EBRD – Second opinion

Summary and conclusion

CICERO - Center for International Climate and Environmental Research, Oslo, has considered the framework for the Green project portfolio of the European Bank for Reconstruction and Development (EBRD).

The documents provided by EBRD are well structured and provides a sound framework for the internal assessment of the character of projects. Nevertheless, there are some areas that need high supervision, which we will return to below.

The procedures are standardized, transparent, and include robust long-term goals and seem reasonably simple to apply. Furthermore, the rules and procedures are publicly available. This should provide a solid foundation for supporting the selection of Green projects for the Green Bond portfolio of EBRD.

Furthermore, and most important, the documents give the impression of an organization that is motivated by real concern for environmental issues going beyond what is possible to capture by detailed rules and regulations.

Still on a general level and seen in the light of a low carbon future, we recommend to give high emphasis to the following points in implementing their rules and regulations:

- Avoid investments in projects that have the potential of creating 'lock ins' that in turn will make a transition to a low carbon society difficult in the not too distant future.
- While investments that lead to emission reductions are good, small reductions are not enough for the longer term. Thus one should avoid investing in projects that only leads to 'small' reductions over time and that may stand in the way of the more radical shift in technologies that are needed for the longer term. Such 'blind alley' projects are not 'green'. An example could be retrofitting a coal fired power plant.
- Thus, in general the projects area of influence should be considered to be wide both in space and time.

It is our impression that EBRD's Green Bond project selection approach takes these concerns seriously, and it is very likely that the selected projects under EBRD's current green framework will contribute positively to the development of a low carbon future.

Introduction and documents received

As an independent research institute, CICERO - Center for International Climate and Environmental Research, Oslo, provides second opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, here defined as investments in projects that will or may have effects on the mitigation of, or adaptation to, anthropogenic climate change.

These second opinions are normally restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general or overall level. CICERO does not validate or certify the climate effects of single projects, and, thus, has no conflict of interest in regard to single projects. CICERO is not responsible for how the framework or mechanisms are implemented and followed up by the institutions.

The second opinion is based on documentation of rules and frameworks provided by the institutions themselves (the client) and information gathered during meetings and email correspondence with the client.

CICERO has been asked by SEB to provide a Second Opinion on the rules and regulations employed by the European Bank for Reconstruction and Development (EBRD) for it's Green Project Portfolio (GPP) selection procedures.

Documents received and the basis for this second opinion were:

- 1. Table of content. File: Table of contents.doc. Note: An overview of submitted documents.
- 2. Use of Proceeds. File: Environmental Sustainability Bond criteria (Use of Proceeds) (1).pdf
- 3. Green Project Portfolio selection manual. File: 20120209_Green project portfolio selection procedure FINAL (2b).pdf. Note: Key document that sets the procedures for selecting green projects.
- 4. EBRD's environmental sustainability bonds. Frequently Asked Questions. File: Frequently asked questions 1-10 (3).pdf. Note: A useful brief of main principles.
- 5. Socially Responsible Investment Opportunity in EBRD Bonds: Focus on the Environment, 2011 Update. File: Factsheet 2011 (4a).pdf
- 6. Cernavoda Wind Farm (EDPR). File: Cernavoda Wind Farm full description (4b).pdf. Note: An example of information of a concrete project.
- 7. EBRD Environmental and Social Policy (ESP). File: Environmental and Social Policy 2008 policy (5a).pdf. Note: Read with focus on performance requirements 1, 3, 6 and 10 of significance to environmental and sustainability concerns.
- 8. Environmental and social procedures. April 2010. File: Environmental-Procedures (6).pdf. Note: A key document for the formulation of the second opinion, together with project requirements no. 1, 3, 6 and 10 in EBRD ESP and the clarification in no. 12.
- 9. GPP Selection Procedure. File: GPP Selection Procedure.ppt. Note: A powerpoint file outlining procedural flows.
- 10. Municipal and environmental infrastructure sector strategy. File: mei.pdf
- 11. EBRD promotes sustainable transport. File: EBRD promotes sustainable urban transport.docx. Note: Describes the need for well-managed public transport

- 12. Memorandum. File: 20130723_Green project portfolio selection procedure_clarification_clean.pdf. Note: Updated version of document no. 3.
- 13. The Low Carbon Transition. File: Special Report on Climate Change 6 April 2011.pdf
- 14. EBRD promotes sustainable urban transport. File: EBRD is promoting sustainable urban transport.docx. Note: A description of EBRD's strategy and key concerns in developing sustainable urban transport systems.

Discussion

In general

The documents, in particular no. 3, 7, 8, 12 and 14 listed above, are well structured and seems to provide a sound framework for the internal assessment of the character of projects. Nevertheless, we have some remarks, which we will return to below.

The procedures are standardized, transparent and seem reasonably simple to apply. Furthermore, the rules and procedures are publicly available.

The documents give the impression of an organization that is motivated by real concern for environmental issues going beyond what is possible to capture by detailed rules and regulations. Thus The Environmental and social procedures from April 2010 states that (p. 4):

"The Procedures need to be employed in conjunction with the ESP (Environment and Social Policy) and its PRs (Project Requirements), as well as other relevant and appropriate documents referred to therein such as, *inter alia*, EC Directives, international conventions, national law, and other documents such as sectoral guidelines, tools and handbooks.

...

These Procedures are to be followed by Bank staff, and outline the different roles and responsibilities of the EBRD's Banking Vice-Presidency, Office of the General Counsel (OGC), the Bank's Environment and Sustainability Department (ESD), and other departments involved in the environmental and social appraisal and monitoring process. Designated staff will work with prospective clients to help them structure their projects so as to meet the requirements and outcomes expected by the Bank in a reasonable timeframe."

In particular we appreciate the description of key institutional responsibilities during project appraisal, which is clear, well structured and comprehensive.

Also, in a section entitled *Defining the scope of due diligence and the Environmental and Social Due Diligence Plan* in The Environmental and social procedures, we note the focus on issues like:

- What is the project's area of influence?
- Are there transboundary, third party or supply chain issues?

These are issues that are easily forgotten or downplayed in the assessment of single projects, but that nevertheless are very important when it comes to analysing the projects total environmental and social impacts.

When it comes to the **project implementation and monitoring**, we note with satisfaction that the summary of key roles and responsibilities during project implementation is clear with strict identification of roles of the various departments during this crucial phase.

Some more specific comments on categories used

Despite this general good impression of the documented rules and regulations, we would like to provide some more specific comments on some of the details. The aim is to highlight some pitfalls that may arise despite a good overall general framework.

EBRD defines seven broad categories of "green projects" as set out in Table 1. Table 1 also contains an evaluation of likely direct and indirect impacts on GHG emission from each category.

Table 1.

	Sector	Likelihood of direct GHG reductions	Likelihood of indirect GHG reductions	Notes
1	Energy Efficiency	Very likely	Not likely	Potential issues: Rebound effects, prolonging life of obsolete technologies
2	Clean Energy	Very likely	Not likely	Issues: Efficiency and external effects of certain types of biofuels (mostly food crops)
3	Water management	Very likely	Not likely	Methane emission reduction and capture
4	Waste Management	Very likely	Likely	Methane capture, waste minimization
5	Sustainable Living	Likely	Not known	Very broad category
6	Environmental Services	Likely	Not known	Very broad category
7	Sustainable Public Transportation	Very likely	Uncertain	Potential issues: Rebound effects and lock ins

Projects in category 1, energy efficiency, are often by default characterized as green, but may nevertheless have some problematic side effects that should be considered. This is in particular the case when considering the climate impacts of investments. We will here try to go trough these side effects and the way we see EBRD approach them.

One concern is the so-called rebound effect, whereby energy efficiency improvements may make energy cheaper and therefore give incentives for increased energy demand. Thus, evaluation of potential green energy efficiency project should take account of rebound effects, both through emission leakage and through financial channels. Based on the received documentation, EBRD seems to be both aware and sensitive to this issue. CICERO is therefore satisfied with the EBRD's approach.

Another potentially problematic effect could be to prolong the operational lifetime of equipment (by making it more energy efficient, e.g. rehabilitation of power plants) in such a way that accumulated emissions from the equipment plant increases over its operational lifetime.

Also, the alternative cost of energy saving projects should be carefully considered. Sometimes it may be better to invest in zero (or even negative) emission solutions instead of upgrading equipment with improved, but still inherent positive emissions.

The crucial point is to avoid projects that in themselves may provide improvements, but which leads down 'blind alleys' by prolonging the lifetime of inadequate solutions (as seen from a climate perspective) and lead to delays in necessary shifts to zero or very low emission solutions.

This is an important point, as meeting the climate challenge entails striving for a near zero emission society. It is necessary that the anthropogenic emissions of greenhouse gases, CO_2 in particular, balance the natural sinks of carbon *out of the atmosphere-upper ocean-biosphere carbon reservoirs*. These natural sinks are (unfortunately) very small. Thus, if an investment in, lets say, a project that reduces carbon emissions by 10% stand in the way for investment in a zero emission solution, the project should not be categorized as 'green'.

Again, from the received documentation CICERO finds EBRD to have ambitions and guidelines to avoid projects that could increase lifetime emissions or clearly stand in the way for better realistic alternatives. Thus, in the revised guidelines (document no. 12) they state to our satisfaction:

"In selecting projects involving energy efficiency and fuel-switching to lower carbon intensive fuels (that qualify) for the GPP, the Bank takes into consideration the longer-term impact of each project towards the goal of a low carbon society and excludes projects that could lock EBRD clients in carbon intensive energy solutions."

Projects in category 2, clean energy, are usually less problematic, at least if biomass is kept out of the energy mix, although wind power projects sometimes have impacts on wild life (migratory birds in particular).

Biomass is in general a complex issue with a number of potential problems related to biodiversity, climate efficiency (life cycle carbon emissions, albedo effects), food security etc. depending on type of biomass and surrounding context. On the other hand, biomass is the only fuel, which together with carbon capture and storage (CCS), have the potential of delivering negative carbon emissions.

EBRD's policy is to focus on biomass projects based on forest and agricultural residues (information obtained in teleconference with EBRD July 19th, 2013). These kinds of projects are in our opinion beneficial and appropriate for a long term transition to a low carbon society. Hence, EBRD's clean energy projects can safely be labelled as 'green projects' from a climatic point of view.

Categories 3 and 4, water and waste management, respectively, are quite broad. EBRD list methane capture from both activities among their sample projects. This is clearly beneficial to climate change. Furthermore, waste minimization is likely to also have indirect beneficial effects on greenhouse gas (GHG) emissions. It is CICERO's opinion that projects in these categories should be labelled 'green projects'.

We don't have many comments on categories 5 and 6 besides pointing out that sustainable living and environmental services are very broad categories and therefore somewhat unclearly defined. Consequently there may be a fair degree of subjectivity in the selection process of projects to these categories. While there is a relatively high probability that these projects will be beneficial to both climate and more broadly the environment based on the general guidelines from EBRD, it is difficult to ascertain this for all potential projects.

Finally, category 7, sustainable public transport, presumably including fuel switching and investments in mass transport, is complex with a number of potential issues, depending on actual project design. While fuel switching and the extension of mass transport are likely good projects seen from a narrow perspective, increased road capacity may lead to potentially increased traffic. In general, investments in transport infrastructure have the potential to create unfortunate lock ins and should ideally be considered in connection with urban planning for a low carbon society.

EBRD define sustainable transport as a system which allows the access and development needs of individuals, companies, and society to be met safely and without compromising the quality of life of future generations. Document 14 go through the bank's strategy to promote sustainable urban transport. In particular it is said (from doc. no. 14):

"Supporting the development of a low carbon economy is a Bank-wide strategic objective, though the Bank's Sustainable Energy Initiative (SEI). The Bank will build on its achievements to date, and through its investments and policy dialogue promote an "Avoid-shift-improve" strategy for transport development, where:

- Avoid means reducing the need to travel, for example by integrating transport planning or developing multimodal logistics networks to avoid unnecessary trips;
- Shift means shifting to more energy efficient modes or routes, such as
 encouraging the use of rail or inland waterway networks where feasible, or
 introducing policy measures such as internalising external costs through
 pricing instruments; and
- Improve means using technologies that are more energy efficient for every mode, such as through improving vehicle standards; and improving transport efficiency using information technology."

It is CICERO's opinion that the EBRD is well aware of the potential pitfalls in transport related projects and that, therefore, category 7 projects can be labelled "green projects".

Some example projects

Examples of projects given by EBRD are:

- Renewable energy projects, such as
 - photovoltaic installations, and production of photovoltaic cells/modules
 - installation of wind turbines
 - construction of mini-hydro cascades
 - geothermal and biomass facilities
- Rehabilitation of power and heating plants and transmission/distribution facilities to reduce total greenhouse gas ("GHG") emissions
- Modernisation of industrial installations to reduce total GHG emissions
- New technologies that result in significant reductions in total GHG emissions, e.g. smart distribution networks
- Fuel-switching from carbon-intensive (coal, heating oil, oil shale) to less carbon-intensive fuels such as natural gas
- Greater efficiency in mass transportation, such as investment in fuel-efficiency (fleet replacement) or more energy efficient infrastructure
- Methane capture on waste landfills and waste water treatment plants
- Rehabilitation of municipal water/waste water infrastructure to reduce water consumption and waster water discharges
- Improvements to solid waste management (minimisation, collection, recycling, storage and disposal)
- Energy efficiency investments in existing buildings (insulation, lighting, heating/cooling systems)
- Investments to improve efficiency of industrial water use
- Sustainable and stress-resilient agriculture, including investments in waterefficient irrigation
- Sustainable forest management, reforestation, watershed management, and the prevention of preventing deforestation and soil erosion

Many of our concerns described above can be related to some of these examples, for instance rehabilitation of power and heating plants, modernization of industrial installations, and greater efficiency in mass transportation.

The exclusion list

On the other hand, some of our concerns are taken care of by the following exclusion list, e.g. the exclusion of projects with significant consumption of fossil fuels and biofuel production projects.

Projects involving the following activities are not eligible for inclusion in the Green Project Portfolio:

- Activities listed on the Exclusion list in Appendix 2 of the EBRD's Environmental and Social Policy (http://www.ebrd.com/downloads/research/policies/2008policy.pdf)

- Construction of new large hydropower installations (as defined by ICOLD)
- Nuclear energy generation
- Fossil fuel production and projects with significant consumption of fossil fuels (coal, heating oil, oil shale) (as determined by ESD)
- Biofuel production (pending the adoption of internationally recognized sustainability criteria)
- Alcohol production, defence-related activities, tobacco industry, standalone gambling facilities
- Projects approved on the basis of derogation from the Environmental and Social Policy for not being able to meet the Bank's environmental and social Performance Requirements within the term of the EBRD transaction
- Equity investments (subject to review)
- Investments in RUB (Russian Rouble) (subject to review)