

*Barriers in financing renewable energy
projects - an EBRD perspective*
IRENA-ENERGY COMMUNITY Joint Workshop
Cost-Effective Renewable Energy in South East Europe

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European Bank
for Reconstruction and Development

EBRD – Power and Energy Utilities

Team of ca. 35 bankers, based in London, Almaty, Amman, Belgrade, Budapest, Bucharest, Cairo, Istanbul, Kiev, Moscow, Tbilisi and Warsaw

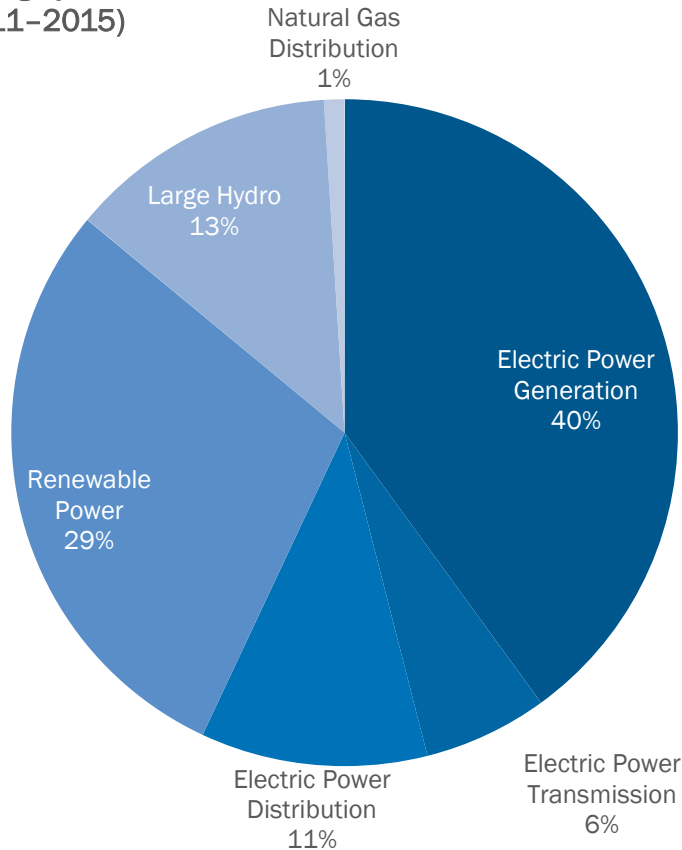
- In each of the last six years, annual power & energy investments exceeded EUR 1 bln and at least 20% of those funds went towards renewable energy generation projects.
- In 2015 the EBRD signed EUR 591 mln of financing for 13 renewables deals with a total gross project value of EUR 2.2 bln.



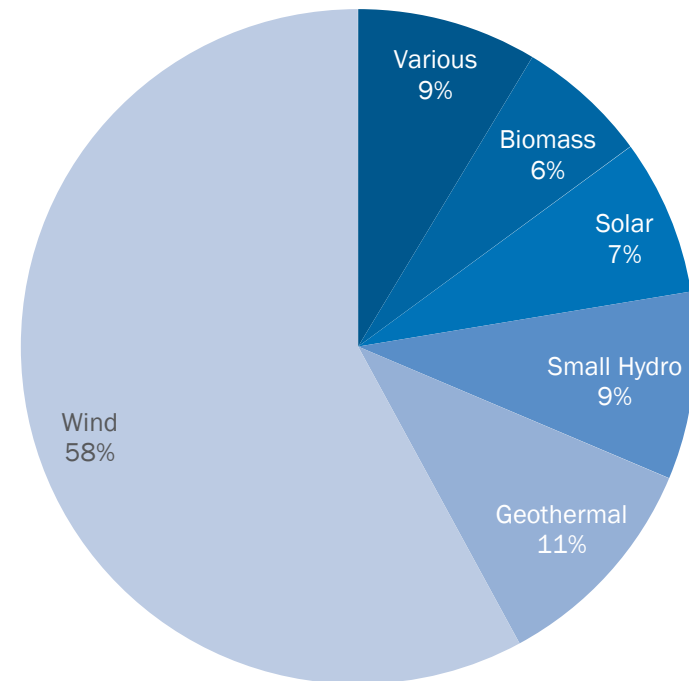
Power and Energy – Financing by sub-sector

PEU's exposure to renewables is 29% of its portfolio

Financing by Sector
(2011–2015)



Renewables - Exposure by Technology



Updated as of 31 December, 2015.
Source: EBRD data

The average renewables EBRD finance amount is **EUR 28m**, compared to **EUR 59m** for non-renewable PEU.

Key risks for investors and financiers

Risk

Mitigation

1

Reliance on regulatory support => retroactive changes

Certainty: Strong commitment from host governments/ regulators. Fair, clear approach. Contained program.

2

Construction risk => delays, cost overruns

Reputable and experienced contractors. Short construction period. Sponsor support, Sponsor funds in first

3

Grid capacity => curtailment, balancing cost.

Grid studies, Operators are becoming more experienced in operating RE and manage/control capacity additions in a fair and transparent manner. Shift towards smart grids.

4

Off-taker, Market/price risk => non payment

Comprehensive financial and market analysis. Affordability analysis.

Key risks for investors and financiers

Risk

Mitigation

5 Environmental Risk

Generally EU standards, gap analysis. Strategic Environmental assessment for cumulative impact in a region.

6 Resource assessment

Redo assessment based on raw data

7 Technical

Equipment must be certified, from a reputable manufacturer; overall site assessment.

8 Legal

All permits in place and validated (CP); ownership structure

Examples from Poland, Bulgaria, Romania, Turkey, Ukraine

SOME PROBLEMS

Poland

- Prolonged discussion on the revision of the new RES Support Scheme undermined investors confidence period between 2012-2014.
- New Feed-in-Premium (auctioning) system that will commence in 2016 is expected to revive the sector and remove some of the pricing risks

Bulgaria

- The country has reached its RES targets for 2020 following significant growth in Solar power
- Retroactive changes affected existing investors and financiers
- Payment difficulties from the main off-taker for large projects made situation even worst

Romania

- Meeting its RES targets for 2020, following significant activity during 2013
- A combination of retroactive GC reduction and reduced GC quotas created an oversupply of GCs that reduced income for RES producers putting hold to investment activity

SOME GOOD APPROACHES:

Turkey

- Significant potential. FiT are perceived more as a floor for wind and hydro. Sufficient but not excessive for solar, geothermal and biomass.

Serbia

- Limitation of renewables capacity at 500 MW seen as very good example for the region. FiT in place.

Egypt

- The limitation of 4.3 GW capacity and a cap of 50 MW per project.

Ukraine

- In 2015, repealed local content requirement but reconfirmed RE support scheme.

Thank you for you attention



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