Classification and Environmental and Social Strategy (ESS)
Renewstable® Barbados Power Plant Project - BARBADOS

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1. Project Scope and Objective, and IDB Invest Participation

Renewstable® (Barbados) Inc. (the "Client" or the "Company") is proposing to construct and operate a baseload hybrid solar photovoltaic ("PV") energy facility with hydrogen storage (the "Project") at Harrow Plantation in the Parish of Saint Philip, Barbados. The Project, which will deliver non-intermittent, carbon-free, and renewable electrical power to the national grid, will also accommodate a large-scale Blackbelly sheep farming facility within the solar power plant and surrounding green areas.

The Project will be composed of: i) a 50-megawatt peak ("MWp") solar PV power plant that will consist of an array of 96,154 solar panels, equipped with PV cells, which will be ground-mounted in a fixed-tilt, south-oriented configuration; ii) a short-term battery energy storage system ("BESS") with an installed capacity of 15 mega-watts ("MW") housed in cabinets; and iii) a long-term hydrogen energy storage system ("HESS"), composed of electrolysers, with a total capacity equivalent to 16 MW that will split the molecules of water (H_2O) into hydrogen (H_2) and oxygen (O_2), compressors and pressurized containers to store the H_2, and hydrogen fuel cells with a total capacity equivalent to 3 MW, that will combine the stored hydrogen with the oxygen that is available in the surrounding air to generate energy (electricity).

The Project will generate approximately 56,000 megawatt-hours ("MWh") per year of solar power with hydrogen storage, thereby providing non-intermittent renewable power to the equivalent of approximately 18,680 residential customers annually[1] (based on an average monthly energy production of 4.67 GWH).

2. Classification and Environmental and Social Strategy

The project has been pre-classified as high risk Category B in accordance with IDB Invest's Environmental and Social Sustainability Policy, since it could generate the following environmental and social impacts and risks during construction and operation: i) dust and noise generation due to the use of heavy machinery; ii) occurrence or intensification of erosive processes; iii) potential traffic disruptions; iv) health and safety risks associated with the production and handling of H_2; v) introduction of impermeable surfaces and alteration of the current drainage scheme; and vi) change in land use from agriculture to energy generation. Positive impacts may be associated with reduction of Greenhouse Gas ("GHG") emissions and carbon footprint, generation of long-term direct and indirect jobs, and decarbonization of the Barbadian energy matrix.

To date, the Project has prepared an Environmental and Social Impact Assessment that has been presented to the local authorities as part of the process of obtaining the corresponding planning approvals.

[1] Based on the average energy system production of 4.67 GWH per month.

The Environmental and Social Due Diligence ("ESDD") process will include interviews with key Client executives (environmental, social, and occupational health and safety areas); analyze its Environmental and Social Management System ("ESMS"), including all related plans and procedures; and assess any Project social and labor information, among other issues. As a result of the ESDD, the Project's categorization will be confirmed, any potential compliance gaps in terms of IDB Invest's Environmental and Social Sustainability Policy will be identified, and an Environmental and Social Action Plan ("ESAP") to close such gaps will be produced.

Based on the information received and reviewed so far, the Performance Standards ("PS") that the Project is likely to trigger are: PS1: Assessment and Management of Environmental and Social Risks and Impacts; PS2: Labor and Working Conditions; PS3: Resource Efficiency and Pollution Prevention; PS4: Community Health, Safety and Security; and PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. The final determination of the PS triggered by the Project will be done by the end of the ESDD. The final determination of the PS triggered by the Project will be done by the end of the ESDD.

Once the ESDD is completed, an Environmental and Social Review Summary ("ESRS") and an ESAP will be prepared and published on this website.

3. Additional Information

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For questions and comments to IDB Invest, contact:

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In addition, and as a last resort, affected communities can access IDB Invest's Independent Consultation and Investigation Mechanism (ICIM) as follows:

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