Climate Change Innovation Grant Facility - CCCA3

BUILDING THE ELECTRIC MOBILITY ECOSYSTEM IN CAMBODIA

Implemented by EnergyLab

National Council for Sustainable Development
General Secretariat
Department of Climate Change

Ministry of Environment

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 a main consumer of energy and consequently a major driver of the carbon emissions in the Kingdom. Motorbikes are significant contributors to the pollution problem with almost 6 times more motorbikes than cars on the road in Cambodia. Electric Vehicles release no direct air emissions and release significantly less CO2 emissions than direct combustion engines.

The project will increase the use of electric motorbikes (e-bikes) through a pilot e-bike sharing system, while building public awareness and education on the benefits of using electric vehicles (EV) through an electric vehicle showcase, online promotion campaign and targeted events.

Overall Objective

Mitigate the effects of climate change by reducing GHG emissions from motorbikes

Specific Objectives

1. Provide an innovative e-bike sharing system that, with scale, will reduce reliance on traditional combustion engine vehicles; and

2. Provide hands on exposure to, and experience of, riding e-bikes to help overcome negative perceptions of electric vehicles.

Approach

EnergyLab, a well-recognized NGO focused on energy efficiency and renewable energy solutions, is the main applicant. For this project they will partner with Oyika Co., Ltd, who have developed an innovative battery swap infrastructure and technology for e-bike sharing that has been developed in the past 18 months and deployed in Cambodia since 2019. If this Proof of Concept is successful, Oyika will use it to raise investor resources for an additional 190 bikes for a full-scale e-bike sharing system. The proposed e-bike sharing system would be a first for Cambodia and is in line with climate change plans in the transport sector to promote electric mobility and climate-friendly public transport. This would provide good exposure to the technology without users having to worry about identified barriers such as investment costs, maintenance or battery performance (as this is all managed by the operator). In addition, EnergyLab will lead a range of communication and research activities to increase awareness and engagement with e-bikes in Cambodia.

Outputs and Key Activities

Result	Key Activities
• Increasing use of e-bikes • Improving public awareness and engagement with electric vehicles • Increasing visibility of careers in electric vehicle industry • Capacity building of relevant officials on benefits of e-bikes for Cambodia	• Modify 300 e-bikes over 3 phases to ensure power control and helmet access through developing mobile app for ride share • Create and deploy motorbike relocation team to optimize use of vehicles and launch of Motorbike ride sharing pilot • Run focus group workshop to validate understanding of barriers to EV • Create educational videos that address the main barriers to EV uptake and the benefits of the e-bike sharing system • Online marketing campaign to advertise career opportunities to work with e-bikes • Workshops with government officials from the Ministry of Public Work and Transport, Ministry of Economic and Finance and the National Council for Sustainable Development

Knowledge Products

• Policy briefs • Educational videos • Workshops and training materials

Timeframe	August 2020 –January 2022	**Partners**	EnergyLab Oyika Co., Ltd
Total Budget	USD 422,250 (From CCCA US$100,000)	**Location**	Phnom Penh

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Funded by

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