

Environmental and Social Data Sheet

Overview

Project Name:	MALDIVES SUSTAINABLE ENERGY DEVELOPMENT
Project Number:	2013-0598
Country:	MALDIVES
Project Description:	<i>The project will finance individual hybrid minigrid systems consisting of solar photovoltaic panels, together with efficient diesel engine generators and integrated lithium-ion accumulators in the Maldives' Outer Islands. The objective of the project is to reduce diesel fuel usage and costs of electricity generation, enhance the use of renewables, improve security of supply and reduce CO2 emissions.</i>
EIA required:	yes
<i>Some of the subprojects may be subject to full EIA under the Maldivian Law, in which case the corresponding EIS will be published on the Bank's website. Framework Environmental & Social studies have been prepared for the full 160-island programme, and have been published on the Bank's website.</i>	
Project included in Carbon Footprint Exercise:	Yes

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

Environmental and Social Framework studies on a programme level (including Environmental and Social Management Plans (ESMPs)) have been prepared (covering the whole project-i.e. 160 or so islands) to the satisfaction of ADB (as lead co-financier), and have been approved by the Competent Authority. All these documents suggest limited environmental & social impacts for the project. Expected potential environmental impacts relate mainly to noise from the diesel engine generation sets, impacts on vegetation during construction activities for the solar plants, as well as impacts due to the handling and disposal of used batteries. No negative impact is foreseen on protected areas. Limited or no resettlement is expected for the project. The Asian Development Bank (ADB) has already completed a full environmental & social due diligence on these studies. Given the scope of planned interventions, fulfilment of ADB environmental and social standards for the project shall ensure alignment with the Bank's standards as well.

Specific atoll- or sub-project-specific environmental & social assessments will be prepared in a subsequent process with permits issued accordingly. Given the technical scope of the individual projects, were they located inside the EU, they would fall under Annex II of the EIA Directive, requiring the screening of the project by the Competent Authority to determine whether a full EIA would be required. A first phase of the operation (5 pilot islands), for which no EIA were necessary, has already been permitted under local environmental and social (E&S) regulation. Environmental permits issued by the Competent Authority and the final impact studies of each sub-project (as approved by the Competent Authority and / or the ADB) will be submitted to the Bank for its review before allocating funds to the respective atoll(s).

Applicable eligibility criteria ensure that the proposed subprojects will not be located in any protected areas, and will not have any negative impacts on protected fauna or flora.

The sub-projects do not expect to have any significant negative social impacts due to land acquisition or involuntary resettlement. If any changes or additional land requirements or involuntary resettlement emerges during implementation of a subproject, a resettlement plan will be prepared or modified according to the applicable laws referred to in the resettlement framework. ADB/EIB approval will be obtained before implementation of the subproject continues.

A gender action framework (GAF), which integrates indicators and targets in the project design and monitoring framework, has been prepared. Social development specialist services in gender and development will be recruited to support the utilities in implementing the GAF.

A grievance redress mechanism (GRM) will be established to receive complaints and facilitate the resolution of affected persons (AP) concerned and grievances on project implementation and operation, including negotiated/voluntary land donation, relocation, income restoration, environmental management and other construction and operation related issues. The GRM will be designed to be proactive and accessible to all APs to address their concerns grievances and issues effectively and swiftly, in accordance with the Bank's standards.

Civil works contractors will be required to comply with all applicable labor laws and ILO standards, do not employ child labor, provide appropriate facilities for women and their children in construction campsites; and do not differentiate wages between men and women for work of equal value. Specific clauses ensuring these will be included in bidding documents.

Contractors will be required to provide adequately for the health and safety of the construction workers and further ensure that bidding documents include measures on how contractors will address this, including information and awareness raising campaigns for construction workers on sexually transmitted diseases, including HIV/AIDS and human trafficking.

MEE will prepare a stakeholder communication strategy and submit it for review 3 months after loan effectiveness. All communication will be in a language suitable for the specific audience and will follow the ADB Public Communication Policy. The stakeholder strategy will incorporate the following components:

- i) Compilation of stakeholder communication activities already undertaken;
- ii) Public communication plan for disseminating information regarding project development to the public who may be impacted by the proposed projects; and
- iii) Consultations and disclosure during preparation of future sub project IEE.

Both, the Executing Agency (EA) and its Implementing Agencies (IA) will be supported by a project technical consultant financed by ADB to manage the project's environmental and social aspects to ensure compliance with the Bank's requirements.

Considering the above conditions, as well as the information available to and reviewed by the Bank to date, the project is considered acceptable from an E&S perspective for Bank's financing.

Environmental and Social Assessment

Environmental Assessment

Overview of environmental impacts

Individual renewable energy hybrid energy systems (sub-projects) would typically be classified as EIB's environment category A (Low risk) or B (Low to moderate risk) as they involve physical works but are generally expected to have limited, insignificant, and manageable direct and induced adverse environmental and social impacts. Sub-projects located directly in or within 1 km boundary of protected areas /areas with critical habitats will not be supported by the Project.

Overall impacts associated with sub-project siting on the physical environment will be negligible. The location of sub-project sites for ground mounted solar PV installations will be mostly on open plots, which may be covered by thin vegetation. Rooftop installations will be mostly done on selected public buildings. The project location will not overlap and is not expected to have significant negative impact on any environmentally sensitive areas. Similarly sites of archaeological importance are not expected to be negatively impacted by the sub-projects or their facilities. Diesel generator-sets (gen-sets) will be installed in existing powerhouses and grid assets will be replaced mostly on existing grid system.

During construction and operation, the project's negative environmental impacts are expected to be limited to those of typical construction sites of this scale and appropriate mitigation measures have been proposed in the framework E&S studies.

EIB Carbon Footprint Exercise

Emissions from the project are estimated to be around 60 ktCO₂e / annum. CO₂ emission savings (relative emissions) are estimated to be around 34 ktCO₂e / annum over the 19-year project lifetime.

For the annual accounting purposes of the EIB Carbon Footprint the project emissions will be prorated according to the EIB lending amount signed that year, as a proportion of project costs.

Social Assessment, where applicable

The Project's social impacts are expected to be overall positive, thanks to a number of benefits provided, notably (i) provision of renewable & cheaper energy to households, community facilities, service institutions and businesses; (ii) livelihood development through poverty reduction and improvement in the quality of life; and (iii) capacity development opportunities for women groups. Meaningful public consultation will be carried out for the operation and the financed sub-projects on an ongoing basis. As part of this appraisal, detailed information about the procedures and mitigation measures undertaken to minimise any impacts on involuntary resettlement, labour standards, occupational health and safety, vulnerable groups, public consultation and grievance mechanisms was reviewed by the Bank.