



SCREENING CHAPTER 15 ENERGY

AGENDA ITEM: NEW AND RENEWABLE SOURCES OF ENERGY AND DEMAND MANAGEMENT – PART I

Demand Management - Energy Services

**Country Session: The Republic of TURKEY
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CONTENT: LEGAL FRAMEWORK

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Law on the Organization and the Duties of the Ministry of Energy and Natural Resources (MENR), No. 3154

(Official Gazette: 1 March 1985, no 18681)

Article 2(b) and 10(d)

- MENR duties;
 - To determine general policy principles in order to survey, assess and protect the energy resources for country's benefit.
 - To survey, develop and protect the energy resources and to promote and coordinate the energy conservation studies.



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants

Official Gazette: 11 November 1995, no 22460)

Legal Base;

Law on the Organization and the Duties of the Ministry of Energy and Natural Resources No 3154

- Article 2(b)
- Article 10(d) (modified by the Decree Law No 505, 12 August 1993)



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Objective

Article 1

- The objective is to set arrangements which are needed to improve energy efficiency in the energy intensive industrial sector.

Scope

Article 2

- It covers private and state establishments which operate in the industrial sector covered by 'Chambers of Industry and Trade' and those related to mining exploitation, which have annual energy consumption equal to 2,000 ton oil equivalent (toe) and over.



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Measures

Article 6

- Measures to improve energy efficiency in existing and new industrial plants are identified. These measures should be taken by industrial plants.

Energy Efficiency Audits and Action Plans

Article 7 and 8

- Plants shall make or have make energy audits in order to identify energy saving potential and monetary savings.
- Plants shall prepare 2 and 5 years action plan considering the energy efficiency audit studies.



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Monitoring and Reporting

Article 9, 18, 19, 23 and 24

- Plants shall monitor their specific energy consumption on monthly and annual bases. They shall install necessary measurement equipment for these purposes.
- DG of Electrical Power Resources Survey and Development Administration (EIE) is to follow up implementation of By-Law and an annual report shall be prepared and submitted to MENR by EIE.
- EIE is empowered to control/monitor whether or not the plants comply with the obligations.
- Plants shall submit energy efficiency projects, status of implementation of their action plans and specific energy consumption.



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Energy Management

Article 10, 11 and 12

- All factories consuming 2,000 toe or more energy in a year shall establish an energy management system.
- Factories shall set up an energy control committee or shall assign an energy manager according to their total annual energy consumption. Personnel in charge of energy management are required to hold 'Energy Manager Certificate'.
- Energy manager is the coordinator of the Energy Control Committee. The committee is composed of technical personnel in charge of operations of the main production units.



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Energy Management

Article 13

- The duties and responsibilities of the energy managers:
 - Installation of measurement equipment for monitoring
 - Monitoring of specific energy consumptions
 - Energy supply analyses and preparation of energy budget
 - Development of energy efficiency project
 - Operation of equipment efficiently
 - Implementation of energy efficiency project
 - Development of training and awareness program
 - Monitoring of emissions and ensuring that emissions are within the limit values
 - Calibration of measurement equipments
 - Preparation of monitoring reports



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Energy Management

Article 14, 15 and 17

- Certification process for the energy managers and authorization for organizing the energy manager courses are defined.
- Energy Manager Courses: EIE shall organise energy manager courses or shall authorize institutions to organize these courses to award energy manager certificate.
- Energy Management Lecture in Universities: When an engineer who has received energy management lecture during education in university can have energy manager certificate.



By-law on the Measures to be Taken to Increase Energy Efficiency in Industrial Plants (CONT'D)

Authorization for Energy Audit Studies

Article 21

- Energy efficiency audits in plants shall be made by plants or person(s) or institutions empowered by the EIE.
- Person(s) or institutions shall have a Certificate of Proficiency valid for 5 years in order to carry out energy audits.

Energy Management

Article 22

- Names, CVs, addresses and communication information of the persons assigned as energy manager, authorized by the industrial plant management, shall be submitted to EIE.



Circular for The Principles for Organizing Energy Management Lectures and Courses (Official Gazette: 31 August 1996, no 22743)

The purpose and the coverage of the energy management lectures and courses which are to be arranged by universities and institutions, and the conditions which have been set by the EIE for granting authorisation to arrange the energy management courses.



Circular for The Principles for Granting Authorisation for Conducting Energy Audits

(Official Gazette: 8 July 1998, no 23396)

The purpose and the coverage of the energy audit which are to be conducted by the industrial establishments in their own facilities, or the energy audits which are to be conducted in the industrial facilities of the third parties or establishments and the conditions which have been set by the EIE for granting authorisation to conduct energy audits.



Circular for the Measures are to be Taken by the Governmental Institutions and Organizations 1997/68 (11 November 1997)

In order to eliminate electricity shortages, the measures for the efficient use of electricity in the final consumption stage and which are to be taken by the government institutions and organizations are defined.



Preliminary Draft Law on Energy Efficiency

- **Objective**

To improve efficiency in both usage of energy sources and energy itself, in order to decrease the burden of energy cost on the national economy and to protect the environment.

- **Scope**

The preliminary draft law comprises the principals and procedures in order to improve the energy efficiency in end use sectors, such as industry, buildings and transport sectors and also in power generation, transmission and distribution.



Preliminary Draft Law on Energy Efficiency (CONT'D)

- **Main Strategies**
 - Establishment of an administrative structure for energy efficiency activities
 - Training and awareness
 - Dissemination of energy efficiency services
 - Promotion of renewable energy sources



Preliminary Draft Law on Energy Efficiency (CONT'D)

Administrative Structure

- Energy Efficiency Coordination Board (EECB) shall be established for conducting the energy efficiency activities throughout the country.

(High level representatives from relevant ministries, government institutions, Union of Municipalities, Association of Chambers)



Preliminary Draft Law on Energy Efficiency (CONT'D)

Training and Awareness

- Training programmes
 - Energy managers in industry and building sectors
 - Energy Efficiency Consultant Companies
 - Primary and secondary schools and public sector
- Awareness
 - “Energy Efficiency Week” each year,
 - Broadcasting on TV Channels,
 - Informing customers on their annual consumption by energy supply companies



Preliminary Draft Law on Energy Efficiency (CONT'D)

Dissemination of Energy Efficiency Services

- EIE, Universities and chamber of mechanical and electrical engineers will carry out the training programmes and authorization activities for the energy efficiency consultant companies.
- Energy efficiency consultant companies can conduct energy efficiency services such as energy manager training programmes, audits, consultants and implementation in end-use sectors, including investment.



Preliminary Draft Law on Energy Efficiency (CONT'D)

Instruments for Strategies

- Energy management
- Monitoring
- Training and awareness
- Financial instruments
- Voluntary agreements
- Supporting mechanisms
- Implementation of heat control and measurement equipments in buildings
- 'Energy Performance Certificates' for buildings



Preliminary Draft Law on Energy Efficiency (CONT'D)

- Energy Management
 - Appointing Energy Managers or setting up Energy Management Units in factories which consume energy over a certain amount and buildings which are over a certain size or energy consumption
 - Certification of Energy Managers
- Monitoring
 - Monitoring annual energy consumption of the factories and buildings for energy efficiency analyses and projections by EIE.
 - Reporting to EIE is required annually, for monitoring energy consumption of public sector.



Preliminary Draft Law on Energy Efficiency (CONT'D)

- Training & Awareness
 - Responsibilities related to the public awareness are given to NGOs, chambers, schools and TV channels.
- Financial Instruments
 - Investments in industrial plants
 - Energy efficiency services for SMEs
 - Cogeneration systems



Preliminary Draft Law on Energy Efficiency (CONT'D)

- Voluntary Agreements
 - Decreasing of energy intensity in industry
 - Utilisation of co-generation and renewables
- Supporting mechanisms for;
 - High efficient co-generation and micro-cogeneration
 - Research and Development
 - Small scale renewable energy plants



Preliminary Draft Law on Energy Efficiency (CONT'D)

Other Provisions

- To be regulated by secondary legislation,
 - Improvement of energy efficiency in power generation, transmission, distribution
 - Demand side management
 - Utilisation of waste heat of thermal power plants
 - Outdoor lighting
 - Utilisation of alternative energy sources
 - Improvement of energy efficiency in transport sector
 - Defining of minimum performance of building materials
- Boilers and combustion equipment, air-conditioners, electrical motors, electrical appliances and lamps have to meet the minimum performance levels.



International Agreements

Energy Charter Treaty and Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects was ratified by Turkish Grand National Assembly in February 2000.

- EIE has been appointed by MENR as a responsible body to carry out energy efficiency studies.
- Energy Efficiency Strategy of Turkey has been prepared and approved by the MENR in 2004.
- Preliminary Draft Law on Energy Efficiency includes some provisions on policy principles envisaged by Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects



Thank you for your attention