

Project Implementation Monitoring Report (#8)

Reporting Period From 2024/01 To 2024/06

Maldives : Greater Male Waste-to-Energy Project

1. Project Information

Project ID:	P000278	Instrument ID:	L0278A
Member:	Maldives	Region:	Southern Asia
Sector:	Urban	Sub-sector:	Integrated waste management
Instrument type:	<input checked="" type="checkbox"/> Loan:40.00 US Dollar million <input type="checkbox"/> Guarantee	Lead Co-financier (s):	Asian Development Bank
ES category:	A	Borrowing Entity:	Ministry of Finance, Maldives
Implementing Entity:	Ministry of Environment, Maldives		
Project Team Leader:	Ankur Agrawal		
Responsible DG:	Rajat Misra		
Responsible Department:	PSC1		
Project Team Members:	Monyrath Nuth, SFD - Social Development Specialist; Liu Yang, Project Counsel; Shonell Robinson, SFD - Financial Management Specialist; Jurminla Jurminla, SFD - Procurement Specialist; Sabah Iqbal, SFD - Environment Specialist; Ankur Agrawal, Back-up PTL; Jinghui Li, Project admin		
Completed Site Visits by AIIB:	<p>Mar, 2021 Virtual Inception Mission was held instead of site visit due to the Covid-19 pandemic. Discussions were held with the officials of Ministry of Finance, Ministry of Environment, Waste Management company (WAMCO) etc.</p> <p>Dec, 2021 Lead Co-financier (ADB) had physical review mission from Dec 5-Dec 14. AIIB joined partly virtually.</p> <p>May, 2022 ADB team (lead co-financier), conducted the site visit during the mission from May 8 - May 19, 2022. AIIB team attended some mission meetings virtually.</p> <p>Nov, 2022 AIIB joined the physical implementation support mission led by ADB including the field visit to the WTE site to review the implementation progress.</p> <p>Mar, 2023 AIIB joined the physical implementation support mission led by ADB including the field visit to the WTE site to review the implementation progress</p> <p>Aug, 2023 AIIB joined the physical implementation support mission led by ADB including the field visit to the WTE site to review the implementation progress.</p> <p>Jan, 2024 AIIB joined the physical implementation support mission led by ADB including the field visit to the WTE site to review the implementation progress.</p>		
Planned Site Visits by AIIB:	<p>Aug, 2024 Field visit to the WTE plant site is planned to review the implementation progress.</p>		
Current Red Flags Assigned:	1		
Current Monitoring	Regular Monitoring		

Project Implementation Monitoring Report (#8)

Reporting Period From 2024/01 To 2024/06

Regime:	
Previous Red Flags Assigned:	0
Previous Red Flags Assigned Date:	2023/12
Brief justifications for assigned red flags:	Delay in contract execution.

2. Project Summary and Objectives

The main objective of the project is to establish a regional solid waste treatment system in the Greater Malé capital region. The project is designed to reduce disaster risk and improve climate change resilience while creating a cleaner environment and reducing greenhouse gas emissions. The project has two components: Component 1 - Establishment of climate resilient regional waste management facilities, including construction of a 500-ton per day (tpd) Waste-to-Energy (WTE) plant with flue gas treatment, emissions monitoring, a bottom ash processing plant, and an ash disposal landfill with leachate treatment ponds and Component 2 - Institutional capacity building in sustainable waste management, environmental monitoring and public awareness. AIIB is financing only Component 1.

The project will be implemented during the period October 2020 to September 30, 2026.

The Project cost is USD151.13 million which would be financed through AIIB loan of USD40.00 million, ADB loan of USD38.21 million, ADB grant of USD35.18 million, Japan Fund for the Joint Crediting Mechanism (JFJCM) grant of USD10.00 million and counterpart funds (Government of Maldives) of USD27.74 million.

3. Key Dates

Approval:	Sep. 10, 2020	Signing:	Sep. 29, 2020
Effective:	Dec. 11, 2020	Restructured (if any):	
Orig. Closing:	Mar. 31, 2027	Rev. Closing (if any):	

4. Disbursement Summary (USD million)

Contract Awarded:	120.22	Cancellation (if any):	0.00
Disbursed:	10.30	Latest disbursement (amount/date):	0.01/Jun. 06, 2024
Undisbursed:	29.70	Disbursement Ratio (%) ¹ :	25.74

5. Project Implementation Update

A Design-Build-Operate (DBO) contract for the construction and operation of the Waste-to-Energy (WTE) plant was executed on October 10, 2021 and the site was handed over to the contractor in March 2022. After the initial delays in conducting geotechnical surveys, site activities have started in July 2022. The conceptual design for the WTE plant has been approved by the Project Management, Design and

¹ Disbursement Ratio is defined as the volume (e.g. the dollar amount) of total disbursed amount as a percentage of the net committed volume.

Project Implementation Monitoring Report (#8)

Reporting Period From 2024/01 To 2024/06

Construction Supervision Consultants (PMDSC) supporting the PMU. Currently, foundation works and slab casting works are going on. Overall, there is a delay of about 400 days due to several factors (i) delays in geotechnical survey; (ii) site boundaries changes and delay in site handover by the Government; (iii) coordinating issues amongst all stakeholders; and (iv) technical complexity

Components	Physical Progress	Environmental & Social Compliance	Procurement
<p>Component 1: Establishment of disaster and climate resilient regional waste management facility</p>	<p>Construction of fences surrounding the construction site and the labour accommodation has been completed. Currently, foundation works and slab casting works are going on. Part of the bunker foundation slab has been cast and the walls reinforcement work is going on in the bunker area. Overall, there is a delay of about 400 days.</p>	<p>The Contractor's Environmental Management Plan (CEMP) and Occupational Health and Safety Plan have been approved in April 2024. Relevant environmental and social staff/consultants have been mobilized and Quarterly Environmental Monitoring Reports have been submitted and approved by the ADB on a regular basis.</p> <p>Seven locations for monthly ambient air quality monitoring have been defined and included in the CEMP. The contractor is undertaking baseline monitoring of marine ecology and marine water quality on a quarterly basis. During the benthic surveys by contractor, it was indicated that the intake and outfall locations will be changed further away from the shoreline into deeper water, requiring remodeling for detailed design. Final drainage plans for the roads, and facilities, as well as runoff, are to be finalized as part of the detailed design. A geotechnical report has been approved and all recommendations have been implemented during construction activities. In addition a climate vulnerability and risk assessment (CVRA) will be conducted during the detailed design stage. Site plan is almost finalized, and domestic wastewater treatment plant is now installed. Locating sites for construction work, camps, areas for stockpile, storage, and disposal has been compiled and included in the detailed site plan.</p>	<p>The only procurement package under the Bank financing was the DBO contract for the WTE plant and the same has already been awarded in the year 2021; the contractor is on board and the work is in progress.</p> <p>The contract implementation shall be closely monitored to avoid construction delays.</p>

Project Implementation Monitoring Report (#8)

Reporting Period From 2024/01 To 2024/06

		<p>Contractor’s compliance with the CEMP will be continuously monitored.</p> <p>An update on the ES staffing with specific timeline, as well as the implementation status regarding gender actions will be updated in the next PIMR, following discussion in the upcoming mission.</p>	
--	--	--	--

Financial Management:

Overall, the FM arrangements are in place and functioning. However, it was noted that due to government budgetary constraints and the consistent underutilization of the Project budget, the GoM has decreased Project allocations. There are delays in processing payments of invoices submitted by contractors which might involve penalties as per the contract. Despite this, MoF has committed to prioritizing payments under the Project. The audited financial statements for the year ending December 2023 are due by June 30, 2024. The audit is ongoing and is expected to be submitted by the due date.

6. Status of the Grievance Redress Mechanism (GRM)

The Project GRM has multiple tiers – an individual or an interest group can contact DBO Contractor (1st tier), PMU/MOE (2nd tier), and if not resolved, the complainant could use judiciary approach. PMU (2nd tier) has been set up and able to receive grievances. No complaints have been received; however, there were some suggestions made by workers to improve food at site canteen.

7. Results Monitoring (please refer to the full RMF, which can be found on the last page of this PIMR)

Given the implementation delay, RMF may be adjusted and reflected in the next PIMR.

Remarks:

Project Objective Indicators	Indicator level	Unit of Measure	Cumulative Target Values																			Frequency	Responsibility	Comments				
			Baseline		2020		2021		2022		2023		2024		2025		2026		2027		End Target							
			Year	Value	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Year				Target	Actual		
Solid waste treated with residuals safely disposed or recycled	Project	%	2020											50		70		80										
Reduction in estimated annual GHG emissions	Project	tons	2020											20,000		20,000		20,000										
Installed capacity of WTE plant (50% is renewable energy)	Project	Number	2020											8 (4)		8 (4)		8 (4)										

Project Intermediate Indicators	Indicator level	Unit of Measure	Cumulative Target Values																			Frequency	Responsibility	Comments		
			Baseline		2020		2021		2022		2023		2024		2025		2026		2027		End Target					
			Year	Value	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Year				Target	Actual

Electricity generated from WTE (50% is renewable energy)	Project	Number	2020										16,000 (8,000)		32,000 (16,000)		32,000 (16,000)							
500 tpd WTE plant (with extended O&M contract) is constructed and operational	Project	Text	2020										Constructed		Operational		Operational		Operational					
Landfill for safe disposal of WTE air pollution control residues and nonmarketable bottom ashes is constructed and operational.	Project	Text	2020										Constructed		Operational		Operational		Operational					
Adoption of disaster and climate resilience measures in the design and construction phases of WTE	Project	Text	2020										Adopted	Ongoing	Adopted		Adopted		Adopted					