



Cost Competitive Renewables in South East Europe

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EURELECTRIC ANNUAL MEETING – Powering Transition Investments in South East Europe

IRENA's regional engagement



South East Europe Regional Initiative



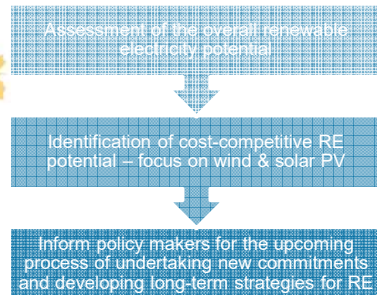
Abu Dhabi **Communiqué** on Accelerating the Uptake of Renewables in South East Europe
Abu Dhabi, 13 January 2017

Action Areas

- Resource assessment
- Long-term planning for RE deployment
- Enabling frameworks: technical, policy, regulatory, institutional
- Market based RE support schemes
- Socio-economic benefits vs. affordability
- Access to financing for RE projects



Cost-competitive RE potential of SEE



- ✓ LCOE within the ranges of the fossil-fuel supply options
- ✓ Level of cost-competitive potential today, 2030 and 2050
- ✓ Sensitivity analysis for cost of capital



Resource assessment and cost analysis



Global Atlas FOR RENEWABLE ENERGY

Wind and Solar PV Suitability Maps

What is a good site

- ✓ Renewable energy resource intensity
- ✓ Topography
- ✓ Population density
- ✓ Distance to the grid
- ✓ Land cover
- ✓ Protected areas

IRENA COSTS

Renewable Energy Costs, Technologies and Markets

Renewable Power Generation Costs in 2017



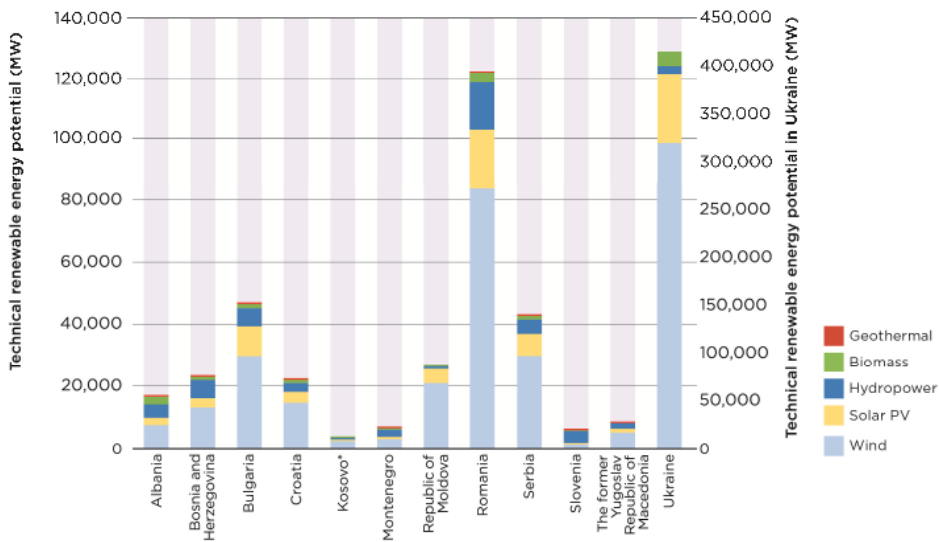
IRENA Renewable Costing Alliance
IRENA Renewable Cost Database
 based on data from
 over 10,000+ utility-scale RE projects

- ☐ Geothermal
 - ☐ Biomass
 - ☐ Hydropower
- ✓ Based on national energy studies or academic and feasibility studies
 - ✓ Validated by country experts

Technical potential



740 GW Technical renewable electricity potential suitable for development

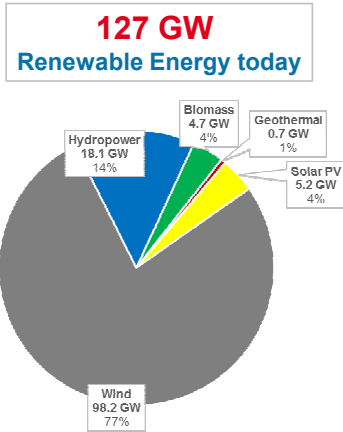


NREAP targets vs. cost-competitive additional potential

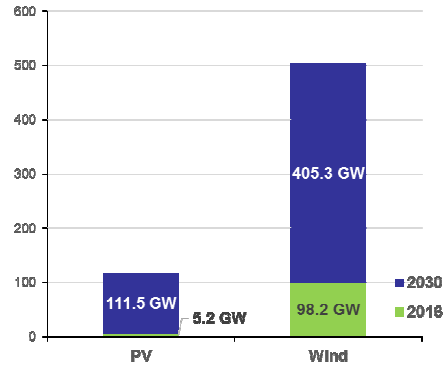


8.2 GW

Gap to achieve cumulative RE deployment target for 2020 (based on NREAPs)



620 GW
Wind and Solar PV by 2030

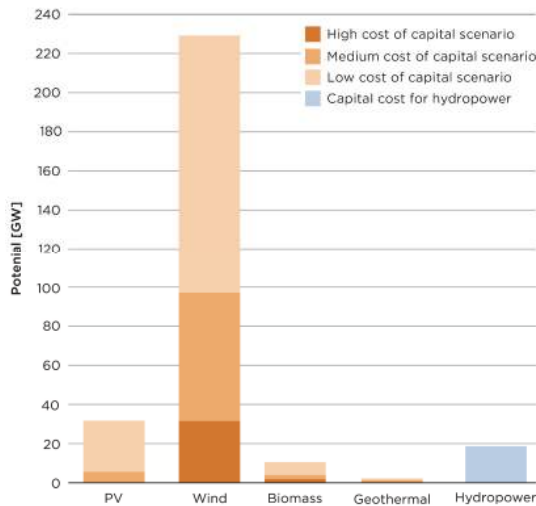


Based on: Medium cost of capital scenario

Impact of cost of capital



Additional cost-competitive renewable energy potential in 2016



How to improve the risk perception of the region?

- ✓ Eliminate administrative barriers and improve market access
- ✓ Create attractive and consistent RE support schemes
- ✓ Improve PPA structure
- ✓ Address grid integration challenges
- ✓ Enhance skills and capacities
- ✓ Facilitate access to finance

Conclusions



- Vast technical potential for renewable power generation in the region.
- Large cost-competitive potential as of today, 15x of remaining gap to reach 2020 RE targets. Much larger cost-competitive potential towards 2030.
- Challenges ahead:
 - Mobilization of sufficient capital at reasonable costs.
 - Other technical challenges e.g. ensuring security of supply.
- IRENA stands ready to support countries in the region in their efforts to accelerate RE deployment.

