EUROGAS response to
The European Investment Bank review of its
Energy Sector Lending Policy

Please find below the Eurogas response in the form of replies to the questions posed in section 4 of the EIB October 2012 Consultation Paper.

4. Key issues for the current review

4.1 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?

- A strategy exists that minimizes the scope of the trade-off. Promoting the substitution of natural gas and biogas for higher carbon fuels, in high efficiency equipment, brings immediate GHG reduction. It also opens up options for future use of the equipment either in flexible support for zero-carbon renewables or with CCS, depending on which route offers the more favourable future technology and cost conditions.

- This strategy thus offers a sound track for a sustainable climate policy, while avoiding the threat of locking-in uncompetitive costs to the EU economy that can flow from very high up-front capital commitments, which in turn entail risks as they may depend on political assurances of future subsidies.

- It also offers secure energy policy, where appropriate diversification is in place as a matter of commercial prudence and public policy.

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?

- The energy sector’s contribution to growth and employment cannot be seen in isolation from the rest of the economy. The price elasticity of energy demand (especially of electricity demand) is relatively low, so that if households and firms have to cover high costs of an energy system, this will result in cutbacks in other spending—thus diminishing overall welfare and employment, whatever the consequences within the energy sector itself. Correspondingly, making sure energy costs are competitive in world terms will tend to boost welfare, growth and employment across the economy.

- EU policy, and EIB lending policy, should not attempt to ‘pick winners’ with a view to supposed or hoped-for macroeconomic benefits. The EIB focus should be project-based within a wider framework of EU energy policy.
What impact do you consider the current economic crisis will have on the energy sector (demand, policies, supply)?

- In the short term the current economic crisis will have (and already has) a downward effect on energy demand in Europe. This does not necessarily mean that the balance between supply and demand will loosen, since global energy demand is still increasing. Europe will therefore stay in competition with other regions for the supply of oil, coal and particularly natural gas. Eurogas judges the longer term effects of the crisis as highly uncertain in terms of what its consequences for EU competitiveness, energy policy and technological development will be. This strengthens the case of gas as a flexible “non-locking in” solution.

4.2 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?

- It is a leap of faith to assert that something ‘... will ultimately be the least cost approach’. It may be. Eurogas understands that the Bank’s strategic approach enables it to engage in some lending for research, development and innovation (RDI), enhanced by various risk-sharing mechanisms (see 4.7 below). This is the most appropriate context for the Bank’s support for emerging renewable technologies.

- Lending to mature renewable technologies can continue to fit within the Bank’s core remit subject to its usual criteria.

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

- Some forms of renewable energy are now increasing their market share even without being subsidized.

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

- Eurogas would like to note the significant potential of increasing the use of biomethane in vehicles, particularly in heavy duty vehicles. We expect that gas infrastructure will play an important role in the development of renewable energy across Europe. Firstly, biogas can easily be fed, as biomethane, into the gas grid. Secondly, new technologies such as “power to hydrogen” and “power to gas”, will further benefit the future low-carbon economy framework, making use of existing and new gas infrastructures.

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

(No response)
Do you agree that there is significant scope for investment in renewable heating and cooling?

- Yes, and there is considerable potential for hybrid solutions. Thanks to its flexibility, gas is well placed to facilitate the application of small-scale renewable energy techniques in the domestic domain.

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

(No response)

4.3 Energy Efficiency

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

- Classical landlord-tenant (agency) issues and short payback periods/high implied discount rates in household sectors

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

- ESCOs can provide practical advice to their customers through dedicated efficiency-promoting programmes and teams, including help with equipment installation. Many of them do this—but all can be encouraged to develop or expand such programs

- ESCOs can in particular promote next generation equipment that offer very significant gains in energy efficiency in the household and commercial sectors—condensing boilers, heat pumps, micro-cogeneration plants.

- But ESCOs cannot dictate to their customers what they must do, nor arbitrarily curtail energy supply.

What is the potential for energy efficiency outside Europe?

(No response)

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 principles enunciated in Annex 1 are reasonable, but the thresholds (20% reduction compared to pre-implementation, or savings equal to or greater than 50% of investment costs) may appear somewhat arbitrary. The discount rate would need to be clarified.

- Efforts to increase energy efficiency mainly concentrate on improvements at customer level. When applying the Bank’s criteria, it should, however, be kept in mind that efficiency improvements can also be achieved at production and transportation level. Natural gas can be transported very efficiently over both long and short distances, with limited fuel losses in transportation. The bank’s criteria, where they take energy efficiency into account, might therefore be extended to comparison of the losses in transmission of the various energy forms.
4.4 Security of supply

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

(No response)

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

- Gas grids are already ‘smart’ in the sense of responding in real time to demand changes (line-pack, backed by storage buffers, backed by flexible purchase contracts and field ‘swing’).
- Smart gas distribution grids, to include more sophisticated metering, are currently being developed in many EU countries.
- As the electricity system increases its needs for storage and interconnection, it is possible that ‘power to gas’ solutions, either by direct hydrogen injection or by synthetic methanization, will enable the capacity of the gas grid and storage facilities to contribute storage that is both long-term and high volume.

4.5 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?

- See response to 4.1 above.

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?

(No response)

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

(No response)

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

- EU climate and energy policies and objectives, reflected in current criteria as mentioned in Annex 1.

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

- Unknown at present. The scope of the resource is likely to be large, as shale is a very common form of rock, and is frequently impregnated with natural gas.
- But development prospects are currently limited by: 1) modest activity to identify producible prospects, 2) sufficient alternative sources of internationally-traded gas that are available to European buyers, and 3) a sense that local concerns in many parts or Europe will act as a brake on development, whether or not these are substantively justified by the actual impact of shale gas production.
• However, in countries with limited conventional natural gas resources and limited diversification of gas supplies development prospects for shale gas resources may well be viewed positively, if they can be exploited in full compliance with the highest health, safety, and environmental standards as reflected in applicable EU law.

• Quantitative resource estimates should not be considered reliable, as there are no established methodologies for estimating volumes of producible gas in shale in the absence of substantial drilling experience.¹

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

• Yes, or to remain stable.

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

• These are two separate questions.

• Security of gas supply is assured by a combination of diverse supply sources, (including both imports and local production), storage, physical interconnection and reversibility of grids, and commercial practices that range from supply undertakings to provide ‘best efforts’ gas and fuel-switching options on the demand side. EU gas supply now comes from 30 different national sources (including domestic production), up from 17 in 2000. This increase in import sources, mainly through globally-traded LNG, has increased security of gas supply.

• Given the economic and welfare benefits of international trade, diverse supplies, and not the reduction of import dependency, should be the aim. There is also a risk that the reduction of import dependency turns into protectionism. In addition to the options mentioned above, supply diversity can be increased by improving the fiscal and licensing terms under which gas is produced domestically.

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

• The commodity cost element of gas supply is usually appreciably larger than the infrastructure cost element. Therefore, consumer benefits can expect to be greater when there is a surplus of infrastructure capacity that enables more intense competition among the suppliers of the commodity.

• This is a vital point to consider when addressing the risk of stranded infrastructure costs.

• Economic theory points out that there is a risk of market failure in ‘complementary markets’ (gas supply and gas pipelines are complementary markets, in that you cannot have one without the other), and that the usual consequence of this market failure will be underinvestment.

• Europe’s unbundled infrastructure and gas supply markets run this risk of market failure. It should be at least as much a concern for policy makers as the risk of stranded investment. The EIB is understandably focused on the stranded cost risk. In dialogue with project promoters and policy makers, the EIB should be

¹ In the United States, industry drills between 25,000 and 35,000 shale wells each year, so estimates are possible. In the EU, fewer than 200 wells have been drilled cumulatively.
supportive of commercial arrangements that take account of both sets of risk, in the interest of consumers.

4.6 Nuclear

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

(No response)

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

(No response)

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?

(No response)

4.7 RDI

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

- A wide range of innovative technologies should remain candidates for development, with policy support (such as carbon-pricing) that remains as technology-neutral as possible so that winning and losing technologies do so according to market tests.

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

- Eurogas members have noted that the rules of participation and dissemination around EU supported technology programmes often involve difficult processes that could be simplified.

- It is important to make these easier, if qualified participants are to engage and results are to be effective.

- In the particular case of CCS, the current criteria for ranking projects for support reward the amount of carbon (waste product) captured, rather than rewarding the lowest cost carbon-free kilowatthour produced. These criteria could usefully be changed.

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?

(No response)
4.8 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?

(No response)

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

(No response)

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

(No response)

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

(No response)