Proposed Redline Edits to the Resource Efficiency and Greenhouse Gas Provisions of ESS 3

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Introduction

1. This ESS outlines a project-level approach to resource efficiency, cleaner production processes and pollution\(^1\) management\(^2\) in line with internationally disseminated technologies and practices and in accordance with the mitigation hierarchy. Accordingly, this ESS provides a set of guiding principles that a project will address during preparation and implementation. In addition, this ESS promotes the ability of projects to identify and assess the application of alternative technologies and practices based on GIIP\(^3\) that incorporate technical\(^4\) and financial\(^5\) feasibility.

Objectives

- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.

\(^1\) The term “pollution” is used to refer to both hazardous and non-hazardous chemical pollutants in the solid, liquid, or gaseous phases, and includes other components such as pests, pathogens, thermal discharge to water, GHG emissions, nuisance odors, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light.

\(^2\) Unless otherwise noted in this ESS, “pollution management” includes measures designed to reduce GHG emissions, given that measures which tend to encourage reduction in energy and raw material use, as well as emissions of local pollutants, also generally result in encouraging a reduction of GHG emissions.

\(^3\) GIIP is defined as the exercise of professional skill, diligence, prudence, and foresight that would reasonably be expected from skilled and experienced professionals engaged in the same type of undertaking under the same or similar circumstances globally or regionally. The outcome of such exercise should be that the project employs the most best internationally available appropriate process or technologies for in the project-specific circumstances to improve resource efficiency and avoid or minimize the production of GHGs and other pollutants, unless the borrower demonstrates that an available option is not technically feasible.

\(^4\) Technical feasibility is based on whether the proposed measures and actions can be implemented with commercially available skills, equipment, and materials, taking into consideration prevailing local factors such as climate, geography, demography, infrastructure, security, governance, capacity, and operational reliability.

\(^5\) Financial feasibility is based on the relative magnitude of the incremental cost of adopting such measures and actions compared to the project’s investment, operating, and maintenance costs, and on whether this incremental cost could make the project nonviable for the Borrower.
ESS3. Resource Efficiency and Pollution Prevention

- To promote more sustainable use of resources, including energy and water.
- To reduce project-related GHG emissions.

**Scope of Application**

2. The applicability of this ESS is established during the environmental and social assessment described in ESS1.

**Requirements**

3. The Borrower will consider ambient conditions and apply **technically and financially feasible** best processes and technology available internationally as resource efficiency and pollution prevention measures **to avoid impacts in accordance with the mitigation hierarchy**. The measures will be commensurate with the risks and impacts associated with the project and consistent with GIIP as reflected in, will generally comply with various internationally recognized sources, including the EHSGs. The Borrower can seek a variance from the requirement to meet these standards where the Borrower documents that the proposed variance will not significantly harm communities or the environment, and either the local ecology warrants the proposed variance or the applicable standard is not technologically feasible.

**Resource Efficiency**

4. The Borrower will implement **technically and financially feasible** measures for improving efficiency in its consumption of energy and water, as well as other resources and material inputs, with a focus on areas that are considered core business activities. Such measures will integrate the principles of cleaner production into product design and production processes with the objective of conserving raw materials, energy and water. Where benchmarking data are available, the Borrower will make a comparison to establish the relative level of efficiency.

**A. Greenhouse Gases**

5. In addition to the resource efficiency measures described above, the Borrower will consider **and assess** alternatives and implement **technically and financially feasible and cost-effective** best available processes and technologies options **to reduce project-related GHG emissions during the design and operation of the project, to avoid impacts in accordance with the mitigation hierarchy.**

6. For projects that are expected to or currently produce more than 25,000 tonnes of CO₂-equivalent annually, the Borrower will, where **technically and financially feasible**, quantify direct emissions from the facilities owned or controlled within the physical project boundary, as well as indirect emissions.

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6 These options may include adoption of renewable or low carbon energy sources; sustainable agricultural, forestry and livestock management practices; the reduction of fugitive emissions and gas flaring; and carbon sequestration and storage.

7 The quantification of emissions will consider all significant sources of GHG emissions, including non-energy related sources such as methane and nitrous oxide, among others.

8 Project-induced changes in soil carbon content or above ground biomass and project-induced decay of organic matter may contribute to direct emission sources and will be included in the emission quantification where such emissions are expected to be significant.
associated with off-site production of energy\(^9\) used by the project. Quantification of GHG emissions will be conducted by the Borrower annually in accordance with internationally recognized methodologies and good practice.

8. **Water Consumption**

7. When the project is a potentially significant consumer of water, the Borrower, in addition to applying the resource efficiency requirements of this ESS, will adopt measures, to the extent technically or financially feasible, that avoid, minimize or reduce water usage so that the project’s water consumption does not have significant adverse impacts on others. These measures include, but are not limited to, the use of additional technically feasible water conservation measures within the Borrower’s operations, end-use efficiency improvements, the use of alternative water supplies, water consumption offsets to maintain total demand for water resources within the available supply, and evaluation of alternative project locations.

8. For projects with a high water demand (greater than 5,000 m\(^3\)/day), the following will be applied:

   - A detailed water balance will be developed, maintained and reported annually;
   - Opportunities for continuous improvement in terms of water use efficiency must be identified;
   - Specific water use (measured by volume of water used per unit production) will be assessed; and
   - Operations must be benchmarked to available industry standards of water use efficiency.

9. The Borrower will assess, as part of the environmental and social assessment, the potential cumulative impacts of water use upon communities, other users and the environment, and will demonstrate that the proposed water use is not likely to have adverse impacts on water resources under reasonably likely climactic scenarios. As part of the environmental and social assessment, the Borrower will identify and implement appropriate mitigation measures.

**Pollution Prevention**

10. The Borrower will avoid the release of pollutants or, when avoidance is not feasible, minimize and/or control the intensity and mass flow of their release using the performance levels and measures specified in national law or the EHSGs, whichever is most stringent. This applies to the release of pollutants to air, water and land due to routine, non-routine, and accidental circumstances, and with the potential for local, regional, and transboundary impacts.

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\(^9\) These emissions result from the off-site generation by others of electricity, heating and cooling energy used in the project.