



07. Clean and Affordable Energy

07-02 University Actions Towards Affordable and Clean Energy

07-02-04 Does your university have an energy efficiency plan to reduce overall energy consumption?

Yes, our university has developed a comprehensive and integrated energy efficiency plan targeting the gradual and systematic reduction of total energy consumption across all university operations:

Strategic Framework of the Plan:

1. Diagnosis and Continuous Monitoring:

- Conducting periodic energy audits to identify high consumption and waste areas.
- Regularly analyzing consumption data to identify patterns and opportunities.
- Real-time monitoring system for energy consumption across different facilities.

2. Technological Upgrades:

- **Equipment Replacement:** Evaluating and replacing old devices and equipment with high energy-efficient ones.
- **Smart Lighting:** Installing energy-saving LED lighting systems with motion sensors.
- **Smart Control Systems:** Implementing Building Management Systems (BMS) to optimize energy use.

3. Structural Improvements:

- **Thermal Insulation:** Inspecting and improving thermal insulation of buildings to reduce energy loss.
- **Windows and Doors:** Replacing old windows and doors with high thermal efficiency ones.
- **Passive Design:** Integrating passive design principles in new projects.

4. Renewable Energy:



- **Solar Energy:** Gradual expansion in the use of solar energy for lighting, pumps, and other systems.
- **Long-term Planning:** Developing plans to cover an increasing percentage of energy needs from renewable sources.

5. Awareness and Behavior:

- **Awareness Campaigns:** Organizing periodic campaigns to raise awareness among students and employees about the importance of energy conservation.
- **Training Programs:** Training staff on best practices in energy management.
- **Behavior Incentives:** Developing incentive programs to encourage energy-saving behaviors.

6. Partnerships and Funding:

- Securing necessary funding through institutional budget and strategic partnerships.
- Collaborating with industrial institutions (such as SONATRACH) to exchange expertise and training.

Target Objectives:

- Gradual reduction in total annual energy consumption.
- Increasing the proportion of renewable energy in the overall energy mix.
- Improving energy efficiency in all buildings and operations.
- Reducing operating costs and environmental impact.

This integrated plan represents a clear institutional commitment to achieving energy efficiency and contributing to addressing climate change challenges.