

EIB Energy Lending

Screening and Assessment Criteria for Fossil Fuel-fired Power Plants

"Transforming energy supply in the EU: what can coal and clean coal technologies deliver?" Wednesday, 11 June 2014 – Charlemagne Building, Brussels

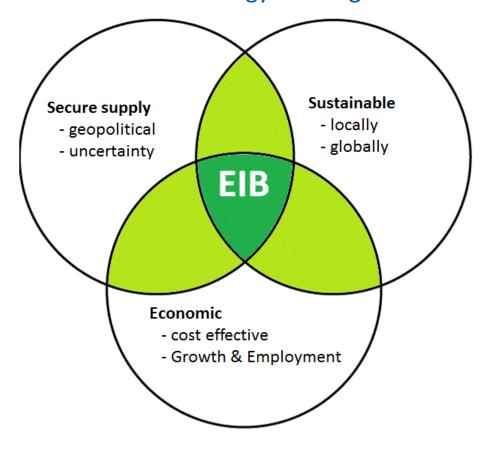


Agenda

EIB and Energy - Overview

2013 EIB Energy Lending Review

EIB financing of Fossil Fuel Power Generation



Lending Priorities since 2007:

- 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

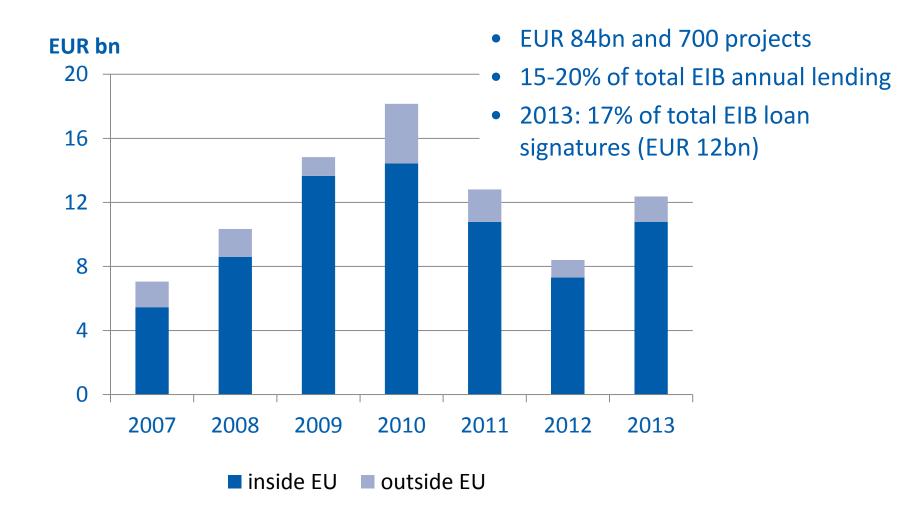
 (e.g. ELENA for sustainable energy,
 NER300 for innovation)
- Equity and EU-EIB risk sharing facilities (RSFF, LGTT)



EIB Energy Lending by Geographic Area



2007-2013 Signatures

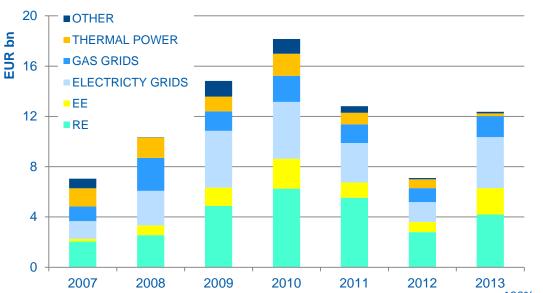




EIB Energy Lending by Technology Sector

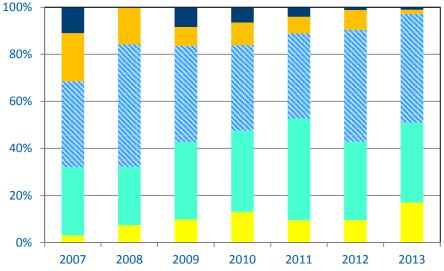


2007-2013 Signatures



 EUR 72bn over the period for renewables, energy efficiency and grids

 ~1/3 of annual loan signatures to renewables





2013 Energy Lending Criteria ReviewContext



- EU importance in world energy demand declining
 - ...as EU energy import dependency increases
 - ...and shale gives US prospect of energy independence
 - ...higher EU energy prices: Competitiveness, affordability
- Economic crisis: regulatory uncertainty for renewables
- Fukushima accident
- Global temperature now forecast to rise above 2°C limit
- 1/3rd world's population have no access to modern energy services
- New EU policies Energy Efficiency Directive and 2030 Energy and Climate White Paper



2013 Energy Lending Criteria Review



Key Conclusions

- Public consultation process; extensive and transparent
- Result: Revised Energy Lending Criteria published in June 2013

Key objective:

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

Measures:

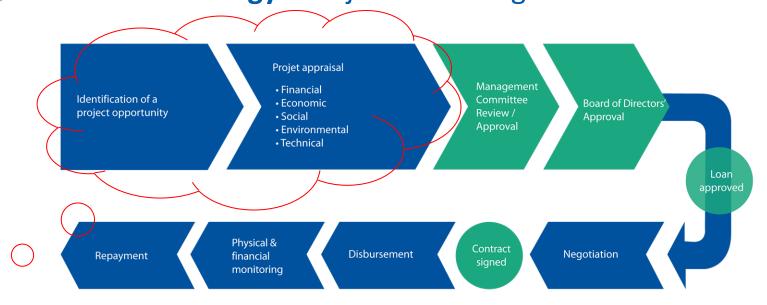
- 1. Prioritising energy efficiency, energy networks, renewable energy and energy RDI projects ("No Regrets" Sectors)
- 2. Introducing assessment criteria which:
 - Screen out fossil fuel generation projects from financing which are not consistent with EU climate policies
 - Ensure that nuclear projects proposed for financing are environmentally, economically and financially sustainable
 - Safeguard the environmental sustainability of hydrocarbon projects.

Fully aligned with EU energy and climate policy



EIB and Energy - Project screening since 2007







- + Technical and economic viability including economic cost of carbon
- + Assessment of risk and financial viability
- + Compliance with environmental and procurement legislation
- + Coal-fired: Best available technology, replace existing coal-fired plants and be "carbon-capture ready".



New EIB Screening Criteria since 2013



Fossil fuels

The EIB has introduced an Emission Performance Standard (EPS) of 550 gCO2/kWh

- EPS screens EIB's investments in fossil fuel generation projects
 - A project needs to
 - be economically justified based on a cost-benefit analysis including a externalities which reflect the marginal damage of each unit harmful emissions (CO2, NOX, SOX, particles ..).
 - comply with EU Directives (CCS, LCP, IE and ETS)

Limited, tightly defined exceptions:

- Technical constraints energy islands
- Outside EU: "Substantial contribution" poverty alleviation UN LDCs and World Bank "low income". Excludes all European and North African countries

Advantages over previous approach:

- technology neutral
- Relatively simple to understand and communicate to clients
- Flexible: can be adapted if policies change
- consistent with the EU's Climate policies
- « No Regrets » approach

Not eligible: most unabated power-only coal or lignite fired power stations

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Emission performance Standard (EPS)



Methodology

EPS = Moving Average of the ratio of

- targeted annual carbon emissions from power plants vs.
- electricity generated by the same plants in the same year.

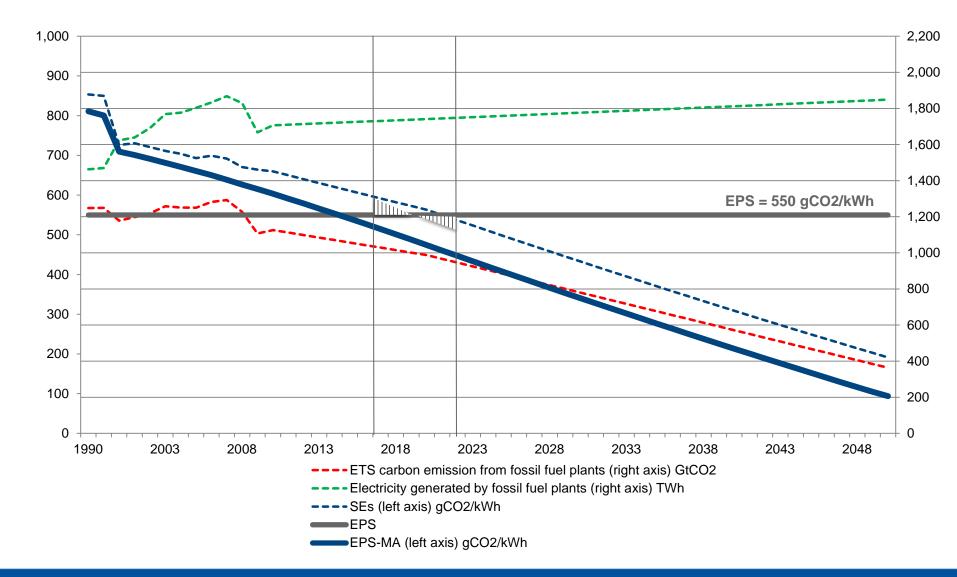
- The annual carbon emissions from power plants are calculated assuming an annual reduction consistent with the requirements of the ETS Directive (2009/29/EC).
- The electricity generated by the power plants is forecasted to grow yearly at a rate consistent with the higher end of the full set of scenarios contained in the Energy Roadmap 2050.



Emission performance Standard (EPS)



Methodology

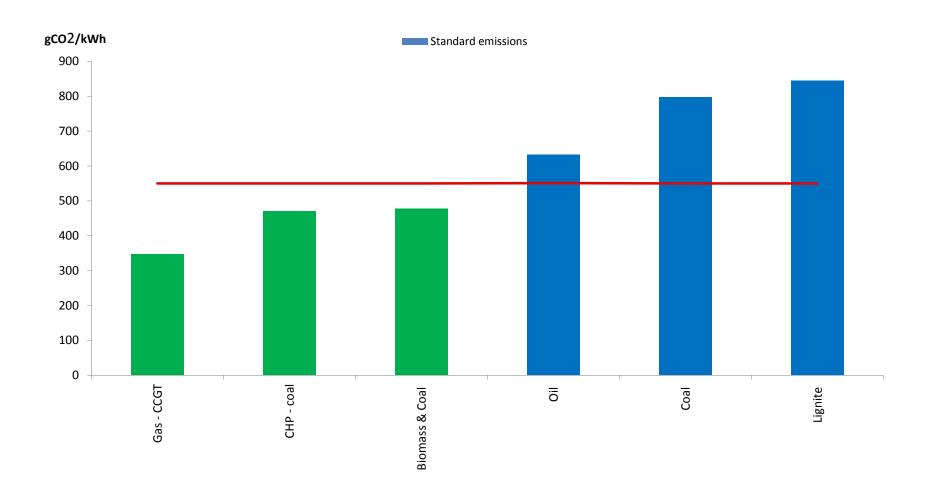




Emission performance Standard (EPS)



Fossil Fuel Power Generation – various technologies



CHP = Combined Heat & Power

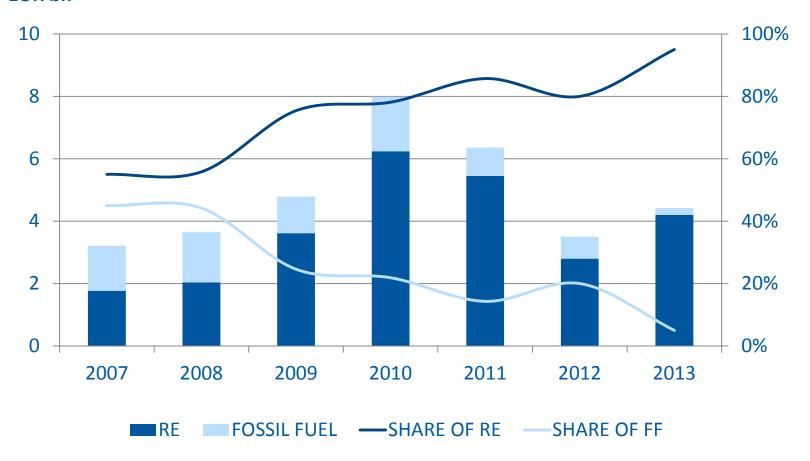


EIB Energy Lending - RE vs. FF



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EUR bn





Back-up



Quick Reminder - The EU Emissions Trading System

Launched in 2005, the EU emissions trading system (EU ETS) is the European Union's key tool for reducing industrial greenhouse gas emissions cost-effectively. As the biggest international system for trading greenhouse gas emission allowances, the EU ETS covers more than 11000 power stations and industrial plants in 31 countries, as well as airlines.

The EU ETS works on the 'cap and trade' principle. A 'Cap' (limit) is set on the total amount of certain greenhouse gases that can be emitted by the factories, power plants and other installations in the system. The cap is reduced over time so that total emissions fall.

Within the cap, companies receive or buy emission allowances which they can trade with one another as needed. After each year a company must surrender enough allowances to cover all its emissions, otherwise heavy fines are imposed. If a company reduces its emissions, it can keep the spare allowances to cover its future needs or else sell them.