



## 07. Clean and Affordable Energy

### 07-02 University Actions Towards Affordable and Clean Energy

#### 07-02-05 Does your university conduct energy audits to identify areas where energy waste is highest?

Yes, our university implements a comprehensive and systematic energy audit program aimed at identifying, analyzing, and addressing areas of high consumption and energy waste:

##### Energy Audit Methodology:

###### 1. Comprehensive Consumption Data Analysis:

- Collecting and analyzing historical and current consumption data for all facilities.
- Identifying temporal and seasonal consumption patterns.
- Comparing consumption rates with national and international standard benchmarks.

###### 2. Real-time Monitoring:

- Implementing continuous monitoring systems to track energy consumption instantaneously.
- Using smart meters to monitor consumption at building and department levels.
- Immediately identifying anomalies and unjustified spikes in consumption.

###### 3. Equipment Evaluation and Replacement:

- Comprehensive inspection of all devices and equipment to determine their energy efficiency.
- Identifying old or inefficient equipment that needs replacement.
- Establishing a priority plan for replacement based on return on investment and environmental impact.

###### 4. Thermal Insulation Inspection:

- Conducting thermal imaging inspections of buildings to identify heat leak points.



- Evaluating insulation quality in walls, ceilings, windows, and doors.
- Identifying priorities for required structural improvements.

## 5. Awareness Campaigns:

- Organizing continuous awareness campaigns to educate the university community about energy conservation.
- Publishing audit results to raise awareness about the importance of energy-saving practices.
- Engaging students and employees in energy-saving efforts.

### Benefits and Impact:

#### Environmental:

- Reducing the university's carbon footprint.
- Improving overall environmental performance.
- Contributing to achieving national climate goals.

#### Economic:

- Significantly reducing operating costs.
- Improving efficiency in using financial resources.
- Freeing up resources that can be reinvested in other development projects.

#### Institutional:

- Promoting a culture of sustainability and environmental responsibility.
- Improving institutional image and leadership in sustainability.
- Developing technical capabilities in energy management.

This systematic approach to energy auditing represents a fundamental element in our comprehensive strategy to achieve energy efficiency and transition towards a sustainable, low-carbon campus.