BUREAU OF ENERGY EFFICIENCY (BEE)

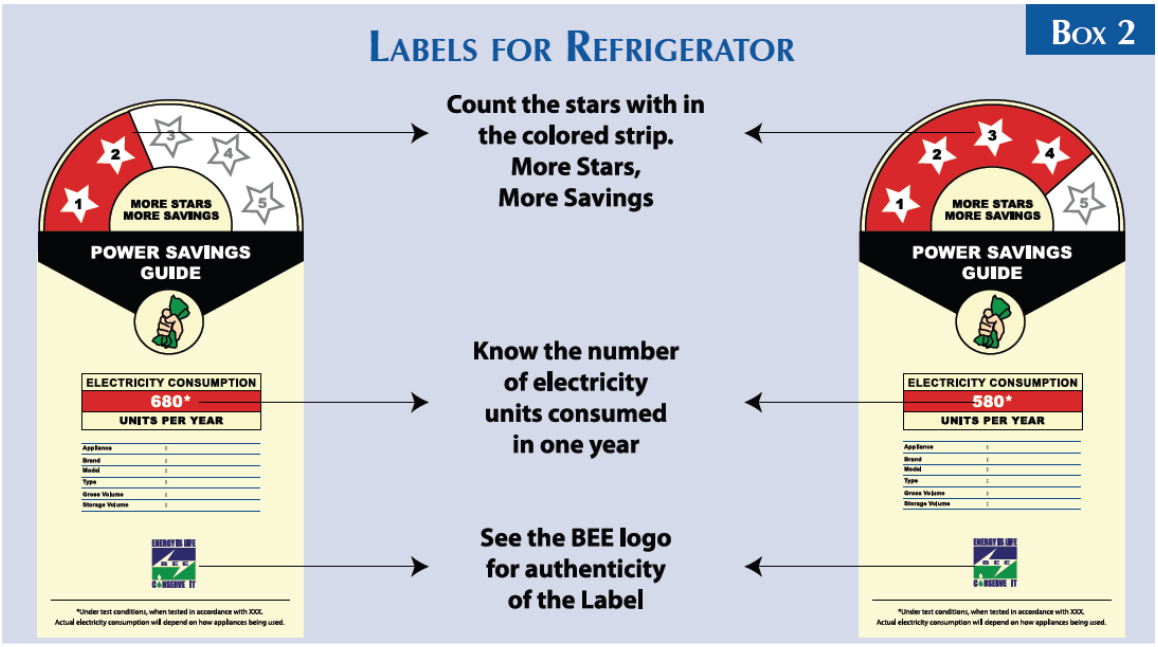
The objectives of Standards and Labelling programme is to provide the consumer an informed choice about the energy saving, and thereby the cost saving potential of the marketed household equipment. It is currently invoked for equipments/appliances: (Frost Free) refrigerator, Tubular Fluorescent lamps, Room air conditioners, Direct cool refrigerator, Distribution transformer, Induction motors, Pump sets, Ceiling fans, LPG stove, Electric geysers and Colour Television.

LOOK FOR "BEE" STAR RATING

- When you buy appliances, look for energy efficiency rating. If looking for new household products, look for ones that have earned the ENERGY STAR. They meet strict energy efficiency guidelines set by the EPA and US Department of Energy
- Avoid non-ISI appliances – they may be good bargains but being sub-standard and their components inefficient, they consumer more electricity.
- Energy Star is a joint programme of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.
- Energy efficient choices can save families about a third on their energy bill with similar savings of greenhouse gas emissions, without sacrificing features, style or comfort. ENERGY STAR helps you make the energy efficient choice.
- The savings potential in rural segment by adopting CFLs and BEE star rated products is 40-50%. The savings potential in urban segment by adopting BEE star rated products is 15-20%. On the whole, the energy savings potential in domestic sector is estimated 20-25%, which accordingly

works out to 2.6 BU per year in Tamil Nadu.[1]

Fig: Buying and Maintaining an Energy-Efficient Refrigerator



[1] Bureau of Energy Efficiency (BEE), "State-wise Electricity Consumption & Conservation Potential in India". Prepared by National Productivity Council. For Ministry of Power, Government of India. p.181.

Table: Energy and Cost saving for 250 litres Frost Free Refrigerator with different Star Ratings.

Star Rating	Energy Consumption Per Year (Approx.)	Per Unit Charge (Approx.)	Electricity Cost/year	Total Savings (w.r.t No Star Every Year)	Refrigerator Cost (Approx)	Cost Difference	Pay Back Period
	Units (kWh)	Rs.	Rs.	Rs.	Rs.	Rs.	Years
No Star	1100	2.50	2750	0	14000	0	0
1	977	2.50	2443	308	15000	1000	3.25
2	782	2.50	1955	795	15500	1500	1.89
3	626	2.50	1565	1185	16500	2500	2.11
4	501	2.50	1253	1498	17500	3500	2.34
5	400	2.50	1000	1750	18500	4500	2.57

Source: Bureau of Energy Efficiency

Box 3

Labels for Room Air Conditioners

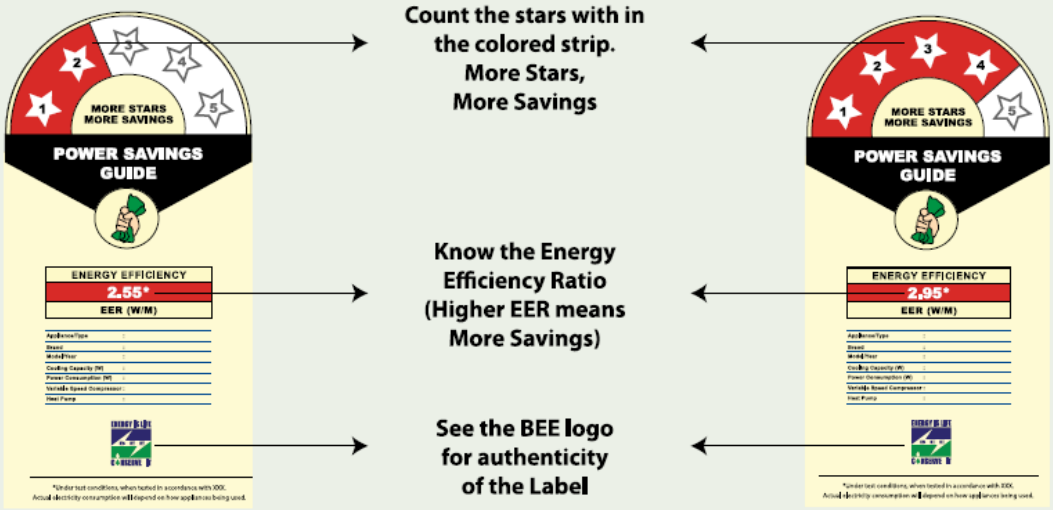


Table: Energy Cost Savings for 1.5 Ton Window or Split Air conditioner at Different Star Ratings

Star Rating	Minimum Energy Efficiency Ratio (EER)	Maximum Cooling Capacity	Input Power	Units Consumption/ Day	Per Unit Charge (Approx.)	Electricity Cost/Month	Cost Saving Per Year (w.r.t. no star) (Approx.)
		Watts	Watts	kWh	Rs.	Rs.	Rs.
No Star	2.20	5200	2364	9.45	2.50	709	0
1	2.30	5200	2261	9.04	2.50	678	308
2	2.50	5200	2080	8.32	2.50	624	851
3	2.70	5200	1926	7.70	2.50	578	1313
4	2.90	5200	1793	7.17	2.50	538	1712
5	3.10	5200	1677	6.71	2.50	503	2059

Note: Assuming 8 hours operation per day for five months in a year
Source: Bureau of Energy Efficiency