

Regional Energy Efficiency Center for Home Appliances



West Bengal Renewable Energy Development Agency



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WBREDA

(Department of Power and N.E.S., Govt. of West Bengal)

BACKGROUND

In West Bengal, the electricity consumption in the domestic sector is estimated to be about 30% of total electricity consumption in the state. Remarkable increase in purchase of electrical home appliances by households has led to the increasing growth in electricity consumption in the sector. Home appliance manufacturers, both in large as well as Small and Medium Enterprises (SMEs) have been meeting the demand of appliance requirements in the State. However there has been limited awareness amongst the households on the extent of energy consumption by such appliances and its effect on their electricity bill. Rarely it is known how energy inefficiency of these appliances can substantially contribute to the higher capacity addition of power generation and at what cost, and enhance emission of carbon dioxide that can severely affect the climatic conditions. In such a scenario, raising awareness on energy efficiency amongst the households becomes essential.

WBREDA, an organization under Department of Power and N.E.S, Government of West Bengal, is setting up a Regional Energy Efficiency Center (REEC) in Kolkata with USAID support under its ECO-III Project, with a focus on raising public awareness on energy efficiency of home appliances. WBREDA was founded in 1993 with objectives of promoting renewable energy systems and technologies in the State of West Bengal, as the State nodal agency of Ministry of New and Renewable Energy (MNRE), Government of India. Recently it has started promoting energy efficiency amongst school/university students and women especially in the domestic sector.

REEC GOAL

Establish REEC as a Centre of Excellence that:

- Acts as an information hub to create public awareness on adoption of energy efficient home appliances in West Bengal and neighboring North Eastern States of India
- Demonstrates energy efficient equipment and technologies on home appliances and helps in promoting clean energy technologies mitigating climate change
- Networks with the state, national and international activities on energy efficiency in domestic sector

REEC ACTIVITIES

- **Construction of a low energy demonstration facility:** WBREDA has identified the land for constructing REEC building in Energy Education Park, Kolkata with the active support of Government of West Bengal. USAID supported ECO-III Project has been providing technical assistance to WBREDA in designing the REEC building. The REEC building will be 'Energy Efficient' and is planned to be in compliance with

'Energy Conservation Building Code' of Government of India. Efforts are being put in to create REEC building itself as a 'Demonstration Facility' to attract the public, potential developers and other stakeholders to visit the facility.

- **Showcasing and Demonstration of Efficient Appliances:** REEC plans to showcase and demonstrate selected home appliances, equipment, facilities, etc. Public-private partnership and involvement of national and international organizations are being considered.
- **Awareness and Education:** Creating awareness on energy efficiency of home appliances among housewives, college students and school children is one of the important activities of the Centre. For implementing this activity, involvement of consumer forums, residents' welfare and housewives' associations, schools and colleges, chambers of commerce and industry, existing renewable energy clubs, NGOs and institutions working on renewable energy activities of WBREDA and Panchayat-Municipality network would be utilized to spread awareness in the State.
- **Enhancement of Efficiency Standards of Appliances produced by SMEs:** SMEs are major suppliers of several home appliances such as ceiling fans, water pumps, kitchen mixers, etc., which are inherently not designed based on energy efficiency principles. Buyers are also not aware of the energy consumption levels of electrical appliances produced by local SMEs. A suitable program will be conceived to facilitate and guide SMEs to adopt newer techniques and manufacturing practices to raise energy efficiency of their products.
- **Procurement of energy efficient appliances in public institutions and Government owned residential complexes and apartments, guest houses:** This activity would be undertaken to promote the replacement of energy inefficient appliances and enhance the procurement of BEE star labeled domestic appliances. In this context, REEC plans to approach the concerned State Government departments and agencies to promote efficient procurement through policy initiatives, advocacy and interventions.

ACCOMPLISHMENTS OF REEC¹

- Land for constructing REEC building has been identified at Energy Education Park, Kolkata
- 'Foundation Stone Laying' for REEC building was undertaken on 14 December 2009 on the National Energy Conservation Day
- The building plan for REEC building has been submitted to Kolkata Municipal Corporation

¹ as on August 2010

- Simulation based energy analysis of planned REEC building is being carried out under ECO-III Project to optimize energy efficiency while maximizing thermal comfort
- REEC Steering Committee has been constituted to review the progress of REEC
- Seven training programs for technical students on home appliances have been organized
- Since February 2010, awareness programs (28 no.) on energy efficiency in home appliances for government officials, NGOs, academic institutions, housewives associations, etc., have been conducted in Kolkata, Paragnas, Hooghly, Burdwan, Bankura, Birbhum, Murshidabad, Jalpaiguri, Malda and Darjeeling districts
- Training on Renewable Energy and Energy Efficiency for Karmadhakshya, Vidyut of all 323 blocks of West Bengal has been undertaken at State Institute for Panchayat and Rural Development
- Awareness material in the form of energy efficiency guides on home appliances such as refrigerators, air conditioners, ceiling fans, etc. have been developed with support from ECO-III Project
- In association with West Bengal State Electricity Distribution Company Limited and Manoranjan Roy Energy Education Centre, WBREDA published a book (in Bengali language) on 'Procurement and Maintenance Practices of Home Appliances'. 50,000 copies of the book were printed and distributed at Kolkata International Book Fair. Nearly 2 lakh people with large number of students and youth visited WBREDA Stall
- With support from ECO-III Project, a State-level Base Line Study for home appliances is being currently undertaken to establish the current scenario of home appliances and develop focus areas and long term (3-5 years) strategy of REEC

FOR ANY SUGGESTIONS AND INFORMATION, PLEASE CONTACT:



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This Brochure is made possible by the support of the American People through United States Agency for International Development (USAID) under the terms of Award No. 386C-00-06-00153-00. The contents of the Brochure are the sole responsibility of International Resources Group and West Bengal Renewable Energy Development Agency, and do not necessarily reflect the views of USAID or the United States Government.