

KEY MESSAGES FOR THE PACIFIC ENERGY & TRANSPORT MINISTERS

BACKGROUND

- Addressing the imbalance in regional energy sector support & EE in the transport sector has been talked about but not much follow up on the ground
- Pacific Energy and Transport Ministers had the foresight and courage
- At the 4th PETMM, Ministers tasked SPC, UNIDO and SIDS Dock to design and roll out a regional e-mobility policy and programme
- PICs is suitable for e-mobility
 - ✓ High renewable energy targets and ambitions
 - ✓ Short average distances travelled per day
 - ✓ High fuel dependency and costs
 - ✓ Vehicle ownership is low
 - ✓ Aging ICE vehicle fleets

Electrification of the transport sector must go hand-in-hand with the pursuit of RE and EE targets

Transport and the Power Utility must play a key role

- At the national level, PICs were following up on the PA, and submitted their NDCs and NDC Plus and placed priority on EE in the transport sector with e-mobility as one of the options
- Some PICs were updating their energy sector plans and roadmaps and included e-mobility
- PCREEE started rolling out the regional e-mobility programme in 2021

Deliveries by the SPC regional e-mobility programme [supported by UNIDO and ADA]

- Webinars on EVs – Regional, Kiribati, Nauru, SI, Tonga, Tuvalu and Vanuatu
- Awareness Event focussing on sustainable transport in Samoa
- Developed CTCN funding proposals for SI and Vanuatu – e-mobility feasibility study, EV roadmap, etc
- Legal TA to Leaf Capital [Fiji]
- Exposure visit [Tuvalu] and participation at the NZ EV Summit – [Fiji and Tonga]
- Development of awareness materials on EVs
- Convening of the first regional workshop

KNOWN E-MOBILITY EVENTS IN THE PICs

Country	Pilot Project	Supporting Agencies
American Samoa		
Cook Is	EV charger demo by power utility (2017)	Te Aponga Uira
Fiji	Techno Feasibility Study for shuttle buses	• Commonwealth
	TA for decarbonizing Government Fleet	EU
	design and built of a solar powered electric outboard engine of a fishing boat	EU, MTCC SPC
	Readiness proposal to scale ebus pilot (GCF)	TBC

Country	Pilot Project	Supporting Agencies
	Project for the enhancement of planning for transport decarbonization and electric mobility	KOICA
	Electric Vehicle Charging Network Development (NDC Investment Plan) – final stage of publication	
	Launch the first Fiji and Pacific Islands States Electric Charging Network	UNDP Blue Accelerator Grants Scheme (BAGS)
	0 emission bus network proposal	ZekiTek
	e-mobility roadmap study	World Bank
French Polynesia		
FSM		
Guam		
Nauru	EV activities under GEF project	
New Caledonia		
Niue	EV activities under GEF project	
Palau		
PNG	Development of an EV policy	CTCN
RMI	10 e-scooters & a charging station provided to the police in 2021 for demonstration of the technology	EU
	EV roadmap study	World Bank
Samoa	10 EV Cars by the power utility - EPC	
Solomon Is	Policy Roadmap for e-mobility	CTCN
	e-mobility roadmap study	World Bank
Tonga	EV roadmap and strategic plan	NREL [USA]
	E-vehicle and charging station demo	PCREEE
Tuvalu	12 e-bikes by power utility - TEC	World Bank
	EV roadmap study	World Bank
Vanuatu	Feasibility study for low emission land transport sector	CTCN
Wallis & Futuna		

IDENTIFIED BARRIERS TO E-MOBILITY

BARRIERS	STATUS AND PROGRESS
Transport and electricity infrastructure	
Lack of electricity charging infrastructure	PICs are piloting charging stations. Run as a business in Fiji
Dependency on diesel-fired electricity production and resulting high tariffs	Ambitious RE targets have been adopted and pursued to address this.
Lack of technical support and adequate maintenance services for EVs	Private sector will respond to a clear govt policy on EVs and movements in the market
Lack of technical support and adequate maintenance services for EVs	Private sector will respond to a clear govt policy on EVs and movements in the market
Limited environmental benefits given reliance on diesel generation for electricity	Ambitious RE targets have been adopted and pursued to address this.

BARRIERS	STATUS AND PROGRESS
Electricity grid has limited capacity for electricity charging infrastructure	
Commercial viability	
Price gap between the upfront cost of EVs and ICE, with demand in the PICs very sensitive to price	Financial and fiscal incentives are being considered. Rolled out in Fiji already.
Small trip distances limits operating cost savings	Can be an advantage for EVs too.
Reliance on second-hand vehicles and the limited second-hand EV market	
Limited financing options for investment in infrastructure and EV fleets	
Limited fiscal capability to subsidise EV uptake	
Governance and policy	
No clear e-mobility strategy or roadmap	PICs are working on their strategies and roadmaps, etc
Limited coordinated efforts between the Pacific Island Countries	First regional workshop on e-mobility on 28 – 30 Nov 2022
Regulation and standards	
Absence of regulations and standards relating to EVs	UNIDO and PRIF are working on one.
Communication and awareness	
Limited experience and training with EVs	
Limited understanding of quality standards of EVs and associated products	

RECOMMENDATIONS

Transport/electricity infrastructure	Status	Lead / Volunteer
Develop public electric charging infrastructure		
Roll-out electricity smart meters		
Expand RE and BESS capacity		

- Many of these are interrelated and are focused on enabling daytime EV charging using cheap solar generation
- Some are contingent on others and should not necessarily be implemented immediately. For example introducing time-of-use tariffs requires roll-out of smart meters and should not be implemented until RE capacity has been expanded

Commercial viability	Status	Lead / Volunteer
Provide purchase incentives, such as subsidies or tax breaks		

- These are focused on reducing the upfront cost differential between electric and ICE vehicles and fairly reflecting the environmental benefits of EVs
- Policy makers should hold off introducing large purchase incentives until their national electricity system can charge EVs from renewable sources

Governance and policy	Status	Lead / Volunteer
Create a regional e-mobility council	Council, task force, interest group? Can we form one in time to be approved by the PETMM 5?	
Develop a regional e-mobility strategy	Isn't the regional EV programme sufficient? Can we develop one in time to be adopted by the PETMM 5?	
Develop national e-mobility strategies		

- This WB roadmap provides a starting point for regional and national e-mobility strategies
- Such strategies should be developed by local stakeholders to ensure that they have ownership over the policy

Regulations and standards	Status	Lead / Volunteer
Establish minimum standards for EVs and charging equipment	UNIDO support & PRIF TA Can we develop one in time to be adopted by the PETMM 5?	

- Technical annexes to the report, which can be used as a starting point for national guidelines and standards, include:
 - Technical guidelines for EV charging stations
 - Minimum standards for EV charging equipment
 - Guidelines for EV maintenance procedures

Communication and awareness	Current Status	Lead / Volunteer
Develop an e-mobility communication strategy	None in existence Can we develop one in time to be adopted by the PETMM 5?	

- **An e-mobility communication strategy will be a key step in the implementation of regional and national e-mobility strategies**

Recommendations to Ministers [to note, to acknowledge, call, to approve, etc]

1. **Note** the progress with the roll out of the regional e-mobility programme [A summary of the e-mobility workshop outcome will be annexed to the meeting paper]
2. **Acknowledge** national effort on e-mobility
3. **Acknowledge** DPs' and the private sector's effort on e-mobility
4. **Acknowledge** the need for the pursuit of e-mobility to be conducted in tandem with the pursuit of renewable energy targets **and integration of transport strategies/ targets**
5. **Acknowledge** the need for the Power Utility and Transport to be actively involved in the e-mobility development
6. **Call** on DPs and donors to support feasibility studies, pilot projects
7. **Approve** the establishment of the regional e-mobility task force
8. **Approve the development of sustainable transport roadmaps including emobility**
- 9.

OBJECTIVES

1. The workshop will bring together key stakeholders on e-mobility in the region to:
 - Discuss priority areas for e-mobility in the region and matters to be brought to the attention of the 5th Energy Ministers Meeting in 2023.
 - Discuss SIDS-SIDS cooperation on e-mobility and establish a coordination mechanism for e-mobility in the PICs.
 - Learn more about e-mobility developments in the PICs, SIDS and globally;
 - Establish network and share experiences;
 - Agree on next steps and ways forward for e-mobility in the PICTs.

EXPECTED OUTCOMES

2. The expected outcomes of the workshop are:
 - i) Improved appreciation of e-mobility and its advantages and disadvantages
 - ii) Strengthened partnerships and coordination of e-mobility effort in the PICTs
 - iii) Agreed priority areas for the promotion of e-mobility in the region