COMPULSORY PROGRAM

Guideline for the Implementation of Energy Conservation As Prescribed in the Energy Conservation Promotion Act B.E. 2535 For Designated Building and Designated Factory

Department of Alternative Energy Development and Efficiency Ministry of Energy April 2005

Content

- 1. Main points of the Energy Conservation Promotion Act B.E. 2535
 - 1.1. Principle of the Act
 - 1.2. Target group of the Act
 - 1.3. Implementing Measure
 - 1.4. Punishment
 - 1.5. Surcharge
- 2. Description of Designated Building and Designated Factory
- 3. Duty of Designated Building and Designated Factory
- 4. Procedure of the Implementation of Energy Conservation according to the Energy Conservation Promotion Act B.E. 2535
 - 4.1. Person Responsible for Energy
 - 4.2. Energy Consumption Report
 - 4.3. Establishment of Energy Conservation Target and Plan
 - 4.4. Monitoring and Evaluation of the Implementation of the Plan

1. Main Points of the Energy Conservation Promotion Act B.E. 2535

1.1. Principle of the Act

The Energy Conservation Promotion Act B.E. 2535 was established with the following principles:

- (1) To promote energy efficient production and consumption
- (2) To promote the production of energy efficient equipment and machinery.
- (3) To promote the concrete energy conservation by establishing the Energy Conservation Fund to provide financial support to people who have to implement energy conservation as required by law.

1.2. Target Group

Target group of the Act is as follows:

- (1) Designated Factory
- (2) Designated Building
- (3) Manufacturer or supplier of energy efficient equipment, machinery and material used for energy conservation.

The Royal Decree designated the building and factory was announced in B.E. 2538 and B.E. 2540 respectively.

Regarding the manufacturer or supplier of energy efficient equipment, the ministerial regulation prescribing type and standard of equipment, machinery and material eligible for financial support from the Energy Conservation Promotion Fund will be issued in the future.

1.3. Implementing Measure

To reach the principle of the Act, the following measures were established:

(1) Supervisory Measure

The Act prescribed that owner of designated building and designated factory shall have a duty to follow the law as detail in "3. Duty of Designated Building and Designated Factory".

(2) Promotion and Support Measure

According to the Act, the Energy Conservation Promotion Fund is established under a supervisor of the Energy Conservation Promotion Fund Committee, as prescribed in article 27. The objectives of the Fund, prescribed in section 25, are to promote and support designated building and designated factory to implement energy conservation as required by law, as well as to support others who want to conserve energy.

1.4. Punishment

According to The Energy Conservation Promotion Act B.E. 2535, the punishment section is prescribed as a fine for an offender, who does not submit and record energy consumption data, does not establish energy conservation target and plan, does not audit and analyze the implementation of the energy conservation target and plan, as well as does not appoint a Person Responsible for Energy (PRE). While an offender who verifies a false energy conservation report will be imprisoned or fined, or both. (Detail of the punishment is prescribed in Division 9 of the Act).

1.5. Surcharge

The Act prescribes that a surcharge for use of electricity can be collected from designated building or designated factory that fail to comply with the energy conservation standard, criteria and method prescribed in the ministerial regulation. However, at present there is no enforcement regarding a surcharge collection.

2. Description of Designated Building and Designated Factory

Building and factory are designated according to type of energy consumption as follows:

- 1. Installed power meter of $\geq 1,000$ kW. Or,
- 2. Total transformer capacity $\geq 1,175$ kVA., Or,
- 3. Annual energy consumption from 1 January-31 December \geq 20 million mega-Jules.

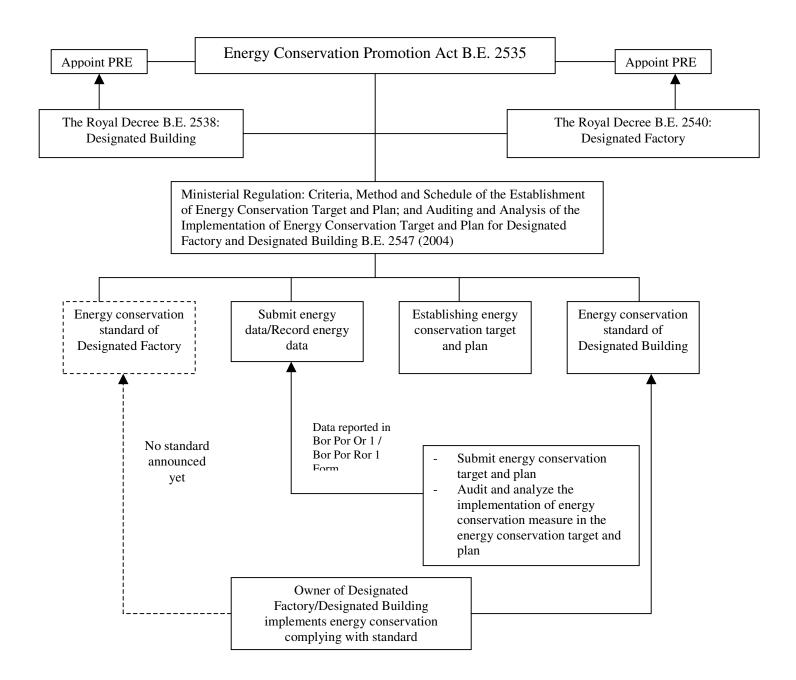
The Royal Decrees on Designated Building and Designated Factory were effective on 12 December 2538 (1995) and on 17 July 2540 (1997) respectively.

3. Duties of Designated Building and Designated Factory

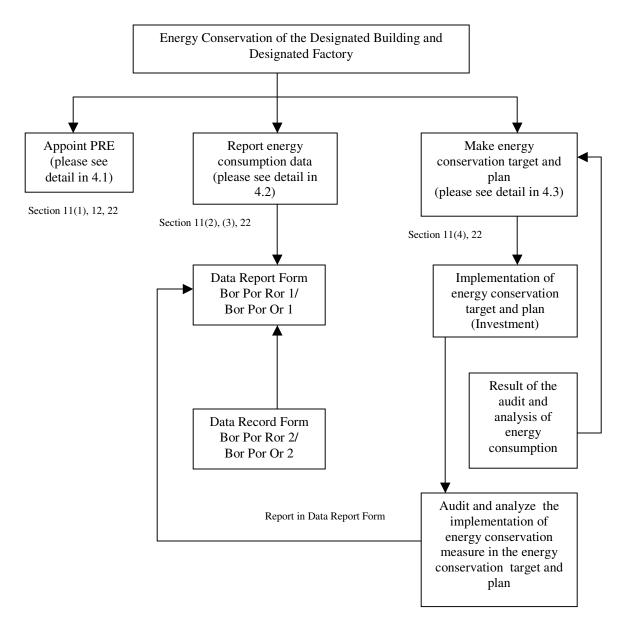
Owner of designated building and designated factory shall have duties to conserve energy as follows:

- 1. Implement the energy conservation to be complied with specified standard.
- 2. Appoint at least 1 Person Responsible for Energy (PRE) to work full-time at the designated building or designated factory.
- 3. Submit data of energy generation, consumption and conservation to DEDE.
- 4. Record data of energy consumption, data of installation or modification of equipment or machinery affecting to energy consumption and conservation.
- 5. Establish an energy conservation target and plan and submit it to DEDE.
- 6. Audit and analyze the implementation of energy conservation target and plan.

Structure of the Energy Conservation Promotion Law



4. Procedure of Energy Conservation according to the Energy Conservation Promotion Act B.E. 2535



Section 11(5), 22

4.1. Person Responsible for Energy (PRE)

Objective:

PRE is appointed to assist the owner of designated building and designated factory in implementing energy conservation.

Appointment of PRE

Owner of designated factory or designated building shall appoint at least 1 PRE to work full-time at the designated factory or designated building. Appointment shall be notified to DEDE by using Form Bor Por Chor 1, 2 or 3.

Qualification of PRE

PRE shall have one of the following qualifications:

- 1. Having taken a training course in energy conservation organized or approved by Ministry of Energy.
- 2. Holding a Higher Vocational Certificate and having at least 3 years experience in a building or a factory, with evidence of work in energy conservation verified by the owner of a designated factory or a designated building.
- 3. Holding a degree in engineering or science, with evidence of work in energy conservation in a building or a factory, verified by the owner of a designated factory or a designated building.

Recommendation:

Before submission of PRE appointment form to DEDE, required document and qualifications of PRE should be checked carefully. If the PRE has the qualification in 2 or 3, the PRE is recommended to attend the training course in energy conservation organized by DEDE to gain more skill and understanding of energy conservation. Please contact "Training Division" Tel. (02) 5777035-41 for more information.

Duty of PRE

- 1. Periodically maintain and inspect the efficiency of equipment and machinery that uses energy.
- 2. Verify an energy consumption and conservation report to be submitted to DEDE.
- 3. Assist the owner of a designated building or a designated factory in establishing energy conservation target and plan.
- 4. Verify the result of the energy conservation audit and analysis.

** Please see detail of the duties of PRE in section 14 of the Energy Conservation Promotion Act B.E. 2535

Punishment: The owner of a designated building or a designated factory who does not appoint a PRE shall be fined not exceeding 200,000 baht. The owner of a designated building or a designated factory who verifies a false information shall be imprisoned not exceeding 1 month or fined not exceeding 50,000 baht, or both.

4.2. Energy Consumption Report

Objective:

For the benefit of the owner of designated building and designated factory and DEDE in analyzing and planning energy conservation measure, the production data, energy consumption and conservation data shall be reported to DEDE.

Prescription:

- Energy consumption and conservation data, as well as the result of audit and analysis of the implementation of the energy conservation target and plan shall be reported in Form Bor Por Or 1 (Designated Building), and Bor Por Ror 1 (Designated Factory) to DEDE every 6 months. The report of data of January-June shall be submitted to DEDE within July, and the report of data of July-December shall be submitted to DEDE within January of the following year.
- DEDE has unofficially established E-form of Bor Por Or 1 or Bor Por Ror 1 for designated building or designated factory to send data via the internet system. Please contact One Stop Service Center or please click at www.dede.go.th for more information.
- Energy consumption data and data of installation or modification of equipment affecting to energy conservation and consumption shall be recorded very month in the Form Bor Por Or 2 (Designated Building) and Bor Por Ror 2 (Designated Factory) and shall be kept for inspection of DEDE for at least 5 years.

Content of Form Bor Por Or 1:

- General information of designated building and designated factory such as address, working hour, type of business, etc.
- Utilization of designated building such as (for hotel) numbers of rooms sold in each month, or production data in the past 6 months for designated factory.
- Total energy consumption data in the past 6 months.
- Energy conservation and the result of audit and analysis of the implementation of energy conservation target and plan in the past 6 months.

Method of Submission

- 1. By hand at DEDE
- 2. By registered mail. Date of a registration by the post office will be regarded as a submission date.
- 3. By facsimile. Date of sending a facsimile will be regarded as a submission date but the original report shall be sent to DEDE within 7 days from the due date specified by the law.
- 4. By internet. (Since it is not officially announced but the designated factory and designated building can send report to DEDE using E-form, therefore the original report shall also be submitted to DEDE later on.)
- ** PRE and the owner of a designated building or a designated factory shall certify a report before submitted to DEDE.

^{**} The monthly data shall be concluded and reported to DEDE every 6 months.

Please contact One Stop Service Center, DEDE, Tel. 02 2262311 to get the Bor Por Or 1, Bor Por Or 2 / Bor Por Ror 1, Bor Por Ror 2, or download at www.dede.go.th

Punishment: If a person does not submit an energy consumption report in Bor Por Or 1 or Bor Por Ror 2 and does not record energy consumption data or data of equipment installation in Bor Por Or 2 or Bor Por Ror 2, a person shall be fined not exceeding 100,000 baht.

4.3. Establishment of Energy Conservation Target and Plan

The important duty of owner of designated building and designated factory is to establish energy conservation target and plan, which will bring into the concrete action of energy conservation.

Objective:

To be used as a guideline for energy conservation implementation as specified in the law.

Prescription:

- The owner of designated building or designated factory shall audit and analyze energy consumption and use the audit and analysis result to establish an energy conservation target and plan to be complied with the energy conservation standard.
- Energy conservation target and plan shall be submitted to DEDE every 3 years.
- As soon as the ministerial regulation regarding the establishment of energy conservation target and plan is effective on 29 April 2005, the energy conservation target and plan shall be submitted to DEDE within 1 year of effective date.

Comparison of the Main Points of the Repealed and New Ministerial Regulation regarding the Establishment of Energy Conservation Target and Plan

The Repealed Ministerial Regulation	The New Ministerial Regulation
There were 2 Ministerial Regulation for designated building and designated factory separately.	Only 1 Ministerial Regulation for designated building and designated factory. The title is "Ministerial Regulation: Criteria, Method and Schedule of the Establishment of Energy Conservation Target and Plan; and Auditing and Analysis of the Implementation of Energy Conservation Target and Plan for Designated Factory and Designated Building B.E. 2547 (2004)
Audit and analysis of the implementation of energy conservation target and plan shall be submitted to DEDE every year	Result of audit and analysis of the implementation of energy conservation target and plan shall be reported in Bor Por Or 1/Bor Por Ror 1 and submitted to DEDE every 6 months.
Registered Consultant (RC) registered with DEDE shall conduct the audit and analysis of energy consumption and establishment of energy conservation target and plan.	 The Registered Consultant was repealed from the ministerial regulation. Owner of designated building and factory shall conduct the audit and analysis of energy consumption, and shall establish energy conservation target and plan. Any implementation in order to establish the energy conservation target and plan that is prescribed as the Controlled Engineering Profession in accordance

	with the Engineer Law or as the Controlled Architectural Profession in accordance with the Architecture Law, the implementator shall be a person practicing the controlled engineering profession or the controlled architectural profession.
	Detail data of the audit and analysis of the implementation of each energy conservation measure shall be attached with the energy conservation target and plan.
Designated factory and designated building can apply for subsidy from ENCON Fund for making energy consumption report, audit and analysis of energy consumption, preparation of energy conservation target and goal, and for implementing energy conservation measure to reach the target and goal, as prescribed in the ENCON Fund Committee Regulation No. 1 B.E. 2537 and No. 2 B.E. 2539.	ENCON Fund subsidy was ended by the ENCON Fund Committee from 26 January 2005. (DEDE Notification, 1 st April 2005)

Source: www.dede.go.th