



Department of Construction and Technical Works

Energy Efficiency Policy

Energy efficiency; is the reduction of energy consumption, without changing the standard of living and quality of service. Efficiency is ensured in every operation where the same product output is achieved with less energy input.

In order to prevent the rapid depletion of energy resources, savings are required in all areas.

During all kinds of maintenance and repair, modification, manufacturing and restoration works to be carried out within the body of our Department, the following issues shall be considered within the scope of energy efficiency and savings.

The principles that should be adopted to minimize the environmental impact of a building can be listed as follows:

- 1- Positioning and shaping the building according to the sun, arranging the openings accordingly and using the natural light effectively
- 2- Efficiency in the use of energy and natural resources
- 3- Passive and active heating / cooling systems integrated into the building
- 4- Low CO₂ emission targets
- 5- Application of low carbon energy sources
- 6- Collecting and generating energy in the field
- 7- Use of recycled materials
- 8- Taking materials from sustainable sources
- 9- Use of local and natural materials predominantly
- 10- Minimizing waste during construction
- 11- No use of CFC, HCFC and ozone depleting materials
- 12- Minimal intervention in natural resources
- 13- Indoor air quality and use of volatile organic-free material
- 14- Accessibility, security and proximity to social services

Attention must be paid to these issues during planning and feasibility studies and designs must comply with these requirements.

The quality of the materials selected during construction is important and the principles required for achieving savings targets and energy efficiency can be listed as follows:

- 1- “TS 825 Thermal Insulation Rules in Buildings” must be followed in the insulation of buildings. In this context, it is preferable that the thermal insulation materials to be used are domestic, recyclable.
- 2- Heat recovery systems will be used in the heating and cooling systems of the building. High efficiency motors will be selected. Automation of heating and cooling systems will prevent energy losses caused by the user. Utilization of rain water and domestic water will be provided by using gray water system. Boilers to be used in heating systems shall be selected as energy efficient.
- 3- The “Procedures and Principles Regarding the Use of Led Luminaires in the Scope of General Lighting” of the Ministry of Energy and Natural Resources shall be complied with. Led luminaires will be used in new buildings. Automation system will be used in the control of lighting system in order to increase energy efficiency.
- 4- An automatic irrigation system will be used in landscaping works. In summer, irrigation will be done at night to minimize evaporation.
- 5- In cases where it is necessary to replace the existing system in maintenance and repair works, energy saving and cost will be considered together.

During the feasibility analysis, project, construction, maintenance and manufacturing processes made by our department, the above mentioned issues will be evaluated in every aspect and the selection of the material suitable for energy efficiency will be ensured.