MAPÚA UNIVERSITY	Energy-Efficient Renovation or Construction Guidelines	Date Created: January 4, 2021
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I. PURPOSE

The purpose of the energy-efficient renovation or construction guidelines is to increase energy efficiency for a newly constructed building or building renovation, to save money and to comply with the mandatory minimum energy efficiency requirements in the form of building codes or standards. It is also one of the most cost effective ways to combat climate change, clean the air and reduce energy costs for the University.

II. SCOPE

This guideline is specifically made and designed for Mapua employees handling building construction and renovation projects.

III. DEFINITIONS

Energy Efficiency	The practice of using less energy to provide the same amount of useful output from a service.
Renovation	Make improvements on a existing school structure or facilities Restore to a good condition or state of repair
Construction	School structure or facility is being built for the first time
Fit-Out Contractor	Accredited company tapped by Mapua University to perform construction or renovation work on a contract basis

IV. RESPONSIBILITY AND AUTHORITY

CDMO Head	Responsible for implementing energy efficiency standards when it comes to construction or renovation projects. Responsible to perform regular inspection and monitoring the contractor work to ensure that they comply with all the conditions and requirements indicated in the Terms of Reference (TOR).

Purchasing	Responsible for sourcing of contractors/suppliers who will meet the requirements of the University based on the TOR.
Contractor	Responsible for the materials and/or labor to perform a service based on the TOR set by the University

V. DETAILS OF REFERENCE GUIDELINES

Integration of the following energy efficiency measures/requirements should be included in all major construction and renovation projects and enforced along with the general rules of the building codes:

1) Energy efficient building design when constructing or upgrading buildings to reduce energy loss such as decreasing the loss of heat through building envelope
2) Air conditioning system
3) Lighting system
4) Heating system
5) Ventilation system
6) Installing high quality windows that utilize low e-coatings and gas filling, while choosing the glazing and window frame material that will be most beneficial in the environment
7) Proper amounts of insulation in the walls and roof
8) Installing high-performance systems and appliances/equipment and evaluate their performance over their life cycle
9) Other modern energy-efficiency system

The University shall monitor and verify performance through energy audits to see where energy is being wasted in a building and where it is most cost-effective to make improvements through retrofitting.

VI. REACTION PLAN

To impose penalty to contractor for non-compliance to the agreement.

VII. PERFORMANCE INDICATOR

The University was able to reduce the energy consumption, enable economic growth, reduce emissions and improve energy security by implementing energy-efficiency standards.

VIII. REPORTORIAL REQUIREMENTS

Report Title	Frequency of Update	Responsible Personnel
Energy Audit	Yearly	CDM

IX. REFERENCE DOCUMENT