



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)

- 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>



- 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 fossil-fuel alternative, Discounted power generation cost (EUR/MWh)

- 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 $T_i = \text{const.}$ for $i=1, \dots, n$ assumed, T_i 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

