




MARIANO MARCOS STATE UNIVERSITY
Office of the President



MEMORANDUM NO. 24-306

TO : All Employees and Students

THRU : Vice Presidents
Deans
Directors
Heads of Units

FROM :  SHIRLEY C. AGRUPIS
President

DATE : August 20, 2024

SUBJECT : Reiteration of Energy Efficiency and Conservation Practices

Pursuant to the Government Energy Management Program (GEMP) and energy conservation and utilization policies of the University, and in anticipation of the forthcoming increase in energy consumption attributed to the opening of classes, you are hereby reminded to observe the following Energy Efficiency and Conservation practices:

A. Airconditioning Units

1. Switch on air-conditioning units (ACUs) at 9 a.m. and switch them off at 4 p.m., except for computer and laboratory classes.
2. Switch off ACUs or set them at fan mode during lunch break (12 noon-1 p.m.).
3. Check whether the thermostat is working and set it to not lower than 24°C (room temperature).
4. Ensure that airconditioned offices are well-insulated from direct sunlight or heat. Automatic door closers may be installed.
5. ACUs should be cleaned and maintained periodically.
6. Turn off all ACU breakers, especially during power interruptions.

B. Electric Fans and Electric Pumps

1. Switch off electric fans when not in use or after class.
2. Lock the oscillator when cooling is desired in one direction only, except for ceiling fans.
3. Set the fan to "low" if it is comfortable enough.
4. Switch off exhaust fans while the ACUs are in operation (where applicable).
5. Properly maintain agricultural and other pumps (electric).

C. Lighting (Illumination)

1. Replace incandescent lamps with compact fluorescent lamps (CFL) or LED lamps (or high efficiency lamps).
2. Regularly clean lighting fixtures (reflectors, luminaires).
3. Replace or remove busted fluorescent lamps.
4. Switch off or reduce lights where there is natural light.

Cultivating Minds, Transforming Futures



D. Office Equipment/Appliances Computers/Printers

1. Computers must be strictly for official use only.
2. Set computers to energy-saving mode or switch them off when not in use.
3. Do not play computer games or music using office computers.
4. Do not turn off laser jet printers if these would be used again later.

E. Other Appliances

1. Switch off refrigerators during weekends/holidays and long vacations (except when necessary).
2. Do not use ovens and electric stoves in offices, except for laboratory activities.
3. Do not watch TV during office hours, except for instructional purposes.
4. Check water/plumbing system against leaks.
5. Turn off water dispensers (and the like) before leaving the office.
6. Consider procuring laptops instead of desktops (laptops consume less energy – around more than 50" A).

F. Motor Vehicles/Machineries

1. Subject motor vehicles to regular preventive maintenance.
2. Allow only certified roadworthy vehicles to travel.
3. Avoid prolonged idling of vehicles.
4. Dispose very old vehicles as these are less road worthy and fuel inefficient.
5. Properly maintain agricultural and other pumps that use fuel.

G. General Energy Management

1. Shut down all colleges/units that are not operational on weekends and holidays and turn off their transformers.
2. Turn off all ACUs, water dispensers, computers, printers, TVs, and other electrical devices before leaving in the afternoon/evening.
3. Switch off all ACU breakers, especially during power interruptions.
4. Configure three-phase transformers to "Open Delta" when possible, to reduce losses.
5. Update electrical load information for all units according to Department of Energy (DOE) format.

Heads of units are encouraged to assign personnel to monitor the observance of the aforementioned energy conservation measures.

Cultivating Minds, Transforming Futures



POLICIES ON ENERGY GENERATION AND UTILIZATION

Principle 1. Solar Energy Generation

Policy 1.1	Designs of new buildings shall integrate/incorporate the option for the construction of solar power facility (solar panels and accessories)
Policy 1.2	Roof deck (roof integrity) must be considered in the designs
Policy 1.3	Consideration of south facing roof (around 18') is recommended
Policy 1.4	Buildings shall consider provision for the integration of interconnectivity with the grid/utility with net-metering

Principle 2. Diesel Gasoline Generator Sets for Power Generation (For 50 KV A and Larger)

Policy 2.1	Consideration of generator sets as standby units for power generation (not only during emergencies)
Policy 2.2	Consideration of standby generator sets to operate on renewable fuels (i.e., biofuels-hybrid with fossil fuel)
Policy 2.3	Maintenance program for generator sets should be in place and to be strictly observed

Principle 3. Net Metering

Policy 3.1	To optimize the potentials of distributed generation in the University, all generation facilities (large capacity), especially on renewables (solar), should consider net-metering scheme
------------	---

Principle 4. Integration of Green Technologies but not limited to:

Policy 4.1	Inverter-type of air conditioning units are preferred for new installations
Policy 4.2	Roof insulation should be installed for air-conditioned areas
Policy 4.3	LED lamps or high efficiency lights must be used in buildings/facilities including street lighting
Policy 4.4	Appropriate building orientation must be considered for new buildings to optimize energy conservation
Policy 4.5	Sufficient shade (canopies) must be provided for outdoor units of split-type air conditioning units

Cultivating Minds, Transforming Futures



Principle 5. Energy Audit

Policy 5.1	There shall be periodic conduct of spot and detailed energy accounting and audit (electricity, water, fuel) by energy auditors within all energy centers of the university
Policy 5.2	Spot energy audit shall be conducted as often as possible. This can be done by coordinators,
Policy 5.3	Detailed energy audit by energy auditors shall be done at least once every three years
Policy 5.4	University-wide energy efficiency and conservation technologies and practices must be implemented

Principle 6. Sustainability

Policy 6.1	The University shall sustain the conduct of research and development on alternative energy sources
Policy 6.2	The University shall invest on energy-efficient infrastructure and facilities
Policy 6.3	The University shall adopt and implement relevant government issuances on energy and power generation and utilization

Cultivating Minds, Transforming Futures