

## BEE Standards and Labelling Programme



Source: TH

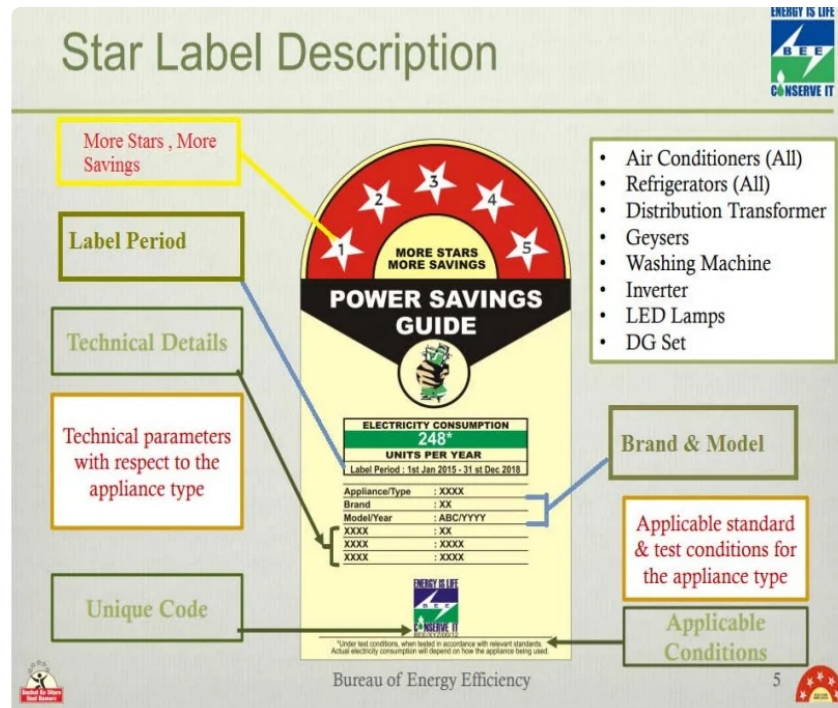
### Why in News?

The **Bureau of Energy Efficiency (BEE)** has tightened India's energy efficiency regime by **making star labelling mandatory for a wider range of appliances**, thereby expanding compulsory energy performance disclosure under the **Standards and Labelling (S&L) Programme**.

### What is the BEE's Standards and Labelling (S&L) Programme?

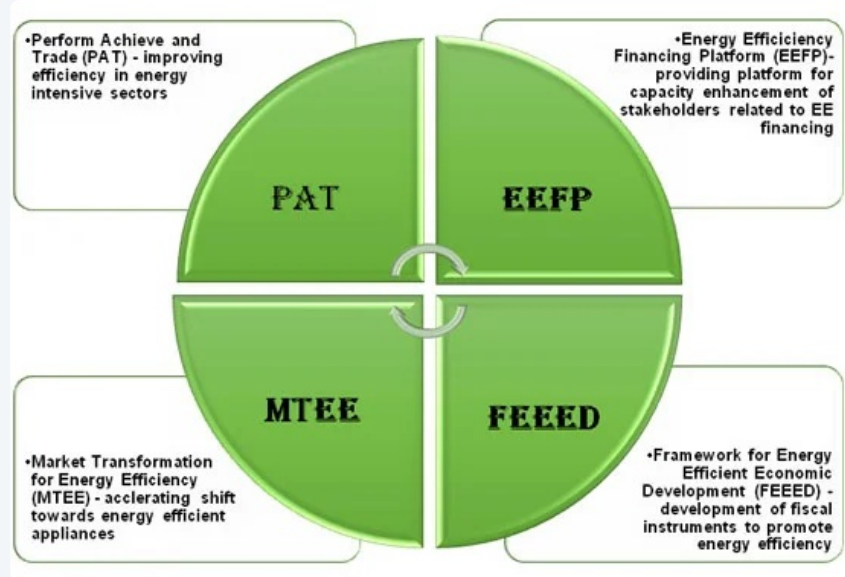
- **Background:** Launched in **2006** under the **Energy Conservation Act, 2001** by the **Ministry of Power**, Government of India, and implemented by the **BEE**.
- **Objective: S&L Programme** enables **informed consumer choice**, reduces electricity consumption and energy bills, and encourages manufacturers to adopt **energy-efficient technologies**.
- **Star Labelling System:** A key feature of the programme is the star labelling system, which rates appliances **on a scale of one to five stars based on their energy efficiency**.
  - **Five stars indicating the most energy-efficient product** within a given category, making efficiency comparison simple and visual for consumers.
  - Under the programme, appliances are tested against prescribed **Indian Standards** and assigned star ratings based on their **energy consumption and performance parameters**, with labels displaying essential information such as star rating, annual energy use, product category, and brand.
- **Coverage:** The programme covers a wide range of household appliances and industrial equipment, with **some products brought under mandatory star labelling and others under voluntary labelling**, depending on government notifications and market readiness.
- **Labels under the S&L Programme:**
  - **Comparative Label:** Shows **1-5 star ratings** to compare energy efficiency among models of the same product category. It helps consumers easily identify the **most energy-efficient appliance**.
  - **Endorsement Label:** Certifies products that meet **minimum energy performance standards** notified by BEE. It assures compliance with efficiency norms rather than comparison.
- **Dynamic Nature:** To keep pace with technological advancements, **BEE periodically revises star rating criteria**, ensuring that efficiency benchmarks remain relevant and that manufacturers continuously improve product efficiency.

- **Significance:** It plays a crucial role in **curbing national electricity demand** , **lowering consumer power bills** , and **cutting carbon emissions** . Notably, **Standards and Labelling (S&L) programmes have already reduced around 60 million tonnes of CO<sub>2</sub> annually** , while also **strengthening India's long-term energy security** .



## India's Energy Efficiency Initiatives

- **National Mission for Enhanced Energy Efficiency (NMEEE):** It is one of the eight national missions under the **National Action Plan on Climate Change (NAPCC)**. **NMEEE** consist of four initiatives to enhance energy efficiency in energy intensive industries which are as follows:
  - **Perform, Achieve and Trade (PAT) Scheme:** Improves efficiency in energy-intensive industries through mandatory targets and tradable Energy Saving Certificates (ESCerts).
  - **Energy Efficiency Financing Platform (EEFP):** Facilitates access to finance for energy efficiency projects by connecting project developers with financial institutions.
  - **Market Transformation for Energy Efficiency (MTEE):** Encourages uptake of super-efficient technologies through policy and financial interventions.
  - **Framework for Energy Efficient Economic Development (FEEED):** It provides partial credit guarantees to cover default risk on energy efficiency loans, with guarantees for up to 5 years and 40-75% of the loan amount or Rs 15 crore per project.



- **Energy Conservation Building Code (ECBC), 2017:** Sets minimum energy performance standards for commercial buildings to curb energy use.
- **Unnat Jyoti by Affordable LEDs for All (UJALA):** Accelerates adoption of LED lighting and efficient fans to reduce household bills and peak power demand.
- **Bachat Lamp Yojna (BLY):** The programme was developed for replacement of inefficient bulbs with Compact Fluorescent Lamps (CFLs).
- **Street Lighting National Programme:** Its objectives include reducing energy consumption, lowering operational costs for municipalities, and fostering a market transformation towards energy-efficient appliances.
- **BEE State Energy Efficiency Index:** It **assesses and compares the energy efficiency performance of Indian States and Union Territories** , enabling **data-driven monitoring** , **healthy inter-state competition** , and identification of **best practices and policy gaps** across key sectors.
  - States are classified into **Front Runners (>60%)**, **Achievers (50-60%)**, **Contenders (30-50%)**, and **Aspirants (<30%)** , reflecting their relative progress.

## Bureau of Energy Efficiency (BEE)

- The **BEE** under the Ministry of Power, was established in **2002** under the **Energy Conservation Act, 2001**
- BEE's vision is to drive **accelerated and sustained adoption of energy efficiency across sectors** , contributing to India's **sustainable development** .
- The **BEE** performs key regulatory functions that include **developing minimum energy performance standards and star labelling for appliances** , formulating **Energy Conservation Building Codes** , and prescribing **energy consumption norms for designated consumers** .
  - It also **certifies and accredits Energy Managers and Energy Auditors** , defines the **manner and periodicity of mandatory energy audits** for tracking energy use and implementation of audit recommendations.

## Frequently Asked Questions (FAQs)

**1. What is the Standards and Labelling (S&L) Programme?**

It is an energy efficiency programme launched in 2006 under the Energy Conservation Act, 2001 to rate appliances on a 1–5 star scale based on energy performance.

**2. Who implements the S&L Programme in India?**

The programme is implemented by the Bureau of Energy Efficiency under the Ministry of Power.

**3. Why is expansion of mandatory star labelling significant?**

It improves transparency, reduces electricity demand, lowers consumer bills, and has already cut about 60 million tonnes of CO<sub>2</sub> annually.

**4. What is the National Mission for Enhanced Energy Efficiency (NMEEE)?**

NMEEE is a mission under NAPCC focusing on industrial and market-based energy efficiency through PAT, MTEE, EEFP, and FEEED.

**5. What is the purpose of the State Energy Efficiency Index (SEEI)?**

It assesses and compares energy efficiency performance of States and UTs, encouraging data-driven governance and healthy competition.

# UPSC Civil Services Examination, Previous Year Question:

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## *Prelims*

**Q. With reference to street lighting, how do sodium lamps differ from LED lamps? ( 2021)**

1. Sodium lamps produce light at 360 degrees but it is not so in the case of LED lamps.
2. As street lights, sodium lamps have a longer lifespan than LED lamps.
3. The spectrum of visible light from sodium lamps is almost monochromatic, while LED lamps offer significant colour advantages in street lighting.

**Select the correct answer using the code given below.**

- (a) 3 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**Ans: (c)**

**Q. On which of the following can you find the Bureau of Energy Efficiency Star Label? (2016)**

1. Ceiling fans
2. Electric geysers
3. Tubular fluorescent lamps

**Select the correct answer using the code given below:**

- (a)** 1 and 2 only
- (b)** 3 only
- (c)** 2 and 3 only
- (d)** 1, 2 and 3

**Ans: (d)**

# National Investigation Agency (NIA)



Source: TH

In 2025, the **National Investigation Agency** recorded a landmark counter-terror performance with an **over 92% conviction rate** , reflecting a significantly strengthened internal security enforcement framework.

## National Investigation Agency (NIA)

- **Status & Mandate:** The NIA is India’s federal counter-terror agency responsible for **investigating and prosecuting terrorism, insurgency and national security crimes of pan-India impact.**
- **Legal Powers:** Established in 2009 under the [NIA Act, 2008](#) and strengthened by the NIA (Amendment) Act, 2019 , it can take over cases from States, investigate across State boundaries without prior consent, and exercise extra-territorial jurisdiction .
- **Core Functions:** The NIA **collects, analyses and disseminates** counter-terror intelligence, coordinates with domestic and international law-enforcement agencies, and conducts capacity-building programmes to **strengthen national security** enforcement.
- **Taking Up a Probe:** Under **Section 6 of the NIA Act, 2008** , cases can be referred by States or taken up suo motu by the Centre, including for offences committed outside India, with Central Government sanction required for prosecution under [Unlawful Activities \(Prevention\) Act, 1967](#) and other **scheduled offences** .
- **Specialised Focus & Trial:** The NIA has dedicated mechanisms for [Left Wing Extremism \(LWE\)](#) **terror-financing investigations** , can probe connected offences during investigation, and presents cases before designated [NIA Special Courts](#) for trial.

Read more: [National Investigation Agency](#)