

## Romblon, The Philippines: Transport and Electricity Profile

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## Romblon Island, The Philippines



Land area: 83 km<sup>2</sup>

Population: ~40,000 people

**Climate:** Tropical





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## Background





#### Access to the island: By ferry.

A regular ferry schedule (10 hours) connects Romblon to the main port of Batangas in Southern Luzon. The closest airport is Tugdan airport, which is located on the neighboring island of Tablas and can be reached via a 3-4 hour combined boat and car trip.



## Background





#### **Primary economic activities:**

Marble industry, coconut farming, fishing, tourism (emerging).



Romblon's electricity sector

## Share of installed capacity per generation source, Romblon Island





## Romblon's transport sector



**Private vehicle fleet size:** N/A – For Philippines: 3.36 million private cars (2015

#### Public vehicle fleet size:

N/A – For Philippines: Public or hired vehicles only accounted for 14% (2010)

#### **Demand growth rate:**

N/A – For Philippines: 6.4% growth of private cars

#### **Motorization rate:**

N/A - For Philippines: 38 cars per 1000 inhabitants .

#### Transport modal split:

Main transport modes are Jeepneys (buses), tricycles and motor scooters



## Policy + investment environment



- The Philippine government ratified the Paris Agreement in 2017 and committed itself to cut all GHG emissions by 70% compared to the business-as-usual (BAU) scenario.
- There are two major policies in the Philippines that aim to support renewable energies and private investments in the power sector: The Renewable Energy Act (RE Act) and the Electric Power Industry Reform Act (EPIRA).
- The Romblon Electric Cooperative (ROMELCO) is a good example of an EC that is actively deploying renewable energies and hybridizing their energy generation portfolio. ROMELCO has also set RE targets for the electricity mix and wants to achieve 90% of RE-generation by 2030.
- ROMELCO seeks to increase the share of sustainable transport to 10% until 2025 and to 50% until 2040.



## Main Stakeholders



Organizational Scheme of the Philippine Off-Grid power sector Source: Bertheau et al. 2019

#### Electricity

- The NPC-SPUG (National Power Corporation – Small Power Utilities Group) is part of the National Power Corporation, a state-owned power company that operates power plants in off-grid areas including the 3,650 kW diesel power plant on Romblon Island.
- ROMELCO is in charge of the power distribution on Romblon Island and operates the 900 kW wind park, consisting of three wind turbines. ROMELCO will also operate the biomass power plant that is currently under construction

#### Transport

• There is no public transport.



## Island snapshot: Electric Scooters Pilot



E-scooter battery exchange station (Source: Topgear 2019)

General Manager of ROMELCO Rene Fajilagutan



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## The way forward...

- The meteorological conditions on Romblon are favorable for renewable energies: average solar irradiation lies at almost 2000 and with wind speeds above 8 m/s in certain areas, wind turbines can achieve high annual energy yields.
- The e-scooter and wind park project on Romblon represents a successful example of sector coupling for an island energy system. As a next step, a concept of electric public transport should be elaborated to further improve the transport system.
- Further capitalizing on the "electric tricycle program", that aims to distribute 100,000 Etricycles, as Romblon has the advantage of an existing battery charging infrastructure from the e-scooter project.





Average wind speeds on Romblon Island in m/s Source: Globalwindatlas 2019



# Thank you for your attention!

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