

December 14, 2009

Guidance to MDBs for Engaging with Developing Countries on Coal-Fired Power Generation¹

The following guidance is intended to be adapted by individual MDBs and incorporated into their respective operational policies, country and sector strategies, and other procedures that are related to the public or private project cycle for coal-powered generation operations.

1.0 Development Assistance Programming

When engaging with a country to plan a multi-year program of development assistance, the MDB should seek to remove barriers to and build demand for no or low carbon resources (supply and demand side) that meet power needs. Based on borrower priorities, ideally identified through national energy strategies and supported by technical studies, the MDB would design operations that:

- 1.1 Provide assistance to **build borrower technical and institutional capacity** to evaluate no or low carbon resources to meet projected energy demand. If an agreement at or subsequent to the Copenhagen Climate Conference includes provisions that support the preparation of low carbon development plans, then over time MDB support for a country's power sector is expected to be consistent with any such applicable plan.
- 1.2 Facilitate the transfer of information about no or low carbon supply and demand side resources in a manner and time such that it can be **incorporated into domestic investment decisions**.
- 1.3 Provide policy loans to level the playing field where it is determined that existing **policy and market conditions** (e.g., including electricity or fuel subsidies) **bias investment decisions** against no or low carbon resources.

The country strategy or equivalent document should include a discussion of how the MDB's support for the power sector will address the borrower's greenhouse gas (GHG) emissions trajectory.

2.0 Pre-Appraisal and Appraisal Steps

At the pre-appraisal stage of the project cycle, the MDB should incorporate procedures that ensure full consideration of no or low carbon options before appraising a proposed greenfield or

¹ This guidance is intended to supplement rather than supersede other MDB operational policies (environmental impact assessment, other environmental and social safeguards, procurement, etc.).

retrofit coal-fired power generation project for domestic power consumption or export.² These procedures may vary depending on: 1) whether the borrower is in the public or private sector, and 2) for public borrowers, whether a country is creditworthy (e.g., an IBRD borrower or the equivalent) and able to access private capital, or IDA-only or equivalent where private financing is much more difficult to obtain.

Steps in this procedure should include the following:

- 2.1 Alternatives analysis: The MDB would seek to identify a portfolio of **technologically feasible and commercially available**³ **no or low carbon resources** that could serve projected energy demand. Such a portfolio could include more carbon efficient fossil fuel generation, renewable resources, supply side efficiency improvements in other plants, and demand side management, which in the aggregate provide all or a portion of the energy services otherwise provided by the proposed project.
- 2.2 Economic analysis: If an alternative portfolio is potentially available, the MDB would determine whether its selection likely would result in higher costs of delivering power to end users than the delivered costs of power from the proposed project.⁴ Risk factors and implicit or explicit subsidies should also be considered, as well as the ability of electricity consumers to pay.⁵
- 2.3 Incremental financing analysis: If incremental costs of electricity from the alternative portfolio relative to the coal investment are positive and the ability of end users to pay the additional costs is limited, the MDB would assist the borrower in identifying **public or private sources of external financing** to cover them.
- 2.4 Select either the proposed project or low carbon resource portfolio: If the financing described in paragraph 2.3 is available, then the MDB would **select the low carbon portfolio** for appraisal. If after substantial effort, such financing cannot be accessed, the proposed project would be selected for appraisal.

² These procedures would also apply to financial intermediary, sector, or other loans in which one or more coal-fired power plants have been identified as likely subprojects.

³ “Commercially available” means available in some markets, not necessarily least market cost.

⁴ Delivered costs comprise the resource’s capital and operating costs levelized over its life, taking account of its expected capacity factor, associated transmission and distribution costs, and how it interacts with the existing grid. Implicit subsidies include environmental externalities and lack of accounting for factors such as fuel price and performance risk.

⁵ For example, international industrial customers and middle class households may have greater ability to pay for electricity produced by lower carbon technologies than do local businesses and low income households.

2.5 If at the end of the MDB pre-appraisal process, a coal project is to be appraised (even if its capacity is scaled back from the original proposal), it should meet the following characteristics:

2.51 **Use best available technology:** If proceeding with appraisal of a new or retrofit coal generation project, the project should use best internationally available technology for reducing GHG emissions for the size and duty cycle of generating capacity that is needed to meet projected demand characteristics. Designs using subcritical pulverized coal technology should be avoided.

2.52 For projects **in IBRD and IDA-blend equivalent countries**, incorporate **offsetting actions**.⁶ The project should be accompanied by a package of significant and measurable actions in the power sector that, in the aggregate, are intended to reduce its emissions by an amount equivalent to the emissions to be added by the proposed project. The MDB should either condition its support for the coal project on these actions, or finance complementary operations that do so. These actions may include: 1) policy initiatives (e.g., tariff reform); 2) infrastructure improvements (e.g., improved management and maintenance, upgrades to transmission and distribution systems, displacement, retirement, or efficiency retrofit of existing less carbon efficient generation); and 3) implementation of programs that reduce emissions (e.g., demand side management).

2.6 In **IDA only** countries, the MDB could proceed with appraising a coal project that does not meet the above best available technology criteria, if the project:

2.61 addresses critical **national energy security needs** that cannot otherwise be met (e.g., involuntary cessation of major power imports); or

2.62 responds to **national short term emergencies** (e.g., repair of a damaged generator where its outage is causing widespread blackouts); or

2.62 overcomes binding constraints on **national economic development** when no viable alternatives exist (e.g., where the generation investment is projected to stimulate a measurable increase in national growth rates).

In any event, IDA-only countries should follow the pre-appraisal process (alternatives analysis, economic assessment, etc.) outlined in paragraphs 2.1-2.4 above.

⁶ This would require the MDB to conduct calculations for gross and net **GHG fuel cycle emissions** based on transparent and uniform methods and assumptions.

3.0 Board presentation

The MDB should provide sufficient public documentation on the steps followed with respect to the process described above to enable its Board and external stakeholders to understand the decision process resulting in the proposed project. The information assembled in the pre-appraisal process should be presented in the project information document or equivalent. This information should include:

- 3.1 the financial, economic, and environmental rationale for selecting the **proposed generating technology and capacity size**, including any conditions that result in deviation from best available technology determined to be available under paragraph 2.6;
- 3.2 the extent and nature of the **MDB's upstream engagement** with the borrower with regard to no or low carbon options and the borrower's actions to evaluate those options;
- 3.3 the status of the **market and policy environment** with respect to barriers and incentives for investment in no or low carbon supply and demand options;
- 3.4 the availability or lack thereof of **supplemental sources of finance** for any additional costs of lower carbon options;
- 3.5 the results of calculations of lifecycle GHG emissions from the proposed project and from any offsetting actions; and
- 3.6 if applicable, a justification for invoking an exception under paragraph 2.6.