From the People of Japan

Sustainable Land Use and Mobility Plan

Final Report March 2025

Table of Contents

1. Executive Summary 1
2. Introduction 2
3. Decarbonisation Strategy for Samoa's Transport Sector until 2030 3
4. Enabling Actions 4
5. Interventions 14
6. Programme 17
7. Environmental and Social Safeguards and Gender Aspects 18
8. Monitoring Framework 19
9. Long-term sustainability and scalability 21

Appendix A: Intervention Details

Appendix B: Programmes

This report was produced by KVA Consult Ltd, Flow Transportation Specialists Ltd and Foreseeable Ltd for the Samoa Ministry of Works, Transport and Infrastructure as part of the Climate Action Pathways for Island Transport (CAP IT) project, funded by the Government of Japan and implemented by United Nations Development Programme.

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UNDP

List of Acronyms

AGO	Office of the Attorney General
BAU	Business as Usual
CAP IT	Climate Action Pathways for Island Transport
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
e-	Electric (e.g., e-bus) or electronic (e.g. e-banking)
EIA	Environmental Impact Assessment
EPC	Electric Power Corporation
ESS	Environmental and Social Safeguards
EV	Electric Vehicle
FESA	Fire and Emergency Services Authority
GEDSI	Gender, Equality, Disability and Social Inclusion
GHG	Greenhouse Gas
Gg	Gigagram (1 million kilogrammes)
GIS	Geographic Information System
GoS	Government of Samoa
ICE	Internal Combustion Engine (Vehicle)
IPP	Independent Power Providers
KO	Key Outcome
kW	Kilowatt
kWh	Kilowatt-hour
LTA	Land Transport Authority
MCIL	Ministry of Commerce, Industry and Labour
MCIT	Ministry of Communications & Information Technology
MCR	Ministry of Customs and Revenue
MESC	Ministry of Education, Sports & Culture
MFAT	Ministry of Foreign Affairs and Trade
MNRE	Ministry of Natural Resources and Environment
MOF	Ministry of Finance
MOH	Ministry of Health
MPE	Ministry of Public Enterprise
MTCC	Maritime Technology Cooperation Centre
MWTI	Ministry of Works, Transport, and Infrastructure
NDC	Nationally Determined Contribution
NUS	National University of Samoa
PHEV	Plug-in Hybrid Electric Vehicle
PIC	Pacific Island Country
PSC	Public Service Commission
PMO	Programme Management Office
PUMA	Planning and Urban Management Agency
SAA	Samoa Airport Authority
SIDS	Small Island Developing States
SMP	Sustainable Management Plan
SPA	Samoa Ports Authority
SPC	South Pacific Commission
SPREP	Secretariat of the Pacific Regional Environment Programme
SQA	Samoa Qualifications Authority
SSC	Samoa Shipping Corporation
SSS	Samoa Shipping Services
STA	Samoa Tourism Authority
SWRMA	Samoa Recycling and Waste Management Association
TISP	Transport and Infrastructure Sector Plan
UNDP	United Nations Development Programme
US	United States (Dollars)

1. Executive Summary

The Sustainable Land Use and Mobility Plan (the Plan) sets out the activities required to deliver the Decarbonisation Strategy for Samoa's Transport Sector to 2030 (the Strategy).

The Strategy promotes low-carbon transportation to contribute to global efforts to reduce the impacts of climate change. The Strategy sets out a pathway to a 25 Gg reduction in GHG emissions from the transport sector by 2030, with continued reductions in GHG emissions thereafter.

The Strategy includes the targeted transition to electric and hybrid vehicles, primarily focused on buses, taxis and Government vehicles, along with shared mobility, bus and active mode infrastructure improvements and sustainable land use planning.

This Plan provides a comprehensive list of the enabling activities required to progress the interventions included within the Strategy, assigns owners to these activities and considers the timeframes required for completion.

The Plan expands upon the details of the 19 interventions recommended in the Strategy. For each intervention, the tables in Appendix A expand upon the following aspects:

- How the intervention responds to the five Strategies (Easy Access, Improved Public Transport, Smart Electricity, Get Active, Green Tourism)
- Which enabling activities are required to prepare for and implement the intervention
- The estimated costs and benefits, financial, GHG reduction and co-benefits such as health and environmental outcomes
- High-level timeframes including pilot projects
- Ownership (Ministries, Authorities, private sector)
- Collaboration potential (e.g. with other Pacific Island Countries)
- Key Indicators to monitor progress and outcomes
- TISP key Outcome alignment
- Gender, Equity, Disability and Social Impacts
- Risks and Mitigation

Programmes covering the work required to deliver the interventions, as well as programme management and monitoring activities, are included to show the sequencing of tasks and the timeline for delivering changes on the ground. These programmes highlight that for many activities, work needs to begin in early 2025 to establish a dedicated Programme Management Unit, adequately resourced to complete the transition to a lower-carbon transport system and deliver the target GHG reduction by 2030.

Consideration of the long-term sustainability and scalability of the interventions in the Plan includes how the ongoing decarbonisation of the transport sector is linked to improvements in the carbon emissions of the electricity sector, and in the stability of the electricity grid.

2. Introduction

2.1 Purpose

This report presents the plan for implementing the interventions and enabling activities recommended in the Decarbonisation Strategy for the transport sector in Samoa, which was informed by a suite of studies and surveys and complemented by awareness campaigns as shown in Figure 2.1.

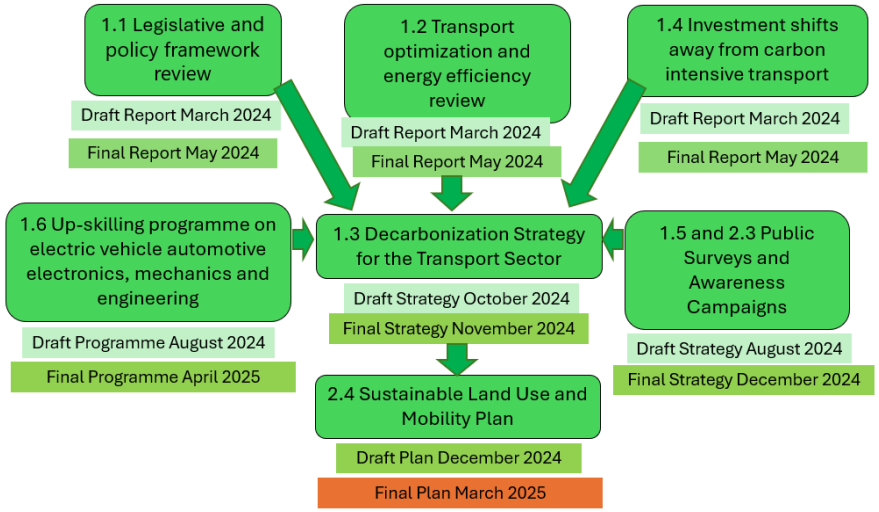


Figure 2.1 Related Strategies, Policies and Plans

2.2 Project Overview

CAP-IT Programme

To meet Samoa's Second NDC target to reduce national GHG emissions by 26% from 2007 levels by 2030 (equivalent to 91 Gg CO_2e)[1], the rapid decarbonisation of both land and maritime transport systems is fundamental. The project Climate Action Pathways for Island Transport (CAP IT): Accelerating the Decarbonisation of Samoa's Land and Maritime Transport Sectors, funded by the Government of Japan, aims to promote the urgent and inclusive transformation of the land and maritime transport sectors towards decarbonisation. CAP IT includes:

- Output 1. Strengthened, integrated and gender-sensitive institutional governance, financial and technical capacity of the transport sector for zero-emission economic development across land and maritime transport systems.
- Output 2. Accelerated inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems.
- Output 3. Decarbonisation of the maritime sector

Activity 2.4

This report covers Activity 2.4 of CAP IT Output 1, which requires the production of a gender-sensitive 5-year Sustainable Land Use and Mobility Plan to promote low-carbon, inclusive and accessible infrastructure and mobility in Samoa.

[1] Samoa's Second Nationally Determined Contribution, Government of Samoa

3. Decarbonisation Strategy for Samoa's Transport Sector until 2030

The Decarbonisation Strategy for Samoa's transport sector until 2030 (Strategy) promotes low-carbon transportation to contribute to global efforts to reduce the impacts of climate change. It provides Samoa's leaders with tools to choose practical and affordable ways to reduce GHG emissions and deliver on their climate commitment. The Strategy sets out interventions to deliver an 18 % reduction in GHG emissions from the transport sector by 2030 compared to 2022, with continued reductions in GHG emissions after that.

The key strategies are focused on delivering a more sustainable and accessible transport system, including for women, youth, the elderly, persons with disabilities, and rural households in Samoa. The 5 key strategies developed and adopted for the decarbonisation of the transport sector in Samoa are:

1. **Easy access:** reducing travel to access services through greater use of digital connectivity and longer-term land use changes
2. **Get active**: integrating physical activity in our everyday life, through walking or cycling as a means of transport
3. **Modernising Public Transport:** upgrading buses and services to promote low-emission travel with higher safety and quality standards
4. **Smart electrification:** targeted adoption of electric vehicles with careful planning and integration with the electricity network
5. **Green the Tourism experience:** leveraging the unique characteristics of the tourism sector to help kick start low-emission transport modes

Table 2.1 summarises the identified priority strategic land and maritime transport interventions for the decarbonisation of Samoa's transport sector by 2030, their expected capital cost and resulting forecast GHG emission reduction potential.

Table 2.1 Strategic Interventions (High Scenario)

Intervention Numbers / Type	Scale	Capital Cost (US $ million)	GHG reduction (Gg CO_2e)
1, 8, Electric buses	85	40	6.5
6, 7, 14 Electric/hybrid private vehicles	3,500	56	4.9
2 Electric/hybrid taxis	1,400	22	4.7
3 Electric/hybrid Govt vehicles	560	28	3.9
9,10 Shared e-mobility	100 minibuses 3,000 e-bikes	11	1.4
4 Electric/hybrid small trucks	110	8	1.0
17,18,19 Low-carbon Maritime Transport	1 electric ferry 2 solar refits 2 terminals	24	1.0
11, 12, 13, 15, 16 Infrastructure Improvements and Land Use Planning	1 bus station 10 km paths	13	0.5
5 Electric/hybrid rental vehicles	120	6	0.3
Programme Management	n/a	15	n/a
Total		**226**	**24.5**

4. Enabling Actions

To achieve the desired outcomes of the transport decarbonisation Strategy by 2030, there are a substantial number of legislative, policy, finance, capability and capacity activities that need to occur with some urgency to enable the transition to a lower-carbon transport system to be achieved by 2030.

Securing Finance is an essential enabling activity. The Strategy is estimated to require a capital investment of between US $167 million and $226 million. While the private sector will finance some of this investment, the Government will need to secure funding for infrastructure, low-emission Government vehicles, concessions and incentives and programme management and monitoring.

Policies and regulations are crucial enablers because they provide the necessary framework and guidelines to drive systemic change. They ensure that interventions included in the Strategy are implemented effectively, creating a structured pathway for achieving emission reduction targets.

The Government of Samoa (GoS) has developed several plans and strategies to reduce GHG emissions across all sectors, with a significant focus on the transport sector. These plans emphasise the electrification of vehicles and improvements in bus services and low-emission modes like walking and cycling.

Technology and innovation will have a role in enabling the transition to low-emission modes of transport while supporting the broader outcomes of this Strategy. The key technological advancements that are available today and expected to be available up to 2030 include improvements to electric vehicles, the batteries that power them as well as EV charging infrastructure; and the use of smart transportation systems that can provide real-time data on things like bus services and patronage or how cycling and walking infrastructure is being utilised.

Greener and stable electricity is essential as implementing the Strategy is expected to increase annual electricity demand by 4 % to 6 %. While this increase is relatively small, it necessitates a continued rise in renewable energy use to meet this demand and maximise the GHG-saving benefits of electric vehicles. This increased demand will also need to be supported by appropriate levels of investment in the grid to ensure resilience.

Culture, Capability and Capacity Building includes education and awareness, as the Samoan people are key to the success of the transition to low-emission transport. To ensure local ownership and buy-in on this issue, citizens need to understand why this shift is occurring, how it benefits them and how they can play their part.

A proactive approach to promoting **Gender Equality, Disability-friendly and Social Inclusion (GEDSI) measures** is a key enabler to a successful green transformation. The greening of transport systems needs to promote safe, accessible and affordable mobility options that work for everyone to deliver a behavioural shift. While transport in Samoa has remained a male-dominated sector, potential newly generated employment opportunities also need to be accessible to different population groups.

The shift to low-emission transport will necessitate new services, infrastructure, and technology. This creates an opportunity to develop new skills and expand existing businesses (or create new ones) within Samoa to support these. Shifting to electric vehicles is the most pronounced change, and the CAP-IT project has recognised that and included the development of a suitable upskilling programme to ensure Samoa has the right training in place to provide the ongoing maintenance for these vehicles.

The successful enabling, implementation and monitoring of the Strategy will require considerable dedicated resourcing from responsible Government departments The Strategy cost estimate has allowed for additional capacity within Ministries and costs associated with legislative and policy changes, planning, rollout and evaluating pilot studies, feasibility studies, negotiations, programme and project management and monitoring activities including baseline surveys.

Samoa has made a good start with the initial EV charging **Infrastructure** delivered through the CAP-IT programme. Expanding this to create a network of public chargers that is accessible, of a reasonable speed, and reliable, will reduce concerns about EV range anxiety. The Strategy also includes upgrades to bus stations and improved walking and cycling facilities, upgrading the traffic signals to a “smart” adaptive connected system, and investigating bus priority lanes.

The following tables describe the identified enabling activities that will be required to be delivered before substantial progress on the Strategy’s interventions can commence.

Policy and regulatory								
Action	**Activity**	**Timeframe**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Bus operating model changes	Undertake a feasibility study to determine the impact on the overcrowding of buses by shifting to a different operating model for bus operators. The current model operates in a private setting, where bus operators' incomes are reliant on the number of bus passengers, which creates a tendency to overcrowding and unstable incomes. The proposed model would mean bus operators are contracted to provide services for a known annual income, while farebox income passes to the Government.							Lead: LTA Supporting: private bus operators
	Undertake the necessary regulatory changes to enable the new bus operating model.							Lead: LTA Supporting: MWTI
Import restrictions for ICE buses and taxis	Introduce legislation to restrict the importation of ICE buses and taxis beyond 2030							Lead: LTA Supporting: MCR, private bus and taxi operators
Taxi fare regulations	Undertake a review of taxi fare regulations to ensure that taxi operators are not unfairly disadvantaged from the shift to low-emission vehicles.							Lead: LTA Supporting: MCR, private bus and taxi operators
Guidelines for EV charging infrastructure	Adopt EV charging infrastructure standards in line with the *Electric Vehicles Standards for the Pacific - Pacific Regional Infrastructure Forum*.							Lead: MWTI Supporting: EPC, LTA, MNRE
Update land use planning framework to support low-carbon transport	Identify specific changes required to the relevant planning documents to ensure alignment with the Decarbonisation of Transportation Strategy and schedule based on their impact and alignment with review periods.							Lead: MWTI (PUMA) Supporting: MNRE, LTA
	To ensure alignment with the Decarbonisation of Transportation Strategy, undertake a programme of work to update the respective planning documents, including the Apia City Spatial Plan, LTA's road specifications and Corporate Plan, Samoa National Urban Policy and the Samoa Climate Change Policy.							Lead: MWTI (PUMA) Supporting: MNRE, LTA

Policy and regulatory								
Action	**Activity**	**Timeframe**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Enable greater working from home by Government workers	Update the Working Conditions and Entitlement Manual 2015 to support an increase in working from home.							Lead: PSC
Decentralise government services to reduce travel times	Investigate the potential scope of government services that could be decentralised.							Lead: PSC Supporting: MOF, MPE
	Introduce a policy to encourage Government departments to decentralise services where practicable.							Lead: PSC Supporting: MOF, MPE
Government Vehicle Policy to promote the purchase of EVs or low-emission vehicles	Introduce policy amendments to promote the purchase of EVs or low emissions vehicles for the Government fleet.							Lead: MOF Supporting: MCR, MNRE, LTA
Pre-inspections of imported vehicles	Create a partnership between the Government and inspection providers (e.g. JEVIC in Japan) for pre-inspections of imported vehicles to reduce the risk of poor-quality vehicles entering the country.							Lead: LTA Supporting: MCR, MOF, MNRE
Waste management policies for batteries	Adopt recommendations for the handling of end-of-life batteries from the *Electric Vehicles Standards for the Pacific* produced by the Pacific Regional Infrastructure Forum.							Lead: MNRE (Waste) Supporting: SWRMA
	Develop an appropriate product stewardship scheme that covers EV batteries with consideration of other Pacific nations and existing schemes such as in New Zealand.							Lead: MNRE Supporting: SWRMA
Vehicle scrappage scheme	Implement the necessary legislative/regulatory changes to establish a vehicle scrappage scheme and set the compensation rules and amounts and the timeframe for the scheme.							Lead: MNRE Supporting: AGO, MWTI

Policy and regulatory								
Action	**Activity**	**Timeframe**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Digital strategy	Establish a requirement for all Government departmental policies to include a digital strategy which includes targets for improved digital accessibility to Government services (e.g. paying bills and submitting forms) by 2030							Lead: MCIT Supporting: MOF
Align regulations to support shared mobility services	Identify any changes to regulations and/or policies necessary to support shared mobility services, including ride-hailing, bike-sharing, and car-sharing. This includes safety standards, insurance requirements, and data privacy laws.							Lead: LTA Supporting: MWTI, MNRE
	Introduce changes to regulations and/or policies to enable shared mobility services.							Lead: LTA Supporting: MWTI, MNRE

Culture, capacity and capability								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Conduct awareness campaigns	Maintain an ongoing programme of awareness to promote low-carbon modes of transport as recommended within CAP IT Activities 1.5 and 2.3.							Lead: MWTI Supporting: MNRE, LTA, EPC
Upskilling of local mechanics	Implement electric vehicle servicing training as per the CAP IT Activity 1.6 report.							Lead: SQA, Supporting: technical institutions including Don Bosco, Laumua O Punaoa, etc., academic institutions such as APTC, NUS etc.

Culture, capacity and capability								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Upskilling of MCR staff for vehicle inspections	Provide necessary training and equipment for border inspection staff to be able to complete border inspections of EVs in line with the Electric Vehicles Standards for the Pacific - Pacific Regional Infrastructure Forum.							Lead: MCR Supporting: LTA
FESA Training and equipment	Provide a suitable training programme and the necessary equipment to enable FESA to respond to battery fires in electric vehicles or from batteries that have been removed.							FESA

Gender equality, disability and social inclusion (GEDSI)								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Proactively encourage more women to become commercial drivers and mechanics	Develop a vocational training programme for women to be trained as bus operators, school bus operators, taxi drivers, ferry operators and mechanics (operational for both EVs and hybrid vehicles)							Lead: MWTI Supporting: LTA
	Proactively encourage women to become bus and taxi drivers and drivers in the Government vehicle fleet							Lead: MWTI Supporting: LTA
	Roll out a Women's Commercial Driving License Training programme in partnership with the Land Transport Authority to ensure they also benefit from the increase in electric vans and to bridge the mobility gender gap							Lead: MWTI Supporting: LTA
Improve the actual and perceived safety of public transport use (buses and taxis)	Analyse the safety of public transport routes (e.g. buses, bus stops) Deliver training to bus operators on response to harassment in their vehicles, including sexual harassment							Lead: MWTI Supporting: LTA
	Implement corrective measures on public transport planning and across Sustainable Mobility Plans (SMPs) to improve safety (e.g. well-lit bus stops), grounded in community consultations on the use of public transport							Lead: MWTI Supporting: LTA

Gender equality, disability and social inclusion (GEDSI)								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
	Encourage the set-up of a women-only taxi station using an electric car fleet to improve the feeling of safety of female passengers and to boost women's livelihood opportunities							Lead: MWTI Supporting: LTA
Improve accessibility of public transport for all users	Conduct a disability audit of the land and maritime public transport systems and take corrective measures to make the transport infrastructure accessible (e.g. installation of wheelchair ramps)							Lead: MWTI Supporting: LTA, Nuanua O Le Alofa (NOLA, disability advocacy CSO in Samoa offering disability audit services)
Reduce barriers to cycling	Develop an inclusive cycling pilot programme in targeted villages to diminish the use of cars for short distances (with the provision of bike lanes, locks, and training) with a focus on youth learning and uptake							Lead: MWTI Supporting: LTA, National Council of Youth, National Council of Women
Improve affordability of lower-carbon transport	Design and roll out a discount scheme for bus tickets for targeted demographics based on socioeconomic criteria of vulnerability							Lead: MWTI, MOF
	Design and roll out an incentive scheme to promote the conversion to EVs by low- and middle-income households							Lead: MWTI, MOF
	Design and roll out an incentive scheme to promote the conversion to EVs by households with mobility-impaired members							Lead: MWTI, MOF

Finance								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Build capacity on Gender-Responsive Budgeting	Conduct Gender-Responsive Budgeting (GRB) training to ensure gender concerns and priorities are assessed and integrated into transport and land use budget planning							Lead: MOF Supporting: MWTI
Incentives for electric vehicle and low-emission vehicle purchases	Design a comprehensive vehicle taxation/ import duty/ registration fee framework which is based on individual vehicle GHG emissions							Lead: MCR Supporting: LTA
	Implement, monitor and adjust the comprehensive vehicle taxation/ import duty/ registration fee framework based on individual vehicle GHG emissions.							Lead: MCR Supporting: LTA
Financial tools	Establish the appropriate financing mechanisms, including no or low-interest loans and leasing arrangements for entities such as bus companies, taxi operators, and village councils that will own the vehicle fleets.							Lead: MOF Supporting: Financial institutions

Green electricity								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Remove solar disincentives	Office of the Regulator to review which organisations are classified as Independent Power Producers (IPP) Review to ensure small-scale solar systems are not inadvertently captured. Update the Electricity Fees Regulation 2017 accordingly.							Lead: Office of the Regulator Supporting: EPC, MWTI
Time of Use Pricing (Apia only)	Introduce time-of-use pricing to steer EV charging to the times of day when there is sufficient capacity in the grid.							Lead: EPC Supporting: MWTI
EV electricity load notification	Ensure the Electric Power Corporation (EPC) is aware of planned new EV loads well in advance to enable procurement of network equipment as required eg transformers.							Lead: EPC Supporting: MWTI

Green electricity								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Smart charging solutions	Prepare for smart charging solutions that optimise energy use and grid stability, such as demand-response programs and vehicle-to-grid (V2G) integration.							Lead: EPC Supporting: MWTI, LTA

Infrastructure								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Public EV charging	Assess the optimal locations for EV chargers to provide a backbone public charging network.							Lead: EPC Supporting: MWTI, LTA, MOF
	Implement a programme to roll out public EV chargers incorporating several types of chargers (slow and fast) to meet diverse needs.							Lead: EPC Supporting: MWTI, LTA, MOF
Safer road design integrating safe facilities for walking and cycling	Incorporate safe facilities for walking and cycling, including streetlights, into the design for all new roads or road upgrade projects.							Lead: MWTI Supporting: LTA
	Conduct community consultations for new facility works, including with women-only and youth-only focus group discussions to ensure their settings and locations respond to their needs, including convenience and safety.							Lead: MWTI Supporting: LTA, National Council of Women, National Council of Youth
Establish a centralised traffic signals system.	Undertake a feasibility study to upgrade the traffic signals to a “smart” adaptive connected system, and implement if favourable							Lead: LTA Supporting: MWTI
	Undertake a feasibility study to determine the potential impact of priority lanes, and implement if favourable							Lead: LTA Supporting: MWTI

Infrastructure								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Enable bus priority lanes to be established through regulation/legislation.	Amend regulations to enable priority lanes to be created.							Lead: MWTI Supporting: LTA

Innovation and Technology								
Action	**Activity**	**Timeframes**						**Responsibility**
		2025	**2026**	**2027**	**2028**	**2029**	**2030**	
Promote the use of online services, e.g. Banking, remittances, shopping, medical consultations, etc.	Update Government policy to enable government services to be accessed online, with payments and forms submitted online.							Lead: MOF Supporting: AGO, MCIL
E-Government services	Implement comprehensive e-government platforms where residents can access public services such as applying for permits, paying taxes, and accessing health records online.							Lead: MOF Supporting: MCR, MOH
Adopt voluntary technical standards for EV charging	Identify suitable EV voluntary standards that can be used to provide best practice advice to consumers and EV charger providers on the charging and installation of EV chargers at residential and commercial premises.							Lead: LTA Supporting: MWTI

5. Interventions

Appendix A contains tables that detail the 19 interventions recommended in the Transport Decarbonisation Strategy, their costs, expected outcomes, dependencies and timelines.

For each intervention, the tables in Appendix A expand upon the following aspects:

- How the intervention responds to the five Strategies (Easy Access, Improved Public Transport, Smart Electricity, Get Active, Green Tourism)
- Which enabling activities are required to prepare for and implement the intervention
- The estimated costs and benefits, financial, GHG reduction and co-benefits such as health outcomes
- High-level timeframes including pilot projects
- Ownership (Ministries, Authorities, private sector)
- Collaboration potential (e.g. with other PICs)
- Key Indicators to monitor progress and outcomes
- TISP key Outcome alignment
- GEDSI Impacts
- Risks and Mitigation opportunities

The following table summarises the interventions, the main actions required, their timeframes and where responsibility lies.

Intervention and Scale	Main Activities	2025	2026	2027	2028	2029	2030	Responsibility
1 & 8 Buses Replace 50-85 wooden buses with e-buses, along with depots and charging equipment.	Work with the bus industry to agree on e-bus ownership arrangements.							MWTI with MoF / LTA / Private
	Pilot trial with 5 buses on express route (e.g. Airport to Apia) and monitor/adjust operation							MWTI with LTA / STA / SAA
	Specify, procure and deliver the first tranche of 40 buses, depots and charging infrastructure.							MWTI / MoF
	Specify, procure and deliver the second tranche of 40 buses, depots and charging infrastructure.							MWTI / MoF
2 Taxis Replace 70%-80% of taxis with hybrid/electric vehicles	Legislation changes – specify a restriction on new ICE taxis after, for example, 2030.							MWTI
	Design and implement financing arrangements, e.g. low-interest loans for low-emission taxi purchase							MoF
3 Government Vehicles Replacement of 65%-80% of the Government vehicle fleet with Electric or Hybrid vehicles	Update Government vehicle procurement policies and rules to specify low-emission vehicles as the default.							MoF
	Install charging infrastructure at Government buildings with dedicated renewable electricity generation, e.g. providing solar panels over covered car park areas.							MWTI
4 Small Trucks Replacement of 10%-15% of small trucks with electric or hybrids	Design and implement import duty concessions/tax incentives, and financing mechanisms to encourage the uptake of electric or hybrid small trucks							MoF
5 Rental Vehicles Replacement of 5%-15% of rentals with electric or hybrids	Design and implement import duty concessions/tax incentives, and financing mechanisms to encourage the uptake of electric or hybrid rental vehicles							MoF
6 & 7 Private Vehicles Replacement of 15%-20% of private vehicles with electric or hybrid vehicles	Design and implement import duty concessions/tax incentives, and financing mechanisms							MoF / MWTI

Intervention and Scale	Main Activities	2025	2026	2027	2028	2029	2030	Responsibility
9 & 10 Shared Mobility 2-3,000 Electric Bikes and 80-100 E-minibuses for village mobility	Pilot trials of 50 e-bikes and 5 e-minibuses							MWTI / MWCSD
	Rollout of the rest of the shared mobility vehicles							MWTI / MWCSD
11 School Buses 10 dedicated school bus routes	Pilot trials of 2 school bus routes							MWTI/ MESC
	Rollout of the rest of the school bus routes							MWTI / MESC
12 Sustainable Management Plans 2-5 by 2030	Complete SMPs by 2030. Transport Decarbonisation Strategy planned for 2-3, but the 2014 Apia City Spatial Plan envisaged 6 SMPs completed by 2020							MNRE
13 Walking and Cycling Paths 10km paths by 2030	Walking and cycling network study and concept designs, funding, land							MWTI
	Construction of the first 10 km of walking and cycling paths							MWTI
14 Vehicle Scrappage Scheme 500-1000 vehicles	Design, specify, legislate and introduce a vehicle scrappage scheme and monitor/adjust as required.							MoF
15 Savalolo Bus Station Upgrade	Concept design, cost estimate, secure funding for the upgrade of Savalolo Bus Station							MWTI
	Procure and construct							MWTI
16 Improved Digital Connectivity	MCIT to complete the Digitally Connected and Resilient Samoa Project.							MCIT
	All Government departments introduce the ability to access all appropriate services online.							GoS
17 Electric Ferry Replace one ferry with an electric vessel.	Introduce a policy that any future ferry replacements must be electric or low-carbon vessels. Secure funding, identify the ferry to be replaced, specify the vessel and identify potential suppliers							MWTI
	Procure an electric ferry							MWTI/SSC
18 Solar Panels Install on 1-2 ferries	Retrofit existing vessels with solar panels.							MWTI/SSC
19 Lower-energy ferry terminals	Design and implement low-energy terminal upgrades as per MTCC guidelines							MWTI/SSS

6. Programme

Programmes for the interventions and the specific enabling activities required to deliver them have been developed to illustrate the sequencing of tasks and the expected durations needed for each. In many cases, the complete delivery of an activity is expected to take most or all the five implementation years of this Plan (2026-2030). This highlights the need for urgent action from several Ministries and Authorities, upon adoption of the Plan, to identify and allocate, or procure, suitable resources that will be dedicated to the planning and delivery of these programmes of work.

Appendix C includes the proposed programmes for:

- Programme Management and Monitoring
- Electric buses, including the pilot express bus service
- Electric and hybrid Government Vehicles
- Electric and hybrid taxis, private vehicles, small trucks and rental vehicles
- Shared Mobility (e-bikes and e-minibuses) including pilots
- Infrastructure and Land Use Planning
- Maritime Transport

The first tasks will involve securing finance and establishing a Programme Management Office (PMO), likely within the Ministry of Works, Transport and Infrastructure, to plan, progress, oversee and monitor the implementation of the Strategy.

The PMO will need to be adequately resourced with dedicated staff with a range of skills across leadership, project management, procurement, technical (transport planning, civil and electrical engineering), financial and risk management, environmental, social and gender impact assessment and measures, and communication. An example PMO organisation chart is included in Appendix B. The PMO staff will require induction and training and be given sufficient time to understand the tasks ahead of them.

The programmes have allowed 9 months for the establishment of the PMO.

Once established, the early focus will be on planning and implementing the Pilot projects for electric buses, e-bikes, and e-minibus shared mobility.

In parallel, the collection of sufficient data to establish the baseline to measure the programme outcomes will be required.

Feasibility studies for the infrastructure projects will likely need to be externally procured, for the investigations and concept designs for the bus station upgrade, walking and cycling paths, adaptive traffic signals and bus priority lanes.

The programme depends highly upon the confirmation of funding for implementation. There remains a risk that if funding is not secured early enough, there may be insufficient time to complete some of the activities by 2030.

7. Environmental and Social Safeguards and Gender Aspects

The development of the gender-sensitive Sustainable Land Use and Mobility Plan has resulted in opportunities to integrate Environmental and Social Safeguards (ESS) and gender aspects.

Integration of ESS in the Plan has involved the assessment of options against policies, standards, and operational procedures that identify and try to avoid, mitigate, and minimise adverse environmental and social impacts as well as adhering to relevant national legislation requirements (e.g. PUM-Act, National Building Code, SFESA).

Gender equality, disability and social inclusion impacts and measures have been added as a dedicated enabler across the Plan's Interventions in Appendix A. Environmental and social impacts were important considerations in the multi-criteria assessment of options for the Strategy.

It was fundamental to the project that the gender-related travel needs and barriers to travel were thoroughly understood. Survey work completed under Activities 1.5 and 2.3 has assisted in the understanding of opportunities and barriers for inclusive and safe mobility, especially for women, people with disabilities and conditions, the elderly, youth and children.

Balanced representation in stakeholder engagement ensured a diversity of views. The engagements and the workshops have provided a balanced representation of genders as evidenced in the reports produced under Activities 1.1, 1.2 and 1.4.

In developing the Plan, gender patterns in the data collected were considered. For example, considering actions such as promoting public transport or active modes, included assessing how these measures can improve access to and safety of these modes for all users. As the transport sector remains male-dominated, this Plan also considers ways to promote a more inclusive workforce by promoting women's capacity-building. This Plan thereby aims to enable a just, green transition in Samoa

The development of all activities in this Plan will require ongoing assessment of impacts on the environment, on social well-being and safety and considering gender impacts and should be designed with environmental and social improvements where possible. For example, the bus station upgrade should include measures to treat stormwater runoff to capture and remove pollutants from surface water runoff before it reaches a body of water. Consultations with transport users are key to informing and guiding the Interventions, with targeted efforts to reach out to women, youth, the elderly, and persons with disabilities. The infrastructure projects included within the Plan will require the development of a Preliminary Environmental Assessment Report (PEAR) and a Comprehensive Environmental Assessment Report (CEAR) as projects progress from concept through detailed design stages.

The transition to a lower-carbon transport system as recommended in the Strategy is expected to have positive outcomes on environmental, social and gender well-being, noting that the treatment of end-of-life batteries will require specific safeguards to be in place.

8. Monitoring Framework

8.1 Overview

The monitoring framework for the Sustainable Land Use and Mobility Plan includes setting key performance indicators (KPIs) across several aspects of mobility, such as

- modal share (walking, cycling, bus use)
- greenhouse gas emissions,
- accessibility,
- safety,
- affordability, and
- equity.

To measure progress, it is essential to gather clear baseline data, establish targets, plan and procure regular data collection methods, identify responsible entities for monitoring, and establish the mechanisms for reporting and evaluation to track progress and identify areas for improvement.

Regular monitoring will ensure the implementation aligns with the overall goals of the Sustainable Land Use and Mobility Plan and considers the needs of diverse stakeholders within the community, as well as providing information to internal and external stakeholders and the public about progress towards a more sustainable transport system.

8.2 Funding Requirements

External (e.g. donor) funding for the Plan will likely come with specific monitoring and reporting requirements, so the targets and goals, and the specific data that will need to be collected for the baseline and measured regularly over the programme life cycle will need to account for these.

8.3 Core Indicators

Core indicators are likely to include some or all of the following:

- Modal share: Percentage of trips made by walking, cycling, bus, taxi, car, etc.
- Number of hybrid and electric vehicles within each fleet category (e.g. buses, taxis, government fleet, etc.)
- Greenhouse gas emissions: CO_2 emissions from transportation in total and per capita.
- Digital Accessibility: Number of new digital services available (Government and private service sector).
- Bus usage: Ridership numbers, service frequency, reliability, passenger satisfaction.
- Traffic safety: Crash rates, deaths, and serious injuries total and per capita.
- Equity indicators: Access to public transport by socio-economic groups and by gender.

8.4 Targets and Goals

The PMO will need to set (and agree with the funding partner) specific, measurable, achievable, relevant, and time-bound (SMART) targets for each indicator aligned with the overall Sustainable Land Use and Mobility Plan.

8.5 Data Collection Methods

Data collection will need to use a mix of data sources, including:

- Traffic counts
- Bus/walk/cycle use surveys
- LTA registration data (including odometer readings)
- Fuel sales data
- Vehicle import records
- Household travel surveys
- Public surveys

Where possible, data should be disaggregated by gender, age, and disability to inform and guide inclusive policy design.

8.6 Reporting and Evaluation

Regular reporting on progress against targets, including data visualisation and analysis, will be required. Preferably, reporting will make use of Geographic Information Systems (GIS) to analyse and present changes in transport use or perceptions in distinct parts of Samoa.

An important part of the monitoring and reporting task will be to regularly review and update the monitoring framework as needed based on new data and changing circumstances. For example, should a change in ticketing for bus use be progressed, there could be a rich source of information available about where, when and who is using buses.

Reporting will need to consider the different audiences, such as funding partners, Government departments, stakeholders, the media and the general public. A range of reporting tools is likely to be required to suit the needs of the different audiences, and these should be developed early on and tested to ensure they meet the users' requirements.

9. Long-term sustainability and scalability

While this Plan is focused on interventions that can be delivered over the next five years to achieve the target emission reductions by 2030, there will be a need to ensure the reductions are sustained and expanded beyond 2030. There may even be opportunities to scale the impact into other sectors or other areas of the Pacific Region.

We have highlighted some of the opportunities and challenges associated with achieving both a sustained effort and ensuring scalability.

9.1 Challenges

- Achieving a stable electricity grid while growing the load on the grid. EPC has already demonstrated the operational and emissions savings that can be achieved at a small scale by moving to electric vehicles. To scale this up to a level where the country can displace significant diesel and petrol usage will require a widespread rollout of chargers, the availability of fast chargers and the ability to charge larger vehicles/ships. These all have implications for the grid.
- In a broader adoption of EVs, the EPC needs to closely monitor electricity demand growth forecasts and preferably avoid uneconomical increases in peak production. The EPC will explore demand-responsive options (such as load-shifting) to minimise additional power generation infrastructure investments, ultimately minimising potential increases in electricity tariffs that will be felt by the wider public.
- Maintaining substantial investment in additional renewable generation to meet the continued demand from electrification of transport and keeping the GHG emissions from electricity as low as possible.
- The ability to finance the necessary capital replacements and new infrastructure with certainty and longevity. Long-term investments will be necessary, and funding for incentives will need to be sustained to be effective. Operating and maintenance cost requirements should be identified early, and their funding secured before committing to expenditure.
- Shaping future land use changes to reduce the sprawl from urban areas and ensure new development is achieved with an emissions consideration.

9.2 Opportunities

- Providing installation and support services for other smaller island nations for their EV charging infrastructure
- Promoting land use and transport choices that are in the long term healthier for the people of Samoa, especially walking, cycling and low-emission public transport use.
- Providing long-term improved outcomes for mobility-poor sections of the population, including women, people with disabilities and lower-income families
- Promoting a more inclusive and diverse transport workforce
- Leading generational change in attitudes towards, for example, alternative mobility, e-mobility and e-commerce.

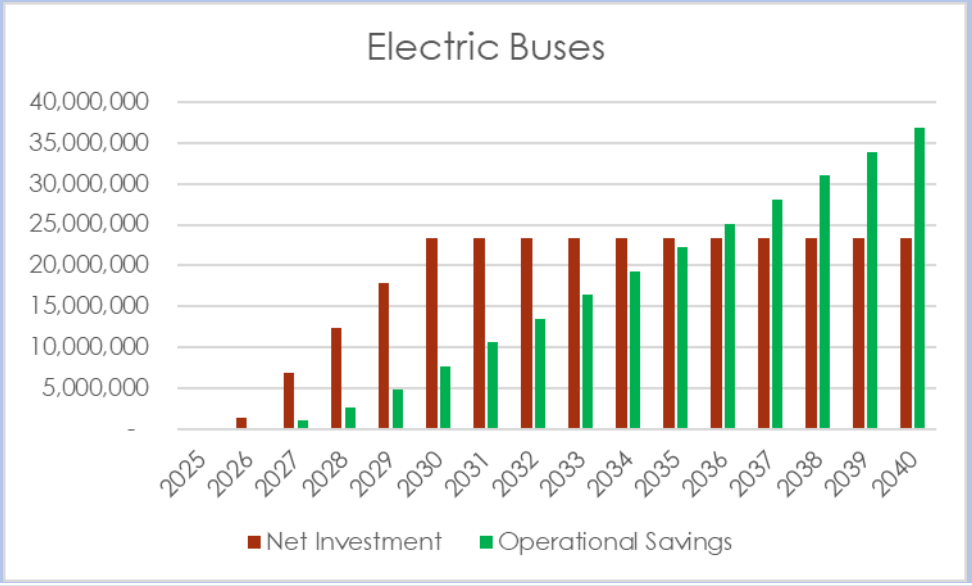
Appendix A: Intervention Details

Intervention 1	Electric Buses 
Description and Scale	Replacement of 30%-50% of Wooden Buses with Electric This equates to 50-85 new electric buses (based on 2022 vehicle registration data, common to all interventions)
Relevant Strategies	
Public Transport	Improves the attractiveness, safety, accessibility and equity of public transport by introducing low-floor easily accessible vehicles, with smooth and quiet operation. Increased comfort and quality will improve the image of buses to widen the appeal to those who would not use wooden buses.
Smart Electricity	Capital cost estimates have allowed US $100,000 per bus to cover dedicated renewable electricity generation and battery storage to reduce the impact on grid supply and ensure power availability. Costs have allowed for about 50% of the buses' electricity requirements to be sourced from solar rooftops over bus depots. In the event of a major electricity outage, bus batteries could be used to power essential appliances and communications equipment. End-of-life battery re-purposing for energy storage for household or commercial resilience purposes, or recycling
Get Active	Bus use inevitably includes walking at each end of the bus trip, increasing activity compared to car use.

Green Tourism	Electric buses, combined with improvements to the availability of bus service information, will be an attractive option for tourists, and seeing electric buses will give the message that Samoa is environmentally responsible.
Easy Access	Not directly relevant
Enablers	
Legislation and Policy	Legislation to restrict the importation of ICE buses beyond 2030 is required to provide operators with a clear signal of the shift to electric buses. Regulation is required to enable a different operating model where bus operators are contracted to provide services for a known annual income, while farebox income passes to the Government. This will provide income certainty to operators and avoid behaviours aimed at maximising bus occupancy. A feasibility study of this model should be undertaken at an early stage.
Finance	Financing mechanisms such as zero or low-interest loans will be required to avoid the high upfront capital costs for bus operators. This assumes private bus ownership remains widespread, and the operators would need financial assistance to purchase. Donor funding could enable the GoS to purchase electric buses, which could then be leased to operators for an annual fee. To enable uptake, import duty concessions on electric buses will help to reduce upfront costs.
Infrastructure	Electric buses have specific charging requirements due to their large batteries and scheduled usage. Sufficient capital will need to be allocated to create the necessary charging infrastructure. Several depots that could house and charge 8-10 buses would be more efficient than many single-bus charging installations while also being able to be located around Samoa. Based on each bus travelling 140 km per day, using 1 kWh/km (based on a BYD K7 8.5m 24 seater), buses will use 140 kWh each per day (about 12,000 kWh for all 85 buses).

	The BYD has a 215 kwh battery which would be sufficient for a full day's work – though there are likely to be longer distance buses that may do more km in a day. To achieve 50% off-grid solar power, this will require at least 6,000 kwh daily solar generation capacity. Assuming an average irradiance (GHI) of ~5kWh/m2/day[2], this will need at least 1.2 MW worth of installed solar panels. The buses will be usually charging at night, so all this power will need to be stored in batteries. 10 bus depots could each have 120 kw solar panels and a 1.2 MWh battery. Each depot would also require a reinforced concrete pad suitable for the weight of the electric buses, with a roof for shelter and to support a solar panel array.
Green Electricity	Increasing the renewable share of the electricity supply is required to improve decarbonisation benefits.
Capacity and capability	Driver training in using electric buses and getting the best out of them Training for the maintenance and repair of electric buses, and specialised equipment (eg 20-tonne capacity hoists) will be required. FESA training in how to deal with an electric bus fire
Gender equality, disability and social inclusion	Develop a vocational training programme for women to be trained as bus operators and mechanics. Establish a minimum quota target for women in the bus operation system Conduct an analysis of safety on public transport routes (e.g. buses, bus stops) Deliver training to bus operators on response to harassment in their vehicles, including sexual harassment Implement corrective measures on public transport planning to improve safety (e.g. well-lit bus stops) Conduct a disability audit of the buses and take corrective measures to make the transport infrastructure accessible (e.g. installation of wheelchair ramps)

[2] Information from MWTI March 2025

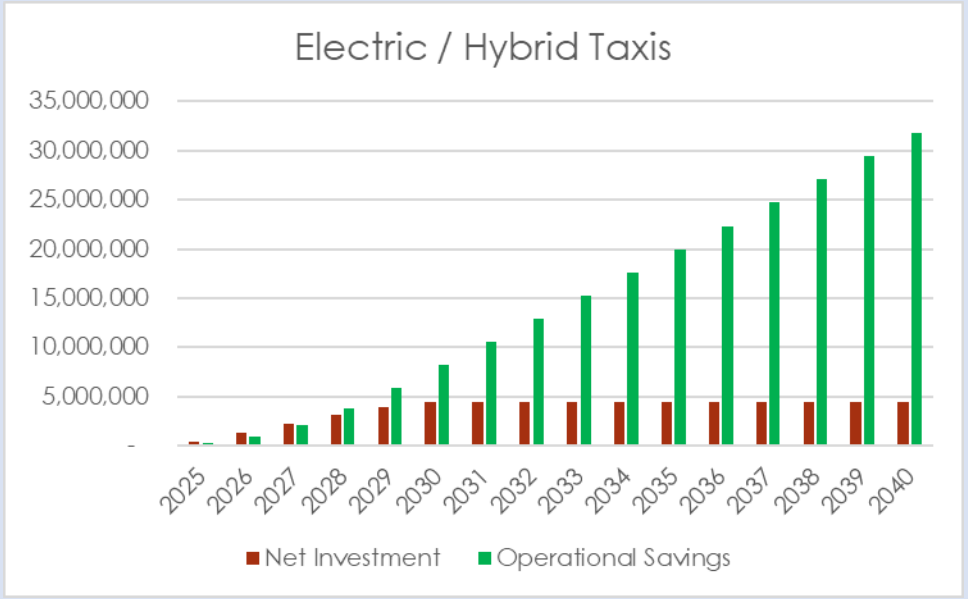
Costs and Benefits (Higher Investment Scenario)	
Cost estimates (High scenario)	Capital Cost US $40 million (US $475,000 per bus, including renewable electricity generation and storage, and fast charging) The extra cost above Business as Usual (BAU) replacement US $23 million Operating Cost saving US $2.9 million per year. Cumulative fuel savings forecast to exceed net capital cost in 2036, as shown on the following chart 
Emissions forecasts	2030 annual carbon emission reduction 6.5 Gg (4.6% of Samoa's 2022 land transport emissions, 27% of the total Plan)
Timeframe	Pilot project 5 buses (express service – see intervention #8) 2026-27 Rollout 2028-2030
Co-benefits	Improved safety, improved access and equity, less traffic noise and improvements in air quality through fewer pollutants.

Owner	MWTI, with MoF, LTA, MNRE and private-sector bus owners
Collaboration Potential	Co-operation with other Pacific countries that are looking at electric buses (eg Fiji) could benefit from the adoption of a single Pacific Island appropriate e-bus, economies of scale in collaborative ordering, and opportunities to partner on capability building.
Indicators	• Number of electric buses operating in Samoa, their annual km travelled, electricity consumption (grid and solar) • Patronage of those buses compared to the existing fleet • Number of safety incidents • Passenger satisfaction • Number of bus operators and mechanics trained, disaggregated by gender • Number of women operating buses • Number of bus operators trained on response to harassment in their vehicles • Number of disability-friendly infrastructure/measures installed • % decrease in bus passengers feeling unsafe when using public transport
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Substantial risk due to private ownership and very high capital cost. Mitigation strategies by way of legislation and finance enablers are covered above.

Intervention 2	Electric / Hybrid Taxis 
Description and Scale	Replacement of 70%-80% of taxis with electric or hybrid (or PHEV) vehicles This equates to 1,200-1,400 new vehicles Calculations based upon 15% electric and 85% hybrid
Relevant Strategies	
Public Transport	Improves the attractiveness and safety of this mode of public transport. Increased comfort and quality will improve the image of taxis as an alternative to owning vehicles, and lower operating costs will help the ongoing affordability of fares.
Smart Electricity	Expect that the majority (85%) of new taxis will be hybrid, as seen in other countries, which would not have any impact on the electricity grid. Some electric and Plug-in-hybrid taxis are anticipated; these would likely be charged at the owners' homes and would not have a large impact on electricity demand. In the event of a major electricity outage, electric (and plug-in hybrid) taxi batteries could be used to power essential appliances and communications equipment. End-of-life battery re-purposing for energy storage for household or commercial resilience purposes, or recycling.

Green Tourism	Hybrid and electric taxis will be an attractive option for tourists, and seeing low-emission taxis will give the message that Samoa is environmentally responsible.
Easy Access	Not directly relevant
Get Active	Not directly relevant
Enablers	
Legislation and Policy	Legislation to restrict the importation of ICE taxis beyond 2030 is required to provide operators with a clear signal of the shift to low-emission public transport. Used electric/hybrid vehicles are the most likely source for replacing the current taxi fleet. Using a pre-import inspection partner such as JEVIC is recommended to reduce the risk of importing poor-quality vehicles. Taxi fare regulations should be reviewed to ensure that taxi operators can be confident in making a return on the higher investment required to purchase a low-emission vehicle while maintaining affordability for users. The running cost savings are expected to outweigh the investment over a short time frame.
Finance	Financing mechanisms such as zero or low-interest loans would assist in the upfront capital cost of low-emission vehicles. The estimated running cost savings would pay off the capital investment over 6-10 years. To enable uptake, import duty concessions on low-emission vehicles will help to reduce upfront costs.
Infrastructure	Electric taxis are likely to be charged overnight at the owner's house. Alternatively, public charging stations at key locations (eg Faleolo International Airport) and at taxi stands could be used to top up.

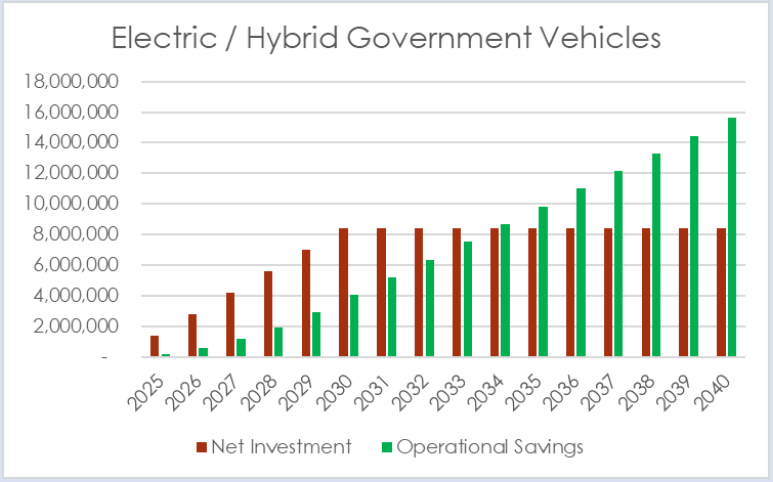
Green Electricity	Increasing the renewable share of the electricity supply is required to fully obtain decarbonisation benefits from electric or PHEV taxis.
Capacity and capability	Driver training in using electric taxis and getting the best out of them, especially for PHEV vehicles which need regular charging to derive the maximum fuel savings. Training for the maintenance and repair of electric and hybrid taxis FESA training in how to deal with an electric vehicle fire
Gender equality, disability and social inclusion	Encourage the set-up of a women-only taxi station driving an electric car fleet to improve the feeling of safety of female passengers and to boost women's livelihood opportunities Ensure a portion of the electric taxis are equipped with disability-friendly infrastructure (e.g. wheelchair ramps)
Costs and Benefits (Higher Investment Scenario)	
Costs	Capital Cost US $22 million (US $18.5k for 5yr old hybrid or US $21k per 5 yr old electric vehicle) The extra cost above BAU replacement US $4.4 million Operating Cost saving US $2.4 million per year. Cumulative fuel savings forecast to exceed net capital cost in 2028, as shown on the following chart

	
Emissions	2030 annual carbon emission reduction 4.6 Gg (3.3 % of Samoa's 2022 land transport emissions, 19% of the total Plan reduction)
Timeframe	2025 -2026 Investigate and confirm incentives and awareness campaigns 2026-2030 Monitor progress and adjust incentives and awareness programmes to ensure progression to the target
Co-benefits	Improved safety, and improvements in air quality through fewer pollutants, and reduced traffic noise.
Owner	Private-sector taxi owners, with assistance from MWTI and MoF
Collaboration Potential	Co-operation with other Pacific countries that are transitioning to electric vehicles (eg Fiji) could benefit from opportunities to partner on capability building.

Indicators	• Number of low-emission taxis operating in Samoa • Passenger satisfaction • Tourist surveys • Number of women taxi drivers operating in Samoa • Number of disability-friendly taxis
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Medium risk due to private ownership. Mitigation strategies by legislation and finance enablers are covered above. Elevated risk that second-hand electric and hybrid vehicles have poor battery health and have a consequent short operating life before battery replacement or refurbishment is needed, which can be a substantial cost. Pre-import inspection of used EVs must include testing of the battery health, which is a simple and reliable indicator of likely performance.

Intervention 3	Electric / Hybrid Government Vehicles
	
Description and Scale	Replacement of 65%-80% of the Government vehicle fleet with electric or hybrid (or PHEV) vehicles This equates to 420-560 new vehicles (including the existing 2024 fleet of 86 vehicles) Calculations based upon 50% electric and 50% hybrid.
Relevant Strategies	
Smart Electricity	Electric and plug-in-hybrid Government cars, pickups and vans would need charging infrastructure at Government buildings. Dedicated renewable electricity generation, eg providing solar panels on covered car park areas, would increase effectiveness and reduce running costs and drain on the electricity grid. In the event of a major electricity outage, electric (and plug-in hybrid) batteries could be used to power essential appliances and communications equipment. End-of-life battery re-purposing for energy storage for household or commercial resilience purposes, or recycling
Green Tourism	Seeing hybrid and electric Government vehicles, and solar arrays for charging them, will give tourists the message that Samoa's Government is environmentally responsible.

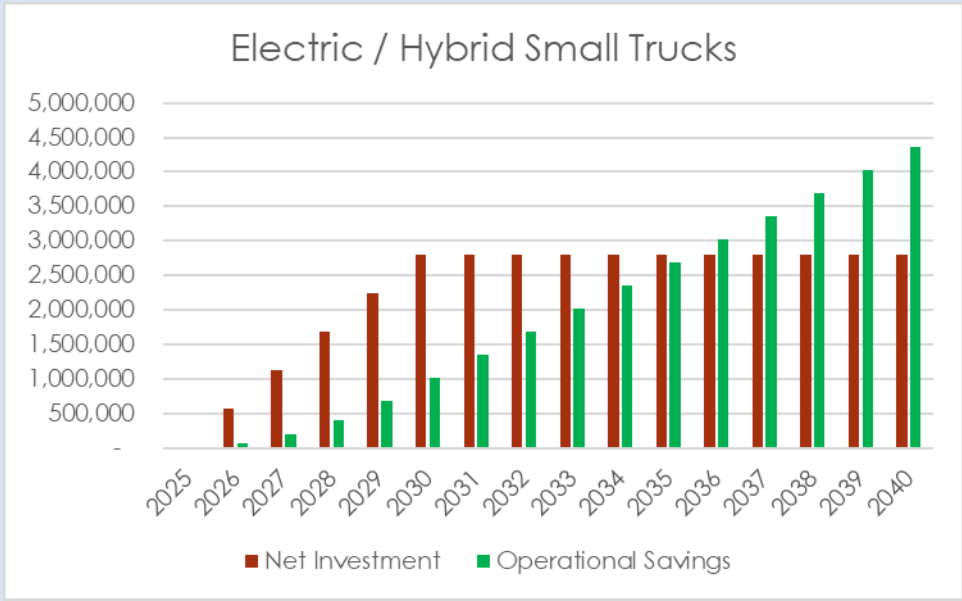
Public Transport	Not directly relevant
Easy Access	Not directly relevant
Get Active	Not directly relevant
Enablers	
Legislation and Policy	Government vehicle procurement policies and rules need to specify low-emission vehicles as the default.
Finance	Increased capital costs may be met through donor funding for Government vehicles to lead the sector transformation.
Infrastructure	Electric and plug-in-hybrid Government cars, pickups and vans would need charging infrastructure at Government buildings. Dedicated renewable electricity generation, eg providing solar panels over covered car park areas, would increase effectiveness and reduce running costs and drain on the electricity grid.
Green Electricity	Increasing the renewable share of the electricity supply is required to obtain decarbonisation benefits.
Capacity and capability	Driver training in using electric vehicles and getting the best out of them, especially for PHEV vehicles, which need regular charging to derive the maximum fuel savings. Training for the maintenance and repair of electric vehicles FESA training in how to deal with an electric vehicle fire

Gender, disability and social inclusion	Integrate proactive HR measures to make sure new recruitment opportunities as Government vehicle drivers reach women applicants Ensure a portion of the Government vehicle fleet is equipped with disability-friendly infrastructure (e.g. wheelchair ramps)
Costs and Benefits (Higher Investment Scenario)	
Costs	Capital Cost US $28 million (US $45k for new electric pickup/van plus $5k per vehicle for charging infrastructure, or US $45k per new hybrid pickup/van) The extra cost above BAU replacement US $8 million Operating Cost saving US $1.2 million per year. Cumulative fuel savings forecast to exceed net capital cost in 2034, as shown on the following chart 
Emissions	2030 annual carbon emission reduction 3.9 Gg (2.8% of Samoa's 2022 land transport emissions, 16% of total Plan reduction)

Timeframe	2024-2030, with 86 vehicles already in service.
Co-benefits	Improved safety, and improvements in air quality through fewer pollutants, and reduced traffic noise. Government vehicles will be sold on to the private market after about 10-15 years.
Owner	MoF
Collaboration Potential	Co-operation with other Pacific countries that are transitioning to electric vehicles (eg Fiji) could benefit from opportunities to partner on capability building or bulk purchase.
Indicators	• Number of low-emission Government vehicles operating in Samoa • Government fuel consumption • Number of women drivers in the Government vehicle fleet • Number of disability-friendly Government vehicles
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Low risk due to Government ownership, with departments able to arrange training on how to use, charge and maintain electric and hybrid vehicles.

Intervention 4	Electric or Hybrid Small Trucks
	
Description and Scale	Replacement of 10%-15% of small trucks with electric or hybrid vehicles This equates to 70-110 new electric/hybrid small trucks, the assumption is 50/50 electric/hybrid
Relevant Strategies	
Smart Electricity	Capital cost estimates allow US $10,000 per truck for charging infrastructure. In the event of a major electricity outage, truck batteries could be used to power essential appliances and communications equipment.
Green Tourism	Tourists seeing electric and hybrid trucks will give the message that Samoa is environmentally responsible.
Public Transport	Not directly relevant
Easy Access	Not directly relevant

Get Active	Not directly relevant
Enablers	
Legislation and Policy	No legislation is required to enable this intervention.
Finance	Financing mechanisms such as zero or low-interest loans will be required to avoid the high upfront capital costs for truck owners. To enable uptake, import duty concessions on electric/hybrid trucks will help to reduce upfront costs.
Infrastructure	Expecting that electric trucks will usually charge at their depots, US $10,000 per electric truck has been included for charging infrastructure.
Green Electricity	Increasing the renewable share of the electricity supply is required to obtain decarbonisation benefits.
Capacity and capability	Driver training in using electric and hybrid trucks and getting the best out of them Training for the maintenance and repair of electric and hybrid trucks FESA training in how to deal with an electric truck fire
Gender equality, disability and social inclusion	Develop a Women's Driving License Training programme in partnership with the Land Transport Authority to boost the uptake of commercial car licenses among women and boost their livelihood opportunities

Costs and Benefits (Higher Investment Scenario)	
Costs	Capital Cost US $8 million (US $65,000 per electric or hybrid truck plus $10,000 per electric truck for charging) The extra cost above BAU replacement US $3 million Operating Cost saving US $0.3 million per year. Cumulative fuel savings forecast to exceed net capital cost in 2036, as shown on the following chart 
Emissions	2030 annual carbon emission reduction 1 Gg (0.7% of Samoa's 2022 land transport emissions, 4% of total Plan reduction)
Timeframe	2025 -2026 Investigate and confirm incentives and awareness campaigns 2026-2029 Monitor progress and adjust incentives and awareness programmes to ensure progression to the target

Co-benefits	Improved safety, less traffic noise and improvement to air quality through fewer pollutants.
Owner	MWTI, with MoF, LTA, and private-sector truck owners
Collaboration Potential	Co-operation with other Pacific countries that are considering investing in electric trucks (eg Fiji) could benefit from adopting a single Pacific Island appropriate small e-truck model, bringing economies of scale in collaborative ordering, and opportunities to partner on capability building.
Indicators	• Number of electric trucks operating in Samoa • Number of women completing their Commercial Driving License
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Medium due to private ownership and capital cost. Mitigation strategies by way of finance enablers are covered above.

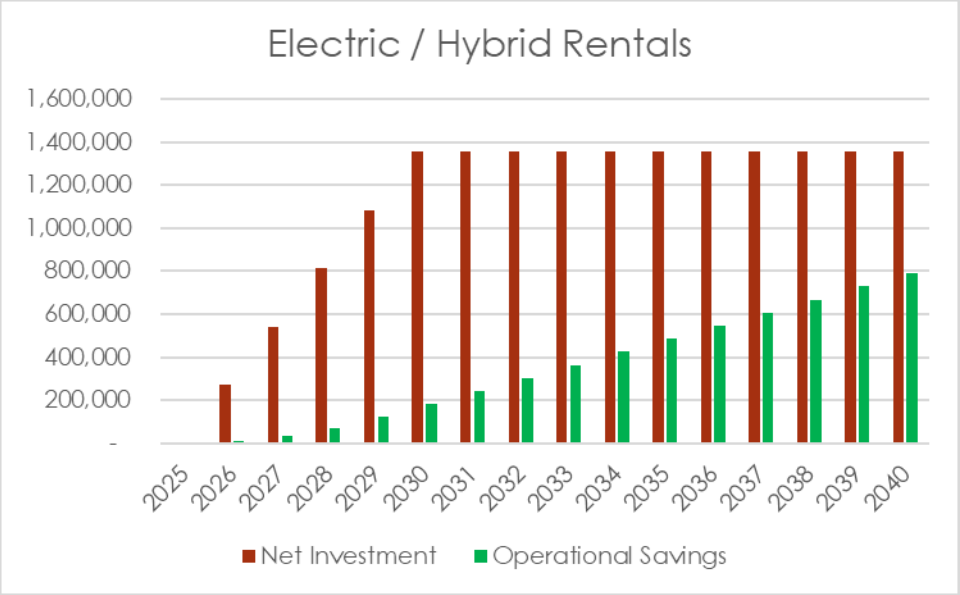
Intervention 5	Electric / Hybrid Rentals
	
Description and Scale	Replacement of 5%-15% of Rental Vehicles with Electric or Hybrid vehicles This equates to 40-120 new vehicles Calculations based upon 50% electric and 50% hybrid
Relevant Strategies	
Smart Electricity	Electric rental vehicles would be charged at the rental companies' depots, at hotels or private accommodation and public charging stations. Rental companies could install renewable solar / wind generation to save electricity costs and assist resilience. In the event of a major electricity outage, electric rental vehicle batteries could be used to power essential appliances and communications equipment. End-of-life battery re-purposing for energy storage for household or commercial resilience purposes.
Green Tourism	Hybrid and electric rental vehicles will be an attractive option for eco-aware tourists and give the message that Samoa is environmentally responsible.

Public Transport	Not directly relevant
Easy Access	Not directly relevant
Get Active	Not directly relevant
Enablers	
Legislation and Policy	It is not expected that specific legislation or policy change is necessary to enable rental companies to adopt low-emission vehicles; the rollout of public charging stations will assist in ensuring renters can get around Samoa without concern.
Finance	Financing mechanisms such as zero or low-interest loans would assist in the upfront capital cost of low-emission vehicles. Expected that rental companies could charge a premium rate for low-emission vehicles to recoup the investment To enable uptake, import duty concessions on low-emission vehicles will help to reduce upfront costs.
Infrastructure	Public charging stations at key locations are required to top up, including at tourist attractions and in hotels and resorts.
Green Electricity	Increasing the renewable share of the electricity supply is required to obtain decarbonisation benefits.
Capacity and capability	Training for the maintenance and repair of electric vehicles FESA training in how to deal with an electric vehicle fire

Gender equality, disability and social inclusion	None required With this measure, female customers will also get the opportunity to try out electric rental cars.

Costs and Benefits (Higher Investment Scenario)

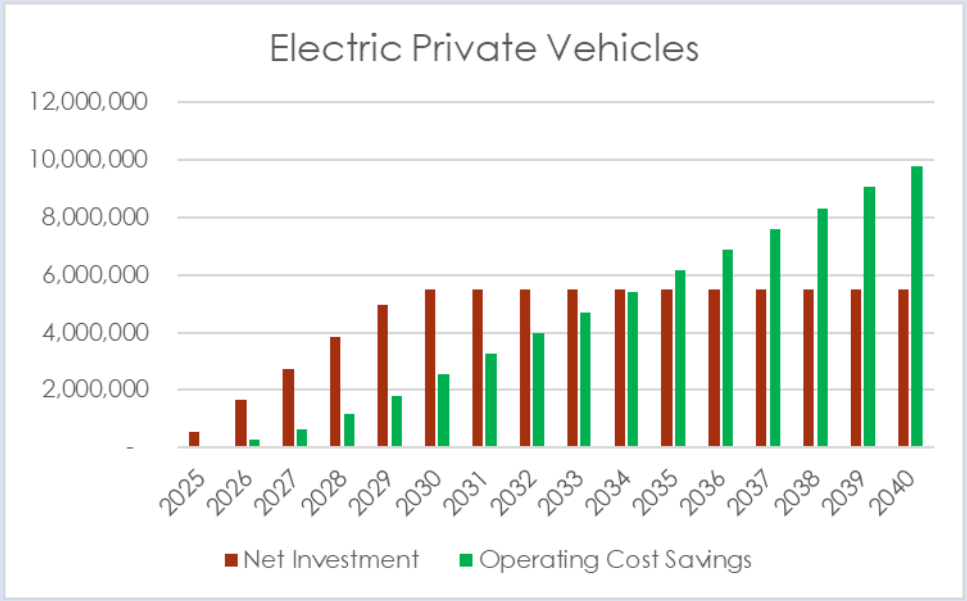
Costs	Capital Cost US $6 million (US $45k for new hybrid or US $57k per new electric vehicle including $5k per vehicle for fast charging) The extra cost above BAU replacement US $1.4 million Operating Cost saving US $60,000 per year. Cumulative fuel savings forecast to exceed net capital cost post 2040, as shown on the following chart



Emissions	2030 annual carbon emission reduction 0.3 Gg (0.2% of Samoa's 2022 land transport emissions, 1% of total Plan reduction)
Timeframe	2025 -2026 Investigate and confirm incentives and awareness campaigns 2026-2029 Monitor progress and adjust incentives and awareness programmes to ensure progression to the target
Co-benefits	Improved safety, and improvements in air quality through fewer pollutants, reduced traffic noise, and green tourism credential
Owner	Private-sector rental vehicle owners, support from the Samoa Tourism Authority
Collaboration Potential	Build on international rental companies (e.g. Avis, Hertz), learning about low-emission vehicles.
Indicators	• Number of low-emission rental vehicles operating in Samoa • Tourist surveys
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Accelerate inclusive decarbonization of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Medium risk due to private ownership. Mitigation strategies by finance enablers are covered above.

Intervention 6	Electric Private Vehicles 
Description and Scale	Replacement of 5% of private vehicles with electric This equates to 880 vehicles
Relevant Strategies	
Smart Electricity	During a major electricity outage, electric vehicle batteries could be used to power essential appliances and communications equipment.
Green Tourism	Tourists seeing electric vehicles will give the message that Samoa is environmentally responsible.
Public Transport	Not directly relevant
Easy Access	Not directly relevant

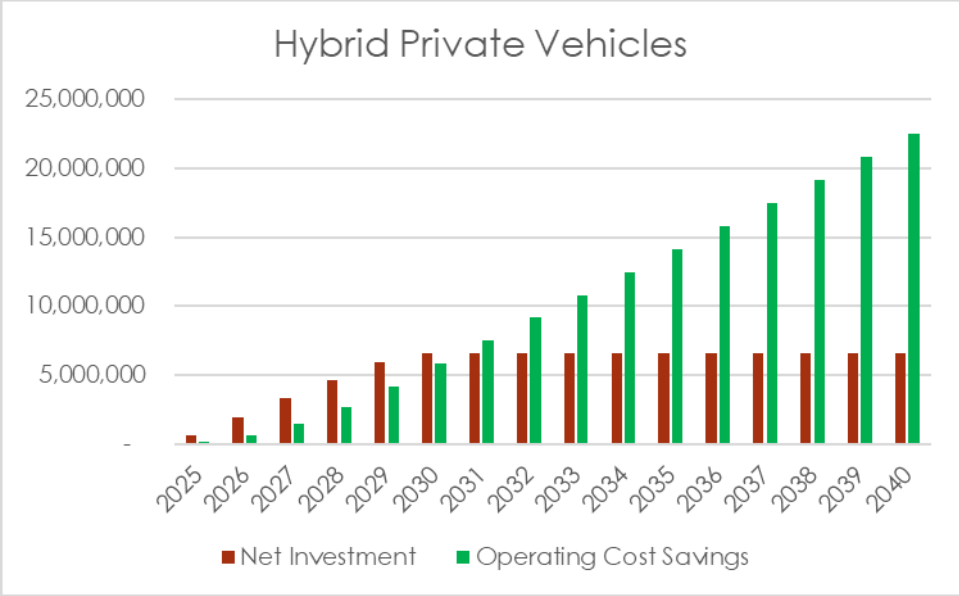
Get Active	Not directly relevant
Enablers	
Legislation and Policy	No legislation is required to enable this to occur. Using a pre-import inspection partner such as JEVIC is recommended to reduce the risk of importing poor-quality vehicles.
Finance	Financing mechanisms such as zero or low-interest loans would encourage adoption. To enable uptake, import duty concessions on electric vehicles will help to reduce upfront costs. Commercial electric car sharing could open up access to those who cannot justify the capital cost of an electric vehicle, for example, https://www.zilch.nz/
Infrastructure	Expected that private electric vehicles will usually charge at home but will also use public charging stations. The use of public chargers should be monitored to ensure that supply can be increased to meet growth in demand.
Green Electricity	Increasing the renewable share of the electricity supply is required to obtain full decarbonisation benefits.
Capacity and capability	Training electricians to install private charging points Driver training in using electric vehicles and getting the best out of them Training for the maintenance and repair of electric vehicles FESA training in how to deal with an electric vehicle fire
Gender equality, disability and social inclusion	Design and roll out an incentive scheme to promote the conversion to EVs by low- and middle-income households. Support Technical and Vocational Education and Training (TVET) schools and the Samoa Qualifications Authority to take proactive measures to make sure mechanical engineering courses reach female students (e.g. through targeted communications campaigns)

Costs and Benefits	
Costs	Capital Cost US $16 million (US $19,000 per 5-year-old electric vehicle) The extra cost above BAU replacement US $5.5 million Operating Cost saving US $0.7 million per year. Cumulative fuel savings forecast to exceed net capital cost by 2035, as shown on the following chart 
Emissions	2030 annual carbon emission reduction 2 Gg (1.5% of Samoa's 2022 land transport emissions, 8% of total Plan reduction)
Timeframe	2025 -2026 Investigate and confirm incentives and awareness campaigns 2026-2030 Monitor progress and adjust incentives and awareness programmes to ensure progression to the target

Co-benefits	Improved safety, less traffic noise and an improvement to air quality through fewer pollutants.
Owner	Private owners
Collaboration Potential	Opportunities to partner on capability building.
Indicators	• Number of private electric vehicles entering/operating in Samoa • Number of households benefitting from the EV incentive scheme • Number of EV mechanics trained, disaggregated by gender
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Medium - Low due to private ownership and reducing capital cost. Mitigation strategies by way of finance enablers are covered above. Risk that second-hand electric and hybrid vehicles have poor battery health and have a consequent short operating life before battery replacement or refurbishment is needed, which can be a substantial cost. Pre-import inspection of used EVs must include testing of the battery health, which is a simple and reliable indicator of likely performance.

Intervention 7	Hybrid Private Vehicles
	
Description and Scale	Replacement of 10%-15% of private vehicles with hybrid This equates to 1,800-2,600 vehicles
Relevant Strategies	
Green Tourism	Tourists seeing widespread hybrid vehicles will give the message that Samoa is environmentally responsible.
Smart Electrification	Pure Hybrid (HEV) vehicles generate their own electricity through regenerative braking, so they do not require external charging. Plug-in hybrids (PHEV) do need to be regularly charged to extract the greatest benefits, but their relatively small batteries mean that low-power chargers are usually sufficient.
Public Transport	Not directly relevant

Easy Access	Not directly relevant
Get Active	Not directly relevant
Enablers	
Legislation and Policy	No legislation is required to enable this to occur. Using a pre-import inspection partner such as JEVIC is recommended to reduce the risk of importing poor-quality vehicles.
Finance	Financing mechanisms such as zero or low-interest loans would encourage adoption. To enable uptake, import duty concessions on hybrid vehicles will help to reduce upfront costs.
Infrastructure	None required
Green Electricity	None required
Capacity and capability	Training electricians to install private charging points (PHEV vehicles) Training for the maintenance and repair of hybrid vehicles FESA training in how to deal with a hybrid vehicle fire
Gender equality, disability and social inclusion	Design and roll out an incentive scheme to promote the conversion to hybrid vehicles by low- and middle-income households. Support Technical and Vocational Education and Training (TVET) schools and the Samoa Qualifications Authority to take proactive measures to make sure mechanical engineering courses reach female students (e.g. through targeted communications campaigns). These two measures are to be merged with and complementary to the GEDSI initiative in Intervention 6.

Costs and Benefits (Higher Investment Scenario)	
Costs	Capital Cost US $40 million (US $15,000 per 5-year-old hybrid vehicle) The extra cost above BAU replacement US $6.6 million Operating Cost saving US $1.7 million per year Cumulative fuel savings forecast to exceed net capital cost by 2031, as shown on the following chart 
Emissions	2030 annual carbon emission reduction 2.9 Gg (2.1 % of Samoa's 2022 land transport emissions, 12% of total Plan reduction)
Timeframe	2025 -2026 Investigate and confirm incentives and awareness campaigns 2026-2030 Monitor progress and adjust incentives and awareness programmes to ensure progression to the target

Co-benefits	Improved safety, less traffic noise and the improvement to air quality through fewer pollutants.
Owner	Private owners
Collaboration Potential	Opportunities to partner on capability building.
Indicators	• Number of private hybrid vehicles entering/operating in Samoa • Number of households benefitting from the EV incentive scheme • Number of EV vehicle mechanics trained, disaggregated by gender
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Low due to private ownership and small incremental capital cost. Mitigation strategies by way of finance enablers are covered above. High risk that second-hand electric and hybrid vehicles have poor battery health and have a consequent short operating life before battery replacement or refurbishment is needed, which can be a substantial cost. Pre-import inspection of used EVs must include testing of the battery health, which is a simple and reliable indicator of likely performance.

Intervention 8	New Express Electric Bus Routes
	
Description and Scale	1 new express electric bus service. Initial service could provide express service between Faleolo International Airport and Downtown Apia bus station. The cost estimate allows for 5 buses to operate a half-hourly service in each direction with 1 spare vehicle.
Relevant Strategies	
Public Transport	Express bus routes with a limited number of stops will improve the journey times between key destinations, becoming more competitive with car or taxi use. Improves the attractiveness, safety, accessibility and equity of public transport by introducing low floor easily accessed vehicles, with smooth and quiet operation. Increased comfort and quality will improve the image of buses to widen the appeal to those who would not use wooden buses.

Smart Electricity	Capital cost estimates have allowed US $100,000 per bus to cover dedicated renewable electricity generation and battery storage to reduce the impact on grid supply and ensure power availability. A fast charger will be required at the Airport bus stop to allow top-ups during the day. In the event of a major electricity outage, bus batteries could be used to power essential appliances and communications equipment.
Get Active	Bus use inevitably includes walking at each end of the bus trip, increasing activity compared to car use.
Green Tourism	An express electric bus between the international airport and downtown Apia will be a highly visible and attractive option for tourists arriving in Samoa. Electric buses, combined with improvements to the availability of bus service information, will be an attractive option for tourists, and seeing electric buses will give the message that Samoa is environmentally responsible.
Easy Access	Not directly relevant
Enablers	
Legislation and Policy	No legislation is required, but having a bus service operated by a Government Agency will be a new concept for Samoa and may need special powers. A policy regarding the operation of the bus service, covering the source of capital and operating costs, the setting of fares outside of the usual LTA fare regulations and the treatment of fare revenue may be required.
Finance	Expected that this service will be operated by SAA, STA or a private operator. Donor funding could be used to purchase the bus and charging equipment through MoF which could be leased to SAA, STA or a private operator. The setting of an appropriate fare for this service should be investigated by willingness to pay surveys, which could include different fares for airport workers and tourists, for example.

Infrastructure	A dedicated bus stop within the Faleolo International Airport, situated close to the main entrance is required to maximise the convenience and visibility of the service. Internal terminal signage for the bus stop should be provided. Bus stops should feature high kerbs to enable step-free access. Electric buses have specific charging requirements due to their large batteries and scheduled usage. Sufficient capital will need to be allocated to create the necessary charging infrastructure. A bus depot will be required near or within the Airport that could house and charge 5 buses and include solar charging. A fast charger (e.g. 300 kw/h) will be required at the bus stop.
Green Electricity	Increasing the renewable share of the electricity supply is required to obtain decarbonisation benefits.
Capacity and capability	Driver training in using electric buses and getting the best out of them Training for the maintenance and repair of electric buses FESA training in how to deal with an electric bus fire
Gender equality, disability and social inclusion	This Initiative should benefit from the previously referred vocational training programme for women as bus operators. Ensure the buses are equipped with disability-friendly infrastructure (e.g. wheelchair ramps)
Costs and Benefits	
Costs	Costs included within Intervention 1
Emissions	Emissions reduction included within Intervention 1
Timeframe	Design, confirm and procure pilot 2025-2026

	Run Pilot Faleolo International Airport to Downtown Apia service 2026-27
Co-benefits	Improved safety, improved access and equity, less traffic noise and improvements in air quality through fewer pollutants, less congestion, better tourist experience
Owner	MoF, MWTI, STA, SAA, or private operators.
Collaboration Potential	Co-operation with other Pacific countries that are looking at electric buses (eg Fiji) could benefit from the adoption of a single Pacific island appropriate e-bus, economies of scale in collaborative ordering, and opportunities to partner on capability building.
Indicators	• Patronage, costs and farebox recovery, • Passenger satisfaction including tourist survey responses
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Medium risk due to lack of existing such service and no natural operator, and opposition from taxi/shuttle operators. Mitigation will be by way of early engagement with taxi/shuttle operators.

Intervention 9 Electric Bike Shared Mobility

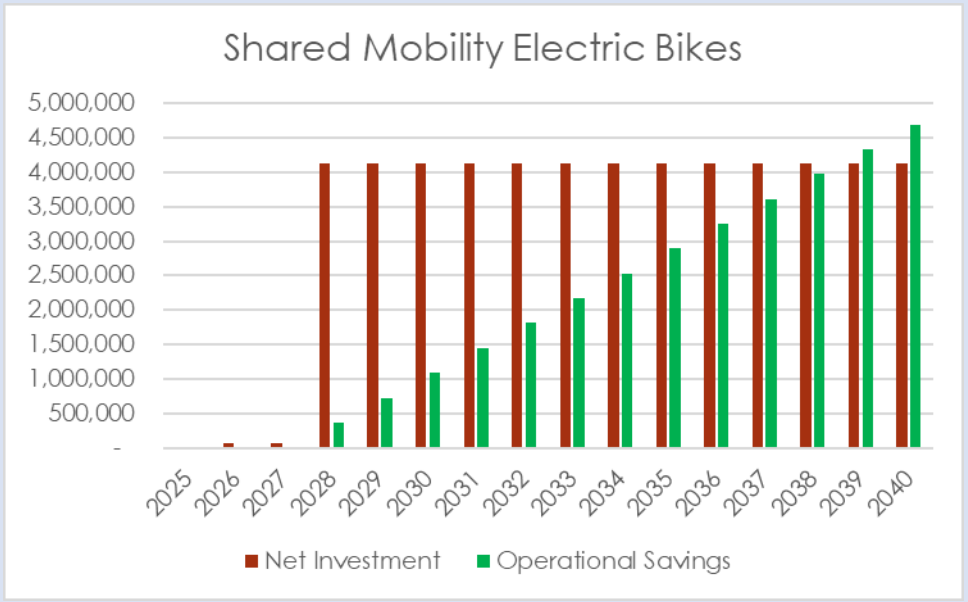
Description and Scale	2,000-3,000 e-bikes, managed by 100 village councils, together with e-bike riding and maintenance training

Relevant Strategies

Smart Electricity	E-bikes have low power charging requirements, but the cumulative effect of 20-30 e-bikes requiring charging simultaneously in the same place will need to be assessed.
Easy Access	E-bikes will offer low-cost access options for residents of villages to travel for education, employment, shopping and socialising, as well as for recreation.

Get Active	E-bikes provide people who would or could not use an unpowered bike an alternative to driving, whether in an urban or rural setting. E-bikes are suitable for most travel up to 50 km, and cargo bikes can enable substantial load-carrying capacity. E-bike users still need to pedal, so riders get low-impact exercise benefits.
Green Tourism	Electric bikes are very suitable for tourists to explore Samoa. While the bikes are aimed at local users, e-bike rental is expected to increase once e-bike use is common across the country.
Public Transport	Not directly relevant
Enablers	
Legislation and Policy	No regulation is expected to be required. Strengthened stray dog control would improve the perceptions of safety for walking and cycling.
Finance	Financing mechanisms will be required to enable Village Councils to purchase e-bikes at an affordable price. Successful e-bike finance schemes overseas have seen 30%-50% of the cost of an e-bike underwritten by central and local Governments. Ownership of the bikes by Village Councils is preferred as it gives them the incentives to manage the use and maintenance of their asset, rather than donating the bikes to the Villages. Donor funding could enable the GoS to purchase electric bikes, which could then be sold to villages at an affordable price. To enable uptake, import duty concessions on electric bikes will help to reduce upfront costs.

Infrastructure	E-bikes can safely travel at 30 km/h or more, so the speed difference between e-bikes and other vehicles is lower than for pedal cycles, enabling e-bikes to share road space. However, there are some roads (eg parts of Vaitele Street) where traffic speeds and volumes mean that e-bike users would feel much safer on a separate cycle lane or shared path. Secure e-bike parking will be required at key destinations which will include markets and shopping areas, places of employment, Government buildings, schools and churches.
Green Electricity	Increasing the renewable share of the electricity supply is required to maximise decarbonisation benefits.
Capacity and capability	Training in using and maintaining electric bikes and getting the best out of them, and how to react to being chased by dogs.
Gender equality, disability and social inclusion	CAP IT Activity 1.5 public survey showed that men are more frequent users of bikes than women. E-bikes provide opportunities for women to cycle with reduced effort and increased comfort and confidence. Develop an inclusive cycling pilot programme in targeted villages to diminish the use of cars for short distances (with the provision of bike lanes, locks, and training), with a focus on youth learning and uptake.
Costs and Benefits (Higher Investment Scenario)	
Costs	Capital Cost US $6 million (US $2,000 per bike including helmets, lights, carriers and panniers) The extra cost above BAU replacement (assuming each e-bike replaces 0.2 cars) is US $4.1 million. Operating Cost saving US $0.4 million per year. Cumulative fuel savings forecast to exceed net capital cost by 2039 as shown on the following chart

	
Emissions	2030 annual carbon emission reduction 0.7 Gg (0.5% of Samoa's 2022 land transport emissions, 3% of total Plan reduction)
Timeframe	Pilot project 50 e-bikes 2026-27 Rollout 2027-2028
Co-benefits	Improved health, improved access and equity, less traffic noise and improvements in air quality through fewer pollutants.
Owner	MoF, MWTI, Village Councils

Collaboration Potential	Co-operation with other Pacific countries looking at electric bikes could benefit from adopting a single Pacific island-appropriate e-bike, and economies of scale in collaborative ordering. An example is the “Africrooze” bike especially developed for local conditions and needs in Africa. https://africrooze.com/en/
Indicators	• Number of electric bikes operating in Samoa • User satisfaction • Number of villages participating in the inclusive cycling pilot programme
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems
Risks and Mitigation	Low risk due to relatively low capital cost, however obtaining Village Council buy-in and ensuring e-bikes are affordable, maintained and used safely will require more work. The prevalence of roaming dogs has been noted as a deterrent to cycling in Samoa, and increased dog control and specific training on how riders should deal with dogs would be appropriate. The pilot programme will assist in demonstrating the feasibility of the mass rollout.

Intervention 10: Electric Minibus Shared Mobility

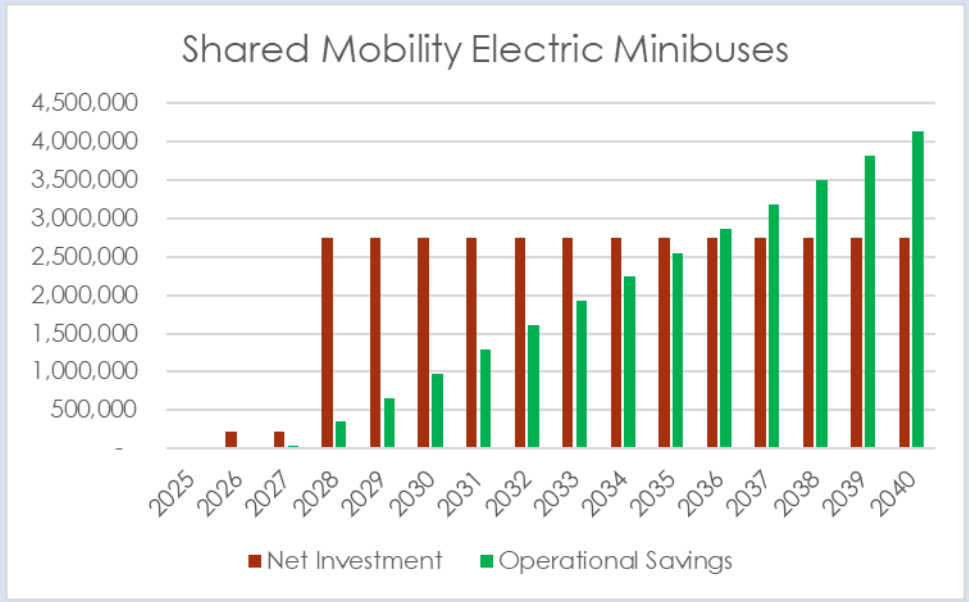
Description and Scale	80-100 electric minibuses, managed by village councils, together with driving and maintenance training. The assumed model has 50 villages with an average of 2 minibuses each.

Relevant Strategies

Smart Electricity	For some villages, potentially the more remote ones, adding electric minibus charging requirements may be an issue on their grid capacity and stability, especially if they have multiple vehicles requiring charging at the same time. Micro-solar or wind installations with battery storage could assist in these locations. E-minibus batteries could provide emergency backup in power outages.

Easy Access	E-minibuses will offer low-cost access options for residents of villages to travel for education, employment, shopping and socialising, going to church and for access to recreation.
Green Tourism	Electric minibuses will provide a clear message to tourists that Samoa is environmentally responsible.
Public Transport	Not directly relevant
Get Active	Not directly relevant
Enablers	
Legislation and Policy	The purchase, ownership and management of the minibuses may require special legislation, especially if a public-private partnership model is adopted. This will need to ensure that the assets are well-maintained and looked after, and the controls and processes are in place in the event of loss or damage to the vehicle.
Finance	Financing mechanisms will be required to enable Village Councils to purchase e-minibuses at an affordable price. Ownership (or part ownership) of the minibuses by Village Councils is preferred as it gives them the incentives to manage the use and maintenance of their asset, rather than donating the minibuses to the Villages. Donor funding could enable the GoS to purchase electric minibuses, which could then be sold or leased to villages at an affordable price. Import duty concessions on electric minibuses will help to reduce upfront costs.

Infrastructure	Electric minibuses will require reasonably fast charging speeds so that they are available throughout the day and evening to provide community transport. 11 or 22-kW smart charging should be considered.
Green Electricity	Increasing the renewable share of the electricity supply is required to maximise decarbonisation benefits. Dedicated solar panels or small wind turbines and a storage battery should be provided in more remote locations.
Capacity and capability	Training in using and maintaining electric minibuses and getting the best out of them
Gender equality, disability and social inclusion	CAP IT public surveys showed that women are much less likely to own a vehicle than men. Shared e-minibuses will offer the opportunity for women to drive an electric vehicle, which may also encourage more women to obtain driving licenses. Consultation with a diverse range of stakeholders, including women's councils and youth groups, is key to ensuring fair and inclusive management and use of the minibuses. Ensure the minibuses are equipped with disability-friendly infrastructure Consult with village councils, women's councils and youth groups on the rollout and management of the minibuses
Costs and Benefits (Higher Investment Scenario)	
Costs	Capital Cost US $5.3 million (US $52,500 per minibus plus $5,000 per bus for charging infrastructure) The extra cost above BAU replacement (assuming each e-minibus replaces 2 cars) is US $2.8 million. Operating Cost saving US $0.3 million per year. Cumulative fuel savings forecast to exceed net capital cost by 2036, as shown on the following chart

	
Emissions	2030 annual carbon emission reduction 0.6 Gg (0.4% of Samoa's 2022 land transport emissions, 2% of total Plan reduction)
Timeframe	Pilot project 5 e-minibuses 2025-27 Rollout 2027-2029
Co-benefits	Improved health, improved access and equity, less traffic noise and improvements in air quality through fewer pollutants.
Owner	MoF, MWTI, Village Councils

Collaboration Potential	Co-operation with other Pacific countries looking at electric minibuses could benefit from adopting a single Pacific island-appropriate e-minibus, and economies of scale in collaborative ordering.
Indicators	• Number of electric minibuses operating in Samoa • User satisfaction • Decreased car ownership in villages with e-minibuses • Number of disability-friendly minibuses • Number of women's councils and youth groups involved in the minibus management
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Medium risk due to capital cost and obtaining Village Council buy-in, and ensuring e-minibuses are affordable, maintained and used safely will require more work. The pilot programme will assist in demonstrating the feasibility of the mass rollout.

Intervention 11: Dedicated School Bus Services

Description and Scale	10 school bus routes operating before and after school.

Relevant Strategies

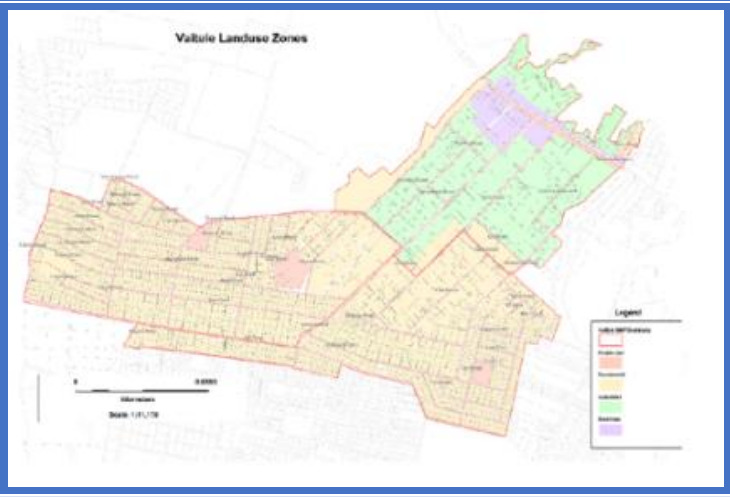
Easy Access	School buses will assist children travelling to and from school to do so safely and efficiently.
Modernising Public Transport	School buses will improve the safety of children bussing to and from school, compared to using public buses.
Get Active	Using a bus to travel to school will involve more walking than being driven to school
Smart Electrification	Not directly relevant
Green Tourism	Not directly relevant

Enablers	
Legislation and Policy	Potentially needs a change of legislation to define a school bus and enable signage and rules of use.
Finance	Ideally, school buses will be free to use, to maximise their appeal. Existing purpose-built buses can be used as school buses, with the Ministry of Education and Culture contracting buses and drivers to operate the services. Potentially, sponsorship (corporate or donor agency) could finance or part-finance the school buses.
Infrastructure	Safe school bus pick-up and drop-off locations will need to be identified and potentially improved, eg with bus shelters.
Green Electricity	N/A
Capacity and capability	School bus drivers would benefit from advanced training in the safe operation of a dedicated school bus.
Gender equality, disability and social inclusion	School buses will address safety concerns raised in consultation regarding school children, especially girls, using crowded public buses. Develop a vocational training programme for women to be trained as school bus operators Establish a target for women in the school bus operation system Deliver training to school bus drivers on response to harassment in their vehicles, including sexual harassment

	Ensure the school buses are equipped with disability-friendly infrastructure These measures are to be merged with and complementary to Intervention 1.
Costs and Benefits	
Costs	The existing bus fleet can be used for these services, so no capital cost is assumed. The cost of contracting buses will need to be negotiated with bus owners. The working assumption is that running each bus route will cost WST 100 per day, equating to about WST 20,000 for a 40-week school year. 10 routes may therefore cost WST 200,000, or US $75,000 per year.
Emissions	Assuming every bus trip will prevent 5 car trips, and the average car trip length is 5 km, 10 buses would lead to 100,000 fewer vehicle kilometres driven per year. At 250 g/km CO_2e, this would equate to a 25 t reduction in annual CO_2e emissions. This assumes that the bus emissions are neutral, as the bus would otherwise be driving its normal route.
Timeframe	Pilot project 2 school buses 2025-26 Rollout 2027-2028
Co-benefits	Improved access and equity, less traffic and improvements in air quality through fewer pollutants.
Owner	MoF, MESC, Schools, Bus Owners
Collaboration Potential	N/A

Indicators	• Number of school buses operating in Samoa • Number of passengers on school buses • Number of disability-friendly school buses • Number of school bus operators trained, disaggregated by gender • % decrease of students feeling unsafe when using public transport
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems • KO15 Make vehicles safer
Risks and Mitigation	Low risk due to no capital costs. The pilot programme will assist in demonstrating the feasibility of the wider rollout.

Intervention 12: Sustainable Management Plans



Description and Scale	2-3 Sustainable Management Plans completed by 2030

Relevant Strategies

Easy Access	SMPs should plan for new developments to be better connected by sustainable transport modes i.e. buses, walking and cycling.
Get Active	SMPs should deliver connected safe and convenient walking and cycling networks in the plan areas. Vaitele SMP seeks active streets to create interest and vibrancy on the street which encourages walking and cycling and also provides for shared paths.

Modernising Public Transport	SMPs should ensure that high trip-generating land uses are located where they are well served by existing or planned bus routes.
Smart Electrification	SMP's should consider opportunities for local solar or wind electricity generation within their development plans, which may be used for charging electric vehicles..
Green Tourism	Not directly relevant
Enablers	
Legislation and Policy	N/A SMPs are already legislated for in PUMA Act (2004) The Samoa City Development Strategy 2015 envisaged the rollout of seven SMPs covering the wider Apia urban area by 2019.
Finance	The cost of developing SMPs will need to be borne by MNRE / PUMA, but donor funding may be available, eg UNDP funded the 2012 Vaitele SMP.
Infrastructure	N/A
Green Electricity	N/A
Capacity and capability	The capacity of MNRE / PUMA to complete 2-3 SMPs over the next five years is unclear, further capacity and capability may be required in-house or procured using a suitable consultant.

Gender equality, disability and social inclusion	SMPs should be developed to ensure gender-responsive outcomes through detailed demographic analysis and promoting inclusive design standards. They should be informed by consultations with women and youth on their use of and mobility in the public space. Innovative methods such as "exploratory walks" can be used to inform public space planning. Usually done by night, they aim to boost women's confidence and ownership of the public space and identify planning adjustments, such as streetlight instalments in dark spots that generate insecurity - producing a map informing future planning works.
Costs and Benefits	
Costs	The assumed cost to undertake and administer a SMP is US $100,000 if it requires substantial consultant input.
Emissions	N/A. Unlikely to make a substantial difference by 2030, the SMPs are a longer-term sustainable programme of low-energy transport planning
Timeframe	2026-2030
Co-benefits	Improved access and equity, less traffic and improved air quality through fewer pollutants.
Owner	MNRE / PUMA, Village Councils
Collaboration Potential	Lessons learned in urban planning from other SIDS may be appropriate for Samoa.
Indicators	• Number of SMPs completed

	• Number of inclusive consultations held with communities on their use of and mobility in the public space, including with women's groups and youth groups
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Strengthen Public transport planning and responsiveness to equity and access needs of the population • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems
Risks and Mitigation	Medium risk due to previous plans for the rollout of multiple SMPs not being realised. Mitigation would be in the form of securing dedicated funding to enable MNRE / PUMA to assign resources (internal or external) to completing SMPs.

Intervention 13: Walking and Cycling Paths

Description and Scale	10km of new walking/cycling paths constructed by 2030

Relevant Strategies

Easy Access	New walking and cycling paths can connect villages and business districts enabling easy car-free accessibility. In some cases, they can enable shorter connections than provided by the road network.
Get Active	New convenient and safe paths will encourage walking and cycling trips.
Green the Tourism experience	New paths that provide access to and from tourist resorts, hotels and attractions will enable tourists to walk or cycle instead of relying on rental cars or taxis.

Public Transport	Not directly relevant
Smart Electrification	Not directly relevant
Enablers	
Legislation and Policy	Not required for path construction. Strengthened stray dog control would improve the perceptions of safety for walking and cycling.
Finance	Donor or corporate finance/sponsorship of new paths
Infrastructure	New paths should be designed to safely accommodate expected levels of use, should be well lit and provided with shade where feasible.
Green Electricity	N/A
Capacity and capability	Network planning and path design capacity and capability may be required in-house or procured using a suitable consultant.
Gender equality, disability and social inclusion	All new paths should consider the diverse requirements of users, e.g. more women have reported concerns about walking at night in poorly lit environments. Paths should be designed with Crime Prevention Through Environmental Design principles applied.

Costs and Benefits	
Costs	The assumed cost of 10 km of walking/cycling path is $US 3 million.
Emissions	2030 annual carbon emission reduction 0.1 Gg (0.07% of Samoa's 2022 land transport emissions, 0.4% of total Plan reduction)
Timeframe	Walking and cycling network study and concept designs 2026 Construction of first 10 km completed 2028-2029
Co-benefits	Better health outcomes, improved access and equity, less traffic and improvements in air quality through fewer pollutants.
Owner	MWTI, LTA, Village Councils
Collaboration Potential	N/A
Indicators	• Network study completed • Km of new path constructed • Number of measures taken/consultations held to consider gender-specific requirements of users • Number of users of the new paths
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes

	• KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems
Risks and Mitigation	Medium risk due to the need to secure land or landowner agreements. Mitigation would be in the form of early engagement with landowners/village councils to first consider if paths can be constructed and maintained on their land, noting the potential benefits to the landowner/village from having better access.

Intervention 14: Vehicle Scrappage Scheme

Description and Scale	Aim for 5% of oldest vehicles to be scrapped by 2028

Relevant Strategies

Smart Electrification	Replacing old vehicles with newer hybrid or electric vehicles, including e-bikes, partly funded through the scrappage scheme, would contribute to this strategy.
Get Active	Scrappage payments could be used to purchase electric bicycles, which would promote active transport.
Green the Tourism experience	Reducing the older most polluting vehicles would improve tourists' enjoyment of Samoa.

Easy Access	Not directly relevant
Public Transport	Not directly relevant
Enablers	
Legislation and Policy	Expected that special legislation would be required to establish a scrappage scheme, set the compensation rules and amounts and the timeframe for the scheme, which should be no more than 2-3 years to have the most impact. The legislation will need to specify what vehicles are eligible (e.g. they should be roadworthy and registered) and what the compensation can be used for (eg towards the purchase of a low-emission vehicle including an e-bike) A policy for the treatment of scrapped vehicles (which goes wider than this scheme) in terms of maximising the reuse of components and recycling of scrap metal will be required.
Finance	Donor funding could enable the financing of the scrappage scheme.
Infrastructure	N/A
Green Electricity	A greener electricity supply would improve the carbon reduction outcomes assuming that electric cars or bikes replace scrapped vehicles.
Capacity and capability	MoF / MWTI / LTA will need to design, establish and run the scheme, ensuring the principles and rules are complied with

Gender equality, disability and social inclusion	N/A
Costs and Benefits	
Costs	The assumed cost is based on a payment of WST 2,500 per scrapped vehicle. If 5% of private vehicles are scrapped this would be about 1,200 vehicles, and the total cost of compensation would be about WST 3 million, or just over US $1 million
Emissions	The cars likely scrapped will be high-emission vehicles, assuming they are replaced with a hybrid vehicle the carbon savings could be at least 40%. Savings are covered in the private / taxi (etc) activities so are not double counted here.
Timeframe	Design of scheme and secure funding 2025/6. Scheme operative 2026 to 2028.
Co-benefits	Safer vehicles on the roads. Improvements in air quality through fewer pollutants.
Owner	MoF / LTA
Collaboration Potential	N/A
Indicators	• The number of old vehicles scrapped under the scheme.
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes

	• KO15 Make vehicles safer
Risks and Mitigation	Medium risk that incentive is insufficient to attract uptake or too high and oversubscribed. Mitigation should involve early market sounding to assess whether the compensation is set at the right level, or whether the compensation level could be adjusted once the scheme goes live.

Intervention 15: Bus Station Upgrade

Description and Scale	Upgrade of Savalolo Bus station to improve bus circulation, bus and pedestrian safety, passenger amenities and facilities, information and signage

Relevant Strategies

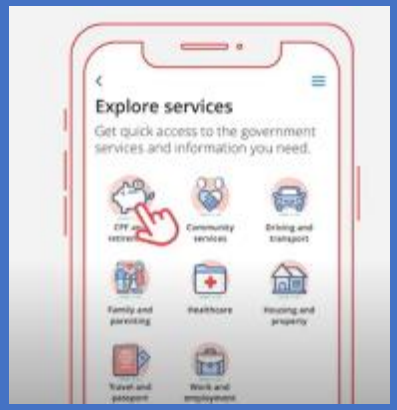
Modernising Public Transport	Upgrading the bus station to modern standards would improve the experience of using bus services and be an integral part of improving bus services in Samoa.
Smart Electrification	Upgrading the bus station could include charging infrastructure for electric buses, and solar panels on the roof of the bus station could power charging and/or lighting and cooling for the bus station building.

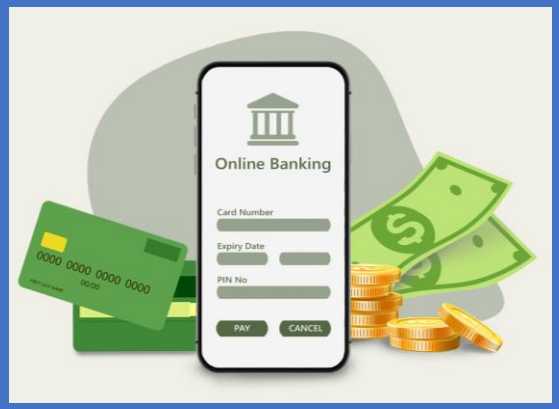
Green the Tourism experience	The current bus station is not attractive or safe for tourists to use and the lack of information on bus services means that tourists are unlikely to use buses. A better bus station with passenger information and signage would increase the likelihood of tourists using buses. The bus station is adjacent to the under-construction new market building. The market is a key tourist attraction and encouraging tourists to use buses to travel to and from the market will improve their experience.
Get Active	Bus trips invariably include walking at each end, so any improvements to increase bus use will have an activity benefit
Easy Access	The bus station is adjacent to the new market building, so is ideal for travel to and from the market for vendors and shoppers alike.
Enablers	
Legislation and Policy	Not expected to be required.
Finance	Donor funding or corporate sponsorship could be suitable. Co-development with retail space could provide a funding stream.
Infrastructure	The upgrade to the bus station should include resurfacing, which should include concrete hardstanding which will be required to provide for the higher weight of electric buses. Bus circulation should be efficient and safe and sufficient bus stops and layover space should be well demarcated. Pedestrian circulation should include safe crossing points and clear routes through and around the bus station.

	Amenities for passengers should include waiting areas protected from the weather, toilets and family rooms, refreshment kiosks and adequate lighting. Information on where to catch buses to all destinations should be provided, and timetabled services would be beneficial, real-time bus location information would be very desirable.
Green Electricity	The upgraded bus station should include solar or wind electricity generation to power the station and potentially for electric bus charging.
Capacity and capability	The design of the bus station upgrade should be based on successful bus station improvement projects around the Pacific or other SIDS.
Gender equality, disability and social inclusion	Women are higher bus users than men, and providing improved safety, facilities and amenities will therefore have particular impact on women bus users. Upgrades need to be grounded and informed by consultations with bus users, including women, to guide the design of the amenities (e.g. station is well-lit, and baby changing rooms are included).
Costs and Benefits	
Costs	The assumed cost of the upgrade is $ US10 million. There may be a desire to integrate the bus station with retail, entertainment or tourist facilities, which would increase the cost but potentially provide an income stream.
Emissions	With a more user-friendly bus station, the use of buses as an alternative to private vehicles or taxis is expected to increase, which would reduce emissions. Indicative assessment is that an improved bus station could induce mode shift to buses, reduce private vehicle trips by 0.8 %, saving 1.2 million vehicle km per year and reducing

	GHG emissions by 400 tonnes (0.4 Gg) per annum
Timeframe	Concept Design and secure funding 2025/6. Detailed design 2026-28, Construction 2028/30.
Co-benefits	An upgraded bus station should enliven and increase the safety of Apia's waterfront area, improving facilities for Samoans and tourists and stimulating economic activity in the area.
Owner	MoF / MWTI / LTA
Collaboration Potential	Lessons learned from bus station upgrades around the Pacific or other SIDS should inform the design.
Indicators	• Bus station patronage and user satisfaction • Number of measures taken/consultations held to consider gender-specific requirements of users in the bus station upgrade
TISP alignment	Aligns with the following TISP 2023-2028 Key Outcomes • KO14 Accelerate inclusive decarbonisation of the land transport sector with a focus on inclusive, accessible, and greener public transport systems
Risks and Mitigation	Medium risk that funding will not be available, or insufficient funding will result in a sub-standard facility being constructed with poor user outcomes. Mitigation should begin with a feasibility study to consult stakeholders, bus operators and passengers as to their needs and preferences, followed by concept design to improve the cost estimate and help secure funding.

Intervention 16: Improved Digital Connectivity





Description and Scale	This intervention promotes greater access to online services across a broad spectrum including access to Government services, free widespread internet banking, utility providers, and online shopping.

Relevant Strategies

Easy Access	Digital connectivity is an important and growing factor in enabling "travel" without leaving home. The ability to shop, bank, pay bills and submit forms, engage with a medical practitioner, or simply communicate with a family member through a computer or mobile device can replace the need for physical travel, thus contributing to a lower emissions transport sector. An important feature of digital connectivity, which rocketed worldwide during COVID-19 restrictions, is the ability to work from home. This intervention

	encourages businesses to move towards allowing hybrid working where feasible, which has many benefits including decreased emissions.
Modernising Public Transport	Not directly relevant
Smart Electrification	Not directly relevant
Green the Tourism experience	Not directly relevant
Get Active	Not directly relevant
Enablers	
Legislation and Policy	Samoa has been working on a National Digital Transformation Strategy for some time.[3] and MCIT is preparing to begin the Digitally Connected and Resilient Samoa Project. Government departmental policies should include having a digital strategy which should include targets for improved digital accessibility by 2030.
Finance	The costs should be borne by the service providers. In the Government sector, individual Ministries and Authorities will require a budget to implement their digital strategy.

[3] https://www.undp.org/samoa/press-releases/samoas-digital-strategy-takes-another-step-closer-being-realized

Infrastructure	The existing mobile networks and internet accessibility can cope with the needs of digital access.
Green Electricity	N/A
Capacity and capability	Government departments and authorities may require additional capacity and capability to implement and operate enhanced digital access. The Digitally Connected and Resilient Samoa Project will be looking at capacity and capability.
Gender equality, disability and social inclusion	The Digitally Connected and Resilient Samoa Project[4] has recognised the need to engage with and plan for the specific needs of vulnerable or disadvantaged groups including women, the elderly, female-headed households, those who identify with diverse sexual orientation and gender identities and expression (SOGIE), and groups that are more vulnerable to exploitation and abuse on the web.
Costs and Benefits	
Costs	No cost estimate has been attempted, the increased digital access should be part of the Digitally Connected and Resilient Samoa Project.
Emissions	For outcome forecasting purposes, we estimate that improved digital connectivity could replace 0.5 % to 1 % of private vehicle trips, saving between 75,000 and 150,000 vehicle kilometres per year, with an annual GHG reduction of 250 to 500 tonnes.

[4] https://www.regulator.gov.ws/images/DSP/Samoa_Digital_SEP_August_2024.pdf

Timeframe	Digitally Connected and Resilient Samoa Project 2024/25 Rollout of improved access 2026/28.
Co-benefits	Enhanced digital connectivity will enable people to access services from anywhere and immediately, saving them time they would have spent travelling and enabling increased productivity.
Owner	MCIT and all Ministries with substantial public interaction that could be moved online, banks and other private sector companies that could increase digital accessibility
Collaboration Potential	If not already part of the Digitally Connected and Resilient Samoa Project scope, good practices and pitfalls from countries that have increased digital accessibility recently should be investigated.
Indicators	• Number of users accessing new online services and user satisfaction, disaggregated by gender, age and disability
TISP alignment	N/A
Risks and Mitigation	Low risk in that the project is already underway.

Intervention 17: Replacement of Maritime Transport Vessel with Electric

Description and Scale	Replacement of one existing maritime transport vessel with an electric ferry

Relevant Strategies

Modernising Public Transport	An electric ferry is not only better for the environment, but it will also provide a quieter, more comfortable ride for passengers. A new vessel will have better facilities and safety equipment than an older craft.
Smart electrification	Electric ferries require a very high current to charge. Ideally, a ferry will have sufficient range to charge only at Mulifanua terminal and make the 45 km round trip to Salelologa on one charge, including a substantial safety margin to allow for adverse weather conditions. Solar or wind generation at the ferry terminal should

	be considered to reduce operating costs and impacts on the grid.
Green the Tourism experience	Tourists travelling between Upolu and Savai'i on the ferry will enjoy a much better experience on a new electric ferry and it will enhance their journey and impression of Samoa.
Get Active	Not directly relevant
Easy Access	Not directly relevant
Enablers	
Legislation and Policy	The Samoa Transport and Infrastructure Plan 2023-28 includes the proposal for a new landing craft to replace Fotu-o-Samoa II, which ideally would have been an electric-powered craft. However, we understand that a contract for a replacement diesel vessel has recently been agreed. The GoS should develop a policy that any more ferry replacements must be electric or low-carbon vessels.
Finance	Donor funding might be required as the capital cost of electric vessels is very high.
Infrastructure	Charging infrastructure and renewable electricity generation at Mulifanua port and Salelologa wharf.

Green Electricity	A renewable electricity supply is required to maximise the GHG reduction effect of an electric ferry.
Capacity and capability	The use, maintenance and charging of an electric ferry will require training, as will the installation and maintenance of the charging infrastructure.
Gender equality, disability and social inclusion	Develop a vocational training programme for women to be trained as ferry operators and mechanics
Costs and Benefits	
Costs	The cost estimate for a 40m landing craft is US $20 million, with another $4 million allocated for charging infrastructure. This is based on the US $23 million cost for a 60m landing craft in Denmark launched in 2019 Plug-in and sail: Meet the electric ferry pioneers with allowance for escalation, contingency and the remote location.
Emissions	Estimated annual GHG reduction of 0.7 Gg per year, (0.5% of Samoa's 2022 land transport emissions, 3% of total Plan reduction)
Timeframe	Planning, finance arrangements and specifications developed 2025-27. Construction partner identified and a contract let 2027/28. Construction 2028-30 and operation begin mid-2030.

Co-benefits	Improved passenger experience. Better air and water quality, enhanced tourist appeal. Safer.
Owner	SSC/MWTI/ MOF/MFAT
Collaboration Potential	Potential to collaborate on vessel design and specification with other tropical countries to ensure designs are suitable for operating conditions. Many electric ferries are operating in quite different conditions in Scandinavia and North America and may not be suited to the Apolima Strait. Partnership with international Organisations and Companies to support maritime decarbonisation (e.g. SPC, SPREP, MTCC, Pacific Regional One Maritime Framework)
Indicators	• Electric ferry in service • Operator and Passenger satisfaction • Number of electric ferry operators and mechanics trained, disaggregated by gender
TISP alignment	• KO 13: Improved connectivity via climate-resilient, secured, and safe ports and vessels
Risks and Mitigation	Elevated risk of not meeting the programme for operation by 2030, given the new ferry contract has just been signed.

Intervention 18: Solar Power for ferries

Description and Scale	Installation of solar panels on 1-2 existing maritime transport vessels

Relevant Strategies

Modernising Public Transport	Installing solar panels enables ferries to run on solar power when in port, reducing noise and vibration.
Smart electrification	Solar panels on ferries, with battery storage, can run the vessel's air-conditioning, fridges, lighting and electronics instead of these being powered by diesel engines.
Green the Tourism experience	Tourists travelling between Upolu and Savai'i waiting to board the ferry will enjoy a better experience while in port without the diesel engines running.

Get Active	Not directly relevant
Easy Access	Not directly relevant
Enablers	
Legislation and Policy	None required, MV Lady Samoa II has already been retrofitted with solar panels.
Finance	Donor funding might be required, but investment is expected to be recouped within 2-3 years in fuel savings.
Infrastructure	None
Green Electricity	N/A
Capacity and capability	Samoa already has the appropriate capability for this work. Lessons learned from issues with the Lady Samoa II installation should be taken on in specifying future projects.
Gender equality, disability and social inclusion	N/A. Training women as renewable energy engineers falls outside the scope of this Plan.
Costs and Benefits	
Costs	The cost estimate for installing solar on a ferry is US $60,000; the Plan has allowed for two ferries by 2030

Emissions	Estimated annual GHG reduction of 160 tonnes per year from 2 ferries (0.1% of Samoa's 2022 land transport emissions, 0.7% of total Plan reduction)
Timeframe	2025-2028
Co-benefits	Improved passenger experience. Better air and water quality, enhanced tourist appeal.
Owner	SPA/ SSC/ SSS/ MWTI
Collaboration Potential	Partnership with international Organisations and Companies to support maritime decarbonisation (e.g. SPC, SPREP, MTCC, Pacific Regional One Maritime Framework)
Indicators	• Solar panels installed • Operator and Passenger satisfaction
TISP alignment	• KO 12: Social and environmental impacts of maritime operations and services effectively mitigated • KO 13: Improved connectivity via climate-resilient, secured, and safe ports and vessels
Risks and Mitigation	Medium risk given limited cost, but lessons learned from the previous project must be addressed.

Intervention 19: Lower Energy Ferry Landside Operations

Description and Scale	Lower energy infrastructure for Mulifanua and Salelologa Ferry Terminals

Relevant Strategies

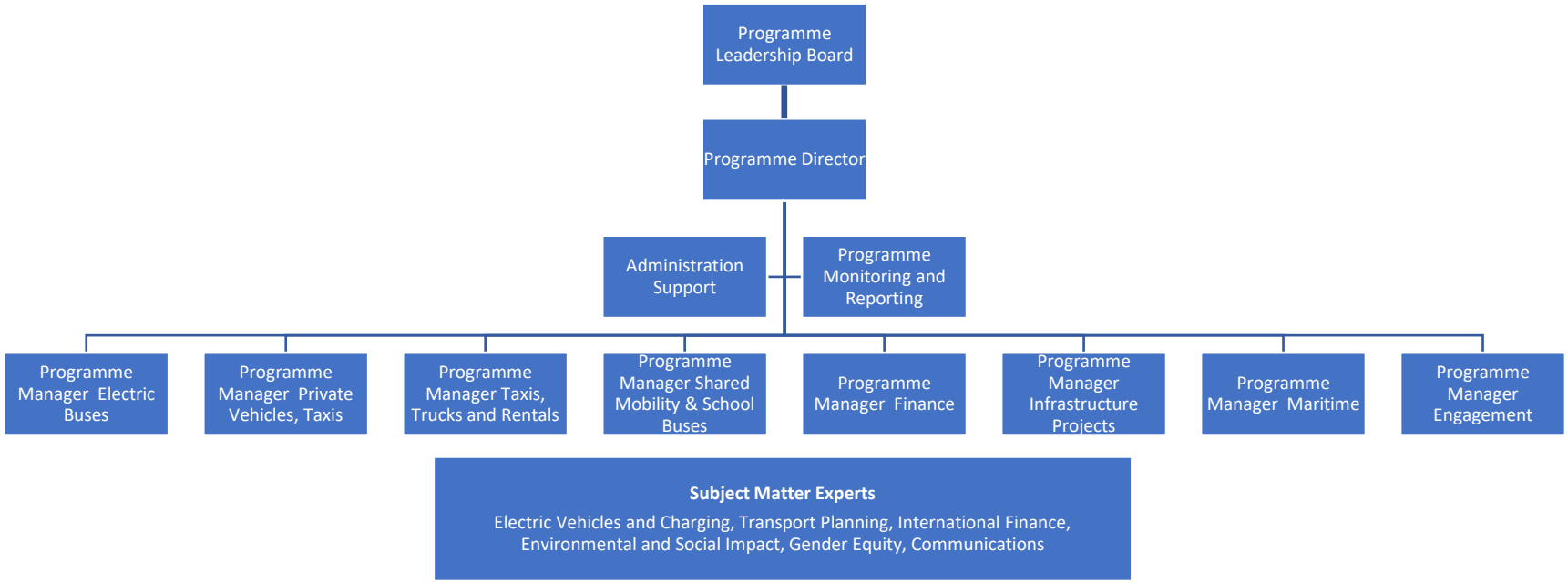
Modernising Public Transport	Improvements to ferry terminals can improve the user experience of public transportation.
Smart electrification	Improvements could include solar or wind generation to power the landside operations, along with improvements to the energy efficiency of the equipment and operations.
Green the Tourism experience	Tourists travelling between Upolu and Savai'i on the ferry may appreciate observing solar or wind generation powering the ferry terminals.

Get Active	Not directly relevant
Easy Access	Not directly relevant
Enablers	
Legislation and Policy	None required
Finance	Donor funding might be required, but investment is expected to be recouped within 2-4 years in power savings, so a low-interest loan could be attractive.
Infrastructure	Renewable electricity and lower-energy appliances
Green Electricity	Lower electricity consumption at ferry terminals would improve the progress toward increasing renewable electricity.
Capacity and capability	Samoa already has the appropriate capability for this work, with advice from MTCC-Pacific.
Gender equality, disability and social inclusion	N/A
Costs and Benefits	
Costs	The cost estimate is US $ 300,000 for the two terminals based on MTCC-Pacific report.

Emissions	Similar projects have yielded about 2 t GHG reduction per year for every US$1,000 invested[5]. A conservative estimate of 40 tonnes per year has been used, (0.03% of Samoa's 2022 land transport emissions, 0.2% of total Plan reduction)
Timeframe	2025-2027
Co-benefits	N/A
Owner	SPA/ SSC/ SSS/ MWTI
Collaboration Potential	MTCC-Pacific has provided technical assistance on port energy management (including Apia Port) through energy audits to establish baseline data on ports energy consumption and provide advice on energy-saving short and long-term projects to reduce GHG emissions from port operations. The expertise of MTCC should be leveraged.
Indicators	• Terminals upgraded. Terminal electricity use is reduced.
TISP alignment	• KO 12: Social and environmental impacts of maritime operations and services effectively mitigated • KO 13: Improved connectivity via climate-resilient, secured, and safe ports and vessels
Risks and Mitigation	Low risk given limited cost, and proven results.

[5] https://gmn.imo.org/wp-content/uploads/2020/10/MTCC-Pacific-Pilot-Project-1-Uptake-of-ship-energy-efficient-technology.pdf

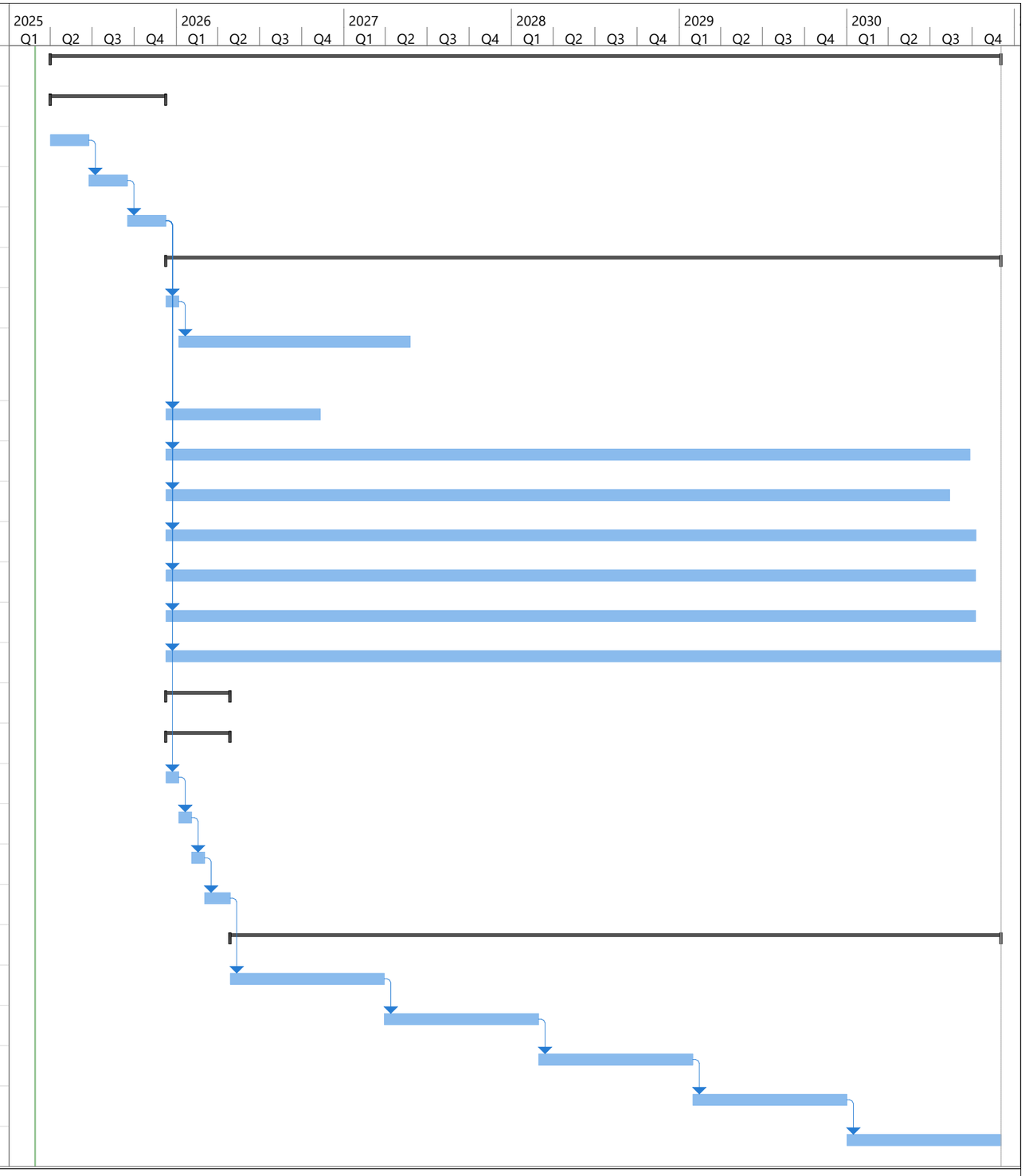
Appendix B: Example PMO Organisation Chart



Example only. Some of these roles may be part time.

Appendix C: Programmes

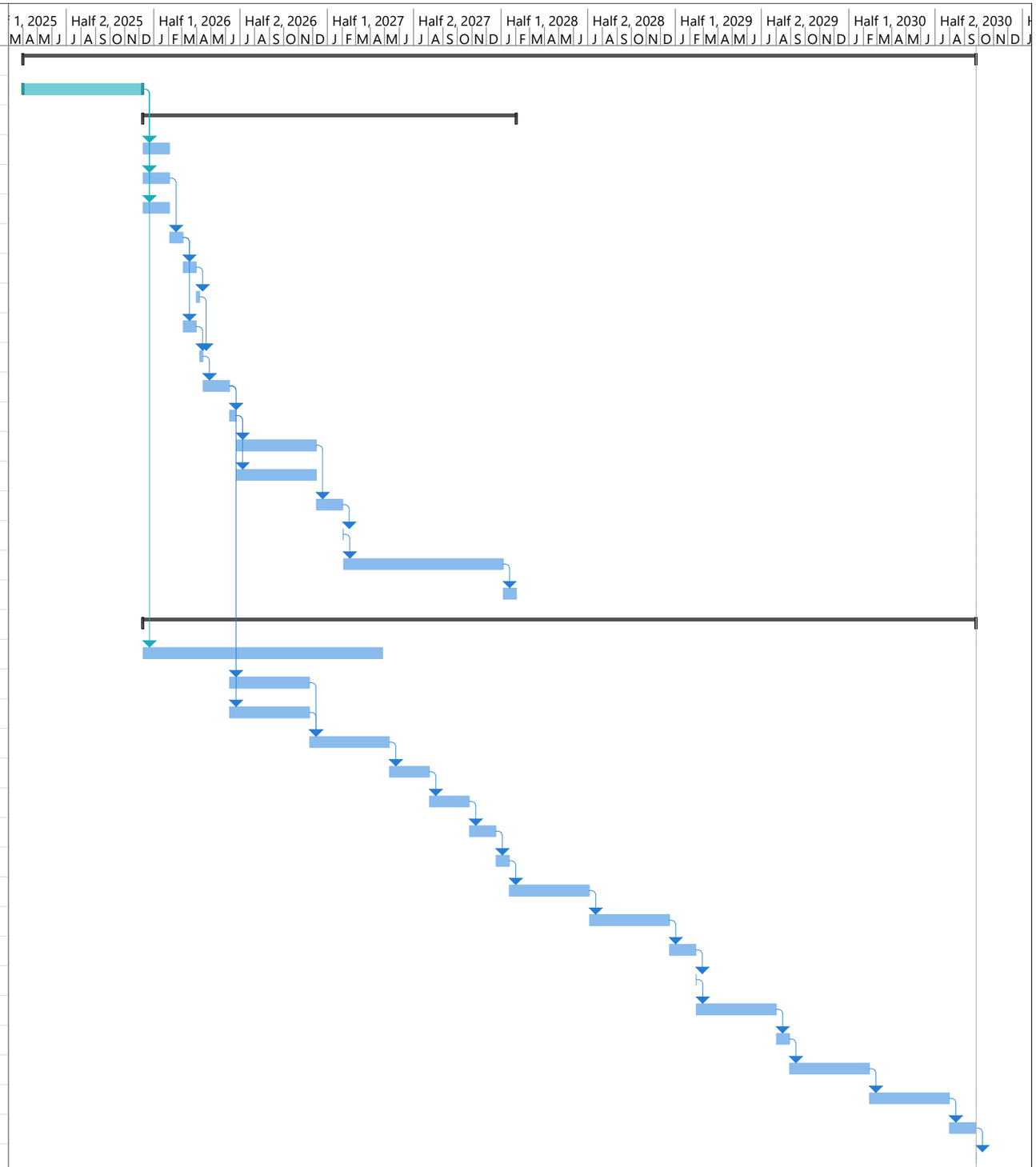
ID	Task Name	Duration	Start	Finish
1	**Programme Management and Monitoring**	**1480 days**	**Tue 1/04/25**	**Mon 2/12/30**
2	**Establishment of Programme Management Office**	**180 days**	**Tue 1/04/25**	**Mon 8/12/25**
3	Identify Roles and Responsibilities	3 mons	Tue 1/04/25	Mon 23/06/25
4	Establish Budgets and Secure Funding	3 mons	Tue 24/06/25	Mon 15/09/25
5	Appoint staff to roles, induction and training	3 mons	Tue 16/09/25	Mon 8/12/25
6	**Programme Implementation Management**	**1300 days**	**Tue 9/12/25**	**Mon 2/12/30**
7	Set Up Implementation Plan	1 mon	Tue 9/12/25	Mon 5/01/26
8	Progress Pilot projects implementation and monitoring	18 mons	Tue 6/01/26	Mon 24/05/27
9	Procure and Manage Feasibility Studies	12 mons	Tue 9/12/25	Mon 9/11/26
10	Electric Bus Implementation	1252 days	Tue 9/12/25	Wed 25/09/30
11	Government Vehicles	1220 days	Tue 9/12/25	Mon 12/08/30
12	Private Vehicles and Taxis	1261 days	Tue 9/12/25	Tue 8/10/30
13	Shared Mobility	1260 days	Tue 9/12/25	Mon 7/10/30
14	Maritime Transport	1260 days	Tue 9/12/25	Mon 7/10/30
15	Infrastructure	1300 days	Tue 9/12/25	Mon 2/12/30
16	**Monitoring and Reporting**	**100 days**	**Tue 9/12/25**	**Mon 27/04/26**
17	**Baseline Surveys**	**100 days**	**Tue 9/12/25**	**Mon 27/04/26**
18	Confirm baseline data required	1 mon	Tue 9/12/25	Mon 5/01/26
19	Design Surveys	1 mon	Tue 6/01/26	Mon 2/02/26
20	Conduct surveys	1 mon	Tue 3/02/26	Mon 2/03/26
21	Report on baseline	2 mons	Tue 3/03/26	Mon 27/04/26
22	**Annual Monitoring**	**1200 days**	**Tue 28/04/26**	**Mon 2/12/30**
23	Year 1 surveys and reporting	12 mons	Tue 28/04/26	Mon 29/03/27
24	Year 2 surveys and reporting	12 mons	Tue 30/03/27	Mon 28/02/28
25	Year 3 surveys and reporting	12 mons	Tue 29/02/28	Mon 29/01/29
26	Year 4 surveys and reporting	12 mons	Tue 30/01/29	Mon 31/12/29
27	Year 5 surveys and reporting	12 mons	Tue 1/01/30	Mon 2/12/30



Project: SLUMP Programme Ma
Date: Thu 27/02/25

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

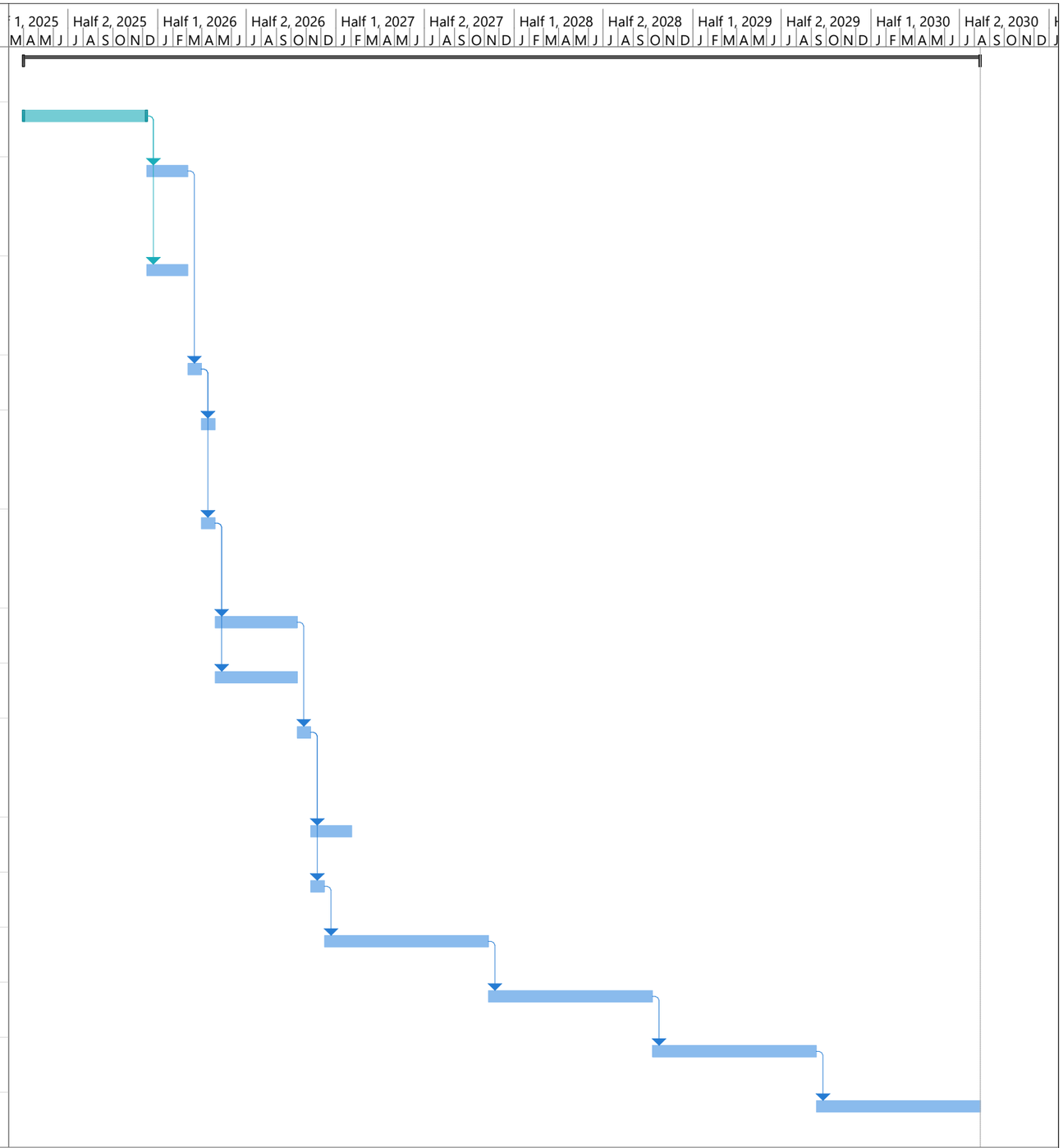
ID	Task Name	Duration	Start	Finish
1	**Electric Buses**	**1432 days**	**Tue 1/04/25**	**Wed 25/09/30**
2	Obtain Government Approvals and Set up PMO	9 mons	Tue 1/04/25	Mon 8/12/25
3	**Pilot Project - Airport Express Bus**	**561 days**	**Tue 9/12/25**	**Tue 1/02/28**
4	Identify Potential Funding Sources	2 mons	Tue 9/12/25	Mon 2/02/26
5	Plan Route, Stops and Frequency	2 mons	Tue 9/12/25	Mon 2/02/26
6	Assess and recommend bus fare strategy	2 mons	Tue 9/12/25	Mon 2/02/26
7	Analyse vehicle and charging requirements	1 mon	Tue 3/02/26	Mon 2/03/26
8	Assess available vehicles and charging equipment	1 mon	Tue 3/03/26	Mon 30/03/26
9	Recommend vehicle and equipment	1 wk	Tue 31/03/26	Mon 6/04/26
10	Identify infrastructure requirements	4 wks	Tue 3/03/26	Mon 30/03/26
11	Update capital and operating costs estimate	1 wk	Tue 7/04/26	Mon 13/04/26
12	Confirm capital and operational funding	2 mons	Tue 14/04/26	Mon 8/06/26
13	Order vehicles and equipment	2 wks	Tue 9/06/26	Mon 22/06/26
14	Manufacture and deliver vehicles and equipment	6 mons	Tue 23/06/26	Mon 7/12/26
15	Design and construct infrastructure	6 mons	Tue 23/06/26	Mon 7/12/26
16	Train drivers, test vehicles	2 mons	Tue 8/12/26	Mon 1/02/27
17	Launch service	1 day	Tue 2/02/27	Tue 2/02/27
18	Monitor and adjust service patterns, stops, fares	12 mons	Wed 3/02/27	Tue 4/01/28
19	Trial complete, report outcomes	1 mon	Wed 5/01/28	Tue 1/02/28
20	**Rollout of Electric Buses**	**1252 days**	**Tue 9/12/25**	**Wed 25/09/30**
21	Legislate for Electric Buses, Duty Concessions	18 mons	Tue 9/12/25	Mon 26/04/27
22	Investgate and recommend funding source	6 mons	Tue 9/06/26	Mon 23/11/26
23	Identify operating partners	6 mons	Tue 9/06/26	Mon 23/11/26
24	Negotiate funding, operating partners	6 mons	Tue 24/11/26	Mon 10/05/27
25	Analyse vehicle and charging requirements	3 mons	Tue 11/05/27	Mon 2/08/27
26	Assess available vehicles and charging equipment	3 mons	Tue 3/08/27	Mon 25/10/27
27	Confirm capital and operational funding	2 mons	Tue 26/10/27	Mon 20/12/27
28	Order first 40 vehicles and equipment	4 wks	Tue 21/12/27	Mon 17/01/28
29	Manufacture and deliver vehicles and equipment	6 mons	Tue 18/01/28	Mon 3/07/28
30	Design and construct infrastructure	6 mons	Tue 4/07/28	Mon 18/12/28
31	Train drivers, test vehicles	2 mons	Tue 19/12/28	Mon 12/02/29
32	Launch service	1 day	Tue 13/02/29	Tue 13/02/29
33	Monitor Vehicle, Chargers, Drivers Performance	6 mons	Wed 14/02/29	Tue 31/07/29
34	Order second 40 vehicles and equipment	4 wks	Wed 1/08/29	Tue 28/08/29
35	Manufacture and deliver vehicles and equipment	6 mons	Wed 29/08/29	Tue 12/02/30
36	Design and construct infrastructure	6 mons	Wed 13/02/30	Tue 30/07/30
37	Train drivers, test vehicles	2 mons	Wed 31/07/30	Tue 24/09/30
38	Launch service	1 day	Wed 25/09/30	Wed 25/09/30



Project: SLUMP Buses2.mpp
Date: Thu 27/02/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone

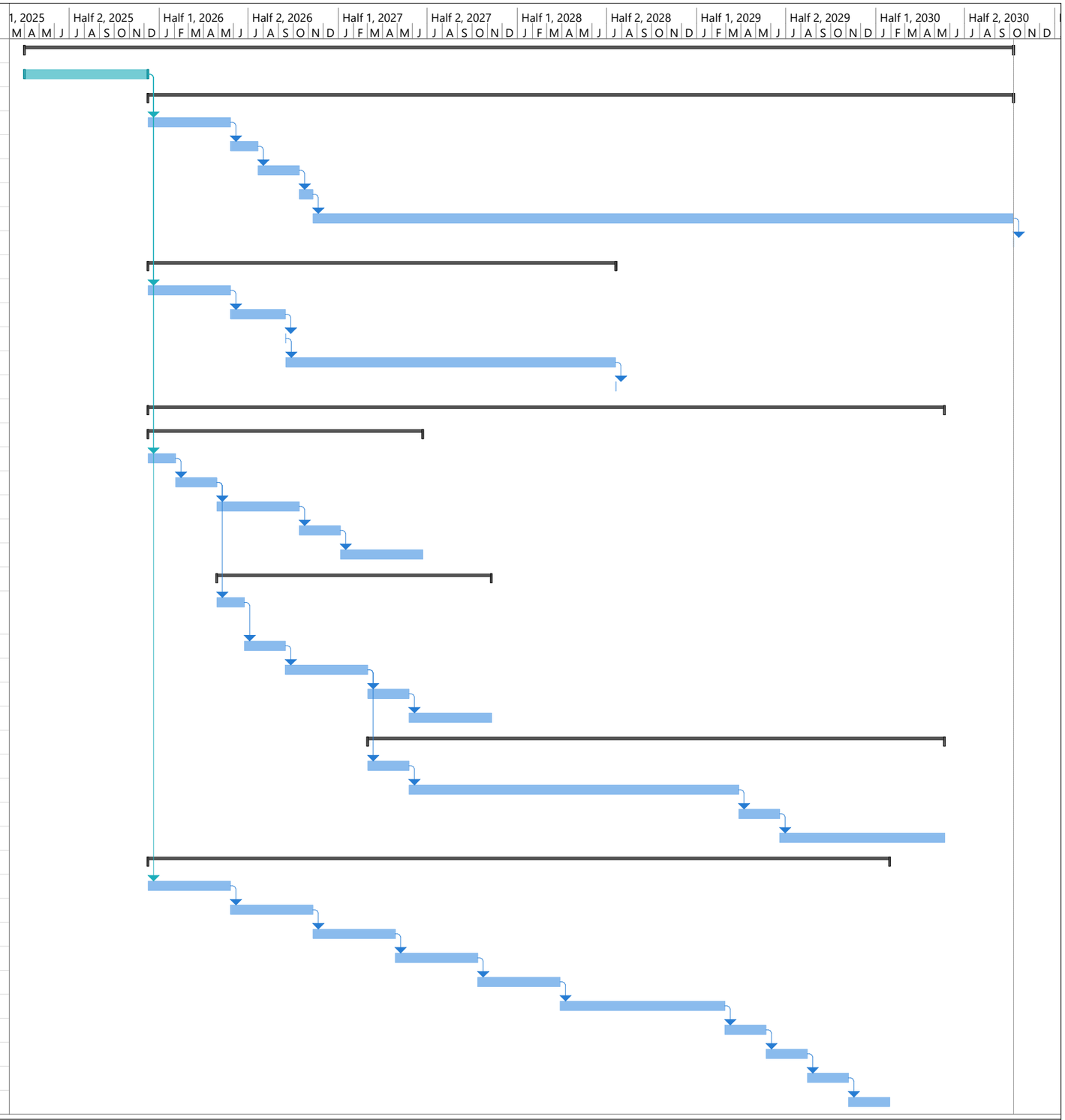
ID	Task Name	Duration	Start	Finish
1	**Government Vehicles**	**1400 days**	**Tue 1/04/25**	**Mon 12/08/30**
2	Obtain Government Approvals and Set up PMO	9 mons	Tue 1/04/25	Mon 8/12/25
3	Amend Government Vehicle Procurement Policy to Prioritise Electric / Hybrid	3 mons	Tue 9/12/25	Mon 2/03/26
4	Identify and Confirm Funding for vehicles and charging infrastructure	3 mons	Tue 9/12/25	Mon 2/03/26
5	Identify Year 1 vehicle requirements	1 mon	Tue 3/03/26	Mon 30/03/26
6	Research Vehicle availability, suitability for different purposes	1 mon	Tue 31/03/26	Mon 27/04/26
7	Plan rollout of Govt charging stations, including solar enhanced stations	1 mon	Tue 31/03/26	Mon 27/04/26
8	Procure 80 vehicles for year 1	6 mons	Tue 28/04/26	Mon 12/10/26
9	Procure and install Year 1 charging infrastructure	6 mons	Tue 28/04/26	Mon 12/10/26
10	Deliver Yr 1 vehicles to departments, provide training in use and maintenance	1 mon	Tue 13/10/26	Mon 9/11/26
11	Monitor use, vehicle performance, safety, perceptions	3 mons	Tue 10/11/26	Mon 1/02/27
12	Report and recommendations for Year 2	1 mon	Tue 10/11/26	Mon 7/12/26
13	Year 2 procurement	12 mons	Tue 8/12/26	Mon 8/11/27
14	Year 3 Procurement	12 mons	Tue 9/11/27	Mon 9/10/28
15	Year 4 Procurement	12 mons	Tue 10/10/28	Mon 10/09/29
16	Year 5 Procurement	12 mons	Tue 11/09/29	Mon 12/08/30



Project: SLUMP Government2.m
Date: Thu 27/02/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

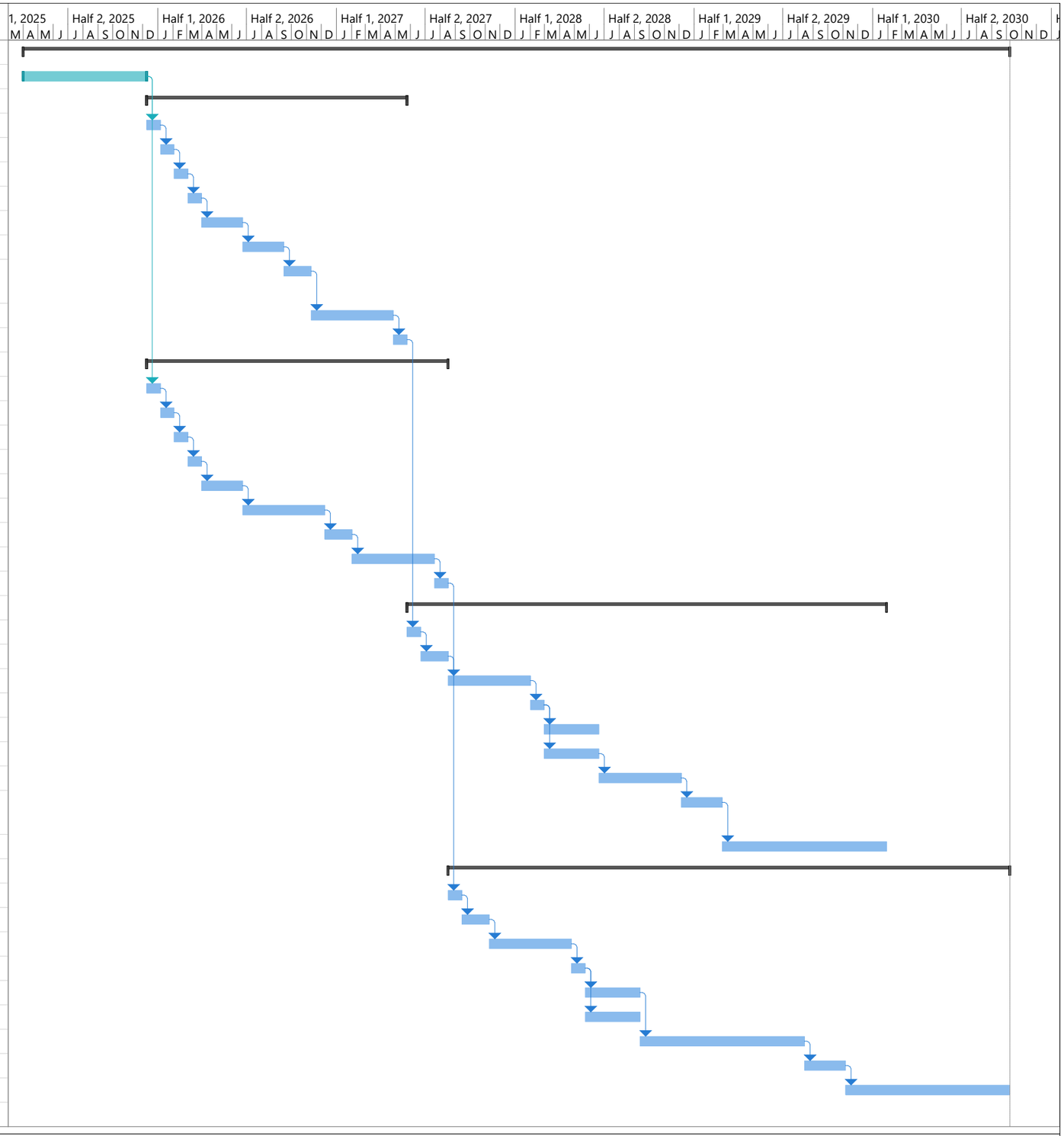
ID	Task Name	Duration	Start	Finish
1	**Taxis, Private, Small Trucks, Rentals**	**1441 days**	**Tue 1/04/25**	**Tue 8/10/30**
2	Obtain Government Approvals and Set up PMO	9 mons	Tue 1/04/25	Mon 8/12/25
3	**Incentives**	**1261 days**	**Tue 9/12/25**	**Tue 8/10/30**
4	Investigate Duty / Tax Incentive Options	6 mons	Tue 9/12/25	Mon 25/05/26
5	Decide whether to implement incentives	2 mons	Tue 26/05/26	Mon 20/07/26
6	Introduce legislation, confirm funding	3 mons	Tue 21/07/26	Mon 12/10/26
7	Launch Incentive Scheme	1 mon	Tue 13/10/26	Mon 9/11/26
8	Monitor, Review and Adjust	51 mons	Tue 10/11/26	Mon 7/10/30
9	Close Scheme	1 day	Tue 8/10/30	Tue 8/10/30
10	**Vehicle Scrappage Scheme**	**682 days**	**Tue 9/12/25**	**Wed 19/07/28**
11	Investigate / Design Scheme	6 mons	Tue 9/12/25	Mon 25/05/26
12	Introduce Legislation, Confirm funding	4 mons	Tue 26/05/26	Mon 14/09/26
13	Launch scheme	1 day	Tue 15/09/26	Tue 15/09/26
14	Monitor and adjust scheme	24 mons	Wed 16/09/26	Tue 18/07/28
15	Close Scheme	1 day	Wed 19/07/28	Wed 19/07/28
16	**Awaremess Campaigns**	**1160 days**	**Tue 9/12/25**	**Mon 20/05/30**
17	**Taxis**	**400 days**	**Tue 9/12/25**	**Mon 21/06/27**
18	Survey taxi owners re Hybrid and Electric Vehicles	2 mons	Tue 9/12/25	Mon 2/02/26
19	Design Awareness Scheme for taxi owners	3 mons	Tue 3/02/26	Mon 27/04/26
20	Roll out Taxi Awareness Campaign	6 mons	Tue 28/04/26	Mon 12/10/26
21	Survey Taxi Owners, adjust campaign	3 mons	Tue 13/10/26	Mon 4/01/27
22	Monitor progress, repeat campaign if required	6 mons	Tue 5/01/27	Mon 21/06/27
23	**Small Trucks**	**400 days**	**Tue 28/04/26**	**Mon 8/11/27**
24	Survey truck owners re Hybrid and Electric Vehicles	2 mons	Tue 28/04/26	Mon 22/06/26
25	Design Awareness Scheme for truck owners	3 mons	Tue 23/06/26	Mon 14/09/26
26	Roll out Truck Awareness Campaign	6 mons	Tue 15/09/26	Mon 1/03/27
27	Survey Truck Owners, adjust campaign	3 mons	Tue 2/03/27	Mon 24/05/27
28	Monitor progress, repeat campaign if required	6 mons	Tue 25/05/27	Mon 8/11/27
29	**Private Vehicles**	**840 days**	**Tue 2/03/27**	**Mon 20/05/30**
30	Design Awareness Campaign	3 mons	Tue 2/03/27	Mon 24/05/27
31	Roll out Awareness Campaign	24 mons	Tue 25/05/27	Mon 26/03/29
32	Survey Owners, adjust campaign	3 mons	Tue 27/03/29	Mon 18/06/29
33	Monitor progress, repeat campaign if required	12 mons	Tue 19/06/29	Mon 20/05/30
34	**Public Charging Stations**	**1080 days**	**Tue 9/12/25**	**Mon 28/01/30**
35	Monitor Use of Charging stations	6 mons	Tue 9/12/25	Mon 25/05/26
36	Plan expansion of charging stations	6 mons	Tue 26/05/26	Mon 9/11/26
37	Obtain funding / partnership for additonal stations	6 mons	Tue 10/11/26	Mon 26/04/27
38	Specify, procure equipment	6 mons	Tue 27/04/27	Mon 11/10/27
39	Install additional charging stations	6 mons	Tue 12/10/27	Mon 27/03/28
40	Monitor Use of Charging stations	12 mons	Tue 28/03/28	Mon 26/02/29
41	Plan expansion of charging stations	3 mons	Tue 27/02/29	Mon 21/05/29
42	Obtain funding / partnership for additonal stations	3 mons	Tue 22/05/29	Mon 13/08/29
43	Specify, procure equipment	3 mons	Tue 14/08/29	Mon 5/11/29
44	Install additional charging stations	3 mons	Tue 6/11/29	Mon 28/01/30



Project: SLUMP Private2.mpp
Date: Thu 27/02/25

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

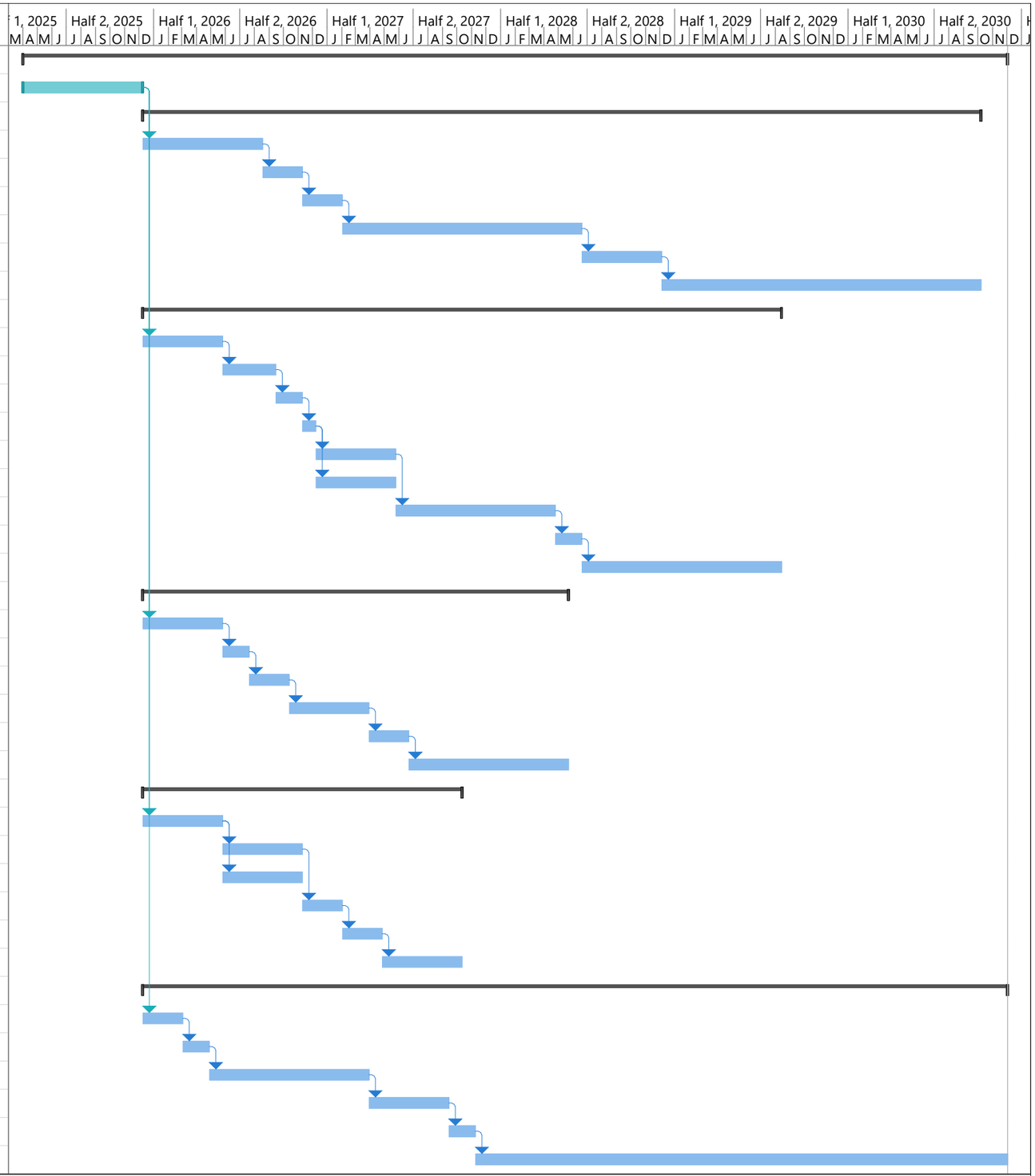
ID	Task Name	Duration	Start	Finish
1	**Shared Mobility**	**1440 days**	**Tue 1/04/25**	**Mon 7/10/30**
2	Obtain Government Approvals and Set up PMO	9 mons	Tue 1/04/25	Mon 8/12/25
3	**E-Bike Pilot**	**380 days**	**Tue 9/12/25**	**Mon 24/05/27**
4	Confirm funding	1 mon	Tue 9/12/25	Mon 5/01/26
5	Identify potential villages and shortlist 10	1 mon	Tue 6/01/26	Mon 2/02/26
6	Collaborate with Village Councils to check interest	1 mon	Tue 3/02/26	Mon 2/03/26
7	Confirm (5) villages for pilot	1 mon	Tue 3/03/26	Mon 30/03/26
8	Specify bikes - collaborate with other PICs?	3 mons	Tue 31/03/26	Mon 22/06/26
9	Procure 50 e-bikes	3 mons	Tue 23/06/26	Mon 14/09/26
10	Deliver to villages, training in riding and maintenance	2 mons	Tue 15/09/26	Mon 9/11/26
11	Monitor use, bike performance, safety, perceptions	6 mons	Tue 10/11/26	Mon 26/04/27
12	Report and recommendations for rollout	1 mon	Tue 27/04/27	Mon 24/05/27
13	**E-Minibus Pilot**	**440 days**	**Tue 9/12/25**	**Mon 16/08/27**
14	Confirm funding	1 mon	Tue 9/12/25	Mon 5/01/26
15	Identify potential villages and shortlist 10	1 mon	Tue 6/01/26	Mon 2/02/26
16	Collaborate with Village Councils to check interest	1 mon	Tue 3/02/26	Mon 2/03/26
17	Confirm (5) villages for pilot	1 mon	Tue 3/03/26	Mon 30/03/26
18	Specify minibuses - collaborate with other PICs?	3 mons	Tue 31/03/26	Mon 22/06/26
19	Procure 5 e-minibuses	6 mons	Tue 23/06/26	Mon 7/12/26
20	Deliver to villages, training in use and maintenance	2 mons	Tue 8/12/26	Mon 1/02/27
21	Monitor use, bus performance, safety, perceptions	6 mons	Tue 2/02/27	Mon 19/07/27
22	Report and recommendations for rollout	1 mon	Tue 20/07/27	Mon 16/08/27
23	**E-Bike Rollout**	**700 days**	**Tue 25/05/27**	**Mon 28/01/30**
24	Confirm Specs in review of Pilot	1 mon	Tue 25/05/27	Mon 21/06/27
25	Identify potential villages and shortlist 100	2 mons	Tue 22/06/27	Mon 16/08/27
26	Collaborate with Village Councils to check interest	6 mons	Tue 17/08/27	Mon 31/01/28
27	Confirm (50-100) villages for rollout	1 mon	Tue 1/02/28	Mon 28/02/28
28	Negotiate shared ownership model	4 mons	Tue 29/02/28	Mon 19/06/28
29	Confirm funding availability	4 mons	Tue 29/02/28	Mon 19/06/28
30	Procure 3000 e-bikes	6 mons	Tue 20/06/28	Mon 4/12/28
31	Deliver to villages, training in riding and maintenance	3 mons	Tue 5/12/28	Mon 26/02/29
32	Monitor use, bike performance, safety, perceptions	12 mons	Tue 27/02/29	Mon 28/01/30
33	**E-Minibus Rollout**	**820 days**	**Tue 17/08/27**	**Mon 7/10/30**
34	Confirm Specs in review of Pilot	1 mon	Tue 17/08/27	Mon 13/09/27
35	Identify potential villages and shortlist 100	2 mons	Tue 14/09/27	Mon 8/11/27
36	Collaborate with Village Councils to check interest	6 mons	Tue 9/11/27	Mon 24/04/28
37	Confirm (50) villages for rollout	1 mon	Tue 25/04/28	Mon 22/05/28
38	Negotiate shared ownership model	4 mons	Tue 23/05/28	Mon 11/09/28
39	Confirm funding availability	4 mons	Tue 23/05/28	Mon 11/09/28
40	Procure 100 e-minibuses	12 mons	Tue 12/09/28	Mon 13/08/29
41	Deliver to villages, training in use and maintenance	3 mons	Tue 14/08/29	Mon 5/11/29
42	Monitor use, performance, safety, perceptions	12 mons	Tue 6/11/29	Mon 7/10/30
43				



Project: SLUMP Shared Mobility
Date: Thu 27/02/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

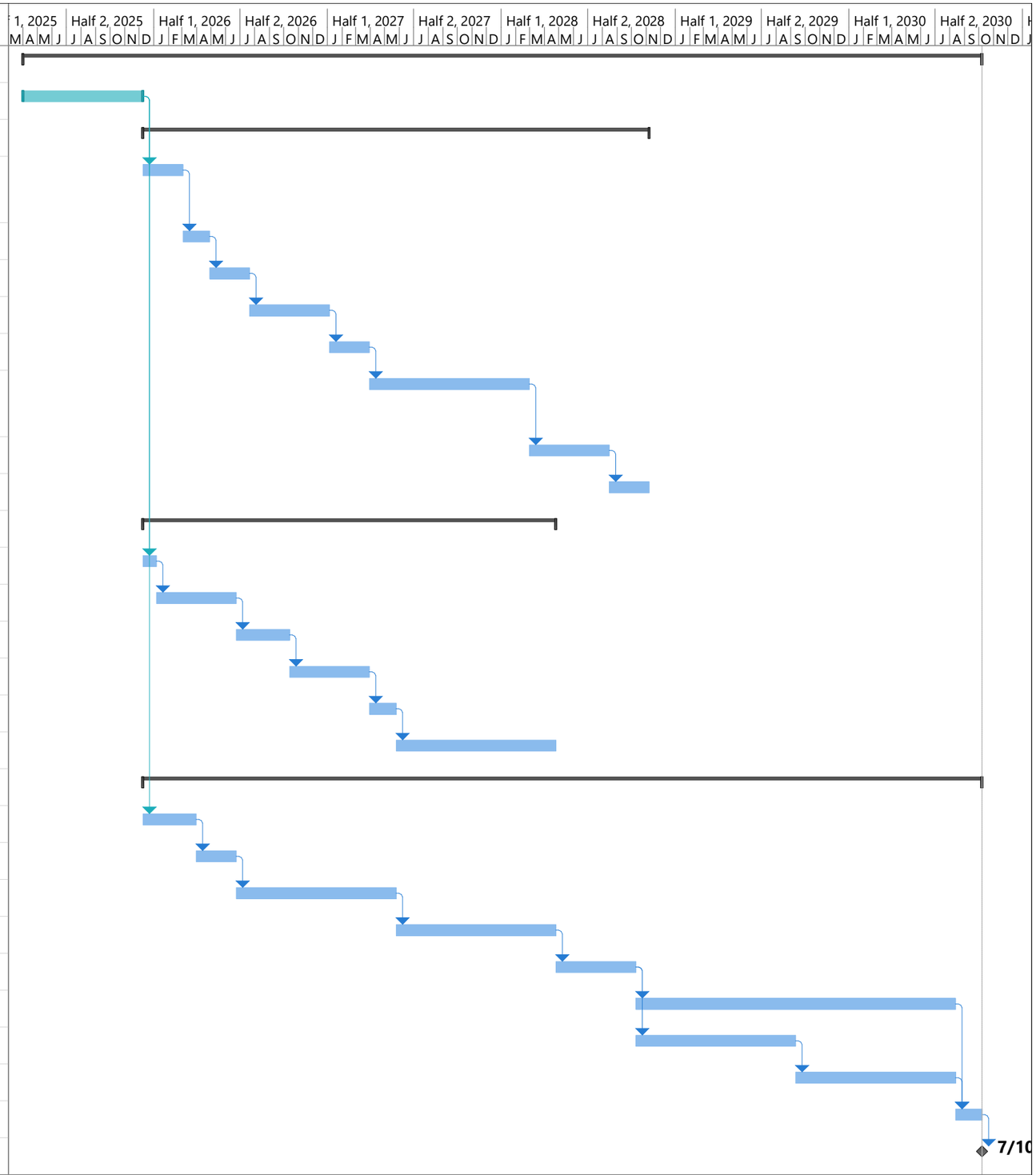
ID	Task Name	Duration	Start	Finish
1	**Infrastructure Improvements and Land Use Planning**	**1480 days**	**Tue 1/04/25**	**Mon 2/12/30**
2	Obtain Government Approvals and Set up PMO	9 mons	Tue 1/04/25	Mon 8/12/25
3	**Savalolo Bus Station Upgrade**	**1260 days**	**Tue 9/12/25**	**Mon 7/10/30**
4	Feasibility / Concept Design and Cost Estimate	9 mons	Tue 9/12/25	Mon 17/08/26
5	Design and costing review and gateway to proceed	3 mons	Tue 18/08/26	Mon 9/11/26
6	Confirm funding arrangements	3 mons	Tue 10/11/26	Mon 1/02/27
7	Detailed design and consultation	18 mons	Tue 2/02/27	Mon 19/06/28
8	Tendering	6 mons	Tue 20/06/28	Mon 4/12/28
9	Construction	24 mons	Tue 5/12/28	Mon 7/10/30
10	**Walking and Cycling Paths**	**960 days**	**Tue 9/12/25**	**Mon 13/08/29**
11	Network design and gap analysis	6 mons	Tue 9/12/25	Mon 25/05/26
12	Concept design of initial 10 km	4 mons	Tue 26/05/26	Mon 14/09/26
13	Design and costing review and gateway to proceed	2 mons	Tue 15/09/26	Mon 9/11/26
14	Confirm funding arrangements	1 mon	Tue 10/11/26	Mon 7/12/26
15	Consultation and Land negotiations	6 mons	Tue 8/12/26	Mon 24/05/27
16	Enabling Legislation	6 mons	Tue 8/12/26	Mon 24/05/27
17	Detailed Design	12 mons	Tue 25/05/27	Mon 24/04/28
18	Tendering	2 mons	Tue 25/04/28	Mon 19/06/28
19	Construction	15 mons	Tue 20/06/28	Mon 13/08/29
20	**Adaptive Traffic Signals**	**640 days**	**Tue 9/12/25**	**Mon 22/05/28**
21	Feasibility Study - Costs and benefits	6 mons	Tue 9/12/25	Mon 25/05/26
22	Investment Decision Gateway	2 mons	Tue 26/05/26	Mon 20/07/26
23	Secure Funding	3 mons	Tue 21/07/26	Mon 12/10/26
24	System Specification	6 mons	Tue 13/10/26	Mon 29/03/27
25	Procurement	3 mons	Tue 30/03/27	Mon 21/06/27
26	Installation, Training and Testing	12 mons	Tue 22/06/27	Mon 22/05/28
27	**Bus Priority Lanes**	**480 days**	**Tue 9/12/25**	**Mon 11/10/27**
28	Feasibility Study, Costs and Benefits	6 mons	Tue 9/12/25	Mon 25/05/26
29	Design and Consultation	6 mons	Tue 26/05/26	Mon 9/11/26
30	Enabling Legislation	6 mons	Tue 26/05/26	Mon 9/11/26
31	Pilot Project Installation	3 mons	Tue 10/11/26	Mon 1/02/27
32	Awareness Campaign	3 mons	Tue 2/02/27	Mon 26/04/27
33	Monitor operation, adjust as required	6 mons	Tue 27/04/27	Mon 11/10/27
34	**Sustainable Management Plans**	**1300 days**	**Tue 9/12/25**	**Mon 2/12/30**
35	Identify Plan Areas and Priority	3 mons	Tue 9/12/25	Mon 2/03/26
36	Confirm Scope, Objectives	2 mons	Tue 3/03/26	Mon 27/04/26
37	Consultation and Plan development	12 mons	Tue 28/04/26	Mon 29/03/27
38	Engagement and Refinement	6 mons	Tue 30/03/27	Mon 13/09/27
39	Adopt Plan	2 mons	Tue 14/09/27	Mon 8/11/27
40	Repeat for four more areas	40 mons	Tue 9/11/27	Mon 2/12/30



Project: SLUMP Infrastructure2.
Date: Thu 27/02/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone

ID	Task Name	Duration	Start	Finish
1	**Low-Carbon Maritime Initiatives**	**1440 days**	**Tue 1/04/25**	**Mon 7/10/30**
2	Obtain Government Approvals and Set up PMO	9 mons	Tue 1/04/25	Mon 8/12/25
3	**Retrofit Solar Panels to 2 Ferries**	**760 days**	**Tue 9/12/25**	**Mon 6/11/28**
4	Review previous Solar project and recommend and changes	3 mons	Tue 9/12/25	Mon 2/03/26
5	Identify vessels for solar panels	2 mons	Tue 3/03/26	Mon 27/04/26
6	Specify equipment	3 mons	Tue 28/04/26	Mon 20/07/26
7	Procure equipment for first vessel	6 mons	Tue 21/07/26	Mon 4/01/27
8	Install solar panels	3 mons	Tue 5/01/27	Mon 29/03/27
9	Monitor performance and make any recommended changes to specifications	12 mons	Tue 30/03/27	Mon 28/02/28
10	Procure equipment for second vessel	6 mons	Tue 29/02/28	Mon 14/08/28
11	Install solar panels	3 mons	Tue 15/08/28	Mon 6/11/28
12	**Power Saving at Ferry Terminals**	**620 days**	**Tue 9/12/25**	**Mon 24/04/28**
13	Review MTCC Study	1 mon	Tue 9/12/25	Mon 5/01/26
14	Feasibility study into opportunities	6 mons	Tue 6/01/26	Mon 22/06/26
15	Cost Estimates, secure funding	4 mons	Tue 23/06/26	Mon 12/10/26
16	Detailed design and specification	6 mons	Tue 13/10/26	Mon 29/03/27
17	Tender works	2 mons	Tue 30/03/27	Mon 24/05/27
18	Implementation	12 mons	Tue 25/05/27	Mon 24/04/28
19	**New Electric Ferry**	**1260 days**	**Tue 9/12/25**	**Mon 7/10/30**
20	Confirm Ferry Replacement Schedule	4 mons	Tue 9/12/25	Mon 30/03/26
21	Identify Ferry for Replacement with Electric	3 mons	Tue 31/03/26	Mon 22/06/26
22	Specifications for replacement vessel	12 mons	Tue 23/06/26	Mon 24/05/27
23	Identify cost and secure funding	12 mons	Tue 25/05/27	Mon 24/04/28
24	Tender for replacement vessel	6 mons	Tue 25/04/28	Mon 9/10/28
25	Construction period	24 mons	Tue 10/10/28	Mon 12/08/30
26	Procure Landside Charging Infrastructure	12 mons	Tue 10/10/28	Mon 10/09/29
27	Install Infrastructure	12 mons	Tue 11/09/29	Mon 12/08/30
28	Testing and Training	2 mons	Tue 13/08/30	Mon 7/10/30
29	Vessel enters service	0 days	Mon 7/10/30	Mon 7/10/30



Project: SLUMP Maritime2.mpp
Date: Thu 27/02/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone