



# The European Investment Bank – The EU Bank

*Profile, Public policy goals and objectives* 

- European Union's long-term lending bank set up in 1958 by the Treaty of Rome
- A not-for-profit, policy driven institution
- Shareholders: 28 EU Member States
- Largest supranational lender:
  signatures in 2013 amounted to EUR 75bn (90% in EU)
- Supporting sound investments which foster EU policy goals

### **Growth and employment potential**

Knowledge economy

Strategic transport (TEN-T)

Competitive and secure energy

Small and Medium Enterprises (SMEs)

Urban renewal and regeneration (incl. health care)

### **Environmental sustainability**

**Environmental protection** 

Renewable Energy, Energy Efficiency

Sustainable transport (urban, inter-urban)

**Cohesion (primary, transversal)** 

Climate action (primary, transversal)



## **EIB and the Energy Sector**

### EIB's Screening and Assessment Criteria for Energy Projects

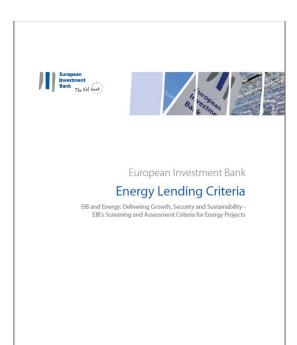
- Last comprehensive energy sector lending review 2007
  - Energy identified as priority objective
  - Renewable Energy and Energy Efficiency prioritised
  - Specific criteria for coal projects
- Energy sector lending over EUR 70bn and 500 projects since 2007
  - 15-20% total lending
  - 90% to EE, RE and networks
  - substantial technical assistance
- Significant part of Climate Action lending
- Extensive public consultation for review
  - Public meeting, > 80 written responses, Input from MEPs, member states, industry, NGOs and public authorities, Meetings with key stakeholders
  - Consultation report and matrix published

http://www.eib.org/about/partners/cso/consultations/item/public-consultation-on-eibs-energy-lending-policy.htm



## **EIB and the Energy Sector**

Energy Sector Lending Review - Key Conclusions



- Review balances EU energy and climate policy objectives by:
  - Prioritising "no regrets" sectors:
    energy efficiency, renewable energy, networks and RDI
- Supporting other economic investments in the sector which promote EU policies where these are environmentally sustainable:
  - Emission performance standard for fossil fuel generation
  - Nuclear and shale gas projects screened for their environmental sustainability

http://www.eib.org/infocentre/publications/all/eib-energy-lending-criteria.htm

Fully aligned with EU energy and climate policy



# **Lending Criteria for financing RE**

### DISTINCTION BETWEEN TECHNOLOGIES

- commercially mature RE technologies = onshore wind, geothermal, hydro, CHP-biomass
- emerging RE technologies = solar (CSP & PV), offshore wind; maritime

### ECONOMIC JUSTIFICATION

- Identification of a benchmark for commercially mature technologies aiming at achieving compliance with an important EIB eligibility criteria ("economic viability")
- Benchmark = Competitive to least-cost alternative of electricity of fossilfuel alternative, Discounted power generation cost (EUR/MWh)



### **PROJECT APPRAISAL**

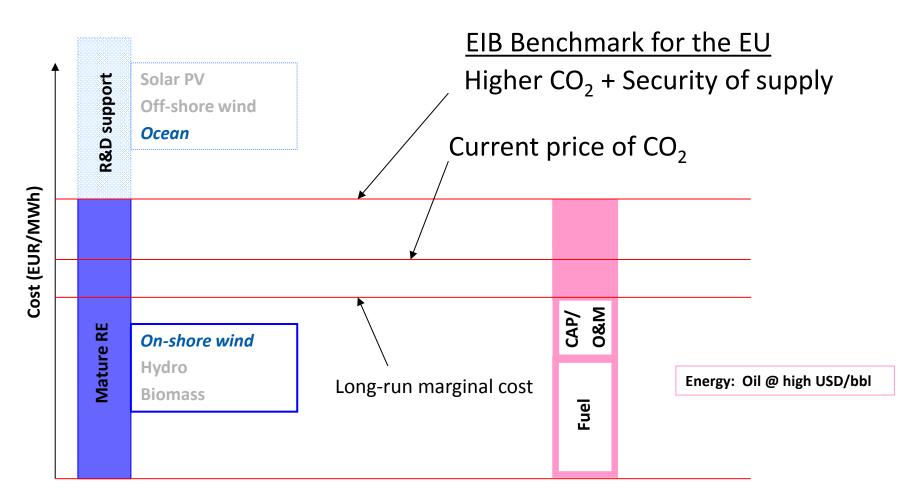
#### **ECONOMIC CRITERIA: COMMERCIALLY MATURE RE**

- NPV of total project cost = NPV total revenues
- NPV of total project cost =  $\sum_{i=1}^{n} \frac{c_i}{(1+rate)^i}$
- NPV revenues = Tariff  $T_i$  \* annual power production  $P_i = \sum_{i=1}^n \frac{T_i * P_i}{(1 + rate)^i}$
- As T<sub>i</sub> = const. for i=1,...n assumed, T<sub>i</sub> is the discounted (levelised) production cost to cover total cost

• 
$$T_{i} = \frac{\sum_{i=1}^{n} \frac{C_{i}}{(1+rate)^{i}}}{\sum_{i=1}^{n} \frac{P_{i}}{(1+rate)^{i}}}$$



### **ECONOMIC VALUE OF RENEWABLE ENERGY**



**CCGT Benchmark**