



Campus Sustainability Office

APPROVED

Chancellor's Council

1 February 2018
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1. Purpose:

The University utilizes electricity as its main energy source for the operation of its facilities. Fossil fuels are used to run its facilities. These result in high carbon foot prints. The promotion of energy conservation as well as the conduct of regular maintenance checks and other mitigation measures to ensure safe and efficient energy utilization will help in lowering CO2 emissions and reduce the carbon footprint of the University.

2. Scope

This policy provides general guidelines on the proper and efficient use of energy to run equipment and facilities in all its campuses. This covers the following general areas: (1) use of electricity in air-conditioning units, lighting, appliances and equipment, (2) use of fossil fuels in vehicles, generators sets and boilers and (3) use of other materials that produce carbon emissions and air pollution.

This policy shall be implemented wherever applicable to the following Campuses and Facilities:

1. DLSU Taft Campus
2. DLSU Laguna Campus
3. DLSU Rufino Campus
4. DLSU Makati Extension Campus
5. Lasallian Center
6. Charles Huang Conference Center
7. DLSU Marine Station
8. Condominium Units of the University



3. Definitions:

CARBON FOOTPRINT – total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide (CO₂).

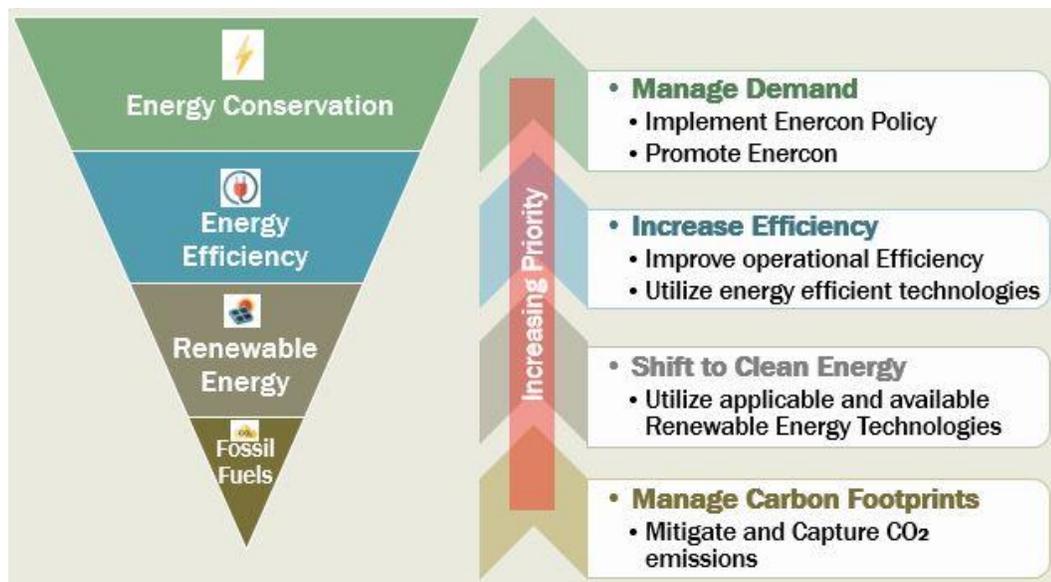
HAZARDOUS MATERIAL – any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

RENEWABLE ENERGY – energy that is collected from renewable resources, relying on naturally available as sources such as sunlight, wind, rain, tides, waves, and geothermal heat.

Guiding Principle:

The *General Guidelines on Energy Conservation and Management* aims to provide guidance to members of the Lasallian community on procedures and practices that promote energy waste minimization and energy conservation, guided by the following principles:

- a) **Natural Lighting and Ventilation.** As a general principle, people are enjoined to use electricity only when needed. As much as possible the community is encouraged to utilize available natural lighting and ventilation.
- b) **Carbon Neutrality.** De La Salle University is committed to monitoring and lowering its carbon footprints with the aim of achieving a carbon-neutral status or better as articulated in the principles and standards of Modern Conduct of Schools – Facilities and Environmental Programs Management (MCS-FEPM)
- c) **Energy Management Hierarchy.** The Energy Management Hierarchy presents a guide towards maximizing the benefits of different demand-side energy management intervention. *Energy conservation* is the foundation of any efforts of an institution towards the efficient utilization of energy. Then, *energy efficiency* in operations should be pursued followed by the application of *renewable energy*.





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4. Guidelines

4.1. Use of Air-conditioning Units¹

- 4.1.1. The University shall promote the use of energy efficient aircon systems that employ ozone-friendly refrigerants. The Facilities Management Office (FMO), the University's Pollution Control Officer and Campus Sustainability Office (CSO) shall also ensure the proper disposal of any hazardous material/s (e.g. ozone depleting substances) generated from the decommissioning of an aircon in compliance with government regulations and laws. For the decommissioning as well as purchase of new aircon units, please refer to *Appendix A: Guidelines for the Management of Air-conditioning Units*.
- 4.1.2. The Mechanical and Electrical Works Office (MEWO) shall conduct cooling demand audits of all air-conditioned spaces to ensure that the aircon systems are sufficient. Regular cleaning and proper maintenance of aircon systems shall also be conducted by MEWO to ensure their efficient operations.
- 4.1.3. Air-conditioning units, to maintain a comfortable room environment, should be set not lower than 22 degrees Celsius (Thermostat Setting 6). This shall also be applied to hallways and other common areas throughout the University. This helps reduce the energy load by around 10% for every 1 degree warmer setting.
- 4.1.4. Doors and windows should always be kept closed whenever the air-conditioning system is switched on.
- 4.1.5. To ensure the uniform distribution of cold air within a room, furniture, equipment and electronics shall not be placed in front of or in close proximity to the thermostats and sensors of the air-conditioning unit/s.
- 4.1.6. When arranging venues for meetings, talks and other university events, the appropriate room size should be matched with the number of occupants/participants.
- 4.1.7. Pre-cooling Switch-On Time of Aircon Systems. In order to ensure the efficient use of energy, users are encouraged to observe the prescribed pre-cooling time according to different venues as per advice from technical personnel from MEWO.
- 4.1.8. Users of a room or venue are requested to switch off the aircon units immediately after an activity or event. If the venue's air-conditioning system has a centralized control system, the users should inform the roving security guard or MEWO to shut down the aircon immediately after an activity or event.
- 4.1.9. For offices, last person to leave the room is requested to switch off the aircon.
- 4.1.10. For classrooms, checkers c/o the Security Office are requested to switch off the aircon unit/s if there is no scheduled class or if the professor is absent.
- 4.1.11. The Campus Sustainability Office staff shall conduct periodic energy conservation inspections for compliance with the guidelines.

4.2. Lighting

- 4.2.1. The University shall ensure that classrooms, offices and other University facilities (e.g. laboratories) employ and maintain energy efficient lighting that meet basic lighting illumination standards for the intended room use or activity. Defective lighting fixtures shall be replaced with a more energy efficient fixture whenever applicable. For the replacement as well as purchase of new lighting fixtures, please refer to *Appendix B: Guidelines on the Use of Energy Efficient Lighting*.

¹ Some facilities of the University require different climate control conditions (e.g. research labs, ITS server room, telecom facilities etc.) and as such, these shall not be covered by these general air conditioning guidelines.



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- 4.2.2. The University shall utilize available natural lighting whenever possible. Lighting facilities shall be used only when these are needed. At the end of any activity, persons-in-charge of the activity shall make sure lights are switched off. Personnel working in the evening/extended hours shall turn lights on only in the respective areas where they are working if applicable.
- 4.2.3. The Facilities Management Office (FMO) shall ensure that all lighting facilities are properly maintained. Defective fixtures shall be reported immediately to the FMO at local 666. The FMO, the University's Pollution Control Officer and Campus Sustainability Office (CSO) shall also ensure the proper disposal of lighting waste materials (e.g. Busted Fluorescent Lamps, replaced lighting fixtures and ballasts etc.) in compliance with government regulations and laws.
- 4.2.4. Lighting for display purposes (e.g. bulletin boards, trophy cases, etc.) shall be turned off after 9 pm and during term breaks/long holiday breaks, except for special occasions.
- 4.2.5. All offices are enjoined to switch off lights from 12 noon until 1:30 pm. (or during scheduled noon break) as part of the energy conservation measures of the university to help reduce energy costs and carbon emissions.
- 4.2.6. For offices, last person to leave the room is requested to switch off the lights.
- 4.2.7. For classrooms, checkers c/o the Security Office are requested to switch off the lights if there is no scheduled class or if the professor is absent.
- 4.2.8. The Campus Sustainability Office staff shall conduct periodic energy conservation inspections for compliance with the guidelines.

4.3. Use of Electronic Equipment and Appliances

4.3.1. Personal Items (Equipment, Appliances, Gadgets)

- 4.3.1.1. The use of personal equipment/appliances within the University shall be regulated and subjected to the approval of the Office/Unit Head.
- 4.3.1.2. All offices shall list all personal equipment/appliances together with its corresponding power rating and its average time of use per day.
- 4.3.1.3. University staff and students are encouraged to charge all their electronic gadgets at home.
- 4.3.1.4. For the stipulations on using personal items in the University, please refer to *Appendix C: Specific Guidelines on the Use of Electronic Equipment and Appliances*.

4.3.2. University-owned Items

- 4.3.2.1. The University shall consider energy efficiency features when purchasing equipment and electronics.
- 4.3.2.2. Electronics and other energy-consuming equipment shall be turned off, set to sleep mode or unplugged when circumstances are appropriate.
- 4.3.2.3. All electronics with standby or sleep mode shall be unplugged at the end of the day.
- 4.3.2.4. For the stipulations on using University-owned items, please refer to *Appendix C: Specific Guidelines on the Use of Electronic Equipment and Appliances*.

4.3.3. Elevators and Escalators

- 4.3.3.1. Operation of elevators and escalators shall also be managed to ensure the efficient use of energy. Energy-saving features (e.g. motion sensors) shall be utilized whenever possible. Routine maintenance runs and checks shall be conducted by the MEWO.



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- 4.3.3.2. Members of the community are enjoined to use the stairs or escalators whenever possible especially when travelling just a few floors or when going down. Use elevators only when necessary especially when travelling 3 (or more) floors.

4.3.4. Vending Machines

- 4.3.4.1. All vending machines are to be unplugged during long holiday breaks (e.g. Holy Week, Christmas).
- 4.3.4.2. Vending machines are to be unplugged during term breaks except for those located near administration areas.

- 4.4. Use of Fossil Fuels. Whenever possible, all members of the University are encouraged to take mass transport systems. This results in lesser carbon footprints. As much as possible, users of vehicles should ensure efficiency and maximum utilization on the use of fuel through proper trip planning, car-pooling and vehicle maintenance.

4.4.1. Anti-idling and Anti-Smoke Belching Policy.

- 4.4.1.1. All parking areas and driveways of the University are subject to the “no-idling” policy. “Idling” is defined as leaving the engine of a parked vehicle running for more than one (1) minute.
- 4.4.1.2. Motorists with idling vehicles or motorcycles shall be asked to comply with the policy by members of the Security Office.

4.4.2. University Vehicles

- 4.4.2.1. The University shall ensure the efficient and judicious use of University vehicles.
- 4.4.2.2. All vehicles shall be properly maintained and have up-to-date registration with the LTO and are compliant to the Clean Air Act emission standards.
- 4.4.2.3. Regular maintenance checks as well as engine efficiency checks (Km/liter) shall be done to ensure that all University vehicles are performing at peak efficiency levels.
- 4.4.2.4. Drivers shall practice eco-friendly driving habits to ensure efficient and low-carbon footprint use of all University vehicles.
- 4.4.2.5. Old vehicles shall be decommissioned upon conduct of proper evaluation c/o the Support Services Office.

4.4.3. Private Vehicles

- 4.4.3.1. It is assumed that vehicles which have up-to-date registration with the LTO are also compliant to the Clean Air Act emission standards. Car pass stickers are issued upon submission of a photocopy of the vehicle’s Official Receipt and the Certificate of Registration (OR/CR).
- 4.4.3.2. Request for special emission testing may be required for vehicles that manifest smoke belching qualities.

4.4.4. Other Applications of Fossil Fuels

4.4.4.1. LPG in Laboratories and Canteens.

- 4.4.4.1.1. The efficient and safe use of LPG in the canteens and laboratories shall be observed at all times. The MEWO and the University Safety Office, in close coordination with the academic units/offices concerned, shall conduct routine maintenance and safety checks of LPG installations to ensure their safe and efficient operations.
- 4.4.4.1.2. The proper handling and storage of the LPG tanks shall be regularly monitored by the MEWO and the University Safety Officer in accordance to legal requirements of the Bureau of Fire Protection.



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4.4.4.2. Generator Sets

4.4.4.2.1. On the occasion of power shortages and brown outs, the MEWO shall be in-charge of operating the University's generator sets.

4.4.4.2.2. All generator sets utilizing fossil fuels shall secure a Permit to Operate from the DENR. These shall also be subjected to the necessary emissions tests as necessitated by government depending on their power generation capacity. Routine maintenance runs and checks shall be conducted by the MEWO.

4.4.4.3. Boilers

4.4.4.3.1. The University shall secure all necessary government permits in the operation and use of boiler systems.

4.4.4.3.2. Routine maintenance runs and checks shall be conducted by the office/unit concerned. Periodic safety checks shall be conducted by the University Safety Office.

4.4.4.4. University Activities that Result in Air Pollution.

4.4.4.4.1. As part of the University's commitment to lowering its Carbon Footprint with the aim of achieving a carbon-neutral status or better, the use of fossil fuels (e.g. kerosene to light up torches) and wood (e.g. bon-fires during camping) shall be highly regulated in all campuses, and should be compliant to local and/or national laws, ordinances and issuances.

4.4.4.4.2. Offices and Departments who are planning to use such fuels will need to secure a clearance from the University Safety Office.

4.4.4.4.3. Activities that result in emissions shall be required to off-set these by engaging in tree-planting activities, the number and species of trees to be planted shall be determined by the Campus Sustainability Office.

4. Special Situations:

5. Responsibilities:

Responsible Office/Unit	Area of Operation
Office of the Vice Chancellor for Administration	
<ul style="list-style-type: none"> University Safety Office Security Office 	Periodic Safety Audit and Inspection of LPG tanks Compliance with Occupational Safety and Health Standards Issuance of Hot works Permit Monitoring of Compliance to Anti-idling and Anti-smoke Belching Policy
Office of the Associate Vice Chancellor for Facilities Management	
<ul style="list-style-type: none"> Mechanical and Electrical Works Office 	Management of Air-conditioning Units, Lighting Facilities and Fixtures, Elevators and Escalators Routine Maintenance Runs and Checks of Generator Sets Periodic Cooling Demand Audits Environmental Legal Compliance
Office of the Associate Vice Chancellor for Campus Services	
<ul style="list-style-type: none"> Support Services Office Procurement Office 	Evaluation of University vehicles for decommissioning Inclusion of energy efficiency rating/features in the criteria for the selection and purchase of electronic appliances and equipment.



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Responsible Office/Unit	Area of Operation
Office of the Chancellor	
<ul style="list-style-type: none"> Campus Sustainability Office 	Environmental Legal Compliance Monitoring of Compliance to Guidelines on Energy Conservation and Management
Risk Management, Compliance & Audit Office	General Legal Compliance, Compliance to MCS-FEPM
Office of the Associate Vice Chancellor for Campus Development	Green Building Development
Designated Lab Technicians/Coordinators	Preventive Maintenance of Specialized Lab Equipment

6. Procedures:
7. Instructions/Forms:
8. Standards: MCS – Facilities and Environmental Programs Management
9. Parent Policy: DLSU Environmental Sustainability Policy
10. Related Policies: n/a
11. Related Information/Document: Guidelines for the Management of Air-conditioning Units
Guidelines on the Use of Energy Efficient Lighting
Specific Guidelines on the Use Electronic Equipment and Appliances
12. References: MCS – Facilities and Environmental Programs Management
13. History: