

Sovereign-backed Financing Program Document

Republic of Maldives

Strengthening Fiscal Management and Sustainability Program

Currency Equivalents

(As of June 27, 2024)

Currency Unit – USD MVR1.00 = USD0.065 USD1.00 = MVR15.40

Borrower's Fiscal Year

Jan-Dec

Abbreviations

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AGO	Auditor General's Office
DLIs/DLRs	Disbursement-Linked Indicators/Disbursement-Linked Results
CEA	Climate Emergency Act
COFOG	Classification of the Functions of Government
ECap	Economic Capital
EIRR	Economic Internal Rate of Return
ENPV	Economic Net Present Value
ESEL	Environmental and Social Exclusion List
ESP	Environmental and Social Policy
ES	Environment and Social
FSA	Fiduciary System Assessment
FM	Financial Management
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GoM	Government of Maldives
GRM	Grievance Redress Mechanism
IAs	Implementing Agencies
IDA	International Development Association
IMF	International Monetary Fund
IP	Indigenous People
IPPF	Internal Professional Practices Framework
IPSAS	International Public Sector Accounting Standards
ISSAIs	International Standards for Supreme Audit Institutions
IVA	Independent Verification Agencies
IWMCs	Island Waste Management Centers
LWC	Labor and Employment Conditions
MCI	Ministry of Construction and Infrastructure
MDB	Multilateral Development Bank
MIRA	Maldives Inland Revenue Authority

MMA	Maldives Monetary Authority
MOF	Ministry of Finance
MOCCEE	Ministry of Climate Change, Environment and Energy
MVR	Maldivian Rufiyaa
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
OHS	Occupational Health and Safety
OPIR	Operational Policy on International Relations
PAS	Public Accounting System
PBG	Policy-based Grant
PFA	Public Finance Act
PFM	Public Financial Management
PFR	Public Finance Regulation
PPG	Public and Publicly Guaranteed
PPM	Project-Affected People Mechanism
PSIP	Public Sector Investment Program
PV	Photovoltaic
RBF	Results-Based Financing
RBP	Result-Based Program
SDFP	Sustainable Development Finance Policy
SFW	Special Fund Window
SIAC	State Internal Audit Committee
SIAF	State Internal Audit Function
STELCO	State Electric Company Limited
SUPs	Single-use plastics
ToR	Terms of Reference
UNEP	United Nations Environment Program
USD	United States Dollar
WB	World Bank
WMCs	Waste Management Centers

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I. Result-Based Program (RBP) Summary Sheet

Project No.	P000815		
Project Name	Strengthening Fiscal Management and Sustainability Program		
AIIB Member	Republic of the Maldives		
Borrower	Republic of the Maldives		
Program Implementation	Ministry of Finance (MOF)		
Entity			
Sector	Others		
Subsector			
Alignment with AIIB's thematic	Green infrastructure		
priorities			
Program Objective	The proposed Results-Based Financing (RBF) aims to strengthen fiscal sustainability and promote climate-resilient investments.		
Program Description	The proposed Program (the Program) will provide a results-based loan financing to support a portion of a defined Government programs. It is designed to enhance the sustainability of the policy actions under the Strengthening Fiscal Management and Sustainability Program (a policy-based grant) of the Asian Development Bank (ADB). The proposed Program will support the Government's programs and consist of the following two results areas:		
	Results area 1 (Green Taxation) - This results area will mainly support two Government programs related to green taxation: (i) widening of the coverage of tourism green tax beyond hotels to include integrated resorts etc.; and (ii) levy a tax on plastic bags as part of the commitment to phasing out single-use plastics (SUPs). The tourism Green Tax will exclusively go to the Government-established "Green Fund" which will finance climate-related projects as well as other green projects. Results area 2 (Climate Mitigation and Adaptation) - This Result Area will support Government programs to address climate change, including: (i) increasing the capacity of renewable energy; (ii) establishing new waste management facilities; and (iii) implementation of coastal protection measures in priority islands.		
Implementation Period	Q3-2024 to Q2-2027		
Expected Loan Closing Date	December 31, 2027		
Proposed Amount of AIIB	USD15 million		
Financing			
Financing Plan	Total program cost: USD35.2 million		

	Government: USD20.2 million			
	AIIB: USD 15million			
	Result Area 1: USD3 million			
	Result Area 2: USD12 million			
ES Category (or AIIB	В			
equivalent, if using another				
MDB's ES Policy)				
ES Category Comments	N/A			
Risk (Low/Medium/High)	Medium			
Conditions of Effectiveness	N/A			
Key Covenants	Quarterly Progress Report which includes reporting of			
	expenditures under the defined Government programs during			
	the Program's implementation.			
Conditions for Disbursement	Appointment of Independent Verification Agencies (IVA) as per			
	ToR acceptable to the Bank.			
Policy Waivers Requested	No			
Policy Assurance	The Vice President, Policy and Strategy, confirms an overall			
	assurance that the proposed Bank Financing complies with the			
	applicable Bank operational policies.			
Economic Capital (ECap)	ECap: USD7.12 million (ECap Ratio: 57.5%)			
Consumption				

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	Institutions and Funds Global
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II. STRATEGIC CONTEXT

- 1. **Country Context.** The Maldives is a small island nation in the Indian Ocean comprising 26 coral atolls with 1,192 tiny, low-lying coral islands. With a population of about 540,000, the Maldives has 187 inhabited islands, including the capital city of Male, with significant exposure to climate change. Due to its rich marine biodiversity, the tourism industry is crucial in driving economic growth in the Maldives. This industry significantly contributes to the country's gross domestic product (GDP) and provides employment opportunities for its citizens. However, the Maldives faces limited resources for agriculture, minerals, and oil reserves, with a total land area of approximately 298 square kilometers. Given its geographic location and features, the Maldives is dependent on imports, which has resulted in significant external and inflationary pressures, particularly with the sharp rise in global commodity prices.
- 2. The Maldives has outperformed its regional and South Asian peers with an average GDP growth rate of 6.4 percent from 2010 to 2019. However, the COVID-19 pandemic severely impacted the economy, leading to a contraction of 33.5 percent and causing the country's public and publicly guaranteed (PPG) debt to peak at 150.2 percent of GDP in 2020. Additionally, the total PPG debt-to-GDP ratio rose to USD7.0 billion or 113.5 percent at the end of 2022, up from USD5.9 billion or 112.1 percent in 2021. Despite this setback, the Maldives has demonstrated resilience and achieved a strong rebound, with the tourism industry's thriving performance contributing to an average projected GDP growth rate of 5.4 percent from 2024-2025, yet significant fiscal challenges remain.
- 3. **Sector Context.** The country's fiscal performance is still constrained by challenges amplified by the surge in global commodity prices, increased Government spending on capital projects and subsidies, and other factors. Its reliance on subsidies, particularly fuel, electricity, and food, has contributed to mounting spending pressures. Additionally, the significant imports of capital and construction materials for the Public Sector Investment Program (PSIP) projects have exacerbated fiscal and current account deficits. Since the Government remains subject to the International Development Association's (IDA) Sustainable Development Finance Policy (SDFP, formerly Non-Concessional Borrowing Policy), restoring fiscal and debt sustainability remains a priority. In addition to the fiscal constraints, the country also faces high exposure to climate change risks. Half of its housing structures are located within 100 meters of the coastline, and 90 percent of the islands experience annual flooding. Approximately 97 percent of the islands report shoreline erosion, with 64 percent facing severe erosion. Given the Maldives' heavy reliance on natural ecosystems and tourism, climate change poses an existential threat that needs to be addressed.
- 4. Despite the exposure and its vulnerability, the Maldives ranks low in adaptive capacity relative to its per capita income, indicating a substantial gap in the country's climate action efforts. Addressing this gap entails significant financing needs for climate adaptation and mitigation. International Monetary Fund (IMF) estimated the cost of adaptation and mitigation to be at USD8.8 billion and USD1 billion respectively, totaling to USD9.8 billion, nearly twice of the country's GDP in 2018.

- 5. Given its fiscal constraints and climate change exposure, the Maldives is among the nations with high climate adaptation costs and limited fiscal space. With the high growth-debt trade-off, financing adaptation in the Maldives may need strategies such as strengthening domestic revenue mobilization, expenditure rationalization, and prioritization in adaptation investment, or grant financing. Realizing these, the Government prioritizes restoring fiscal and debt sustainability to address these fiscal challenges while simultaneously tackling climate change vulnerabilities. This includes reforms for the implementation of a solid public investment management framework to help reduce high levels of public expenditure and replenish fiscal buffers against future shocks; diversify the tax base to improve revenue mobilization; and improve the efficiency of spending. These initiatives include a specific range of areas coupled with policies, including the revised green tax, the levy imposed on single-use plastics, and addressing the challenges posed by climate change that will indirectly strengthen the fiscal health. Implementing the revised green tax and levy on single-use plastics can generate additional revenue and reduce dependence on traditional taxes and import duties while raising environmental awareness and protection. Increasing the capacity of renewable energy will help lower energy subsidy expenditure in the public budget and reduce greenhouse gas emissions simultaneously.
- 6. Specifically, the Government has taken significant steps to address the climate emergency through the enactment of two laws: the Climate Emergency Act (CEA) (Law No. 9/2021) and the Maldives Energy Act (Law No. 18/2021). The CEA provides a legal structure to respond to climate emergencies and address the urgent need for climate action against climate change, including allocating funds for renewable energy sources. The Act aligns with the country's ambitious plan to achieve net-zero carbon emissions by 2030, as outlined in its Nationally Determined Contributions (NDCs). Additionally, the Maldives Energy Act aims to promote using renewable energy sources and energy efficiency measures to reduce reliance on fossil fuels and mitigate climate change. Moreover, the Government prioritizes investing in climate resilience measures and adaptation strategies, such as coastal protection and waste management systems, as they are crucial to mitigating the economic and fiscal risks of climate change.
- 7. **Integrated Financing with ADB's Policy-based Grant (PBG)**. In September 2023, ADB approved a PBG of USD18.7 million to the Maldives under the Strengthening Fiscal Sustainability and Management Program (Subprogram 1). The ADB program supports reforms aimed at strengthening fiscal management and restoring fiscal sustainability over the medium to long term. The ADB's and AllB's programs are complementary and mutually reinforcing regarding design and results, i.e., enhancing fiscal sustainability and supporting climate-resilient investments. The Program has been designed to support and help monitor implementation of the key policy actions under ADB's PBG.
- 8. **SDFP Waiver**. Due to the fiscal constraints and debt sustainability issue the country is facing, the Maldives is subject to the World Bank (WB) Debt Limit Conditionality under its SDFP and is currently restricted to borrow any non-concessional loans. In November 2023, the Government applied for a waiver from the WB to borrow from AIIB for this Program. Since then, the Government, the WB, and AIIB had several discussions and exchanged information

regarding AIIB's lending terms and how this Program is integrated with ADB's PBG. In June 2024, the WB Committee indicated that the AIIB Program met the criteria for an integrated financing package. As such, no waiver would be required since the total financing package meets the 35 percent grant element. This decision was based on the Program's design, its alignment with the ADB's Strengthening Fiscal Sustainability and Management Subprogram 1, and the concessionality of the total package consisting of ADB's PBG and the Program. AIIB's Special Fund Window (SFW)¹ also contributed to meeting the concessionality requirements under SDFP. The use of this Special Fund Window effectively buys down the applicable interest rate of the AIIB financing by 100 bps.

III. **RATIONALE**

- 9. Strategic Fit for AllB. The Program is aligned with AllB's thematic priority to promote green infrastructure. The Program entails building climate and disaster resilience and enhancing environmental sustainability by promoting net-zero carbon initiatives, improved management of solid waste and increased coastal protection measures.
- Paris Agreement Alignment and Climate Finance. In line with AllB methodology for assessing the alignment with the mitigation and adaptation goals of the Paris Climate Agreement, the Program is assessed as aligned. In particular, the Program is committed to sustainable and climate-resilient development, i.e., the goals of the Paris Agreement (including its building block 4 - accelerated contribution to the transition through climate finance, and the building block 5 - engagement and policy development support), and AIIB's Climate Finance target. Details on the assessment are provided in Section c of Part V. In line with the joint Multilateral Development Bank (MDB) methodology for tracking adaptation finance, it is estimated that USD4.5 million of the Program cost contributes to support adaptation; in line with the joint MDB methodology for tracking mitigation finance, it is estimated that USD10.5 million of the Program cost contributes to support mitigation.
- 11. Value Addition by AIIB. Beyond providing financing, AIIB's participation will support the Maldives efforts to enhance its resilience to the impacts of climate change, promote long-term environmental sustainability, and address fiscal challenges. The Program will strengthen the institutional capacity of the agencies implementing the Program in using and benefitting from a relatively new RBF instrument.
- 12. Value Addition to AllB. The Program is the first RBF of the AllB in the Maldives. This engagement presents a valuable opportunity for the Bank to expand its expertise in multisectoral programs. It also demonstrates AIIB's commitment to strengthening its partnership

¹ With the assumptions of a 31-year final maturity, a 5-year grace period, and the indicative buy-down rate at 100 basis points, the total buy-down amount is estimated at USD2.74 million based on the indicative disbursement schedule and financial assumptions. The Special Funds Committee approved SFW for this Program in April 2024.

with the Government and supporting the urgent needs of its members. Moreover, this also provides an avenue for the AIIB to contribute to climate mitigation and adaptation efforts.

IV. PROGRAM DESCRIPTION

A. Government program and RBP scope

- 13. The Program will support the implementation of four key Government expenditure programs focusing on fiscal sustainability and climate resilience undertaken by several ministries, namely Fiscal Reforms by Ministry of Finance (MOF), Waste Management by Ministry of Climate Change, Environment and Energy (MOCCEE), Coastal Protection by the Ministry of Construction and Infrastructure (MCI), and Renewable Energy by MOCCEE. First, the Program supports the Government's Public Financial Management (PFM) Reform Strategy and Action Plan 2022 2026. This strategy aims to strengthen fiscal discipline, improve debt sustainability, and modernize the management of public finances through eight reform areas: fiscal and macroeconomic reforms, strengthening debt and cash management, enhancing state-owned enterprises (SOE) governance, procurement reforms, external audit of the public sector, strengthening the public accounting system and asset management, program performance-based budgeting, and public investment management and public-private partnerships. Within this broader reform agenda, the Program specifically focuses on reforms related to fiscal and climate resilience, particularly the Green Taxation, which is incorporated in Result Area 1 of the Program: Green Taxation.
- 14. The Waste Management expenditure program aims to establish and upgrade waste management centers (WMC) on at least 22 islands and develop comprehensive waste management systems in these islands between 2023 and 2025. This initiative is designed to help the Maldives achieve environmentally sound management of solid waste throughout their life cycles, adhering to international standards. The goal is to significantly reduce the release of pollutants into the air, water, and soil, thereby minimizing their adverse impacts on human health and the environment. The Program supports the subset of this initiative focused on establishing waste management centers including waste collection and transfer points, waste storage, and sorting facilities, which are reflected in the Result Area 2.
- 15. Under the Coastal Protection initiative, the Government of Maldives (GoM) aims to execute measures to safeguard the shorelines. Maldives has experienced shoreline changes in 95 percent of the inhabited islands from 2015-2023. A priority list of 33 islands was developed based on criteria such as population, area, economic activity, risk to infrastructure, proximity to infrastructure, and estimated direct impacts of climate change. Upon completion, these efforts are expected to benefit approximately 46,000 residents across these islands through various coastal protection measures such as geo bag revetment, sand-cement bags, seawalls, etc. These activities are classified under Result Area 2: Climate Mitigation and Adaptation.

- 16. The Program will also support the Government's efforts to increase the share of renewable energy in the national energy mix, ensuring access to affordable, reliable, sustainable, and modern energy for all under the Renewable Energy initiative. Key projects under this initiative include the Maldives Clean Environment Project, the World Bank's Accelerating Renewable Energy Integration and Sustainable Energy (ARISE) project, the Accelerating Sustainable Private Investments in Renewable Energy (ASPIRE) project, and the Asian Development Bank's Preparing Outer Island for Sustainable Energy Development (POISED) project. This initiative is designed to address the climate challenges and vulnerabilities faced by the Maldives as an island nation. By shifting to renewable energy sources, the Maldives aims to reduce its reliance on fossil fuels and significantly lower its carbon footprint.
- 17. The total cost of the Government's expenditure programs is USD35.2 million. Sub-sets of these programs will be financed by AIIB in the amount of USD15 million while the balance will be financed through Government's own resources. The Program's expenditure boundaries are well defined and each expenditure under the Program is linked to the Government's budget code. Out of the total Government's expenditures eligible under the Program, 80 percent is towards creating high-priority physical infrastructure while the rest is towards operational costs directly linked to achieving the Program's Objective. The summary Program Expenditure Framework is provided in Table 1.

Table 1. Summary Program Expenditure Framework

Government	2023	2024	2025	2026	Total
Program	(Actual)	(Budgeted)	(Estimated)	(Estimated)	Estimated
Coastal	4.29	2.08	4.07	2.62	8.77
Protection	4.29	2.00	4.07	2.02	0.77
Waste	6.50	6.65	10.25	1.66	18.57
management	0.50	0.00	10.25	1.00	10.57
Renewable	0.77	0.97	1.28	0.86	3.11
Energy	0.77	0.97	1.20	0.00	3.11
Fiscal reforms	1.57	1.57	1.57	1.57	4.72
Total	13.16	11.29	17.19	6.72	35.20

B. RBP Development Objective/s (PO)

18. The proposed Program aims to strengthen fiscal sustainability and promote climate-resilient investments. The Program is standalone and is expected to support the Government Expenditure Program. It has been designed to be consistent with the ADB's Subprogram 1 on Strengthening Fiscal Management and Sustainability Program (ADB PBG). Under the RBF, the funds are disbursed upon achievement of results using the Disbursement-Linked Indicators (DLIs) and Disbursement-Linked Results (DLRs). The details on DLIs and DLRs for the Program are attached as Annex 2.

C. RBP Key Results and Disbursement Linked Indicators

- 19. **Results Area 1 (Green Taxation)** This results area will mainly support Government programs related to green taxation implemented by the Maldives Inland Revenue Authority (MIRA) (i) widening of the coverage of tourism green tax beyond typical tourist resorts and guesthouses to resort hotels and integrated tourist resorts, and (ii) levy a tax on plastic bags as part of the commitment to phasing out SUPs. The tourism green tax will exclusively go to the Government-established "Green Fund," which will finance climate-related and other green projects. The levy imposed on plastic bags is part of the Waste Management Act (Law No. 23/2022), requiring all commercial entities to charge two Maldivian Rufiyaa (MVR) for each plastic bag sold. In particular, this result area will focus on widening the coverage of green tax and implementation of tax levy on SUPs.
- 20. **Results Area 2 (Climate Mitigation and Adaptation)** This results area will support Government programs in addressing issues related to climate change enactment of the CEA to adopt climate adaptation measures for coastal protection and achieve net zero emission by 2030; The Ministry of Climate Change, Environment and Energy (MOCCEE), and Ministry of Construction and Infrastructure (MCI) are the main agencies implementing the Program under this Result Area. This includes enactment of CEA (Law No. 9/2021) to achieve net zero emission by 2030 and the Maldives Energy Act to promote renewable energy and reduce subsidized fossil fuel-generated electricity. In particular, this will support the installation of solar photovoltaic (PV) in houses and buildings in designated islands/atolls. This result area also supports implementation of the Waste Management Act (Law No. 23/2022) which stipulates the establishment of waste management centers to enhance the country's waste management efforts. Furthermore, it also supports the country's National Adaptation Plan (NAP), particularly in increasing the climate resilience of inhabited islands through shore protection measures.
- 21. **Expected Results**. Expected results will be the improvement in fiscal sustainability through resource mobilization and climate change adaptation/mitigation. This will be measured through the following indicators:
 - (i) Revenue enhancement through expanded coverage of Green Tax.
 - (ii) Reduction in the use of SUPs through enactment of tax levy on plastic bags.
 - (iii) Increased capacity of renewable energy
 - (iv) Increased number of people served by the waste management facilities (gender-disaggregated).
 - (v) Increased number of people benefitting from the coastal protection measures.

D. RBP Key Capacity Building and Institutional Strengthening Activities

22. The Program benefits from the ADB's PBG which strengthens the institutional capacity of GoM in implementing the fiscal reforms and other initiatives to strengthen the fiscal sustainability. The Program relies on an established institutional and fiduciary structure of the GoM. This structured approach ensures that all program activities are conducted with the highest

standards of governance, ultimately leading to more successful and sustainable outcomes. The capacity of the agencies implementing the Program will be further strengthened with the Technical Assistance under the ADB's Program which aims to improve the procurement system and public investment management and other administrative reforms.

V. RBP IMPLEMENTATION

A. Institutional and Implementation Arrangements

23. The MOF will be responsible for the overall implementation of this Program. The Maldives Sustainable Finance Hub in the MOF will be responsible for coordination amongst the agencies implementing respective DLIs under the Program including MOCCEE and MCI. The proposed IVA is the Auditor General's Office (AGO), a statutory and apex body responsible for all audit of all Government institutions in the Maldives. Below table provides the specific roles and responsibilities of each entity implementing the Program:

Table 2. Institutional Arrangements

DLI	Institution	Roles and responsibilities for the Program		
All DLI	MOF	 Overall responsible implementing unit to oversee and monitor the timely implementation of the Program activities. Coordinate with the relevant agencies implementing the Program for any issues and concerns related to implementation. Allocate sufficient budget for the Government programs. 		
DLI#1 and DLI#2	MOF	MOF will be responsible for implementing DLI 1 and 2. MOF will coordinate with MIRA for collecting data related to Green Tax revenue and with the Maldives Custom Service for collecting data related to import of SUPs.		
DLI#3 and DLI#4	MOCCEE	 MOCCEE is mandated to implement programs and projects related to environment, climate change, and energy. In particular, MOCCEE will implement and monitor the implementation of renewable energy and waste management centers. Provide guidance to meet the requisite supervision schedule and reporting during the Program implementation. 		
DLI#5	MCI	 MCI will lead the implementation of DLI 5, particular for the construction of shore protection line in designated atoll/islands. MCI will ensure that requisite documents and assessments are completed before any construction. 		

B. Results Monitoring and Evaluation

24. The Government systems will be used to monitor the Results Framework, which will be complemented by data, reports, and documents with independent verification. Achievements of the DLIs will be verified by IVA after the Government provides the attestation that the DLI is achieved. This will then trigger the processing of disbursements.

C. Disbursement Arrangements and Verification Protocol

- 25. The GoM will pre-finance the Program expenditures using its own budgetary resources through the identified budget lines of the Programt Expenditure Framework. Upon the satisfactory achievement of the DLIs/DLRs, as verified by an IVA following the agreed verification protocols, AIIB will disburse funds to the Treasury Single Account maintained by MOF at the Maldives Monetary Authority (MMA). GoM has requested a disbursement for 50 percent of the total loan proceeds upon effectiveness. This is because GoM is in need of urgent external financing. GoM indicated that this will contribute towards the government's efforts to manage the cashflow and foreign currency reserves. Accordingly, AIIB plans to provide 30 percent for an advance and 20 percent for Already Achieved DLRs related to DLI4 and DLI5. The Already Achieved DLR from DLI4 pertains to the cabinet approval of Waste Management Center prioritization, and the Already Achieved DLR from DLI5 refers to the cabinet approval of coastal protection prioritization (see Annex 2 for details). This will facilitate GoM in achieving the defined DLI/DLR in a timely manner.
- 26. The applicable disbursement methods will be (i) reimbursement for achieved DLIs, and ii) advance for the financing of activities required to aid in the achievement of one or more DLIs. Where actions are not achieved in any particular year, the allocated amount will be carried over to the subsequent year. In case of achievement of targets before respective deadlines, early disbursement claim may be submitted. In case of scalable DLIs/DLRs, claim for part achievement may be submitted. Disbursement Letter shall detail out the authorized signatories, the process of submitting claims, other terms and conditions of disbursements related to the Program.

VI. ASSESSMENT SUMMARY

A. Technical (including RBP economic evaluation)

27. **Program Design.** As an IDA-grant eligible country, the Maldives is subject to the World Bank's SDFP due to the high risk of external debt distress, which restricts external non-concessional borrowing. The Government is facing significant external debt servicing obligations. High expenditure levels primarily constrain its overall fiscal performance due to increased subsidies and sustained high levels of capital spending, specifically for the PSIP.

Moreover, the country has seen a slow and steady recovery in tourism after the impacts of COVID-19, which adversely impacted the country's revenue generation.

- 28. To address this challenge, the GoM is implementing measures, including subsidy reforms, revenue mobilization, and economy diversification, to restore fiscal sustainability while addressing its vulnerabilities to climate change. MDBs, such as the WB and ADB, have helped the country overcome fiscal challenges by providing grants and concessional loans. In particular, the Maldives has received support for COVID-19 response and recovery efforts, infrastructure development, sustainable tourism, and fiscal management. It also received policy advice and technical assistance to support public financial management, revenue mobilization, expenditure rationalization, and debt management. MDBs have been working closely with the Maldivian Government to develop and implement reforms that strengthen fiscal sustainability while addressing its vulnerability to climate change.
- 29. The Program is designed to contribute to the joint effort, addressing fiscal constraints and climate vulnerability, with a particular emphasis on infrastructure. The Program's design is also consistent with ADB Program to achieve the concessional funding requirement of having at least a 35 percent grant element of the total financing package. The Program aims to reinforce ADB Program implementation, focusing on green taxation, domestic saving, climate change mitigation, and adaptation towards a more robust fiscal sustainability response. This joint efforts of ADB and AIIB will contribute towards the Maldives' fiscal management and sustainability considering its fiscal challenges. Table 3 below summarizes the Program's DLIs linkage with the ADB Program.

Table 3. The Program's DLI and Linkage to ADB Program

DLI	Linkage to ADB Program
DLI#1: Coverage of tourism green tax	This DLI is directly linked to ADB Program Reform
expanded to generate more funds for	Area (RA) 1.3 and intended to monitor the result of
the Green Fund	policy implementation.
DLI#2: Reduction of single-use plastic	This DLI is directly linked to ADB Program's policy
bags	action under RA 1.4
DLI#3: Total capacity of renewable	This DLI is directly linked to ADB Program's policy
source of energy increased	action under RA 1.7 and intended to monitor the
	result of policy implementation.
DLI#4: New waste management	This DLI builds on DLI#2 and supports Waste
facilities established.	Management Acts which was also covered by the
	ADB's policy action.
DLI#5: Coastal protection measures	This DLI builds on Climate Emergency Act which
adopted	is covered by the ADB's policy action.

30. **Operational sustainability.** The MOF has extensive experience implementing programs and projects financed by MDBs and through GoM budget. Its role will be critical in ensuring the Program's sustainability, through budget allocations and monitoring expenditures for

implementing the activities towards the timely achievement of DLIs/DLRs. The Program will be implemented through the GoM's existing institutional modalities and systems without putting additional implementation burden. In fact, the Program is expected to improve GoM's fiscal situation through enhanced revenues and through prioritized investments in climate resilient infrastructure without further rise of debt burden. The estimated annual O&M cost of USD0.2 million for the MOCCEE projects are expected to be financed through a combination of ministry's budget and revenue generation from sale of electricity from RE projects. For the coastal protection investments, the O&M needs are very nominal and will be financed through MCI and local government's budget.

- 31. The Program will also benefit from the close coordination of the main agencies implementing the Program, including MOCCEE and MCI. The Government has established its financial management systems and accountability mechanisms, which would help facilitate transparency and efficient use of funds. The results monitoring framework and verification protocols for each DLIs/DLRs are well-defined to incentivize the agencies implementing the Program to deliver defined results. These measures collectively contribute to the operational sustainability of the Program, enabling its effectiveness and long-term impact.
- 32. **Economic analysis.** The Program supports several actions to promote fiscal sustainability and climate resilience. The Program is expected to generate significant economic benefits, not all of which are quantifiable:
 - 1) Strengthening macroeconomic position through:
 - a. Improving domestic resource mobilization through expansion of Green Tax.
 - b. Improving fiscal position through rationalization of subsidies on fuel and electricity by promoting renewable energy power generation
 - c. Improving current account deficit and foreign exchange reserves by reducing the reliance on imported fossil fuel-based power generation and encouraging renewable energy-based power generation
 - d. Reduced debt burden through careful review and prioritization of investments under PSIP
 - 2) Reduced damages to life and property through investments in climate resilient coastal protection measures.
 - 3) Environmental improvements through Greenhouse Gas (GHG) emission reduction, public health benefits in terms of reduced vulnerability to diseases and avoided medical expenditures and reduced contamination of surface and ground water resources through management of solid waste.
 - 4) Employment creation through labor-intensive construction works.
- 33. Although the Program supports a set of wider government programs, the economic analysis of the Program focuses on investments in green taxation, tax levy on SUPs, and renewable energy through cost and benefit analysis. The viability of the Program's investment in waste management and coastal protection are analyzed through assessments of similar projects.

- 34. The widened coverage of the green taxation is estimated to provide economic net present value (ENPV) of USD15.7 million at an economic discount rate of 9 percent in 10 years. The benefit calculation includes the increase of fiscal inflow with and without the Program.
- 35. Further, the tax levy on the SUPs is estimated to bring additional USD534 thousand annually as fiscal revenue to the public budget, even at conservative assumptions. As such, the implementation of tax levy to SUPs will ENPV of USD2.7 million in 10 years at an economic discount rate of 9 percent.
- 36. On the Program's investment in renewable energy sector, the economic benefit from the increased solar PV capacity is estimated to be USD8.4 million in 10 years using an economic discount rate of 9 percent. This provides an Economic Internal Rate of Return (EIRR) of 56 percent. This benefit calculation covers the fuel cost savings due to displaced diesel energy generation and the reduction in greenhouse gas emission by 55,000 tCO2e in 10 years. This shows that the Program's investment in renewable energy sector, green taxation, and implementation of tax levy on SUPs have resulted in the economic viability of the Program.
- 37. Similar projects on coastal protection in Maldives by JICA are estimated to provide EIRR of 8 percent, with ENPV of USD31.9 million at an economic discount rate of 5 percent.² Meanwhile, similar investments in waste management interventions by ADB are estimated to provide of 17.5 percent with ENPV of USD34.4 million at an economic discount rate of 9 percent.³ Detailed analysis is provided in Annex 4.

B. Fiduciary

- 38. A Fiduciary System Assessment (FSA), conducted in accordance with AIIB's Operational Policy on Financing and the Interim Guidance Note for Results-Based Financing (RBF), concludes that the systems, along with proposed mitigation measures, are broadly adequate. They should provide reasonable assurance that financing will be utilized for its intended purpose, emphasizing economy, efficiency, effectiveness, transparency, and accountability. The FSA covers the agencies implementing the Program– MOF, MCI and MOCCEE, with the procurement assessment mainly focusing on the latter two Implementing Agencies (IAs) which should be executing the procurement of activities. The FSA concludes that the residual fiduciary risk is assessed to be "Moderate", which is presented in Table 5 along with the identified fiduciary risks and mitigation measures.
- 39. **Procurement**. The procurement system assessment was carried out at both policy and practice level. It covers the legal, regulatory and policy review, institution arrangements review and the procurement in operations review. While there is no procurement act in the Maldives, the Public Finance Act (PFA) provides mandate for public procurement legal structure. Public Finance Regulation (PFR) serves as the primary legal document governing public sector procurement in the country. The Regulation provides all the rules, thresholds, methods, and procedures for public procurement, as well as the mechanisms for complaints and grievances.

³ Refer to the Greater Male Environmental Improvement and Waste Management Project by ADB.

² Refer to Building Climate Resilient Safer Islands in the Maldives Project by JICA.

The assessment sampled MCI for procurement performance in practice review and noted the agency has the experience and capacity of handling large value works contracts through open and limited international competitive procurement method following rule requirements. The overall procurement performance is found acceptable. The current activity review identified no high value contracts⁴ under the Program.

Financial Management (FM)

- 40. **Public Financial Management Framework.** The PFM framework and systems in the Maldives are highly centralized at the MOF. They are primarily governed by the Maldives PFR, which is issued under the PFA, itself founded on the Constitution of the Maldives. This Act and its regulations detail procedures for budget preparation, execution, accounting, and reporting of public funds. As the Program is being implemented by mainstream ministries, and integrated into their daily operations, the Program's financial management function will be governed by the Maldives' PFM system. The MOF will lead and coordinate the overall financial management function. However, the Program's daily financial management activities will be carried out by the Finance and Accounting Departments within each agency implementing the Program. Although the overall PFM system is the same across ministries and the Finance and Accounting departments are staffed with competent accounting and finance professionals, the overall capacity varies by agencies.
- 41. **Planning and Budgeting.** The Program consists of a subset of existing Government programs, all pre-financed through the respective line ministries' budgetary allocations as incorporated in the GoM national budget. The 2024 projected revenue and grants per approved budget stands at MVR33.5 billion (USD2.18 billion) of which tax revenues accounts for 76.4 percent. In-year budget adjustments are at the discretion of the MOF and are guided by the Virement and Appropriations Procedures. Each sub-project under the Program is included in the medium-term budget covering 2024 budget and estimates for 2025 and 2026. The budget classifications are based on the Chart of Accounts, which is guided by the Government Finance Statistics (GFS) and the Classification of the Functions of Government (COFOG). While each sub-project under the Program already has an existing Project code, an overarching Program code will be created allowing efficiency in consolidating financial information.
- 42. **Budget Execution and Reporting.** There are generally strong cash management controls in place. Payments are centralized at the MOF and are processed through the Treasury Single Account maintained by MOF at the MMA. Public Accounts System (PAS) powered by SAP is designed in accordance with the International Public Sector Accounting Standards (IPSAS) on a cash basis. It is used throughout the entire budget preparation, approval and execution of payments, and reporting process. PAS is deemed to have embedded, good controls around authorization and segregation of duties. As per standard practice, there is preparation and approval of monthly reconciliations of the PBA and budget execution reports. Furthermore, quarterly reconciliation statement of the Program accounts will be included in the

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⁴ High value contracts for moderate risk project: (i) works, turnkey, supply installation of plant and equipment, public, private partnership and concessions contracts >=USD 115m; (ii) goods, information technology and non-consultancy services contracts >=USD 75m; and (iii) consulting services contracts >=USD 30m.

Program progress reports and MOF will prepare annual consolidated financial statements for the Program.

- 43. **Internal Audit.** The State Internal Audit Function (SIAF) of MOF, prepares and executes risk-based audits in accordance with Internal Professional Practices Framework (IPPF) promulgated by the Institute of Internal Auditors. With a mandate to conduct internal audits for the MOF and other public offices, SIAF will be responsible for executing the internal audits of the Program. These audits will be conducted semi-annually, in accordance with a Bank approved audit Terms of Reference (ToR). The internal audit reports will be shared with the Bank within four months after the end of each reporting period.
- 44. **External Audits**. The head of the AGO, the Auditor General (AG), reports directly to both the President and the Public Accounts Committee (PAC) of Parliament. The AG's full independence is enshrined in the Constitution of the Maldives and the Audit Act, with the office's functions and mandate further reflected in the PFA and PFR. The AGO executes audits in accordance with International Standards for Supreme Audit Institutions (ISSAIs).
- 45. The program audit will also be executed by the AGO in accordance with the ISSAs. As the first RBF operation in the Maldives, the audit will also adhere to a Bank-approved ToR. The consolidated audit report, along with a management letter (report on internal controls), will be submitted to the Bank within six months after the end of each financial year (June) and published on the AG's website.

Prohibited Practices

- 46. In addition to AGO and the PAC, scrutiny of public offices is conducted by the Anti-Corruption Commission (ACC) of Maldives. The ACC is an independent legal entity that was established following the ratification of the 2008 Constitution, under which an 'Anti-Corruption Commission Act (ACCA) 13/2008' was enacted on 24th September 2008. The Act further defines the ACC's duties and responsibilities, which includes amongst others, to investigate all allegations, complaints, information, or suspicion of corruption. The 'Prevention and Prohibition of Corruption Act (PPCA) 2/2000,' was enacted on August 31, 2000, which provides guidelines to prevent corruption in public offices. Additionally, it defines fraud, corruption, and other prohibited practices.
- 47. In addition to the investigation of public procurement related fraud and corruption, Government officials and individuals breaching the law will face penalties. The overall governance arrangements are deemed adequate to prevent, detect and mitigate risks of prohibited practices.

C. Environmental and Social Systems Assessment

48. **Categorization.** AllB's Environmental and Social Policy (ESP), including the Environmental and Social Exclusion List (ESEL) and provisions related to RBF, are applicable to this Program. This Program is classified Category B as per AllB's ESP, as it covers a limited

number of potentially adverse environmental and social impacts. The Bank has reviewed the set of actions agreed with the government under the ADB's PBG, and the applicable national environmental and social (ES) systems for the government expenditure programs covered by the Program. All the implementing agencies responsible for the different budget expenditure programs, have already developed and applied their ES risks and impact assessment systems, with support from the ADB. AllB's ESP requires initial review of the environmental and social risks and impacts for Category B projects. On the basis of this review, AllB, in consultation with the Client, determines the appropriate instrument for the Client to assess the Program's environmental and social risks and impacts. An ESIA or another similar instrument may be determined as appropriate for any specific activities during the implementation of the Program.

- 49. **Assessment Process.** The Bank has conducted an assessment of national environmental and social systems in compliance with the AIIB's ESP Section 15.1 applicable for RBF operations. Based on the assessment, an ES System Assessment Report (ESSA Report) was prepared. The ESSA Report has been shared with the MOF and publicly disclosed at the AIIB's website. The assessment encompasses a review of the government policy and regulatory framework, ES systems applied by various implementing entities, and their implementation capacity as well as the screening and assessment of the potential ES risks and impacts of the activities supported by the Program. On the basis of the ESSA Report, the AIIB, in consultation with the Client, determines application of appropriate instrument to address the ES risks and impacts associated with the implementation of the underlying investment activities. The ESSA Report suggests an ES Action Plan (ESAP), which will get attached to the financing agreement with the MOF. The ESAP encompasses actions addressing the gaps against AIIB ESF.
- 50. **Environment**. Environmental risks and possible adverse impacts are limited to possible biodiversity and ecosystem impacts related to some of anticipated coastal protection activities. Each site selected for coastal protection will undergo a thorough ESIA in compliance with the national E&S Framework with site-specific risks and adverse impacts mitigation measures set up for each of investments sites. The Bank does not anticipate any significant environmental risks or adverse impacts on the rest of the budget expenditure programs (i.e., reduction of single-use plastics, widening the coverage of green tourism tax, renewable energy). These activities are expected to deliver a net positive environmental impact, including climate mitigation, pollution prevention (e.g., reduction of plastic waste or reduced air pollution due to lower use of fossil fuels) and even positive impact on biodiversity by reducing plastic pollution affecting marine life in the sea. The national ES framework applied by designated implementing agencies for all the budget expenditure programs supported by the Program has been developed with support from international development agencies and MDBs (particularly the WB and ADB) based on their ESPs and the United Nations Environment Program (UNEP) ES guidelines for sustainable finance. The existing national ES systems are fully functional, have largely sufficient in-house implementation capacities, with support if and where necessary from credible external consultancy firms. Overall, it complies with the AIIB's ESP.
- 51. **Climate Change**. All budget expenditure activities covered by the Program are considered Paris-aligned for climate mitigation as they feature in the joint MDB "aligned list" and meet

accompanying conditions. Coastal protection expenditures align with the Paris Agreement's adaptation objectives, as the activities' main purpose is to address national climate vulnerabilities. The rest of the budget expenditures covered by the Program are considered aligned with the adaptation objectives of the Paris Agreement. The activities are not significantly exposed to climate risks (e.g. reduction of single use plastics, widening the coverage of green tourism tax, enactment of the CEA, and the Energy Act). The Program includes highly diversified climate resilience measures integrated into its design to address identified program vulnerabilities.

- 52. Investments conducted under the Coastal Protection program qualify at 100 percent as climate adaptation finance under the enabling category of activities, as they contribute directly to reducing climate vulnerability and exposure to sea-level rise and extreme weather events (sea storms) as the main climate hazards which the Maldives is exposed to. The rest of the expenditure activities qualify as climate mitigation finance as they feature on the list of joined MDB climate mitigation finance tracking methodology.
- 53. **Social Aspects**. The Program's implementing agencies have already implemented policies addressing health and safety, diversity and inclusion, anti-bribery, anti-corruption, and equal opportunity policies with elements of gender-positive inclusion and in compliance with the Bank's ESP principles. Provisions addressing these considerations have been integrated into procurement policies for any external contractors, procured by the implementing agencies for budget expenditure programs covered by the Program. The Program does not encompass any land acquisition, resettlement and neither livelihood restoration. Fiscal measures related to green taxation or reduction of Single Use Plastic do not have any land footprint. Renewable energy activities are related to building rooftop installations with no land requirements. Any utility scale investments will use public land and will be co-financed by MDBs (the WB and/or ADB). Coastal protection and waste management activities (sorting facilities for communal waste) will use public land only with waste sorting facilities being installed at existing landfills.
- 54. Provisions of the AIIB's ESF related to Indigenous People (IP) are not triggered since no specific Indigenous People were identified. This is consistent with the approach adopted by peer MDBs on IP. The Bank has undertaken research on the subject by reviewing assessments conducted by peer MDBs and International Development Agencies and agrees with conclusions in the WB's report on Additional Financing Appraisal Environmental and Social Review Summary. The Report explicitly states in section of ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities: Not Relevant as there are no persons in the Maldives which fall into this category. Further on it is confirmed "as not relevant as there are no persons in the Maldives which fall into this category".
- 55. **Gender Aspects**. The national ES system incorporates gender-positive considerations for each of the investment programs supported by the Program. For investments that are gender-agnostic (like renewable energy, coastal protection), the gender considerations include the application of an inclusive, non-discriminatory labor policies, protection against sexual

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⁵ World Bank: https://projects.worldbank.org/en/projects-operations/project-detail/P180777

harassment, training, and awareness-raising campaigns undertaken at the level of relevant agencies implementing the Program. Also, Results Framework indicators include gender indicators (e.g., number of gender-related training/participants).

- 56. Occupational Health and Safety (OHS), Labor and Employment Conditions (LWC). The national ES framework, applied by designated implementing agencies for the budget expenditure programs supported by the Program, has already incorporated adequate provisions on OHS and LWC. The national ES Framework has been developed with support from international development agencies and MDBs (particularly the WB and ADB) based on their ESPs and the UNEP ES guidelines for sustainable finance. The existing national ES systems are fully functional, have sufficient implementation capacities, and comply with the AIIB's ESP. The only ES aspect that requires a follow-up with the Government and coordination with the ADB is related to LWC in the procurement of Solar PV technologies and supply chain management, to ensure compliance with AIIB policy and practice. Procurement of solar PV technologies will incorporate provisions for due diligence on LWC, including provision of adequate representations from suppliers and contractors for any utility-scale sub-projects, or, if feasible, for any non-utility scale sub-projects.
- 57. **RBP Implementation Support and Monitoring.** The MOF is responsible for implementing the Program, monitoring the implementation progress and performing relevant commitments as per the legal documents. Such responsibilities involve the Borrower keeping the ES management systems effective, implementing monitoring plans, and identifying and solving problems in a timely and effective manner. AIIB will support the implementation of the Program through close coordination with the agencies implementing the Program and ADB.
- 58. Stakeholder Engagement, Consultation, and Information Disclosure. An extensive Stakeholder Engagement process is already in place, conducted by designated national authorities according to national systems and in the context of the policy dialogue activities led by ADB. Stakeholder consultations and information disclosures are conducted in compliance with the national legislation and as part of permitting procedures. The ESSA Report will be disclosed by AIIB.
- 59. **Grievance Redress Mechanism (GRM).** All of the implementing agencies responsible for budget expenditure programs covered by the Program have fully functional GRM mechanisms and whistle-blower policies in place. The Bank will follow up with the Government on the GRM and will track and report any grievances during Program implementation including gender-related ones.
- 60. **Applicable Independent Accountability Mechanism.** AIIB's Policy on the Project-Affected People Mechanism (PPM) applies to this Program. The PPM has been established by AIIB to provide an opportunity for an independent and impartial review of submissions from Project-affected people who believe they have been or are likely to be adversely affected by AIIB's failure to implement the ESP in situations when their concerns cannot be addressed satisfactorily through the GRM or the processes of AIIB's Management. Information on AIIB's

PPM is available at: https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html

D. Operational Policy on International Relations (OPIR)

61. None of the activities under the Program triggers application of the Bank's OPIR.

E. Risk Assessment

62. The overall Program risk is rated "Medium" (see Table 4). Technical challenges and environmental and social risks are deemed to be minimal, while macroeconomic risks, procurement, and institutional capacity risks are considered to be moderate.

Table 4. Summary of Risks and Mitigating Measures

Risk Description	Assessment (H/M/L)	Mitigation Measures
Macroeconomic Risks The Maldives is currently experiencing a weak fiscal position and low foreign exchange reserves; the investments under the expenditure program may be curtailed	Medium	While the Program explicitly focuses on fiscal stability, its expenditure framework consists of only high-priority investments and is much broader than the financing under the Program.
Technical Design This is the first RBF in the Maldives, agencies implementing the Program may not fully understand the implementation nuances	Low	MOF has demonstrated strong leadership and commitment throughout the Program preparation to engage and collaborate with other agencies implementing the Program.
Environmental and Social ES risks and adverse impacts are limited to possible biodiversity and ecosystem impacts related to some of anticipated coastal protection activities.	Low/Low	The Program encompasses a number of budget expenditure programs, each of them expected to provide a net environmental benefit. Due diligence and ESSA conducted have confirmed that expenditure programs covered by the Program have limited to no environmental and social risks. Therefore, the E&S category is B due to some limited scale civil works related to coastal protection. The Bank will closely monitor the LWC related to supply chain of Solar PV technologies.
Fiduciary: Financial Management Staff across IAs, SIAF and AGO are unfamiliar with Result-based-lending	Medium	There are at least some staff from the MOF, SIAF and AGO who are familiar with other

operations. This could potentially impact the timely execution of program activities, verification of DLIs, provision of accurate financial reports.		projects with disbursement linked indicator being a key feature. Bank approved disbursement verification protocol, Internal and external audit ToRs will serve as a guidance to execute these functions. In addition, the Bank will provide continuous training and hands-on-support during implementation.
The delay in proper reconciliation of accounts at year-end could potentially impact the timely provision of accurate financial statements.		Quarterly reconciliation of RBF accounts will be coordinated by MOF and included in the Program progress report to ensure all transactions are accurately included in the RBP accounts.
Untimely release of funds to meet contractual obligations, potentially resulting in penalty charges and fees and delay in implementation.		Delayed contracts payments for civil works (i.e., related to renewable energy, waste management, and coastal protection) under the Program will be reported in the Program progress report. The Program is comprised of GoM highly prioritized sub-programs in which appropriate budgetary allocations have been made. In addition, the "Advance" disbursement will be made available to financed expenditure inputs, if required.
The absence of or variation in functionality of Internal Audit Units across Ministries, which could comprise the robustness of the internal controls in preventing detecting and correcting error.		The Internal Audit Function for the Program will be centralized and executed by the SIAF within MOF. Audit is planned to commence on FY 2025 onwards.
Procurement AIIB debarment list is not followed.	Medium	The agencies implementing the Program are required to check the AIIB debarment list before contract award. No AIIB financing for contracts being awarded to debarred contractors/suppliers/ consultants/service providers.
Institutional Capacity Risks Implementation capacity varies across the participating departments and agencies and there are challenges to retaining staff for long-term periods. This could potentially impact timely execution	Medium	The Program benefits from the TA under the ADB's PBG which will directly support the capacity of these agencies implementing the Program.

of the Program's activities, thereby hindering disbursements.		
Overall Risks	Medium	

F. RBP Action Plan

Table 5. RBP Action Plan

Action	DLI*	Covenant*	Due Date	Responsible	Completion
Description				Party	Measurement**
Procurement of SPVG from suppliers will incorporate provisions for DD on LWC.	NA	NA	Throughout implementation	MOCCEE	Utility-scale sub-projects ⁶ : Borrower to: (1) include in the SPVGs tender or purchase documents agreed Representations; and (2) require its SPVGs suppliers to obtain similar confirmations from their SPVGs sub-suppliers. Non-utility scale sub-projects where SPVGs procured directly from suppliers: Borrower to: (1) conduct due diligence on LWC risks as appropriate to its circumstances and within the reasonable exercise of its control; (2) if feasible, request its SPVGs suppliers to require a similar level of due diligence of their SPVGs sub-suppliers; and (3) maintain records relating to the SPVGs for the Bank's or its independent auditor's review. Non-utility scale sub-projects where SPVGs procured indirectly:

⁶ Following consultations with the Borrower, the Bank will determine and inform the Borrower whether a sub-project is utility-scale or non-utility scale.

					Borrower to: (1) on best- effort basis and in a manner appropriate to its circumstances, identify the source of the SPVGs and conduct reasonable due diligence of LWC risks; (2) if feasible, request its SPVGs suppliers to require a similar level of due diligence of their SPVGs sub-suppliers; and (3) maintain records relating to the SPVGs for the Bank's or its independent auditor's review.
The agencies implementing the Program are required to check AIIB debarment list before the contract award.	NA	NA	Throughout implementation	MCI, MOCCEE	No contract award to debarred firm/individual.
Internal Audit Function for the RBF will be centralized and executed by SIAF. The Program will be included in the Audit plan commencing for FY 2025	NA	NA	Throughout implementation	SIAF	Internal audit plan approved by State Internal Audit Committee (SIAC); and the execution of audits semi-annually
Preparation of Internal Audit ToR approved by the Bank	NA	Yes	1 month after program effectiveness.	MOF	ToR submitted to the Bank for No Objection.
Preparation of External Audit ToR approved by the Bank	NA	Yes	1 month after program effectiveness.	MOF	ToR submitted to the Bank for No Objection.
Budgetary allocations, adequate in the Bank's view, are made against RBP activities annually	NA	Yes	December 31, each year	MOF	Such allocations included in GoM approved budgets, copies of which shall be provided to the Bank

The delayed	NA	NA	Throughout	MOF	Quarterly Program
contracts			implementation		Progress report submitted
payments for civil					to the Bank
works (i.e., related					
to renewable					
energy, waste					
management, and					
coastal protection)					
under the Program					
will be reported in					
the Program's					
progress report.					
Quarterly	NA	NA	14 days after	MOF, MCI,	MOF authorized
reconciliation of			previous	MOCCEE	Reconciliation Statements
accounts			quarter-end		

Annex 1: Results Framework Matrix

Results Monitoring Framework

Results Areas	PO/Outcome Indicators	DLI#	Unit of Meas.	Baseline (2023)	End Target (2026)
Results Area 1: Green	PO Indicator 1. Green Tax revenue	DLI#1	Percentage	Green tax revenue	7%
Taxation	mobilization increased to improve fiscal position		increase	collected (Baseline 2022)	
	PO Indicator 2. Reduction in use of single-use plastics	DLI#2	Percentage decrease	Import of SUP (Baseline 2022)	5%
Results Area 2:	PO Indicator 3. Increase in renewable energy	DLI#3	MW Capacity	53 MW	5MW
Climate Mitigation	capacity				
and Adaptation	PO Indicator 4: People benefitting from new waste management facilities (gender-disaggregated) under the Program	DLI#4	Number	Nil	10,000
	PO Indicator 5. People benefiting from new coastal protection measures (with gender disaggregated data) under the Program	DLI#5	Number	Nil	20,000
	Number of individuals participated on training and workshop on solid waste management (gender-disaggregated data)	-	Number	Nil	5,000

Indicator Description

The table below summarizes the proposed DLIs forming part of this Program. Achievements of these DLIs will be verified by an Independent Verification Agency before disbursements will be made.

Indicator	Description (Clear	Frequency	Data	Methodology	Responsibility	DL	.ls
Name	definition etc.)		Source	for data	for Data	Responsibility	Scalability of
(#)				collection	Collection	for Data	Disbursement
						Verification	(Yes/No)
DLI#1	Increase in revenue	Annually	MIRA	Green Tax	MIRA and	IVA will verify	No
	from Green Tax. This			collection	MOF	the tax	
	indicator aims to			data		collection data.	
	measure the increase in						
	funds generated by						
	expanding the scope						
	and the rate of Green						
	Tax. The Green Tax is						
	a levy imposed on						
	select tourist						
	accommodation at a						
	rate of USD3 and USD6						
	per day. The total						
	amount of Green Tax						
	collected in the country						
	is expected to increase						
	with the expansion of						
	the scope to include						
	integrated tourist						
	resorts and the						
	application of						
	differentiated green tax						
	rate based on the						

	number of registered rooms as follows:						
	 USD6 for tourist guesthouse located on an uninhabited island, or, has more than 50 registered rooms; USD3 for tourist guesthouse 						
	located on an inhabited island and has 50 or fewer registered rooms. This will be monitored through official tax collection numbers.						
DLI#2	Reduction in use of SUPs. This indicator aims to track the reduction in use of SUPs by through the import data of SUPs after a levy of USD0.13 fee per plastic bag was imposed upon enactment of the Waste Management Act.	Annually	Maldives Custom Service	SUP Import data	Maldives Custom Service and MOF	IVA will verify the SUP import data.	No

DLI#3	Increase in renewable	Semi-	MOCCEE	MOCCEE will	MOCCEE and	The IVA will	Yes
	energy capacity. The	annually		prepare a	MOF	verify the	
	Maldives has recently	-		report with		reports	
	enacted Climate			information		produced by	
	Emergency Act with the			on the RE		MOCCEE.	
	aim to achieve new-			based power			
	zero emissions by			generation			
	2030. The addition of			plants			
	renewable energy						
	capacity is encouraged						
	through several						
	initiatives. This indicator						
	measures the increase						
	in the renewable						
	energy-based power						
	production capacity in						
	the country.						
DLI#4	New waste	Semi-	MOCCEE	MOCCEE will	MOCCEE and	The IVA will	Yes
	management facilities	annually		prepare a	MOF	verify the	
	established. Most			report with		reports	
	islands in the Maldives			information		produced by	
	lack proper facilities for			on the WMC		MOCCEE.	
	processing and disposal			established			
	of municipal solid						
	waste. The Government						
	of Maldives has plans						
	for establishing Island						
	Waste Management						
	Centers (WMCs) at						
	each island for						
	decentralized						
	management of waste.						

	These WMCs will reduce littering and open dumping, and support better recycling and waste disposal. This indicator will measure the number of such WMC established in different parts of the country under the Program.					
DLI#5	Coastal protection measures adopted. The Maldives is highly vulnerable to climate change. The country has experienced shoreline changes for 95% of the inhabited islands from 2015-2023. This indicator measures the number of islands benefitting from the coastal protection measures under the Program	Semi- annually	MCI	MCI will prepare a report with information on the coastal protection measures implemented	The IVA will verify the reports produced by MCI.	Yes

Annex 2: Disbursement Linked Indicators, Disbursement Arrangements and Verification Protocols

Disbursement-Linked Indicator Matrix

Result Area (RA)	Disbursement Linked Indicators	Period	Disbursement Linked Results		d Amount) mn)
RA1: Green Taxation		Baseline (2022)	Green tax has limited coverage as it is imposed on select tourist accommodations but not on integrated tourist resorts etc.	-	
	DLI#1 Increase in revenue from Green Tax	Already Achieved DLR	Scope and rate of Green Tax is expanded	-	1.9625
	HOIH GIEEH TAX	Year 2 (2025)	Revenue from Green Tax is increased by 5.0%	0.9625	
		Year 3 (2026)	Revenue from Green Tax is increased by 7.0%	1.0	
		Baseline (2022)	No levy/tax on SUPs	-	
	DLI#2 Reduction in use of SUPs	Already Achieved DLR	Waste Management Act enacted to provide statutory levy on SUP	-	1.0
		Year 2 (2025)	Reduction in import of SUPs by 5%	1.0	
RA2: Climate		Baseline (2022)	Renewable energy capacity is 53MW	-	
Mitigation and Adaptation	DEIN'S AIREADY		Enactment of the Climate Emergency Act and the Maldives Energy Act to achieve emission target as per Nationally determined contributions		3.0
		Year 2 (2025)	Renewable energy capacity increased by 5MW	3.0	

	Baseline	Nil	-	
DLI4# New waste management facilities established	Already Achieved DLR	Cabinet approval of WMC prioritization	1.5	4.5
under the Program	Year 2 (2025)	5 new WMC established	1.5	
	Year 3 (2026)	5 new WMC established	1.5	
	Baseline	Nil	-	
DLI 5# Coastal protection measures	Already Achieved DLR	Cabinet approval of coastal protection prioritization	1.5	4.5
adopted under the Program	Year 2 (2025)	Coastal protection measures adopted in 10 priority islands	1.5	
	Year 3 (2026)	Coastal protection measures adopted in 10 priority islands	1.5	
		0.0375		
	Total			15.0

DLI Verification Protocol Table

#	DLI	Scalability of	Protocol to	evaluate achievement	of the DLI and data/result verification
		Disbursements (Yes/No)	Data source/agency	Verification Entity	Procedure
1	Increase in revenue from Green Tax	No	MIRA	AGO	MIRA will provide Green Tax collection numbers for the years 2022, 2023 and 2024. The IVA will verify the numbers from official records and confirm that the defined increase in the Green Tax has been achieved by using the data from 2022 as the baseline. The comparison will be made for the period before and after the implementation of the revised provisions of the Green Tax.
2	Reduction in use of SUPs		Maldives Custom Service	AGO	The Maldives Custom Service will provide SUP import data for the years 2022, 2023, 2024 and 2025. The IVA will verify the numbers from official records and confirm that the defined decrease in the import of SUP has been achieved by using the data for the year 2022 as the baseline. The comparison will be made for the period before and after the implementation of the levy on SUP.
3	Increase in renewable energy capacity		MOCCEE	AGO	MOCCEE will provide a report on the commissioning of the renewable energy-based power plants in the years 2023, 2024 and 2025 and 2026. IVA will pursue the reports, source confirmation from other authorities such as State Electric Company

				Limited (STELCO)/FENAKA and conduct
				random site checks to confirm the report.
4	New waste	MOCCEE	AGO	MOCCEE will provide a report on the
	management			commissioning of the IWMCs in the years
	facilities			2023, 2024 and 2025 and 2026. IVA will
	established			pursue the reports, source confirmation
				from other authorities such as local Island
				Councils and conduct random site checks
				to confirm the report.
5	Coastal	MCI	AGO	MCI will provide a report on the coastal
	protection			protection measures undertaken in the
	measures			islands in the years 2023, 2024 and 2025
	adopted			and 2026 as per the MCI's work plan. IVA
				will pursue the reports, source confirmation
				from other authorities such as local Island
				Councils and conduct random site checks
				to confirm the report.

Bank Disbursement Table

Category (including Disbursement Linked Indicator as applicable)	Disbursement Linked Result (as applicable)	Amount of the Credit (USD million)	Disbursement Calculation Formula	
DLI#1 Increase in revenue	Scope and rate of Green Tax is	-	-	
from Green Tax	expanded	-		
	Revenue from Green Tax is	0.9625	-	
	increased by 5%	0.9023		
	Revenue from Green Tax is	1.0		
	increased by 7%	1.0		
DLI#2 Reduction in use of	Waste Management Act enacted to	_	-	
SUPs	provide statutory levy on SUP			
	Reduction in import of SUPs by 5%	1.0	-	
DLI#3 Increase in	Enactment of the Climate Emergency	_	-	
renewable energy capacity	Act and the Maldives Energy Act			
	Renewable energy capacity	3.0	Pro-rata per MW	
	increased by 5MW	0.0		
DLI#4 New waste	Cabinet approval of WMC	1.5		
management facilities	prioritization			
established	5 new WMC established	1.5	Pro-rata per WMC	
	5 new WMC established	1.5	Pro-rata per WMC	
DLI#5 Coastal protection	Cabinet approval of coastal	1.5	-	
measures adopted	protection prioritization			
	Coastal protection measures adopted	1.5	Pro-rata per island	
	in 10 priority islands			
	Coastal protection measures adopted	1.5	Pro-rata per island	
	in 10 priority islands			
Front-end fee		0.0375		

Annex 3: Implementation Support

AIIB will support the implementation of the Program through close coordination with the agencies implementing the Program and ADB. ADB as part of their PBG is providing technical support to the GoM in implementing the fiscal reforms. Further, ADB has also provided a TA to improve the procurement system and public investment management which would directly benefit the Program. AIIB would closely supervise the Program's implementation, while mitigating the identified risks and effectively responding to issues and challenges as they arise. It will include a concerted plan of technical, fiduciary, and safeguards support to ensure due diligence over the course of the Program's implementation.

AIIB will closely monitor the adherence to the RBP Action Plan and provide necessary support. AIIB may engage local experts for M&E and other areas if required to support the capacity of the MOF in collating information from other ministries, coordinating with the IVF, preparing regular monitoring reports for submission to AIIB including the results under the RMF. AIIB will also closely work with IVF in ensuring the defined verification protocol is followed and the IVF reports properly documents the achievement of DLIs.

Main focus of Implementation Support (template)

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First six months	Technical support	PTL/Co-PTL	2-4 weeks	
First 12 months	FM supportMonitoring support	FM specialistM&E specialist	2-4 weeks 2-4 weeks	
12-36 months	FM supportMonitoring support	FM specialist	2-4 weeks	

Task Team Skills Mix Requirements for Implementation Support (template)

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Project Team Leader	2-4 annually	one or two per year	
Procurement Specialist	2-4 annually	one or two per year	

FM Specialist	2-4 annually	one or two per year	
E&S Specialist	2-4 annually	one or two per year	

Role of Partners in RBP implementation

Name	Institution/Country	Role
Asian Development Bank	-	ADB through the ADB's Program is leading the policy and institution reform dialogue with the GoM to support fiscal sustainability. ADB through
		their TA is also supporting augmenting the capacity of the agencies implementing the Program.

Annex 4. Economic Analysis

Background

- 1. **Fiscal position**. Despite the post-Covid economic rebound, fiscal stress in the Maldives worsens compared to its pre-Covid level. The overall fiscal deficit is estimated to be 8.6 percent of GDP in 2023, which is 2 percentage point higher than its level in 2019.⁷ The fiscal space was already constrained prior to the pandemic due to significant expenditure in social welfare, subsidies, health, and student loan scheme.⁸ However, the pandemic exacerbated these challenges, further straining the fiscal outlook.
- 2. In 2024, the Maldives is expected to maintain a high fiscal deficit at 8.6 percent of GDP, coupled with high risk of external and overall debt distress due to elevated fuel prices and import demands. Therefore, strengthening fiscal institutional and public financial and debt management frameworks is critical to enhance the credibility and effectiveness of fiscal policy.
- 3. Climate change vulnerability. The Maldives faces significant exposure to climate change risks, with half of its housing structures located within 100 meters of the coastline, and 90 percent of its islands experiencing annual flooding. Despite the exposure, the Maldives ranks low in adaptive capacity relative to its per capita income, indicating a substantial gap in the country's climate action efforts. 10
- 4. Addressing this gap entails significant financing needs for climate adaptation and mitigation. IMF estimated the cost of adaptation and mitigation to be at USD8.8 billion and USD1 billion respectively, totaling to USD9.8 billion, nearly twice of the country's GDP in 2018.
- 5. High adaptation costs and limited fiscal space. The Maldives is among the nations with high climate adaptation costs and limited fiscal space. Given the high growth-debt trade-off, financing adaptation in the Maldives may need strategies such as strengthening domestic revenue mobilization, expenditure rationalization, and prioritization in adaptation investment, or grant financing. ¹¹

Program's benefit

6. Fiscal sustainability. The Program directly contributes to the improvement of fiscal sustainability through: (1) domestic resource mobilization by enhancement of fiscal revenue via green taxation and single-use plastic bag tax levy; and (2) improves debt and expenditure rationalization via energy subsidy management by supporting the transition to renewable energy. The Program also indirectly contributes to fiscal sustainability through investments in coastal protection and waste management centers (Figure 1). The Program also strengthens the Maldives' macroeconomic position through the current

⁷ World Economic Outlook, October 2023.

⁸ IMF. 2019. Maldives: 2019 Article IV Consultation Staff Report.

⁹ IMF. 2024. IMF Staff Completes 2024 Article IV Mission to the Maldives.

¹⁰ IMF (2021) constructed country-by-country composite indices on adaptive capacity which has been found to be positively correlated with income levels, suggesting that development matters for climate resilience.

¹¹ International Monetary Fund. 2021. Fiscal Policies to Address Climate Change in Asia and the Pacific.

- account and foreign exchange reserves improvement as the reliance on imported fossil fuel-based power generation and encouraging renewable energy-based power generation.
- 7. Climate resilience. Beyond fiscal sustainability, the Program also delivers benefit to the enhancement of climate resilience. These include reducing greenhouse gas emissions by shifting from fossil fuels to renewable energy sources and minimizing single-use plastic consumption. Additionally, the Program aims to mitigate damage from coastal floods through coastal protection measures and protect the environment through improved waste management.
- 8. **Other benefits.** Through investments in climate resilient coastal protection measures, the Program helps reduce damages to life and property from the tidal flood and sea-level rise. The Program also contributes to the employment creation through labor-intensive construction works.

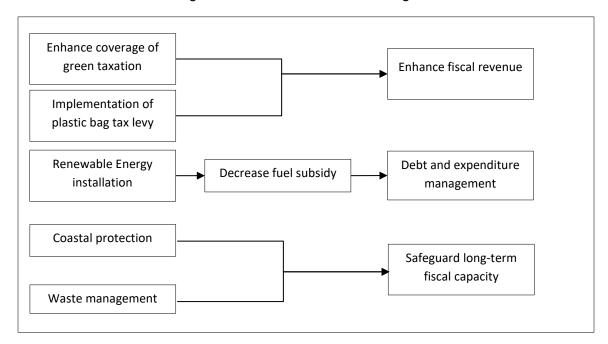


Figure 1. Fiscal Benefits of the Program

Source: AIIB Staff.

Renewable Energy: Solar panel installation

9. In 2022, 98 percent of Maldivian households utilized gas and 2 percent used electricity.¹² Although household access to electricity is universal at 100 percent, the majority is derived from non-renewable energy sources. Only 6 percent of the electricity generated in 2021, amounting to 49 GWh out of 837 GWh, originated from renewable sources, primarily solar energy.¹³

¹² Bureau of Statistics, Maldives. 2022. Household Characteristics: An analysis from Census 2022.

¹³ International Renewable Energy Agency (IRENA). 2023. Energy Profile: Maldives.

- 10. This highlights the significant dependence on imported and subsidized fossil fuels, worsening fiscal vulnerability against price shocks and global macroeconomic conditions due to fuel subsidy expenditures. In 2022, the Government expenditure on fuel and electricity subsidy is estimated to be USD208 million, approximately 37 percent of total Grants, Awards, and Subsidies, or 51 percent of the total subsidies.¹⁴
- 11. The Program will support the installation of solar PV on the rooftops of houses and buildings in selected island, promoting alternatives to fossil-fuel generated electricity. As the program aims to increase the capacity of renewable energy source from 53MW in 2022 to 58MW in 2025, it is estimated that at least 2.4 million liter of diesel fuel is avoided annually. Further, with the shift from fossil-fuel generated energy to solar-generated energy from the increased solar PV capacity, the greenhouse gases emissions is reduced by at least 6,141 metric tons annually, which is equivalent to USD2.3 million in 10 years at a 9 percent discount rate. 16,17,18
- 12. The present value of the total benefit from avoided diesel fuel and GHG emission savings is USD8.4 million at 9 percent discount rate in 10 years.

Benefit	Present Value (USD million)
Diesel cost savings	8.74
2) GHG emission savings	2.8
Total Benefit	8.4

- 13. Although the Program supports a wider set of Government programs which include other sectors and initiatives, focusing solely on the support to renewable energy component of the Program has already revealed a substantial benefit of the Program, i.e., USD20.15 million, significantly above the Program total financing of USD15 million.
- 14. Additionally, the Program also helps reduce fuel subsidy through the shift away from the fossil-fuel generated electricity. By applying the same assumptions, the Program will result in fuel subsidy savings of USD2.8 million in 10 years, discounted at the same economic discount rate.

Green taxation

15. Benefit on fiscal sustainability: In 2023, the central Government collected USD65 million of green taxation, which accounts for 4.2 percent of the tax revenue. 19 The green taxation is projected to grow by 8.6 percent to USD70.3 million in 2024. It used to have limited coverage because it imposed on select tourist accommodation only, i.e., excluding resort hotels and integrated tourist resorts among others. The Program will support the implementation of Green Tax regulation to widen the coverage by including integrated

¹⁴ Ministry of Finance, Maldives. 2024 Approved Budget Book (English Translation)

¹⁵ Energy rate for diesel is estimated at 39.6 MJ/L and 30% fuel efficiency ratio per Acelerex report.

¹⁶ Electricity is assumed to be utilized for 24 hours per day, 365 days per year, at 18 percent on average (IRENA: capacity utilization rate in 2021)

¹⁷ Unit carbon footprint of solar vs natural gas is collected from Schlomer, S., et.al., 2014: Annex III: Technology-specific cost and performance parameters. In: Climate Change 2014: Mitigation of Climate Change. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf

¹⁸ Carbon prices is sourced from Stern and Stiglitz, 2017, as per AIIB Guidance Note on Cost-Benefit Analysis of Projects, July 2023.

¹⁹ Maldives Monetary Authority, Ministry of Finance. https://www.mma.gov.mv/#/statistics/fiscalsector

tourist resort, hotels, and other similar tourist establishment under the green tax, and increasing the rate levied on guesthouses with more than 50 registered rooms and guesthouses in inhabited islands from USD3 per day to USD6 per day per guest (Table 1). The action is expected to increase the Government's revenue from green taxation by 5 percent in 2026 compared to its 2022 level.

Table 1. Green Taxation Changes

Accommodations	Nov	Oct	July 2022-Sept 2022	Sept	Jan 2023
	2015-	2016-		2022-Dec	onwards
	Sept	July		2022	
	2016	2022			
Tourist resort	USD6	USD6	No green tax	USD6	USD6
Tourist hotel	USD6	USD6	implemented due to	USD6	USD6
Tourist vessel	USD6	USD6	ongoing amendment	USD6	USD6
Tourist guesthouse	NA	USD3		USD3	-
Integrated tourist resort					USD6
Resort hotel					USD6
Hotel (located on an uninhabited					USD6
island, OR, has more than 50					
registered rooms)					
Hotel (located on an inhabited island					USD3
and has 50 or fewer registered					
rooms)					
Tourist guesthouse (located on an					USD6
uninhabited island, OR, has more					
than 50 registered rooms)					
Tourist guesthouse (located on an					USD3
inhabited island and has 50 or fewer					
registered rooms)					

Source: Collected by AIIB Staff from Maldives Inland Revenue Authority website

- 16. The widening of the coverage of green taxation is estimated to bring in additional USD3 million to as fiscal revenue annually on average. This translates to ENPV of USD15.7 million in 10 years at economic discount rate of 9 percent.
- 17. Benefit on climate resilience: Since its inception in 2019, the revenue collected from green taxation initiative which is deposited in the Maldives Green Fund has financed 230 climate-related projects, totaling USD175 million. The fund covers projects such as clean energy, coastal protection, waste management, water and sewerage, and sanitation projects (Figure 2).

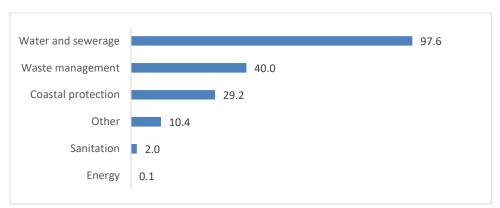


Figure 2. Projects Financed by the Maldives Green Fund (USD million)

Source: AIIB Staff Analysis from Green Fund Report by the Maldives Monetary Authority, Ministry of Finance.

Plastic bag tax levy

- 18. Benefit on fiscal sustainability: Since the Government introduced plastic bag fee under the Waste Management Act in April 2023, the state had accrued more than USD800 thousand in plastic bag fees by the end of 2023. ²⁰ This contributed to 0.28 percent of the total Goods and Services Tax (GST) collected in 2023. As of January 31, 2024, additional USD90 thousand were collected.
- 19. Using conservative assumptions where the additional revenue streams to the public budget is only half of what have been received in 2023, the ENPV of this particular investment to implement the tax levy on SUPs is USD2.7 million in 10 years at 9 percent discount rate.
- 20. Benefit on climate resilience: The plastic bag levy is estimated to have reduced plastic bag consumption approximately 55.5 percent between April 2023 and January 2024, from 15.7 million to 7 million plastic bags. This estimation is based on the following assumptions:
 - 1) The price elasticity of demand for plastic bag in the Maldives is equivalent to the import elasticity of nonbiodegradable plastic bags which was imposed between 2012 and 2020. The import of nonbiodegradable plastic bags of more than 30*30 cm long and bags over 50-micron thickness is taxed at a rate of 400 percent.²¹ This resulted in 76 percent reduction in the import of nonbiodegradable plastic bags from 2012 to 2017.²²
 - 2) The plastic bag tax levy implemented under the Waste Management Act is imposed on all kinds of plastic bag at a fixed rate of MVR2 per bag.
 - 3) Before the Waste Management Act was enacted, it is assumed that the consumers bear the production or import cost of the plastic bag which was passed by the producers. Afterwards, the consumers bear the tax levy on top of the production cost of the plastic bag.

²⁰ Mohamed A. Haleem. "Maldives' Plastic Bag Fee Yields MVR 14 Million," Maldives Republic, February 2024. Maldives' Plastic Bag Fee Yields MVR 14 Million (myrepublic.com)

²¹ Ismail, A.A., and M.A. Hussain. 2019. Report: Assessment of Potential Alternatives to Single Use Plastics. Zero Waste Maldives.

²² Karasik, R. 2022. "Plastic Pollution Policy Country Profile: Maldives." NI PB 22-08. Durham, NC: Duke University.

- 4) The cost of producing plastic bag is estimated at USD0.05 or MVR0.77 per plastic bag. Like many other small island economies, the Maldives is dependent on imports for consumption. Thus, the cost of plastic bag is estimated by calculating the average value of plastic bag import from Bangladesh, the biggest exporter of plastic bag in the Maldives (contributing 79 percent of the total plastic bag import). In 2018, Bangladesh exported 405 tons of plastic bags to the Maldives, valued at USD2.2 million to the Maldives.^{23, 24}
- 21. The reduction of 6.8 million plastic bag consumption equates to approximately 0.14 percent of the Maldives' total annual plastic footprint. The country's plastic footprint constitutes around 12 percent of its total waste, amounting to 43,143 tons per year. ²⁵ Carbon emission saved from the reduction is estimated to be 1,360 metric tons, or equivalent to USD94,500. ^{26,27}

Coastal protection

- 22. Benefit on fiscal sustainability: Sea-level rise (SLR) poses a significant threat to economies heavily reliant on climate-sensitive sectors, as is the case with the Maldives' tourism sector. 28 SLR can lead to a substantial reduction in fiscal revenues due to its negative impact to the tourism sector and thus lowering the economic growth. On the other hand, the Governments may find themselves with substantial and unanticipated expenditure to mitigate the impacts of SLR, such as population displacement and infrastructural strain, leaving them with significant public financing gaps. This simultaneous decline in revenues and increase in expenditure could erode the Government's fiscal capacity, particularly if long-term economic growth prospects are compromised. 29
- 23. Empirical evidence shows the positive impacts of significant investment in adaptation against SLR, such as coastal protection projects, not only on GDP growth and development, but also reductions in public debt even when the adaptation is financed in deficit spending, as the cost of avoided damages surpasses adaptation expenses. This

²³ Source: World Integrated Trade Solution (WITS). Product considered in the estimation is "Plastic hazardous waste disposal bags" with HS product code 392329.

 $^{^{24}}$ Number of plastic bags imported is estimated using the <u>formula</u> of Polybag Weight (lbs per thousand bags) = [Width (inch) x Length (inch) x Milage] / 15. It is assumed that the size of the plastic bag imported is uniformed at 30 x 30cm, with 50-micron thickness, resulting in 8.7 kilograms per thousand bags.

²⁵ Maldives Ocean Plastics Alliance (MOPA). 2021. Socio-Economic Impact Assessment of the Use of PET in the Maldives.

²⁶ Unit emission of plastic bag production is assumed to be 200 grams of carbon, sourced from https://8billiontrees.com/carbon-offsets-credits/carbon-ecological-footprint-calculators/carbon-footprint-of-paper-vs-plastic/#:~:text=Plastic%20Bags%20Greenhouse%20Gas%20Emissions,What%20is%20this%3F&text=Calculating% 20the%20CO2%20produced,of%20oil%20(energy%20consumption).

²⁷ Carbon prices is sourced from Stern and Stiglitz, 2017, as per AIIB Guidance Note on Cost-Benefit Analysis of Projects, July 2023.

²⁸ Heller P. 2003. Who Will Pay? Coping with Aging Societies, Climate Change, and Other Long-Term Fiscal Challenges. Washington DC: International Monetary Fund.

²⁹ Farid et al, 2016. After Paris; Fiscal, Macroeconomic and Financial Implications of Global Climate Change, IMF Staff Discussion Notes 16/01, International Monetary Fund.

- effect is particularly pronounced in Asian countries, where the exposure to SLR is higher and the capacity to adapt and mitigate climate change is lower.³⁰
- 24. Benefit on climate resilience: The Program includes support in improving coastal protection in 10 priority islands, providing protection against tidal floods to an estimated total of 16,369 population.³¹ Similar project by JICA, Building Climate Resilient Safer Islands in the Maldives, has been assessed as economically viable with an estimated EIRR of 8 percent and ENPV of USD31.9 million at an economic discount rate of 5 percent by including reductions in physical damage, people's lives, and economic damage as the project's benefits.³²
- 25. Another similar project by ADB, Sustainable Coastal Protection and Management Investment Program in India, provided EIRR of 21.9 percent with ENPV of INR1,547 million at 12 percent discount rate. The benefit covered in the analysis includes savings in dredging costs for the fishing harbor, prevention of erosion and storm damage to land and buildings, avoided costs of replacing the road, avoided resettlement costs, and benefits of future tourism and recreational development of the beach.

Waste management

- 26. The waste generation rate among inhabitants of Small Island Developing States (SIDS) averages 2.30 kg per person per day, which surpasses the global average by 48 percent at 1.55 kg.³³ However, due to the Maldives' small landmass and escalating sea levels, landfilling emerges as an ill-suited waste management solution. Presently, the Maldives' only operational landfill is located on the manmade island of Thilafushi, but its capacity falls short of meeting the nation's waste disposal needs. Experts project that only 20 hectares of landfill space remain as Thilafushi faces the imminent threat of rising sea levels, which could result in waste from the landfill polluting the Indian Ocean.³⁴ These prevailing waste management practices endanger the Maldives' reputation as a pristine marine environment and a premier tourist destination.
- 27. Benefit on fiscal sustainability: Improving the cleanliness and attractiveness of the local environment will boost the Maldives' reputation as a tourist destination, consequently driving increased demand and economic growth. This growth, in turn, will improve fiscal sustainability through various avenues, such as increased revenue from green taxes, land rent, GST, etc. For instance, research by ADB on improving waste management practices in the Solomon Islands estimates 1 percent increase in the number of international tourists

³⁰ Parrado R, et al, 2020. Fiscal effect and the potential implications on economic growth of sea level rise impacts and coastal zone protection. Climate Change, Vol 160, p. 283—302.

³¹ Estimation is based on the top ten priority island of the Government of Maldives, including Funadhoo, Dhuffushi, Meedhoo, Kudahuvadhoo, Mathiveri, Dhuvaafaru, Thulusdhoo, Humandhoo, Veyvah, and Dhigurah Island.

³² The project has four components: 1) Establishment of the Integrated Coastal Zone Management; 2) Implementation of Coastal Conservation/Protection Measures against Coastal Erosion; 3) Development of Disaster Warning and Information Dissemination; and 4) Development of Basic Data Collection and Sharing System Related to Climate Change. Even when the assessment only considers Component (2), the project remains economically viable with an EIRR of 9 percent and ENPV of USD21.5 million.

³³ Seadon, Jeff; Giacovelli, Claudia. 2019. Small Island Developing States: Waste Management Outlook. United Nations Environment Programme.

³⁴ Karasik, R. op.cit.

- as a result, with an estimated 15 percent increase in the average expenditure per tourist.³⁵ In 2022, the Maldives was visited by 1,675,303 tourists, which generated a total of MVR11,452 million of tourism revenue to the Government through collection of land rent, tourist bed-night tax, green tax, tourism GST, and lease period extension fee.³⁶
- 28. On top of that, the financial demands associated with Solid Waste Management (SWM) are substantial, estimated to consume between 20 to 50 percent of municipal expenditures.³⁷ Despite the escalating volume of solid waste in line with improving living standards, available financing has failed to keep pace with the growing needs. Waste reduction and management potentially saves SIDS municipalities between USD35 to USD400 per ton, contingent upon location and the utilization of waste management technologies.³⁸
- 29. A similar project financed by ADB, the Greater Male Environmental Improvement and Waste Management Project, projected an EIRR of 17.5 percent. The project's benefits include reductions in household waste collection and disposal costs, mitigated health hazards, decreased solid waste disposal time, and revenue generated from recycled waste. Spanning 35 inhabited islands across the Alifu Alifu Atoll, Alifu Dhaalu Atoll, Kaafu Atoll, and Vaavu Atoll, including the capital city of Male, the project caters to 51 percent of the Maldives' population.

³⁵ Hampel-Milagrosa, Aimee; and Castro-Wooldridge, Vivian. 2023. Using Ex-Ante Cost-Benefit Analysis to Improve Waste Management in the Pacific. ADB Briefs No. 246.

³⁶ Ministry of Tourism, Maldives. 2023. Tourism Yearbook 2023.

³⁷ ADB. 2014. Solid Waste Management in the Pacific: Financial Arrangements.

³⁸ United Nations Environment Programme, op.cit.

Annex 5: Country Credit Fact Sheet

Recent Economic Development

- 1. The Maldives is an upper-middle income country with GDP per capita at USD 16,822 and a population of 0.40 million in 2023.³⁹ The Maldives grew at a healthy rate of 6.4 percent between 2010 to 2019. It was severely impacted by COVID-19 pandemic, given its overwhelming dependence on international tourism, with the economy contracting by more than 33 percent in 2020. The decline in tourist arrivals had a ripple effect on the broader economy affecting other sectors like transportation, hotel and restaurants etc. The containment measures also led to a slowdown in domestic activity like construction. As the cases started declining from mid-2021 and vaccination rate increased, the government started easing COVID-19 containment measures. A revival in tourism resulted in the economy growing by 37.7 percent in 2021 and further 13.9 percent in 2022, reflecting strong post-pandemic growth. The economy grew by 4.4 percent in 2023 as tourist arrivals continued to increase reflecting pent-up demand and lifting of travel restrictions in most countries, including China. Other sectors like construction also contributed to growth as government initiated big-ticket infrastructure projects.
- 2. Inflation has remained stable since 2022, averaging 2.6 percent in 2022 and 2023. High international commodity prices and imposition of GST have been offset by subsidies on food staples, fuel and electricity and administered price controls. The financial sector faces several systemic vulnerabilities with the key vulnerability arising from the banking sector increasingly financing the government and SOE debt.
- 3. Like most other countries in the region, the Maldives provided a fiscal stimulus to minimize the economic impact of the pandemic, including increasing funds allocated for the health sector, subsidized utility bills and special allowances to people who lost their jobs. The additional expenditure, combined with a shortfall in revenue and contraction of GDP, resulted in the fiscal deficit widening to over 23.5 percent of GDP in 2020 and public debt surging to 154 percent of GDP. The fiscal position has remained weak since then, averaging 12.7 percent between 2021 and 2023. An improvement in revenue has been offset by an ambitious program of capital spending and rise in recurrent expenditure like salaries, interest costs and subsidies. The hike in GST (effective from January 2023) resulted in higher share of revenue in GDP in 2023 but failed to keep pace with higher fiscal expenditure. As a result, the fiscal deficit increased from 11.0 percent of GDP in 2022 to 13.4 percent of GDP in 2023. More than half of the fiscal deficit was funded by external borrowing. At more than 118 percent of GDP, the Maldives' public debt remains significantly high and remains at high risk of external and overall debt distress.
- 4. The current account deficit widened to 22.8 percent of GDP in 2023 compared to 16.1 percent in the previous year. Although the trade deficit improved, the contraction in the services' surplus resulted in the worsening of the current account deficit. Despite an increase in tourist arrivals in 2023, the travel receipts contracted. To avoid being impacted by the planned hike of

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³⁹ The income group classification for fiscal year 2023 is based on WB criteria. The data sourced from World Economic Outlook April 2024 Database.

GST in 2023, advance travel sales for 2023 were booked in the last quarter of 2022. Gross reserves declined to USD 588.6 million, which can cover around 2 months of imports.

5. In October 2023, Moody's affirmed the Maldives' rating as Caa1 with a stable outlook, reflecting persistent liquidity constraints and elevated vulnerability risks emanating from large financing needs and wide current account deficit. This is likely to push pressure on thin foreign exchange rate reserves. Fitch downgraded Maldives to 'CCC+' in June 2024 to reflect higher risks from worsening external financing and liquidity metrics.

Economic Indicators Selected Macroeconomic Indicators – the Maldives (2021-FY2025)

Economic Indicators	2021	2022	2023*	2024*	2025*
Real GDP growth	37.7	13.9	4.4	5.2	6.5
CPI Inflation (average, % change)	0.2	2.6	2.6	3.8	3.0
Current account balance (% of GDP)	-8.4	-16.1	-22.8	-19.4	-13.9
General government overall balance (% of GDP)	-13.8	-11.0	-13.4	-9.4	-6.9
General government gross debt (% of GDP)	119.9	110.4	118.7	121.7	118.8
External public debt (% of GDP)	15.1	15.4	17.7	18.1	18.1
Gross international reserves (USD mil.)**	805.8	832.1	588.6	534.4	
Exchange rate (BDT/USD, EOP)**	15.39	15.40	15.40	15.41	

Note: * denotes projected figures.

Economic Outlook

- 6. According to IMF's estimates, the economy is expected to grow by 5.2 percent in FY2024. Tourism and related services are expected to get a strong boost from a rising number of tourist arrivals. The government has embarked on promotional activities and is negotiating additional flights from China to bolster tourists. Construction activity may slowdown in 2024 as the government has significantly reduced the capital expenditure for 2024. However, a growth in private investment, especially in tourism and real estate is expected to offset some of the decline. Growth in fisheries is also expected to bolster the economy as the government embarks upon diversification and promotion. A rise in construction activity and higher tourist arrivals, as key infrastructure bottlenecks are plugged, will help the economy grow by 6.5 percent in 2025.
- 7. Inflation is expected to rise to 3.8 percent as the government shifts from blanket to targeted subsidies for fuel, electricity, and staple foods. Easing of global commodity prices is expected to temper the rise in inflation. Inflation is expected to decline in 2025 on moderation of food and energy prices and a high base effect.

^{** 2024} reserves and exchange rate are from the Maldives Monetary Authority and are as of March 2024. Source: IMF Report 23/365, IMF World Economic Outlook Database April 2024, and Maldives Monetary Authority

- 8. The fiscal deficit is expected to narrow in 2024 driven by subsidy reforms and lower public capital expenditure. The deficit is expected to decline further to 6.9 percent of GDP in 2025 on the back of higher revenue. The Maldives faces heightened debt service obligations in the near term with refinancing risks. External debt service payments are set to increase from current levels of USD 300 million per year as repayment of several credit facilities bonds commence.
- 9. The current account deficit is expected to decline but remain elevated. Higher tourism receipts and easing of global commodity prices will help in reducing the current account deficit. However, a rise in construction related imports for the government's massive infrastructure investments will contain the decline in current account deficit.