

Event Report on
Project Inception Meeting

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

**12 April, 2011
New Delhi**



Background

Economic growth is now critically dependent on the availability and accessibility of energy from exhaustible (conventional sources of energy) and/or non-exhaustible or renewable sources. Considering the current usage pattern of exhaustible energy sources, and the availability of such sources, which is not guaranteed in the long-run, the sustainability of economic growth becomes questionable. In India, therefore there is a growing realisation among policy makers, businesses, civil society organisations, and the public at large that the country would find it increasingly difficult to sustain its economic growth by using non-renewable sources of energy at the prevailing levels of energy efficiency. India's energy strategy, therefore, needs to integrate two additional ingredients:

- increasing reliance on renewable energy, and
- enhancing energy efficiency at various levels.

Infrastructure for producing renewable energy is still at a nascent stage and it would take years for India to fully or even considerably meet its increasing energy demands through renewable sources. Promoting energy efficiency across sectors would therefore perhaps be the best strategy for avoiding energy scarcity. There are two main ways of promoting energy efficiency:

- promotion of consumption of energy efficient products (EEP) and
- adoption of energy efficient technology

For enhanced energy efficiency of the country as a whole, there has to be a simultaneous increase in the production and consumption of energy efficient products. Importantly, it needs to be ensured that the consumers are aware of the benefits of purchasing energy efficient products, both from an economic and environmental point of view, as well as from the national perspective of conservation of scarce and possibly exhaustible sources of energy. Such awareness and concomitant consumer behaviour is a crucial determinant in the use of energy efficient products.

There is, thus, an urgent need to gauge and understand consumer behaviour and consumer perception in regard to these products. The proposed project is a clear step in this direction which aims to achieve the following outcomes:

- A comprehensive benchmark on level of consumer awareness on energy efficient products;
- A closer understanding of barriers to both awareness and usage and the role of civil society (consumer organisations in particular) in addressing such barriers;
- Channels that can be more effective in popularising the concept of energy efficient products;
- Better understanding of supply-side factors determining production and usage patterns;
- Consumers' willingness to pay for energy efficient appliances;

- Future demand projections which are critical for the success of any long term strategy; and
- Understanding international good practices on energy efficiency and how can they be adapted in India.

The project findings will provide a basis for designing future strategies by the relevant departments and ministries of the government of India for enhancing the use of energy efficient products in India.

Inaugural Session

Chair: Pradeep S Mehta, Secretary General. CUTS International
Speaker: Jyoti Parikh, Executive Director, IRADe and
Member of the Prime Minister's Council on Climate Change

Pradeep S Mehta welcomed the participants to the launch meeting of the mentioned project. He provided a brief introduction of CUTS, which began its journey as a grassroots organisation about 27 years ago, by publishing a wall newspaper called Gram Gadar to create consumer awareness in rural areas of Rajasthan. Then there were very few consumer organisations in the country. Subsequently, CUTS diversified and today it addresses variety of consumer related issues. It conducts research, advocacy and networking on five thematic areas and has expanded its network to countries in Africa, Asia and Europe.



Mehta then underlined the growing importance of civil society organisation's activism and influence in a democratic country like India and emphasised that the jurisprudence in the area of environment had evolved with significant contributions from activists such as M.C. Mehta, Manu Bhai Shah, Jyoti Mahahan, and others. He mentioned that on several occasions CSOs have participated in formulation of draft legislation and policy making and cited examples of CUTS' contributions in drafting of several legislations and policy measures. One significant achievement in the initial years was that of putting the Consumer Protection Act in place. Mehta said that the contributions of CSOs will increase in the coming years, in wake of increased space in policy issues, that affect consumers, and also due to initiatives taken by the government of India such as *Jago Grahak Jago*, which are directed towards increasing awareness of consumers on their rights and duties.

Emphasising the importance of this current project, which is in line with what CUTS has been doing for a long time, Mehta referred to some of CUTS' past work on Eco-mark scheme carried out in collaboration with VOICE in 1991. The scheme was launched in the same year, though it has not successfully been implemented in India due lack of political will. CUTS is still pursuing the same. CUTS also undertook a project on concept testing of green consumption in four metros – Delhi, Kolkata, Mumbai and Chennai. One of the major findings of that project was that consumers in Delhi and Mumbai were willing to pay a little more for green products as compared to Kolkata and Chennai.

Mehta then drew attention towards the relationship between consumer behaviour and price factor---how consumer behaviour is hugely influenced by the price factor---and linked it to this project which will assess the consumer behaviour for energy efficient products in rural and urban India.

Mehta further stressed that climate change negotiation is going to drive thinking and policy responses on sustainable production and consumption. In this context, this study will also assess if Indian consumers are ready and able to respond to these challenges, if not, then what needs to be done. The project will throw light on consumer behaviour and will come up with a set of recommendations, in order to ensure that it has both supply-side and demand-side influence.

With the establishment of Bureau of Energy Efficiency (BEE), work in the area of energy efficiency has increased significantly in India. Several international initiatives are also in place. With this backdrop and in this context, this project is being launched, said Mehta.

Jyoti Parikh, in her keynote address, thanked CUTS for inviting her to the launch meeting of 'Assessing Consumer Behaviour on Energy Efficient Products in India', which, she said, was a very important project. She introduced IRADe and its activities in five thematic areas – energy and power system; climate change and environment; urban and rural development; poverty and gender; and food security and poverty. She also briefed the audience about her work on energy issues and demand side management. In her erudite address, she focused on the need for energy efficiency and informed the audience that one Megawatt, which is the unit for electricity saved, is almost equal to two Mega watts, the unit for electricity generated. Therefore 1Negawatt, she said, is more powerful than 1 Megawatt taking into consideration the lifecycle approach and the cost associated with it. The significance of Energy Efficiency (EE) in the growth and economy of a country was colossal. Therefore she stressed that delinking of energy efficiency from economic growth should not be thought of as an option.

Parikh was very happy that CUTS and Shakti Foundation had jointly undertaken this project. She said that the inputs and findings from this project would go a long way in assessing consumer behaviour as far as energy efficiency was concerned. She hoped that good data and good facts would come out from the survey which was of critical importance and cautioned that the modelling would be a daunting task given the time period of the project. Parikh, however, felt there was need for such projects as studies indicated that the retailers were not aware of energy efficiency in many cities. In her opinion, just buying energy efficient products would not solve the problem. Energy Efficiency was/is about re-organising our society. It has to become our way of life which should be a continuous process. Linking of consumer behaviour to energy efficiency is therefore vital---And this is what makes this study assume such significance, stressed Parikh.

She also pointed out that there is need for bringing about a change in fundamental thinking while designing energy efficient systems /equipments which should be geared towards meeting Indian requirements. To substantiate her point she cited a few examples. In her concluding remarks she urged Climate Change Network, through Shakti Foundation, to provide quality support and monitoring control to CUTS in order to ensure timely delivery of results of this very important project.

The keynote address was followed by self introduction by participants.

Session Two: Assessing Consumer Behaviour on Energy Efficient Products in India (CONBEE)

Chairperson: *Arunabha Ghosh, Chief Executive Officer, Council on Energy Environment and Water (CEEW)*

Presentation: CONBEE: An Overview of the Project: *Keya Ghosh, Centre Head, CUTS-Calcutta Resource Centre*

Discussants:

- *H. Wadhwa, Head – Technical & Projects, Voluntary Organisation in Interest of Consumer Education (VOICE), New Delhi*
- *Shweta Mahajan, Consumer Education and Research Centre (CERC), Ahmedabad, Gujarat*
- *Aditya Chunekar, Prayas, Pune*
- *Dibyendu Maiti, Institute of Economic Growth, University of Delhi*

Arunabh Ghosh, in his opening remarks, set the framework for the discussion to be followed after the presentations by saying that the main objective of the meeting was to help the project team to improve the design of the study. It would therefore be desirable that the discussions and deliberations focused on the methodology and the gaps that could be filled to make the project plan more effective. Some of the pointers he flagged for deliberation were:

- Identification of the levers that would promote behavioural change in consumers and producers
- The bottom-up model which include credits/loans of Financial Institutions/ Smart metering/Theft/T&D loss etc
- Top-down model such as Tax benefits and Subsidies
- Efficacy of Government-run campaigns
- Regulatory issues---to be mandatory or optional
- Labelling---Government or Private and who should drive the harmonization process
- Psychological aspects and prices etc

He then invited Keya Ghosh to make the presentation.

Keya Ghosh made the presentation on the need and relevance giving an overview of the mentioned project. Her presentation covered the project objectives, activities, methodology, outputs, expected outcomes, and project management.

Ghosh in her presentation, elaborated on the crucial aspects of the survey which will cover 20,000 consumers, 500 traders and 50 manufacturers in 19 states and 3 union territories in India. Inclusion of traders and manufacturers, she said, will enhance the profoundness of the study as it will generate both demand-side and supply-side inputs for further research and policy decisions on the subject. The presentation was followed by detailed discussion on the methodology adopted in selecting states' and districts' share in the total sample size.

She informed that the output of the project would be a research report which would combine the findings of the desk research and analysis of the data collected from the field. She shared the draft outline of the report and the details therein to be covered under the report.

One of the important outcomes of the study would be to benchmark the level of consumer awareness on energy efficiency products in India and use this benchmark to measure future development in consumer awareness. Ghosh stressed that the level of consumer awareness of energy efficiency products was still not characterised. This project would identify the barriers to consumer awareness, and usage of such products, the factors determining willingness to pay and extrapolate these answer to arrive at future demand projection. Further, the study would make an effort to understand the

supply side constraints; international good practices and the ways in which these practices could be adapted in India; and a model would be developed for making energy efficient products more acceptable to Indian consumers..

Chairperson's Remarks:

Arunabha Ghosh flagged six main issues from the reactions and discussions that followed the presentation. They were:

1. Absence of before and after/counter factual;
2. Criteria/methodology for selection of states for survey
3. Methodology for selecting districts;
4. Measuring effectiveness of regulatory regime; primarily through monitoring, implementation and enforcement and its impact on consumer behaviour;
5. Inclusion or exclusion of the productive sector of the economy within the scope of this project and
6. Incorporation of new products under Standard & Labelling (S&L) scheme of BEE which might be introduced in the near future.



The four discussants were then requested to make brief remarks on one or each of the above points.

Shweta Mahajan, commented that in her opinion the methodology of the survey was well designed, She said that as far as consumer behaviour was concerned,

consumers preferred green products if they guaranteed savings. So, right kind of consumer education could influence their purchase decisions positively. Aesthetic appearance was also an important criterion for consumers, and therefore, these products could be packaged suitably.

H. Wadhwa emphasised on the problems in identifying barriers that hamper the usage of energy efficient products. He pointed out that as a product is accredited with higher number of stars, the cost of the labelled product rises which is not an encouraging factor given that consumers prefer labelled and yet low-cost products. In this context it has been observed that retailers play great role in pushing three-star products instead of five-star products. However the reason for such preference by retailers is not known and hence should be investigated. He suggested that the survey may also cover consumers and retailers of shopping malls.

While commenting on how to make the project more encompassing, he said, the project should include assessing the impact of monitoring schemes of State Designated Agencies.

Dibyendu Maiti expressed the need for a widespread campaign on energy efficient products. While consumers are rational in making purchase decisions, producers are concerned about pricing factors that influences price levels. Therefore, Maity felt, one needs to understand Producer's pricing behaviour----what additional costs are incurred by them in producing energy efficient products (EEPs) and what their profit margins are.

Maity said that it is equally important to understand the ways in which demand in the market is influenced by the price levels. It is therefore necessary to factor in the price differential, cost of producing energy efficient products incurred at producers level and through the value chain until it reaches the consumers. He felt that if the government comes out with a policy which supports producers to produce energy efficient products by providing incentives to carry out R&D, scenario for the products could change dramatically, as is evident in some countries in Europe. While concluding, Maity pointed out that consumer behaviour also depends on income levels and therefore income group comparisons could be more effective.

Aditya Chuneekar, while commenting on the presentation pointed out that the USP of the project was its consumer survey which would provide comprehensive data on the subject. Additionally, he stressed on the importance of utilizing this survey to collect and collate data on usage patterns of consumers. He cited an example---if a comparative analysis of usage of one-star air conditioner with five-star air conditioner is carried out, it may provide some interesting and valuable data.. He further commented that it is important to understand what steers consumer preference while making purchasing decisions—whether at all energy is a consideration or not. His suggestion was that the project team should stick to collecting more and more information from the consumers than focusing thinly on too many issues.

Floor Discussion

The participants put forward many pertinent questions and suggestions as this was an interactive session. Queries were raised regarding inclusion of agricultural pump sets in the list of the electrical equipments to be used in the survey. Vineeta Kanwal of BEE suggested that the study should be so designed that it brings out information/data on usage pattern of the EE products which is not in existence at the moment. Some queries were raised on how consumer behaviour and not consumer perception would be measured. At what level would the perception be studied, etc?

Ghosh clarified the queries to the satisfaction of the participants and mentioned that the study will take into consideration relevant suggestions that would be useful in the direction of achieving project objectives.



Conclusion

Arunubha Ghosh reiterated that the project was about assessing consumer behaviour on EEPs and not about everything related to energy efficiency. The project team therefore take into consideration the relevant suggestions that emerged out of the discussions. However he laid stress on the fact that since this survey provided an opportunity to reach out to 20,0000 Indian consumers across the country, the project team could utilize this opportunity to also collate usage patterns of EEPs.

He expressed his concern in these words, “to me the big problem with this study is there is no ‘before’ and ‘after’. We did not measure consumer responses before certain space or before the central government took certain measure”. Complimenting on the good work being done by BEE which is also reaching out to state officials, his concern was, “to what extent is BEE’s work impacting consumer behaviour, we would not know until we have measured this in absence of that. It is important therefore to understand what we can and what we can not capture in this project”, he said.

On project methodology, Dr Arunabha said, it is better to have a rigorous methodology to capture a smaller amount of data rather than having a loose methodology to capture a huge amount of data. He was in total agreement with the methodology followed in sampling design, sample allocation for states, union territories, and districts.

He concluded with the hope that the study would provide excellent support to the existing work on the subject and the data so collected with strong recommendations would definitely allow measurement and characterisation of consumer behaviour which in turn would motivate policymakers to adopt relevant policy measures.