



Energy Prices – What is Going on?  
conference, Belgrade, Dec. 9th 2021.

Mirza Kušljugić, ReSET Center  
„Electricity Supply and Demand in Western  
Balkan Region”

## Supply, demand, security, trade, price, investments

- Wider context: liberalization, environmental sustainability and price affordability
- Wider context: decarbonization
- Security of supply (SoS) – B&H case study
- Trends in the supply / demand balance – author's analysis
- Conclusions

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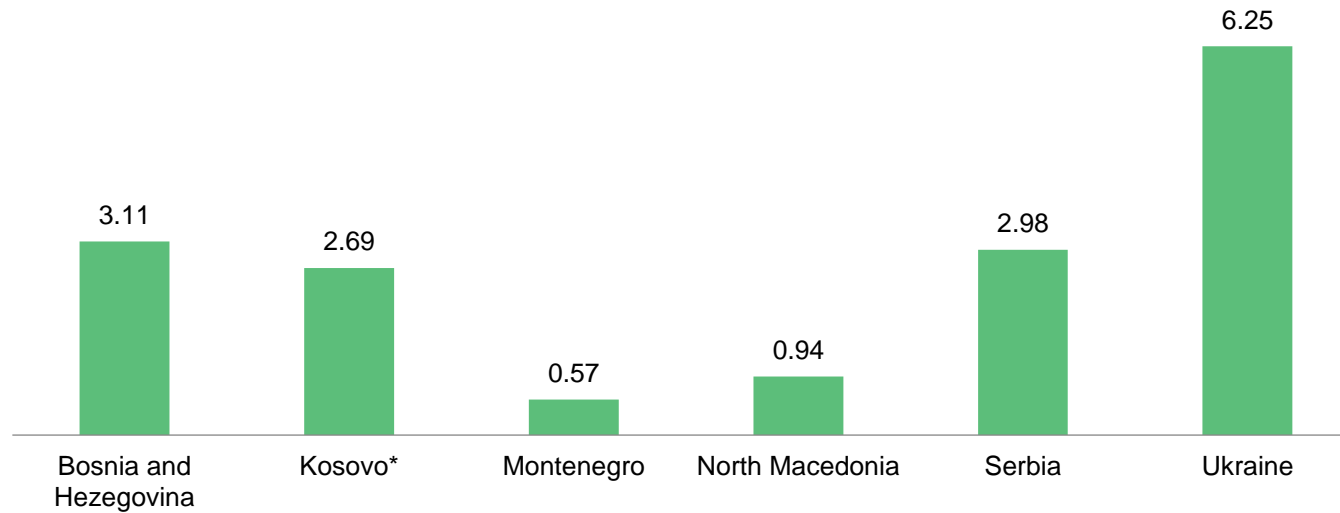
## Wider context: liberalization, environmental sustainability and price affordability

- Energy Community Annual Report (2021.):  
<https://www.energy-community.org/implementation/IR2021.html>
- Janez Kopač: ” *Glass is half full*”
- Market liberalization („Monopoly of public utilities for the supply of local demand is continuing!”)
- Establishment and coupling of power exchanges (liquidity of SEEPEX).
- Implementation of NERP (LCPD/IED)? (Glass is almost empty!)
- *Direct subsidizes for electricity production from coal are increasing*

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### Direct subsidies per 1 MWh in EUR

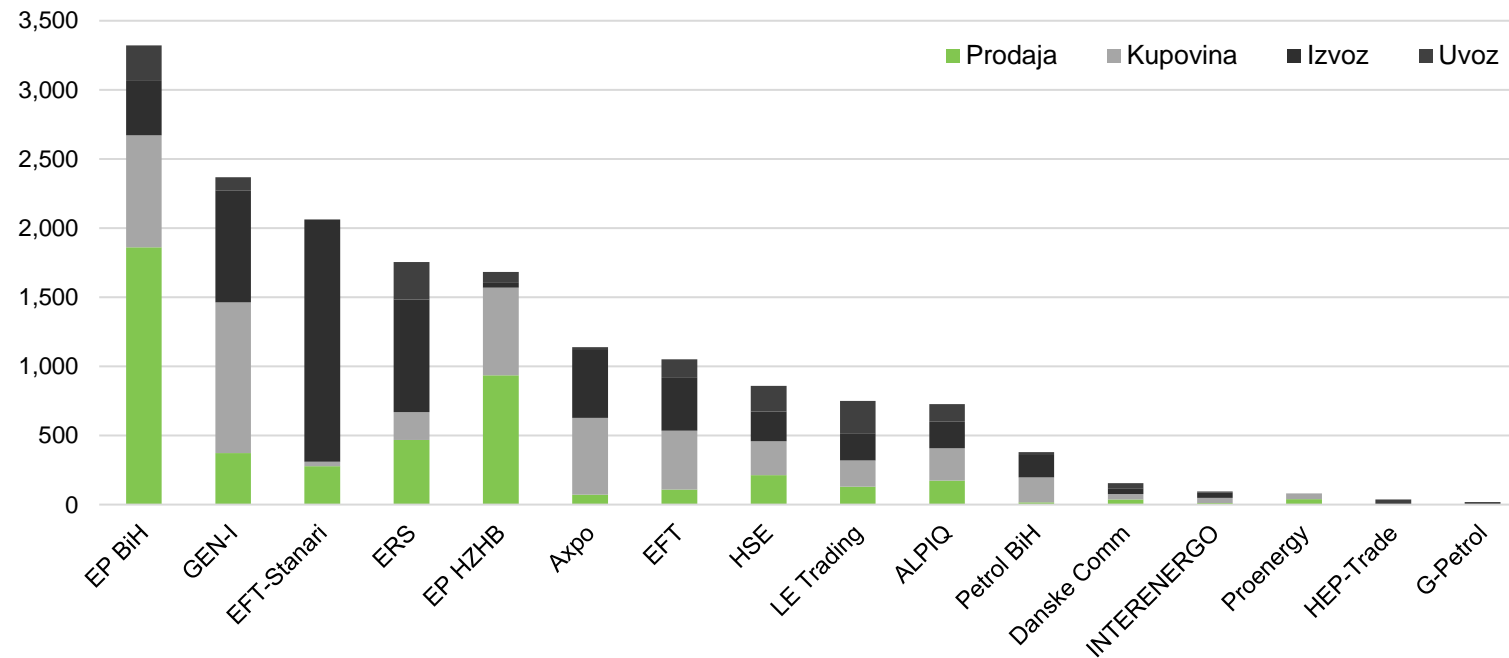
■ Average 2015-2019



## Wider context: liberalization and price affordability

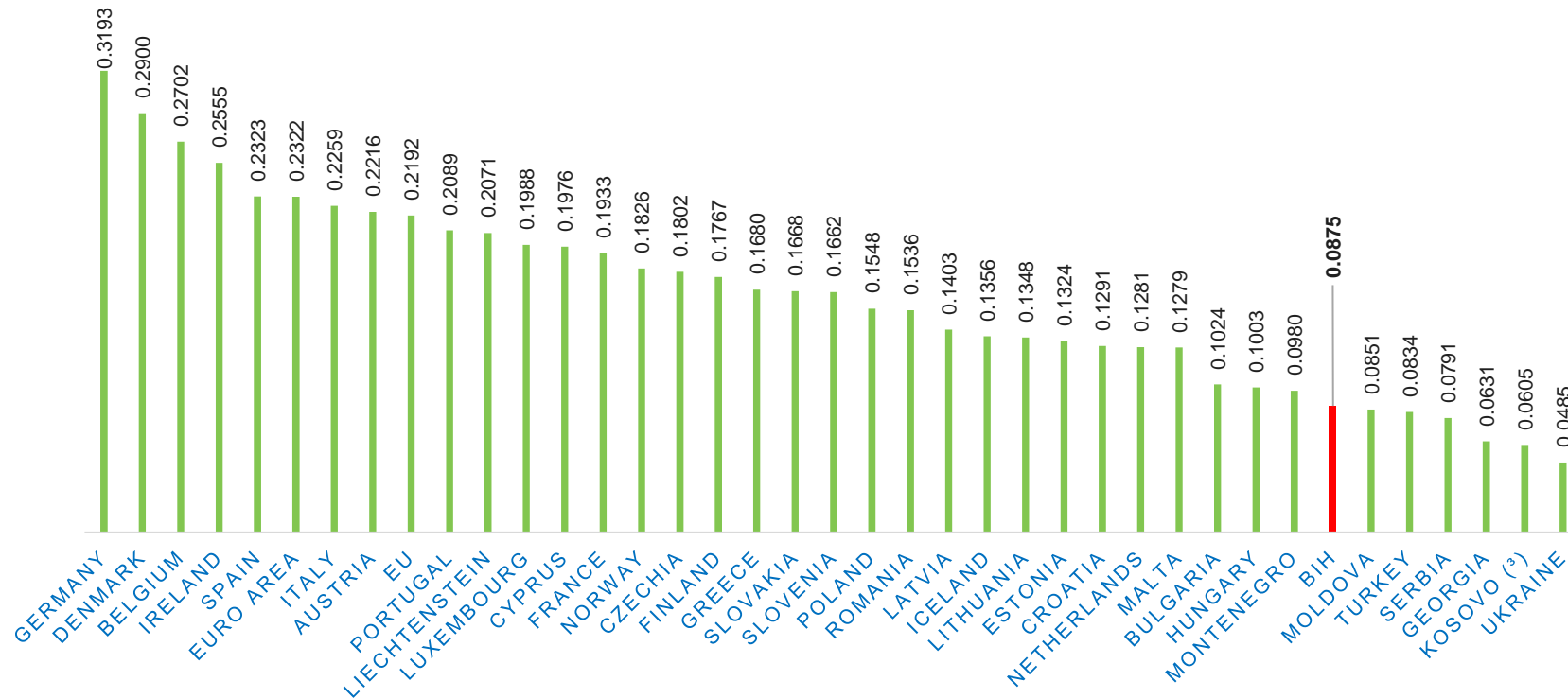
- In B&H only bilateral trade amongst utilities and traders, including export and import
- Different patterns for 2019., 2020., 2021.
- Impact of regional spot market prices (HUPX) on commercial trade (esp. on offers for 2022.)
- Production costs of B&H portfolio 39 €/MWh
- Prices for households are low, but energy poverty is widespread
- Are prices for industrial customers low?
- What about costs for network services?
- Illustrations and comments

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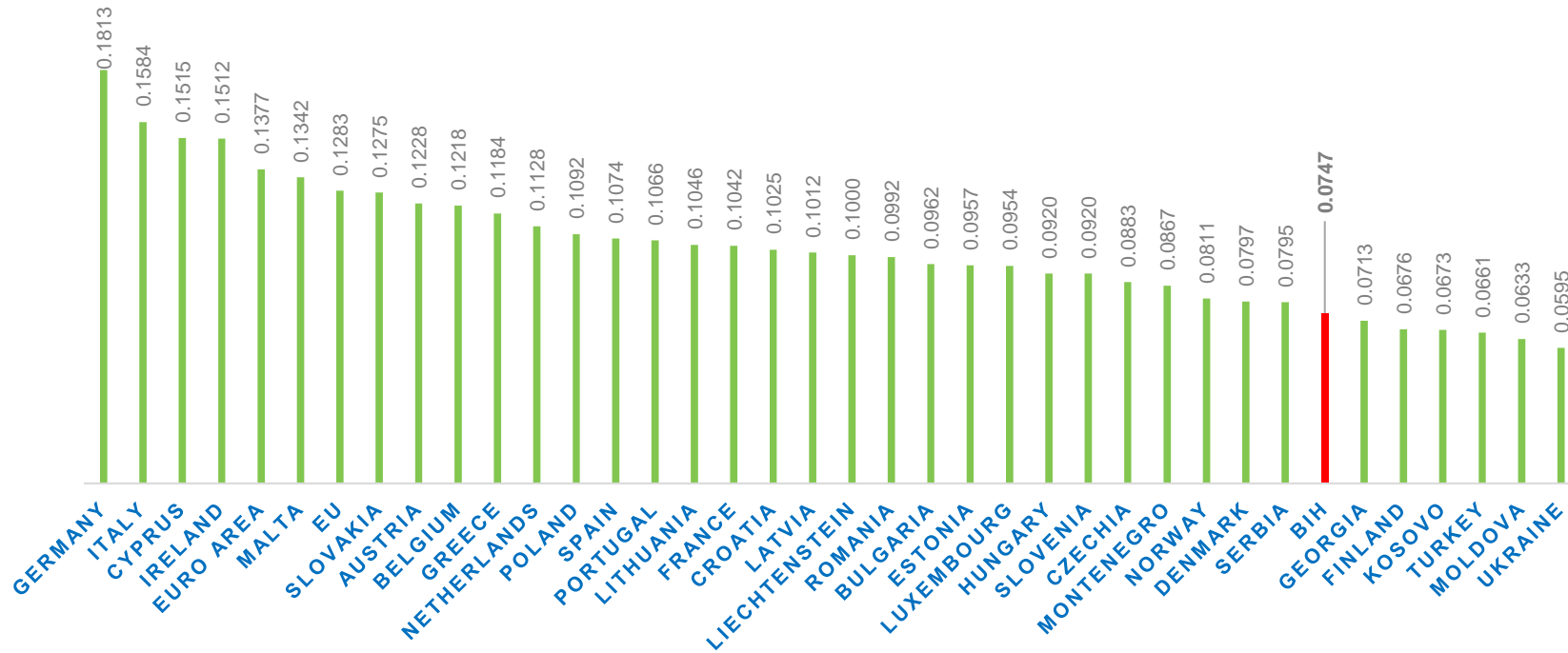
Trade indicators for B&H in 2020. [GWh], ReSET calculation

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Electricity prices for households with VAT [€/kWh] in 2021 in Europe

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Electricity prices for industrial consumers without VAT [€/kWh] in 2021 in Europe



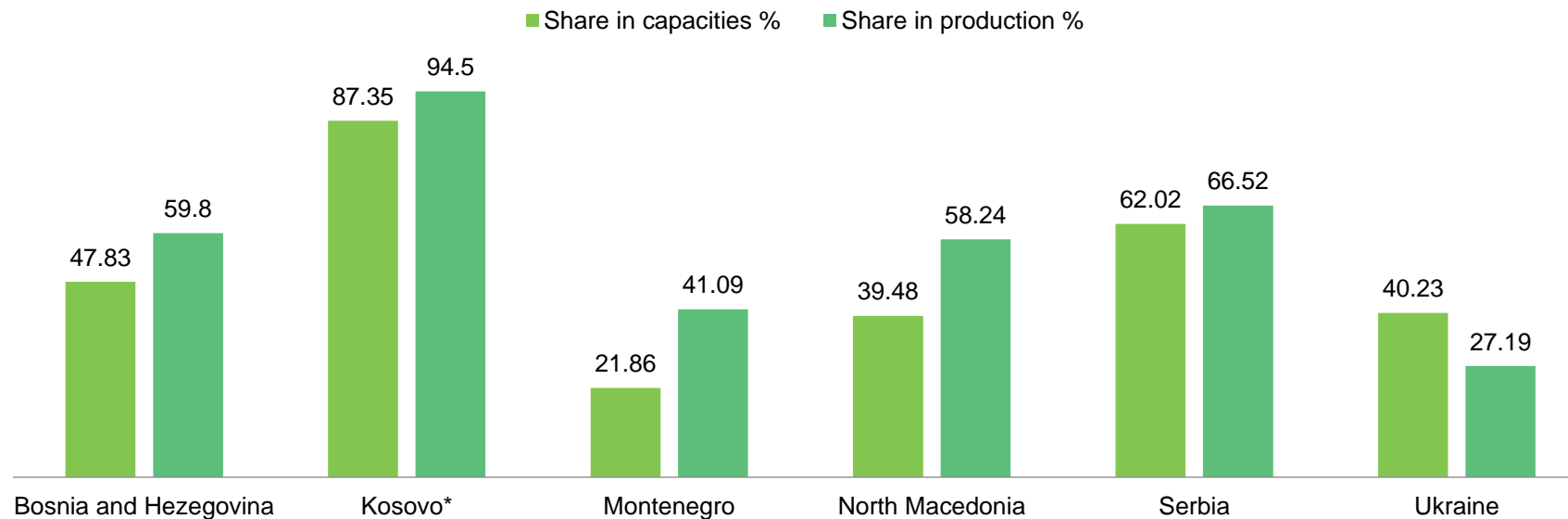
## Wider context: energy transition

- Energy Community adopted EU energy package „Clean Energy for all Europeans“ – a legal framework for decarbonization of power sector

<https://www.energy-community.org/news/Energy-Community-News/2021/11/30.html>

- EC proposed the CBAM (July 2021.)
- On COP26 obligation to introduce CO2 pricing coopted
- *Barometer „Country readiness for sustainable energy transition“, research with participation of over 100 experts from the WB region, within REPCONS project, 2021.*
- Government do not have clear vision of decarbonization
- Intention to preserve public utilities' monopoly is identified as the biggest obstacle to 4D energy transition.

## Share of coal in a fuel mix for generation of electricity in 2019.



***Two thirds of the participants in the survey think that coal will be used for electricity production in their country until and beyond 2050, due to the request for security of supply.***

## Security of Supply (SoS) – view from B&H

- ENTSO-E „Annual Reports“ and „Outlook Reports“  
<https://www.entsoe.eu/outlooks/seasonal/>
- Security of supply: energy autonomy, independence (since the regional market does not provide it)
- Fascination with electricity export
- B&H specificity:
- The largest relative electricity exporter in Europe (in 2020., 60% of local demand)
- There are three SoS concepts (political preferences, no internal market).

## Trends in demand – evaluation of the author

- High share of households in the total demand;
- Demand stagnates (in B&H an increase of the number of consumers and decrease of demand);
- Decrease of minimum load (smaller number of energy intensive industrial customers) with the consequence that voltages in the transmission grid are exceptionally high;
- Impact of CBAM and/or pricing of CO2 emissions especially on energy intensive industries;
- Impact of distributed generation.

## Trend in the supply – evaluation of the author

- Concept of building more efficient „replacement“ thermal power plants TPP (preferably with cogeneration) – is „out“
- Reconstruction of the existing TPP in order to comply with LCPD/IED in order to preserve SoS is „in“,
- Decrease of production from TPP due to the age of blocks, implementation of LCPD/IED and CBAM, and CO2 pricing,
- Possible decrease of the generation from hydro PP and its increased in variability due to climate change impact,
- Planned construction of wind and solar PP – highly variable energy sources,
- ***Power balancing becomes an issue, and requirements for flexibility increases.***

## Conclusions:

- Since the governments and power utilities are not prepared to lead the energy transition, decarbonization of power systems will happen under the impact of international „pressures“ (EU energy and climate policies, CBAM) and economic factors (availability of capital, decrease of LCOE for renewable energy technologies),
- Delaying setting-up Coal Phase-Out date and adopting the road map of CO2 pricing introduction;
- ***„Perfect storm“ is becoming more probable scenario.***



„If a glass is half full, is it filling or emptying?”

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