

## **PERFORM ACHIEVE AND TRADE**

### **1. Definitions.-(1) In these rules, unless the context otherwise requires :-**

- a) “Act” means the Energy Conservation Act, 2001;
- b) “baseline year” means the year in which the base level of energy consumption is used as a reference point for establishment and assessment of performance with regard to compliance of energy consumption norms and standards under rule 4 and rule 6 respectively;
- c) “certification” means the process of certifying the verification report or check-verification report by the accredited energy auditor to the effect that the entitlement or requirement of energy savings certificate is quantified accurately in relation to compliance of energy consumption norms and standards by the designated consumer during the target year;
- d) “check—verification” means an independent review and ex—post determination by the Bureau through the accredited energy auditor, of the energy consumption norms and standards achieved in any year of the three year cycle which have resulted from activities undertaken by the designated consumer with regard to compliance of the energy consumption norms and standards;
- e) “ cycle” means the period of the three years available to a designated consumers to comply with the energy consumption norms and standards;
- f) “energy consumption norms and standards” means the specific energy consumption of the designated consumer for the specified year notified under clause (g) of section 14;
- g) “Form” means the form annexed to these rules;
- h) “Rules 2007” means the Energy Conservation (the form and manner for submission of report on the status of energy consumption by the designated consumers) Rules, 2007 notified in the Official Gazette vide number G.S.R 174 (E), dated the 2nd March, 2007;
- i) “Rules 2008” means the Energy Conservation (Form and Manner and Time for Furnishing Information With Regard to Energy Consumed and Action Taken on Recommendations of Accredited Energy Auditor) Rules, 2008 notified in the Official Gazette vide number G.S.R 486(E), dated the 26th June, 2008;
- j) “Schedule” means the Schedule annexed to these
- k) “rules; “section” means a section of the Act;
- l) “specific energy consumption” means the ratio of the net energy input into the designated consumers' boundary to the total quantity of output exported from the designated consumers' boundary, calculated as per the following

**Formula:-**

**Specific energy consumption =**

Net energy input into the designated consumers' boundary

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Total quantity of output exported from the designated consumers' boundary and expressed in terms of the metric ton of oil equivalent (toe)/per unit of product;

- m) "Target year" means the year by which a designated consumer shall achieve compliance with the energy consumption norms and standards;
- n) "verification" means a thorough and independent evaluation by the accredited energy auditor of the activities undertaken by the designated consumer for compliance with the energy consumption norms and standards in the target year compared to the energy consumption norms and standards in the baseline year and consequent entitlement or requirement of energy savings certificate;
- o) "Year" means the financial year beginning on the 1st day of April and ending on the 31st day of March following.
- p) "Assessment year" means the final year of the cycle.

(2) Words and expressions used herein and not defined but defined in the Act shall have the meanings respectively assigned to them in the Act.

**2. Introduction:-**

NAPCC outlines Eight National Missions, The National Mission for Enhanced Energy Efficiency (NMEEE) is one of the eight national missions with the objective of promoting innovative policy and regulatory regimes, financing mechanisms, and business models which not only create, but also sustain, markets for energy efficiency in a transparent manner with clear deliverables to be achieved in a time bound manner. The Ministry of Power (MOP) and Bureau of Energy Efficiency (BEE) were tasked to prepare the implementation plan for the NMEEE. NMEEE spelt out the following four new initiatives to enhance energy efficiency, in addition to the programs on energy efficiency being pursued. They are:

1. ***Perform Achieve and Trade (PAT)***: A market based mechanism to enhance cost effectiveness of improvements in energy efficiency in energy-intensive large industries and facilities, through certification of energy savings that could be traded.
2. ***Market Transformation for Energy Efficiency (MTEE)***: Accelerating the shift to energy efficient appliances in designated sectors through innovative measures to make the products more affordable.

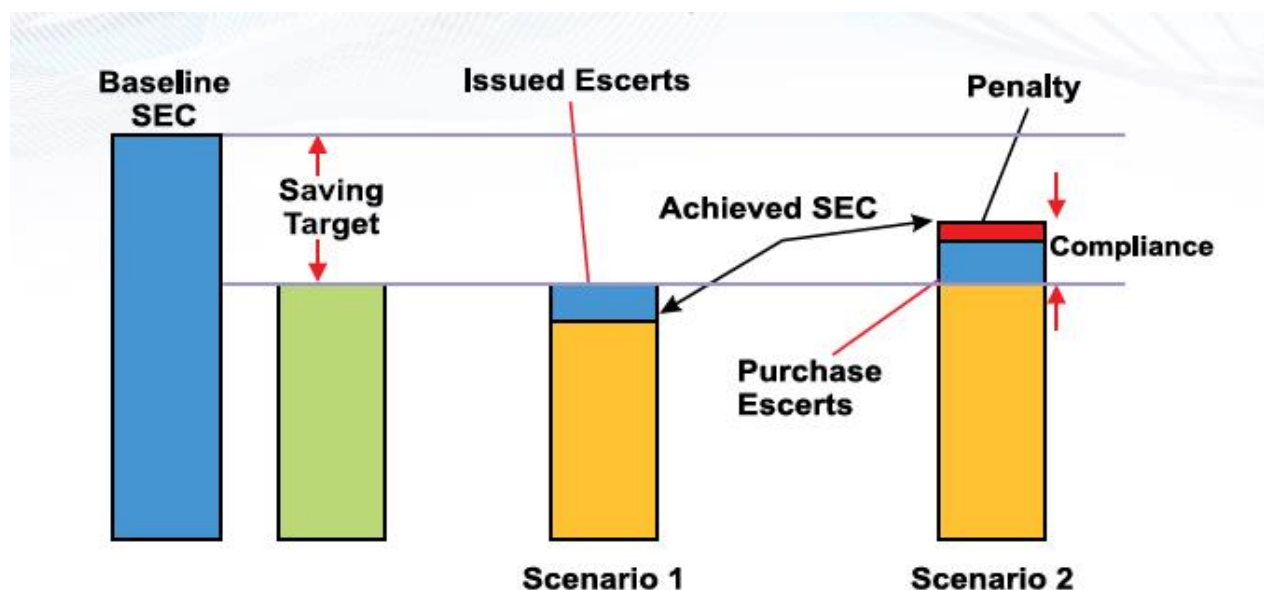
3. **Energy Efficiency Financing Platform (EEFP):** Creation of mechanisms that would help finance demand side management programmes in all sectors by capturing future energy savings.
4. **Framework for Energy Efficient Economic Development (FEEED):** Developing fiscal instruments to promote energy efficiency.

## 2.1 Perform, Achieve and Trade:-

PAT is a market based mechanism to enhance cost effectiveness of improvements in energy efficiency in energy-intensive large industries and facilities, through certification of energy savings that could be traded. The genesis of the PAT mechanism flows out of the provision of the Energy Conservation Act, 2001, herein after referred to as the Act. Section 14 (e) of the Act empowers the Central Government to notify energy intensive industries, as listed out in the Schedule to the Act, as Designated Consumers (DCs).

The Ministry of Power (MoP) has notified industrial units and other establishments consuming energy more than the threshold in 13 sectors namely **Thermal Power Plants, Fertilizer, Cement, Pulp and Paper, Textiles, Chlor-Alkali, Iron & Steel, Aluminum, Railways, petroleum refinery, Electricity Distribution Company, petrochemicals and Building Sector.**

## 2.2 Concept of Target ,compliance, ESCerts & Penalty



When a designated consumer achieve and surpass the target .it can sell its excess savings in the form of Energy Savings Certificates (ESCerts), and if designated consumers fail to achieve its targets, it must purchase the appropriate number of ESCerts to “meet” its energy savings targets.

Monitoring and verification of energy savings will be conducted by Accredited Energy Auditors through a transparent system.

**1 ESCerts= 1 tonne of Oil Equivalent (toe)**

### **3. Role of SDAs under PAT**

In the presently notified PAT rules, SDAs are entrusted with a crucial role in enforcement of compliance. This includes reviewing and commenting on the appropriateness of the various reports received from DC, advising BEE on need or appropriateness of conducting check verification, and triggering penalty proceedings against non-compliant DCs.

The energy conservation (Inspection) Rules, 2009 also empower SDAs to appoint as many inspecting officers as required (requirements may vary from state to state based on the number of DCs and DC Sectors in the state among other factors). With a view to ensuring compliance, Inspecting officers are empowered through SDAs to visit the premises of the DCs as and when required and to consult with or seek necessary information from AEAs and DCs and to report on the compliance of various provisions under the EC Act.

However, many aspects of the role of SDA as laid out in various PAT rules call for better clarity and detailed guidelines. For instance as per Rules 2007, Rule 2008, Rules 2012 the DCs are required to submit Form 1, Form 2, and Form 3, Form A, Form B, Form C (verified by the accredited energy auditor) and form D to the SDA and a copy to BEE within BEE notified timeline.

Additionally, in exercise of the powers conferred by sub-regulation (1) of regulation 3 of “THE BUREAU OF ENERGY EFFICIENCY (MANNER AND INTERVALS OF TIME FOR CONDUCT OF ENERGY AUDIT) REGULATION, 2010,” every Designated Consumers shall have its first energy audit conducted, by an Accredited Energy Auditor and required to submit to SDA and BEE, within 18 months of the notification issued by the Central Government under Clause (i) of section 14 of the Act.

## **Various Forms to be submitted by DC and EmAEA**

**Form-1:** Details of Information regarding total energy consumed and specific energy consumption per unit of production.

**Form-2:** Details of energy savings measures recommended in energy audit report.

**Form-3:** Details of energy efficiency improvement measure implemented, investment made and savings in energy achieved and progress made.

**Form A:** Performance assessment document,

**Form B:** Certification of verification from the energy auditor

**Form C:** AEA (Accredited Energy Auditor)

**Form D:** Perform compliance document.

## Form I and Sector Specific Pro-Forma

	<b>Sector</b>	<b>No of Pro-forma</b>	<b>Name of Pro-Forma for Sub-Sector</b>	<b>Sub-Sector</b>
<b>1</b>	Aluminium	2	Sa1, Sa2	Smelter & Cold Sheet
<b>2</b>	Cement	1	Sb	Cement
<b>3</b>	Chlor- Alkali	1	Sc	Chlor- Alkali
<b>4</b>	Fertilizer	1	Sd	Fertilizer
<b>5</b>	Iron & Steel	2	Se1, Se2	Integrated steel & Sponge Iron
<b>6</b>	Paper & Pulp	1	Sf	Paper & Pulp
<b>7</b>	Textile	4	Sg1, Sg2, Sg3, Sg4	Composite, Fiber, Spinning & Processing
<b>8</b>	Thermal Power Plant	1	Sh	Thermal Power Plant
<b>9</b>	Railways	General format for data collection of these Sectors are available on BEE website <a href="https://beeindia.gov.in/content/pat-performa">https://beeindia.gov.in/content/pat-performa</a>		
<b>10</b>	DISCOMM			
<b>11</b>	Petroleum Refinery			
<b>12</b>	petrochemicals			
<b>13</b>	Building Sector			

Follow the link to download sector Pro-Forma forms:

<https://beeindia.gov.in/content/pat-performa>

# Timelines and Activities

Activity	Time Line	Description	Tentative Dates for PAT Cycle II	Tentative Dates for PAT Cycle III	Tentative Dates for PAT Cycle IV	Activity by	Where
Form 1, Action plan submission	3 Months	Within 3 month from Notification	30 June 2016	30 June 2017	30 June 2018	DC	SDA /BEE
Form 1,Form 3 submission	3 Months	Yearly submission of Form 1, Form 3 within 3 months from last financial year	30 June (Every Year)	30 June (Every Year)	30 June (Every Year)	DC	SDA/ BEE
MEA, with Form-2	18 months	Within 18 months from the start of PAT cycle.	30 <sup>th</sup> September 2017	30 <sup>th</sup> September 2018	30 <sup>th</sup> September 2019	DC	SDA/BEE
Form A, Form B along with others documents	4 Months	Within 4 month from conclusion of target year	31st July 2019	31st July 2020	31st July 2021	DC	SDA/ BEE
Submission of Form A, Form B with SDA comments	45 Days	Within 45 days of the last date of submission of Form A	15th Sept 2019	15th Sept 2020	15th Sept 2021	SDA	BEE
Recommendation of ESCerts to MoP, GOI	Two Months	Within two months from the date of the receipt of the comments from SDA	15th Nov 2019	15th Nov 2020	15th Nov 2021	BEE	MoP
Issuance of ESCerts by MoP	45 Days	Within 45 days from the date of the recommendation of Escerts from BEE	31st Dec 2019	31st Dec 2020	31st Dec 2021	MoP	

Form D Submission	One Month	After 1 month from the Completion of Trading				DC	SDA/BEE
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Designated consumers which are failed to submit the complete data to SDA and BEE in time or those who are not maintain the SEC value notified by BEE and those who are not purchasing Energy Savings certificates if there SEC value is more than the targeted value as notified, comes under disqualified DC's. In case of disqualified DC's, Penalties are to be imposed by an adjudicating officer appointed by SERC in response to the request of concerned SDA.

As per Section 26 of EC Act, if any DC fails to comply with the timelines of M&V procedure, he shall be liable for a penalty of Rs. 10 lakh, in addition to Rs. 10,000 per day. If any DC fails to comply with the provisions, he shall be liable to a penalty of Rs. 10 lakh rupees and, in the case of continuing failure, with an additional penalty of the price of every metric ton of oil equivalent of energy. Any amount payable under this section, if not paid, may be recovered as if it were an arrear of land revenue.