EIB Financing of Renewable (and Wind) Energy: Key Requirements

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Outline

- Context
  - Energy investment needs
  - EU-NREAPs
- EIB role for financing RE and EE
  - Introduction to EIB
  - Energy lending activities
  - Key instruments and facilities for RE (wind)
- EIB Eligibility criteria
  - For RE projects
  - Examples relevant to wind
- Conclusions
Mostly for RE, EE and energy networks (based on different EU Commission studies):

- RE investment needs: currently about 50 bn/y and may be similar or higher to reach objectives
- Energy efficiency: currently very small, need about 85 bn/y to reach objectives
- Electricity and gas networks: 60 bn/year
- Replacement of fossil power stations reaching end of life (about 15 bn/y)
General context is not favourable to financing of required investments

- Difficult access to finance at present, particularly in some countries
- Low energy demand growth
- Uncertain energy price developments:
  - Oil prices: latest US EIA forecasts, from 60 to 200 USD/bbl (WTI) in 2015-35
  - Gas prices in Europe de-linked from oil prices?
  - Import coal prices: from 70 to 120 USD/t in 2035 (IEA)
- Uncertainties on CO2 price developments
EU Renewable Energy Action Plans additional RE energy in 2010-20

- RE electricity (44%)
  - Will RE expansion be limited by grid/storage capacity?
  - Will the cost of PV, off-shore wind and CSP decrease as expected by policy makers?
- RE Heating & cooling (40%):
  - Poor past performance: will it now improve?
- RE Transport (16%)
  - Environmental sustainability issues and uncertainty with the development of the 2nd generation technology
  - Uncertainties with the development of electrical cars
The European Investment Bank (EIB)
Long-term finance promoting European objectives

- Shareholders: 27 EU Member States
- Governance via Board of Governors (EU Finance Ministers), Board of Directors, Management Committee, and Audit Committee

Figure: Breakdown of EIB’s capital
EIB lending to Energy 2007-11

CA Approvals (N°)  Signed loans (bn€)
EIB signed EUR 4.1 billion for European RE projects in 2011 (77% of total RE)

Total EU-2011 : 4.1 billion EUR

- Offshore W: 22%
- Framework: 28%
- Onshore W: 16%
- Biomass / bioenergy: 3%
- Solar thermal: 4%
- Manufacturing & RDI: 5%
- Solar PV: 13%
- Transmission: 3%
- Other: 4%
- Hydro: 2%
Key financing instruments for energy efficiency and renewable energy

- **Large range of financing instruments**
  - From senior loans to equity inside and outside the EU
  - Intermediated lending, including framework loans
    - Through FIs in the banking sector, specialised agencies or ESCOs
  - Indirect financing through investment funds
    - Established with the private sector and a range of IFIs

- **Technical assistance programmes**
  - Support of project preparation and operation
  - E.g. ELENA (European Local ENergy Assistance), JESSICA, NER 300, JASPERS in EU
  - Mediterranean region, Western Balkans and ACP countries
EIB Projects Eligibility Criteria illustrated with wind-relevant examples

- Benefit from appropriate regulatory framework and permitting processes
- Be relevant to EU energy objectives & be technically sound
- Comply with EIB’s E&S guidelines
- *(Comply with EIB’s procurement policy)*
- Be economically and financially viable
Benefit from appropriate regulatory framework and permitting processes

- A clear and stable RE support framework is key
  - Limit exposure to energy price volatility, inc. for heating and cooling
  - Regulatory changes should not create regulatory uncertainty (e.g. recent changes in PV tariffs)
  - RE moves from marginal to mainstream: How will regulations change to accommodate it?

- Other additional barriers
  - Predictability and transparent permitting process
  - Non-financial barriers of small RE: similar to EE
Be relevant to EU energy objectives & be technically sound

- Fit with NREAPs and overall national / regional RE strategy in MT/LT
- Mature or emerging technologies
- Resource modelling and (feasibility) studies to be conducted by qualified specialists with proven experience
- For on-shore wind: at least one year on on-site wind measurements, preferably hub height
Comply with EIB’s E&S standards

- Comply with EU policy, principles, standards and practices, especially the requirements of EU legislation, for the protection of the environment, and satisfy social safeguards
- Potential impacts acceptable: public consultation, natural habitats, forestry, indigenous people, involuntary resettlement, child and forced labour, cultural heritage, waterways, climate change
- Typical criteria for wind: local development plan / SEA and cumulative impact + impacts on: landscape / visual, sensitive areas, migrating / nesting / feeding birds & bats, fauna & flora species of conservation value, local residents, other impacts from auxiliary facilities
- Guidance note:
Be economically and financially viable

- Mature renewable power: cost of power to be economically and financially competitive with the fossil fuel alternative
  - Continental Europe benchmark (2008) of 96 EUR/MWh
  - Incl. environmental externalities and security of supply benefit
- Experience shows that financing is flowing when RE regulatory frameworks are clear and stable:
  - Financing easier for technologies with proven long term track record (on-shore wind, PV)
  - More difficult for biomass, technologies in the early market penetration, or innovative or new RE markets
- Impact on profitability from:
  - Regulatory changes to RE support systems
  - Constraints and curtailment
Conclusions

- Substantial investment needs to reach EU energy objectives
- General context not favourable to the financing of these investments, in particular in some EU countries
- EIB plays a catalytic role to mobilise financing
- Key criteria for financing (good) RE (wind) projects
  - Regulatory framework and permitting processes
  - E&S (& procurement) guidelines
  - Economics and financials
Thank you! For more information…

http://www.eib.org/

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Key EIB-managed facilities relevant to renewable energy in Europe

- **ELENA** – European Local Energy Assistance via grants to prepare investment programmes in sustainable energy at the local level

- **JESSICA** – Joint European Support for Sustainable Investment in City Areas for investment in sustainable urban development

- **NER 300** – New Entrants Reserve to provide finance for installations of innovative renewable energy technology and CCS in the EU (via 300 million carbon emission allowances)

- **JASPERS** – Joint Assistance to Support Projects in European Regions to prepare projects supported by EU Structural and Cohesion Funds
Comply with EIB’s procurement policy


- Obtain the economically most advantageous offer (best value for money) in purchasing the works, goods and services necessary to implement a project

**Principles:**
- Competition as a basis to obtain attractive offers
- Fairness vis a vis competitors
- Appropriate selection process
  - Most logical criterion: net present cost of constructing and operating the project component over its lifetime
- Transparency and accountability (well defined and documented)

**In EU Law on Public Procurement to be complied with**
- Determine whether the project is ruled by public or private sector procurement
- Relevant directive concerning competitive tendering on the basis of fair and non-discriminatory terms
- Open or restricted procedures with publications in OJEU