



**European
Investment
Bank**

The EU bank

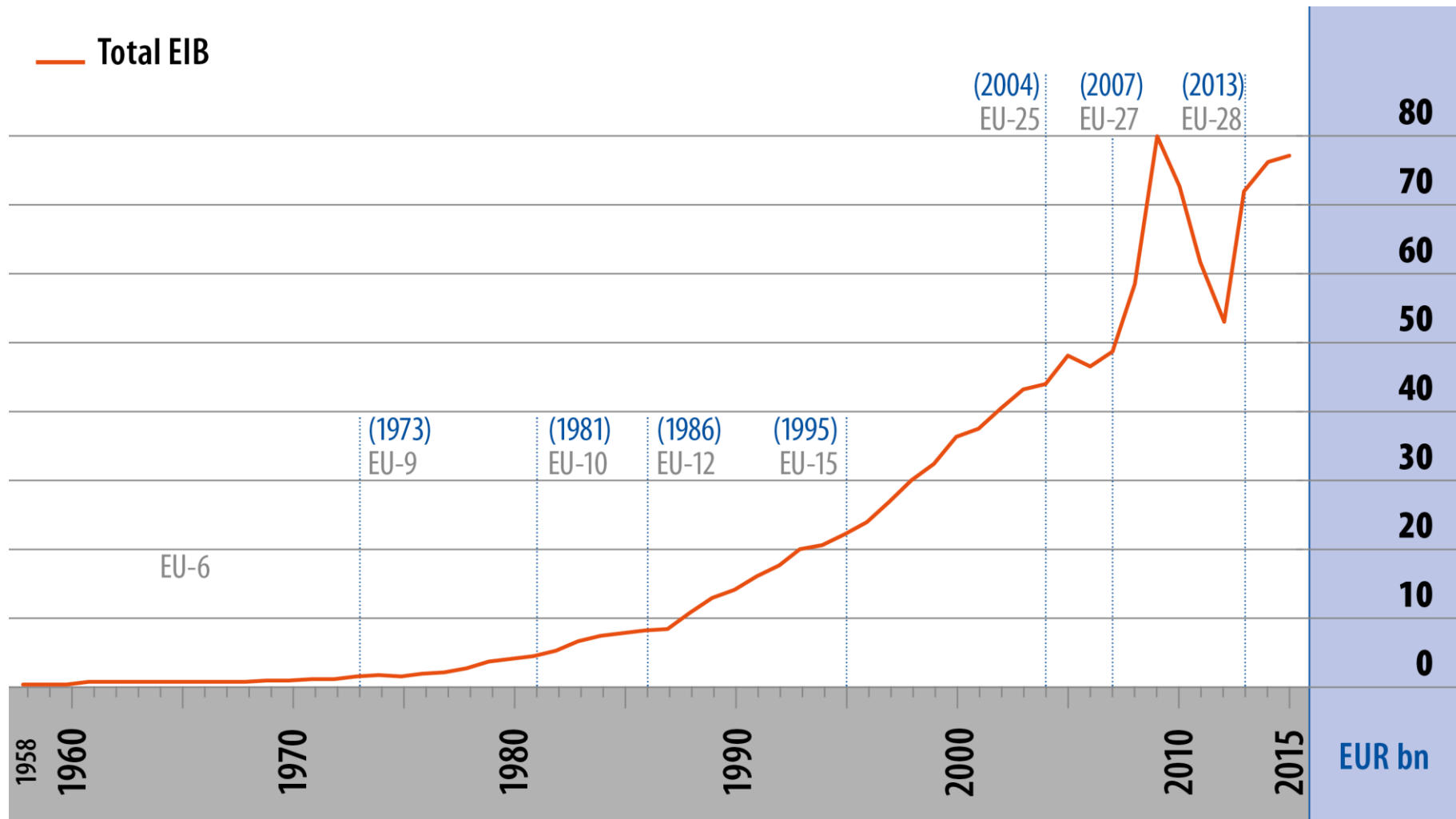
How the EIB supports market introduction of new energy technologies

Jonas WOLFF
Senior Energy Engineer
European Investment Bank
4th May 2016

The EIB at a glance

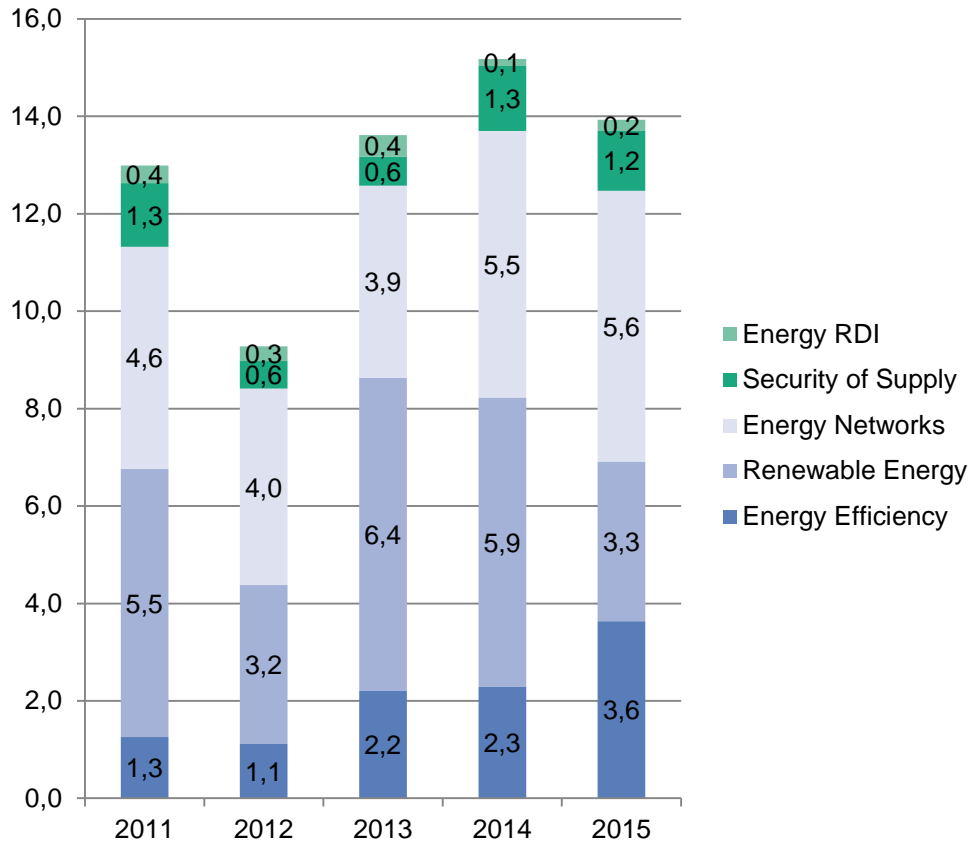
- Largest multilateral lender and borrower in the world
 - Raise our funds on the international capital markets
 - Pass on favourable borrowing conditions to clients
- Some 450 projects each year in over 160 countries
- Headquartered in Luxembourg and 33 local offices
- Around 2 900 staff:
 - Not only finance professionals, but also engineers, sector economists and socio-environmental experts
 - More than 50 years of experience in financing projects

EIB total lending

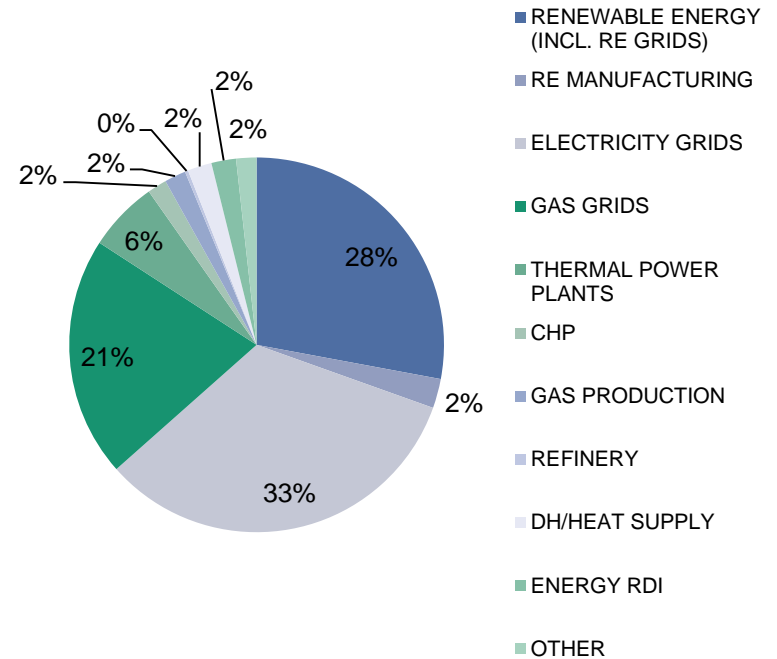


EIB energy lending 2011-2015

EIB Energy Lending 2011-2015



EIB Energy Lending by sector 2015



Energy Lending Criteria

Following extensive public consultation, EIB published a revised Energy Review in June 2013, fully aligned with EU energy and climate policy.

http://www.eib.org/attachments/strategies/eib_energy_lending_criteria_en.pdf

EIB will support the development of clean, affordable and secure energy by:

1. Prioritising energy efficiency, energy networks, renewable energy and energy RDI projects (“No Regrets” Sectors)
2. Adopting an emission performance standards for fossil fuel generation consistent with EU climate policies
3. Nuclear and shale gas projects screened for their environmental sustainability

Criteria concerning renewable energy

Mature technologies : like onshore wind, hydro, geothermal and solid biomass, [refined economic analysis of mature renewables](#)

Emerging technologies : like PV, CSP, 2nd generation bio-fuels and offshore wind, [close monitoring of technology costs](#)

General Project requirements:

- Meet EIB's objectives
- Be technically sound
- Be financially viable
- Show an acceptable economic return
- Comply with environmental protection and procurement regulations

InnovFin – EU Finance for innovators

- "InnovFin – EU Finance for Innovators" is a joint initiative launched by the European Investment Bank Group (EIB and EIF) in cooperation with the European Commission under Horizon 2020.
- InnovFin consists of a series of integrated and complementary financing tools and advisory services offered by the EIB Group, covering the entire value chain of research and innovation (R&I) in order to support investments from the smallest to the largest enterprise.
- <http://www.eib.org/products/blending/innovfin/index.htm>

InnovFin Product Overview



| SMEs | Midcaps | Large Caps | Thematic Finance | Advisory |
|--|--|---|--|--|
| InnovFin SME Guarantee | InnovFin MidCap Guarantee | InnovFin Large Projects | InnovFin Energy Demo Projects | InnovFin Advisory |
| InnovFin SME Venture Capital | InnovFin MidCap Growth Finance | | InnovFin Infectious Diseases | |
| SMEs and small Mid-Caps < 500 Employees | Mid-Caps < 3,000 Employees | Large Caps Typically > 3,000 Employees | SPV, Mid-Caps and Large Caps | Public and Private Sector Promoters |
| Intermediated SME/Mid-Cap Financing | Intermediated and/or direct Corporate lending | Direct Corporate Lending | Project Finance and/or Direct Corporate Lending | Financial Advisory |

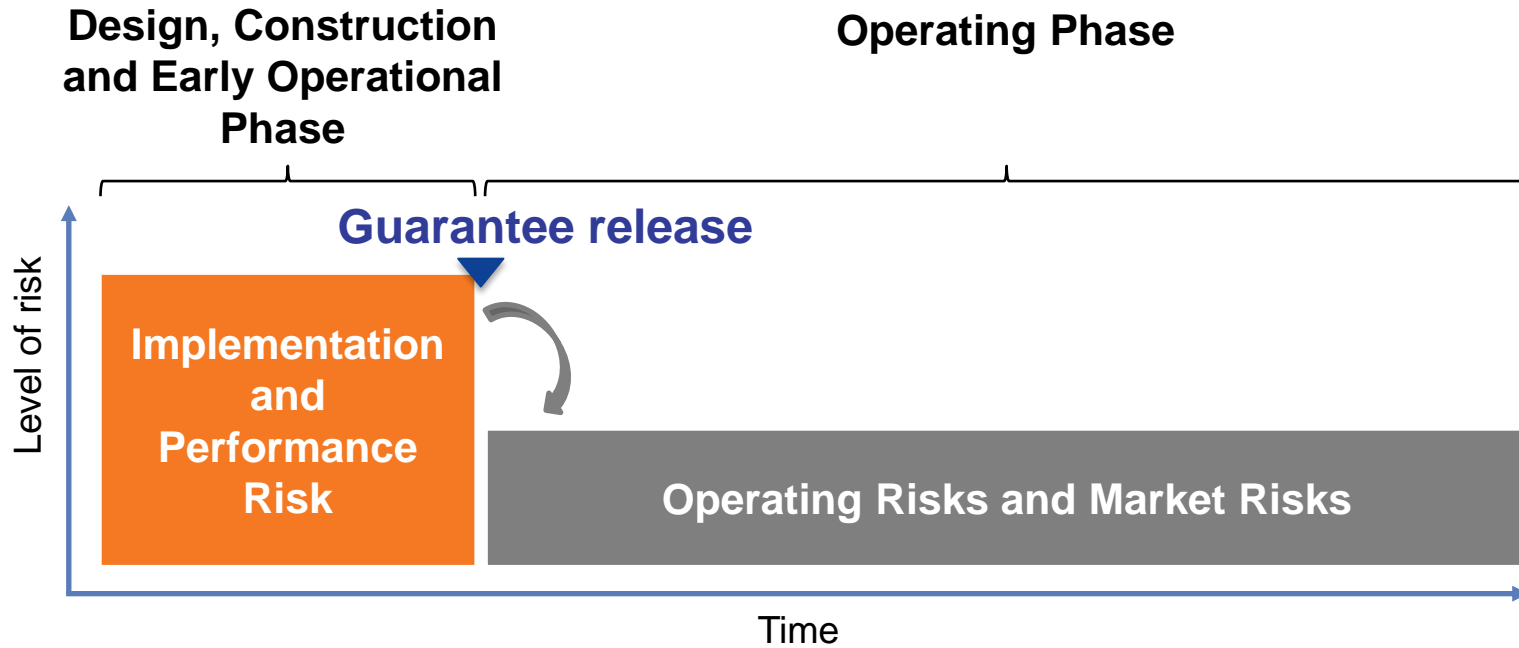
 direct products

 indirect products

Renewable energy

Fuel Cells, Hydrogen

- Pre-commercial stage
- Broad range of instruments
- Loan amount: **min EUR 7.5m, max EUR 75m, max 50% of project costs**
- Loan maturity: **max 15 years**
- Comprehensive due diligence (legal, financial, technical, etc.)
- EIB standard documentation under English or Luxembourgish law
- <http://www.eib.org/products/blending/innovfin/products/energy-demo-projects.htm>



FLP – First loss piece
RRT – Residual risk tranche

- 1 **Innovativeness**
 - ✓ Projects shall demonstrate for the first time the commercial viability of pre-commercial technologies
 - ✓ Technologies shall be innovative and not be commercially available yet
- 2 **Replicability**
 - ✓ The project has the potential to be replicated elsewhere with convincing market opportunities
 - ✓ The project should offer prospects for cost-efficient CO2 reduction both in the EU and globally
- 3 **Readiness for demonstration at scale**
 - ✓ The project shall be sufficiently mature for demonstration at the proposed scale (technologies validated and demonstrated through previous testing) with reasonable prospects of success
 - ✓ The proposed scale of demonstration should be equal to that of future commercial applications or be such that no significant additional problems are to be expected
- 4 **Timeline**
 - ✓ At the time the project is included under the facility, the projected start of commercial operation of the whole plant is expected to happen within a period of maximum 4 years
- 5 **Prospects of bankability**
 - ✓ The project shall have the potential to be or to become bankable by the guarantee release date
 - ✓ This requirement relates to all aspects of the project that are relevant for future project performance and debt service
- 6 **Commitment**
 - ✓ Promoters, sponsors and/or operators must be willing to substantially co-fund the project

- Currently available financing 150 MEUR
- 78 Expressions of interest
- 25 Currently considered for financing
- 5 Under appraisal
- Constraints: Sector, size, readiness, market risk

- Thank You!