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"Regional and National Challenges for the integration of the Western Balkans in the European Energy Union"

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European Energy Union

"A secure, sustainable, competitive, affordable energy in Europe"

5 Guiding Dimensions

- **Security of Energy Supply**
- **Internal energy market**
- **Energy efficiency**
- **Decarbonisation of the Economy**
- **Research & Innovation**

European Energy Union and Western Balkans

- EU Energy Union Strategic Framework: The improvement of cooperation, solidarity and trust in the Central and SE Europe is essential
- The cooperation and coordination in order to deploy a perspective, long-term planning and building of a regional electricity and natural gas infrastructure in Central and South-Eastern Europe should include not only the EU countries, but also the non-EU Western Balkan countries and Turkey
- The importance of the Western Balkans for the entire Europe stems from security of energy supply and integration of energy markets, especially thanks to their geographical, *corridor* position
- Considering the trans-European electricity, natural gas and oil infrastructure projects, Western Balkans may contribute to the diversification of fuel supply routes, stability operation of the regional energy system, and improvements in trading conditions

Energy Community

- The WB have all signed the Treaty establishing the Energy Community, aiming at creating a regional energy market compatible with the internal energy market of the EU

- The establishment of a regional cooperation framework, regarding security of supply, power exchange and fuel supply, is essential both for the accomplishment of the Energy Union and the overall development of SEE

- In April 2016 the WB 6 countries committed to develop a regional electricity market aiming at integrating it with the overall European Internal Electricity Market

Energy Infrastructure Investment Framework

- The EC has identified significant energy infrastructure projects, known as Projects of Common Interest (PCIs)
- Projects of Energy Community Interest (PECI) List has 43 projects with the estimated cost of **EUR 14 Bill**
- The Western Balkans Investment Framework (WBIF) supports the socio-economic development and process of the WB accession to the EU
- The establishment of regulatory framework has been proposed, regarding the PECIs similar to that for PCIs, in terms of energy infrastructure

Electricity Generation			Natural Gas Infrastructure Project		
Project	Country	Estimated investment	Project	Country	Estimated investment
HPP Skavica (350MW)	Albania	550 mill €	Ionian Adriatic PP (511km)	Alb -Mne-Cro - BIH	620 mill €
CHP KTG Zenica (560MW)	BIH	300 mill €	Trans Adriatic PP (871km)	Gre – Alb-It	1,260 mill €
HPP Dubrovnik (304MW)	BIH- Cro	175 mill €	EAGLE LNG Terminal (112km)	Albania	700 mill €
HPP Middle Drina (321.45MW)	BIH-Srb	870 mill €			
TPP Kosova (600MW)	Kosovo	1,260 mill €	LNG Terminal + PP (426km)	Croatia	940 mill €
HPPs Lim River (93MW)	Montenegro	167 mill €	Intercon. PP (100km)	Croatia-Serbia	175 mill €
TPP Kolubara B (750MW)	Serbia	1,300 mill €	Intercon. PP (170km)	Srb- Blg	115 mill €
TPP Nikola Tesla B3 (744MW)	Serbia	1,100 mill €	Intercon .PP (187km)	BIH - Croatia	98 mill €

Western Balkans' Profile

- Western Balkans, located at the heart of South East Europe, cover an area of 276,000 km^2 with a population of 22.7 million.
- For centuries, its geographical position made it the main crossroads and transit corridor between East and West giving the region serious geostrategic importance.
- The last 25 years, the region has experienced the triple transition:
  - ❖ from conflict to peace,
  - ❖ from central planning to free-market economies
  - ❖ from socialism to fragile democracies.
- Out of the Western Balkans countries, only Croatia managed to join the European Union in 2013

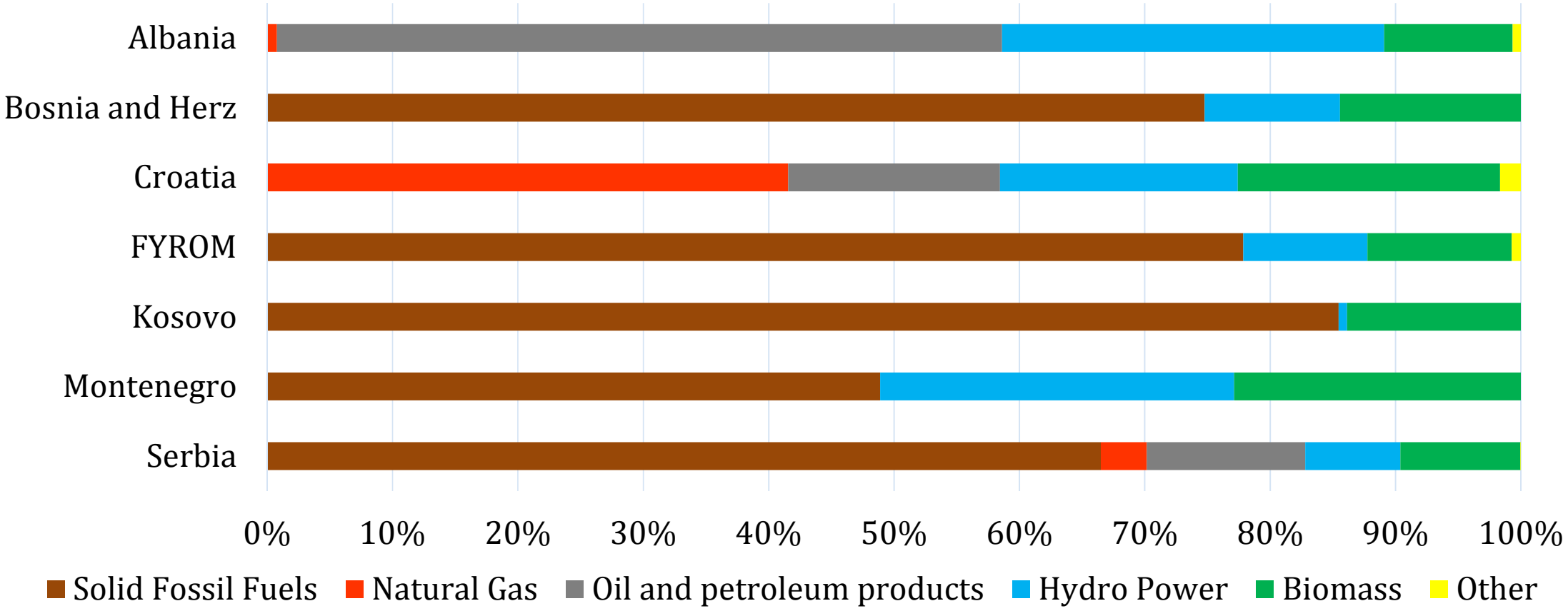
Economic Conditions in the Western Balkans (2014)

Country	Population (million)	GDP (billion 2005 USD)	Energy Production (Mtoe)	Net Imports (Mtoe)	TPES (Mtoe)	CO_2 emissions (Mt of CO_2)	TPES/pop (toe/capita)	Electricity Consumption (TWh)
Albania	2,9	11,35	2,03	0,58	2,32	3,64	0,80	7,33
Bosnia & Herzegovina	3,83	13,03	4,62	1,92	6,45	21,50	1,69	12,31
Croatia	4,26	44,92	3,63	4,13	7,72	16,01	1,81	15,98
FYR Macedonia	2,11	7,54	1,44	1,31	2,80	8,30	1,33	7,37
Montenegro	0,62	2,91	0,76	0,28	1,03	2,27	1,65	3,49
Serbia	7,16	28,41	11,36	3,59	14,89	45,31	2,08	31,84
Kosovo*	1,82	5,09	1,79	0,57	2,36	8,31	1,29	5,30
Total	**22,70**	**113,25**	**25,63**	**12,38**	**37,57**	**105,34**	**10,65**	**83,62**

*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

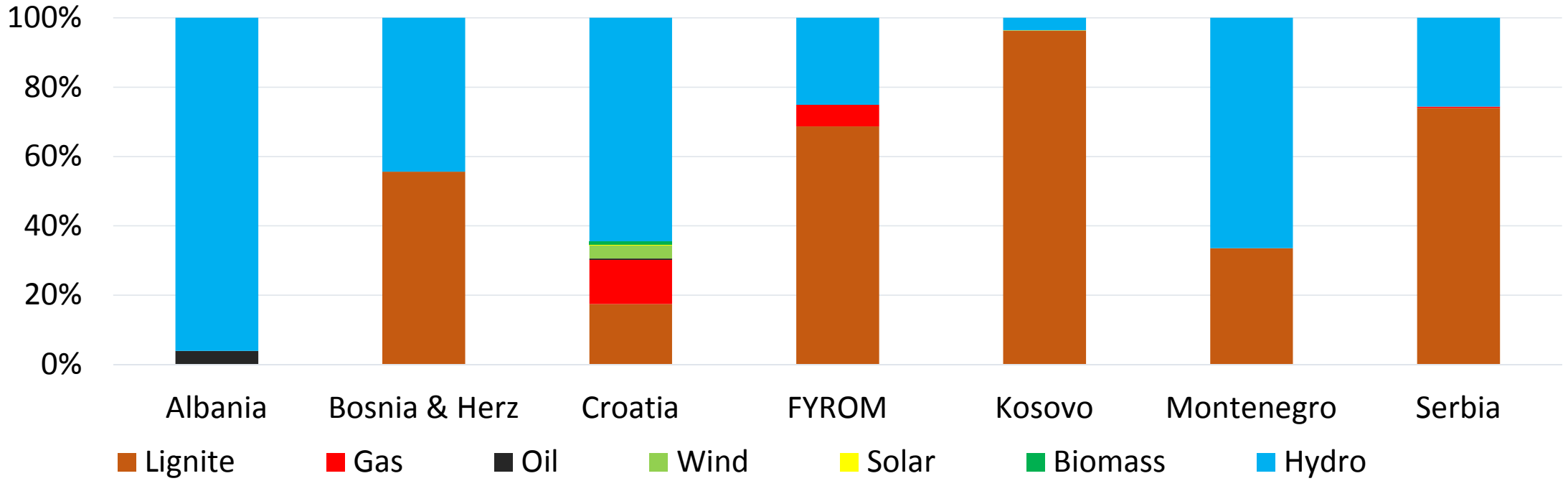
According to the Global Competitiveness Index 2015–2016, Albania (93rd), Serbia (94th), and Bosnia and Herzegovina (111th) are outside the top 80, while FYROM (63rd) and Croatia (77th) are ranked higher

Primary Energy Production in the WB



- Regional primary energy production covers about 68 % of all the WB energy needs mostly based on domestic coal, hydro and biomass and partially on oil and natural gas

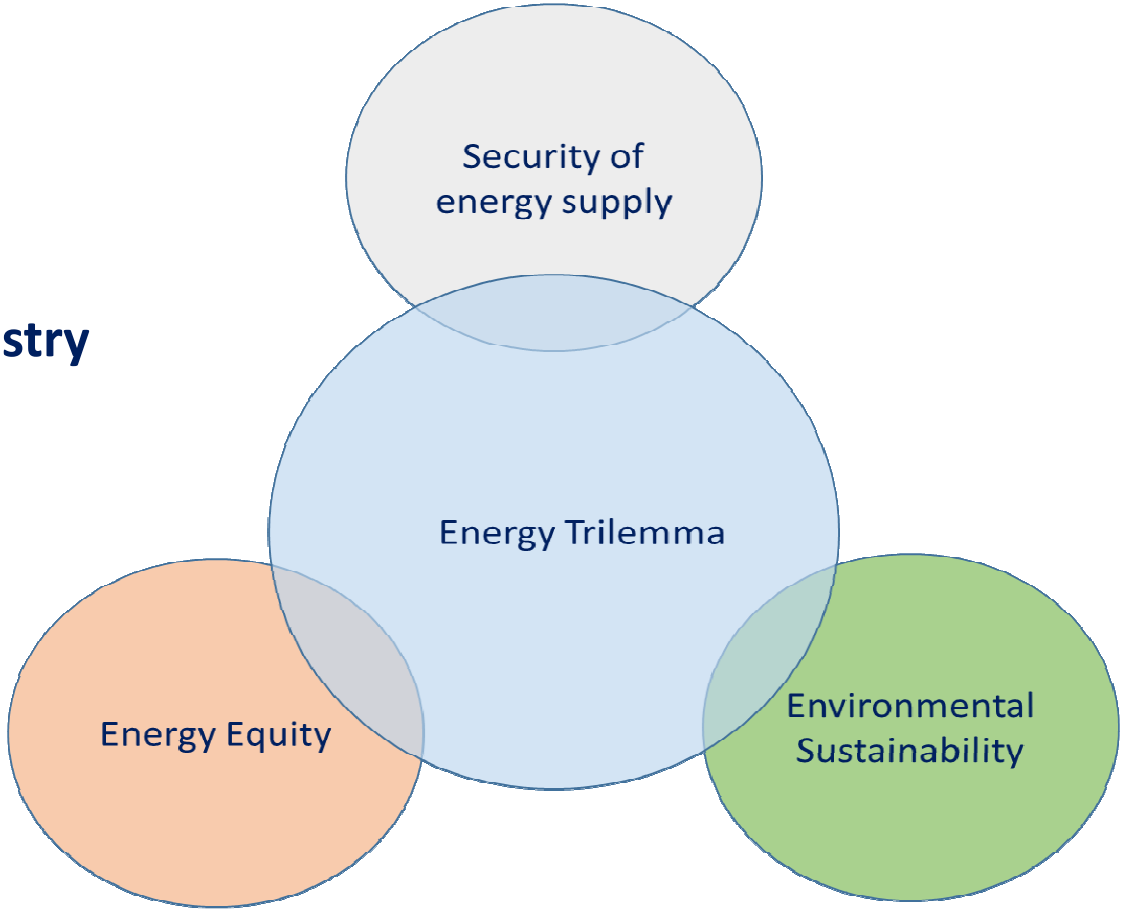
Electricity Generation in the Western Balkans (2014)



- The Trilemma policy framework in the WB could be considered as a dilemma between “black (fossil) ” and “green (renewables)” approach to long-term strategic energy planning
- During the next decade nearly 45% of the new WB generating capacities (about 6.2GW) is planned to run on coal
- Renewable energy needs to be aimed at bridging gaps in regional energy needs

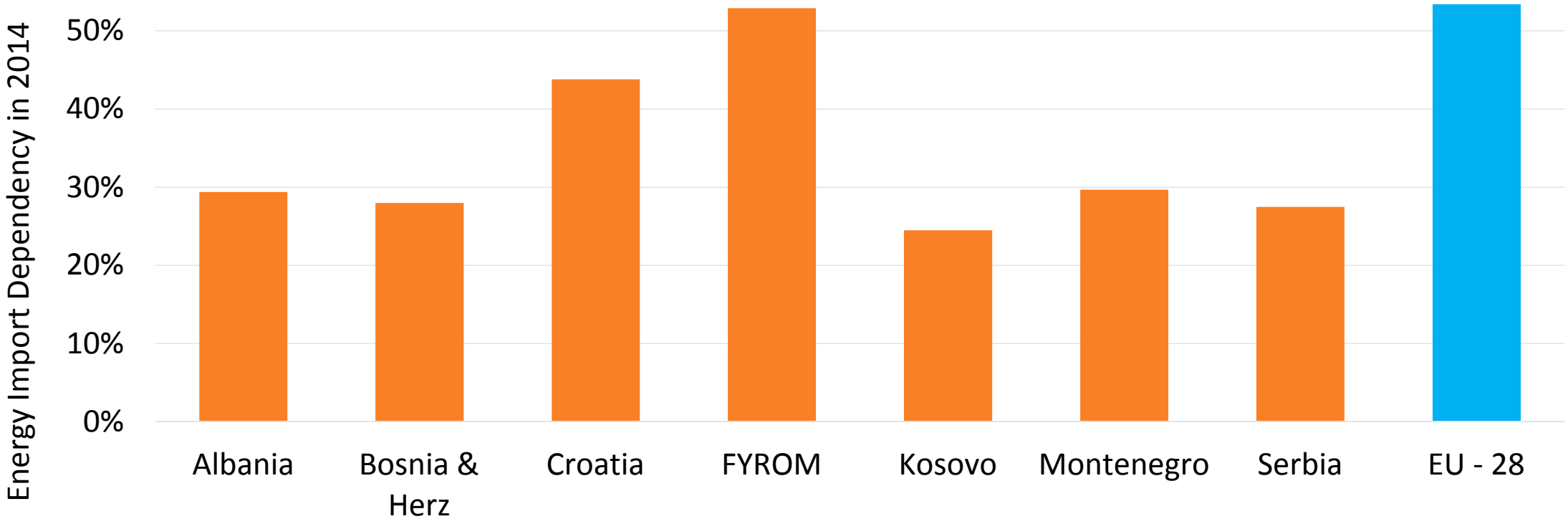
Major National Challenges In The Western Balkans

1. **Transformation of energy supply**
2. **Advancing of energy access**
3. **Enabling consumer affordability and industry competitiveness**
4. **Improvement of energy efficiency**
5. **Decarbonisation of the energy sector**



It could be assumed that the Energy Trilemma concept summarises the core of the EU and WB Energy Policy Framework

Security of energy supply - Import dependence



- The average EU dependency on energy imports (53.4%) was higher than the relevant values for the WB in 2014 (mainly oil and gas)
- Generally, the WB region is an importer of electricity (Serbia is self-sufficient, BIH is an exporter)

Security of energy supply - Plans for future

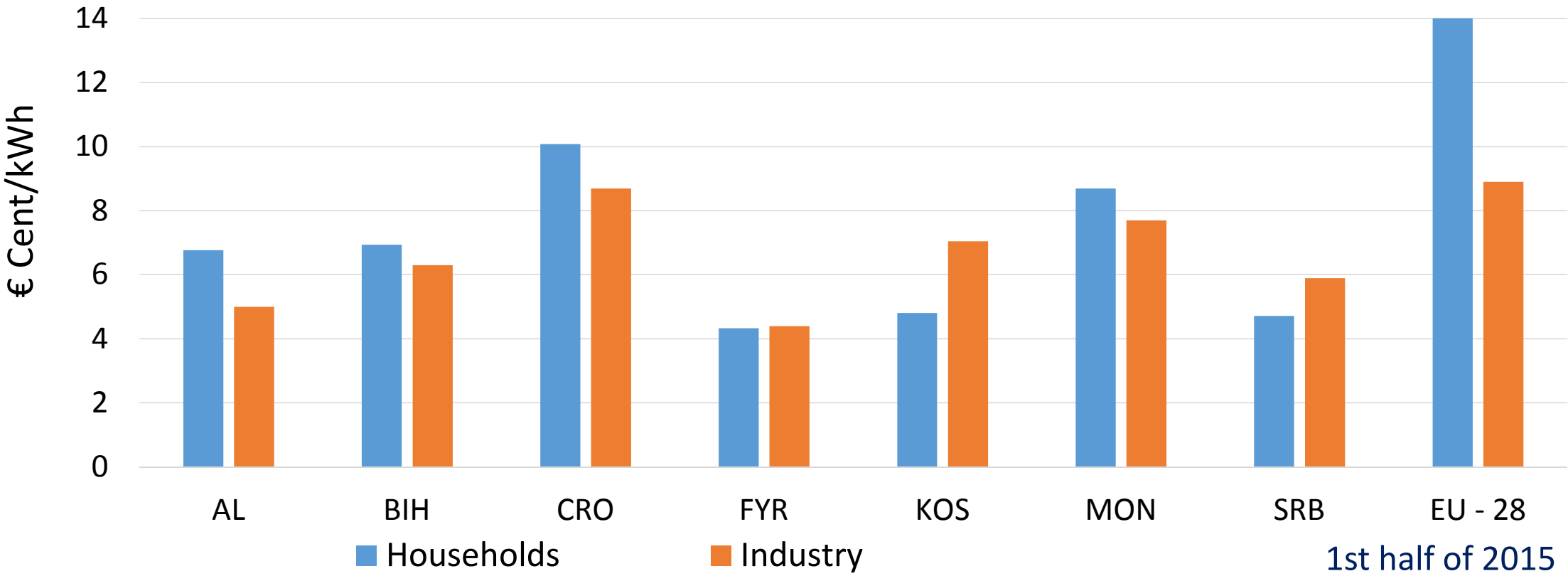
- Almost half of the planned new power capacity in the WB comes from coal.
  - ❖ This contradicts EU's climate policy and brings huge financial burdens to pre accession countries.

- Electricity interconnections are already good and currently sufficient

- Natural gas pipeline system is insufficient and requires upgrades in the form of reverse flow capacities.

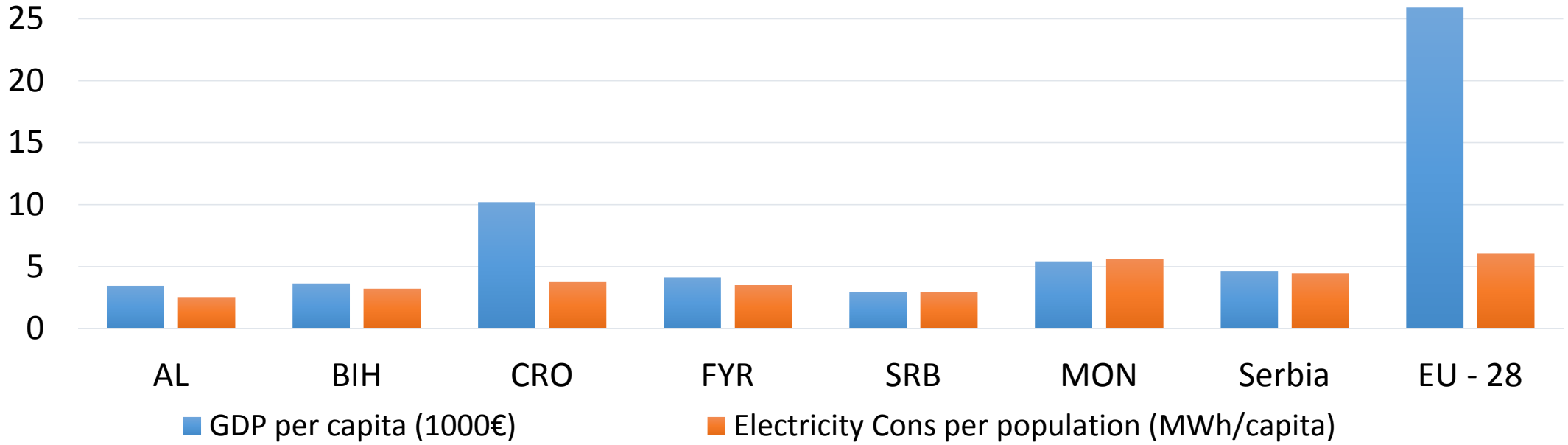
- The biggest challenges to ensuring a safe, sustainable energy future for the citizens of the WB states are:
  - ❖ Diversification of external and internal energy supply sources,
  - ❖ Energy efficiency,
  - ❖ Upgrading cross border infrastructure,
  - ❖ Completing the national and regional market

Electricity pricing



- All consumers in the Western Balkans have access to electricity (source: Wolrd Bank)
- Industrial prices are usually lower than household prices, apart from Serbia and the FYROM - Support of social benefits

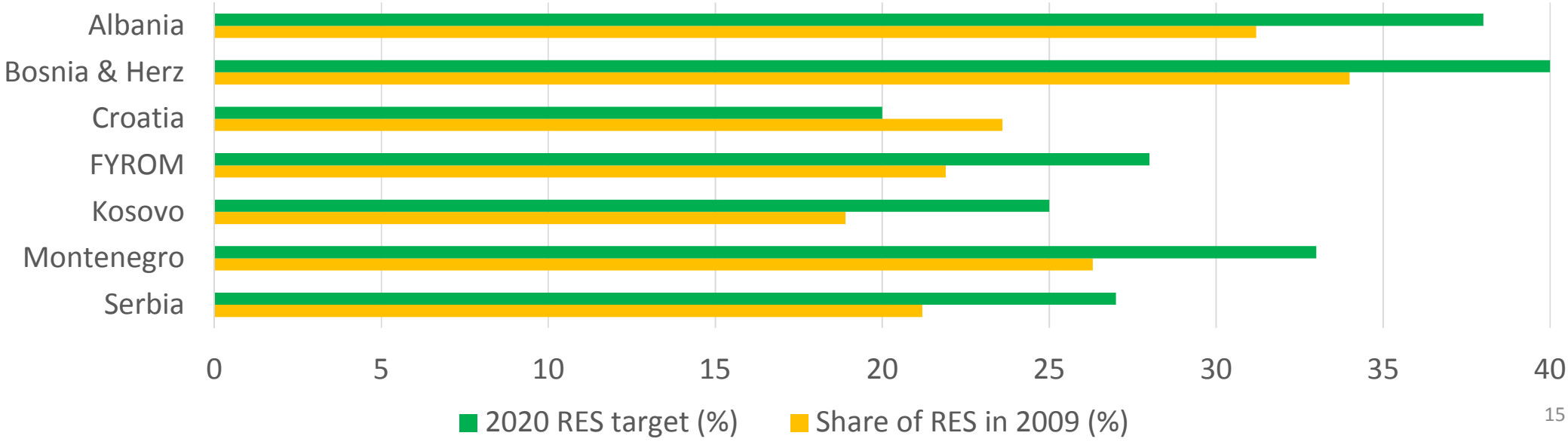
Energy Equity



- In 2013, the average electricity consumption per capita in the WB was about 60% lower than EU-28
- Households' electricity prices are carefully controlled and are much lower than in EU-28. Artificially low tariffs lead to low level of customers' energy efficiency
- In order to provide energy under adequate security, quality and affordability standards the considered countries have been facing the cost of environmental sustainability

Environmental Sustainability

- WB are members of the UNFCCC, and have been included in Non-Annex I, apart from Croatia (Annex I)
- The WB have set the following targets regarding the GHG emissions reduction:
  - Albania 11.5% GHG emissions reduction target between 2016 and 2030 - INDC
  - Croatia as an EU member is committed to reduce its emissions by 40% until 2030
  - Serbia 9.8% GHGs emissions' reduction target until 2030 - compared to the 1990 emissions – INDC
- The WB countries are implementing the EU Renewables and Energy Efficiency Directives



Key Messages (A)

- With approximately 20 million potential new EU citizens, the WB is not just an energy market, but also a promising corridor and sustainable route to transfer energy across Europe

- Energy systems in Europe are increasingly functionally interdependent. Energy vulnerability becomes a cross border issue

- Joint optimization of gas, electricity and demand-side infrastructure can deliver security of supply at a lower cost

- With the Energy Union vision and its forward-looking climate policy, EU gradually moves away from an economy driven by fossil fuels

Key Messages (B)

- **Main characteristics** of the Western Balkans region are:
  - ❖ Intensive energy consumption,
  - ❖ Moderate fossil fuels import dependency,
  - ❖ Stable production and electricity supply,
  - ❖ High values of carbon emissions,
  - ❖ Low efficiency and environmental concern
  - ❖ High potential but minimal RES generation
  - ❖ Lack of new investments
- Nationally centralized and relatively closed hierarchies regulate energy and environmental governance
- The Western Balkan energy sector still depends on geopolitical and regional/national political conditions

Key Actions (A)

The Western Balkans countries:

- Need to combine national approaches with a common regional interest in the single energy market for political, economic and strategic reasons, with renewed motivation
- Should harmonize their common goals and macroeconomic advantages through cross-border cooperation
- Comply regional energy policies and procedures in order to achieve energy security, energy equity, environmental goals and overall sustainability in the long term
- Should strengthen energy efficiency, inevitable coal, hydro, wind, biomass and solar towards a future regional energy system

Key Actions (B)

- Should establish permanent regional institutions or platforms for coordinated regional strategic planning

- The regional approach can address concrete measures:
  - ❖ Upgrading regional transmission infrastructure,
  - ❖ Establishing regional preventive and emergency framework,
  - ❖ Gas market integration
  - ❖ Heating sector renovation,
  - ❖ Scaling up resources and technologies
  - ❖ Broader utilization of regional renewable energy,
  - ❖ Streamlining of finance instruments,
  - ❖ Improving investment patterns
  - ❖ Integration of regional into the pan-European energy markets

Thank you for your Attention

Source: Nikola Tesla Museum, Belgrade, Serbia