



Stars on web: Energy efficiency star labels should be prominently and uniformly displayed on the e-commerce platforms

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As more consumers are buying appliances online, it is necessary that information related to their energy efficiency is prominently and consistently displayed across all e-commerce platforms. This will help consumers make an informed purchase and in turn help in uptake of energy efficient appliances. Currently the Bureau of Energy Efficiency (BEE) does not provide specific rules for the manner of display of star labels on e-commerce platforms. In this piece we detail the concerns observed in terms of display of information related to star label of appliances on different e-commerce platforms and provide recommendations to improve the same.

The Bureau of Energy Efficiency (BEE) established under the Energy Conservation (EC) Act (2001) launched Standards and Labeling (S&L) programme in 2006. It was initiated for consumers to receive adequate information about the energy and cost saving potential of energy efficient appliances. Through this programme, BEE prescribes minimum efficiency standards for appliances that are brought into the market. It classifies them into star ratings ranging from 1-star to 5-star based on energy efficiency, 1-star being the least efficient category and 5-star being the most efficient. Currently, this star-rating programme is mandatory for 10 appliances and voluntary for 19 other appliances. These star-labels enable consumers to compare the energy consumption of various models of an appliance and take into consideration the operational costs while making a purchase decision.

The appliance and consumer electronics market in India has huge potential for expansion. It is expected to double in value by 2025 from Rs. 76,400 crore (US\$ 10.93 billion) in 2019 (India Brand Equity Foundation 2021)³. Online sales and digitalization among other factors such as increased electricity access, reliable power supply and rise in incomes will drive the appliance demand.

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² This article is part of an ongoing series called Power Perspectives which provides brief commentaries and analyses of important developments in the Indian power sector, in various states and at the national level. The portal with all the articles can be accessed here: <https://prayaspune.org/peg/resources/power-perspective-portal.html>. Comments and suggestions on the series are welcome and can be addressed to powerperspectives@prayaspune.org.

³ India Brand Equity Foundation. 2021. "Indian Consumer Industry Analysis." IBEF. <https://www.ibef.org/industry/consumer-durables-presentation>.

According to a market intelligence report⁴ on the Indian appliance market, online sales accounted for 9-30% of the overall sales for TVs, ACs and microwave ovens in 2018. Overall, online sales volume increased by 50-60% over 2017. Therefore, it is evident that online purchase of appliances is only likely to increase in share and volume.

Under the appliance specific regulations and section 14(d) of the EC act, BEE provides instructions to the manufacturers on the information and the display of the label to ensure that it is visible and legible to the prospective consumer. However, BEE does not provide any specific instructions for e-commerce platforms regarding the display of star-rating and the detailed label on their respective platforms. The e-commerce platforms are not under any mandate, from BEE or other consumer protection rules, that ensure a visible star-label and product fiche (a product information sheet) to the consumer so as to facilitate informed decision making.

Consumers purchasing via e-commerce platforms or using them to find and compare products may miss out on this vital information if it is not prominently displayed. It could lead to purchase of energy inefficient products which is counterproductive to addressing the growing energy demand and its social and environmental impacts, and may also result in higher life-time expenditure for the consumer.

1. Missing mandate on star-labels on e-commerce platforms

BEE's instructions to manufacturers and sellers on the information and display of energy labels are restricted to physical labels and their placing on appliance and packing boxes. It does not specify the manner of display of energy labels on e-commerce platforms. The new operations manual by BEE (DISHA)⁵ identifies some areas of non-compliance related to display of particulars on labels on appliances. Not declaring correct energy efficiency information when products are advertised online is a possible non-compliance under this manual. However, BEE doesn't state an enforcement mechanism for e-commerce platforms. Moreover, it doesn't discuss the position and manner of display of labels online so as to make it easily visible and legible to the consumer.

Consumer Protection (E-commerce) Rules, 2020, were brought in to ensure a free and fair competition in the market as well as bring transparency to the platforms. These rules mandate publishing of any necessary information that supports an informed consumer decision by e-commerce platforms. But they do not explicitly cover energy labels under the provision. These rules also mandate e-commerce platforms to appoint a nodal person for compliance with the rules. Hence, if manner and display of star-labels is mandated, this person of contact can ensure the rules are complied with and e-commerce platforms ensure a legible and visible star-label

⁴ Mukherjee, Writankar. 2019. "India goes online to shop; white goods fly off eShelves." The Economic Times (ETtech edition), April 11, 2019. <https://economictimes.indiatimes.com/internet/india-goes-online-to-shop-white-goods-fly-off-eshelves/articleshow/68823904.cms>.

⁵ <https://beestarlabel.com/Home/Launch>

However, due to lack of such a mandate, the e-commerce platforms do not follow any prescribed pattern for display of star labels or information of the same. This often leads to no information being disclosed about star rating or it is placed in a way which isn't prominently visible to the consumer.

We looked at three most used e-commerce platforms for various appliances in India. The table below summarizes the star-label information and the manner of display for 5 appliances covered under the mandatory standards and labeling program on these platforms:

Table 1. Display status for appliances on e-commerce platforms

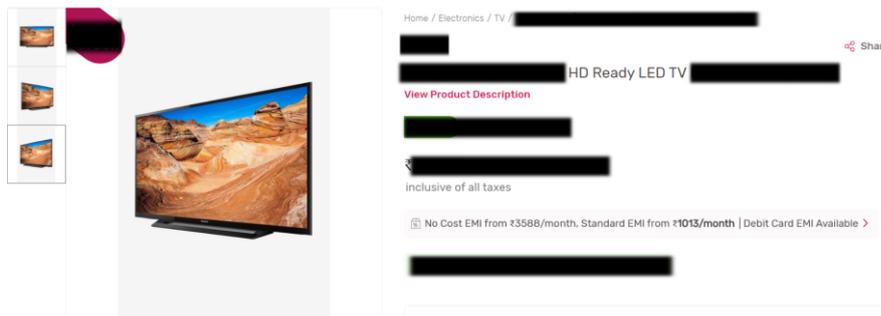
Appliance	Prominent display of BEE star-rating			Performance details in product specifications			Visible and readable display of the BEE star-label		
	Site1	Site 2	Site 3	Site 1	Site 2	Site 3	Site 1	Site 2	Site 3
Frost free refrigerators	✓	×	✓	×	×	×	✓	✓	×
Direct cool refrigerators	✓	✓	×	✓	×	×	✓	×	×
Electric water heaters	✓	✓	×	×	×	×	×	✓	×
Colour TV	×	×	×	×	×	×	×	×	×
Room air conditioners	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: Prayas (Energy Group) compilation based on review of three e-commerce platforms

Three prominent observations stood out:

- The star-rating of a product is, in some cases, included just in the product name. The rating does not stand out in the list of products when a consumer searches a specific appliance. Moreover, the current practice of stating star-rating in the product title is not consistent within a class of products.
- For appliances like water heaters, refrigerators and TVs, the image of the energy label is not made available. In some cases, the image of star-label placed with product images was not readable.

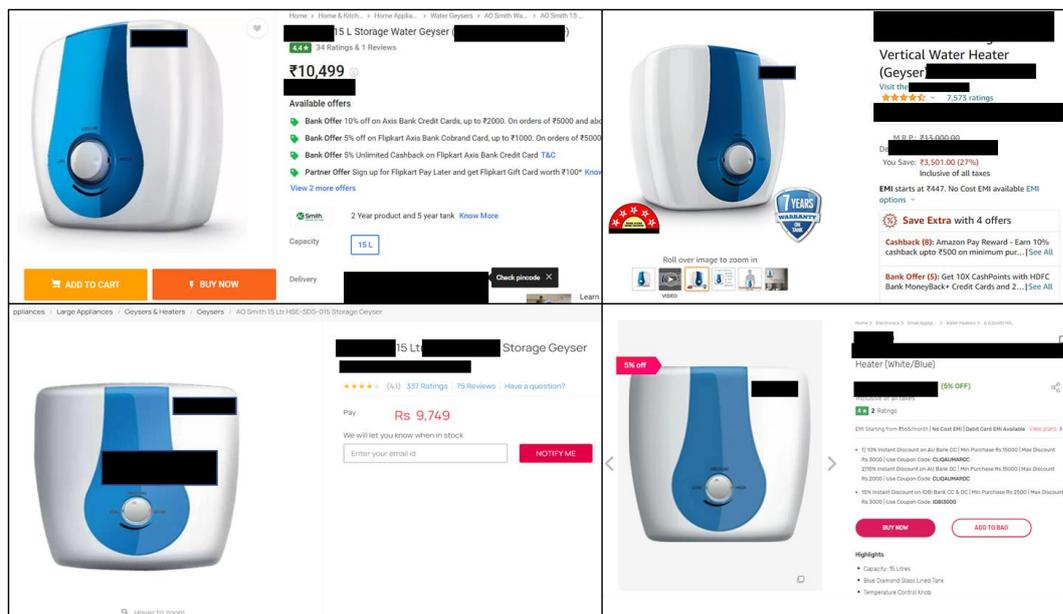
Figure 1. Star-rating and detailed energy label of a 3-star TV missing from the product's information page



Source: Prayas (Energy Group) capture from e-commerce platform

- There is no standard format in which labels are to be displayed across platforms. For the same star rated appliance, e-commerce platforms vary in how they present the star-rating and the energy label. In an instance, the star-rating and label were not as prominently placed as the product price. On another platform, only the star-rating was mentioned while the detailed energy label was missing.

Figure 2. Same 5-star product from 4 different e-commerce platforms shows lack of standard format of label display

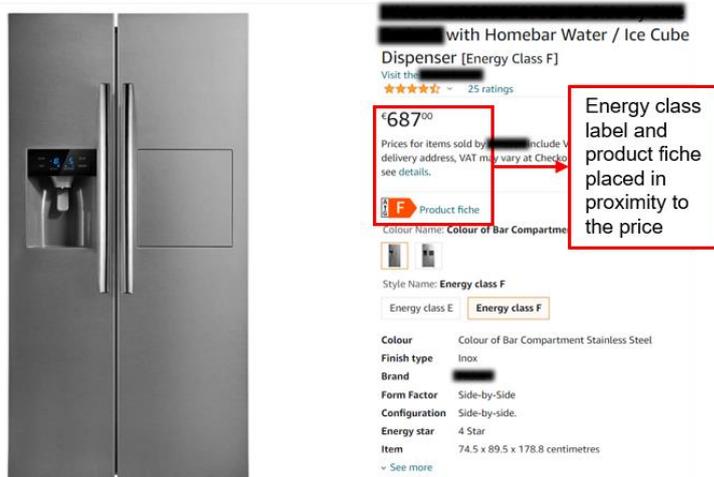


Source: Prayas (Energy Group) compilation from e-commerce platforms

2. An example from the European Union

Regions like the European Union, under the regulations of the European Commission, also run energy label programs. They explicitly mention in-store and online sales channels under the guidelines for placement and positioning of energy labels, including “electronic form” in the definition of label and product information sheet.

Figure 3. Energy class and product fiche close to the product price on e-commerce platforms in EU



Source: Prayas (Energy Group) compilation from e-commerce platforms

The guidelines obligate manufacturers to provide the energy labels and product information sheet to dealers or sellers including e-commerce platforms and ensure they are visible and legible on the platforms. They also specify the positioning of labels on e-commerce platforms. Some of these factors are close placement to price of the product, same font size as price or clearly legible label, provide roll-over or pop-up or click based nested display leading to detailed energy label as well as product information sheet (See Annexure).

3. Recommendations for BEE

The EC Act already applies to all sellers, in store or online. BEE should consider mandating star labels and product information sheets of appliances to be displayed prominently like the product's price on e-commerce platforms.

- It could obligate manufacturers/ label permittees to provide sellers including e-commerce platforms with star-label details and ensure they are displayed on the platform and search features should include an option to select by star label of appliances. It could do so by amending appliance specific regulations or releasing new guidelines for e-commerce platforms, re-sellers and manufacturers. It can engage in stakeholder consultations to explore best practices in displaying labels on e-commerce platforms.
- These regulations could provide instructions regarding the manner of display of the star rating as well as the detailed label in digital formats on e-commerce platforms. It should also have a prominent text display of the star rating in case the images fail to load.
- In future, BEE could include the digital form in the definition of 'labels' and include display of product information sheets alongside the same. Prominent display of energy labels will facilitate informed consumer decisions and improve the uptake of energy efficient

appliances from online sales. Furthermore, when QR codes are added to the star-labeled appliances sold online, it'll enable consumers to verify the label.

- BEE can also consider mandating e-commerce platforms to submit appliance sales data on half yearly or yearly basis which will include product details. Further, e-commerce platforms can also willingly share intelligently acquired details about product related searches, this information can help in improving the standards and labeling of products.

With growing digitalization and impending growth of the appliance market in India, there is a need to address the growing energy demand as well as its social and environmental issues. Improving the uptake of energy efficient appliances can aid in managing the future demand. It becomes vital to provide online consumers with accessible and accurate information about their potential purchase through star labels. As seen across e-commerce platforms, there is no standard format for the legible and accessible display of star-labels in e-commerce platforms. Rules to set display standards for e-commerce platforms and enforcement mechanisms for the same are inadequate. The Bureau of Energy Efficiency can take timely action and publish new rules or revise existing rules to ensure compliance to prominent display of existing information on star rating for sale of energy efficient appliances through all e-commerce portals.

4. Annexure:

4.1. Positioning of a digital label on e-commerce entity under European Commission regulation

The EU mandates the energy class label and product fiche to be shown on any display mechanism like screens, tactile screens and other visual technology, in proximity to the price in a legible and visible manner to the consumer. It also states that a nested display can be applied to the label in the form of mouse click, roll-over or tactile expansion of the screen on the image. The nested display allows for consumers to access the detailed energy label and product information sheet of the product.

4.2. Example of nested display:

The energy class label placed close to price has a nested display, that upon clicking, leads to detailed energy label and product fiche of the specific appliance. The energy class rating close to the price is linked to the detailed energy label. The detailed label opens as a pop-up, inset screen display or as a new tab depending on the type of display mechanism. It comes with a closing option leading back to the main product page on the platform where price and energy class rating are displayed. The e-commerce platforms are also required to provide alternate text for the energy class of the product in case the images fail to load.

Energy label close to price can be used to access detailed label and product fiche in a nested display



For detailed regulations on the same by the European Commission, see the Commission Delegated Regulation (EU) [No 518/2014](#) of 5 March, 2014.

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