Energy and Climate Change

Menoufia National University seeks to rationalize its electricity consumption as efficiently and effectively as possible through the following steps:

1. Avoid purchasing electrical devices that are larger or more powerful than what the university actually needs.
2. Ensure proper maintenance and cleaning of equipment according to the manufacturer's instructions to extend their lifespan and save energy.
3. Avoid using air conditioners as much as possible and rely instead on natural cooling methods (such as shades or ventilation).
4. When air conditioning is used, it should be set at 24°C (no lower) during the summer.
5. Avoid overloading electrical devices and follow the manufacturer's operating instructions (indicated on the device label) to prevent reduced efficiency and excessive energy consumption.
6. Avoid leaving electrical devices on standby mode; turn them off completely and unplug them when not in use.
7. Design posters and brochures to raise awareness about electricity conservation.
8. Ensure that all lights and electrical devices are turned off in unused areas. Designated personnel are responsible for confirming that all lights and devices are switched off at the end of the workday.

Use of Energy-Saving Devices Instead of Traditional Devices

1. Install energy-saving light bulbs.
2. Purchase energy-efficient devices based on the EnergyGuide label, which provides key statistics such as model size, efficiency, and estimated annual operating costs and energy consumption.
3. Use energy-saving lamps in halls, offices, classrooms, and corridors.

Renewable Energy Policy

Renewable energy is energy generated from natural sources that are replenished faster than they are consumed — such as sunlight and wind, which are continuously renewed. These sources are abundant and available everywhere.

By contrast, fossil fuels (coal, oil, and gas) are non-renewable resources that take hundreds of millions of years to form. Burning fossil fuels to generate energy releases harmful greenhouse gases, such as carbon dioxide (CO_2).

Emissions from renewable energy generation are far lower than those from fossil fuel combustion. Therefore, transitioning from fossil fuels, which currently represent the largest share of global emissions, to renewable energy is essential for addressing the climate crisis.

Renewable energy has also become more cost-effective in most countries and creates jobs being three times cheaper than fossil fuels in many cases.

The university aims to rely on renewable energy sources such as solar energy, and a feasibility study is currently being prepared to establish a solar energy unit at the university.

A.O.I
Arab Renewable Energy Co
ARECO

الهيئة العربية
الشركة العربية / المتجددة

محضر معاينة موقع محطة طاقة شمسية

إنه فى يوم .... الموافق .... تم معاينه الموقع المذكور أدناه بتواجد كلاً من مندوب الشركة العربية للطاقة المتجددة " الهيئة العربية للتصنيع
ومندوب ....

بيانات التواصل

اسم العميل : ....
العنوان : ....
رقم التليفون : .... رقم الفاكس : ....
البريد الالكتروني : ....

بيانات الموقع

اسم الموقع : .... عنوان الموقع : ....
نوع أرضية الموقع (أرض فضاء / سطح مسلح / تنده / .....) : ....
نوع أرض الفضاء (رملية / طينية / صخرية /........) : ....
درجة ميل الموقع عن الأفقى (مستوى/مائل) : .... مدى احتياج الأرض للتسوية باللودر : ....
عدد أدوار المبنى : .... إرتفاع الدور: .... ارتفاع السور المحيط بالموقع : ....
إرتفاع المبانى المحيطة بالموقع والتى تؤثر بالظلال على المحطة الشمسية : ....
المسافة الأفقية بين المبانى المرتفعة وموقع المحطة : ....
زاوية ميل الموقع على الجنوب : .... سمك خرسانة أرضية السطح : ....
خطوط الطول ودوائر العرض أو إرفاق صورة الموقع من جوجل ....
الاشغالات الموجودة بالموقع (أشاير/ تكييفات / دشات /........) : ....
إمكانية تركيب خوابير بالسطح بدل القواعد الخرسانية (يتم الاتفاق مع العميل) : ....
المعدات المطلوبة للرفع والتركيب (ونش / أفراد) : ....
الوصول للموقع من خلال (سلم المبنى / سلم بحارى/ لايوجد سلم) : ....
وتم الاتفاق على :-

- إزالة الاشغالات التالية للتمكن من استلام الموقع : ....
- تحديد موقع مذبذب التيار: ....
- تحديد أماكن الربط المقترحة لكابل الربط على الشبكة فى حالة الربط قبل وبعد العداد وتحديد طول كابل الربط من موقعى الربط إلى الإنفرتر : ....
- وصف مسار الكابل ومدى احتياج مد الكابل إلى حفر فى شارع أو عمل فتحات فى حائط المبنى : ....

This photo represents a site inspection report for a solar energy installation within the university campus, conducted by the Arab Renewable Energy Company.

Annual Electricity Consumption Rate

Electricity consumption rates vary from month to month due to several factors:

1. Higher consumption during summer due to the use of fans and air conditioners.
2. Differences between consumption during the academic year and holidays.
3. Increased student numbers lead to higher electricity use.

Ratio of Renewable Energy Production to Total Annual Energy Use

A plan is being prepared to implement renewable energy use at Menoufia National University. Necessary site inspections have been conducted by the Arab Organization for Industrialization.

Greenhouse Gas Emission Reduction Program

The university plans to establish a Carbon Footprint Office to calculate the carbon emissions produced by various university activities. This will enable effective emission management and potentially allow for carbon credit certification, which could become a source of funding in the near future, in line with the COP27 Climate Conference (Sharm El-Sheikh, 2022).

Green Spaces and Environmental Initiatives

Menoufia National University has planted large green areas and added various types of trees and flowers that require minimal water. These efforts aim to conserve water and help combat global warming by absorbing carbon dioxide through photosynthesis.

The university has also developed a plan to cultivate rooftop gardens to further reduce greenhouse gas emissions.

Projects Implemented to Address Climate Change

Due to the university's recent establishment, no specific environmental projects have been implemented yet to address climate change.

Biodiversity and Desertification Control Practices

The university combats desertification by planting trees and vegetation throughout its campus. These plants help purify the air from carbon dioxide through photosynthesis. The campus is characterized by open and green spaces that enhance biodiversity and environmental quality.