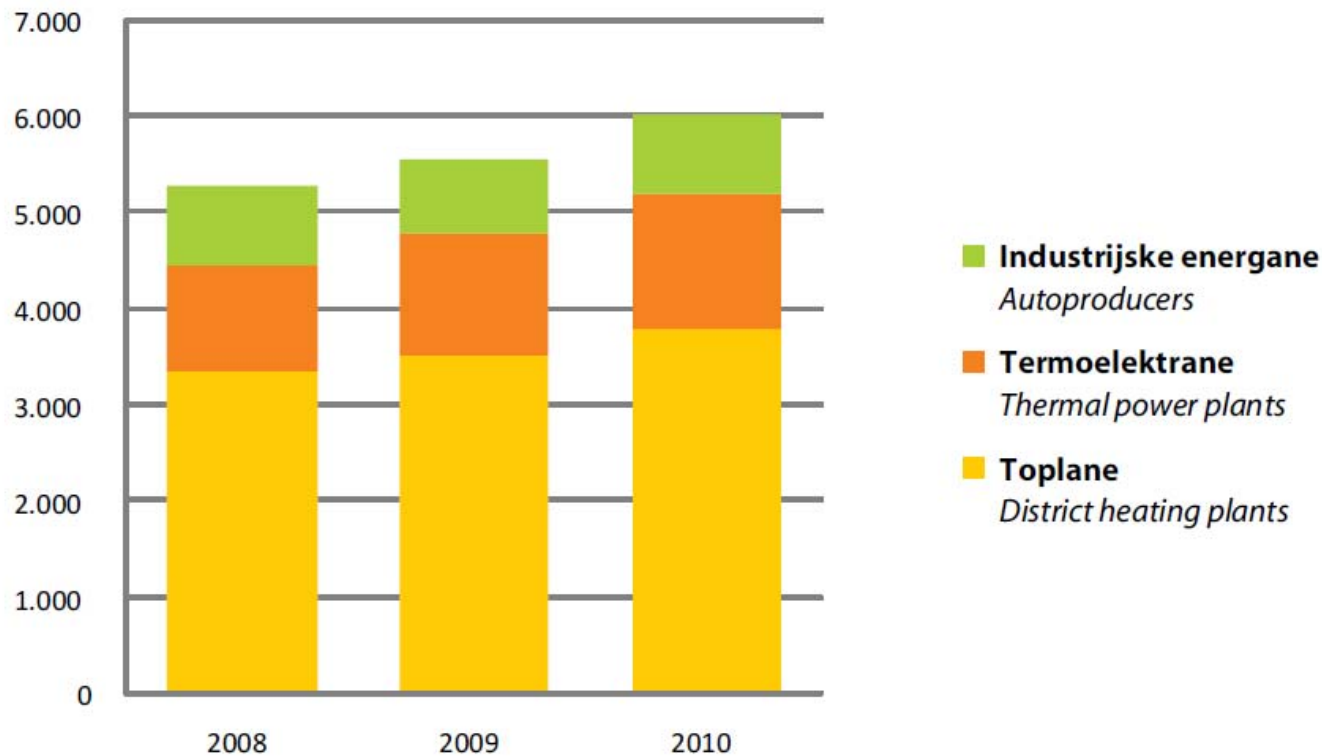
# Past energy demand and supply

## ► Final electricity consumption, GWh



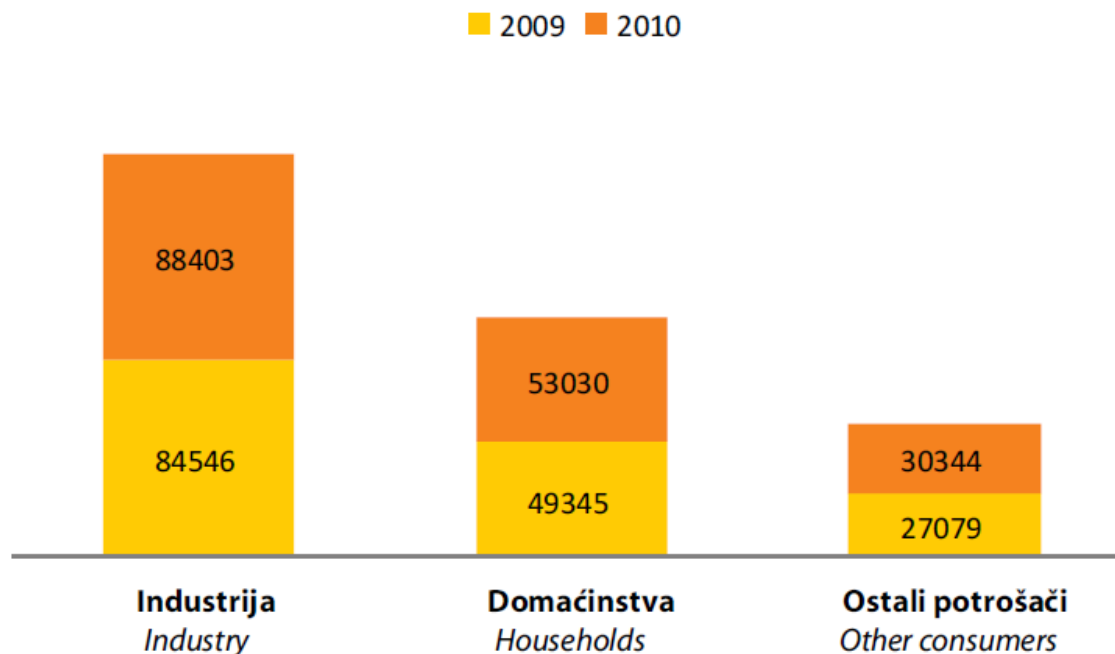
# Past energy demand and supply

## ► Transformation output – Heat, TJ



# Past energy demand and supply

- ▶ Final natural gas consumption, 1.000 Sm<sup>3</sup>



No data for oil in Statistics Agency

# Bosnia and Herzegovina (B&H)

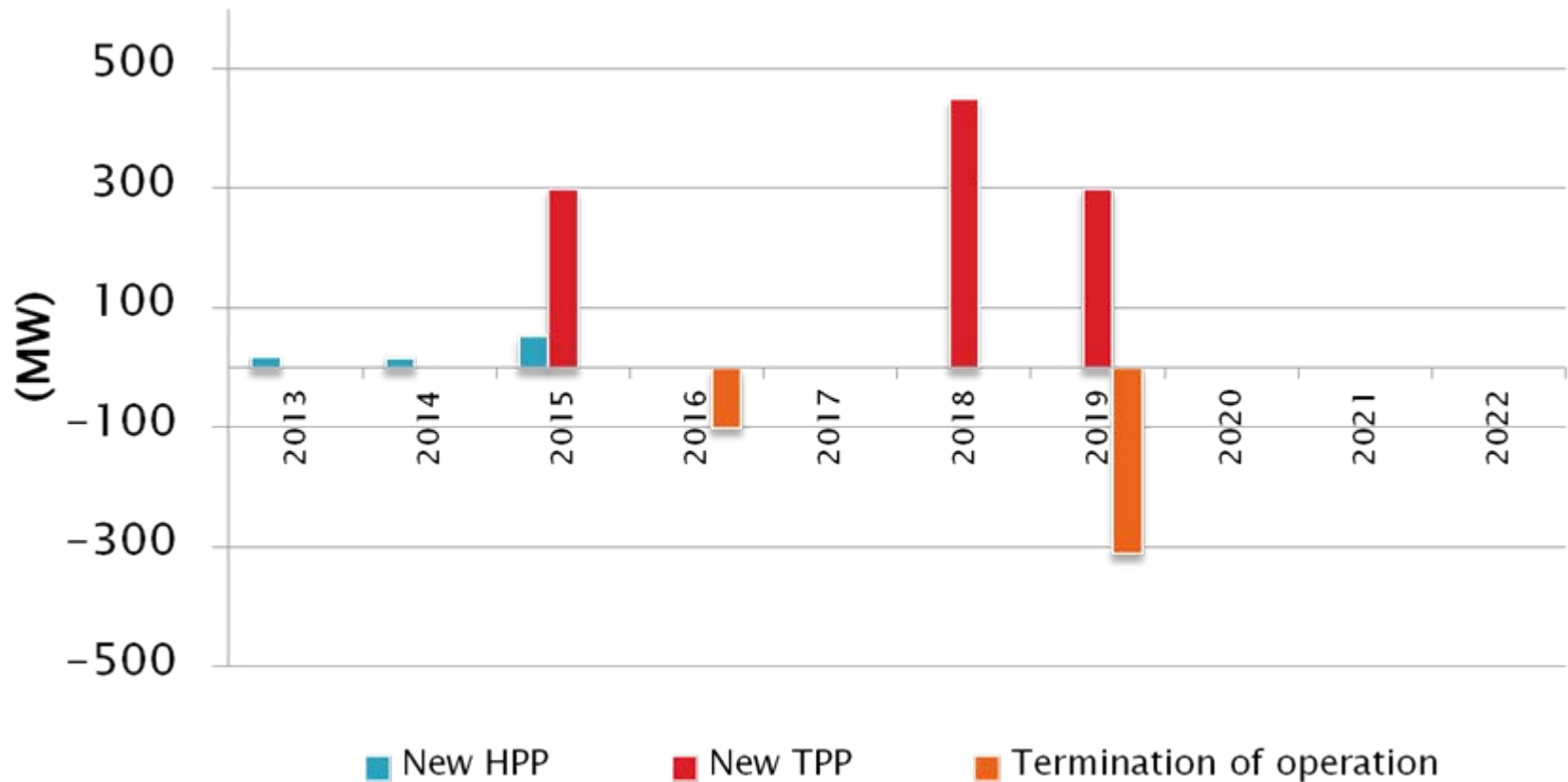
»» Future plans



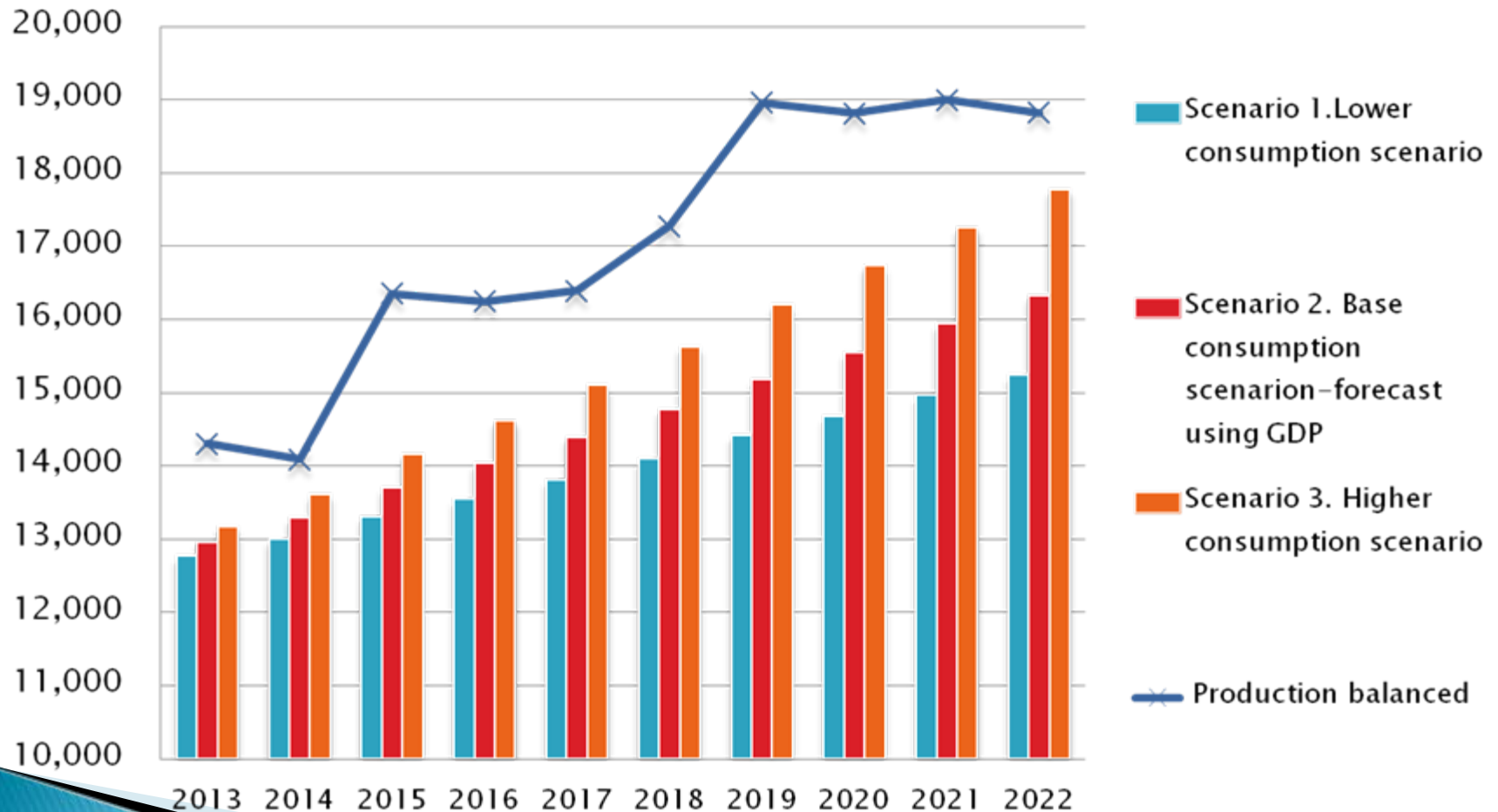
# Power system

- ▶ Existing plants (1956 – 2010):
  - HPP: 2030.6 MW
  - TPP: 1505.6 MW
  - NPP: 0 MW
  - WPP: 0 MW
  - Total: 3476.2 MW  $\approx$  3.5 GW
  
- ▶ Planned capacity (2010–2020):
  - 50 HPP: 1.94 GW
  - 9 TPP: 2.24 GW
  - 47 WPP: 3.01 GW

# New / Decommissioning Capacities



# Electricity balance 2013-2022



# Gas / Coal / Oil

- ▶ Several independent studies have been made concerning the subject of future energy demand and supply predictions.
- ▶ There is no official data.

# Bosnia and Herzegovina (B&H)


»» Difficulties and  
bottlenecks

# Weaknesses

- ▶ Lack of domestic/national energy institute (all major studies, strategic documents, policies are realized on outsourcing basis).
- ▶ No energy strategy on state level.
- ▶ Three energy ministries in one country.
- ▶ Energy policies are formulated on entity level by entity energy ministries, which often makes them incompatible and incomparable.
- ▶ Lack of energy policies and targets.
- ▶ No punishment measures.
- ▶ As other European countries – highly dependent on gas and oil.



# Strenghts

- ▶ Bosnia and Herzegovina is a net exporter of electricity.
  - ▶ Huge renewable energy potential (specially hydro and wind).
  - ▶ In the period 1992–2012, only 100 MW were built – it still isn't too late to adopt missing legislative and policies.
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# Bosnia and Herzegovina (B&H)

»» Areas of interest

# Areas of interest

- ▶ Great schedule (looking forward to observations)
  
- ▶ I'd like to learn more on:
  - Renewable energy policies (incl. Feed-in tariffs)
    - Wind related issues
  - Energy efficiency policies
  - Energy forecasting
  - Greenhouse gas emissions

THANKS

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