Barriers in financing renewable energy projects - an EBRD perspective

IRENA-ENERGY COMMUNITY Joint Workshop
Cost-Effective Renewable Energy in South East Europe

Vienna 3rd March 2016
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

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

**PEU’s exposure to renewables is 29% of its portfolio**

- **Electric Power Generation**: 40%
- **Electric Power Transmission**: 6%
- **Electric Power Distribution**: 11%
- **Renewable Power**: 29%
- **Large Hydro**: 13%
- **Natural Gas Distribution**: 1%

**Renewables - Exposure by Technology**

- **Wind**: 58%
- **Solar**: 7%
- **Small Hydro**: 9%
- **Geothermal**: 11%
- **Biomass**: 6%
- **Various**: 9%

Updated as of 31 December, 2015. Source: EBRD data
## Key risks for investors and financiers

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
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<tbody>
<tr>
<td>Reliance on regulatory support =&gt; retroactive changes</td>
<td>Certainty: Strong commitment from host governments/ regulators. Fair, clear approach. Contained program.</td>
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<td>Construction risk =&gt; delays, cost overruns</td>
<td>Reputable and experienced contractors. Short construction period. Sponsor support, Sponsor funds in first</td>
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<tr>
<td>Grid capacity =&gt; curtailment, balancing cost.</td>
<td>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.</td>
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<tr>
<td>Off-taker, Market/price risk =&gt; non payment</td>
<td>Comprehensive financial and market analysis. Affordability analysis.</td>
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# Key risks for investors and financiers

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<td>5 Environmental Risk</td>
<td>Generally EU standards, gap analysis. Strategic Environmental assessment for cumulative impact in a region.</td>
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<tr>
<td>6 Resource assessment</td>
<td>Redo assessment based on raw data</td>
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<tr>
<td>7 Technical</td>
<td>Equipment must be certified, from a reputable manufacturer; overall site assessment.</td>
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<tr>
<td>8 Legal</td>
<td>All permits in place and validated (CP); ownership structure</td>
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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 your attention

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