### "An Outlook of Renewable Energy Sources in SE Europe: Challenges and Prospects "

### **Balkan Wind Power and HydroTech Balkans 2014**

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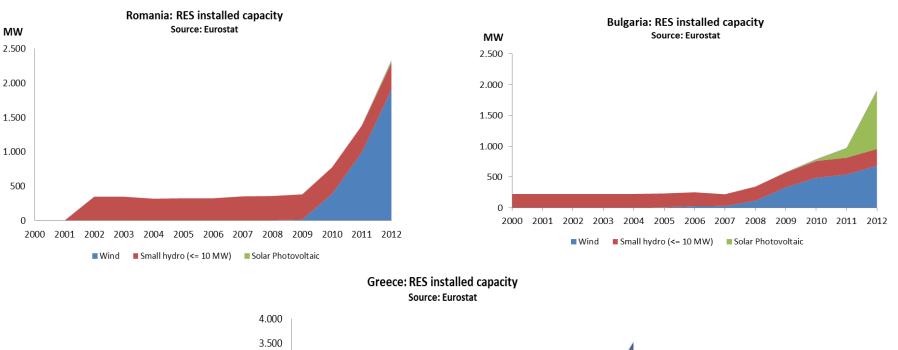


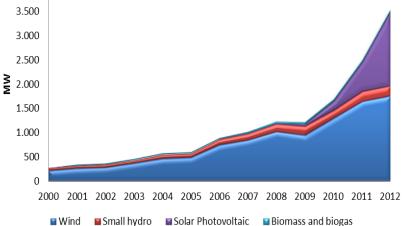
### Installed Electricity Capacity in SE Europe, and the share of RES in electricity generation (MW, 2012 - 2013)

	Hydro <sup>[1]</sup>	Wind	PV	Total RES	Total Electricity (MW)	RES (total %)
Albania	1.466	0	0	1.466	1.496	96%
Bosnia & Herzegovina	2.058	0	0	2.058	3.803	53%
Bulgaria	2183	682	980	3.874	13.759	29%
Croatia	2.112	180	2.9	2.295	4.268	54%
FYROM	580	0	1	581	1.600	36%
Greece	3.060 + 218	1750	2.600	7.673 <sup>[2]</sup>	17.700	44%
Montenegro	660	0	0	660	870	73%
Romania	6.400	2.095	94	8.640 <sup>[3]</sup>	17.360	50%
Serbia & Kosovo	2.831	0[4]	2	2.833	8.360	34%
Turkey	14.000	2312	2	16.500 <sup>[5]</sup>	60.121	28%

- <sup>11</sup> Including both large and small hydro
- <sup>[2]</sup> Including some 50 MW of biomass installation
- <sup>[3]</sup> Including some 40 MW of biomass installation
- <sup>[4]</sup> A wind farm of 120 MW is under construction since September 2013
- <sup>[5]</sup> Including 180 MW of geothermal power plants

## **RES Installed Capacity in Selected Countries** (2000-2012)



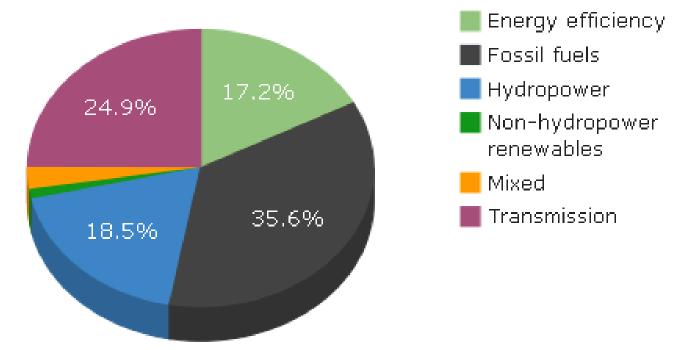




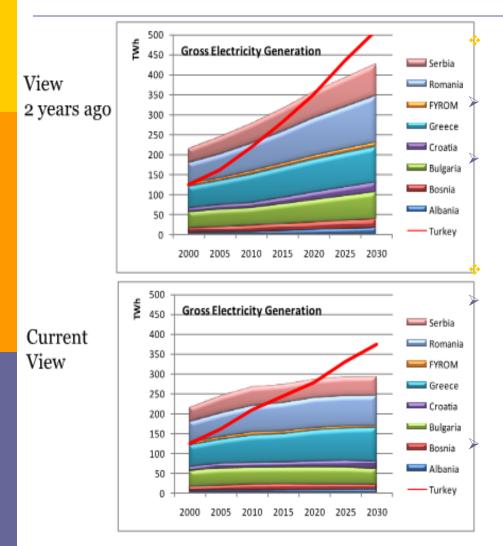


### **Financing the Energy Sector in West Balkans**

EBRD, World Bank Group, EIB, EU-IPA: Energy financing in the Western Balkans 2006-2012 (in % and 100 million EUR)



### **Electricity Generation in SE Europe (2000-2030) and Substantial new Electricity Infrastructure is Foreseen in SE Europe by 2020 for all 12 Countries of the Region**



### Anticipated new power generating capacity:

Thermal/ nuclear (excl. Turkey) ~ 20.0 GW

Rewenables Low scenario ~ 15.0 GW High scenario ~ 25.0 GW

### Anticipated investments in:

Thermal/ Nuclear plants, lignite/ coal mine

development, electricity grids, HV Transmission

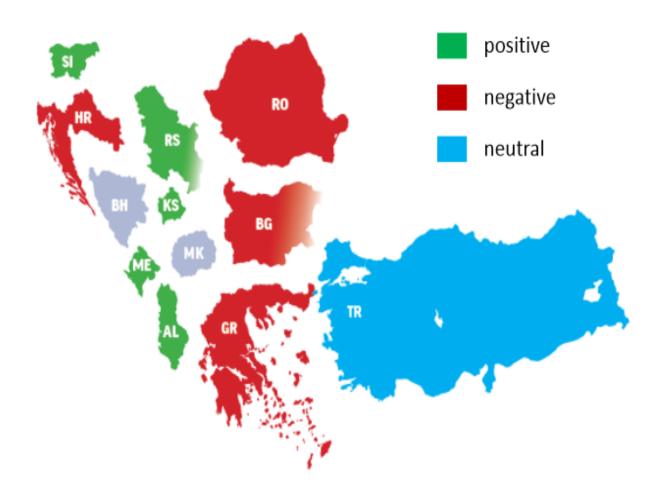
lines ~90.0 Billion Euros

RES (Solar Thermal, Solar PV, Wind, Biomass, Geothermal, Min Hydro) ~35 – 50 Billion Euros

#### Source: EC3 Lab, NTUA

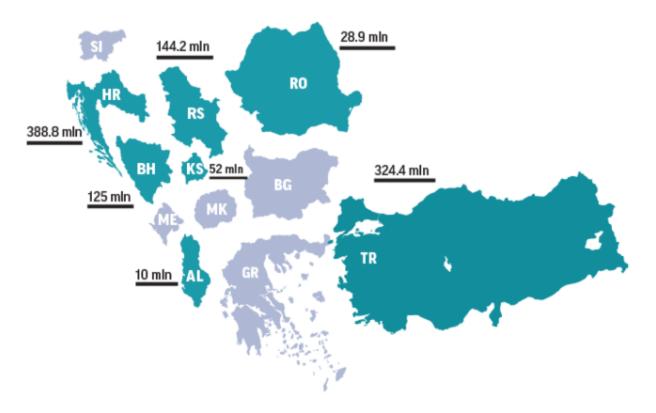


### Prospects ahead of the RES sector by country





#### Financing for the RES industry



- RES projects in Croatia and Turkey most actively seek project funding with over EUR 700 mln of attracted investments
- Lending institutions that support the development of renewables in the region are: the EBRD with 7 mentions, the IFC – 6, the EIB and the WB – 2
- Hydropower projects won most of the allocated funds



# Thank you for your attention

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