

# **Dissemination Meeting**

**A Report**

## **Assessing Consumer Behaviour on Energy Efficient Products in India**

India International Centre, New Delhi, January 25, 2012



## Background and Context

CUTS Centre for International Trade, Economics & Environment (CUTS CITEE) with the support of the Climate Works Foundation, US through Shakti Sustainable Foundation, New Delhi organised a final dissemination meeting of the project entitled, “Assessing Consumer Behaviour on Energy Efficient Products in India”. The objective of the project was to understand consumer behaviour in respect to energy efficient (EE) products. The findings are the result of a survey of over 20,000 consumers, 550 traders and 50 producers of electrical home appliances covering 19 states and 3 union territories, constituting over 90 percent of the population of India. The survey covered consumers in various income brackets and different occupations to generate a better understanding on this subject. The report highlighted the following:

- Level of consumer awareness;
- Barrier to usage;
- Willingness to pay for EE appliances; and
- Measures/initiatives to make EE products more acceptable.

## Opening Session

- Bipul Chatterjee, Deputy Executive Director, CUTS
- Seema Paul, Chief Executive Officer, Shakti Sustainable Energy Foundation
- Sunil Mitra, Independent Director, West Bengal Electricity Distribution Corporation
- Ajay Mathur, Director General, Bureau of Energy Efficiency

**Bipul Chatterjee** thanked the supporters – ClimateWorks Foundation and SSEF. He welcomed all participants to the meeting. He briefly talked about the project and its need. The project is to understand the level of consumer awareness on EE products, major barriers, willingness to pay, and what type of measures are required to promote energy efficiency in home appliances in India. He also highlighted the role played by the Bureau of Energy Efficiency (BEE) in promoting energy efficiency. At the end of his welcome remarks, he also said that presence of distinguished experts will enrich the deliberations.



**Seema Paul** thanked CUTS for inviting her as a panel member. She talked about the SSEF as a grant making foundation, and its funding on energy security, and low carbon growth. Reverting back to the subject of consumer appliances, she said, there is a huge amount of potential to save energy. It is known that about 21 percent of the total energy consumption is in the residential sector and a large chunk of these are used by household appliances. She referred some research, which says that best quality energy efficiency in top ten appliances will help the nation to avoid one ultra-megawatt power plant every year for five years. It can lead to huge financial saving for the country, and it is a matter of guess how much contribution this can make to the economic growth of the country. Energy efficiency is, therefore, a win-win solution.

She highlighted the why SSEF supported CUTS in undertaking this study. Though studies like this have been undertaken earlier, but SSEF wanted to support a larger study. The study has come out with some very interesting findings, she said. Two of the findings which appear to be threats to energy efficiency, as indicated by the report, are the gaps in the perception between retailers and consumers, and this call for training of retailers. SSEF will like to offer its support for such activities.

Another important finding is that the use of appliances is increasing in the lower income class, in which awareness and ability to pay is much lower. We need to think more about this in the coming period, she commented. Though a large number of activities are being initiated by the BEE, there is need for a louder, more engaged and educated voice. She concluded her speech by saying that SSEF will be very excited to continue to work with the BEE in any and every manner, and contribute in ensuring energy security.

**Sunil Mitra** thanked CUTS and said there is a need for bridging the gap between civil society and policy makers on EE products. One of the major findings as indicated by the present report is that there is huge gap between energy saving potential and what has been achieved so far through the use of EE products. Another important finding is that about 22 percent of respondents who are using EE products are not satisfied. This is serious, and the fundamental question is how and why that has that happened. And if this is true, then we have some fundamental problem with energy efficiency drive. This needs to be deliberated and discussed. He applauded the efforts which have gone into the implementation of the study.

Going beyond the present issue of energy efficiency, he said that there is huge problem with the energy sector. If there is no energy, there is no need for energy efficiency. The most serious issue is the complete failure of the regulatory system. Among other things, he also highlighted three things: industry should come forth and invest in research and development (R&D); there is need for clean coal technology; and subsidy is not sustainable. He requested CUTS to advocate for a strong push to solar energy, which can be our most abundant energy resource. Industries, on the other hand, should be pushed to go in a much larger way with R&D, he said.

**Ajay Mathur** highlighted the kind of challenges the country faces in energy sector. Besides issues such as failure of the regulatory system, other issue which is also of critical importance is the problem of fuel availability. Energy is a bigger thing than electricity. India imports about 70

percent of its oil requirements, and it is expected to go up to 80 percent by end of 12<sup>th</sup> Plan. Coal import is also expected to go up to 30 percent (from 10 percent in 2012) by end of the 12<sup>th</sup> Plan. He expressed his apprehension about the effective supply of energy to meet target growth requirements and to improve quality of life.

Coming back to the subject of energy efficiency, he stated that with 40 percent of people in the country without electricity, the supply and more specifically the quality of supply has to improve. The only way of doing this is ensuring that every new appliance that is added, every building that is constructed, and every new industry that is established, is more efficient than the one that was set up previously. This is a great opportunity as a vast mass of infrastructure is yet to be added. This is the approach, we need for promotion of energy efficiency, he said.

He also introduced the participants the kind of initiatives that are being taken by the BEE, and what will it lead to in the coming period. BEE's sustained efforts have led to complete removal of electrical equipment that is less than one star. BEE has also recently tightened the standards for 5 star products starting January 2012. This has resulted in 5 Star in 2011 has now become 4 Star in 2012. The same thing will happen in January 2014, he said. BEE will ensure that star products (5 Star) that are available in India are as efficient as any other products available anywhere in the world.

Commenting on some of the findings of the report, he said, this is the first large survey that has been conducted in India on energy efficiency. There are three things which have come out of this report:

- a very large number of people have heard of energy efficiency;
- the development in awareness needs strengthening and reinforcement (especially dealers issue); and
- need for undertaking such studies at an interval.

To address the issue of dealers, he emphasised on creation of audio-visual modules and training people who can present this to a larger number. He opined that this kind of study becomes a periodic event, as market has become dynamic for this. He also expressed the hope that CUTS and SSEF will continue to take such studies at regular intervals (two/three years).

Commenting on study recommendations, he agreed that the BEE need to work with the Department of Consumer Affairs for raising awareness. However, he said, I do not believe that subsidies are needed. For bridging the gaps between prices of efficient and non-efficient products, bridging finances are necessary. There are, however, some occasions when there is need for incentive to cross the hump.

At the end of his speech, he congratulated CUTS and thanked SSEF for making this study possible. He also said that this is a useful first step, and we would like to see this periodically. We would also like that such studies do address some of the key issues which BEE believes would be more useful.

## Session II & III: Presentation of the Study & Way Forward

- Bipul Chatterjee, Deputy Executive Director, CUTS
- Chair: Prabhjot Singh Sodhi, Programme Director, Centre for Environment Education and National Coordinator, United Nations Development Programme
- Archana Walia, Director of India Programme, Collaborative Labeling and Appliance Standards Programme
- Girish Sethi, Director, The Energy & Resources Institute
- Kerry Harvin, Senior Programme Associate, Shakti Sustainable Energy Foundation
- Anoop Singh, Associate Professor, Indian Institute of Technology

**Bipul Chatterjee** started the presentation by pointing out major objectives of the project which is to provide a strategic basis for the promotion of energy efficiency and conservation in India. After discussing the sample and its composition he revealed major findings from the study. He told that electrical equipments viz. CFLs, Fans, Television etc. have ownership pattern of 90 percent or more while those having ownership of less than 10 percent (viz. Air conditioner, Microwave oven etc.) consume relatively more energy. He pointed out that the study shows a positive correlation between income and energy consumption. He mentioned that awareness about EE products is fast increasing among consumers but they give more weightage to brand and price. While discussing the barriers hindering penetration of EE products he stressed on the need of generating greater awareness among low income groups and agriculture consumers.

Bipul further added that low level of awareness among retailers and traders, high product price, non-availability of EE products are some of the limiting factors for increased use of EE equipments. Discussing the major recommendations that emerged from the study, he told that perhaps the most important step required is to increase awareness among different category of stakeholder about EE products. In this respect he suggested merging BEE's EE campaign with "*Jago Grabak Jago*" campaign, bringing greater number of traders under the coverage of National Educational and Training Programme (NETP).

He further advocated for setting up a website for dissemination of information on EE products (viz. what are the equipments available, how to identify them, what are the benefits etc.). Before concluding he also stressed on the need to provide financial incentives to the consumers to promote greater purchase of EE products.

Speaking on the way forward, he said that there is need for inline ministries to work together and devise consumer awareness programme and make it major theme for promotion of energy efficiency. There is a need for a synergistic approach as a whole on the part of our country. Generating awareness among traders, and educating rural consumers and farmers are some of the second important messages emerging from the report. He also highlighted the important role *Panchayati Raj Institutions* and consumer groups can play in awareness generation. Market of home appliances has become very dynamic, and therefore, there is also need for continued training for traders. This calls for state and non-state actors working together.

**Archana Walia** appreciated the findings of the study and said that it had effectively brought out perception of different category of stakeholders. Going forward the project needs to look into issues such as the international standards available for EE labeling *vis-à-vis* the standards available in India, she added. In addition to this, there is also a need to look into the products produced in the small and medium enterprise sector and understand whether and how they adhere to EE labeling requirements. She emphasised on the need to set up a good Standard and Labeling Network across India alongside setting up testing facilities where a consumer could go and test the quality of the EE products purchased from the market.

She further said that we need to appreciate that it is a huge effort, it not only needs to be applauded, but also needs to be continued on.

**Girish Sethi** pointed out that one of the most important findings of the report is that 22 percent of the EE product users are either indifferent or lowly satisfied. This is a very serious issue, and therefore, it is important to understand why consumers have such perceptions. There is also a need to understand what is meant by satisfaction. He further added that while chalking out dissemination strategies it is important to have strategies for focused products and focused stakeholder groups.

**Anoop Singh** said it is important to look at the consumption pattern of respondents and also how much units of electricity they are consuming instead of looking at the amount they are paying as electricity bills. He further added that while awareness on EE products among various stakeholder groups is necessary, it is even more important to educate them on the benefits from use of EE products. He also said that at present kid's preference has an impact on the purchase behaviour of their parents and hence there is a need to include energy studies in the course curriculum in schools and colleges. He further suggested developing mobile-based application for assisting consumers in making informed choices. He advocated for not allowing corporate to sale products less than 3-4 stars and suggested providing financial incentives to the manufacturers of EE products instead of consumers.

**Kerry Harwin**, Senior Programme Associate, SSEF, pointed out that internet may not be an effective tool to communicate with stakeholders especially in villages. On the issue of subsidy he mentioned that for EE products if government provides subsidy and it has a negative purchase cost for the consumer as they get benefited by the purchase and also save on the usage. He highlighted that manufacturers has a vital role to play in the EE products market.

**Sandeep Garg**, Energy Economist, BEE mentioned that awareness through newspapers and electronic media is becoming costly everyday. He was optimistic in pointing out that a market transformation is happening and preferences are growing towards EE products which are also leading to a gradual change in manufacturing technology. In this context he mentioned that though the study had looked into the consumer behaviour part but the technology aspect needs to be looked into. He further emphasized the need to product and consumer segments to strengthen the study.

Other key inputs received from the floor discussion are as follows:

- Industries form the section of bulk consumers and provide immense potential for energy conservation. Thus, it was suggested that going forward it is important to look at the technology they are using and the factors that can motivate them to switch to EE products.
- The agriculture sector is also not using EE pumpsets which is often linked to inefficient use of electricity. Though BEE is trying to replace old and inefficient pumpsets with EE ones yet the process needs to be accelerated and the CSOs can play a crucial role in this context.
- Doing an ABC analysis of ownership was also suggested.
- BEE is a regulatory body and not purely an organisation dedicated to project implementation. Since the implementation part is left to the State Designated Agencies (SDAs) in each state, it is important to understand and build capacity of these SDAs in the state. It was also emphasised that BEE has a Code of Practice for building awareness among farmers which needs to be used while building their capacity.

Concluding the meeting, **Prabhjot Singh Sodhi**, Programme Director, Centre for Environment Education and National Coordinator, United Nations Development Programme (UNDP) said that *Communication and Education* among stakeholders is the key driver for the change towards a more EE society. Chalking out appropriate dissemination strategy is very important, he said. He also stressed on the need for developing booklets written in local languages, which can be useful for stakeholders in making informed decisions.



Towards the end of summing up his speech, Sodhi thanked participants for providing their inputs on the presentation and requested CUTS to do introspection and see how these comments and suggestions fit into strengthening the study. He flagged off the need for a second phase of the project so that the efforts and findings that came up from the study do not go in vain.