

EURACOAL Response to EIB Consultation Paper dated October 2012

on the European Investment Bank's review of its energy sector lending policy

Introduction

The European Association for Coal and Lignite (EURACOAL) welcomes this opportunity to comment on the EIB's review of its energy sector lending policy. This is a crucially important policy, not only because it determines the conditions under which the Bank will lend, but also because it influences the lending policies of commercial banks. EURACOAL believes that the Bank must follow a strategy that is rational and pragmatic. This means balancing sometimes opposing priorities in the quest for sustainable development, priorities which include: wealth creation, full employment, energy security and reduced emissions.

EURACOAL amendments to the Bank's energy sector lending policy

EURACOAL understands that the Bank wishes to update its energy sector lending policy priorities in line with recent EU energy and climate policy developments. To give clarity to our response, we propose here our suggested amendments to the existing policy priorities. We believe that these amendments would provide a set of priorities that would serve the Bank for many years to come:

- Wealth creation, promoting competitive energy markets for the benefit of EU citizens and enterprises through the exploitation of all primary energy sources – coal, lignite, oil, gas, nuclear and renewables – and deployment of technologies that are affordable and with genuine global market potential;
- Renewable energy, promoting the integration of competitive renewable energy sources into the energy market, assessed against a global carbon price;
- Energy efficiency, both through financial instruments and technical assistance, targeting buildings, industry and SMEs, energy service companies (ESCOs), as well as high efficiency power, heat and cooling supply of all types – cogeneration plants (CHPs) and district heating and cooling systems;
- Security of supply, supporting investments that make a material impact on the security of in-electricity and gas systems, including transmission and distribution networks, smart grids, LNG and storage facilities, as well as flexible fossil fuel-fired – gas-fired power generation including on-site fuel storage;
- Research, development and innovation in energy, sustaining public and private research initiatives with a technology-neutral approach that leads to globally relevant, low-emission solutions to the climate challenge;
- External energy security, – and –economic development and cleaner energy systems (Neighbour and Partner countries).

EURACOAL responses to key issues

1. General energy and economic context

Particularly in the current economic climate, is there a trade-off between promoting a competitive and secure energy supply and one which is environmentally sustainable? Where should the balance lie and what implications does this have for energy sector investments?

How does investment in the energy sector contribute to growth and employment? Are investments in all energy sub-sectors equally valuable? And how does investment in the energy sector rank relative to other investments in the economy which support growth and employment?

What impact do you consider the current economic crisis will have on the energy sector (demand, policies, supply)?

In the energy sector, EU policy is now dominated by the low-carbon agenda, as expressed in the EC roadmaps to 2050. This is presented as a response to the climate challenge that the world currently faces. Yet other aspects of energy policy cannot be ignored: environmental protection, economic development and energy security. EURACOAL's response promotes a three-step strategy for clean coal which would see the EU taking leadership in globally relevant solutions for coal. These are outlined in our publication "A Strategy for Clean Coal" submitted as part of our input to the EIB's public consultation. In summary, the three steps are:

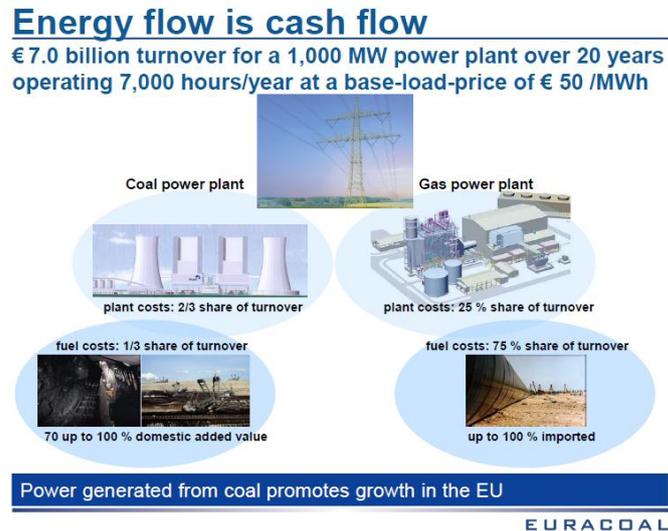
1. Introduce state-of-the-art technology across the EU coal-fired generation sector to boost efficiency and reduce emissions.
2. Develop the next generation of high-efficiency, flexible technologies for coal-fired electricity generation.
3. Demonstrate and deploy CO₂ capture and storage at coal-fired power stations around the world.

Our strategy for clean coal differs from current EU energy policy because we recognise that the EU acting alone cannot solve the climate challenge. Only by following a path that others around the world follow can we begin to make progress. Given the rapid global growth in coal use, the EU must promote the cleaner, more efficient and ultimately emission-free use of coal. In too many policy documents, at member state and EU level, the assumption is made that coal use will fade away. In this way, policy makers are ignoring the global picture and are even ignoring the reality that coal use in the EU has grown significantly over recent years, mainly because all the alternatives are so much more expensive.

In the coal-fired power generation sector, much of the initial investment and operating costs result in growth and employment in the EU. Figure 1 compares how the EUR 7 billion turnover of a typically 1,000 MW power plant contributes to EU growth. In the case of coal-fired power plants,

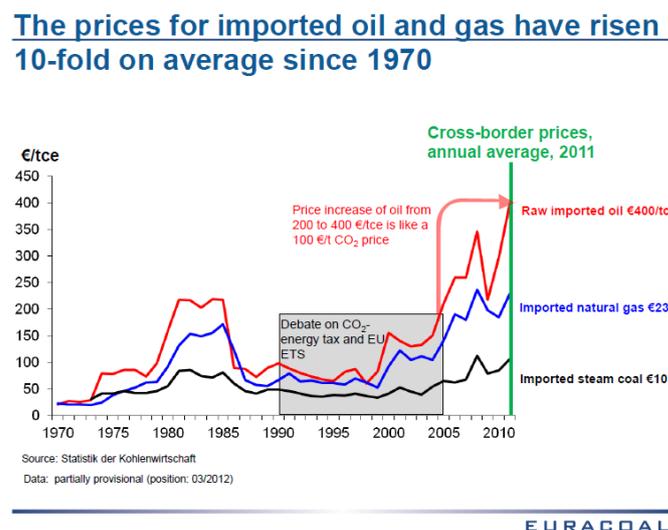
much of the turnover adds value in the EU; in the gas of a gas-fired power plant, much of the added value lies outside the EU.

Figure 1



The economic crisis will surely affect future energy-sector investments which, more than ever, must be economically viable. A more interesting question is whether the economic crisis was *caused by* high energy prices. If so, then this has important implications for future investments because it cannot be assumed that consumers can afford ever-rising energy prices without economic dislocation. Figure 2 shows that energy prices are now at historic highs. It is odd that at a time when the economy is fragile and in need of supportive policies, EU policy makers are proposing measures to raise EU ETS allowance prices and burden the economy with even higher energy prices.

Figure 2



The Bank assumes that the environmental costs associated with CO₂ and other pollutants and security of supply externalities total EUR 96/MWh.¹ This is much less than the implied CO₂ price in today's high energy prices (Figure 2) and approximately half the actual feed-in tariff for renewable electricity sources in Germany (Figure 3). The Bank should assess whether its assumed environmental costs reflect a viable policy mechanism. If not, then it should consider what other measures would deliver policy objectives and whether it is then wise to use an assumed environmental cost in its investment decisions.

2. Renewable energy

The Bank's economic justification for supporting emerging renewable energy technologies, whose cost is significantly above that of conventional and mature renewable energy technologies, is that continued investments in these technologies will eventually lead to cost reductions and will ultimately be the least-cost approach to meeting the EU's renewable energy targets. Do you agree with this approach? Is there an alternative approach to the economic justification of these technologies which you consider more appropriate?

What evidence is there that the cost of emerging renewable technology is falling?

What level of investment in RE do you expect in the short and medium term?

What are the barriers to investment in renewable energy outside Europe? How might these be overcome?

Do you agree that there is significant scope for investment in renewable heating and cooling?

What are the barriers to investments in this sector and how might these be overcome?

Some call for the EIB not to lend to coal-related projects: coal mining and coal-fired power generation. This would be short sighted given coal's contribution to energy supply, employment and wealth creation. Those who lobby against coal believe that only renewable energy sources should be supported by the Bank. EURACOAL agrees that competitive renewables have an important role to play, but does not agree that renewables should be supported in preference to more economic alternatives.

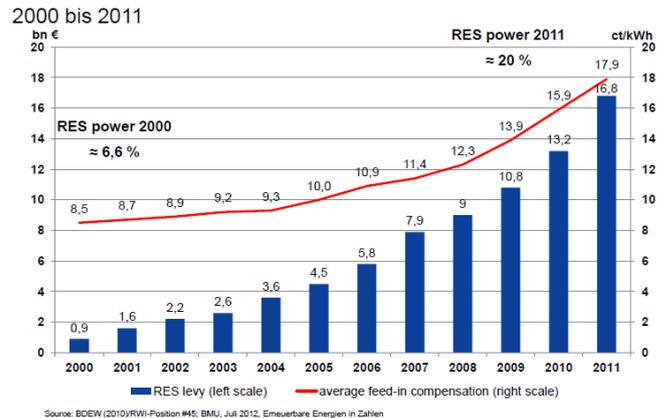
The Bank currently justifies investment in renewable energy technologies because their wider deployment is likely to lead to future reductions in their cost as the market grows. EURACOAL notes that this justification for renewable support leads to "fat babies" that cannot be weaned off subsidies. In Germany, the support cost per unit of electricity has *grown* over the last decade to almost EUR 180/MWh. This trend of rising costs has to be reversed if renewable energy is to play

¹ At the public consultation meeting on the EIB's energy lending policy on 7 December 2012 in Brussels, the Bank stated that it assumes a carbon cost of EUR 30.00/tCO₂ today, rising by EUR 1.00 each year and therefore reaching EUR 50.00/tCO₂ in 2032.

a bigger role in EU electricity generation. Renewables must move from being a drag on the economy to a position of making a net contribution to economic development.

Figure 3

Compensation package for „green power“



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3. Energy efficiency

What do you think are the main barriers to energy efficiency investments? What might be done to overcome these?

What role can Energy Service Companies (ESCOs) play in developing energy efficiency investments?

What is the potential for energy efficiency outside Europe?

Do you consider the criteria used by the Bank to categorise projects as Energy Efficiency projects appropriate (see Annex 1)? What alternative would you propose?

The Bank should extend its energy efficiency criteria to upstream efficiency improvements. In the coal-fired power generation sector, there are many examples of older plants where modernisation and renewal would yield efficiency savings above the Bank's 20% threshold.

4. Security of supply

Is the traditional model for electricity transmission and distribution changing? What implications does this have for future investments in electricity networks?

What is the future role of smart grids, offshore grids and energy storage solutions?

Investment in electricity networks should be economically viable and driven by market demand. Network investments that are needed to connect large-scale renewable generation to electricity consumers should be viable on the basis of transparent transmission charges without additional subsidy beyond that paid for generation.

5. Fossil fuel

Gas is an important bridging fuel source in the transition to a low carbon economy: to what extent and under what conditions should gas-fired generation be supported?

What role will coal and lignite fired generation have in the EU power system in the medium term, with or without CCS, and how is this consistent with the EU's Climate Action goals and its security of supply objectives?

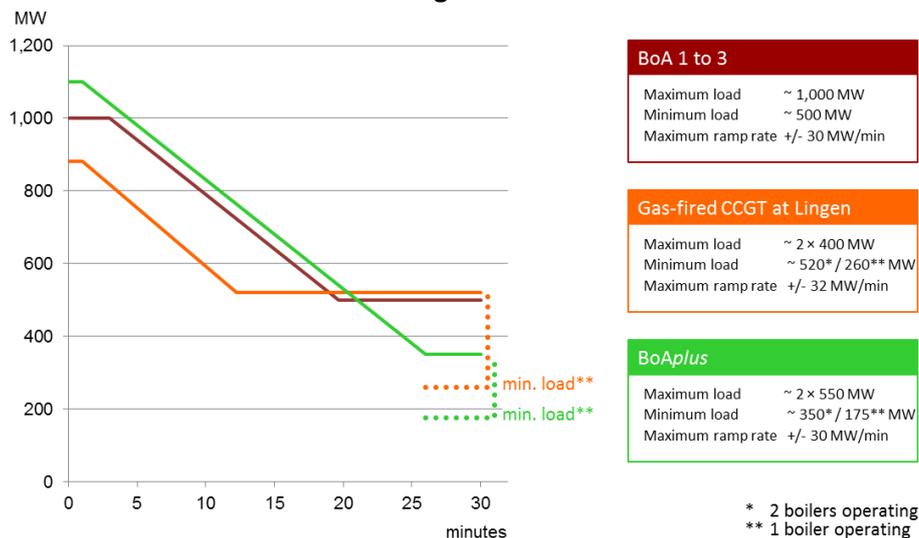
What will be the role of local coal supplies as input for highly efficient CHPs?

What evaluation criteria should the Bank use to assess the economic, environmental and financial viability of coal and lignite fired generation?

Gas-fired power generation projects should be fully commercial. Any investment by the EIB should begin with that assumption.

Although gas markets remain somewhat regional, there has been some correlation between the markets, at least until recently, because of LNG trade. With the shale gas boom in the USA, prices became disconnected from 2010 onwards. As a result, European gas buyers pay three, four or even five times what their US counterparts pay. This means that the EU pays EUR 160 billion more for gas each year – equivalent to over 1% of EU GDP. Today, such additional costs are unwelcome and of a magnitude that makes the difference between growth and recession.² For this reason, EURACOAL believes that more importance should be given to indigenous energy production, such as investment in coal mining.

Figure 4



² According to Eurostat data, EU GDP in 2010 was €12.3 trillion (table tec00001). EU gas consumption in the same year was 442 Mtoe or 20,549,238 TJ on a GCV basis (table nrg_103a). It is assumed here that the US natural gas price is c.\$3/mmBtu and EU gas prices are c.\$11/mmBtu. In fact, EU gas prices are likely to be higher: Eurostat reports an average of \$13/mmBtu for LNG and pipeline imports (table DS-016890 – but data is incomplete since some are confidential), German BAFA has been above \$11/mmBtu for much of the last 12 months and oil-indexed contracts are likely to be higher still.

Coal and lignite will continue to be important fuels for power generation – ensured by their competitiveness. EURACOAL also notes that the flexibility of coal- and lignite-fired power plants matches that of the best gas-fired power plants (Figure 4). Moreover, coal can be stocked at a power plant site cheaply and in sufficient quantities to make a meaningful contribution to electricity supply security. For these reason, there is every reason to believe that coal and lignite will remain an important component of EU electricity supply.

It is disappointing that the EU has not been able to establish its promised CCS demonstration programme. The financing of demonstration projects has been a major stumbling block, despite the EU and national funding that has been made available to project developers. This means that the EU has lost its lead in this important technology area: the world's first integrated CCS pilot project is now operational at Plant Barry in Alabama, USA. The Bank should continue to work with the European Commission to fulfil the EU's ambition to take a leading role in CCS. A number of proposed demonstration projects are ready to proceed and could do so if funding was reallocated away from other CCS projects that are now effectively cancelled.

Coal – both locally mined and imported – is used to fuel CHP plants and district heating (and cooling) schemes. In general, modern large-scale power generation combined with small-scale heat generation is very efficient, but a well-designed CHP scheme can deliver even more useful energy. The EU Cogeneration Directive (2004/8/EC) gives policy support to CHP and harmonised efficiency reference values for the separate production of electricity and heat are tabulated in Commission Decision 2007/74/EC, with further detailed guidance in Commission Decision 2008/952/EC. Taken together, these documents allow CHP projects to be correctly assessed in terms of their overall energy efficiency. Only the very best will deliver real energy savings compared with the alternatives. In such cases, local coal supplies can often be preferred since they are competitively priced.

For all coal- and lignite-fired power generation projects, the Bank should evaluate economic, environmental and financial viability as for any other project. Our only suggestion would be to use a global carbon price. The Bank currently assumes a very high (and rising) carbon price in the EU which EURACOAL does not believe is sustainable if the EU wants to remain economically competitive. Hence, the Bank should use an assumed global carbon price in its analysis.

What is the scope for the development of shale gas resources in the EU?

Do you expect the share of natural gas in EU primary energy consumption to grow further?

What would be the best approach to increase security of gas supply and reduce import dependency?

Given the large uncertainty on future gas demand, what is the risk that investment in natural gas infrastructure may be stranded?

EURACOAL is not in a position to answer these questions, but notes that if shale gas production in the EU can be competitive and environmentally sound, then it should be allowed to make a contribution to energy supply and so contribute to the Union's energy security. However, we suggest that the Bank concerns itself with the overall impact of any investment decisions. Life cycle analysis is a difficult and complex subject, especially in the case of gas supply. Upstream emissions might add considerably to the climate impact of natural gas use. Moreover, if the EU imports gas from external suppliers, then there will be a knock-on impact in the exporting countries. For example, if Russia burns more coal to free up gas for export to the EU, then the EU's own climate and energy policy – based as it is on fuel switching from coal to gas – looks ineffective at the global level even if it results in lower point source emissions from the EU.

6. Nuclear

What role do you expect nuclear power to play in the European energy market?

As nuclear power stations are ageing, should their life be extended (where possible) or should they be replaced with other generation sources?

What will be the impact on electricity generation and climate action of the reconsideration of nuclear policies within EU member states, in particular after the Fukushima accident?

EURACOAL is not qualified to comment on the future of nuclear energy in the EU other than to note that it makes a very important contribution to electricity supply with negligible CO₂ emissions.

7. RDI – research, development and innovation

Which are the key innovative energy technologies under development? The development of which key innovative low-carbon energy technologies should receive most financial support?

Which barrier(s) are hindering the deployment of innovative, low-carbon energy technologies most significantly?

Should financial support be spread across a large number of small research projects or be selective and concentrated on a few promising large research projects?

The most significant barrier to the deployment of low-carbon technologies is consumer unwillingness to pay. This is actually a perfectly rational response by consumers who aim to

maximise their wealth. The aim of climate and energy policy should be to align wealth maximisation with policy objectives on CO₂ emissions, environmental pollution and energy security. Competition between technologies and between different energy sources is crucial to ensuring successful outcomes that are globally relevant because they are affordable and add economic value. Subsidised outcomes are not sustainable in the long term. So support for RDI should seek competitive solutions. In the case of low-emission technologies, this means that goals should be set on the basis of cost per tonne of CO₂ abated. By this means, upstream energy efficiency improvements in the power sector are cost effective. They also happen to be an area where European power plant equipment suppliers have been leading progress. RDI should therefore be directed at further efficiency improvements which will come from the deployment of high temperature materials at coal-fired power plants.

8. EIB external and Cotonou mandates

In a developing market context, where should the balance lie between meeting local energy needs at least cost and reducing global greenhouse gas emissions – the trade-off between affordable energy for all and sustainable energy for all?

What should be the role of the EIB in promoting new technology and helping to transfer existing technologies to new markets?

International agreements on CO₂ reductions and on carbon pricing are the starting point for avoiding a trade-off between affordable energy and sustainable energy.

In terms of new technologies, the EIB must ensure that the projects it supports in the EU are globally relevant. It is no use supporting projects that meet political aspirations in the EU, but are too expensive for developing countries because they rely on costly technologies or unaffordable imported energy.

Where can sources of low-cost finance be more effectively used by the private sector to develop energy projects?

What are the main barriers to developing sustainable energy sources in developing markets?

A lack of affordable technologies is the main barrier to sustainable energy solutions in developing markets. The EU should prioritise economic viability in its policy making to ensure that only competitive technologies are deployed in response to its policy measures. Low-cost finance should be made available to competitive projects – it should not be used as a hidden subsidy.

Conclusions

EURACOAL calls on the EIB to make its investment decisions based on a robust set of criteria, as it has in the past. The EIB energy sector lending policy should promote investments in projects that

create wealth in the EU, boost employment, increase our energy security and reduce emissions. EURACOAL proposes certain amendments to the current policy that would ensure the policy remains relevant both to the economic challenges that the EU faces and to the global challenge of climate change. The exploitation of indigenous energy resources, such as coal and lignite, creates wealth and adds to energy security. The EIB should support viable projects that exploit indigenous resources. The renewal and replacement of old and inefficient coal-fired power plants fulfils all of the objectives of a balanced energy sector lending policy. In terms of cost per tonne of CO₂ abated, this is a sound approach and one that the EIB should continue to support. When coupled with the CO₂ capture-ready designs now offered by power plant equipment suppliers, renewal and replacement become part of a long-term strategy to global emission reduction. Around the world and across the EU, coal-fired generation will continue for decades to come. The EIB energy sector lending policy needs to acknowledge this reality by promoting a rational energy sector development policy that is globally relevant, not an EU-centric policy that others fail to follow.

31 December 2012