

Second Prize

*Manufacturers of
BEE Star Labeled Appliances
(Storage Water Heater)*

BAJAJ ELECTRICALS LIMITED

Mumbai (Maharashtra)

Unit Profile

Bajaj is one of the oldest and trusted brand in India having presence in Indian homes since last few decades. Company caters to the requirement of comfort and luxury of Indian buyers by offering a variety of safe, efficient, reliable and durable appliances at affordable prices. Company has its headquarters in Mumbai with several Sales and Marketing offices spread across the country and now also growing overseas.

Turn-over for financial year 2014-15 was over ₹ 4300 crores. Company has diversified into six major divisions covering Appliances, Fans, Lighting, Engineering & Projects, Luminaires and brand Morphy Richards.

Company offers variety of products used in our daily lives, thus enhancing the convenience and improving life of the consumers. These products also meet the ever demanding energy norms and various regulatory requirements.

Energy saving projects implemented

Over the last 3-4 years, **Bajaj Electricals Ltd.** has undertaken several research and development activities to improve on energy savings of Electrical Storage Water Heaters. Following is the gist -

- 1) Developing state-of-the-art **standing loss test set-up** to accurately assess the energy saving for water heaters.
- 2) Use of **customized software** to analyse and determine means to **effectively arrest heat loss** of stored hot water.
- 3) Conducting several theoretical calculations and subsequent product modification/s to determine the 'best way' to **contain heat** without additional cost impact.
- 4) Testing and confirming the above, and further implementing this with also an objective to protect the environment. Eg. Use of **CFC free PUF** as insulation for all water heaters.
- 5) Implementing the above at all vendors' manufacturing facility across India.

With the above exercise, Company have been able to improve the energy saving of all water heater models without any major plant investment / increase in the product cost.

Most of the 'high volume' selling models are conforming to 5 star energy rating as per current BEE norms. New models under development are conforming to this requirement too.

As indicated last year, the new water heater manufacturing set-up of Bajaj Electricals Ltd. at Nasik is now fully operational. In the last one year, seven water heater models have been developed and are being produced.

Another new range of three capacities is also planned in the next one year.



Energy Conservation Achievements

Besides above, a similar product design approach is underway for other product categories like Room heaters, Air coolers, Electric kettles etc. manufactured by **Bajaj** where one of the design objectives is to improve the product efficiency by reducing heat loss in the aforesaid products. In short, a new 'product platform' has been initiated in this direction, thanks to the BEE initiative for energy conservation!

Thus **Bajaj** has already created **bench marks** in the industry in terms of product efficiency for various product categories and will continue to do so in the future.

Development of products using renewable energy

Lighting division of Bajaj Electricals Ltd., has **Solar powered lamps** in its range and is striving to tap the market for these type of products which do not require any electricity, but work solely on renewable solar energy. Efforts are ON to increase the consumer awareness towards these kind of products so that there will be a sizeable market for these products in the near future.

Besides above, **Bajaj** is planning to enter the **Solar Thermal category** by introducing Solar Water Heaters. With the **Government initiatives** towards this category and the **increasing consumer awareness** to harness the **free and abundant** Solar energy, this product category will be one of the **biggest categories** for **Bajaj** in the near future.

For its **Water purifier** business, **Bajaj** has developed a new series of purifiers which do not require any Electricity to purify water. This was made possible through extensive Research and Development in this area in collaboration with the best players in the international market.

Introduction of Innovative and sustainable products in future and their efficiency levels

Bajaj has bagged the Indian government order for manufacturing LED's for use in domestic application. Thousands of LED's have already been distributed amongst the consumers in North of India and this promotion of using energy efficient lamps is still underway for the next few months.

With the current rise in demand of electrical energy, use of LED's for household lighting will **drastically compensate** for the 'gap' in electricity **demand and supply**. At present, LED's hold a sustainable future in lighting due to its extremely low energy consumption as compared to other lighting technology.

As stated last year, the new **Research and Development** Centre of Bajaj Electricals Ltd., is nearing completion and expected to start delivering results in the next one year. The focus, as stated earlier, will be on **Product Innovation** across its product categories.

Sustainability initiative undertaken last year is also underway in the organization. This, coupled with company's care towards the environment in the form of PARYAVARAN MITRA, and various CSR activities has motivated the team to think 'out-of-the-box' and design and develop 'Green' products, which will drastically have an positive impact on the nation's energy consumption for appliances.