



Transforming India's Ceiling Fan Market

For Prelims: [Bureau of Energy Efficiency \(BEE\)](#), [Star Rating Program](#), [UJALA Programme](#)

For Mains: challenges associated with making '5-star' electric appliances affordable for consumers in India, Government initiatives aimed at enhancing energy efficiency.

[Source: TH](#)

Why in News?

India's fan market is undergoing a transformative evolution, driven by **changes in policy and a growing commitment to sustainable energy practices**.

What are the Reasons for the Ceiling Fan Market Transformation?

- **India's commitment to transitioning to cleaner and more [sustainable energy](#) sources** is a primary driver for change in the fan market.
- Growing awareness of climate change and its impacts necessitates a reduction in energy consumption and greenhouse gas emissions.
- India's goal of reducing **harmful emissions per unit of [Gross Domestic Product \(GDP\)](#) by 45% by 2030, relative to 2005**, necessitates **energy-efficient solutions** in various sectors.
- Households account for **nearly one-third of all electricity consumed in India**, making energy efficiency in appliances like **ceiling fans crucial**.
 - Ceiling fans are used by **90% of households in India** as per a [Council on Energy, Environment and Water \(CEEW\) survey of 2020](#), making them a significant contributor to electricity consumption
- The [India Cooling Action Plan \(ICAP\)](#) projects growth in the **number of fans in use in India, from about 500 million to a billion by 2038**, underscores the need for energy-efficient cooling solutions.
 - The ICAP aims to reduce cooling demand across sectors by **20-25% by 2037-38**. The plan also aims to **reduce refrigerant demand by 25-30%** and **cooling energy requirements by 25-40% by 2037-38**.
- Mandatory **star ratings** for ceiling fans and regulatory changes are driving manufacturers to produce more energy-efficient fan models.

What are the Government Initiatives to Enhance Ceiling Fan Energy Efficiency?

- **Star Rating Program:**
 - [Bureau of Energy Efficiency \(BEE\)](#), India's energy efficiency regulator under the Union Ministry of Power, made the Standards and Labelling (S&L) programme, popularly known as the **'star-rating' programme**, mandates **labelling of ceiling fans based on their energy efficiency**.
 - Informs consumers about a **fan's energy performance** through star ratings.
 - Encourages manufacturers to produce more energy-efficient fans.

- **Energy Efficiency Services Limited (EESL):**
 - **'5-star' fans (the star rating) cost twice as much as typical unrated fans.** To address the Cost challenge of '5-star' fans (the star rating), EESL is planning a demand aggregation programme to sell **10 million '5-star' ceiling fans.**
 - The programme hopes to transform the **fans market much like it did for LED lamps** under the famous [Unnat Jyoti by Affordable Light Emitting Diode \(LED\) for All \(UJALA\) programme.](#)

UJALA Programme:

- Launched in 2015 and initially labeled as the LED-based Domestic Efficient Lighting Programme (DELP), it aims to **promote the efficient usage of energy for all i.e., its consumption, savings and lighting.**
- **The program was spearheaded by the EESL.**
- The programme has evolved to be the **world's largest zero subsidy domestic lighting programme** that addresses concerns like **high electrification costs and high emissions that result from inefficient lighting.**
- **The program's goal was to replace 77 million incandescent bulbs with LED bulbs.**
 - The program was successful in lowering the **retail price of LED bulbs from INR 300-350 to INR 70-80.** The program also resulted in significant energy savings. **As of 5th January 2022, 47,778 million kWh per annum energy has been saved.**

Way Forward

- **Technology-Agnostic Policy:**
 - Maintain a **technology-agnostic policy** that accommodates **various fan technologies, recognizing their trade-offs and advantages.**
 - Allow manufacturers to offer different technologies under a single procurement framework, promoting competition and cost-effectiveness.
- **Balancing Price Reduction and Quality:**
 - Manage the balance between **reducing fan prices and maintaining product quality.**
 - Avoid intense price pressure that **might lead to the introduction of lower-quality fans** with higher failure rates.
 - Allow market actors to determine the **pace of price reduction, fostering consumer trust in the new technology.**
- **Boosting Domestic Manufacturing:**
 - Foster **high-quality domestic manufacturing capacity** for high-efficiency fans.
 - Leverage India's massive domestic market to achieve economies of scale for fan products and components.
 - Explore opportunities for fan exports to countries enforcing minimum energy performance standards.
- **Strengthening the Standard and Labeling Program:**
 - Allocate resources to enhance the standard and labelling program, ensuring the **authenticity of energy performance labels.**
 - Utilize market monitoring powers to ensure that compliant products reach consumers while non-compliant models are removed from the market.
 - Lower barriers to selling new energy-efficient fan models in the market.
- **Promoting Energy-Efficient Fans' Role:**
 - Highlight the importance of **energy-efficient fans in providing critical services for coping with extreme heat while reducing electricity bills.**
 - Emphasize the central role of energy-efficient fans in [India's clean energy transition](#) and their potential contribution to economic growth.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

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)

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