





Accelerate The Shift To Electric Mobility In Seychelles

Africa Support and Investment **Platform** Meeting

PROJECT OVERVIEW

Project Objective: Mitigate GHG emissions by accelerating the introduction of electric mobility in Seychelles □ Component 1. Institutionalization of low-carbon electric mobility □ Component 2. Short term barrier removal through lowcarbon electric mobility demonstrations □ Component 3. Preparing for scale-up and replication of lowcarbon electric mobility □Component 4. Long-term environmental sustainability of low-carbon electric mobility

PRIORITY ACTION



Gender-sensitive electric mobility strategy



Development of e-bus financing proposal to raise additional funding to scale-up the number of electric buses within the fleet of SPTC.



Capacity Building



Improvement of key policies to better incentivize e-mobility in the Seychelles



Feasibility Study



Transition the energy and transport sectors to renewable



Demonstration Project



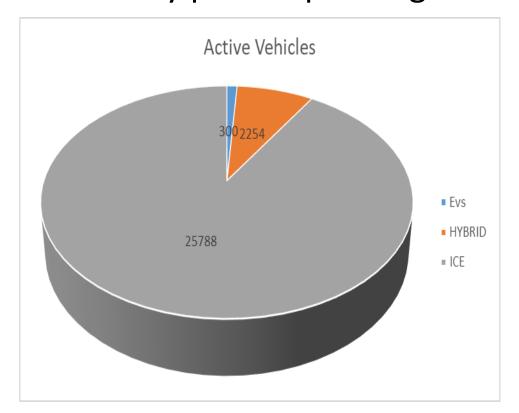
EV battery disposal

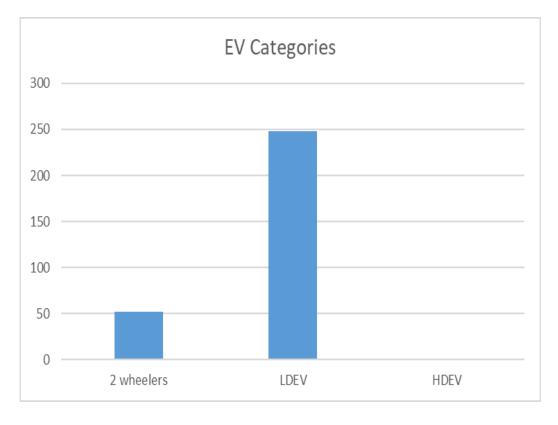
OVERALL WORKPLAN

	PROJECT YEAR 1				PROJECT YEAR 2				PROJECT YEAR 3				PROJECT YEAR 4				
OUTPUTS		2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q 2	Q3	Q4	
Component 1: Institutionalization of low-carbon electric mobility																	
Output 1.1: A national inter-sectorial electric mobility steering committee is established																	
Output 1.2: A gender sensitive National Electric Mobility Strategy that includes electrification of Seychelles Public Transport Corporation is developed and formally proposed.																	
Output 1.3: Key stakeholders are trained in the EV Global Programme activities and through private sector engagement (national and regional workshops, trainings and thematic working groups) and awareness is raised among key stakeholders on electric mobility																	
Component 2: Short-term barrier removal through low-carbon electric mobility demonstrations																	
Output 2.1: A comprehensive feasibility study and implementation plan for electric bus demonstration for testing on different routes is developed including data collection, reporting and analytical frameworks																	
Output 2.2. One demonstration bus and charging equipment are procured, staff trained, demonstration project on different routes is implemented, monitored and data collected, analysed and disseminated.																	
Component 3: Preparing for scale-up and replication of low-carbon electric mobility																	
Output 3.1: Based on the demonstration project, priority routes for scaled-up e-bus deployment are selected and technical specifications for electric buses and the respective charging equipment are developed																	
Output 3.2: Fiscal policies, and regulatory measures to incentivize the uptake of electric mobility are developed and formally proposed.																	
Output 3.3. One e-bus up-scaling financing concept is developed and submitted to a financier																	
Component 4: Long-term environmental and economic sustainability of low carbon electric mobility																	
Output 4.1: A sustainable e-mobility study including a brief technical assessment of the usability of an Extended Producer Responsibility (EPR) scheme for the collection of used EV batteries, an evaluation of the potential to charge EVs with renewable power and the impact of EVs on the integration of renewable is developed with the support of the Global Programme																	

Transport Sector Overview

Seychelles has a very high motorization rate of approximately 28,342 active vehicles for a population of 100,000 habitants. The fleet growth is driven by private passenger cars.





Operating Road Network (land transport)



- Driven distances relatively short
- Speed limit ranging from 40-80 kmph
- Topography includes hilly terrain and steep gradients
- Primary and secondary paved roads
- Narrow roads

ELECTRIFICATION PLAN FOR PUBLIC TRANSPORTATION

Overview



- Government owned organization
- Non-profitable and highly subsidized by the Government.
- Operates integrated networks
- Plan exist to either privatize the organization or convert it into some form of PPP.

Fleet Replacement



- SPTC operates a fleet of 250 diesel fueled buses
- Fleet replacement policy to operate buses not older than 12 years.
- Financing for the buses through donations and Government Grants.
- It is being envisaged that all new buses purchased will be electric.

□ Electrification Plan for SPTC

- The national electric mobility strategy with a strong focus on the electrification of the public transport sector.
- The MoT/SPTC Strategic Plan Review
- Significantly reduce the expenditures on diesel fuel and subsidize from the government.
- Largely dependent on external support and financing
- □ Donation of electric buses from the Chinese Government

Feasibility Study

- Comprehensive feasibility assessment will be developed to identify the routes, which are suitable for electrification
- Technical specification for the demonstration bus will be developed.
- Synergizing feasibility assessment



Demonstration Project

- Demonstration of 1 electric bus alongside the required charging infrastructure
- Provide evidence of technical, financial and environmental sustainability
- The demonstration will be carried out on at least 5 different routes over a timeframe of 10 months in order to define the technical and operational specifications of e-buses suitable for conditions found in the Seychelles

NDCs FOR ELECTRIFICATION OF THE TRANSPORT AND ENERGY SECTOR

- 30% of private vehicles to be electric by 2030 at an estimated cost of 66.7 million USD
- 15.8 MW of solar PV for meeting the energy demand of EVs estimated at 29.8 million USD.
- Renewable energy integration targets (that will also support the charging of EVs) of 15% share of renewables energy supply by 2030.
- Share of BEVs on new buses to account for 30% by 2030, 50% by 2030, 100% by 2050.

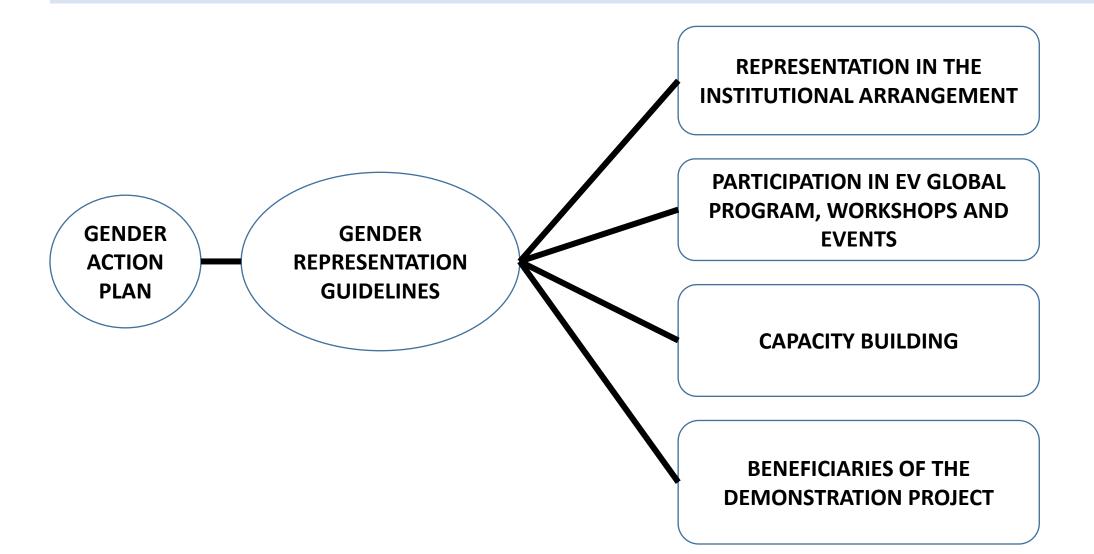
CORDINATION WITH OTHER INITIATIVES

- ☐ Synergizing the feasibility assessment with Chinese Government.
- □NDC Partnership Support from IRENA to develop and implement a Technology Plan for road transport electrification with renewables
- ☐ Seychelles continues with its effort to explore pathways on e-mobility through other sources of funding.

STAKEHOLDERS LISTINGS

GOVERNMENT	INTERNATIONAL ORGANISATIONS	PRIVATE SECTOR
Drives the regulatory and fiscal reforms	 UNEP Climate Mitigation Unit (GEF Implementing Agency): Overall project oversight. UNEP Sustainable Mobility Unit (SMU) – Lead Executing Agency: Provide technical support for the E-Mobility project 	Participate in the Thematic Working Group and Global Programme events as appropriate
ACADEMIA	CIVIL SOCIETY ORGANISATIONS	<u>FINANCIERS</u>
Support the development of the demo monitoring plan and the collection and analysis of demo data	Participate in the Thematic Working Group as appropriate and support the development of gender sensitive sections of the National E-Mobility Strategy	Consult to develop an e-mobility scale-up financing concept

GENDER MAINSTREAMING



MAIN CHALLENGES

The main challenge lies with funding and without intervention Seychelles will not achieve the set objectives. External funding will be required to:

- Facilitate the gradual deployment of electric buses in the public transportation sector inclusive of associated charging infrastructures.
- Support with the introduction of an adequate policy framework.
- Technical and technological support, capacity building and support with infrastructure project including installation of adequate charging facilities across different points in the country.