

Energy Conservation Program

Energy consumption may be considered as the most demanding sustainability challenge. The issue of energy consumption is further compounded as a result of the fact that October 6 university campus is in a desert climate that places high demand on air-conditioning.

O6U energy saving measures inside the buildings and offices

- Usage of transparent ceilings and wide glass windows to allow sun lights to prevail.
- Adopting energy effective behaviors of the staff.
- Performing periodic maintenance for all devices and reporting about equipment that is idle, broken or much energy consuming.
- Switch off unused equipment.
- Switch off unnecessary lighting.
- Each office contains an air conditioning sensor that can switch it off at specific temperatures after adjusted time.
- The devices such as refrigerators, LCD screens, laptops, and printer's all over the university are energy savers.
- Solar cells are placed in many places but limited usage as a prototype that can illuminate these offices.
- Glass windows all over the library permits self-lighting.
- Electric gulf cars for transport inside the campus
- Energy efficient shellers for the condition system
- Rechargeable robot for buildings sanitization.

Examples: -



Horizontal windmill



wind turbine

1) windmills in campus



2) Solar Panel to supply power to the universtiy's Pillar



3) Solar water heater



4) Solar Panel in campus

Energy efficient appliances usage



Fig. 1. October 6 university library glass windows permitting self-lighting for most of the university.



Fig. 2. *The library facilities & computer labs*

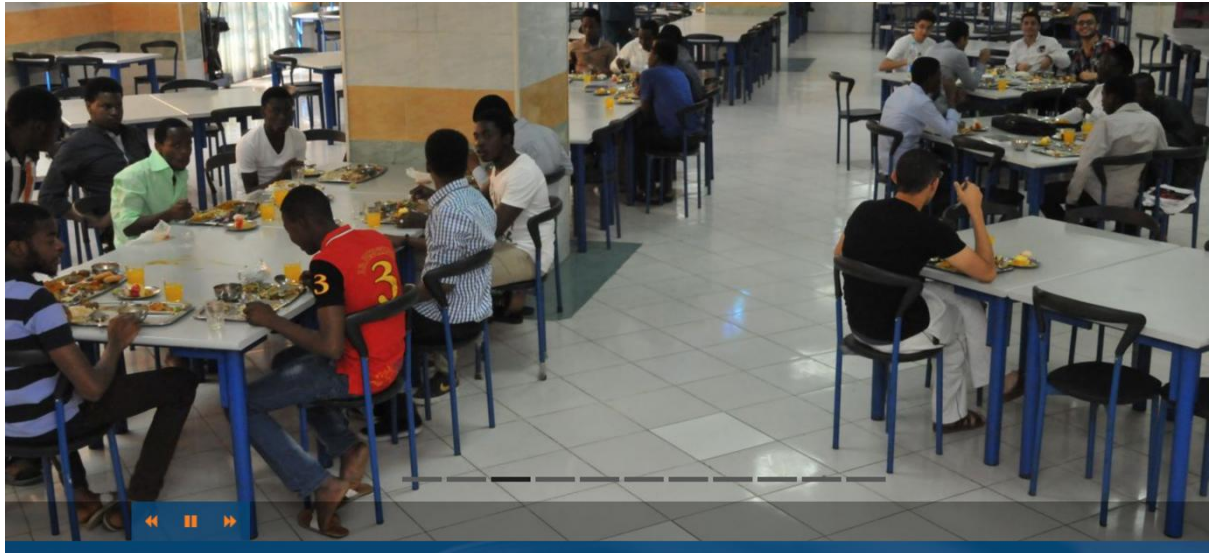




Fig. 3. Example of Energy Efficient Appliances Usage: Use of neon white lighting, LCD screens, printers with efficient energy usage, and air conditioning automatic controller.







Fig. 4. Glass windows and ceilings to allow sun lights to prevail for efficient lights usage.





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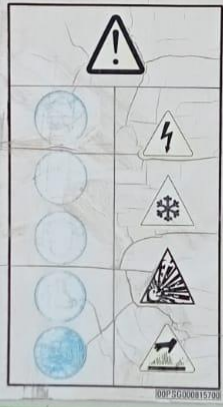
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FRANCE SOCIÉTÉ EN FRANCE SA
CHATELAIN SAS - 150, HANDELÉE - FRANCE
R. COMPTON - 17, CHATELAIN CORPORATION
STOCKHOLM - 1, P. A. NEDER PETERSEN, AUSTRIA

THE QUALITY AND ENVIRONMENTAL MANAGEMENT SYSTEMS OF CARRIER S.A. - F 01126 MONTLUEL ARE CERTIFIED BY LRQA IN CONFORMITY TO ISO 9001 AND ISO 14001



Contient des gaz à effet de serre fluorés couverts par le protocole de Kyoto.
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.
Enthält Fluorkohlwasser-Treibgasen, die vom Kyoto-Protokoll erfasst sind.
Systemet innehåller värmegaser som omfattas av Kyotoprotokollet.
Systemet innehåller värmegaser som omfattas av Kyotoprotokollet.
Mening ekspandere med gas à effet de serre fluorés.
Fluorid gasser med fluorerte drivgasser.
Mening ekspandere med drivgasser som er regulert av Kyotoprotokollet.



Fig.5. Chillers for the buildings cooling system



Periodic maintenance



Switch off unnecessary lighting

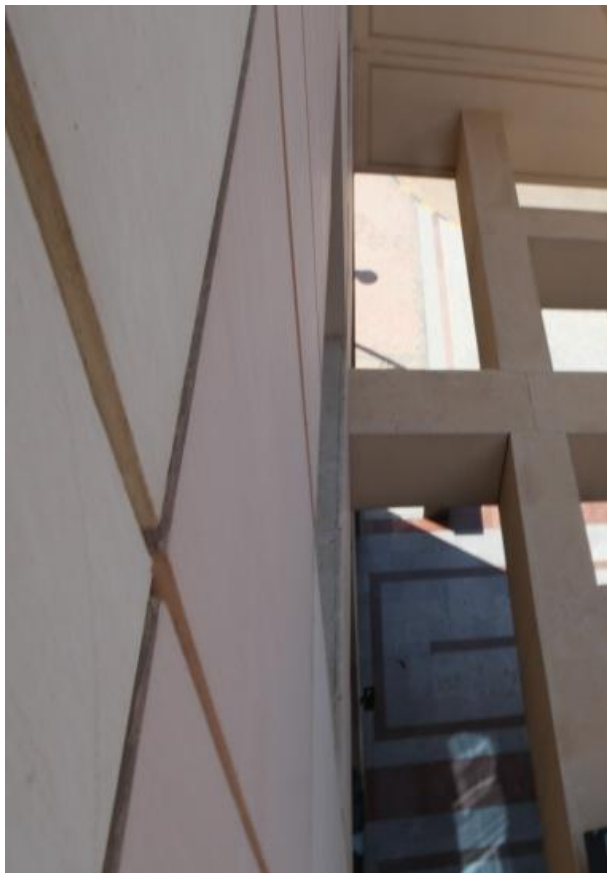
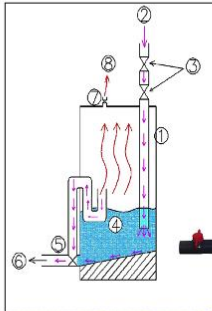


Fig. 6. Energy efficient usage



Fig. 7. Smart screen for announcements

Methane gas production from wastewater



- 1- عمل فصل للمياه الرمادية عن المياه السوداء داخل منشآت الجامعة والاستفادة من المياه الرمادية في ري الحدائق.
- 2- انتاج غاز الميثان من المعالجة الاهوائية للمياه السوداء لانتاج طاقة للاستخدام في الطبخ .
- 3- الاستفادة من المياه الناتجة بعد معالجة المياه السوداء في الري و تسميد المسطحات الخضراء .



Production of biodiesel from food Waste

To be used as fuel for generators and buses work with biodiesel



Fig. 8 Production of biodiesel and waste treatment for production of methane gas to be used for cooking in students hotel.



Fig. 9. Central air condition and fans



OPPO A93



Fig. 10. Replacement of old lamps by energy saving lamps.

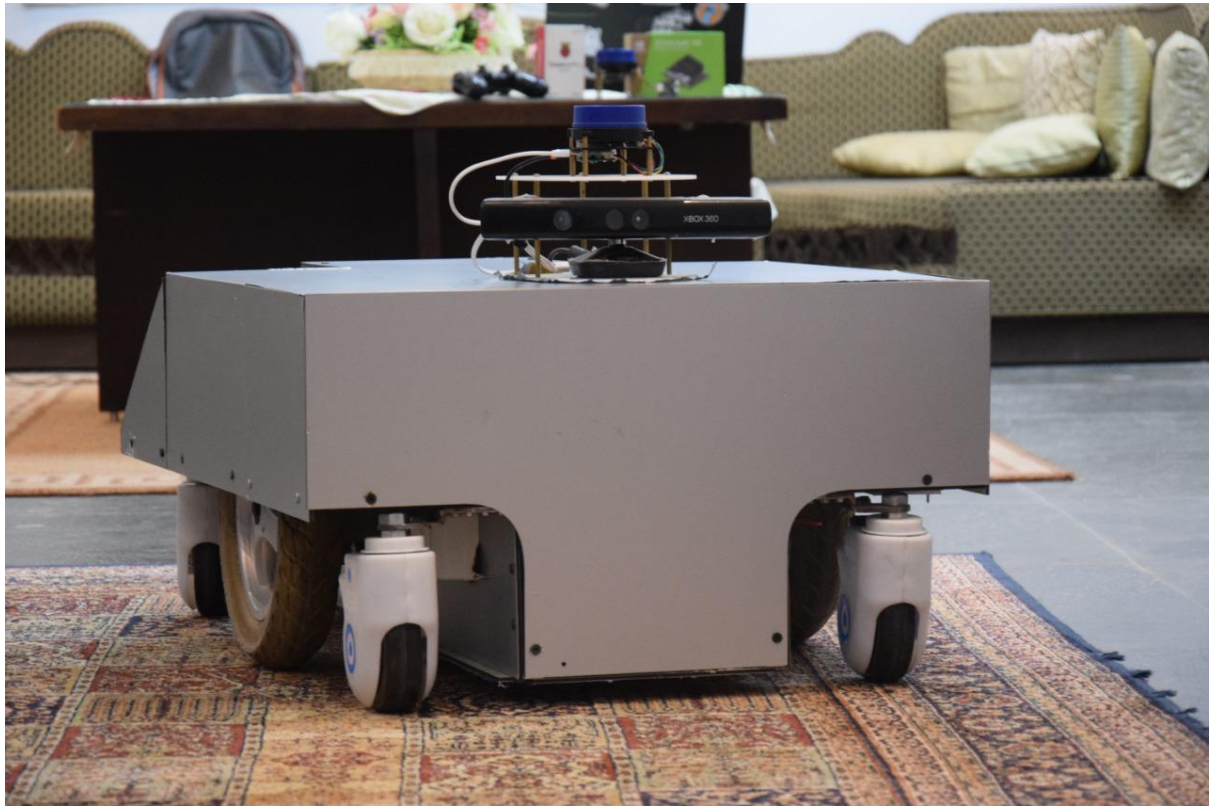


Fig. 11. A robot for sanitization



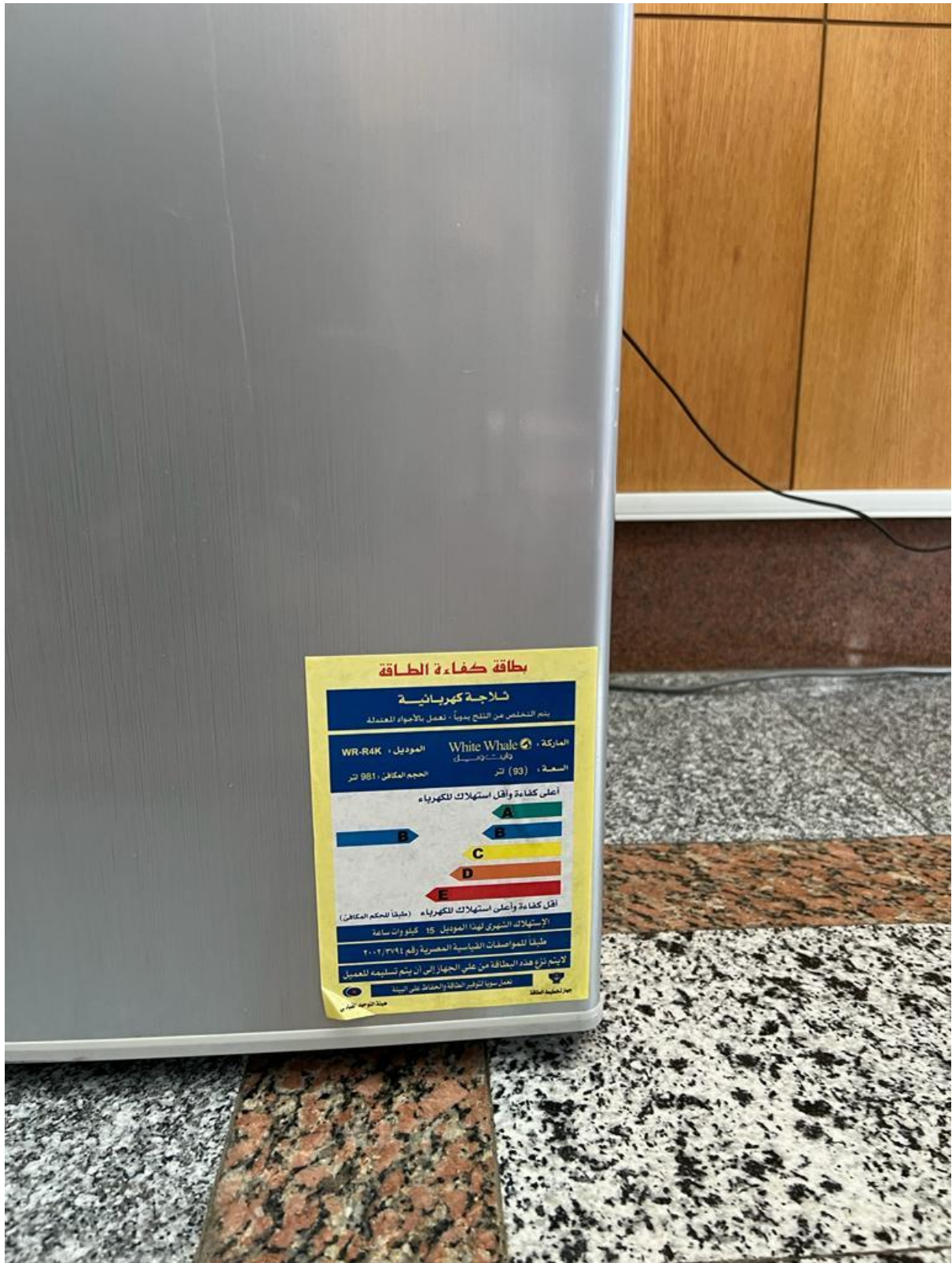


Fig. 12. Energy efficient devices as refrgrator & computers & printers



Fig.13. the electric golf cars transporting on O6U Campus