European Investment Bank  
Attn Adrian Aupperle (Communication Department)  
98-100, boulevard Konrad Adenauer  
L-2950 Luxembourg  

SSE plc (EU Transparency Register: 64436972598-17)  
Attn. Reinout Wissenburg  
Rond-Point Schuman 6  
B-1040 Brussels  

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Response to Consultation on the European Investment Bank Energy Lending Policy  

Introduction  

SSE is a leading energy company, operating mainly in the UK and Ireland. We are involved in the generation, transmission, distribution and supply of electricity and the storage, distribution and supply of gas.  

SSE welcomes the opportunity to respond to this consultation. Next to a response to specific questions that were raised in the consultation, this response will also touch upon a number of other issues relevant for SSE.  

Specific questions  

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?  
  
  There is no trade-off between security of supply and an environmental energy system. Investments in a renewable energy supply increase security of supply by decreasing import-dependency and support the transition to a low carbon economy. As such the EIB should favour renewable energy investments and limit investments that do not support a low carbon energy system.  

- 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?  
  
  Especially the European renewable energy sector has been a driver of economic growth and employment in recent years. The energy system requires substantial investments the coming decades in order to accommodate the low-carbon transition. This further strengthens the growth and employment potential of the energy sector, especially with regards to renewables and energy infrastructure.  

- What impact do you consider the current economic crisis will have on the energy sector (demand, policies, and supply)?  
  
  The economic crisis has had some effects on energy consumption, which will continue to decrease as a result from investments in energy efficiency. The economic
crisis is also an opportunity to move to a low-carbon green economy. This requires substantial investments in renewable energy and (smart) infrastructure.

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?

  Cost reductions have taken place and will continue to take place with any renewable energy technology that is rolled-out. Scaling-up technology installation of renewables is essential to achieve cost reduction. Although the cost price of different renewable technologies will continue to differentiate, a low carbon energy system requires the development of all kinds of renewable energy technologies to ensure a stable energy mix. As such, investments should not solely be based on lowest cost but also on technological potential.

- What evidence is there that the cost of emerging renewable technology is falling? Onshore wind and solar PV have shown sharp cost reductions in recent years. This was due to scaled-up utilisation of these technologies and increasing competition.

- What level of investment in renewables do you expect in the short and medium term? SSE’s investment programme is expected to remain at £1.5bn to £1.7bn per annum for the next few years. In the three years to 31 March 2012, renewables accounted for just over 50% of SSE’s capital and investment expenditure. In the period up to March 2015 renewables is likely to account for around 30% of SSE’s overall total. Economically-regulated electricity networks are likely to require the biggest proportion of capital and investment expenditure during that period.

- What are the barriers to investment in renewable energy outside Europe? How might these be overcome? SSE only operates on the European market.

- Do you agree that there is significant scope for investment in renewable heating and cooling? Renewable heating & cooling could play an important role in moving to a low carbon energy system. As such it requires further investments. Furthermore, heating and cooling can provide system services, for instance Smart Electric Thermal Storage (SETS) contributes to system flexibility, energy (heat) storage and decoupling demand and supply of heat.

- What are the barriers to investments in this sector and how might these be overcome? The lack of regulatory arrangements to develop a market-model is the main barrier. Especially, how to reimburse for system services is an issue that needs to be tackled.

4.3 Energy Efficiency

- What do you think are the main barriers to energy efficiency investments? What might be done to overcome these? An effective market model for energy efficiency investments has yet to be developed. Further guidance on this issue could be helpful to overcome this.
What role can Energy Service Companies (ESCOs) play in developing energy efficiency investments?
ESCOs can support the development of a market model. It can also help to pool investments thereby making it attractive for EIB to finance this. SSE has an in-house energy services team assisting customers in choosing and financing energy efficiency investments.

What is the potential for energy efficiency outside Europe?
SSE only operates on the European market.

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?
Considering the large scope for efficiency improvements in the EU it seems unnecessary to include efficiency-projects for coal and lignite power stations. These could also be covered by the requirements for fossil-fuel investments.

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?
With an increasing amount of decentralised (renewable) generation, the model for transmission and distribution is bound to change. This requires significant investments in upgrading these networks. Especially distribution networks will require increased efforts and investments.

What is the future role of smart grids, offshore grids and energy storage solutions?
Smart grids are an essential element of the changing model of transmission in distribution that follows from 1) a changing pattern of supply and 2) decentralised generation, both requiring to manage demand and supply differently. Decentralised energy storage, such as Smart Electric Thermal Storage, can play an important part in this. Offshore grids support harvesting ocean energy and function together with (small and large scale) energy storage and interconnection to balance the energy system and support a large influx of intermittent renewable energy. The system services provided by storage and interconnection should be considered in assessing projects.

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?
Gas-fired generation has two important attributes for an important role in the transition to a low-carbon economy: it is cleaner than most other fossil fuels, and works well with intermittent renewable generation. Investments in gas-fired generation should be favoured over other types of fossil-fuel generation, including investments in CCS-on-gas technology.

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?
Considering the existing role of coal and lignite, its share is bound to remain high for the short- to medium term. In the longer run such generation should be phased out. With an economic life-time of at least 40 years new coal and lignite can only be constructed if it is fitted with CCS. The EIB should as such refrain from investing in these technologies if they are not immediately fitted with CCS.
What evaluation criteria should the Bank use to assess the economic, environmental and financial viability of coal and lignite fired generation?

Especially the environmental criteria must be strictly applied by requiring a perfect match with the EU’s road to a low-carbon energy system. Requiring CCS seems a good way to do so. The use of an economic carbon price is also a fair way of internalising the costs of climate change.

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?

Particularly ocean energy technologies are quickly advancing. Additional research is needed, whereas in parallel economic installation of technologies can also start to take place. It is essential that the EIB, when assessing ocean energy projects, works together with the project promoter to determine if it is a research- or a commercial project.

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

Access to finance is the main barrier for any new technology. Certainly with stricter financial requirements, traditional streams of finance are quickly depleted and in general limited for new technologies.

Other areas to respond on

Which current and future EU energy policies should definitely be reflected in the EIB Energy Lending Policy?

- The (expected) climate and energy framework for post 2020
- Announced increased efforts on ocean energy
- The anticipated need for system services (e.g. storage, back-up capacity, interconnection)

Which energy market development should definitely be reflected in the EIB’s Energy Lending Policy?

1. Need for upgrading and modernising electricity networks
2. Electrification of energy supply
3. Need for further storage
4. Diverging views on future of nuclear

What are the most important areas the EIB should invest in and what share of energy investments should they take up?

1. Renewables: 30%
2. Energy networks: 30%
3. Storage: 10%

- Energy Efficiency: 15%
- Fossil-fuel: 5%
- Nuclear: 2%
- Research: 5%
- External lending: 2%
- Other: 1%

Should all energy lending be low-carbon only?

All EIB energy investments should support the EU’s road to a low-carbon energy system by 2050.
• For EIB investments in renewable energy, should different criteria be applied to mature and emerging technologies?
It is sensible to use different risk profiles for different technologies. Onshore wind can be regarded as a mature technology. However, offshore wind is still strongly developing and ocean energy is only now becoming ready to be marketed.

• Should ocean energy only qualify for research investments or also project investment under the renewable energy projects?
Ocean energy should qualify for both research and renewable investment as some technologies are still developing, whereas others are ready to be demonstrated on a commercial scale and basis. It is essential that the EIB, when assessing ocean energy projects, works together with the project promoter to determine if it is a research- or a commercial project.

• Should fossil-fuel investment be made by the EIB? If yes, under what conditions?
Fossil-fuel investments should only be made insofar as they support the EU’s move to a low-carbon energy system. Investments in coal and lignite for instance should only take place when fitted with CCS. Gas-plants can provide much needed back-up capacity and this system service must be taken in account when assessing such projects.

• Are there improvements to be made to the process of securing EIB energy investments?
Reducing the volume of information required prior to and after an appraisal visit would help speed up the process.