Kiribati Electric Vehicle Webinar Thursday, May 26, 2022, 11:40am-11:55am (Kiribati time)

## Feasibility Study for Low Emission Land Transport in Vanuatu

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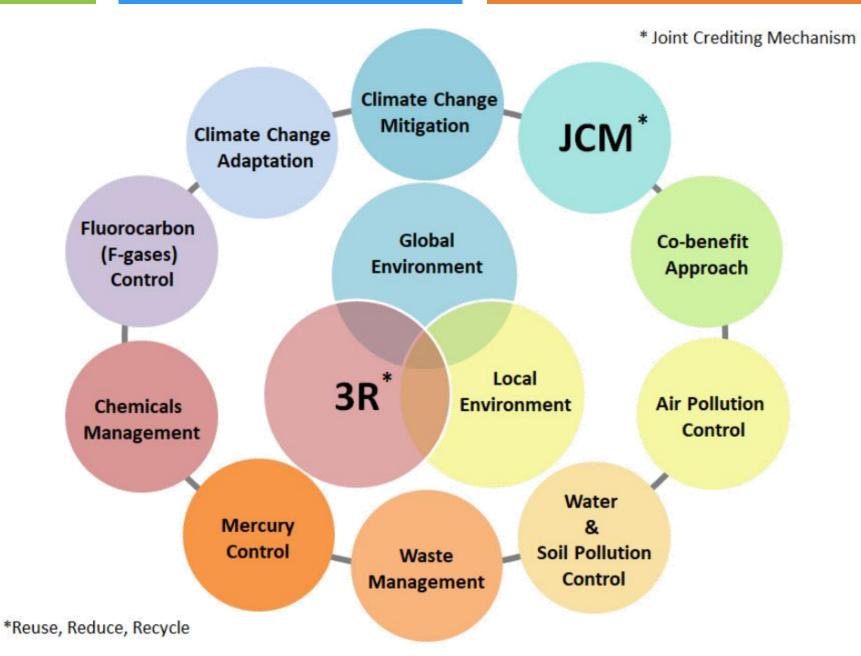






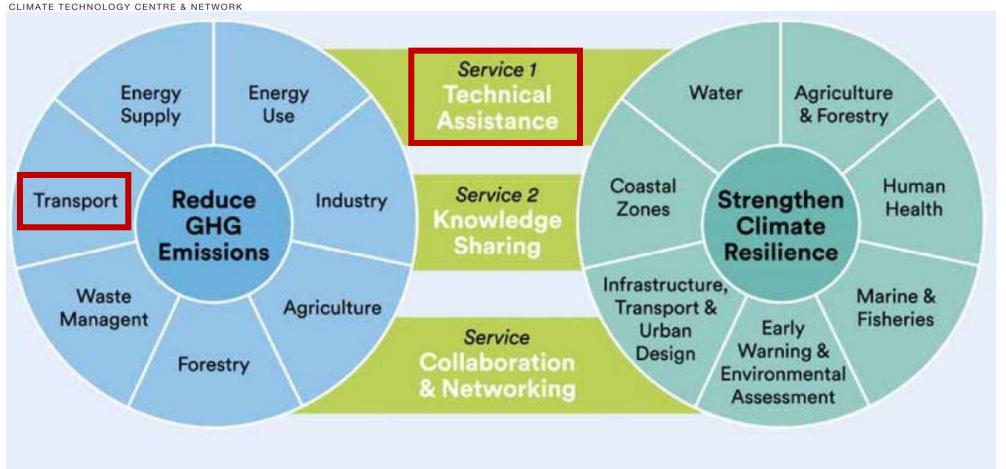
## What OECC is...





## What Project outline is...





## Mitigation

## Adaptation

## How FS was conducted...



#### Feasibility study for low emission land transport sector in Vanuatu



This technical assistance advances the following Sustainable Development Goals:



#### Context

Vanuatu is a small island country in the Pacific which depends almost entirely on imported fossil fuel for its energy and transport needs. The continuous reliance on these fossil fuels is not only unsustainable for Vanuatu but goes against Vanuatu's national climate change mitigation ambition as reflected in its Nationally Determined Contributions, its Climate Change and Disaster Risk Reduction Policy, its National Energy Roadmap and Vanuatu's Sustainable Development Plan.

There is very little information available on the land transport sector. The public transportation system in Vanuatu is still inefficient due to no transport routing systems established. The public transportation system is owned by individuals with no control from the central or provincial governments. This makes the number of buses and taxes uncontrollable leading to more air pollution and increased emission of greenhouse gases.

Vanuatu lacks the policy and legislative framework to control the importation of inefficient vehicles into the country. The lack of education and awareness on the importation and use of low emission vehicles is a barrier to the rapid uptake of energy efficient vehicles into the country.

- Structured interviews to stakeholders and experts
- Conduction of 2 times stakeholder's consultation
- Multi-Criteria Decision Analysis (MDCA)
- Literature review
- Cost-benefit analysis

#### <Project details>

https://www.ctc-n.org/technical-assistance/projects/feasibility-study-low-emission-land-transport-sector-vanuatu?msclkid=07c5cb42b44e11eca91be0da08fac2bc



### 19 barriers/issues from 5 major aspects related with EV.

Policy/ legislative	No common direction, roadmap on EV introduction	No law/ regulation/ standard on EV and related facilities	No law/policy on types of cars imported into Vanuatu	No law/policy to import second hand vehicles	Lack of regulation to carry out quality check of vehicles	No law/ regulation/ standard on fuel efficiency and emissions of vehicles	No incentive to introduce EV such as tax benefits, subsidies
Technical	Lack of information on technical advantages/ disadvantages of EV	EVs seem limitation on mileage, power, vehicle types	Lack of maintenance skills	Limited supply area of electricity	Stability of grid electricity	Poor road and environmental conditions for EV operation	Many narrow roads
Institutional	No leading agency and coordinating entity on EV promotion	Financial	High initial cost of EV	High electricity tariff in Vanuatu	High cost for establishing charging network		
Others	Battery recycle Environmental impacts						

## Proposed 11 pillars of measures corresponding to barriers



	Major barriers and issues	Pillars of measures	Time frameShort-term 2022-2024medium-term 2025-2027Long-term 2028-2030
	No common direction, roadmap on EV introduction	1. EV roadmap	Phased approach
	No law/regulation/standard on EV and related facilities		
Policy/ legislative	No law/policy on types of cars imported into Vanuatu	2. Coordination body to promote EV	
	No law/policy to import second hand vehicles		
	Lack of regulation to carry out quality check of vehicles	3. Regulations on EV and other vehicles	
	No law/regulation/standard on fuel efficiency and emissions of vehicles	A Incontivos to promoto EV	
	No incentive to introduce EV such as tax benefits, subsidies	4. Incentives to promote EV	
Institutional	No leading agency and coordinating entity on EV promotion	5. Awareness raising	
	Lack of information on technical advantages/ disadvantages of EV		
	Limitation on mileage and power as well as vehicle types	6. Pilot projects	
	Lack of maintenance skills		
Technical	Limited supply area of electricity	7. Training programs on EV maintenance	
	Stability of grid electricity	8. Develop public charging stations	
	Poor road and environmental conditions for EV operation	o. Develop public charging stations	
	Many narrow roads	9. Improvement of electricity supply	
Financial	High initial cost of EV		
	High electricity tariff in Vanuatu	10. Improvement of road infrastructure	
	High cost for establishing charging network		
Others	Battery recycle	11. Studies and researches	

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## Promotion time flame of EV uptake toward 2030

	2022	2023	2024	2025	2026	2027	2028	2029	2030
EV/LEV mix	Current dies vehicles	sel/gasoline					LE	/ EV	
Electric power mix	Diesel ger	nerator				(Sola	r, wind, geoth	Renewable ermal, biofue	
EV introduction	Starting	-			•		irport shuttle other islands	•	rposes
Policy/strategy	Develo Roadr	-		,       					
Regulation/incentive	Formulate	-	s on LEV/EV e and provid	de incentives	s on LEV/EV				
Awareness raising	Educatio		•	shop on env		-	insportation,	e.g. EV and	public
Pilot project			School EV bu Go	overnment fle	eet ansportation	in Port Vila			
Maintenance service		Ca		ncement or nce/repair	n EV	License	private EV m compa		service
Charging station	Development of charging infrastructure in accordance with the Roadmap e.g. public charging stations, home charging, existing building charging								
Road infrastructure		Improven	nent of road	surface cor	iditions in lir develop		vant roadmar	os on infrastr	ructure

EV: Electric vehicles such as battery electric vehicles and plug-in hybrid electric vehicles

LEV: Low emission vehicles which have higher fuel economy and low pollutant emissions than current diesel/gasoline vehicles



Image of electric bus



Source: Hino Motors, Ltd.



Source: BYD Company Ltd.



# Thank you for watching!



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