

MoU Between India & Bhutan

Why In News

- Union Cabinet, under the leadership of Prime Minister Narendra Modi, has granted approval for the **signing of a Memorandum of Understanding (MoU) between India and Bhutan on cooperation in the field of Energy Efficiency and Energy Conservation Measures**, in a significant step towards promoting sustainable energy practices and conservation measures.



- MoU, which underscores the **commitment of both nations to address** the challenges of energy consumption and environmental sustainability, will facilitate collaborative efforts in enhancing energy efficiency across various sectors.

All You Need To Know

- MoU was signed between **Bureau of Energy Efficiency, Ministry of Power, Government of India and Department of Energy, Ministry of Energy and Natural Resources, Royal Government of Bhutan.**
- As part of this MoU, **India aims to assist Bhutan** to enhance energy efficiency in the household sector by promoting **star labeling programme** developed by Bureau of Energy Efficiency.



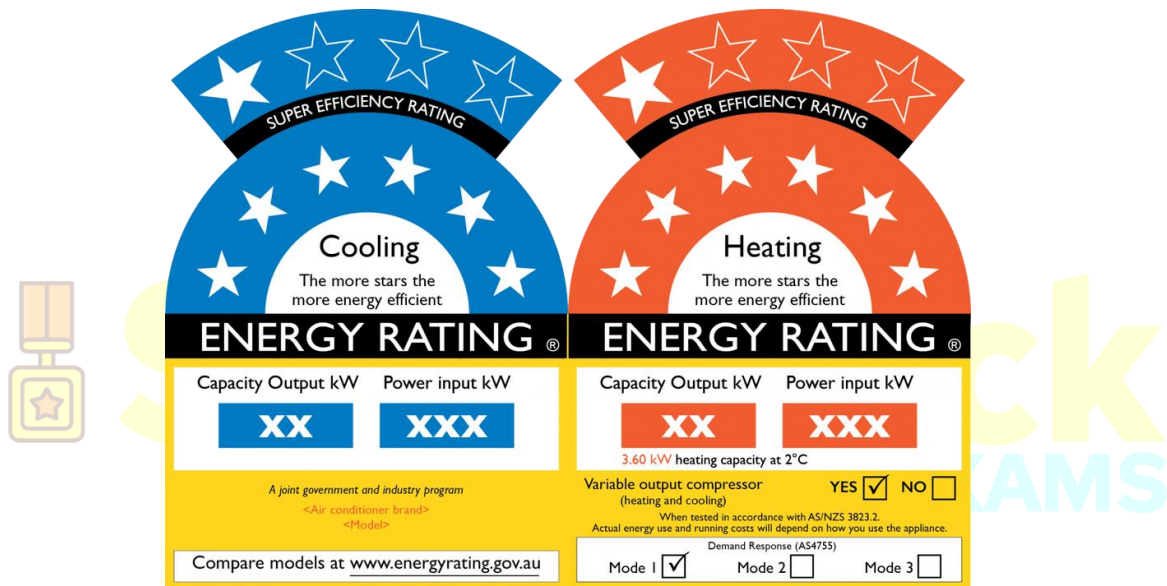
Bureau of Energy Efficiency (BEE)

- The formulation of **building codes**, to suite the climate condition of Bhutan, will be facilitated based with India's experience.
- **Creation of a pool of energy professionals** at Bhutan is envisaged by institutionalizing training of energy auditors.
- The **training of retailers would help in dissemination of energy efficient products** with consumer audience regarding savings from star rated appliances.
- India aims to support Bhutan in its endeavor to develop and implement the Standards and Labelling scheme.



- **Energy intensive Appliances** are the main products leading to higher consumption at household or at commercial establishments. In view of the rapid growth in energy intensive consumer goods, the demand for electrical energy has been increasing every year.

- **This rising demand can be optimized**, if the consumers prefer high efficiency appliances. BEE is spearheading the country's Star-labelling program that now covers 37 appliances used in daily life.
- The MoU has been prepared by **Ministry of Power in consultation with Ministry of External Affairs (MEA)** and Department for Promotion of industry and internal Trade (DPIIT).
- The **MoU will enable exchange of Information**, data and technical experts related to Energy Efficiency and energy conservation between India and Bhutan. It will help Bhutan to ensure availability of energy efficient products in the market.



- The MoU will analyze energy efficiency policies and cooperation in the field of energy efficiency research and technology deployment.
- The Cabinet also approved the signing of an agreement between **Bhutan Food and Drug Authority (BFDA)** and **Food Safety and Standards Authority of India (FSSAI)** regarding cooperation in the areas of food safety.



Star Labeling Programme

- The **objective of the S&L program** is to help consumers make an informed choice about various energy-consuming appliances, in terms of energy savings, that would result based on each appliance's energy efficiency performance.
- This scheme also helps the consumer **determine the cost-saving potential** of the marketed household and other equipment.
- The broad objective of the scheme is:
- To reduce the **end-use energy consumption** of appliances without diminishing the service levels.
- To **create awareness amongst** the consumers, to make an informed decision considering the cost-effectiveness & energy performance while purchasing appliances.

Star level	Effective Efficiency η_{eff} (%)
1 Star	$\geq 17\% \ \& \ \leq 18\%$
2 Star	$> 18\% \ \& \ \leq 20\%$
3 Star	$> 20\% \ \& \ \leq 21\%$
4 Star	$> 21\% \ \& \ \leq 22\%$
5 Star	$> 22\%$

- To monitor and verify energy savings that incur annually through the sale of energy-efficient appliances. The key objective of this program is to provide the

consumer with an informed choice about energy saving and thereby the cost-saving potential of the relevant marketed appliance.

- **The program was launched in 2006** and is presently invoked for 34 equipment/appliance.



- **The first 11 appliances** have been notified under mandatory labeling while the others are presently under the voluntary labeling phase.
- **The energy efficiency labeling programs under BEE** are intended to reduce the energy consumption of appliance without diminishing the services it provides to consumers.