



MARIANO MARCOS STATE UNIVERSITY

7.2.6 University Measures Towards Affordable and Clean Energy

The University is progressively reducing its reliance on carbon-intensive energy sources and increasing its investment in clean, renewable energy. As outlined in the University's Energy Power Generation and Utilization Policy, all new and existing buildings are required to be renewable-energy-ready. Notably, the Department of Energy has selected MMSU as a Net-Zero Energy recipient, with the NBERIC building set as the model for Net-Zero Energy Buildings (NZEBS).

Additionally, through the National BioEnergy Research and Innovation Center (NBERIC), the University has developed a 95% bioethanol fuel derived from nipa sap. This bioethanol is blended at a 20% ratio with clean gasoline for use in university vehicles, motorcycles, and brush cutters powered by spark-ignition engines.

The University's commitment to renewable energy is further demonstrated by the growth in its energy production capacity, which has increased from 11 kW in 2019 to 151 kW in 2023, underscoring a clear upward trend in renewable energy investment.

From May 2023 to April 2024, NBERIC achieved NZEB status, with an annual energy balance showing a total renewable energy production of 95,742.18 kWh against a consumption of 95,470 kWh, resulting in a net surplus of 0.285%. Since the MMSU-Batac Campus operates on a single grid system, where all buildings are connected to a primary energy meter, any surplus energy produced is absorbed by adjacent MMSU buildings rather than being sold to the distribution utility, supporting a cohesive and efficient energy network across the campus.

EVIDENCES:

https://www.facebook.com/story.php?story_fbid=122096188718620947&id=61568628417220&rdid=Z8cRVQscv5j4XXrc

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