Consultation on EIB approach to supporting climate action

Introductory remarks

Alstom welcomes the EIB initiative and is pleased to contribute and share views on EIB approach to supporting climate action, as an experienced and large player in the Energy and the Transportation fields through its activities in Power Generation, Power Transmission & Distribution and Rail & Urban Transport.

Alstom Power - Thermal & Renewable:

As the supplier of 25% of the world’s installed power generation equipment and present in 70 countries with 47 000 employees, Alstom Power possess expertise in project management; engineering procurement and construction; and component design and manufacture. This allows offering a wide range of clean power solutions tailored to individual customers’ needs, including hydropower, nuclear, geothermal and wind as well as combustion plant (coal, gas, oil and biomass) and energy management systems.

Power generation technologies and solutions are key enabler for economic and societal developments. For development to be sustainable, delivery of power services needs to be secure and have low environmental impacts. Sustainable social and economic development requires assured and affordable access to power.

ALSTOM Power Offering is derived from a deep understanding of Power Markets and our Customer needs. It is organized around 3 Levers driving our Product & Portfolio Development strategy:

- reducing **Cost of Electricity** generation over the entire life-cycle by providing Competitive Assets to Customers
- Lowering **Environmental Footprint**, to make these assets increasingly Eco-friendly, contributing to mitigating climate change, reducing their impact on health & safety and allowing Clean Generation of electricity.
- Increasing **Flexibility & Reliability**, to ensure assets can adapt to fluctuating electricity & fuel markets conditions, and will ensure Dependable Operations to generate the required electrical load at all times.

Alstom Grid:

Present in 70 countries with 19 000 employees, Alstom Grid has a long lasting experience and knowledge supported by many projects successful execution, using the different technologies that have paved the Grid history.
To-day as technologies provider ALSTOM Grid is fully engaged in the development of innovative solutions, through a continuous improvement process, of SMART Grids and large transmission interconnection using UHV and HVDC technologies addressing the following electrical power applications:

- connecting of power plants to transmission Grid, whatever is the generation type (nuclear, fossil fuel or renewable),
- designing and building transmission network substations,
- implementing electricity infrastructure for large consumers in industry like railway, mine & metal; oil & gas,
- designing control centers for energy management and distribution management system
- developing market management systems for whole sale, retail and market participants for electricity trading

Alstom Transport:

With 28.000 employees on 90 sites throughout the world, Alstom Transport is the only manufacturer present in all businesses of the rail sector and on all continents.

Alstom Transport’s global approach can be summarized in one word, “fluidity”.

Alstom transport develops comprehensive and sustainable railway solutions tailored to the needs of rail operators, public authorities and passengers. From rolling stock to signaling, infrastructure, services and complete turnkey systems, Alstom Transport offers the widest range of high-tech rail solutions.

Theme 1: Is a volume-based lending target an appropriate climate action target for the Bank? Is the current list of eligible projects in the sectors targeted for EIB Climate Action fit for this purpose? How should the Bank’s climate action lending target evolve over time to reflect global policy development?

Volume based lending target

- With EUR 19, 1 billion invested in Climate action projects for 2014, EIB is the top lending International Financing Institution engaged in this field, with remarkable volume in the field of Renewable Energy, Sustainable Transport & Energy Efficiency. This is, in our opinion, the right way to address the huge needs for climate change.

Current list of projects

- In the field of Energy Efficiency, and more specifically in the field of energy consumption and CO2 emission reduction, we would suggest EIB to focus and promote more:
  - Smart Grid projects which objectives fully comply with Climate change targets.
  - Regulatory framework for Smart Grid solutions deployment
As a global energy industry player, we would recommend to avoid any disruptive support to any technology without taking into account the necessary transition period for deploying the best available technology and adapting the energy mixed policies for the beneficiary countries. The Energy Performance Standard introduced in the Energy Lending Policy in July 2013, could jeopardize the heavy R&D investments made by European industry players for reducing CO² emissions and slow down dramatically the speed of deploying operational CCS project.

- As a consequence, we would recommend adapting the Energy lending policy for the application of EPS methodology, with the objective for EIB to continue influencing on National Energy Policies, for deploying the Best Available Technologies available in the markets.

**Added value of the EIB**

- EIB has acquired a key track record and expertise in financing climate change projects. This is definitively a strong advising position for all the potential stakeholders, and moreover a strong influencing position to public policies and regulatory frameworks.

For the latter, the important thing is to balance the objectives of access to power, environmental impact, diversity & reliability of supply through a balanced portfolio of energy and power technologies. To do this, governments need to:

  * Set policy frameworks that enable markets to deliver; and
  * Plan strategically for the necessary national or regional infrastructure.

Governments must also bear in mind that policy intervention may create market distortion and unintended consequences. It is important for them to be sensitive to this and try to manage it with stable, long-term, transparent policy-making.

- In terms of project deliveries, we strongly encourage the EIB to develop closer relationships with European Industry players, and inform on a transparent & public (web site) basis, the present & future opportunities when EIB intends to finance a project.

**Theme 2:** Based on its existing business model and taking current market constraints into account, how can the Bank further improve the solutions it is providing to foster more climate resilient low carbon growth, both within and outside the EU? What role should technical assistance and increased channeling of EU grants through the EIB play?

- Alstom believes that one of the main problems creating an obstacle to the deployment of low carbon technologies in Europe is the current low carbon price. The EIB should therefore guarantee a determined ‘strike price’ for CO2 that will be applied during its cost-benefit analysis.
Theme 3: Based on its experience with support for venture capital funds, RSFF/InnovFin and NER300, how can the Bank increase its support for European RDI and emerging low carbon technologies? How can energy-intensive industries that invest in innovation addressing lower carbon industrial processes be best supported?

- The expertise acquired by the EIB through its support to NER300, on topic such as Capture Carbon & Storage, is highly valuable and EIB expertise on project bankability / viability is key for addressing introduction of new technologies, identifying the volume of grant element and promoting the case to EU Member States.
- We encourage the EIB to increase the Risk Sharing with R&D investors on long term basis via “reimbursable” solutions in case of commercial deployment success, in time-frame to be fine-tuned according to the market characteristics.
- The current market liquidity for rated corporates is providing very favorable terms with a more flexible and lighter documentation process compared to those proposed by the EIB. However, we recognize the importance of those programs, the capital markets being highly volatile.

Theme 4: How can the Bank most effectively support additional private sector investment in low carbon, resource-efficient, climate resilient technologies? What sort of financing structures should be supported to best catalyze private sector finance? Is the current EIB product portfolio appropriate to meet climate finance needs? How can the Bank best employ the joint Commission-EIB blending facilities, innovative financial instruments and advisory services in support of climate action projects?

- While the EIB has different valuable opportunities to expand its financing activity, available means will remain limited. It is therefore important for the EIB to develop its catalytic role and foster cooperation with other providers of finance (national promotional institutions and sovereign wealth funds, among others). Pooling resources with other financial partners will enlarge the means available to support investment in the real economy in the European Union.
- Alstom considers of particular importance the activity of blending of the EIB, mainly combining its lending activities with other sources from the EU budget. This helps mobilize funds in innovative low-carbon projects, often perceived as having technology and other project-based risks that make them less attractive to many investors.
- Leveraging on the bank’s risk taking capabilities could help diversify the risks and give additional chances to the projects to fly (especially the projects requiring important upfront capex and opex support).
- The EIB, which is likely to play an important role in managing the Innovation Fund indicated by the Council Conclusion in October 2014, and which already offers a credit enhancement product targeted for clean energy, could further explore solution around:
  o Bankable purchase agreement instruments (purchase agreement for clean MWh and insurance to mitigate counterparty-risk) that would establish the credit worthiness of the project as it would be easier for the project to raise financing against a secure pre-agreed rate for clean energy produce);
- Carbon reduction performance-based subsidy, that would provide a guarantee of power prices above the prevailing rate for power generated from eligible low CO2 sources on which long-term debt can be secured;
- Loan guarantee programme that could provide guarantees to share with local commercial financial institutions, the commercial risks of lending to clean energy projects. Such a guarantee could also be provided directly to project applicants;
- Green bonds that would offer a very high potential leverage of private financing as it would allow packaging of loans into green bonds to be sold to institutional investors.

Theme 5: How can the Bank make better use of the project or sector level GHG results to better inform its internal decision-making process? Does the current approach of the Bank, to integrate a price of carbon into the economic appraisal of a project, adequately reflect issues such as carbon lockin? How can the Bank further improve the EE and climate resilience of the projects it supports?

- The EIB applies since July 2013 a carbon footprint benchmark or “Emission Performance Standard in gCO2eq/kWh, currently set at 550g/kWh. Further, fossil fuel plant operators will need to demonstrate compliance with the EU Carbon Capture and Storage Directive.
- As Alstom we believe that the present level of the EPS does not incentivize investment in low carbon technology in Europe. If implemented in the short term, the EPS will undermine CCS demonstration in Europe, therefore we believe that it should be implemented only after CCS has been demonstrated and it should only provide a threshold fixed below 100-150g/Mwh, in order to address both coal and gas power generation.

On the shadow carbon price

The EIB has introduced a shadow carbon price when evaluating energy-related projects.

- The economic crisis has led to an oversupply of allowance on the EU ETS, leading to a lower than anticipated carbon price. A robust and predictable carbon price is key to drive investment in low carbon products and services to accelerate and scale up the investment required to decarbonize on a global scale (estimated by IEA as being over $3 trillion by 2050). Firming 2030 targets for CHG emission reductions would strongly contribute to provide more security to investors. In such frame, we note that the price per ton of CO2 used in the EIB’s economic valuation process is far above the current price on the EU CO2 market, and therefore shows the EIB’s confidence in a strong ETS, which we believe should be pursued.

On cost-effectiveness analysis

The Bank also employs cost-effectiveness analysis, notably for some energy projects.
- Alstom is familiar with such methodology which includes well-known environmental parameters for the computation of Levelized Cost Of Energy. This is a complex & long running methodology. As the parameters level are highly sensitive, we are ready to share with the EIB energy team, Alstom’s market and costing assessment methodologies, and to run a test case based on the EIB methodology & assessment.

**Theme 6: Building on its strong institutional position, how can the Bank improve its outreach on climate action issues to civil society, think-tanks, academia and the business community?**

- Alstom acknowledges the efforts made by the EIB to facilitate exchanges with external stakeholders, however we believe that exchange of information with stakeholders should become more regular and structured, especially when taking crucial decisions affecting lending criteria. This could be achieved through the organization of workshops or the set-up of dedicated working groups.

- We would welcome workshops dedicated to European industry players. We take the opportunity of this consultation to emphasize the rule of the EIB in supporting employment, growth and sustainability in the EU. Alstom has 45 600 employees working in the EU and is spending around € 400 M in R&D. In addition to the EU domestic markets, Alstom has exported in 2014 EUR 4, 3 Billion out of the EU, which represented 30% of Alstom revenue worldwide. The EIB lending out of the EU in the field of Power Energy, Sustainable Transport & Energy Efficiency is key for introducing European technologies and know-how.

- When financing projects outside the EU, the EIB should aim at taking measures which also promote employment and R&D investment in the EU

**Theme 7: How could the Bank continue to develop its leadership and collaboration with other multilateral development banks and international financial institutions to better support the international climate finance debate and negotiations? What partnerships should the Bank develop in mobilizing the UN-pledged USD 100bn annually by 2020 to support technical assistance and funding for mitigation and adaptation projects in low and middle-income countries?**

- We encourage the EIB to support the Green Climate Fund and the Global Environment Facility.
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About Alstom

- Alstom is a global leader in the world of power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom builds the fastest train and the highest capacity automated metro in the world, provides turnkey integrated power plant solutions and associated services for a wide variety of energy sources, including hydro, nuclear, gas, coal and wind, and it offers a wide range of solutions for power transmission, with a focus on smart grids.
- Alstom maintain relationships with many of the world’s top universities, including MIT (US), ETH (Switzerland), Imperial College (UK), HUST and Tsinghua (China), Wits (S Africa) and Indian institutes of technology. We offer funding support and the chance to participate in industrially relevant research with a major international market leader; in exchange we benefit from our own participation in world-class R&D and the opportunity to recruit high caliber graduates in key locations.
- Since 2007, the Alstom Foundation has supported more than 40 humanitarian initiatives including: well construction in Afghanistan; bamboo plantations in Indonesia; installation of solar panels for a Haitian clinic; and well construction and tree planting in Mali’s Dogon lands. Projects are conducted in close partnership with a local institution, organization or NGO, as well as with international associations.
- The Group employs 92,000 people in around 100 countries.