ENERGY COMPACTS

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CASE STUDY

MARENA Mauritius Renewable Energy Agency

Energy Efficiency Management Office

MAURITIUS' BOLD PATH: ADVANCING RENEWABLE ENERGY AND EFFICIENCY BY 2030

While Mauritius emits 0.01% of global carbon dioxide emissions, the government is committed to holding its international commitment by reducing 40% of its GHG emissions by 2030. To this end, the Mauritius government signed onto an Energy Compacts commitment in 2021.

REPUBLIC OF MAURITIUS

1.3M INHABITANTS

ABOUT 470,000 CUSTOMERS IMPACTED BY THE ENERGY COMPACT COMMITMENT:

Household: 420,000 **Industrial:** 5,500

Commercial: 42,000 **Others:** 1,500

THE GOVERNMENT RELEASED A RENEWABLE ENERGY ROADMAP 2030

For the electricity sector, charting the way to achieve 40% of renewables in the electricity mix by 2030. With a revised renewable energy target of 60% by 2030, the national institution is updating the roadmap to identify the most economic and feasible scenario to achieve the compact targets, including investigating the possibility of using hybrid renewable energy as baseload and other new sources of renewable energy such as waste-to-energy, offshore wind, wave and tidal.

The Energy Compact commitments will enable the country to increase its renewable energy share, aiming for a target of 60% by 2030, from the current level of 24%. 99.7% of the Mauritius population is already connected to the electricity grid.

What actions is the Mauritius government taking for on-the-ground implementation?

- The Energy Compact actions will improve the electricity supply service to consumers and the stability and performance of the distribution grid, through the installation of smart meters, ADMS, WAMS and AGC.
- The actions will further help Mauritius in increasing its share of renewables in the electricity mix. As such, dependency on non-renewable sources and GHG emissions will decrease, thus allowing Mauritius to contribute to potentially achieve carbon neutrality by 2070.
- In addition, the Government is also taking measures to improve electricity usage efficiency. Compact commitments include improving energy efficiency in the household sector by facilitating the penetration of energy efficient technology, reducing electricity peak demand and growth in demand by sensitizing consumers to select energy efficient technology, and raising awareness on energy efficiency.
- The compact action also focuses on improving grid stability and will enable the penetration of about 350 MW of renewables in the electricity supply system.

How is Mauritius achieving its Energy Compacts goals?

- Through deployment of Smart Meters, ADMS, WAMS, AGC.
- Installation of 18 MW BESS of Lithium Ion technology for frequency regulation to support integration of VRES.
- Installation of 20 MW BESS of Lithium Ion technology for peak shaving.
- A new 40 MW wind farm will be installed by 2024.
- Construction of a 2MW floating PV in the reservoir of a hydropower plant (Tamarind Falls Reservoir).
- Increase in levy on energy inefficient appliances such as refrigerators, dishwashers, electric ovens, air conditioners, etc. to make them unattractive to customers financially.
- To increase the mandatory energy labeling from three appliances (refrigerators, dishwashers and electric oven) to six (additional: electronic displays, tumble dryers and washer dryers.) and implement Minimum Energy Performance Standards for air conditioners with a rated capacity not exceeding 12kW.
- Large energy consumers are required to carry out mandatory energy audits to reduce their energy use intensity.
- To carry out talks on energy saving and energy efficiency in Community Centres and Social Welfare Centres around the island as well as in primary schools, so as to inculcate a culture of energy saving and energy efficiency in the country.
- Through setting up Energy Performance Contracting.

Accomplishments to date:

- **MARENA launched the National Scheme for Emerging/Innovative Renewable Energy Technologies (NSEIRET)** to stimulate industrial innovation in the field of renewable energy. MARENA has awarded 5 projects – 1 solar, 2 hydro and 2 wind energy-based technologies – that are being implemented on the island.
- **Revamping national scheme:** In 2022, MARENA revamped the NSEIRET scheme to the National Scheme for Emerging Project Concepts based on Renewable Energy Technologies (NSEPCRET). 7 projects encompassing 3 Solar, 1 OTEC, 2 Waste to Energy and 1 Hydrogen on Board Generator have been awarded under this scheme.
- **Scholarship scheme:** MARENA launched its Scholarship Scheme in 2021. 38 candidates benefitted from the first 3 rounds of the scheme. Round 4 was launched in November 2022 and 14 candidates were selected. Upon completion of Round 4, 52 candidates will have benefited from the scholarship scheme.
- **Awareness campaigns:** MARENA has conducted numerous awareness campaigns on renewable energy, focusing on solar energy in secondary schools and community centres all over the Island. MARENA, in collaboration with UNDP, Clinton Climate Initiative, National Women Council, The National Empowerment Foundation and several Social Welfare Centres, has carried out a training on "women entrepreneurship and basics of PV", benefitting 192 women.