

Assessing GHG and Sustainable Development and Impacts of Electric Mobility in Public Transport

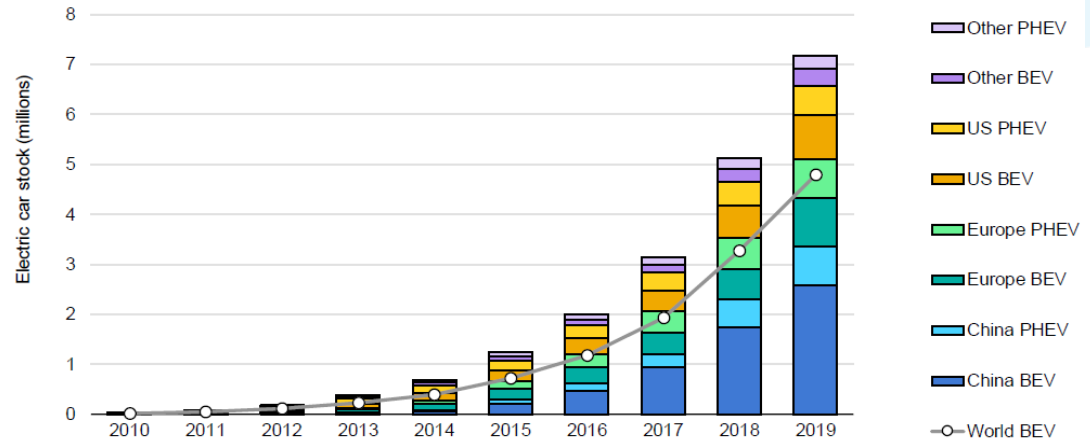
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 - *UNEP DTU Partnership*

Outline

- Problem Background
- Demonstration in Kigali
- Thesis Focus
- Support

Problem Background

- Transportation accounts for **24% of greenhouse gas (GHG) emissions** from fuel combustion
- (EVs) are seen around the world as a potential pathway for the transition towards sustainability in transportation systems
- However share in new vehicle sales still low in most countries.



Kigali : Current Status and Demonstration

- Kigali City
 - *Population*: 1 million (2012)
 - *GDP per capita*: \$2,251.55 (2018)
 - *CO2 emissions (per capita)*: 0.074 metric tons in 2014
- Public Transport - Mini Buses
- Vehicles
 - increasing 12% annually
- Electric Vehicles
 - e-moto (Ampersand)
 - Volkswagen plan to make EVs
- SOLUTIONS+ Demonstration
 - <http://www.solutionsplus.eu/kigali.html>
- Focus on feeder services
 - 30 e-moto taxis (20 new and 10 remodelled)
 - 100 e-bikes (e-bike sharing)

Thesis focus

- The project will entail the following:
 - Review of current and proposed EVs for public transport systems
 - Status of current public transport system operation in Kigali
 - Ex-ante assessment for the demonstration action - Baseline Scenario and Impacts of the demonstration action for key performance indicators (CO2 Emissions, Air Pollution, Accessibility, Safety, etc.)
- Support
 - City Team comprising DTU, UEMI and ITDP
 - Travel Support for visiting Kigali
 - Supervisors - Talat, Subash but other colleagues working on electric mobility Jyoti and Xianli
- Other projects on electro mobility
 - Ghana electro mobility
 - Zimbabwe electro mobility
 - Demonstration of electro mobility in Kathmandu and Nanjing
 - Closed projects - Roadmap for EVs in India, Barriers for EV in India, Business Models for Electric Vehicles