DETAILS OF IMPLEMENTATION ARRANGEMENTS

A. Regulatory Framework

1. The Asian Development Bank (ADB) loan to Gulf Renewable Energy Company Limited (GRE) will support 12 renewable energy projects in Thailand: 393 megawatts (MW) of ground-mounted solar photovoltaic and 256 MW of ground-mounted solar photovoltaic facilities with an integrated 396 MW-hours of battery energy storage systems (BESS). Parent Company, Gulf Energy Development Public Company Limited (GED) was awarded the projects as part of Thailand's 5-gigawatt renewable energy feed-in-tariff (FIT) program that was launched in 2022. The program is subject to regulations of the Energy Regulatory Commission governing the FIT-based procurement of electricity from renewable energy during 2022–2030 (B.E.2565–2573) for the Group of No Fuel Cost 2022 (B.E.2565) published in the Government Gazette on 27 September 2022 (B.E.2565). The regulations set out the key features, nature, and scope of eligible renewable energy projects as well as the qualifications of eligible project participants.

B. Management of Engineering, Procurement, and Construction

2. GED and GRE will implement the projects using the engineering, procurement, and construction management (EPCM) method, whereby GED and GRE will provide technical and commercial support and will directly contract with key equipment suppliers. GED will engage Tractebel Engineering as an EPCM consultant to provide assistance in project management, detailed engineering, procurement, and construction and management supervision.



3. The solar modules are expected to be supplied by JinkoSolar (Haining) Company Limited. The BESS supplier is expected to be Sungrow Power Supply Company Limited. GED undertook a competitive selection process throughout 2023 to determine the key suppliers.

C. Operations and Maintenance Arrangements

4. Once the projects achieve their commercial operations date, the electricity generated will be sold to Electricity Generating Authority of Thailand at a fixed FIT under a 25-year power purchase agreement, providing a long-term and reliable revenue structure. The price the offtaker pays is set at B2.1679 per kilowatt hour (\$0.060 equivalent) for ground-mounted solar and B2.8331 per kilowatt hour (\$0.079 equivalent) for ground mounted solar–BESS output.

5. Solar and solar–BESS projects incur high upfront capital costs but minimal operating costs. The cost structure is generally very predictable—limited expenditure on maintenance and parts replacement, and no ongoing or volatile fuel expense. The operations and maintenance of renewable power plants is relatively simple and does not present major technical challenges, and the risk of major outages is limited because the structure is modular (i.e., the failure or temporary shutdown of one module of solar panel does not affect the output of others).

6. The operations and maintenance for the underlying projects will be handled in-house by GED and GRE, coupled with a long-term service agreement with Sungrow for the BESS.

D. Project Performance Monitoring, Reporting, and Evaluation

7. GRE will report to ADB on key performance indicators of the underlying projects, including output and outcome indicators. The borrower or guarantor will submit (i) quarterly / semi-annual unaudited financial statements and audited annual financial statements, and (ii) environmental and social monitoring reports as agreed, and development effectiveness reports on a yearly basis.

E. Long-Term Project Financing

8. GED plans to arrange long term non-recourse project financing for the 12 projects once they are operational. ADB will explore opportunities to support the long-term project financing stage of these projects at such time. If ADB participates in the long-term financing, and subject to internal approvals at the time, the Clean Technology Fund concessional loan may be rolled over into a long-term facility to support the operational stage of the solar–BESS projects.