

EIB Energy Lending

Available funding for the development of energy storage solutions

Energy Storage Global Conference 2014, Paris 19-21 November 2014





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

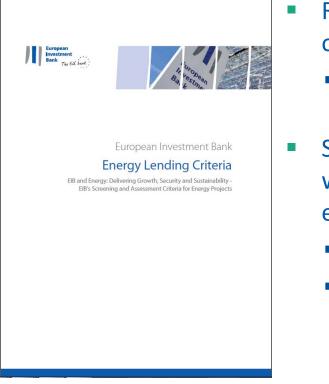
- Last comprehensive energy sector lending review 2007
 - Energy identified as priority objective
 - Renewable Energy and Energy Efficiency prioritised
 - Specific criteria for coal projects
- Energy sector lending over EUR 70bn and 500 projects since 2007
 - 15-20% total lending
 - 90% to EE, RE and 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

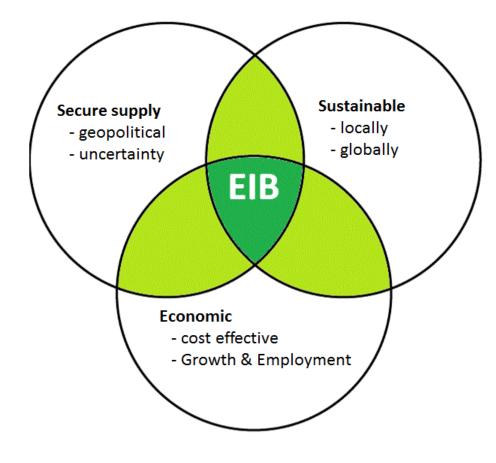
http://www.eib.org/infocentre/publications/all/eib-energy-lending-criteria.htm

Fully aligned with EU energy and climate policy



EIB and the Energy Sector

The 3 Pillars of Energy Lending Criteria



Energy Lending Priorities :

- Renewable energy RE
- Energy Efficiency EE
- Security of energy supply
- RDI Research, Development & Innovation
- Outside the EU External energy security and economic development

Blending, Advising activities

- Technical assistance (e.g. ELENA for sustainable energy, NER300 for innovation)
- Equity and EU-EIB risk sharing facilities (InnovFin (RSFF), LGTT)



20

16

12

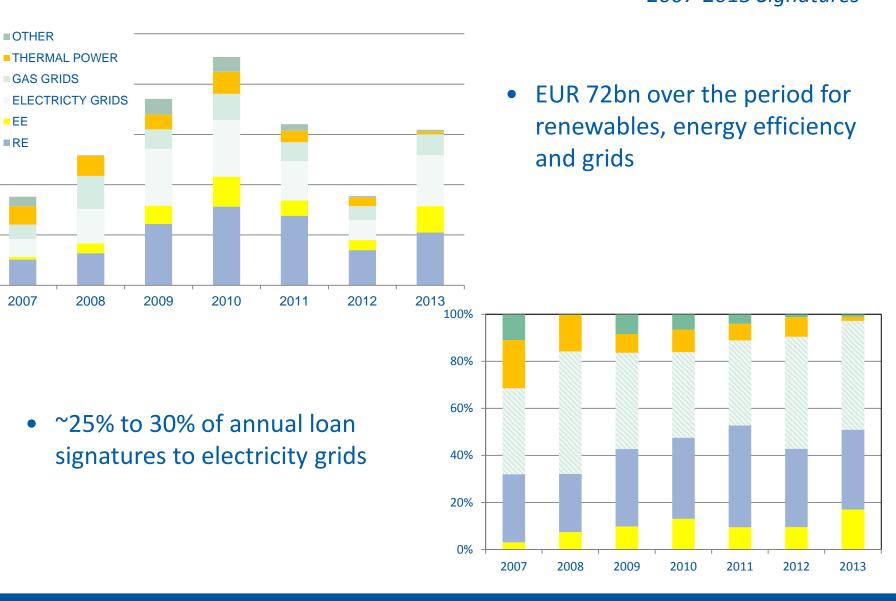
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4

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EUR bn

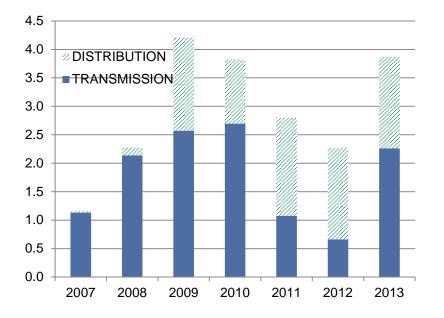
EIB Energy Lending by Technology Sector 2007-2013 Signatures





Breakdown of lending to electricity networks

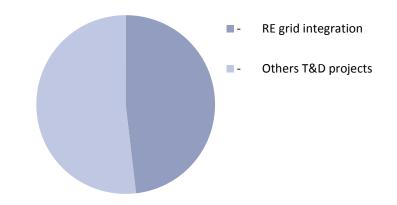
EIB lending criteria 2013



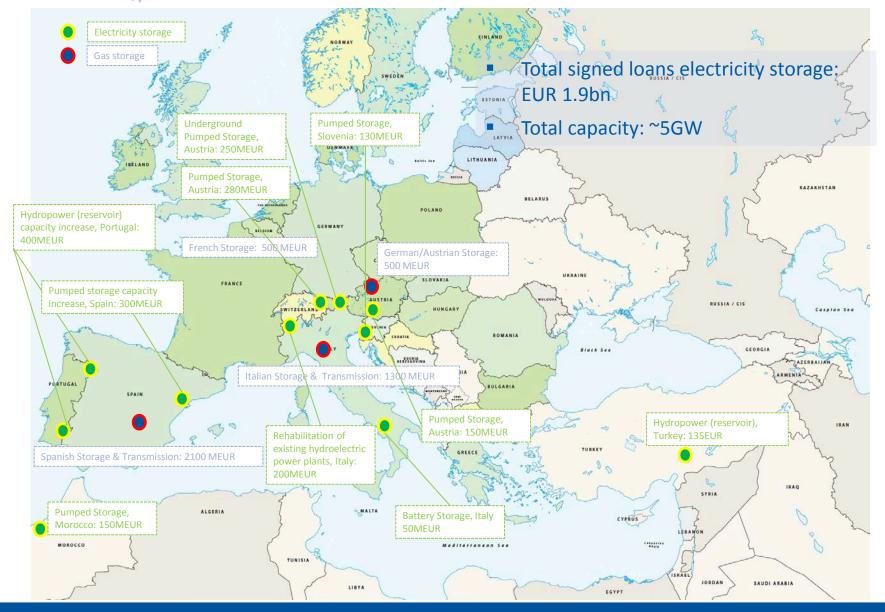
- 2013 ~EUR 4bn loans
- Nearly 50% to finance network investments for RE grid integration

Lending objectives

- transmission projects that contribute to bulk RES integration,
- support market integration (Projects of Common Interest (PCIs))
- secure reliability of supply across the EU;
- distribution investment programmes, including roll-outs of smart meters



EIB supported storage projects (2007-2013)



Energy Storage, Global Conference 2014, Paris, 19-21 November 2014, Day 2 - Market

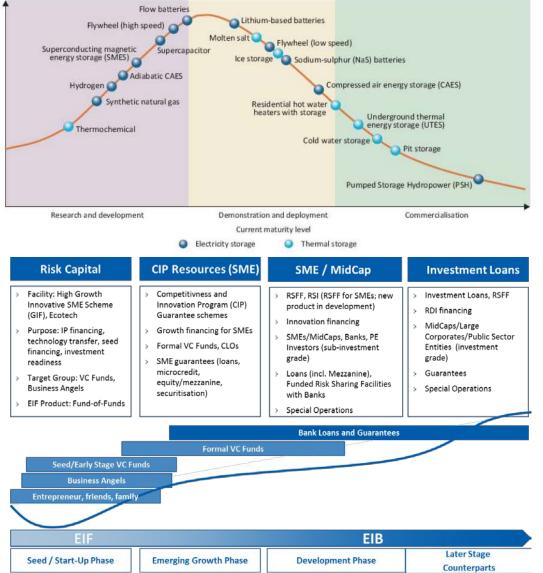
European

Investment Bank

The EU bank



Available funding products for Energy Storage



The variety of different energy storage technologies at various maturity levels



is matched by the variety of EIB Group finance products



InnovFin

EU Finance for Innovators

- Joint initiative launched by the EIB Group and European Commission under Horizon 2020
- Integrated and complementary financing tools and advisory services
- Covering the entire value chain of research and innovation (R&I) in order to support investments from the smallest to the largest enterprise
- Available across all eligible sectors under Horizon 2020, in EU Member States and Associated Countries
- Expectation by 2020: >EUR 24bn of debt and equity financing available to innovative companies to support EUR 48bn of final R&I investments.

http://www.eib.org/products/innovfin/index.htm

| | Inno √Fin EU Finance for Innovators | |
|---|---|-----------------------------|
| SMEs | MidCaps | Large Caps |
| Inno√Fin SME Guarantee | Inno√Fin MidCap Guarantee | Inno√Fin Large Projects |
| Inno √Fin SME Venture Capital | Inno√Fin MidCap Growth Finance | Inno√Fin Advisory |
| UR 25K EUR | 7.5m EUR | 25m |

Energy Storage, Global Conference 2014, Paris, 19-21 November 2014, Day 2 - Market



Funding Innovation – NER300

DRM (=Smart Grid) projects

- 3 NER300 DRM categories: Rural predominant solar, Rural predominant wind, Urban
- 5 Project Applications received in all 3 sub-categories
- 3 projects attributed for NER300 funding
- total NER300 funding amount for DRM projects: ~100 MEUR
- Project 1:

BE, Slim; 5 smart grid building blocks: CVPP (Commercial Virtual Power Plant), TVPP (Technical Virtual Power Plant), Smart Grid communication, New Power Market and TSO observability to accommodate high penetration of renewable generation capacity.

• Project 2:

CY, Green+; conversion of a region with a traditional grid to a micro-grid concept to address distribution network operation issues, such as voltage, frequency, power quality parameters and balancing renewable generation

• Project 3:

IT, Puglia Active Network; active large-scale network management at distribution level to accommodate large quantities of renewables, active control of power flows, facilitation of demand response, ancillary services to control supply quality, reduction of network losses and vehicle-to-grid service from electric vehicle battery storage



More information

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