

#### e-Mobility Project Inclusion in the Philippine MRV framework









### Flectric 2- and 3-wheelers for Personal Use

Number of Available Models: 101	
Declared Seating Capacity	Minimum of 1; Maximum of 4
Battery Bank Voltages Used	36V and below: 6% 48V: 63% 49V and above: 31%
Battery Energy Used	Ranges from 1.44kWh up to 2.88 kWh
Type of Battery	Lithium Ion: 2%
	Lead Acid: 95%
	Both: 3%
Selling Price	Between PhP 6,390.00 to PhP 58,000.00 Average: PhP 34,000.00

Source: Actual Surveys and Interviews from LEV distributors

 Some would make modifications on their bicycles by adding a brushless DC motor, motor controller, battery bank, and a battery management system which allowed the bicycles to function as a basic electric vehicle. This is placed under the category of a Do-It-Yourself (DIY) brand

# Electric 2- and 3-wheelers for Public Transport

Number of Available Models: 2	20	
Declared Seating Capacity	Minimum of 4; Maximum of 9 (including driver)	
Battery Bank Voltages Used	48V, 55.2V, 60V, 72V, 82.8V (varied across models)	
Battery Energy Used	Ranges from 1.44kWh up to 16.2kWh	
Type of Battery	Lithium Ion: 62% (12 models) Lead Acid: 25% (6 models) Both: 10% (2 models)	

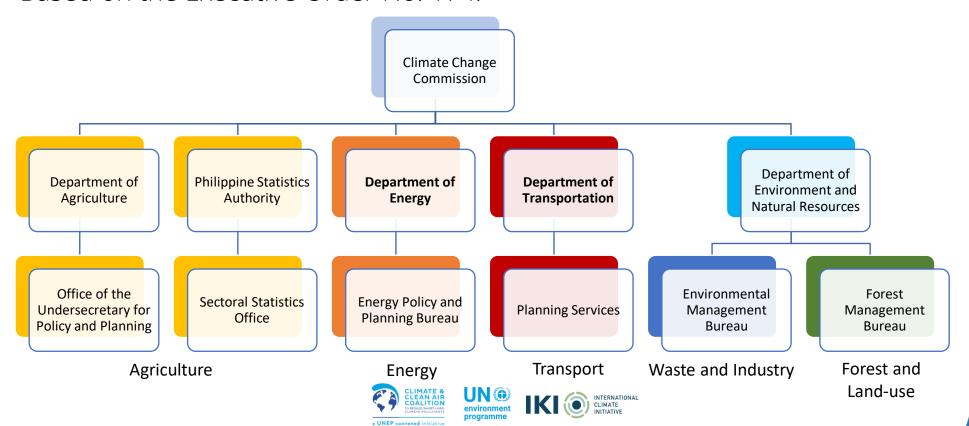
Source: Actual surveys and interviews from different e-trike stakeholders

- Different payment arrangements
  - Continuance fund (PhP 150 for 6 days to be used for maintenance and battery replacement). Drivers must provide free rides to public school students
  - Boundary-hulog (PhP 150/day for five years)



# PH GHG Institutional Arrangements

Based on the Executive Order No. 174:





### E-mobility GHG Accounting for Transport (National)

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Transport
GHG
Emissions

Activity
(Passenger or freight km)

Modal **S**tructure
(Travel mode)

Intensity (fuel consumed per km\*) Fuel GHG intensity (MtCO<sub>2</sub>e per unit of fuel)











X



Transport groups
Fleet operators
Project
implementers

Academe NGOs CSOs Car manufacturers
Fleet operators
Drivers

Distribution utilities
Power plants







## E-mobility project impacts



Sectoral lead

Vehicle CO<sub>2</sub> emitted Vehicle CO<sub>2</sub> mitigated



QA/QC Inclusion of impacts to NDCs, NCs, and BTRs

Project implementer

Vehicle kWh consumed Vehicle km traveled Passengers served LGU participation should enable monitoring and reporting beyond project implementation period.





