Building the Electric Mobility Ecosystem [Sept 2020-Feb 2022] Partner: Oyika Location: Phnom Penh

Background

The number of vehicles per year in Cambodia is growing at 14%, with 3.2 million vehicles registered in 2016. The Cambodia Climate Strategic Plan recognizes transportation as the highest consumption of energy and consequently a major driver of the carbon emissions in the Kingdom. Motorbikes are by far the greatest contributors to the pollution problem with almost 6 times more motorcycles than cars on the road in Cambodia. The objective of 'Building the Electric Mobility Ecosystem in Cambodia' is to mitigate the effects of climate change by reducing GHG emissions from fuel-powered motorbikes.



Outputs and key activities	
Output	Activities
1.1. Establishment of electricmotorbike ride sharing fleet inPhnom Penh	 Modify 300 e-bikes Launch of motorbike ride sharing pilot
2.1. Validate understanding of barriers to electric vehicle uptake	• Run 1 focus group workshop to validate
2.2. General public have a greater understanding of the benefits of electric vehicles	 Create 6 educational videos Run 6 public sessions
2.3. Increased visibility of careers in electric vehicle industry	 Online marketing campaign Recruit and train 2 interns
2.4. Physical exposure for the public to view and experience electric	• Organize an annual electric mobility showcase in 2020 and 2021

Objectives

The objective of 'Building the Electric Mobility Ecosystem in Cambodia' is to **mitigate** the effects of **climate change** by **reducing** greenhouse gas (GHG) emissions from fuel-powered **motorbikes**.





to view and experience electric vehicle technology

2.5. MPWT, MEF and NCSD Officials have an increased understanding of the benefits of e-bikes for Cambodia

Inopinity showcase in 2020 and 2021 • Run 4 workshops with government officials

Results/Achievements

- Deployment of first electric motorbike sharing service in Cambodia with 70 motorbikes now and 120 by end 2022
- Rideshare has influenced delivery businesses to increase electric motorbike fleet through exposure to electric motorbikes from 0 to 1M km's.
- A successful interministral workshop between 5 ministries on the policies and responsibilities for EVs moving forward
- MPWT is now running their own electric mobility showcase and released draft for increasing EV uptake in early 2022
- Organize two mobility showcases in 2021 and 2022, gathering a total of 110 and 182 respectively.
- Released 5 videos about EVs
- Prepared 4 campaign posters on EV careers
- Successful event on 'Electrification of Vehicles for a Cleaner Cambodia' held with British Ambassador, Australian Ambassador, Senior Minister of MPWT and Minister attached to the Prime Minister Managing Director of EDC. Total almost 20k views and shared by MPWT and EDC.

Key technologies and approaches introduced

- Data on electric ride share collected weekly through backend system: Demographic data including age, gender and also number of rides, kms ridden to calculate the distance treavelled based on average speed.
- Over 400 local users and 300 foreign users of Go2 Bike share
- Approximately 25% of customers are female
- Survey conducted on general public in June 2021 to understand perception of electric vehicles. Over 100 people surveyed. Majority had heard of EVs but were yet to test drive them.
- Direct engagement with public through showcase event and online events. Ideally all events have opportunity for physical driving of EVs but this was not possible for events in April-Sept 2021 due to COVID
- Knowledge products and sharing conducted online via social media and primarily through educational videos in Khmer. Also shared through email campaigns to mailing list of 5000+ subscribers





Conclusion and Recommendations/Scale up Plan

- It's critical to assess the partner's supply chain on new products, to understand potential bottlenecks and where the delivery timeline could be delayed
- Business model flexibility is imperative across a 2 year project to ensure that the end goal can still be met, but where parameters can change along the way, especially since we can't predict the external environment
- Leveraging partnerships is key to reaching new demographics, as well as new media partners and gaining maximum project visibility
- Cambodian's are open to accepting the electric motorbikes and most people already have a basic understanding and exposure to this technology.
- Engaging different demographic groups requires different kinds of buy in for example, young people are ok to engage with social media, whereas the low income groups required a key person in community to be an advocate

Recommendations/Scale up plan

• Scale EV economy including increased charging infrastructure and improved regulatory environment to incentivize scaling EV market in Cambodia, by organizing regular dialogues and outcomes with key people

EnergyLab put out a public survey in June 2021 to gain an understanding of Cambodian people's perception and use of electric vehicles in Cambodia.	respondents received are social media, news, and videos.
	Respondents awareness of electric vehicle brands in Cambodia
97%Among 103 responses, there are 97% of which have heard of electric vehicles while only 12.5% have experienced riding them.	Oyika 11.2% Voltra 11.2% BYD Cambodia 12.5% Onion mobility 13.8% Thada 14.5%
Although most respondents are aware of the presence of EVs in Cambodia, there are very few people who feel they hear about EVs 'frequently'	The impression from respondents is rather positive. They think that EVs are better for environment, reduce CO2 emissions, and the vehicles have good design.
Among 85.5% of respondents who have heard of EVs:	Only 13 out of 103 respondents have ridden an EV
Hear of EVs everyday 11.5% Hear of EVs 3-5 time a week 16.1% Once or twice a week 16.1%	Although electric vehicles are known by many in Cambodia, there are very few who actually have experience riding one.

in the ministries such as MPWT, MEF, EDC, MOE and also partners that are supporting this (e.g. GIZ) to get favorable policies for EVs and charging stations

- Focus on B2B for quicker mass adoption of electric motorbikes, and on young professionals for consumer level adoption
- Continue to increase rideshare vehicles to provide more chances for people to experience riding electric vehicles, with a low barrier to entry.



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