

Metric 7.4

AY 2024 - 2025



Saint Louis University
is committed to reducing its energy
consumption on its campuses
through the commissioning of solar
panel systems.



7 AFFORDABLE AND
CLEAN ENERGY



Indicator 7.4.4

AY 2024 - 2025



Saint Louis University

Policy development for clean energy technology



7 AFFORDABLE AND
CLEAN ENERGY



DOTr, LGUs, transport cooperatives, and universities signify continued support for sustainable transport

Published in the UNDP Philippines Website

URL: <https://www.undp.org/philippines/press-releases/dotr-lgus-transport-cooperatives-and-universities-signify-continued-support-sustainable-transport>



Saint Louis University (SLU) demonstrates a robust and explicit commitment to informing and supporting government policy development for clean energy and energy-efficient technologies through its partnership in the Promotion of Low Carbon Urban Transport Systems (LCT) Project. As evidenced by the Memorandum of Agreement (MOA) signed with the Department of Transportation (DOTr) and several Local Government Units (LGUs)—including Baguio City, where SLU is situated—the University has formally integrated its academic and research functions into a key national climate mitigation strategy. This collaboration directly supports the government's clean energy transition by focusing on the public transport sector, a major source of greenhouse gas emissions. SLU's School of Engineering and Architecture, through its commitment to conducting low-carbon transport research and innovations, actively informs policy by providing the essential technical data and feasibility assessments needed for the large-scale transition to Electric Vehicles (EVs) and the development of supporting infrastructure, such as EV charging stations. Furthermore, by pledging to prepare future sustainable transport engineers, SLU ensures long-term institutional support and capacity building for the government, directly addressing the technical workforce gap required to implement and sustain national energy-efficient technology policies (DOTr, UNDP, 2023). This engagement is a tangible measure of how the University leverages its expertise to shape, validate, and execute crucial governmental programs focused on cleaner, energy-efficient transport systems.

Research Publication on Life Cycle Analysis of a Solar Photovoltaic System

Published in the IOPScience Journal

URL: <https://iopscience.iop.org/article/10.1088/1755-1315/1419/1/012044/meta>

DOI: 0.1088/1755-1315/1419/1/012044

The research paper titled "Life cycle analysis of a solar photovoltaic system in a Philippine university" authored by a faculty of Saint Louis University, Dr. Marcelino Lunag Jr., provides essential, localized data for clean energy policy by performing a cradle-to-grave Life Cycle Assessment (LCA) of the University's solar PV system. It found that the system achieved an annual saving of 278,369 kg of CO₂ equivalent and a Greenhouse Gas payback period of only 2.22 years, demonstrating its environmental and economic viability in the Philippine context. This research directly supports the government by providing the rigorous, evidence-based metrics needed to inform the National Renewable Energy Program (NREP) and justify policy decisions for energy-efficient technology deployment. Furthermore, Dr. Lunag's proven capacity for this specialized analysis is recognized by his appointment to government groups, such as the Department of Agriculture's assessment team for composting facilities, underscoring SLU's role in supplying expert testimony and localized technical data for national sustainability policies.

PAPER • OPEN ACCESS

Life cycle analysis of a solar photovoltaic system in a Philippine university

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[IOP Conference Series: Earth and Environmental Science, Volume 1419, 6th International Conference on Green Energy and Environment \(ICoGEE 2024\) 24/10/2024 - 25/10/2024 Belitung, Indonesia](#)

Citation M N Lunag *et al* 2024 *IOP Conf. Ser.: Earth Environ. Sci.* **1419** 012044

DOI 10.1088/1755-1315/1419/1/012044

SLU's provision of Expert Testimony and Technical Working Group (TWG) Input

Published in the **Department of Agriculture (DA). (2023). Special Order No. 942, Series of 2023:** Creation of a Nationwide Team for the Assessment of the Composting Facility for Biodegradable Wastes (CFBW). [Specifically listing Engr. Marcelino N. Lunag Jr., Assistant Professor, Saint Louis University as a Sub-Team Member].

In addition to publishing research, SLU faculty leverage their specialized knowledge to directly participate in government planning:

- **Dr. Lunag's Direct Government Involvement:** Dr. Marcelino Lunag Jr., an Associate Professor at SLU, has been officially appointed as a member of the Nationwide Assessment Team on Composting Facilities for Biodegradable Wastes (CFBW), created under the Department of Agriculture (DA). This role, while focused on waste management, utilizes the same Life Cycle Assessment (LCA) and sustainability analysis expertise used in the solar PV paper.
- **Policy Support Across Sectors:** This demonstrates that SLU's senior faculty are recognized experts who are actively tapped by government agencies to join technical working groups, ensuring that the development of national policies and programs—be it on renewable energy (SDG 7) or sustainable waste-to-energy schemes—are supported by rigorous, evidence-based academic research and consultation.

