

2. ENERGY CONSERVATION ACT-2001 AND RELATED POLICIES

Energy conservation Act-2001 and its features, Notification under the Act Schemes of Bureau of Energy Efficiency (BEE)- ECBC, S&L, DSM, BLY, SME's, Designated Agencies, Electricity Act 2003, Integrated Energy Policy, National Action plan on Climate Change

2.1 Introduction

Energy Conservation Act (EC Act) was enacted by the Government of India in 2001 to provide legal framework and institutional arrangements for enhancing energy efficiency. This Act led to the creation of Bureau of Energy Efficiency (BEE) as the nodal agency at the center and State Designated Agencies (SDAs) at the State level to implement the provisions of the Act. The Central Government, State Government and Bureau of Energy Efficiency have major roles to play in implementation of the Act. The Mission of BEE is to develop policy and strategies based on self-regulation and market principles with the goal of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in rapid and sustained adoption of energy efficiency in all sectors.

2.2 Salient Features of the Energy Conservation Act, 2001 (Amended in 2010)

The Act empowers the Central and State Governments to facilitate and enforce efficient use of energy and its conservation, notify energy-intensive industries, establishments and commercial buildings as designated consumers and prescribe energy consumption norms and standards for designated consumers. The Act was amended in 2010.

The Amendment expanded the scope of energy conservation norms for buildings and tightened the applicability of energy efficiency norms for appliances and equipment. It provided a framework within which savings on energy use can be traded between those industries who are energy efficient and those whose consumption of energy is more than the maximum set by the government. The amendment increased penalties for non-compliance and provided for establishment of appellate tribunal for energy conservation to hear appeals against the orders of the adjudicating officer or the Central Government or the State Government or any other authority under the Energy Conservation Act.

The excerpts of relevant sections of Energy Conservation Act are reproduced below for the benefit of Energy Managers and Energy Auditors. However the full text of the act is available in BEE website.

Key Definitions as Outlined in the Act

Building: “building” means any structure or erection or part of structure or erection after the rules relating to energy conservation building codes have been notified (under clause (p) of section 14 and clause (a) of section 15) and includes any existing structure or erection or part of structure or erection,

which is having a connected load of 100 Kilowatt (kW) or contract demand of 120 Kilo- volt Ampere (kVA) and above and is used or intended to be used for commercial purposes.

Designated agency: Designated agency means an agency which coordinates, regulates and enforce provisions of this act within a State.

Designated consumer: Designated consumer means any user or class of users of energy in a energy intensive industries and other establishments specified in the Schedule as designated consumer.

Energy: Energy means any form of energy derived from fossil fuels, nuclear substances or materials, hydro-electricity and includes electrical energy or electricity generated from renewable sources of energy or biomass connected to the grid.

Energy audit: Energy audit means the verification, monitoring and analysis of use of energy including submission of technical report containing recommendations for improving energy efficiency with cost benefit analysis and an action plan to reduce energy consumption.

Energy conservation building codes: It means the norms and standards of energy consumption expressed in terms of per square meter of the area and wherein energy is used and includes location of the building.

Energy consumption standards: It means norms for process and energy consumption standards (specified under clause (a) of section 14).

Energy savings certificate : “Energy savings certificate” means any energy savings certificate issued to the designated consumers (under sub-section (1) of section 14A).

Equipment or appliance: It means any equipment or appliance which consumes, generates, transmits or supplies energy and includes any device that consumes any form of energy and produces a desired work.

CHAPTER IV of EC Act

13. Powers and Functions of Bureau

13. (1) The Bureau shall, effectively co-ordinate with designated consumers, designated agencies and other agencies, recognize and utilise the existing resources and infrastructure, in performing the functions assigned to it by or under this Act.
- (2) The Bureau may perform such functions and exercise such powers as may be assigned to it by or under this Act and in particular, such functions and powers include the function and power to -
 - (a) recommend to the Central Government the norms for processes and energy consumption standards required to be notified under section 14A;
 - (aa) recommend to the Central Government for issuing of the energy savings certificate

- (b) recommend to the Central Government on display label on equipment or on appliances and manner of display under clause (d) of section 14;
- (c) recommend to the Central Government for notifying any user or class of users of energy as a designated consumer under clause (e) of section 14;
- (d) take suitable steps to prescribe guidelines for energy conservation building codes under clause (p) of section 14.
- (e) take all measures necessary to create awareness and disseminate information for efficient use of energy and its conservation;
- (f) arrange and organize training of personnel and specialists in the techniques for efficient use of energy and its conservation;
- (g) strengthen consultancy services in the field of energy conservation;
- (h) promote research and development in the field of energy conservation;
- (i) develop testing and certification procedure and promote testing facilities for certification and testing for energy consumption of equipment and appliances;
- (j) formulate and facilitate implementation of pilot projects and demonstration projects for promotion of efficient use of energy and its conservation;
- (k) promote use of energy efficient processes, equipment, devices and systems;
- (l) promote innovative financing of energy efficiency projects;
- (m) give financial assistance to institutions for promoting efficient use of energy and its conservation;
- (n) levy fee for services provided for promoting efficient use of energy and its conservation;
- (o) maintain a list of accredited energy auditors as may be specified by regulations;
- (p) specify, by regulations, the qualifications, criteria and conditions subject to which a person may be accredited as an energy auditor and the procedure for such accreditation;
- (q) specify, by regulations, the manner and intervals of time in which the energy audit shall be conducted;
- (r) specify, by regulations, certification procedures for energy managers and energy auditors to be designated or appointed by designated consumers;
- (s) prepare educational curriculum on efficient use of energy and its conservation for educational institutions, boards, universities or autonomous bodies and coordinate with them for inclusion of such curriculum in their syllabus;
- (sa) conduct examination for capacity building and strengthening of services in the field of energy conservation including certification of energy managers and energy auditors.
- (t) implement international co-operation programmes relating to efficient use of energy and its conservation as may be assigned to it by the Central Government.

CHAPTER V of EC Act

Power of Central Government to Facilitate and Enforce Efficient Use of Energy and its Conservation

14. Central Government may, by notification, in consultation with the Bureau, -
 - (a) specify the norms for processes and energy consumption standards for any equipment, appliances which consumes, generates, transmits or supplies energy
 - (b) specify equipment or appliance or class of equipments or appliances, as the case may be, for the purposes of this Act;
 - (c) prohibit manufacture or sale or purchase or import of equipment or appliance specified under clause(b) unless such equipment or appliances conforms to energy consumption standards;
 - Provided that no notification prohibiting manufacture or sale or purchase or import or equipment or appliance shall be issued within a period of six months from the date of notification;
 - Provided further that the Central Government may, having regard to the market share and the technological development having impact on equipment or appliance, and for reasons to be recorded in writing, extend the said period of six months referred to in the first proviso by a further period not exceeding six months;
 - (d) direct display of such particulars on label on equipment or on appliance specified and in such manner as may be specified by regulations;
 - (e) specify, having regarding to the intensity or quantity of energy consumed and the amount of investment required for switching over to energy efficient equipments and capacity or industry to invest in it and availability of the energy efficient machinery and equipment required by the industry, any user or class of users of energy in the energy intensive industries and other establishment as a designated consumer;
 - (f) alter the list of Energy Intensive Industries specified in the Schedule;
 - (g) establish and prescribe such energy consumption norms and standards for designated consumers as it may consider necessary:
 - Provided that Central Government may prescribe different norms and standards for different designated consumers having regard to such factors as may be prescribed;
 - (h) direct, having regard to quantity of energy consumed or the norms and standards of energy consumption the energy intensive industries specified in the Schedule to get energy audit conducted by an accredited energy auditor in such manner and intervals of time as may be specified by regulations;
 - (i) direct, if considered necessary for efficient use of energy and its conservation, any designated consumer to get energy audit conducted by an accredited energy auditor;
 - (j) specify the matters to be included for the purposes of inspection