

# **GEF - PROJECT IMPLEMENTATION REPORT (PIR)**

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### UNEP GEF PIR Fiscal Year 2024 Reporting from 1 July 2023 to 30 June 2024

## **1 PROJECT IDENTIFICATION**

## 1.1 Project Details

GEF ID: 10281	<b>Umoja WBS:</b> SB-017345
SMA IPMR ID:44213	Grant ID:S1-32GFL-000673
Project Short Title:	
Antigua and Barbuda E-mobility	
Project Title:	
Antigua and Barbuda Sustainable Low-Emission Isla	nd Mobility Project
Duration months planned:	48
Duration months age:	38
Project Type:	Full Sized Project (FSP)
Parent Programme if child project:	10114
Project Scope:	National
Region:	Latin America and Caribbean
Countries:	Antigua and Barbuda
GEF Focal Area(s):	Climate Change Mitigation
GEF financing amount:	\$ 3,245,000.00
Co-financing amount:	\$ 9,719,315.00
Date of CEO Endorsement/Approval:	2021-02-19
UNEP Project Approval Date:	2021-04-15
Start of Implementation (PCA entering into force):	2021-04-16
Date of Inception Workshop, if available:	
Date of First Disbursement:	2021-06-18
Total disbursement as of 30 June 2024:	\$ 1,175,385.00
Total expenditure as of 30 June:	\$ 463,288.00
Midterm undertaken?:	n/a
Actual Mid-Term Date, if taken:	2024-07-01

Expected Mid-Term Date, if not taken:	
Completion Date Planned - Original PCA:	2025-04-30
Completion Date Revised - Current PCA:	
Expected Terminal Evaluation Date:	2025-10-31
Expected Financial Closure Date:	2026-04-30

### **1.2 Project Description**

#### Component 1: Institutionalization of Low Carbon and Climate Resilient Electric Mobility

This component aims to strengthen national cooperation and coordination, build a knowledge base and capacity, and raise awareness for accelerating the adoption of lowcarbon and climate resilient electric mobility in Antigua and Barbuda. A multi-stakeholder strategy will be implemented to ensure that the design, implementation, and evaluation of interventions draws on the inputs and interests of all national stakeholders. Capacity will be built by supporting public stakeholders to undertake a comprehensive technical analysis of the possibilities for transforming the island to renewable energy and low-carbon and climate resilient transport. Further capacity will be built by dedicated trainings, which draw on the global programme. Based on these outputs, cooperation and coordination will be strengthened, firstly through the development of a national target on electric mobility. A national plan will then be developed for achieving this target, through broad ranging consultations mechanisms. Finally, public awareness will be raised to build support for implementing the plan and to inform of the benefits and viability of low-carbon electric mobility in Antigua and Barbuda.

#### Component 2: Short Term Barrier Removal Through Low Carbon Electric Mobility and Climate Resilient Renewable Energy Demonstrations

This component aims to provide evidence through demonstrations to local stakeholders of the viability of electric mobility and renewable energy. It will address nonfinancial barriers related to a lack of confidence and awareness of the viability of electric mobility for island conditions through the demonstration of electric vehicles in two high-visibility public fleets: buses and taxis. Additionally, through the electric buses this component aims to demonstrate a bus system which can provide a more effective service than the existing service and thus encourage a modal shift towards public transport. By supporting the taxi and bus drivers and owners to gain confidence in the technology, this component hopes to generate interest among the drivers to purchase electric vehicles. Further, this component will generate data to support policymaking and provide further evidence on the technology viability of clean renewable energy and its connection to an interconnected grid system. It will also demonstrate the capacity of the existing grid to accommodate renewable energy.

#### Component 3: Preparing for Scale Up a Replication of Low Carbon Electric Mobility and Climate Resilient Renewable Energy

Component 3 focuses on scaling-up electric mobility and renewable energy in the medium – to long-term. It aims to reduce barriers to the uptake of electric vehicles by installing grid-interactive solar charging stations across the country. Further, it will establish standards, regulations, and policy frameworks to further reduce this cost differential and incentivize adoption of electric vehicles. The output will establish data collection mechanisms to support effective policy development and monitoring of efforts in the transport and power generation sectors.

#### Component 4: Long Term Environmental Sustainability of Low Carbon Electric Mobility

Component 4 focuses on building capacity and establishing policies, standards, and regulations to ensure the long-term environmental sustainability of electric mobility in Antigua and Barbuda. It aims to achieve this by building the capacity of waste companies on the re-use and disposal of conventional and electric vehicles and electric vehicle batteries. It also works to achieve this by establishing standards and a policy framework for regulating the disposal of electric and conventional vehicles. Finally, it aims to establish standards and policy framework for regulating emissions from the power generation sector, as well as for integrating renewable energy into the grid, setting a level playing field for the mass uptake of grid-connected renewable energy.

Executing Agency: Department of Environment

Main Project Partners: Antigua and Barbuda Bus Association, United Taxi Association, Antigua and Barbuda Transport Board (ABTB), National Solid Waste Management Authority (NSWMA), West Indies Oil Company (WIOC).

### **1.3 Project Contacts**

Division(s) Implementing the project	Climate Change Division
Name of co-implementing Agency	
Executing Agency (ies)	Department of Environment, Ministry of Health and the Environment
names of Other Project Partners	
UNEP Portfolio Manager(s)	Asher Lessels

UNEP Task Manager(s)	Asher Lessels
UNEP Budget/Finance Officer	Fatma Twahir
UNEP Support Assistants	Jone Orbea and Solange Rodriguez
Manager/Representative	Diann Black-Layne
Project Manager	Zariya Russell
Finance Manager	Chalisa Phillip
Communications Lead, if relevant	

## **2** Overview of Project Status

## 2.1 UNEP PoW & UN

UNEP Current Subprogramme(s):	Thematic: Climate action subprogramme
UNEP previous	
Subprogramme(s):	
PoW Indicator(s):	• Climate: (ii) Amounts provided and mobilized in \$ per year in relation to the continued existing collective mobilization goal of the \$100 billion commitment through to 2025 with UNEP support.
UNSDCF/UNDAF linkages	The project contributes to the following strategic objective of the UN Multicounty SDCF- The English and Dutch Speaking Caribbean (2022- 2026):
	Priority area 3 : resilience to climate change and shocks and sustainable natural resource management
	Outcome 5: Caribbean people, communities, and institutions have enhanced adaptive capacity for inclusive, gender responsive disaster
	risk management and climate change adaptation and mitigation
	Outcome 6: Caribbean countries manage natural resources and ecosystems strengthening their resilience and enhancing the resilience
Link to relevant SDG Goals	and prosperity of the people and communities that depend on them.
Link to relevant 3DG Goals	Goal 7: Ensure access to anordable, reliable, sustainable and modern energy for all
	Goal 13: Take urgent action to compat climate change and its impacts
Link to relevant SDG Targets:	<ul> <li>7.1 By 2030, ensure universal access to affordable, reliable and modern energy services</li> </ul>
	<ul> <li>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</li> </ul>
	7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in
	developing countries, in particular least developed countries, small island developing States and landlocked developing
	countries, in accordance with their respective programmes of support
	<ul> <li>13.2 Integrate climate change measures into national policies, strategies and planning</li> </ul>
	<ul> <li>13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least</li> </ul>
	developed countries and small island developing States, including focusing on women, youth, and local and marginalized communities

## 2.2. GEF Core and Sub Indicators

GEF core or sub indicators targeted by the project as defined at CEO Endorsement/Approval, as well as results

	Targets - Expected Value			
Indicators	Mid-term	End-of-project	Total Target	Materialized to date
6- Greenhouse gas emissions mitigated	20 tCO2e	200 tCO2e	218,698 tCO2e direct	

	Targets - Expected Value			
Indicators	Mid-term	End-of-project	Total Target	Materialized to date
			215,496 tCO2e indirect	
			434,194 tCO2e total	
11- People benefitting from GEF-financed	200 women and 200 men		Women: 1,850 Men: 1,820	496 men and 482 women
investments			Total: 3,670	

Implementation Status 2023: 3rd PIR

### 2.3. Implementation Status and Risks

	PIR#	Rating towards outcomes (section 3.1)	Rating towards outputs (section 3.2)	Risk rating (section 4.2)
FY 2024	3rd PIR	MS	MU	Μ
FY 2023	2nd PIR	S	S	L
FY 2022	1st PIR	S	S	Μ
FY 2021				
FY 2020				
FY 2019				
FY 2018				
FY 2017				
FY 2016				
FY 2015				

#### Summary of status

The project execution faced continuity issues during this reporting period due to the resignation of the Project Coordinator. An Interim Project Coordinator was appointed to manage the SLIM Project's implementation, but in April 2024, this interim coordinator also left the Department of Energy (DOE).

#### Outcome 1:

i) Stakeholder consultations were conducted, followed by the quarterly stakeholder reports which encompass approaches that include in-person and online meetings, site visits, and data collection initiatives.

ii) The Transport Use and Expenditure Survey was developed, enumerators trained, and the survey was deployed in conjunction with the DOEs Electric Vehicle Raffle as part of the Lets Get Ready Initiative. Additionally, a training workshop was held on July 21st at the DOEs Conference room to train students on data collection.

iii) Several communication activities were completed with stakeholders. Please see more details information in Section 2.8.

iv) Previous data collection activities with the Transport Board and Ministry of Works did not yield sufficient data for WSP (Transport Electrification Consultant), so in Q3 of 2023, efforts were made to reach out to private car dealerships (Harney & Hadeed Motors) for data on the cost of operations and maintenance of Government vehicles. Harney Motors provided the required information on the aforementioned data requirements. Recognizing the need for broader outreach, efforts were made to engage NGOs actively involved in public outreach due to the lack of substantial progress in the communication campaign, raffle, and surveys.

#### Outcome 2:

i) The EA coordinated meetings to finalize agreements between various parties including the West Indies Oil Company (WIOC) & the United Taxi Company (UTC), WIOC & Antigua and Barbuda Airport Authority (ABAA), and WIOC & Megapower Antigua. A one-on-one session between WIOC & ABBA facilitated the establishment of a formal agreement for charging stations at the VC Bird International Airport.

ii) Negotiations with UTC resulted in an agreement for a post-paid billing system for service charges. A meeting was held with UTC following the expected delivery of electric taxis in early August 2023. Despite initial communication challenges, a rescheduled meeting on July 28, 2023, addressed concerns with one UTC member. A follow-up session, scheduled to include executive members, was set to address key issues.

In August, a meeting with the Minister of Environment discussed potential challenges regarding the handover of high-value electric vehicles to UTC & Bus Association, particularly their ability to manage insurance costs. Proposed solutions included involving ABTB and establishing charging infrastructure at DOE and Transport Board. Actual delivery of electric taxis occurred in December 2023; however, they were retained by the Ministry of Health, Wellness, Social Transformation, and the Environment due to internal UTC organizational issues. Efforts were underway to resolve these issues and release the taxis, initially planned for the first quarter of 2024. Due to ongoing internal challenges within UTC, the electric taxis were subsequently transferred to Emergency Medical Services within the Ministry of Health. Current discussions are ongoing with UNEP to potentially integrate the e-taxi pilot into the government fleet if UTC's issues persist.

iii) Efforts were undertaken to advance the Solar Carport Project, including a request for approval from the Ministry of Health, Wellness, Social Transformation, and the Environment for installation at the Sir Vivian Richards Cricket Stadium, which received no response. Subsequently, a request for support from the Ministry of Energy ICTs and Public Utilities resulted in delegating responsibilities to APUA. Limited responses from APUA necessitated ongoing efforts to gather the required data. As a result, technical specifications for the Solar Carport RFP, including charging stations, were developed. Despite the difficulty in acquiring sufficient data from APUA, the draft RFP was presented to the Technical Advisory Committee (TAC) for review in August 2023. Stakeholder meetings with WIOC, ABAA, and Megapower Antigua progressed, but delays in securing formal permission from WIOC for installation at the V.C. Bird International Airport slowed progress. Feedback on the solar carport RFP was received from the Project Manager and the Global E-Mobility Platform. Furthermore, after determining that APUA lacked the required data, internal checks at the DOE were conducted.

However, in Q3 of 2023, challenges in accessing information necessitated collaboration with the Department of Environments Monitoring, Evaluation, and Data Management Unit., which successfully reviewed and translated relevant documents.

iv) The project team reached out the Transport and Electrification Consultant, WSP, for more details on the bus routes. This consultant previously simulated bus routes to assess the performance of e-buses on the routes recommended by the bus association. WSP provided data on the gradeability needed for the buses, which is approximately 22%. This means that to ensure the performance of the e-buses on all routes in Antigua, the buses must be capable of a gradeability of 22%. This information was included in the updated RFP, which was published on the 11th of July 2023. The deadline for submission was the 10th of August 2023. In Q4 of 2023, Procurement of the electric buses commenced. The Department of Environment (DOE) had initially made plans to procure two (2) electric buses for the Antigua and Barbuda Bus Association (ABBA) and received two bids of \$250,000 USD each. However, a decision was made to change the procurement strategy after a thorough evaluation prompted by the cost to insure the buses, which was estimated at \$22,319.78 USD per year. This was far too costly for the ABBA to manage, and after research, the opportunity arose to explore a broader range of vehicles from vehicle manufacturers based in China. With these considerations, the decision was made to take the alternate approach of procuring the buses through the online platform "Alibaba". Alibaba presented a more advantageous method for distributing the request for quotation (RFQ) to a global network of manufacturers. This broader market was expected to provide more cost-effective options, potentially enabling the acquisition of more buses than initially planned under the original procurement strategy. The RFQ was initially published on October 12, 2023 with the deadline for submissions being October 20, 2023. A total of four (4) bids were received and evaluations commenced on November 15, 2023 by thirteen (13) evaluators representing the DOE, Antigua and Barbuda Transport Board (Bus Drivers), Antigua and Barbuda Bus Association, educators from Antigua State College and Antigua and Barbuda Continuing Education specializing in Automotive Studies, and electrical engineers. Evaluators submitted their preferred choices and the ABBA finalized its decision, selecting seven (7) buses from three (3) companies. One company was unable to provide invoices for the buses listed in their RFQ due to the unavailability of the buses and an alternative bus model was presented stating that the initial bus was unavailable unless the ABBA would purchase the minimum number of 20 buses. Due to this situation, the Bus Association decided to revert to the first proposal, comprising three (3) buses that were initially presented during the recommendation meeting that took place on 21st September 2023, to purchase the E-buses from Alibaba. The first company was unable to provide the two buses and as a result, the buses were procured from the second-best company. The first down payment on the nine (9) electrical buses was made in January 2024. In Q2 2024, representatives from the ABBA, DOE, Antigua State College (ASC) and Antigua and Barbuda Institute for Continuing Education (ABICE) travelled to Nanning, China, from April 6th to April 18th, 2024, to undergo comprehensive training on the operation and maintenance of the procured electric buses. During this period, two buses were fully paid for and are currently awaiting shipping. However, due to logistical challenges regarding the availability of shipping containers and the increasing costs, the shipping of the buses has not yet been completed. This is expected to commence in July 2024. This resulted in a delay in the arrival of the buses, previously expected at the end of Q2 2024. The buses are now anticipated to arrive at the end of Q3/ early Q4 2024. The final payment for all buses and shipping costs will be paid in July 2024.

#### Outcome 3:

i) In Q3 of 2023, the EA focused on identifying potential locations for charging stations at government buildings, schools and clinics. The interns conducted in-person field assessment with the aid of Google Maps, considering factors such as surrounding buildings, lighting, security and fencing. A comprehensive list and presentation of the assessment were prepared for the TAC, with the presentation held on July 29th, 2023. The DOE's Data Management Unit (DMU) produced a map of the existing charging stations in Antigua, contributing to the report on best practices for electric vehicle charging infrastructure. The implementation of the charging station survey faced

obstacles, particularly in clinics where replacement nurses and vacation schedules affected data collection. Progress made by the Data Management Consultant was limited and the DMA was populated with existing data from Outback Optics RE system. A member of the DMU was trained to continue this activity.

ii) The Terms of Reference (TOR) for a consultant to assess potential sites for charging stations was drafted.

iii) Following evaluations and approval of the PMC session to enter contract negotiations with the top scoring consultant to cover both SLIM and GCF Multi-Year Readiness (MYR) deliverables, contract negotiations commenced on July 13, 2023. Budget adjustments approved in June 2023, were also made during this period to hire the consultant. A demo of the SLIM DMS was conducted and efforts to integrate the Solar RO faced delays due to data availability issues. An intern developed a code to allow for the required data to be pulled from the outback optics RWE files downloaded and this code was provided to the Data Management System (DMS) consultant.

iv) The 3.4.1 report on best practices was finalized in this period, with the contract signed on September 12, 2023.

v) The PMC recommended exploring other options for the Vehicle Monitoring Service RFP. Discussions with the DMS Consultant led to the realization that the system could be handed over to the DMU and the handover process was initiated following these discussions.

vi) In Q4 of 2023, an Expression of Interest (EOI) was established to install electric vehicle charging stations at commercial business in Antigua and Barbuda. The EOI is under final revision and will be published in July 2024. Work continued by the Regulatory Framework and Legal Advisor, to carry out stakeholder consultations to aid in the development of policy frameworks.

#### Outcome 4:

i) In Q3 2023, work commenced on activity 4.3.1, "Report on good practices for standards and policy frameworks for regulating emissions in the power generation sector, as well as on integrating renewable energy into the grid", including based on a review of regional and global best practices. For this activity, the objective is to collaborate with relevant agencies, including the Ministry of Energy, APUA, and the Bureau of Standards, to develop standards and policy frameworks for emissions regulation in the power generation sector and the integration of renewable energy into the grid. A concern has been identified regarding private sector adoption of renewable energy, particularly instances of APUA rejecting solar PV system applications involving battery storage, contrary to existing legislation and their own policies. The draft document was shared with the Bureau of Standards and APUA, but no responses were received. To ensure wider visibility and feedback, the SLIM team requested the consultancy, National Renewable Energy Lab (NREL) to present the document to the TAC in September 2023. The presentation occurred as scheduled. Internal and TAC feedback was incorporated, and the document was finalized in October 2023.

ii) In Q4 2023, the Regulatory Framework and Legal Advisor developed a draft Issues Paper: Review of Relevant Policies and Legislation for Achieving Renewable energy Targets of the 2021 Antigua and Barbuda NDCs as part of Deliverable 3.2.2 of the SLIM project. This was then circulated to Stakeholders for review and feedback. Following the incorporation of feedback received, the Issues Paper was finalized and presented to the Technical Advisory Committee (TAC) on February 21, 2024. The Issues Paper was also disseminated to the TAC prior to the presentation. Risk assessment: The risk assessment for this project indicates a medium level of risk due to the frequent turnover in the PMU team and the absence of a well-defined plan to address the obstacles that are causing delays in the implementation of the project.

## 2.4 Co Finance

Planned Co-	\$ 9,719,315		
finance:			
Actual to date:	1,224,092		
Progress	Justify progress in terms of materialization of expected co-finance. State any relevant challenges:		
	The Cofinancing is linked to		
	The purchase and operation of technology;		
The waiver of taxes for the same Cofinancing with the Abu Dhabi fund for the development of the wind turbine project at the Stadium Staff at the DOE and other Government agencies such as the Ministry of Works;			
			Cofinancing this period:
		<ol> <li>During this period most of the time was taken with the procurement of the vehicles and the RE systems which was mainly administrative.</li> <li>The total value of the cofinancing for this period is 60,000.00 USD. The National Solid Waste Management Authority (NSWMA) is undergoing the cofinancing for this period is 60,000.00 USD.</li> </ol>	
	process of land allocation for waste recycling, so it is expected to contribute with 500,000 USD in cofinance a s part of Component 4.		

## 2.5. Stakeholder

Date of project steering	2024-06-24
committee meeting	
Stakeholder engagement (will be	Project Steering Committee meetings were held on May 25th and June 24th 2024. Stakeholder engagements were held according to the
uploaded to GEF Portal)	stakeholder consultation and engagement strategy that was completed in 2021. The engagements have been documented individually
	and within the quarterly stakeholder consultation report. Reports for Q3 2023 and Q4 2023 were completed within this reporting period,
	the Q1 2024 and Q2 2024 report will be completed in July 2024. The key stakeholders referenced as follows: Antigua and Barbuda Bus
	Association (ABBA), Antigua and Barbuda Airport Authority (ABAA), West Indies Oil Company (WIOC), Ministry of Information
	Communications Technologies (ICTs), Utilities and Energy, Antigua Power Company, Antigua Public Utilities Authority, Car Dealers,
	Farmers, Educational Institutions, Ministry of Education, Financial Institutions, Insurance Companies, Mechanics, Electrical Technicians,
	Taxi Association, Heavy Duty Equipment Companies, Car Rental Companies and the Ministry of Finance. Major stakeholder engagements
	are highlighted below: In Q3 and Q4 2023, meetings with ABBA provided updates on the procurement of the E-buses, and alternate

methods of procuring electric buses through the online platform Alibaba were explored. During this period, the project team met with the Ministry of Information Communications Technologies (ICTs), Utilities, and Energy to facilitate collaboration on gathering essential data required for informing technical specifications that were outlined in the Solar Carport Request for Proposals (RFP). Further, discussions were held with the West Indies Oil Company (WIOC) and the Antigua and Barbuda Airport Authority (ABAA) to facilitate the establishment of a formal agreement between WIOC and the ABAA concerning the deployment of EV Charging Stations for the SLIM project at the VC Bird International Airport. The final stakeholder for this period involved Megapower Antigua and the West Indies Oil Company (WIOC), where roles and responsibilities of WIOC in managing the assets of the vehicle charging station to be installed at the VC Bird International Airport were discussed. The support that Megapower will offer in assisting with the installation of these charging infrastructures was also addressed. Meetings involving organizations and entities from various sectors, including energy, transportation, agriculture, education, finance and government agencies addressed challenges and issues related to meeting the Nationally Determined Contributions (NDCs) targets specifically pertaining to the reduction of greenhouse gas emissions and mitigating climate impacts, issues relating to the transition towards renewable energy sources and the adoption of electric vehicles were discussed. In Q1 and Q2 2024, Stakeholder Consultations were held with representatives from the Antigua and Barbuda Bureau of Standards (ABBS), the Development Control Authority (DCA), and the Department of Energy concerning the development of various mandatory standards outlined in Component 4.

## 2.6. Gender

Does the project have a gender	Yes
action plan?	
Gender mainstreaming (will be	As written in the stakeholder engagement strategy a gender-sensitive approach has been used for stakeholder consultations. The project
uploaded to GEF Portal):	team, which is led by women through the Project Manager and Interim Project Coordinator, has strived to encourage women to
	participate in all areas of the SLIM project. The results of this have been seen in the consultations that have been held thus far. As
	indicated in the project document, a register documenting gender has been included for every stakeholder consultation to track the
	gender distributions of SLIM consultations. Each organisation is asked to send a male and a female representative in all consultation
	attempts. However, female participation in each consultation can be difficult due to the low number of women in the sectors targeted by
	this project. Female participation and engagement with vulnerable groups are prioritised in all stakeholder engagement and project
	implementation activities, as guided by the stakeholder engagement strategy and the project's gender action plan. Previously,
	discussions were held with the bus and taxi associations to conduct the pilot project as agreed between the DOE and the agencies; that
	female participation in the pilot is mandatory, as we seek to achieve the project's target of at least 25% female participation in the pilot.
	Discussions with the ABBA to conduct the pilot projects have progressed, and a cooperation agreement has been finalised. Thus far the
	project has engaged with 496 men and 482 women, exceeding the mid-point target for the indicator "number of direct project
	beneficiaries (women and men)."

## 2.7. ESSM

Moderate/High risk projects (in	Was the project classified as moderate/high risk CEO Endorsement/Approval Stage?							
terms of Environmental and	Yes							
social safeguards)	If yes, what specific safeguard risks were identified in the SRIF/ESERN?							
	The CEO ED gives a M rating to SS2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Wastes							
New social and/or	Have any new social and/or environmental risks been identified during the reporting period?							
environmental risks	No							
	If yes, describe the new risks or changes?							
Complaints and grievances	Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period?							
related to social and/or	No							
environmental impacts	If yes, please describe the complaint(s) or grievance(s) in detail, including the status, significance, who was involved and what actions							
	were taken?							

Environmental and social	
safeguards management	The CEO ED gives a M rating to SS2: Resource Efficiency, Pollution Prevention, and Management of Chemicals and Wastes. As noted in the CEO ED training on End-of-Life Vehicle Management has been included in output 1.4 of the project work plan to mitigate this risk. The first training was conducted in August 2022, attended by 26 people (12 from the government, 8 from the private sector, 1 from civil society ). The training explained good practices on the suggested process for end-of-life- vehicle disposal and recycling. The training highlighted the following: Vehicle battery management and battery reuse Hazardous Waste Management Lithium-ion recycling technology Considerations for EVs Worker and Public Safety Environmental Health and Safety Site Security

## 2.8. KM/Learning

Knowledge activities and	Using materials produced in Q3 2022 that allowed for the public launch of the SLIM project and an EV educational campaign in Q4 2022,
products	implementation of the communication campaign continued in Q3 of 2023, with additional brochures being produced for dissemination
	at various events. In collaboration with the Let's Get Ready initiative, The SLIM Project disseminated brochures and promoted the raffle
	of an electric vehicle in conjunction with the Antigua and Barbuda Transport Board (ABTB) and our NGO partners, namely, Rotaract, JCI
	Antigua, Rotary & Macedonia Community Development and Support Services. This raffle was promoted to the public during several
	significant public events, including the 2023 Carnival Launch and Parade, the Prime Minister's Cup, and in Q3 2023, Department on
	Environment (DOE) Arbour Day in Q4 2023. Following collaborations with the Antigua and Barbuda Drag Racing Association (ABDA),
	booth spaces and passes were secured for the Prime Minister's Cup at no cost, allowing for the MG EV4 to be showcased and surveys to
	collect data to be conducted. Further, the DOE team was also able to secure booth spaces and passes for other drag racing events on
	August 12th and 13th and November 25th, 2023, and continue implementing the Transport Use and Expenditure Survey. Coordination
	efforts included logistical preparations and on-site support. The SLIM project had a booth at the Department of Environment (DOE)
	Arbour Day.
	Arbour Day is the DOE's invitation to the public to learn more about DOE projects, climate change, biodiversity, and general climate
	change initiatives while at a family fun activity. On Arbour Day, the project team engaged with school children and adults, explaining the
	theme. Following Arbour Day, the project team continued public awareness by promoting the raffle in popularly frequented public
	spaces and presenting the project and theme. These activities were done in tandem with the Transport Use and Expenditure Survey that
	was being implemented in under the SLIM Project, survey participants received a detailed overview of the project and its key goals.
	Further communication activities will be held when the project's electric vehicles are in Antigua and Barbuda. The project's data
	management software was completed in Q1 2024 and was handed over to the DOE's Data Management Unit by the Data Management
	Consultant. A training session was held for the Data Management Unit along with the handover. This system will capture the data
	produced by the pilot project, which will be used to monitor and evaluate the project's performance, as well as the performance of

	electric vehicles and solar-powered charging stations within Antigua. This data will be shared with project partners through the performance reports carded for the final year of the project, and macro-level data will be shared via the SLIM project's webpage, which is anticipated to be actioned within Q4 of 2024. In Q1 of 2024, the Issues Paper, developed by the Regulatory Framework and Legal Advisor, was presented virtually to the TAC and the final document was disseminated to all members of the TAC.
	In Q2 of 2024, two (2) members of the SLIM project team, four (4) members of the Antigua and Barbuda Bus Association, and two (2) teachers at the Technical Schools travelled to China for training on the Electric buses. Training included the main components of the EVs, the electrical components, and post-sales services. This was followed by a factory tour, which included demonstrations of chassis rust prevention technologies. The final training consisted of safety protocols when operating the electric buses. After completing the training, each trainee was issued a certificate of participation from the Company.
	During the 4th Small Island Developing States (SIDS) Conference in May 2024, members of the Department of Environment (DOE) and the Emergency Medical Services (EMS) had the opportunity to test the Peugeot E Traveller electric taxis. This hands-on experience provided valuable insights and realizations about these electric vehicles' capabilities and limitations.
Main learning during the period	During this period, a significant portion of stakeholders expressed a willingness to adopt renewable energy solutions, including the integration of electric vehicles and charging infrastructure into their operational frameworks. This receptiveness indicates a growing awareness and willingness within the stakeholder community to align with the evolving trends toward sustainability and Antigua and Barbuda's goal of transitioning the transport sector. To achieve these goals, continued dialogue and collaboration between government entities, regulatory bodies, and stakeholders across diverse sectors is essential. These partnerships are crucial for developing comprehensive strategies, implementing supportive policies, and addressing challenges in the transition toward a more sustainable and environmentally conscious future. Issues were identified with the Peugeot E Traveller vehicles purchased for the electric taxi pilot. These include inadequate air conditioning performance in hot weather, lack of rear AC vents, and a tendency for the vehicle to shut off after idling with the AC on for 30 minutes. Thorough testing of all new vehicles is essential, and it is recommended that the government oversee these procedures. These insights will inform future electric vehicle procurement to ensure they are suitable for the region's needs.

## 2.9. Stories

Stories to be	In collaboration with the Antigua and Barbuda Bus Association, the Department of Environment procured nine (9) electric buses from China which marks a
shared	significant step towards the reduction of carbon emissions while promoting climate-resilient and eco-friendly transportation for the public.
	Representatives from the ABBA, DOE, Antigua State College (ASC), and Antigua and Barbuda Institute for Continuing Education (ABICE) traveled to
	Nanning, China, from April 6th to April 18th, 2024, to undergo comprehensive training on the operation and maintenance of the procured electric buses.

## **3** Performance

## **3.1** Rating of progress towards achieving the project outcomes

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
Promote low carbon and climate resilient public and private transportation systems in Antigua and Barbuda.	Indicator A: Tons of direct GHG emissions avoided during project	0	20 tons avoided	200 tons avoided	0	Project's GHG emission reduction will be achieved through implementation of demonstration pilots. Procurement of the project's electric buses and charging stations was completed and they are anticipated to arrive by September/October 2024. The Expression of Interest for the national scale-up and implementation of charging stations will be published in July 2024.	MU
	Number of direct project beneficiaries (women and men)	0	200 women and 200 men	1850 women and 1820 men	496 men, 482 women	The project has thus far engaged: Men – 496, Women – 482 through project consultations with stakeholders and presentations to the technical committee. The project will achieve a significant number of direct beneficiaries, through the implementation of demonstration pilots (bus drivers, taxi drivers, and users).	S
1The Antigua and Barbudan government demonstrates enhanced coordination, capacity and commitment for promoting electric mobility	A multi-stakeholder strategy, national commitment and development plan are delivered to the Government for adoption	0	Draft strategy, commitment and plan finalized for inter- ministerial consultation	Draft strategy, commitmen and plan delivered to the government for adoptior	Multi stakeholder consultation tstrategy was completed and National Commitment was achieved through the 2021 NDC	Antigua and Barbuda submitted its revised NDC in September 2021 to the UNFCCC. It includes the indicative target of "Ban on the importation of new internal combustion engine vehicles from 2025". In the development of this and other new NDC targets and implementation of the NDCs, an inclusive	MS

Project Objective and Outcomes	Indicator	Baseline Mid-Term		End of Progress as of		Summary by the EA of attainment of the indicator &	
		level	Target or	Project	current	target as of 30 June	rating
			Milestones	Target	period(numeric,		
					percentage, or		
					binary entry only)		
						multi-stakeholder engagement strategy	
						was developed and applied during the	
						revision process. The SLIM Project	
						Coordinator provided key support in the	
						development and revision of the	
						renewable energy and EV NDC targets.	
						Though, the timely achievement of the	
						2021 NDC targets necessitates the	
						creation of a complex institutional and	
						regulatory framework. The SLIM	
						project will benefit from these	
						engagements and relationships that were	
						advanced during this process.	
						The stakeholder consultation strategy	
						was completed in Q1 2021, and	
						stakeholder consultation reports have	
						been completed for Q1, Q2, Q3 and Q4	
						2023. The stakeholder consultation	
						reports for Q1 and Q2 2024 will be	
						completed in July 2024. These reports	
						will continue throughout the duration of	
						the project. The project team will	
						be working to finalize the plans by the	
						end of Q4 of 2024.	
2 Antigua and Barbudan citizens	Number of Antigua and	0	1775 women	i l	0	The procurement for electric taxis,	MU
begin to use electric mobility for	Barbudan citizens using electric		and 1745			charging stations and digital payment	
their public transport needs	mobility for their public		men			has been completed. The vehicles and	
	transport					charging stations procured have been	
						delivered. The e-taxi pilot project was	
						scheduled to begin in Q1 2024 and	
						continue until at least Q1 2025, however	
						due to internal struggles, the Taxi	

Project Objective and Outcomes	Indicator	Baseline	Mid-Term	End of	Progress as of	Summary by the EA of attainment of the indicator &	Progress
		level	Target or	Project	current	target as of 30 June	rating
			Milestones	Target	period(numeric,		Ū
				, C	percentage, or		
					binary entry only)		
						Association has been unable to implement	
						the e-taxi pilot in Q1 and Q2 of 2024.	
						The e-taxis were then handed over to the	
						Ministry of Health, Wellness and the	
						Environment to be used by the Emergency	
						Medical Services. Thus, conversations	
						with UNEP were held to aid in the	
						redesign of the e-taxi pilot to pivot to	
						the government fleet.Further,	
						discussions have been held with the VC	
						Bird International Airport that will	
						host the charging stations and an	
						agreement between the VC Bird	
						International Airport and the West	
						Indies Oil Company to allow for	
						cooperation in the installation and	
						maintenance of the charging stations and	
						connection to the electrical supply is	
						presently being drafted. This agreement	
						is still under review by the West Indies	
						Oil Company. The technical	
						specifications for the electric buses	
						for the bus association have been	
						completed and purchase of the electric	
						buses for the bus association was	
						completed in Q1 2024. Due to supply	
						chain shortages with regards to shipping	
						containers, the buses are not	
						anticipated to arrive before the end of	
						Q3 2024.	
3 The Antigua and Barbuda	Public and commercial electric	0	N/A	10 EV	0	The project is in the process of	S
government takes actions towards	vehicle chargers commissioned			charging		formulating plans for commercial	

Project Objective and Outcomes	Indicator	Baseline	Mid-Term	End of	Progress as of	Summary by the EA of attainment of the indicator &	Progress
		level	Target or	Project	current	target as of 30 June	rating
			Milestones	Target	period(numeric,		
					percentage, or		
					binary entry only)		
financing and implementing policy				stations		businesses and spaces in Antigua and	
frameworks for low-carbon electric						Barbuda to apply for loans from the	
mobility						Sustainable Island Resource Framework	
						(SIRF) Fund, enabling them to acquire	
						electric vehicle charging stations at an	
						accessible cost. The EOI has been	
						prepared and is set to be published in	
						July 2024.	
4 The Antigua and Barbuda	Draft policies and standards for	0	Report on	Draft	0	The Regulatory Framework and Legal	MS
government takes action towards	ensuring the long-term		options for	policies and		Advisor was contracted in September 2023	
implementing policy frameworks	environmental sustainability of		standards	standards		and actively conducted stakeholder	
and building capacity to ensure the	electric mobility are delivered to	)	and policy	delivered to		consultations from Q3 and Q4 2023 and Q1	
long-term sustainability of electric	the government for adoption		frameworks	the		and Q2 2024 to begin drafting the	
mobility			delivered to	government		policies and standards to be delivered	
			the	for adoption		to the government for adoption. The	
			government			expected timeframe for this to be	
			for			delivered to the government is Q1 2025.	
			consideratior	n			
	Number of individuals trained in	0	25 women	75 women	11 women and 16	The Basel Convention Regional Center for	S
	the reusing, recycling and		and 25 men	and 75 men	men	Training and Technology Transfer for the	
	disposing used vehicles (both					Caribbean (BCRC - Caribbean) aimed to	
	conventional and electric) and					support the environmentally sound	
	electric vehicle batteries					management (ESM) of End-of-Life Vehicles	
						(ELVs) in eleven (11) project countries.	
						Their focus was on designing an	
						environmentally sustainable scheme to	
						enhance regional and national capacity	
						for ELV management. The BCRC - Caribbean	
						facilitated national in-country	
						workshops, during which the consulting	
						team conducted assessments to evaluate	
						the capacity for ESM of ELVs in each	

Project Objective and Outcomes	Indicator	Baseline	Mid-Term	End of	Progress as of	Summary by the EA of attainment of the indicator &	Progress
		level	Target or	Project	current	target as of 30 June	rating
			Milestones	Target	period(numeric,		
					percentage, or		
					binary entry only)		
						participating country. These workshops	
						took place in Antigua on August 21 and	
						22, 2023. Although, under the SLIM	
						project, workshop three (3) of the	
						training course, originally planned for	
						Q3 2023, specifically addressing the	
						reuse, recycling, and disposal of used	
						vehicle batteries (both conventional and	
						electric), has been rescheduled to take	
						place in Q3 2024.	

**3.2** Rating of progress implementation towards delivery of outputs (Implementation Progress)

Component	Output/Activity	Expected	Implementation	Implementation	Progress rating justification, description of	Progress
-		completion	status as of	status as of	challenges faced and explanations for any	Rating
		date	previous	current	delay	
			reporting	reporting		
			period (%)	period (%)		
1	1.1: A multi-stakeholder consultation strategy is implemented and	2024-12-31	. 57	70	There were delays in the deliverable due	MS
Institutionalization	recommendations for a long-term coordination mechanism are				to the project working along with the	
of low-carbon and	delivered to key government actors				GCF multi-year readiness project and	
climate-resilient					with TA from the NDC Partnership.	
electric mobility					Further, there were two changes in PC	
					and this further slowed the momentum.	
	1.2: A comprehensive assessment of the economic, environmental	2025-03-31	. 53	64	Activities aligned with workplan. D	S
	and social viability of fleet electrification, renewable energy				1.2.1 Fleet Electrification Analysis –	
	capacity penetration and electrical distribution grid stabilization is				Report (2) is being established by the	
	produced and disseminated with key government decision-makers				consultancy, WSP and is currently near	
					completion. D 1.2.2 Renewable Energy	
					Capacity Study – The requirements of	
					report 1 were covered in the fleet	
					electrification of D 1.2.3 . Electricity	
					distribution, grid evaluation and	

Component	Output/Activity	Expected	Implementatio	nImplementatio	on Progress rating justification, description of	Progress
		completion	status as of	status as of	challenges faced and explanations for any	Rating
		date	previous	current	delay	
			reporting	reporting		
			period (%)	period (%)		
					evaluation of incorporation and	
					management of renewable energy and	
					electric mobility into the grid – This	
					document was completed, however, the	
					document is considered confidential and	
					cannot be shared. A summary of the	
l					document should be done. This summary	
l					needs to be a document that the public	
l					can access. The results of this study	
					completed the objectives of activity	
					1.2.3. D 1.2.4 A socio-economic analysis	
					establishing the impact of low-carbon	
					and climate resilient electric mobility	
					on men and women of economically	
					vulnerable communities - The first	
					socio-economic analysis establishing the	
					impact of low-carbon and	
					climate-resilient electric mobility on	
					men and women of economically vulnerable	
					communities report was completed and led	
					by IRENA through the SIDS Lighthouse	
					initiative. The DOE has received 30k USD	
					in additional funding to work on this	
					activity. A concept note/methodology	
					for the development of a survey to	
					inform the analysis was completed,	
					followed by a training for NGOs &	
					student volunteers who were implementing	
					surveys. The survey was implemented	
					alongside the DOE's Get Ready Campaign	
					and many public relations activities	
1					were carried out to gather survey	

Component	Output/Activity	Expected	Implementation	Implementation	Progress rating justification, description of	Progress
		completion	status as of	status as of	challenges faced and explanations for any	Rating
		date	previous	current	delay	
			reporting	reporting		
			period (%)	period (%)		
					responses and garner interest in the	
					project. The target was 400 survey	
					responses. In May 2024, the survey	
					responses were analyzed and compiled	
					into a summary report which was	
					submitted to IRENA as part of the	
					agreement. As of June 2024, the number	
					of survey responses collected remained	
					at 270. The results of this study will	
					complete the objectives of activity	
					1.2.4 and is expected to be completed at	
					the end of Q3 2024.	
	1.3 : Services for strengthening the capacity of national	2025-03-31	. 30	30	Activities delayed compared to the work	S
	stakeholders on technical, financial and regulatory aspects of				plan. The issue is as above with	
	integrating electric mobility and renewable energy into the electric				temporary capacity constraints.	
	grid are provided, including through the Global Programme on					
	Electric Mobility					
	1.4: A national commitment on low-carbon and climate-resilient	2023-02-28	100	100		S
	electric mobility is drafted for adoption by the national government					
	1.5: A national development plan for low-carbon and climate-	2024-03-31	. 29	31	This activity is currently delayed. The	MU
	resilient electric mobility is drafted for adoption by the national				delay is due to the policy environment	
	government				being dynamic as the issues of access to	
					EVs at reasonable prices are not clear.	
					The DOE is waiting for the importation	
					of the first buses under the project and	
					then work on this policy.	
	1.6: Public and private stakeholders' awareness on the benefits of	2025-03-31	. 37	52	Activities delayed compared to	HS
	low-carbon and climate-resilient electric mobility enhanced through				workplan.Communications with private	
	a communication campaign and the provision of a public				and public stakeholders continued	
	information platform				throughout Q3 and Q4 2023 and Q1 and Q2	
					of 2024 and through articles provided on	
					the DOE's social media pages. DOE also	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting	Implementation status as of current reporting	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
			period (%)	period (%)	conducted a raffle of an EV and several public information campaigns to support the raffe and inform the public of the project. Currently, the public information platform specific to the SLIM project has not yet been developed, however, meetings with the DOE's DMU and PR Unit are being organized to ascertain the anticipated time for work on the platform to begin.	
2 Short term barrier removal through low- carbon e-mobility and climate- resilient renewable energy demonstrations	2.1: The effectiveness of a grid-interactive solar array and EV charging infrastructure at the Sir Vivian Richards Stadium, along with EV charging infrastructure at the V.C. Bird International Airport to power electric taxis is demonstrated to public and private stakeholders	2025-03-30	44	44	Activities are delayed compared to workplan. The contractor has been procured under a framework agreement and the drawings are completed and approved. NREL will revise the technical specification aspect of the RFP, and reflect that data will be gathered later on or must be gathered by the contractor. Following this, the document can be published.	MS
	2.2: The viability of electric vehicles as part of the airport taxi fleet is demonstrated to public and private stakeholders	2025-03-31	. 47	59	Activities are slightly delayed compared to the workplan. There are internal issues with the Taxi Association as well as the vehicles purchased are too expensive for the Taxi Drivers to insure. There is a need to get cheaper vehicles and work with the new executives of the taxi association once their issues have been resolved to move forward with the project. As an alternative, the vehicles purchased for the E-Taxi pilot were handed over to the	MS

Component	Output/Activity	Expected completior date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay Emergency Medical Services within the Ministry of Health. It is possible to	Progress Rating
					redesign the E-Taxi Pilot to then make use of the vehicles within the government fleet.	
	2.3: The effectiveness of charging infrastructure for electric buses at St John's West bus station, is demonstrated to public and private stakeholders	2025-03-31	. 16	16	Activities are delayed compared to the workplan. A proposal to change the location of the Solar Array to the Sir Vivian Richards Cricket Stadium was made. Following the procurement of 9 electric buses, a potential site for the solar carport was located at the Sir Vivian Richards Stadium.	MS
	2.4: The viability of electric buses as part of the public transport bus fleet is demonstrated to public and private stakeholders	2025-03-30	11	35	Activities delayed compared to workplan. As above. This is expected to move forward with the arrival of the 9 buses.	MS
3 Preparing for scale-up and replication of low-	3.1: Public and Private Consumers have Access to a National Network of Electric Vehicle Chargers to Support the Scale-Up and Replication of Low-Carbon Electric Mobility	2024-09-31	. 0	7	This is delayed due to capacity issues at the DOE which are being addressed.	MU
carbon electric mobility and climate-resilient	3.2: Standards and a policy framework for regulating the importation of electric and conventional vehicles are developed and drafted for adoption by government ministries	2023-10-31	. 45	68	Activities delayed in comparison to the workplan.	MU
renewable energy	3.3: Standards and a policy framework for regulating the quality of imported fuel are developed and drafted for adoption by government ministries	2024-02-28	3 33	37	Activities delayed compared to the work plan. D 3.3.1 Best practices portfolio for standards and policy framework for regulating the quality of fuel imports was completed. D3.3.2 Report on options for standards and policy framework for the regulation of the quality of fuel imports, including social protection mechanisms, for consultation through 1.1 - a Regulatory Framework and Legal	MS

Component	Output/Activity	Expected completion date	Implementatior status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					Adviser has been hired to carry out this consultancy. This report is anticipated to be delivered in Q3 2024.	
	3.4: Regulations for the installation of private and public electric vehicle charging infrastructure are developed and drafted for adoption by government ministries	2024-07-31	. 33	37	Activities delayed compared to the work plan.	MU
	3.5: A data acquisition and management system for the transport and energy sectors is used by key public organizations	2024-12-31	43	46	The Data Management System was completed and handed over to the DOE's Data Management Unit (DMU) in March 2024. Training was conducted with a few members of the DMU before the handover. However, more widespread training is required before full deployment.	S
4 Long-term environmental sustainability of low-carbon electric mobility	Long-term environmental sustainability of low-carbon electric mobility	2024-06-30	33	33	Activities delayed compared to the workplan. D 4.1.1 The first training course on reusing, recycling and disposing of used vehicles was held and the workshop report was completed in August 2022. The second workshop is anticipated to be held in Q3 2024.	MS
	4.2: Standards and a policy framework for regulating the disposal of electric and conventional vehicles are developed and drafted for adoption by government ministries	2024-02-28	33	33	Activities delayed compared to the workplan. D 4.2.1 The best practice portfolio for standards and policy framework for the regulation of end-of-life vehicles was completed. D4.2.1 Report on options for standards and policy framework for end-of-life vehicle disposal - a Regulatory Framework and Legal Adviser has been hired to carry out this consultancy and work on this deliverable is currently underway.	MS

Component	Output/Activity	Expected	Implementation	Implementation	Progress rating justification, description of	Progress
		completior	status as of	status as of	challenges faced and explanations for any	Rating
		date	previous	current	delay	
			reporting	reporting		
			period (%)	period (%)		
	4.3: Standards and a policy framework for regulating emissions from	2024-07-31	. 8	20	Activities delayed compared to the	MU
	the power generation sector, as well as for integrating renewable				workplan. "D4.3.1 Report on best	
	energy into the grid, are developed and drafted for adoption by				practice portfolio for standards and	
	government ministries				policy framework for the regulation of	
					emissions in the power generation	
					sector, as well as on renewable energy	
					grid integration, including based on	
					review of regional and global best	
					practices" was presented to the	
					Technical Advisory Committee in December	
					2023, and reviewed by the members,	
					leading to edits and its finalization.	
					"D4.3.2 Report on options for standard	
					and policy framework for regulating	
					emissions in the power generation sector	
					and renewable energy grid integration"	
					- a Regulatory Framework and Legal	
					Adviser has been hired to carry out this	
					consultancy. Draft standards and policy	
					framework for the regulation of	
					emissions in the power generation sector	
					and renewable energy grid integration	
					presented to the relevant ministry for	
					consideration and adoption - a	
					Regulatory Framework and Legal Adviser	
					has been hired to carry out this	
					consultancy. Work on these deliverables	
					is currently underway by the consultant.	

The Task Manager will decide on the relevant level of disaggregation (i.e. either at the output or activity level).

## 4 Risks

### 4.1 Table A. Project management Risk

Please refer to the Risk Help Sheet for more details on rating

Risk Factor	EA Rating	TM Rating
1 Management structure - Roles and	Moderate	Moderate
responsibilities		
2 Governance structure - Oversight	Moderate	Moderate
3 Implementation schedule	Substantial	Substantial
4 Budget	Low	Low
5 Financial Management	Low	Low
6 Reporting	Low	Moderate
7 Capacity to deliver	Moderate	Moderate

If any of the risk factors is rated a Moderate or higher, please include it in Table B below

### 4.2 Table B. Risk-log

#### Implementation Status (Current PIR)

Insert ALL the risks identified either at CEO endorsement (inc. safeguards screening), previous/current PIRs, and MTRs. Use the last line to propose a suggested consolidated rating.

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
The high cost of electric vehicles and high	Outcome 2	L	L	L	L	N/A			=	There has been an uptake in the EVs
cost of grid electricity could result in an										in Antigua and Barbuda. There are
increase of the public transport bus fare.										now three car dealerships that sell
affecting vulnerable communities.										EVs. Currently. there have been no
										talks of an increase in the public bus
										fares by the Antigua and Barbuda
										Transport Board. neither has there

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
										been such a demand from the Bus Association Further. the general population's interest in purchasing EVs has increased; however. the price point may make it difficult for persons of lower-income households to attain.
Political opposition to the uptake of EVs. renewable energy and development and approval of more stringent environmental regulations in the transport. energy and waste management sectors.	All outcomes	M	М	М	М	N/A			=	Currently. the possibility of early elections being held may impact the government's willingness to continue sustainability efforts within the transportation sector. In addition to the implementation of certain NDCs may be delayed due to political reasons.
The inclusion of electric buses through the pilot project could generate resistance from the bus association. as it could result in lower revenue for drivers.	All outcomes	L	L	L	L	N/A			=	The Bus Association is fully onboard with the Electric bus Pilot. Most drivers indicated that they are considering purchasing electric buses for use on their own once they are able to finance the purchase.
Risk of high impact climatic event such as a hurricane could disrupt power generation. damage electric vehicles. destroy infrastructure. etc.	All outcomes	M	L	L	L	N/A			=	There were no severe storm events experienced in Antigua and Barbuda in 2021. 2022 & 2023. However. every hurricane season presents a high-risk as a storm or hurricane can directly impact Antigua and Barbuda.There has not been any modification to the considerations for this risk.
Higher electricity use by electric vehicles	Project Objective	L	L	L	L	N/A			=	This risk is a barrier that will be

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
might lead to higher emissions. e.g. from the	2									addressed during project
diesel and oil power generators										implementation. The pilot project
										includes appx. 150 kW grid-
										interactive (i.e battery and grid
										connection) solar installation to offset
										potential emissions that may be
										caused by the electricity demand of
										the pilot vehicles.
Materials from electric vehicles (EVs) (e.g.	Output 4	L	L	L	L	N/A			=	This risk is a barrier that will be
from batteries) might generate										addressed during project
environmental pollution										implementation. It remains low as
										the project directly addresses the
										sustainable disposal of EVs and ICE
										vehicles.
Promoting the use of EVs without restricting	Project Objective	L	L	L	L	N/A			=	The foreign used ICE vehicle market
the number of overall vehicles will result in										has increased the number of vehicles
more traffic. energy consumption. strain on										in Antigua and Barbuda significantly
transport infrastructure and thus GHG										due to their low cost. The present
emissions										cost of new EVs and the low number
										of used EVs available will not trigger
										this risk. Further. the country's
										revised NDC includes a ban on the
										importation of new internal
										combustion engine vehicles 2030
										(with an indicative start year of
										2025).
The country's grid is unstable and not	Output 2	L	L	L	L	N/A			=	This risk is a barrier that will be
resilient affecting the performance of the										addressed during project
project pilots										implementation. It remains low as
										the project's charging stations will be
										attached to decentralised solar

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
										powered installations with battery
										storage. Additionally. it is the
										intention to have the charging
										stations connected to the wind
										turbines at the Sir Vivian Richards
										Stadium.
The high cost of EVs and high cost of grid	Outcome 2	М	М	М	М	N/A			=	The revised NDC commits to the
electricity can reduce the uptake of the										transition of the GOAB vehicular fleet
technology										to EVs. The GCF scale-up of the SLIM
										project will address the transition of
										30% of the GOAB's vehicular fleet to
										electric. The replacement of 30% of
										the fleet will stimulate the vehicle
										market to provide EV options which
										in turn will reduce the cost to
										purchase EVs. There has been an
										uptake in the EVs in Antigua and
										Barbuda. There are now three car
										dealerships that sell EVs.
										Furthermore. interest of the general
										population in purchasing EVs has
										increased. however; the price point
										may make it difficult for persons of
										lower-income households to attain.
High air conditioning energy requirements.	Outcome 2	L	L	L	L	N/A			=	Although high AC requirements will
and vehicle operating conditions will reduce										reduce the range of EVs the risk is still
the range of electric vehicles										deemed as low because the driving
										range in Antigua is low compared to
										larger countries.
Current lack of electric vehicle availability	Outcome 2	L	Μ	L	L	N/A			=	Three local car dealerships have
										started to offer electric vehicles for

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
										sale in Antigua and Barbuda.
										However. at present. a shortage of
										shipping containers and increasing
										shipping costs has delayed the
										shipping of the electric buses to
										Antigua and Barbuda
Lack of technical support on the	Project objective	L	L	L	L	N/A			=	This risk is a barrier that will be
maintenance and deployment of vehicles										addressed during project
and infrastructure										implementation. Maintenance is
										written into the procurement terms
										for the equipment i.e EVs & charging
										stations. Additionally. capacity
										building exercises were carried out
										with the procurement of the electric
										buses from China.
Access to affordable credit by potential	Outcome 2	М	М	М	М	N/A			=	This risk is a barrier that will be
electric taxi purchasers may reduce scale-up										addressed during project
potential of project (This is not considered a										implementation. There is an existing
risk, as it wil be adressess during the project										financial system that supports the
										purchase of vehicles. Financial
										institutions are on board and are
										currently offering loans specifically
										for the purchase of EVs. However. the
										risk remains because the interest
										rates and insurance rates
										experienced by EVs are higher than
										ICE vehicles which can hinder the
										uptake of EVs. This risk is addressed
										within the project through the
										training of financial institutions and
										taxi drivers regarding financing

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
										sustainable assets such as
										EVs.Additionally. the Government of
										Antigua and Barbuda has introduced
										incentives where 100% of the
										Customs Duty and Environmental
										Levy fees have been waived for
										persons purchasing EVs.
Implementation Schedule	Outcome 2	N/A	N/A	М	S	N/A			$\uparrow$	The project is delayed according to
										the plan. Monitoring of the pilot
										projects has also been delayed due to
									the delayed shipment of the buses.	
										Due to this. a project extension
										request will be required for another
										18 months. Additionally. the small
										size of the project team and a lack of
										active consultancies were a
										concern.Due to the unstable political
										situation. the mobility strategy in
										Component 1 has not started yet.
Capacity to Deliver	Outcome 2	N/A	N/A	М	Μ	N/A			=	Sound technical and managerial
										capacity of institutions and other
										project partners and capacity gaps
										were addressed before
										implementation or during early
										stages. The participation of key
										stakeholders remains challenging
										despite robust outreach to these
										stakeholders. At the time of this
										report. the United Taxi Company is
										encountering internal struggles which
										hinder the electric taxi pilot project.

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
										Currently. the electric taxis are in
										possession of the Antigua and
										Barbuda Emergency Medical Services
										(ABEMS). Efforts to manually monitor
										the vehicles will be conducted
										beginning in July 2024.
Uncertainty around the duration and	Outcome 2. Output 2.2. Output	М	М	L	L	N/A			=	There are no longer COVID 19
evolution of the current COVID-19 outbreak	2.4									restrictions on gatherings in person.
and its impact on the country's economic										The global supply chain may still face
outlook and public sector priorities.										some issues regarding logistics. such
Constraints on in-person consultation and										as the supply of shipping containers
training workshops. The reduced purchasing										to facilitate the shipment of the buses
power of people of Antigua and Barbuda										from China. Initially scheduled to
due to the economic crisis triggered by the										arrive in June 2024. The anticipated
COVID-19 pandemic. may jeopardize the										delivery of the buses has been
uptake of the SIRFF financial window.										delayed until September 2024.
COVID-19 impact on global supply chain										
might adversely affect the procurement of										
vehicles and infrastructures required for the										
pilot project.Constraints on in-person										
consultation and training										
workshops.Reduced purchasing power of										
people of Antigua and Barbuda due to the										
economic crisis triggered by COVID-19										
pandemics. may jeopardize the uptake of										
the SIRFF financial window. COVID-19										
impact on global supply chain might										
adversely affect the procurement of vehicles	5									
and infrastructures required for the pilot										
project.										

Risks	Risk affecting: Outcome /	CEO	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current	Δ	Justification
	outputs	ED						PIR		
			Μ	L	М				↑	The vehicle import for the pilot project as well as the current political
										situation provoked a delayed on some key milestones; therefore the risk has increased.

## 4.3 Table C. Outstanding Moderate, Significant, and High risks

### Additional mitigation measures for the next periods

Risk	Actions decided during the	Actions effectively	What	When	By Whom
	previous reporting instance	undertaken this reporting			
	(PIRt-1, MTR, etc.)	period			
Political opposition to the	1. Review and detail the	1. Virtual consultations	The stakeholders	From July 2024 up until the	Project Manager and
uptake of EVs. renewable	stakeholder engagement	were held with key	engagement strategy will be	end of the project.	National Project
energy and development	strategy for (i) the	stakeholders West Indies Oi	reinforce by delivering in-	Meetings will be held at	Coordinator within the DOE
and approval of more	preparation of the national	Company. Antigua and	person workshops and	least once a month	
stringent environmental	electric mobility plan (C1).	Barbuda Airport Authority	consultations will be carried		
regulations in the transport.	and engagement of (ii)	etc.2. Collaborated with the	out with key stakeholders		
energy and waste	Antigua Barbuda Bus	Bus Association and ABTB	(i.e Antigua and Barbuda		
	Association for	for the procurement of the	Bus Association. National		
	implementation of C2; (iii)	electric buses. This is	Housing Company.		
	and the National Solid	ongoing. 3. The electric			
	Waste Management	buses to be used as part of			
	Authority for C4.2.	the Public Transportation			
	Implement the engagement	fleet and operated by the			
	strategy during	Bus Association. This is			
	development of the	ongoing.4. Consultations			
	national e-mobility	were held with the Ministry			
	plan.3.Carry out regular in-	of Energy. No other			
	person meetings with the	activities occurred during			
	Antigua and Barbuda Bus	this period. 5. This has not			
	Association 4.Host	been addressed due to the			

Risk	Actions decided during the	Actions effectively	What	When	By Whom
	previous reporting instance	undertaken this reporting			
	(PIRt-1, MTR, etc.)	period			
	workshops with the utility	unstable political climate at			
	company. Ministry of	present.6. This additional			
	Energy & National Solid	deliverable was included in			
	Waste Management	the previous period and			
	Authority5. Transform the	extended to the current			
	national commitment into	period.			
	more concrete mandates to				
	the transport and energy				
	sectors. to be approved by				
	the government. 6. Include				
	in output 3.1 one additional				
	deliverable with a proposal				
	to the government for the				
	inclusion of EV (new or				
	second-hand) and EVCS				
	procurement within existing				
	financial instruments				
	supporting business				
	development.				
Implementation Schedule	1.Regular follow-up	1Engagement with the Bus	1. The PMU will be using	1. Purchases are expected	1 Project Manager within
	meetings with e-vehicles	Association 2UNEP	new purchase strategies to	from July 2024 to Q1	the DOE 2 The SIRF Fund
	suppliers 2. UNEP mission	mission will take place in	ensure the on-time delivery	20252The SIRF Fund	members and the project
	to the	July 20243Stakeholder	of the assets. 2. The SIRF	approach will be finalized	team within the DOE 3
	country3.Implementation of	strategy of conducting the	Fund approach is being	from July 2024 to Q1	Lead by the project
	updated stakeholders	EV raffle and the	revisited and is ongoing.3	2025.3From July 2025 to	Manager and National
	engagement strategy in	procurement of the Buses	The draft national plan for	Q1 2025. While the political	Project Coordinator within
	order to have all	with bright colours for the	electric mobility will be	instability is resolved. the	the DOE. Regulatory
	permissions. agreements	Electric Bus Pilot. The PMU	developed. adoption by Q1	project will work in the	Framework and Legal
	and contracts signed in a	has stepped in to add	of 20254 The project	draft document	Advisor 4 Project Manager
	timely manner (see	support.4. Communication	schedule will be revised to	preparation. 4 The project	and National Project

Risk	Actions decided during the	Actions effectively	What	When	By Whom
	previous reporting instance	undertaken this reporting			
	(PIRt-1, MTR, etc.)	period			
	previous risk).4. The project	activities and collaboration	extend it including the MTR	extension request will be	Coordinator within the DOE
	team should increase the	with the NGOs namely. The	recommendations	submitted in Q3 of 2024	in collaboration with UNEP
	engagement of Civil Society	Rotaract Club. JCI Antigua.		accompanied by the	
	Organizations (CSOs).	Rotary & Macedonia		redesign of the pilot	
	especially not-for-profit	Community Development			
	NGOs. This should start by	and Support Services.			
	the revision of the project's				
	stakeholder consultation				
	strategy by a social				
	movements specialist. to				
	properly identify relevant				
	CSO stakeholders and				
	establish communication				
	channels with them.				
The high cost of EVs and	1. Identify public and	1 The high cost of EVs and	1 Continue to engage	1 July 2024 to Q2 20252	1. National Financial
high cost of grid electricity	private agencies and	high electricity costs can act	financial institutions and	July 2024 to Q2 2025	institutions 2. The Project
can reduce the uptake of	corporations that could	as a hindrance to the	other stakeholders to		Team at the DOE 2. The
the technology	become early e-mobility	uptake of the technology.	implement government		Government of Antigua and
	adopters and support them	However. financial	subsidies or tax incentives		Barbuda (GOAB)
	in the development of plans	institutions in Antigua and	for purchasing EVs to lower		
	for the electrification of	Barbuda have begun to	the initial cost for		
	their fleets. with the	offer loans for sustainability	consumers. 2Offer rebates		
	involvement of local EV	efforts to make homes	for the installation of home		
	suppliers. Start in first	more climate resilient by	EV chargers to reduce the		
	quarter 2024	introducing climate resilient	upfront costs.		
		measures and offering loans	5		
		to purchase electric vehicles	5		
		for personal use. The			
		recommendation has been			
		completed by the DOE's			

Risk	Actions decided during the	Actions effectively	What	When	By Whom
	previous reporting instance	undertaken this reporting			
	(PIRt-1, MTR, etc.)	period			
		relationship with the Bus			
		Association and their			
		willingness to purchase			
		buses on their own.			
		especially after consultation			
		with their national financial			
		and insurance institutions.			
Capacity to Deliver	1. The project team should	1. The project team has had	1 Mobilize the technical	1 From July 2024 until the	1 Project Manager within
	increase its technical	some engagement with the	consultancies 2 Enlist the	end of the project.2 From	the DOE 2 PMU with
	capacities by participating	UNEP Global Platform and	help of the UNEP global	July 2024 up until the end	support from UNEP Global
	in 2024 in national.	has increased engagement	platform Project team to	of the project. The PMU will	Platform3 Project
	regional. international and	with relevant stakeholders	participate in virtual	attend all capacity building	Manager and the National
	virtual trainings on key	involving energy such as the	training3 Redesign the	and provide feedback on	project Coordinator
	related topics.2. The	Ministry of Energy. The	pilot project to the	training needs to the Global	supported by UNEP and
	preparation of the bus	project team is exploring	governmental fleet	Platform. 3 From July 2024	involving the corresponding
	demonstration requires	the option of having the taxi	including the vehicle	to January 2025. 4. From	actors in the government. 4
	additional technical	pilot redesigned to instead	monitoring software. 4.	July 2024 to January 2025.	the Project Manager and
	assistance to adequately	be based on the	Mobilizing the consultancy		Project Team at the DOE
	plan operations for the	government fleet with the	to establish and implement		
	chosen route. introducing	assistance of the global	proper data collection and		
	formal schedules and	platform. 2. The	methodology for the		
	regular vehicle tracking at	procurement is currently	estimate of direct and		
	least at a testing level.	ongoing. Bus routes have	indirect GHG emissions.		
	under the supervision of	been planned by the Bus			
	ABTB and the involvement	Association with			
	of the Bus Association	authorization from the			
	Vehicle tracking will require	ABTB. A company was			
	the procurement by the	selected as the successful			
	project of GPS trackers for	bidder. 3. No activities			
	all the buses on the	completed in this period			

Risk	Actions decided during the	Actions effectively	What	When	By Whom
	previous reporting instance	undertaken this reporting			
	(PIRt-1, MTR, etc.)	period			
	selected route and tracking				
	software licenses for the				
	project team. ABTB and the				
	bus association. 3. The				
	project should hire				
	technical assistance to				
	establish and implement				
	proper data collection and				
	methodology for the				
	estimate of direct and				
	indirect GHG emissions				
	avoided during the project.				

High Risk (H): There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks. Significant Risk (S): There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks. Moderate Risk (M): There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only modest risks. Low Risk (L): There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only modest risks.

## 5 Amendment - GeoSpatial

#### **Project Minor Amendments**

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the Project and Program Cycle Policy Guidelines. Please tick each category for which a change occurred in the fiscal year of reporting and provide a description of the change that occurred in the textbox. You may attach supporting document as appropriate

### 5.1 Table A: Listing of all Minor Amendment (TM)

Minor Amendments	Changes
Results Framework:	
Components and Cost:	
Institutional and implementation arrangements:	
Financial Management:	Yes
Implementation Schedule:	
Executing Entity:	
Executing Entity Category:	
Minor project objective change:	
Safeguards:	
Risk analysis:	
Increase of GEF financing up to 5%:	
Location of project activity:	
Other:	

#### Minor amendments

In the fiscal year of reporting the DOE requested that a new budget line be created to facilitate Travel and Capacity Building Exercises. This request was approved and the relevant change made and reported in the fiscal reports accordingly.

### 5.2 Table B: History of project revisions and/or extensions (TM)

Version	Туре	Signed/Approved by UNEP	Entry Into Force (last	Agreement Expiry Date	Main changes
			signature Date)		introduced in this
					revision

Version	Туре	Signed/Approved by UNEP	Entry Into Force (last	Agreement Expiry Date	Main changes
			signature Date)		introduced in this
					revision

**GEO Location Information:** 

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as: https://coordinates-converter.com Please see the Geocoding User Guide by clicking here

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
V.C. Bird International	17.1416	-61.7905			
Airport					
St John's West bus station	17.1171	-61.8445			
Saint John's	17.1274	-61.8468	3576022		
Sir Vivian Richards Stadium	17.1032	-61.7849			

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate. \* [Annex any linked geospatial file]

#### Additional Supporting Documents:

Filename	File Uploaded By	File Uploaded At	
SLIM Creatives_Newsletter 1pdf	Executing Agency	2024-08-02 20:56:18	Download
ABBA China Report.pdf	Executing Agency	2024-08-02 20:52:41	Download
ABBA Photos.pdf	Executing Agency	2024-08-02 20:52:41	Download