

Financing of Energy Projects Improving Energy Networks

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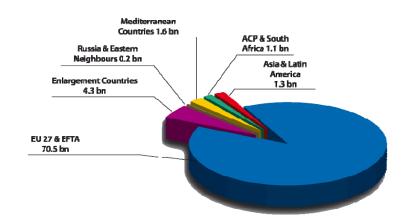
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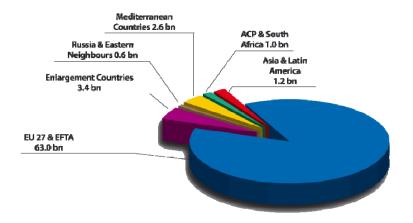
The European Investment Bank (EIB)

- Long-term finance promoting European objectives
- European Union's long-term lending bank set up in 1958 by the Treaty of Rome
- Shareholders: 27 EU Member States
- EIB lending

2009: EUR 79 .1bn



2010 (provisional): EUR 71.7bn





EIB Priority Lending Objectives

EU and Pre-Accession Countries

- Economic and Social Cohesion and Convergence;
- Implementation of the Knowledge Economy;
- Development of Trans-European Networks (TENs);
- Protecting and Improving the Environment and Promoting Sustainable Communities;
- Support for SMEs; and
- Supporting Sustainable, Competitive and Secure Energy

Outside the EU

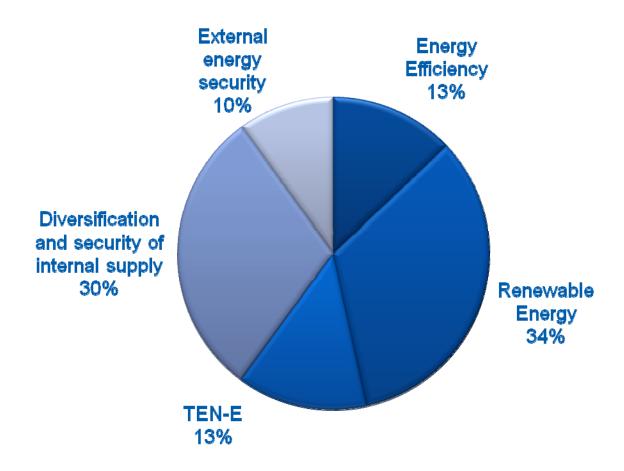
- Private sector development
- Financial sector development
- Infrastructure development
- Security of energy supply
- Environmental sustainability
- Support of EU presence



EIB Lending Strategy in Energy Projects

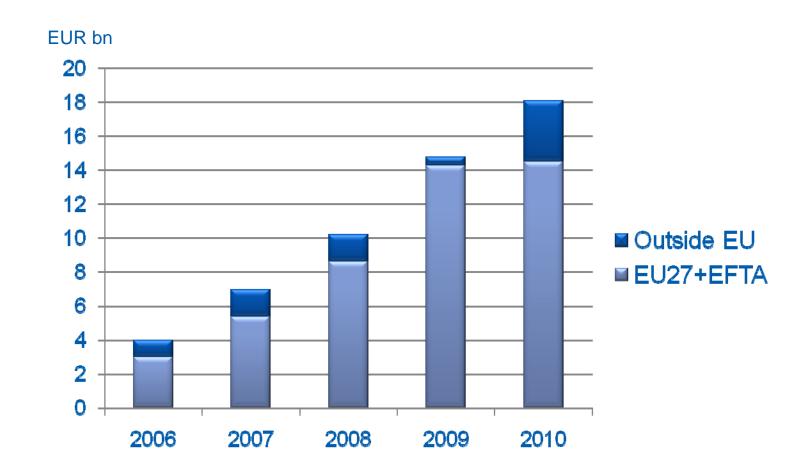
Priority lending areas supporting sustainable, competitive and secure energy

EIB 2010 Lending to Energy by Objectives



Total lending to the Energy sector amounted to 18.1 billion EUR in 2010

EIB Lending to the Energy Sector

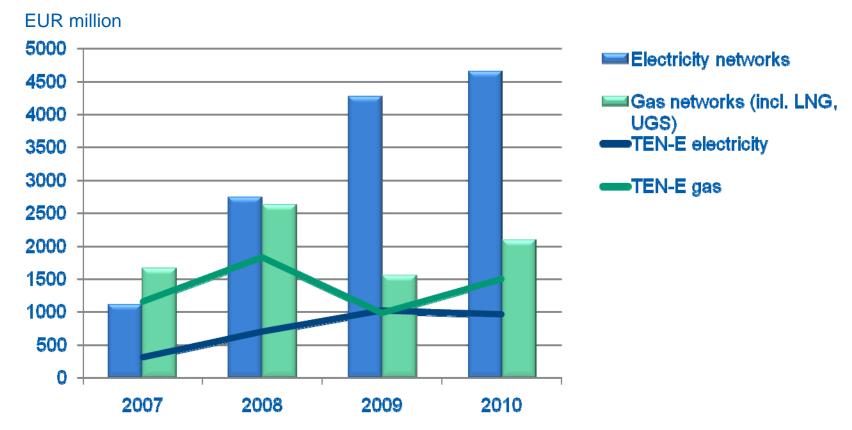


EIB lending to the Energy sector more than quadrupled over 5 years



EIB Lending to the Energy Networks

Lending to electricity and gas networks, incl. TEN-E, 2007-2010



- Financing of 83 projects/programmes including 57 TEN-E across 23 countries
- Cumulative lending of EUR 18.2 bn supporting a total investment of EUR 56 bn
- Recently strong positive impact of EEPR grants in accelerating the development of large interconnectors



Some Lessons Learned

from Financing of Energy Network Projects

Electricity Transmission

- Technical features and performances quite homogeneous across EU
- Lengthy approval processes (including TEN-E), original project designs often significantly reviewed
- Increasing use of cables and HVDC technology; some technical challenges in an otherwise very mature sector;
- Justification of a consistent part of investments relies on support to integration and dispatching of wind resources

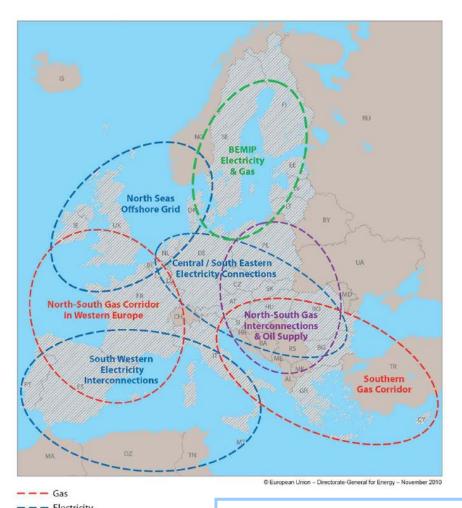
Electricity Distribution

- Large programmes, difficult to assess economic benefit and to monitor
- Technical/performance gap between old and new member states (rehabilitation need)
- Smart grid concept progressing slowly (automation, remote control, smart metering), need of regulatory support and tariff incentives to stimulate innovation

Gas Transmission and Distribution

- Different regulatory systems with cross-border interconnectors
- Considerable market risks often not covered by the TSO regulation
- Long term capacity bookings at fixed tariffs need to be secured (i.e. gas supply/demand risks to be carried by shippers)

EU Energy Infrastructure Priorities for 2020



Priority Objectives for Electricity Networks

- Transport and balance electricity from renewables (expected to more than double over 2007-2020)
- Single Internal Electricity Market (IEM) by 2014 to achieve greater price harmony across borders
- Adoption of technical standards for Smart Grids by end-2012

Priority Objectives for Oil&Gas Supplies

- Increase competition and security of supply through diversification of gas sources and import routes, reduction of single-source dependency and improvement of network interconnection and bi-directional gas flows
- Secure uninterrupted oil supply to land-locked countries in Central-Eastern Europe

To achieve these objectives <u>7 priority corridors</u> + one horizontal priority for <u>Smart Grids</u> have been identified.

Electricity and gasOil and gas

Smart Grids for Electricity in the EU

Needs and Challenges

- Energy networks show substantial investment needs: about EUR 60 bn/ year until 2020 (3/4 electricity and 1/4 gas)
 - Electricity: growing needs of renovation (in particular for distribution grids) & integration of fast growing renewables sources
 - Gas: diversification and security of supply
- Challenges:
 - Uncertain/lengthy permitting procedures
 - Market risks
 - Not coordinated regulation
 - Policies on security of supply
 - Rising financing costs



- Benefits of low cost of funding by AAA-rated bank passed on to clients:
 - Large amounts
 - Broad range of currencies
 - Long maturities
 - Attractive interest rates (non-profit maximising lending at close to the cost of borrowing)
 - Catalytic effect on participation of other banking or financial partners
- Main facilities:
 - Direct Loans
 - Large-scale projects (more than EUR 25m)
 - Intermediated Loans
 - Small and medium-scale projects (particularly to SMEs) via national and regional intermediary banks

| EIB Innovative Financing Instruments

Facilitating additional investment in energy infrastructures

- Structured Finance Facility (SFF)
 - to fund projects with a higher risk profile and enable equity financing; mezzanine and guarantee operations
- Investments in Equity Funds (e.g. Marguerite)
 - to take direct equity participations in infrastructure investments
 - Risk Sharing Finance Facility (RSFF)
 - in conjunction with the EC, to provide higher-risk financing for innovative projects in the sectors of technology platforms and R&D
 - Europe 2020 Project Bond Initiative
 - credit enhancement mechanism currently under evaluation

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