

October 29, 2013

Guidance for U.S. Positions on MDBs 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. It updates and replaces Treasury's "Guidance to MDBs for Engaging with Developing Countries on Coal-Fired Power Generation" dated December 14, 2009. This guidance reflects the U.S. Climate Action Plan of June 2013 that calls for an end to U.S. government support of public financing of new coal plants overseas, except under very limited circumstances.

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. MDB support for a country's power sector is expected to be consistent with any national low carbon development plan or strategy.
- 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.

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

2.0 Pre-Appraisal Process

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 retrofit coal-fired power generation project for domestic power consumption or export. 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. This includes captive plants as part of an industrial project and coal plants that will be constructed as a direct result of the project seeking financing. 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 the procedure should include the following:

- 2.1 Alternatives analysis: The MDB would seek to identify a portfolio of **technologically feasible and commercially available² 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, and determine if the alternative portfolio or the proposed project is economically feasible.³ Risk factors and implicit or explicit subsidies, including environmental and health externalities, should also be considered, even if not quantified, as well as the ability of electricity consumers to pay.⁴
- 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

² “Commercially available” means available in some markets, not necessarily least market cost.

³ Delivered costs comprise the resource’s capital and operating costs levelized over its lifecycle, taking account of its expected capacity factor, associated transmission and distribution costs, and how it interacts with the existing grid.

⁴ Implicit subsidies may also include lack of accounting for factors such as fuel price and performance risk. With regard to ability to pay, it should be recognized, for example, that international industrial customers and middle-income households will have a greater ability to pay for electricity produced by lower carbon technologies than do local businesses and low-income households.

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: After the above steps have been carried out, and if the financing described in paragraph 2.3 is available for the alternative portfolio, then the MDB would **select the low carbon portfolio** for appraisal. If after substantial effort such financing cannot be accessed, and the proposed project is the only economically feasible option, the proposed project would be selected for appraisal.

3.0 Appraisal Process

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:⁵

3.1 **Use best internationally 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.

3.2 In **IDA-only** countries, where energy needs are often the greatest, the MDB could proceed with appraising a coal project that does not meet the best internationally available technology criteria (paragraph 3.1), if it can be demonstrated that the project overcomes binding constraints on national economic development. In such cases, the coal project must instead demonstrate that it employs the **best available technology for reducing GHG emissions that is practically feasible**.⁶ Projects in IDA-only countries must also follow the pre-appraisal process (alternatives analysis, economic assessment, etc.) outlined in paragraphs 2.0 - 2.4 above.

3.3 In **IBRD and IDA-blend equivalent countries**, the MDB could proceed with appraising a coal project only if the following additional conditions are met:

3.3.1 The coal project must **deploy carbon capture and sequestration (CCS) technology** such that the power plant is designed and constructed with operational CCS

⁵ Unless otherwise indicated in the appraisal process, coal projects refer to greenfield plants, captive plants, retrofits, and coal plants that will be constructed as a direct result of the project seeking financing.

⁶ The determination of practically feasible should be based on an alternatives, economic, and incremental financing analysis among coal technologies that mirrors the pre-appraisal steps in Section 2 for choosing among alternatives more generally.

sufficient to reduce the plant's carbon intensity to a level of 500 grams of carbon dioxide equivalent per kilowatt hour of gross energy output.⁷

3.3.2 The coal project must be accompanied by a **package of significant and measurable offsetting 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 on a life-cycle basis.⁸ 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).

3.3.3 **If the coal project is a retrofit of an existing plant, then there is an exception** such that the CCS requirement (paragraph 3.3.1) need not apply if it is not feasible. However, the retrofit must still use best internationally available technology (paragraph 3.1) and be accompanied by sufficient offsetting actions (paragraph 3.3.2). Coal plant retrofits are defined as upgrades to an existing plant that do not increase its generation capacity.⁹

4.0 Board presentation

The MDB should provide sufficient public documentation on the steps followed with respect to the processes described above to enable its Board and external stakeholders to understand the decisions 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:

4.1 The financial, economic, and environmental rationale for selecting the **proposed generating technology and capacity size**, including any conditions that result in a deviation from best internationally available technology determined under paragraph 3.2;

4.2 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;

⁷ This emissions rate can be achieved by a modern natural gas combined cycle (NGCC) power plant, and the rate has recently been determined to satisfy the requirements of Best Available Control Technology for a small NGCC plant in a domestic permitting context.

⁸ This would require the MDB to conduct calculations for gross and net GHG fuel cycle emissions based on transparent and uniform methods and assumptions.

⁹ Increased capacity due to technological efficiencies are acceptable as a retrofit, but upgrades designed for the purpose of increasing coal-fired generation capacity do not fit the retrofit definition.

- 4.3 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;
- 4.4 The availability or lack thereof of **supplemental sources of finance** for any additional costs of lower carbon options;
- 4.5 The results of calculations of **lifecycle GHG emissions from the proposed project and from any offsetting actions**; and
- 4.6 If applicable, a **justification for invoking the retrofit exception** under paragraph 3.3.3.