Increased RE Penetration in an Electric Cooperative – The Case of ROMELCO

Policy Deep Dives in the Philippines

September 21, 2022 1:40 PM to 1:50 PM

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General Manager - Romblon Electric Cooperative, Inc.

President – Association of Isolated Electric Cooperatives, Inc.

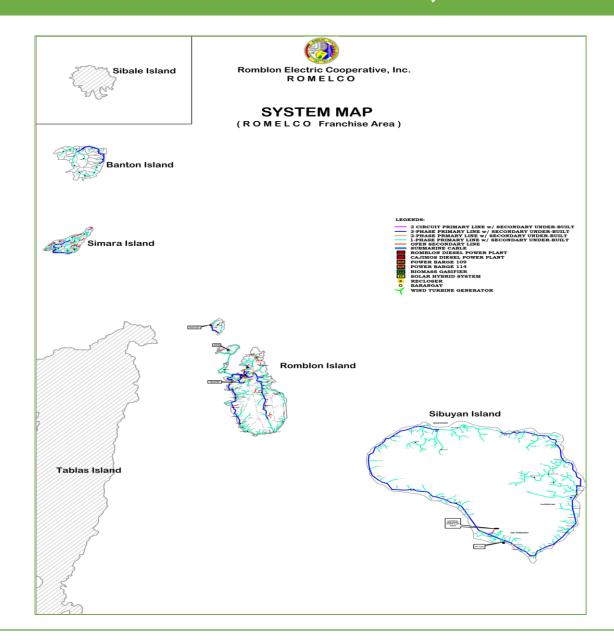


ROMBLON ELECTRIC COOPERATIVE, INC.

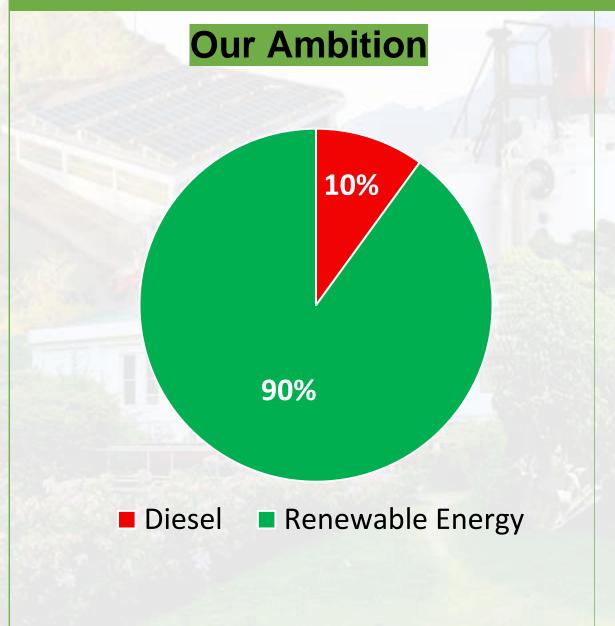


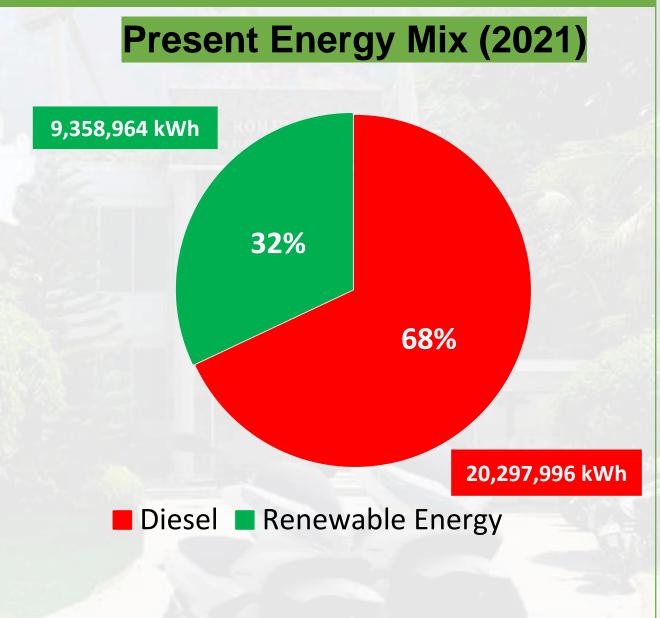
- Non-Stock, Non-profit Electric Cooperative
- Date of Registration to NEA
- Nature of Operation
- Coverage Area
- Size classification (2021)
- Category (2021)
- Member-Consumer-Owners
- Number of personnel
- Peak Demand (2021)
- Energy Purchase/ Energy Generated(2021)

- June 14, 1989
- Off-grid
- Seven (7) Municipalities
- 107 Barangays
- Large EC
- AAA
- 31,921
- 64
- 6,010 kW
- 29,656,960 kWh



ENERGY MIX





COMPELLING REASONS

- To reduce the Generation Cost and eventual graduation from UCME subsidy.
- To provide reliable and dependable electric service to EC MCOs.
- Transition from conventional power source to Renewable Energy sources.
- Democratization of ownership for power generation facilities.
- To stay in Business

BASES OF ECs TO ENGAGE IN RE POWER GENERATION

• RA 9136, "Electric Power Industry Reform Act of 2001" (EPIRA)

Sec.45 (b) x x x For the purpose of preventing market power abuse between associated firms engaged in generation and distribution, no distribution utility shall be allowed to source from bilateral power supply contract more than fifty percent (50%) of its total demand from an associated firms engaged in generations but such limitations. x x x

Sec.45 (c) x x x

Exception from this limitation shall be allowed for isolated grids that are not connected to the high voltage transmission system

X X X

• RA10531, "National Electrification Administration Reform Act of 2013", Chapter III, Sec. 9, Amending Sec. 16, ((j) of PD269

X X X

Sec.16(j-1) To construct, acquire, own, operate and maintain generation facilities within its franchise area.

RA9513, "Renewable Act of 2008"

 $X \times X$

XXX

Chapter III, Sec.6. Renewable Portfolio Standard (RPS) – All stakeholders in the electric power industry shall contribute to the growth of the renewable energy industry of the country

X X X

RA11646, "Microgrid Systems Act"

X X X

"SEC.6. Microgrid System Provicders

X X X

Any party, including private corporations, local government units, cooperatives, x x x, DUs and their subsidiaries who have demonstrated the capability and willingness to comply with the relevant technical, financial and other requirements, may be an MGSP:. x x x

X X X

RENEWABLE ENERGY PROJECTS



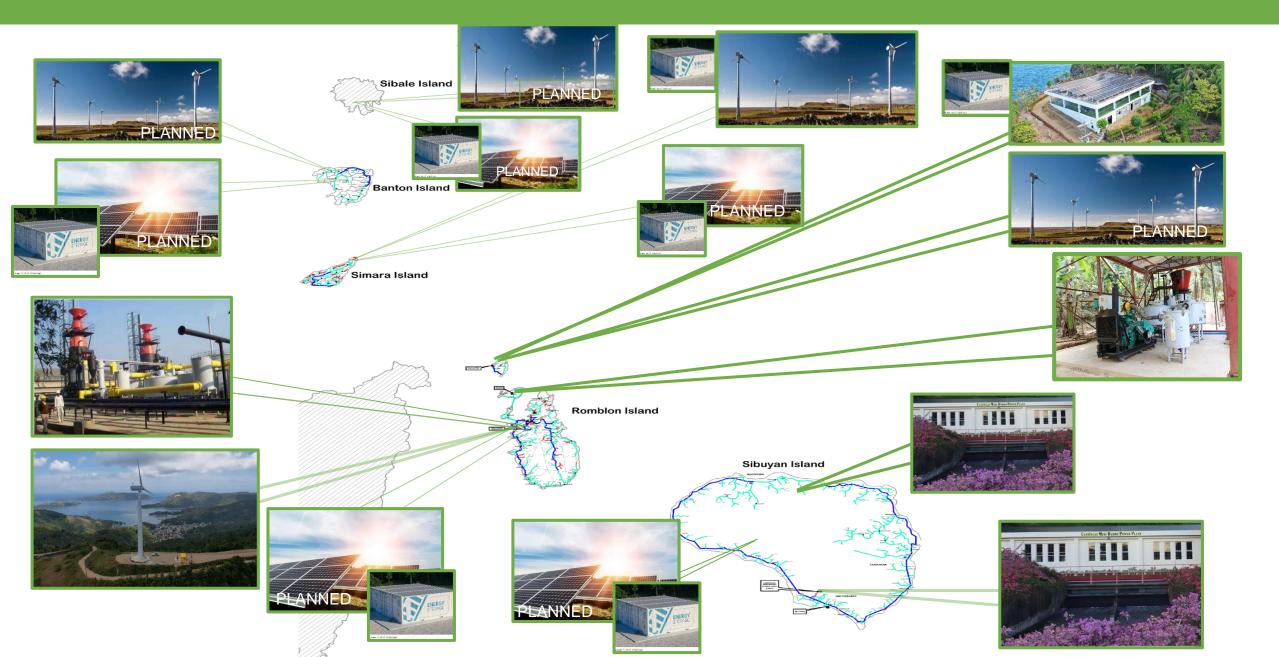








ROMELCO RENEWABLE ENERGY LANDSCAPE



ROMELCO ELECTRIFICATION OF VEHICLE PROJECT



PROJECT IMPLEMENTATION

Business Model	Partnership
Business Arrangement	Demonstration/Lease-4 years
Partner	HONDA Japan
Lease Fee	Php 2,000/month
Battery Exchange Fee	Php 40.00/exchange, 2xbatteries
No. of Units	100
Start of Operation	February 2019

TECHNICAL INFORMATION

Engine Type (Motor) Permanent Magnet,

Brushless

Battery Li-ion (50.4V, 20.8Ah) x 2

Mileage 60 km / exchange

HOW WE DEVELOP THE RENEWABLE PROJECTS

- Hire technical experts and consultants.
- Apply for Commercial Loans from Banks/Financing Institutions.
- Networking with Donor Institutions.
- Develop the technical skills of personnel.
- Continuous learning on the new developments in the industry.

CHALLENGES IN THE RE DEVELOPMENT

- Regulatory Process Application and approval of tariff is a difficult and a long process.
- Power Generation Development Absence/missing of support policies to the ECs in terms of power generation development especially in the off-grid islands/areas.
- Access to UCME Subsidy No clear policy for the ECs to access subsidy from UCME.
- Application for RE Service Contract there is no distinction on the documentary requirements in the application for RE service contract. Small RE facilities has to comply with the same requirement of the Large RE facilities.
- Training of Personnel Lack of established formal technical training facilities for RE installations, and for operation and maintenance.

RECOMMENDATION FOR UPCOMING RE POLICIES

- Access to UCME Subsidy of EC owned power generation facilities in off-grid areas most often, the True Cost Generation Rate (TCGR) is higher than the Subsidized Approved Generation Rate (SAGR).
- Develop a pre-approved RE rates to eliminate the backlog on the tariff approval
 of RE generation facilities and accelerate the realization of total electrification.
- To simplify application process for the RE Service Contracts of the small RE facilities to accelerate the development and energization of households.
- Inclusion of RE generation facilities in the SEP projects of the ECs most of the remaining unernergize sitios are located in remote areas where conventional power system are no longer practical.
- To establish training facilities for the installation and operation of RE facilities.

