PUBLIC CONSULTATION ON EIB’S ENERGY LENDING POLICY

EDISON – WHO WE ARE

Edison is one of Italy’s leading players in the energy field. Its origins date back to 1883, when Edison opened Italy’s first electric energy facility in Milan. Since then, Edison has always been active in the energy industry, making a strong contribution to the development of Italy’s industrial structure. Today, Edison, which is part of EDF Group (Electricité de France) has about 3,200 employees in more than 10 Countries across Europe, Africa and the Middle East, with activities in the procurement, production and sales of electric power and natural gas. Currently, Edison has more than 1,400,000 customers in Italy’s deregulated consumer market.

GENERAL REMARKS

Edison welcomes the EIB consultation on the perspectives of energy lending policy. Investments in energy infrastructures face today unprecedented challenges and opportunities, due to the economic and financial crisis on one hand and European and global market evolutions on the other. Adapting lending policies to address these new realities is of the utmost importance, in order to put forward in due time the necessary investments for a secure, sustainable and competitive energy in Europe.

The European Institutions have paid so far great attention to energy infrastructures through several instruments and programs, and even more in such a particularly critical phase for investments, due to the aforementioned challenges, it is important maintain a high priority on the support and stimulation of investments in energy infrastructures.

For this reason, together with this consultation, we welcome the new EU Regulation on Guidelines for trans-European energy infrastructure [COM/2011/658] as it will contribute to support investments in energy infrastructures and further develop and consolidate market integration, competition and sustainability.
QUESTIONNAIRE

4. Key issues for the current review

- 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?

The 20 20 20 Climate policies and objectives substantially increased the relevance of support schemes, Co2 costs and efficiency gains in the assessment of energy investments and business models in Europe.

This occurred in parallel with a further development of the Internal Energy Market, allowing a better energy price formation and signals across Europe, and a higher liquidity in the electricity and gas markets for trading and security of supplies.

Nevertheless, both the dimensions of sustainability and security have reached today a global scale, and in conjunction with the effect of the economic and financial crisis, they contribute to make energy investments in Europe, as well in neighboring countries, even more challenging.

In a market based perspective, and provided that the polluter pays principle is enshrined in the definition of energy business models and an adequate and significant pricing mechanism for emissions is in place, investments in the energy sector should aim at developing the necessary infrastructures in a technology neutral and cost effective way, by taking full advantage of the Internal Energy Market.

In such a perspective, environmentally sustainable investments and security of energy supply can be mutually reinforcing, rather than a trade-off for investors and project promoters; their relative relevance should result, for any given local situation and infrastructure needs, from a stable policy horizon combined with clear and reliable legislative and regulatory frameworks.

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?

The increasing share of renewable energy in the electricity system and in the market, as per the EU targets to 2020, came along with extra costs which are partly due to direct investment costs (technology) and partly due to market arrangements (provision of back-up capacity, balancing systems, necessary network development).
For mature RES technologies a reduction of the indirect costs from market arrangements (i.e.
progressive RES participation in balancing markets and dispatching services) should be addressed
as a matter of priority, as they compete with other generation units with higher marginal costs. On
the other hand, the economic justification for supporting in the future non-mature technologies
should be better targeted and put in a broader context.
The costs of the overall value chain for any given technology has to be assessed, and the future
costs for the overall electricity system should be taken into account (network development,
interconnections, storages and flexible back-up capacity), within market arrangements able to
accommodate different types of power generation in a competitive manner.
The definition of a policy framework for renewable energy in Europe beyond 2020 will be crucial
for investments, as well as the definition of comprehensive policy instruments to achieve EU
climate policy goals and emission reduction targets. Whether this will be done via specific RES
policies, or through a single GHG emissions reduction target with ETS and CO2 pricing as the main
drivers for investment decisions, access to capital and a stable legislative framework will be a
necessary pre-requisite.

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

Investments in the short-medium term, as it was the case up to date, will most likely be
determined, under the current framework to 2020, by the entity of support schemes, rather than
by electricity prices or electricity demand, as they provided the main guarantee on the return on
investments for investors in renewable energy. Beyond 2020 the definition of a target or the re-
definition of support schemes across Europe may determine in a substantial manner the
investments in renewable energy.

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

Additional investments in renewables for heating and cooling should be considered in particular in
those areas where the biggest potential exists and no alternative sustainable and cost effective
solutions are already in place or available (e.g. natural gas).

4.3 Energy Efficiency

EDISON shares Eurelectric position on Energy Efficiency.

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

In our experience, the market has failed so far to stimulate the uptake of energy efficiency
measures with high energy saving potential but long payback times and high upfront capital
investments, even if they are cost-effective. Amongst the reasons the fact that end-users, even if informed about energy efficiency opportunities and interested in potential savings, do not necessarily feel the urgency to invest in energy efficiency. Positive spin-off effects from energy efficiency measures are often overlooked and/or not fully understood. Small and medium enterprises (SMEs) - and more rarely, also large companies - usually do not have the right competences to guarantee the success of energy efficiency interventions and need reliable technical and financial support. Public authorities certainly have a role to play in promoting energy efficiency. However, for many public administrations energy efficiency has so far ranked rather low on the list of priorities.

Incentives to invest in energy efficiency are many times missing, as well as a well-functioning regulatory framework or voluntary measures. The focus of measures may be on electricity, although transport and heating also hold large energy efficiency potential. In some cases, learning curves are still at an early stage and pay-back times may be long.

Measures to increase energy efficiency should take into account the following principles:

- Energy efficiency must become a profitable business in itself, leading to a robust internal market for energy services, energy-saving techniques and practices, and commercial opportunities;
- all relevant stakeholders (authorities, banks, ESCOs, research institutes, energy companies etc.) should be incentivised to take actions in a system-wide approach to promoting and implementing energy efficiency practices, maximising the use of their skills, competences and resources and making the most of synergies;
- in order to achieve results in energy efficiency schemes, it is important that final customers, including those in the domestic sector, pay the real price of energy.

In case of market failure, public intervention or financing from investment banks such as the EIB might be needed to finance or co-finance certain activities. Funding mechanisms should reflect local realities, thus a “one-size-fits-all” approach is not adequate. We welcome instead the Bank’s involvement with projects and organisations, as this approach allows to finance energy efficiency projects targeting households, SMEs, and such sectors as construction and transport. Benchmarking with other investment banks that are committed to work on the basis of energy policy objectives can also be helpful.

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

ESCOs can play an important role in improving energy efficiency. In this respect, energy supply companies can be a major player in the energy services market: they already have, in fact, commercial incentives to design and provide tailor-made energy services to their customers. Therefore they could certainly play an important role in the development of such a market. Large end-users should be offered the chance to invest directly in energy efficiency or to ask a third
party/ESCO to invest on their behalf (through the benefit-sharing approach, also known as energy performance contracting) in order to avoid diverting money from their core business. The second option entails an immediate benefit for the end-user (shared with the energy service operator) in terms of competitiveness and cost reduction. A large number of small ESCOs make use of the model of “third party financing” and which therefore depend on monetary resources and credit from financial institutions/banks. Considering the uncertainties of the market, the participation of banks and insurances in the system approach increases the possibility for investments either directly by consumers or by ESCOs. The role of ESCOs is also strongly dependent on the general market environment and whether it is regulated or driven by competition.

- **What is the potential for energy efficiency outside Europe?**

The potential for increasing energy efficiency at global level is considerable. As an example, the IEA has estimated, that is its proposed actions policies and measures to improve energy efficiency could save 7.6 Gt CO₂ emissions by 2030. This corresponds to approximately twice the current EU27 annual CO₂ emissions.

- **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 main goal in increasing energy efficiency and the share of carbon free electricity is to reduce carbon dioxide emissions. Should the emissions trading become the main policy instrument to decrease CO₂ emissions in Europe, then the CO₂ emission reductions should be reflected in the Bank’s criteria to categorise projects as Energy Efficiency Projects. It is also meaningful to pay attention to energy efficiency in all projects that the Bank finances and consider how the need to increase energy efficiency has been taken into account (including in network development to complete the Internal Market).

### 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?**

The increasing share of renewable energy in the system and in the market poses already some challenges to the functioning and development of network infrastructures, towards more decentralized and flexible models. More in general, ageing infrastructures replacement and the increasing complexity of services provided to consumers, including smart metering, will require additional investments in energy networks. As a key priority, transmission and distribution networks should be developed with the aim of removing bottlenecks and facilitating physical flows.

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within the Internal Market, along with increasing trading flows and market liquidity. Cost effectiveness for users and system adequacy should be at the center of such a transformation.

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

Smart grids should be developed with the view of enabling consumers and network users to benefit from a more accurate tracking of production and consumption patterns, and be able to optimize their participation to the market. Storage solutions for electricity should be considered where no alternative solutions for flexibility are provided (i.e. interconnections, flexible back-up capacity) or feasible at a lower cost, and should contribute to the flexibility and stability of the system in a cost-effective way.

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?

Natural gas will substantially contribute to the de-carbonization of the energy sector to 2035 and beyond. Natural gas is the most efficient and environmentally friendly fuel for back-up of renewable energy sources. In absence of a fully competitive market arrangement, support to natural gas fired generation may be justified for security of supply reasons.

- 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?

New BAT coal and lignite fired generation can produce environmental benefits when replacing old and inefficient generation capacity with obsolete technologies or very low efficiency, and can guarantee as well security of supply, in particular in those regions where fossil fuels represent a crucial domestic economic resource for local development and fuel diversification (i.e. natural gas) is still limited in scope.

In these regions, and together with RES, BAT coal/lignite fired power generation units might reach EU environmental goals, along with security and competitiveness, by virtue of their cost structure. CCS readiness may contribute to increase the environmental performance of these generation units once CCS technologies will be commercially available.

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

Coal and lignite power plant projects should be assessed against other available options/alternatives, in terms of technology, availability of fuel diversification (i.e. natural gas),
technical and economic constraints, social impact (i.e. contribution of local resources to the economic development of the region), and security of supply. In general, the development and commercial viability of CCS should be facilitated by governments with adequate policy and regulatory means.

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

We fully share the view of the EIB in the issue paper accompanying the consultation that switching existing power generation capacity from coal to gas could have a significant positive impact on carbon emission levels in Europe and that natural gas, as acknowledged in the European Commission EU Energy Roadmap scenarios, will be critical for the transition to a low carbon energy system to 2030 and beyond. We note anyway that the use of gas in power stations is currently facing a challenging environment in Europe, due to low ETS price signals, the current economic crisis, and an unstable regulatory framework.

Nevertheless, in parallel with the completion of the EU internal gas market and the development of robust and liquid European gas hubs, we expect natural gas to maintain a central role in the EU energy mix, as it will be a crucial player in the transition to a de-carbonized power sector and economy in all end uses. The reinforcement of the Emission Trading as an effective mechanism at EU and global level for promoting low-emission sources should further contribute to maintain a high and competitive share of natural gas in EU primary energy demand.

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

Gas is the most efficient transit fuel towards a low carbon environment. On the other hand, Europe has limited natural gas resources, thus the future challenge is to reduce the overall European import dependency. Gas reserves and productions are today well diversified in the world; nevertheless the physical features of natural gas imply the requirement to transport it through dedicated infrastructures.

Security of gas supply will require investments in midstream infrastructures (pipelines, LNG terminals and storages) to guarantee the availability of sufficient physical supplies during any period of the year and in every part of Europe, even in case of disruption on one of the available supply routes.

Diversification of gas supplies and routes (together with the development of liquid and transparent markets and an efficient system management) represent a strategic goal to reduce the import dependency on few infrastructures. In addition, with appropriate infrastructures, gas could conveniently replace more pollutant fuel in many parts of Europe, including its Mediterranean islands.
• Given the large uncertainty on future gas demand, what is the risk that investment in natural gas infrastructure may be stranded?

Investments in natural gas merchant infrastructures have already at disposal some risk mitigation instruments provided in the EU legislative framework, such as the possibility to be exempted from Third Party Access requirements, thus allowing shippers to create the conditions of competitive supplies to the market. Should this type of investments be stranded, it would mean that there is not a market request for them. Investments in natural gas infrastructures for security of supply reasons, when remunerated by system users through regulated tariffs (and thus not bearing the risk to be stranded), should be identified through open selection procedures, ensuring the most efficient size of the infrastructure and the lowest cost for the system. When deciding on cross-border cost allocation, NRAs should ensure that its impact on national tariffs does not represent a disproportionate burden for consumers. Competitive and efficient gas infrastructures can be driven by the evolution of some new and essential characteristics of the gas market (i.e. new regulatory arrangements and the development of hubs).