
FRAMEWORK CHALLENGES FOR EE AND RES

ALEKSANDAR MACURA, RES FOUNDATION, 14 JUNE 2017, HOTEL METROPOL BELGRADE



GOALS OF THE ENERGY COMMUNITY

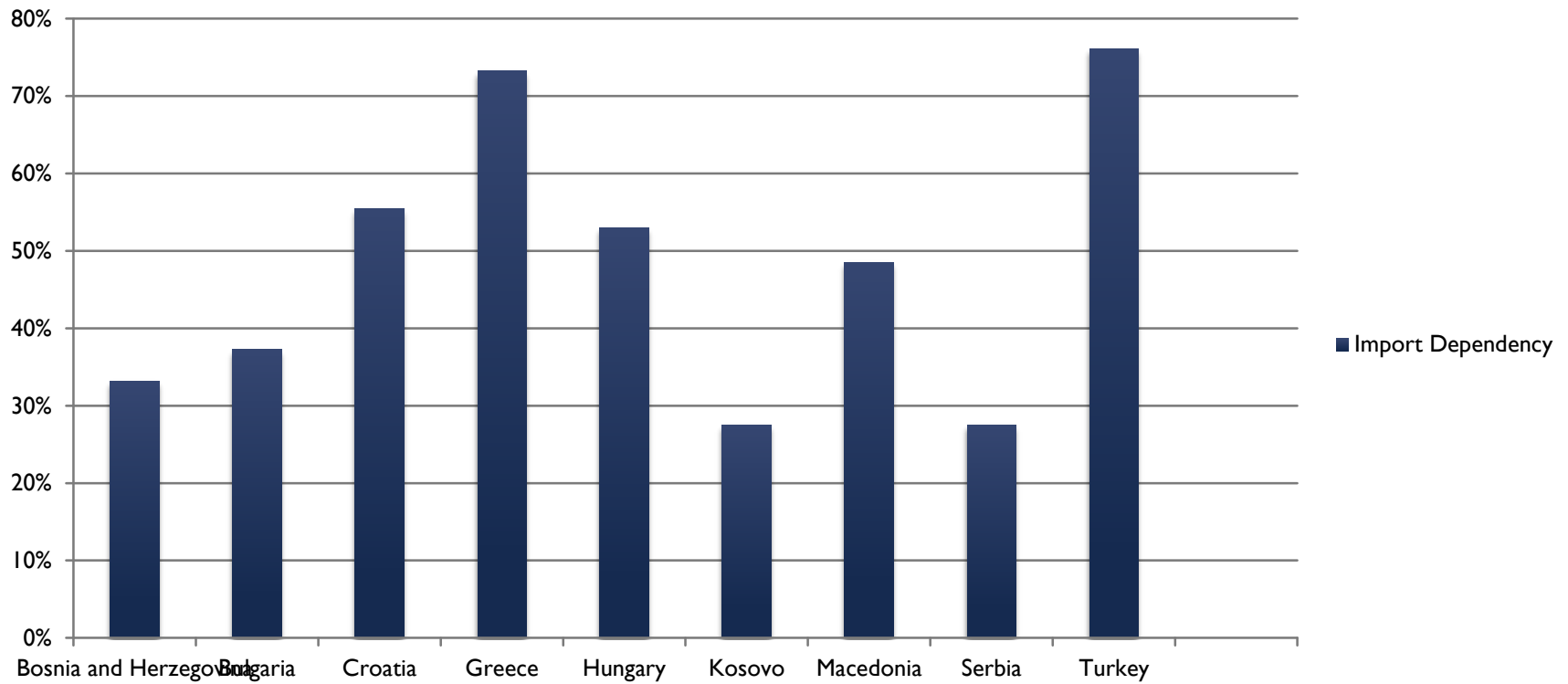
Stable
regulatory and
market
framework

Investements

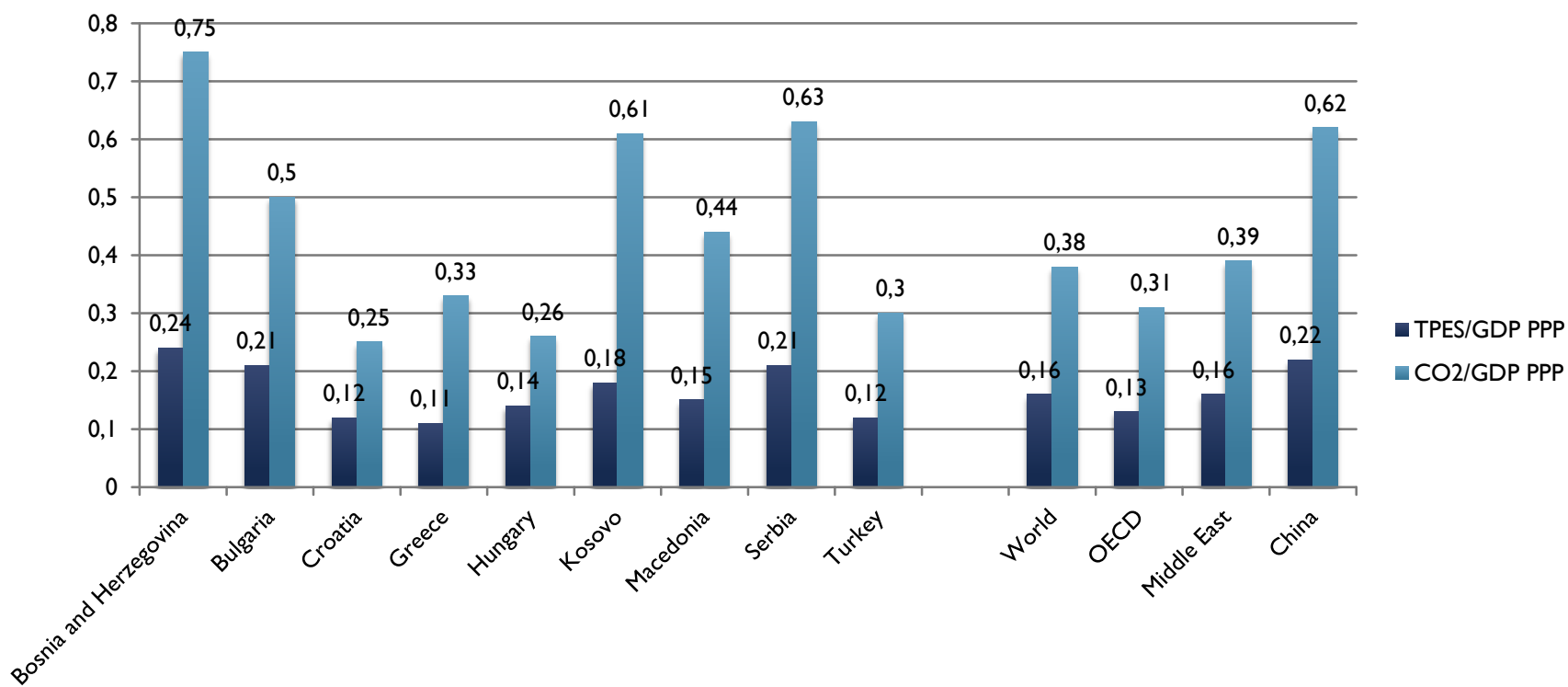
Stable and
continuos
energy supply

Economic
development
and social
stability

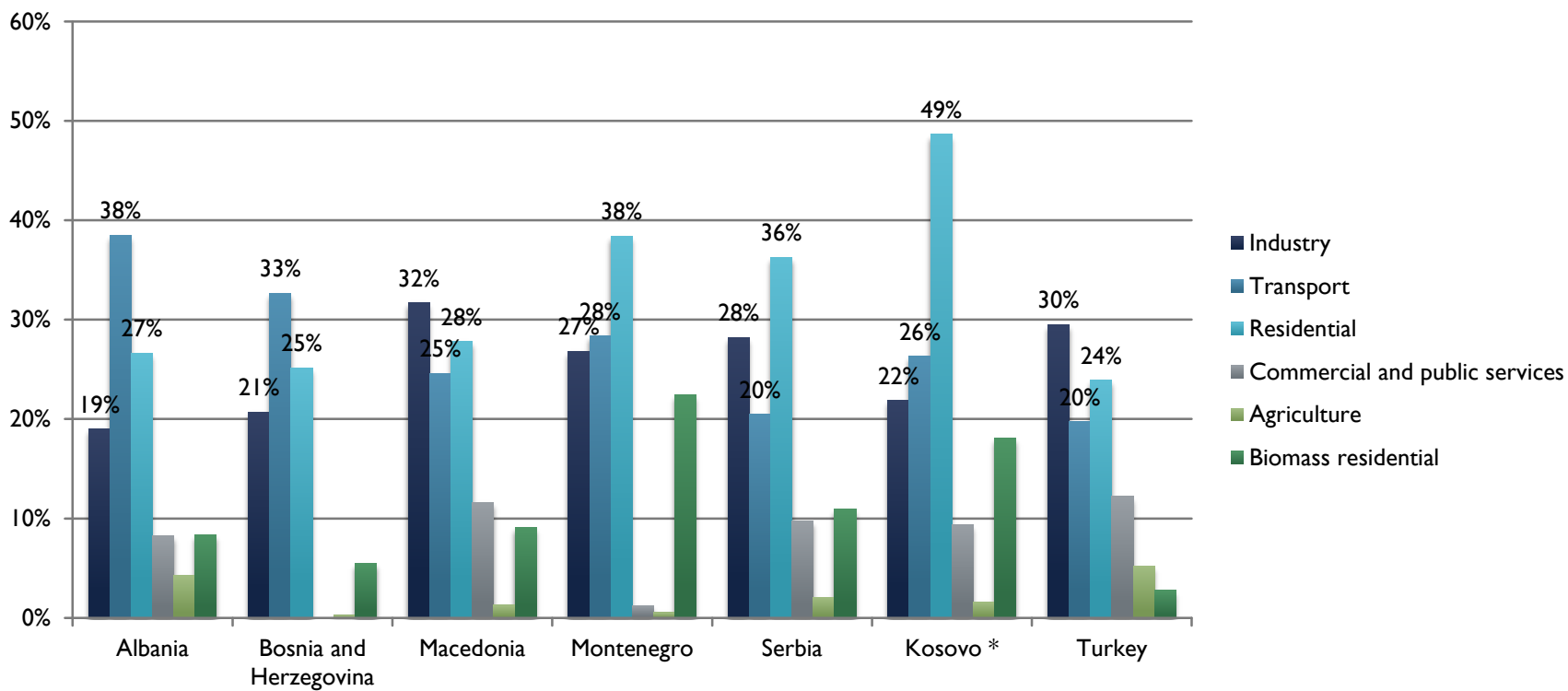
IMPORT DEPENDENCY



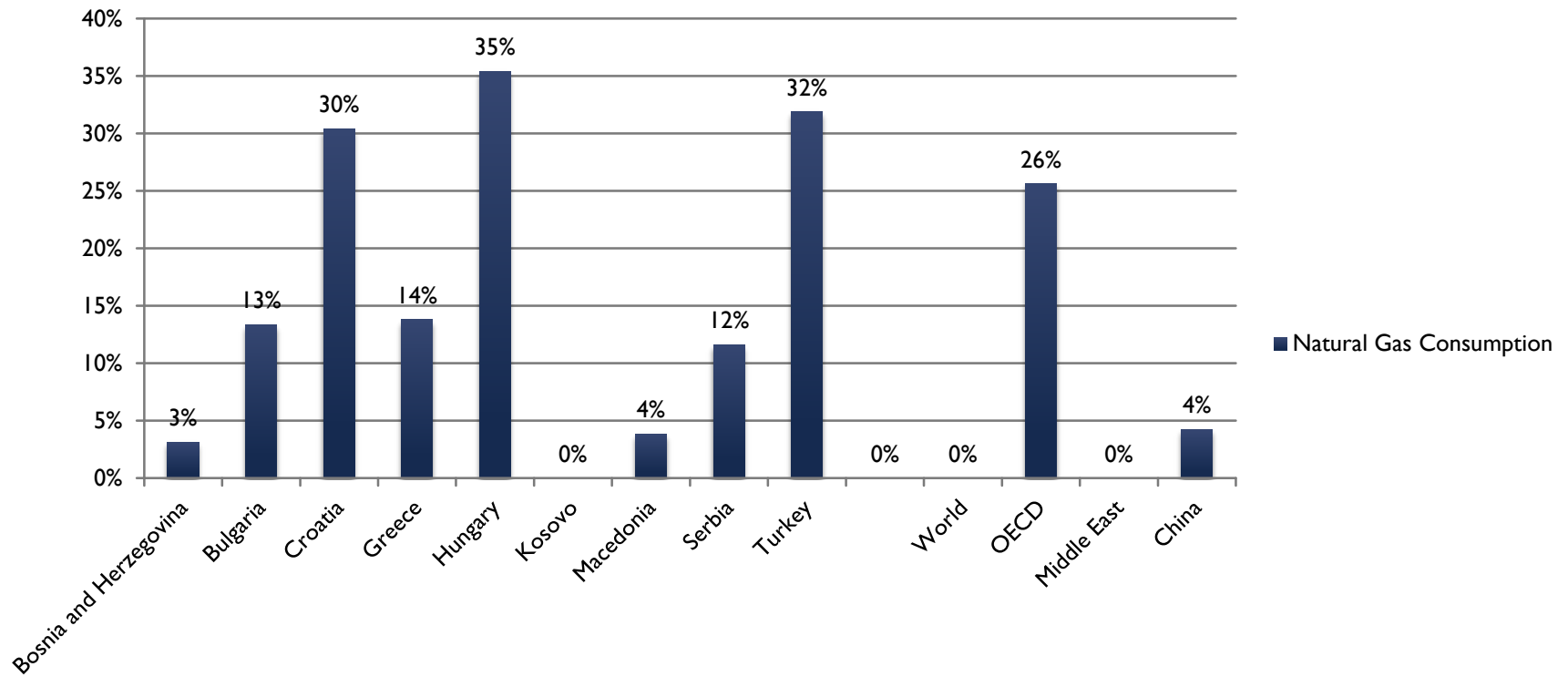
ENERGY AND CARBON INTENSITY



FINAL ENERGY CONSUMPTION

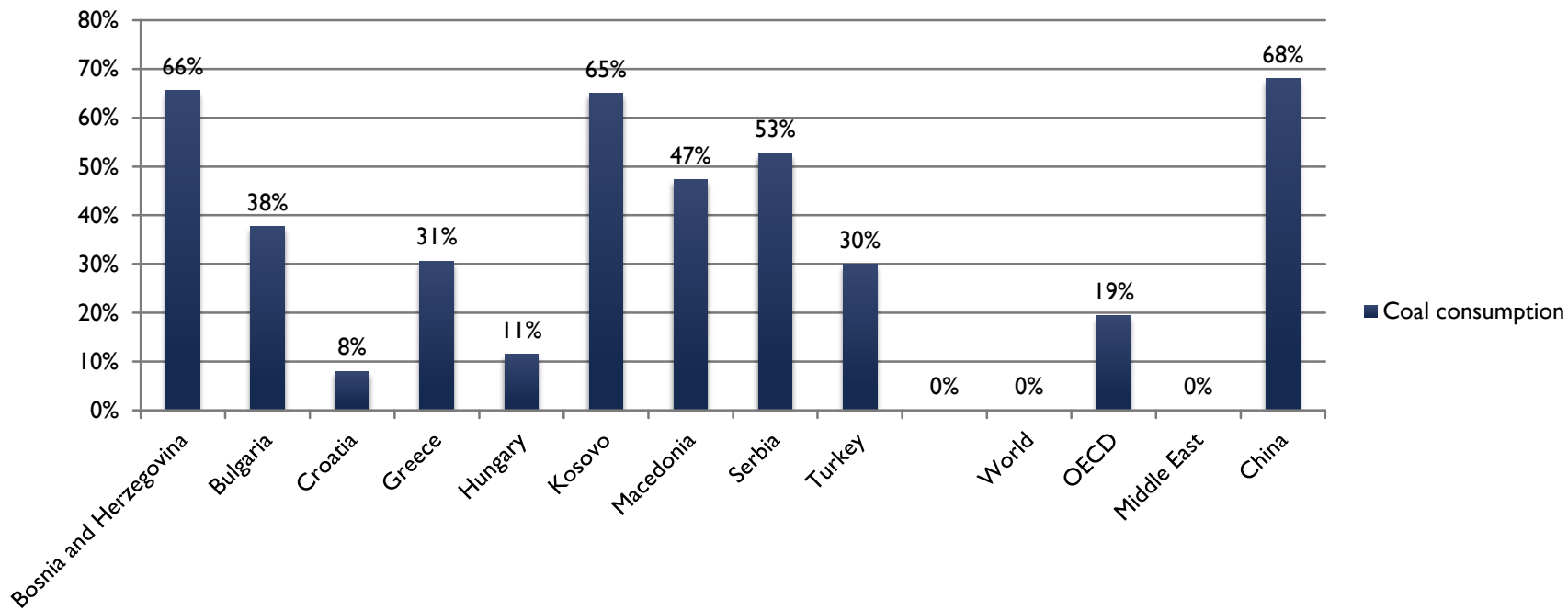


NATURAL GAS CONSUMPTION- AS PERCENTAGE OF TPES

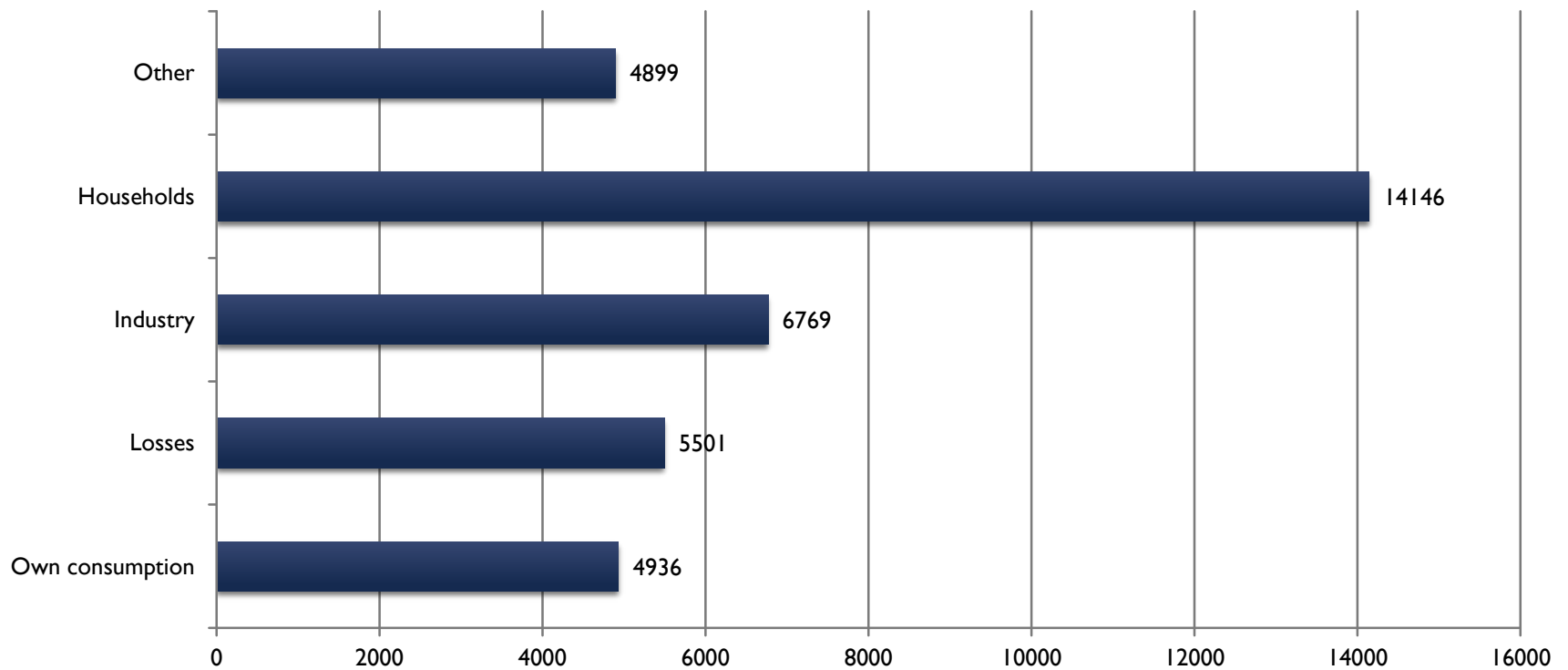


COAL CONSUMPTION IN TPES

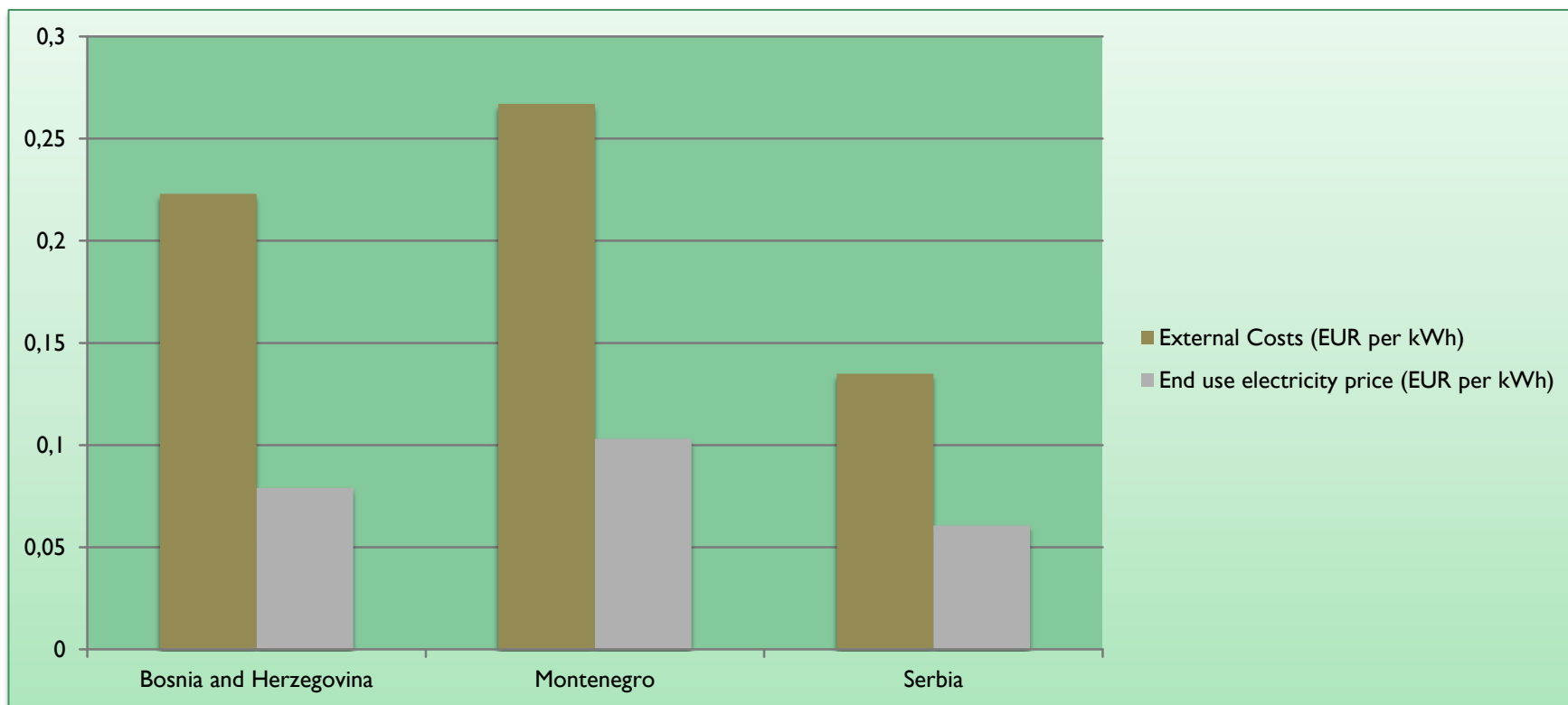
Coal consumption



CREATING GDP FROM ELECTRICITY ?



ELECTRICITY MARKETS- POSSIBILITY TO ENTRY



SOME CHALLENGES

- Sustainability of coal(lignite) based electricity production (old and new)
- Decarbonizing district heat
- Energy poverty
- Governance- government and corporate
- Purchasing power

HOPES VS REALITY

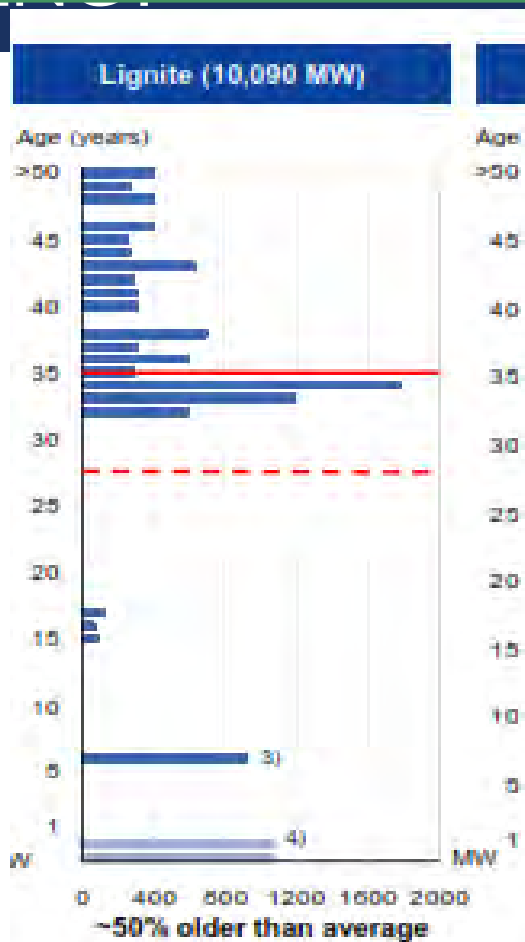
- **Commodities** | Thu Oct 9, 2014 12:30pm BST

CEZ considers plant upgrade with Bulgaria's BEH

- **ČEZ confirms planned closure of coal-burning plant in Varna**
- 13-12-2014 14:02

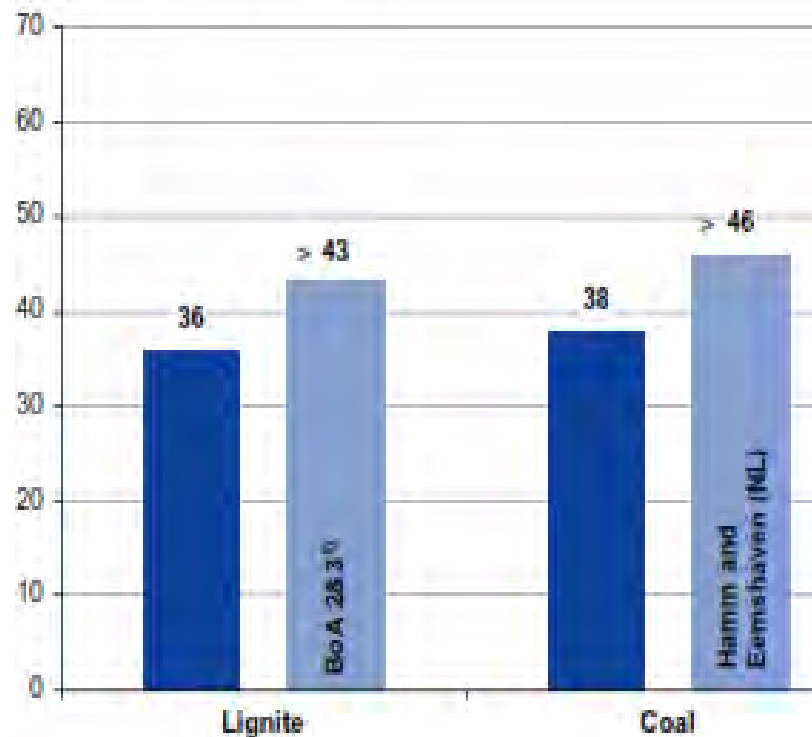
EFFICIENCY

Average lignite plant efficiency in the region is not greater than 30%



Weighted degree of efficiency

in %



■ German average²⁾

■ Highest thermal efficiency of RWE's power plant projects

NEW PROJECTS EFFICIENCY

- Kostolac B3
- Stanari
- Pljevlja.

DISTRICT HEATING- SERBIA

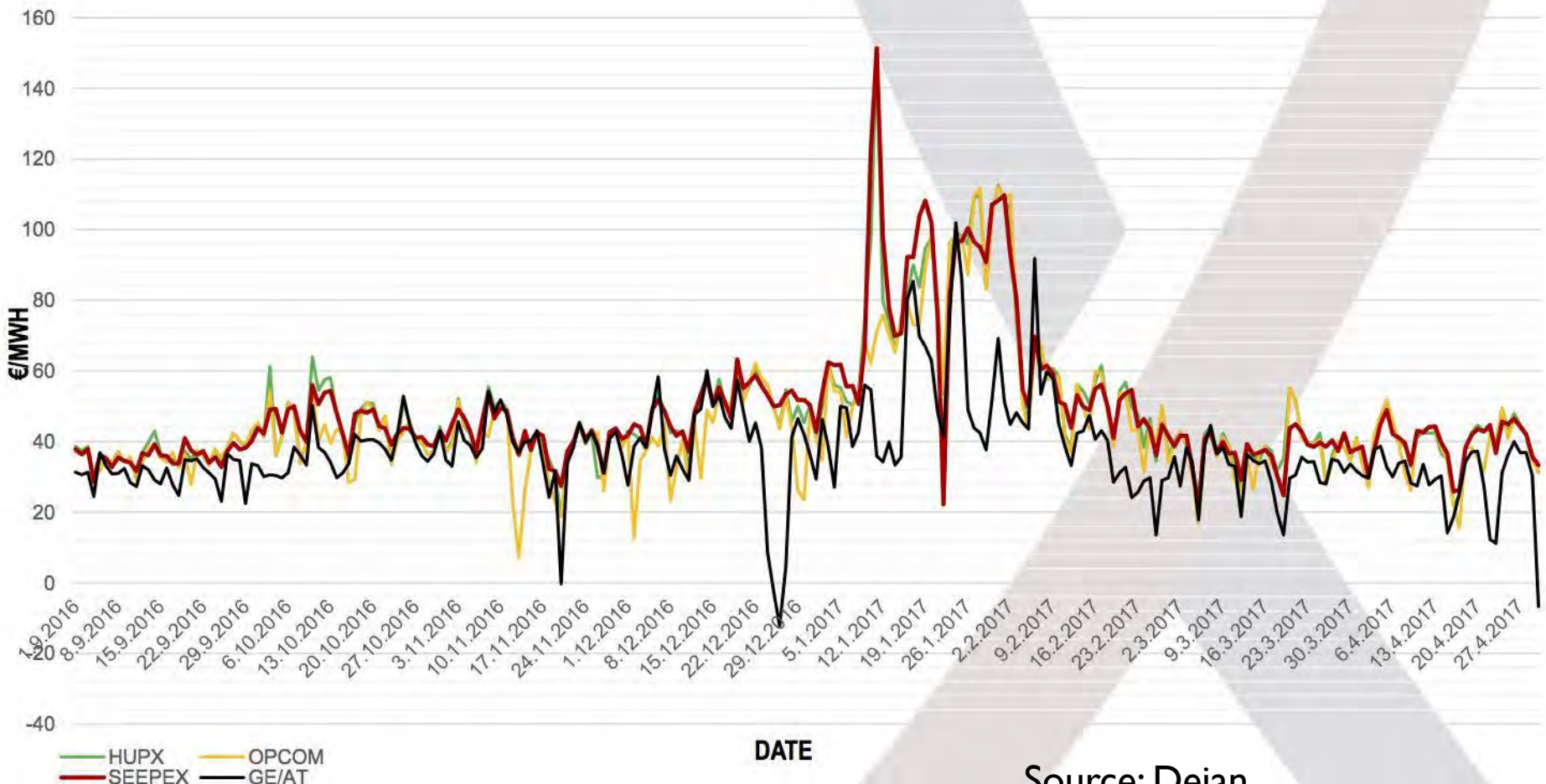
- Heat “produced” using high quality import fuels without simultaneous production of electricity
- End price in absolute terms comparable to higher prices in Europe, more expensive than local alternatives and very high compared to disposable income.
- District heating companies subsidized by state
- Account for 50% of peak winter gas consumption but not able to pay for the fuel

DISTRICT HEATING REGION

- Cross subsidies and monopolies
- Possible de-gasification of DH in major cities in the region may significantly release the winter pressure on gas supply and provide for altered natural gas markets.

Poređenje cena SEEPEX-HUPX-OPCOM-GE/AT

01.09.2016. – 01.05.2017.



Source: Dejan
Stojčevski, SEEPEX

COMPETITIVENESS&GOVERNANCE

	Bosnia and Herzegovina	Croatia	Montenegro	Serbia
Property rights	127	102	81	128
Diversion of public funds	101	84	57	107
Judicial independence	110	99	88	123
Favoritism in decisions of government officials	108	100	59	112
Wastefulness of government spending	137	126	57	129
Efficiency of legal framework in settling disputes	128	137	75	125
Efficiency of legal framework in challenging regs	116	133	84	127
Transparency of government policymaking	133	113	56	108
Extent of market dominance	115	113	89	134
Effectiveness of antimonopoly policy	122	100	93	121

Source: World Competitiveness Report. Rank out of 148 surveyed countries.

WACC

10-12 %
OR MORE?

STRATEGIC EFFICIENCY DEVELOPMENT

Year	Baseline scenario			Energy efficiency scenario		
	Energy for transformation (1000 toe)	Electricity consumption (1000 toe)	Efficiency	Energy for transformation (1000 toe)	Electricity consumption (1000 toe)	Efficiency (%)
2010	6258	2150	34.36%			
2015	6941	2294	33.05%	6941	2289	32.98%
2020	6195	2052	33.12%	6196	2088	33.70%
2025	6358	2198	34.57%	6357	2191	34.47%
2030	6886	2346	34.07%	6885	2346	34.07%

Source: Energy strategy of the Republic of Serbia