

Proceedings of Workshop on “Energy Efficiency Financing - Pioneering new markets”

Energy Management Centre (EMC), Thiruvananthapuram, Kerala

Date: 22nd August, 2017

Venue: EMC Auditorium



Introduction

A workshop on “Energy Efficiency Financing – Pioneering New Markets” was organized at Energy Management Centre (EMC), Kerala as a joint event by Bureau of Energy Efficiency (BEE) and EMC, Kerala on 22nd August, 2017. It was a one day workshop that comprised of and Inaugural session followed by two Technical Sessions. The technical sessions comprised of presentations from BEE, SIDBI, IFC, ESCOs, Designated Consumer and KfW. Open house discussions were also a part of each technical session. The workshop was attended by officials from banks, financial institutions, ESCOs, auditors, designated consumers, municipalities and other stake holders.

The workshop created awareness among the stakeholders on EE financing and also brought out the challenges that are being faced for the same by the ESCOs, financial institutions and Energy Efficiency (EE) project implementers. The discussions held in the workshop were fruitful as various recommendations were given by the stakeholders to overcome the challenges being faced for EE financing.

Agenda

The agenda of the workshop is as follows:

	Activity	Speaker
09:30 – 10:00	Registration	
Inaugural Session		
	<i>Welcome & opening remarks</i>	Mr. K M Unnithan, Director, EMC
	<i>Keynote Address</i>	Shri Abhay Bakre, Director General, BEE
10:00 –	<i>Launch of Energy Audit Manual, Jointly prepared by EMC and NPC</i>	
10:30	<i>Special Address</i>	Dr. Winfried Damm, Director, GIZ
	<i>Address</i>	Smt. Rita Acharya, Senior Advisor, GIZ
	<i>Vote of Thanks</i>	Ms. Vineeta Kanwal, AEE, BEE
10:30 – 10:45	Tea Break	
Technical Session – I (Financial Institutions)- Chair: Dr. Winfried Damm, Director, IGEN		
	<i>Presentation 1: Financing Initiatives</i>	Ms. Vineeta Kanwal, AEE, BEE
10:45 –	<i>Presentation 2: Financing Initiatives</i>	Mr. K R Santhosh, Manager, SIDBI
13:00	<i>Presentation 3: Importance of capacity building of FIs on EE financing in India</i>	Mr. Ashutosh Tandon, Financial Sector Specialist ,IFC
	Open House Discussion	
13:00 – 14:00	Lunch	
Technical Session –II (ESCOs/Industries/SDAs/Municipalities)- Chair: Smt. Rita Acharya, Senior Adviser, GIZ		
14:00– 16:45	<i>Presentation 4: Growing potential for EE financing</i>	Mr. Stefan Hediger, Deputy Director KfW

	<i>in India</i>	
	<i>Presentation 5: ESCO model of financing- Challenges and Opportunities</i>	Mr. Pranay Tagare, Yantra Harvest
	<i>Presentation 6: ESCO model of financing- Challenges and Opportunities</i>	Mr. Naren Kumar, Senior Consultant and Advisor , AEEE
	<i>Presentation 7:: Challenges being faced by Industries for EE financing</i>	Mr. Kalyanasundaram AVP –Operations, Tamilnadu Petro products Limited (TPL)
	Open House Discussion	
16:45- 17:00	End of Workshop followed by High Tea	

Inaugural Session

Shri K M Unnithan, Director, EMC

- Shri Unnithan, welcomed the guest of honour Shri Abhay Bakre, Director General, Bureau of Energy Efficiency, officials from IGEN – Dr. Winfried Damm, Director-IGEN, Smt. Rita Acharya, Senior Advisor –IGEN, Smt. Vineeta Kanwal, Assistant Energy Economist-Bureau of Energy Efficiency, the speakers from various organizations and the audience.
- He talked about the issues of climate change and the need of energy efficiency along with its conservation to deal with the irreversible threats being posed by climate change. He mentioned that EMC has been working extensively for promotion and implementation of energy efficiency projects in the state of Kerala. The Department of Finance, Kerala had come up with a scheme for proving loans on EE projects with an interest rate of 6.5 percent however, no industries/project implementers came forward. There is a large amount of reluctance that has been seen in pumping out money for financing EE projects.
- Shri Unnithan indicated about the commitments made by India in the Paris Agreement and urged that financing of EE projects is necessary for their implementation at project site in order to meet the targets of reduction in energy consumption.



Shri Abhay Bakre, Director General, Bureau of Energy Efficiency

- Shri Bakre, congratulated EMC for coming out with a green campus with provisions of natural light and ventilation. He mentioned that there is a proposal for mandatory

labelling of LEDs from 1st January, 2018 and with all the facilities present in the EMC campus, a LED testing lab would be set up.

- He indicated that apart from setting standards and giving labels to equipment's/appliances for energy efficiency, there is also a need to implement energy efficiency projects in industries for which financing of such projects is imperative.
- The issues due to which the sector of energy efficiency project financing is not picking up despite the huge potential needs to be discussed. He mentioned that sector work needs to be done for generating the culture of EE financing and a common model for the same needs to be developed.
- He concluded by requesting all the financial institutions and other experts to deliberate on this sector so that EE project financing could be initiated.



Launch of “Energy Audit Manual”



The “Energy Audit Manual” that has been jointly prepared by EMC and National Productivity Council (NPC) was launched in the workshop.

Dr. Winfried Damm, Director, IGEN

- Dr. Damm, highlighted the importance of energy efficiency and its urgent need to cater to the irreversible impacts being posed by climate change.
- Ministry of Power and BEE have been working to promote the fourth component of NMEEE namely Framework for Energy Efficient Economic Development (FEEED) of which PRGFEE and VCFEE are a part.
- He mentioned that there is a huge amount of potential that exists in this area of EE financing however, a push is required to create a culture for EE financing. He suggested that a financial institutions identical to IREDA should be developed which could exclusively cater to financing of EE projects.



Smt. Rita Acharya, Senior Advisor, IGEN

- Smt. Acharya gave a brief overview about the workshop along with highlighting the roles and responsibilities of various stakeholders like ESCOs, financial institutions etc.
- She spelt out the two models of EE financing that are being currently used to provide loans. The need to arrive at one common model which could be useful for all the stakeholders was also indicated.

Smt. Vineeta Kanwal, Assistant Energy Economist, BEE

- A vote of thanks was delivered by Smt. Kanwal wherein she thanked EMC for conducting the workshop and thanked to all the speakers and participants for attending the workshop.

Technical Session –I

The first technical session consisted of three presentations and was chaired by Dr. Winfried Damm, Director, IGEN.

Presentation 1: Financing Initiatives – Smt. Vineeta Kanwal, AEE, BEE

- The presentation highlighted activities that are being carried out by BEE in the area of energy efficiency and the related impacts of these activities.
- The barriers to energy efficiency financing were discussed and an economic analysis for the state of Kerala was depicted along with representing the funds under climate finance.
- Energy Efficiency Financing Platform (EEFP) which is a component of NMEEE was discussed along with its achievements.
- The two components of Framework for Energy Efficient Economic Development (FEEED) namely PRGFEE and VCFEE were discussed in detail along with their important features.



Presentation 2: Financing Initiatives by Mr. K R Santhosh, Manager, SIDBI

- The presentation started with a mention of SIDBI's green financing coverage depicting the projects/areas under which they are providing finance.
- The ongoing developmental initiatives to increase investments/financing in energy efficiency were brought out.
- The projects financed by SIDBI under the various schemes that are run by them like PRSF etc. were highlighted.

Presentation 3: Importance of capacity building of FIs on EE financing in India Mr. Ashutosh Tandon, Financial Sector Specialist, IFC

- The strategic focus areas of IFC were brought out along with a graphical description of the growth in climate business that has been achieved by IFC.
- The notable projects of IFC in India were mentioned along with their impacts.
- The Eco Cities projects that is currently being run by IFC was presented with the objectives and activities that have been carried out till date under the project.
- The challenges being faced by the Financial Institutions and MSMEs in dealing with EE loans were indicated.

Open House Discussions:

The following are the issues raised by the participants in the workshop with solutions/answers given by the speakers.

1. There is a big potential for EE projects in India (as per various studies) but banks always state that there is low demand which leads to a mismatch. What is the dichotomy of the Financial Institutions regarding the same?
 - The dichotomy is that the Financial Institutions look for projects of larger ticket size as the project of smaller ticket size are not attractive according to them.
2. Can the replacement of incandescent bulbs by LEDs be financed under the PRSF scheme of SIDBI?
 - Yes, financial help could be provided for the same.
3. Can SIDBI lend loans to large industries under the PRSF scheme?
 - SIDBI cannot lend directly to large industries, but if any ESCO (which is falling under category of MSME) wanted to take loan for implementing EE projects in large industries then it may be financed by SIDBI and can also be guaranteed under PRSF.
4. Is there any special assistance that could be provided by BEE for financing roof top solar projects in Airports?
 - Regarding the financing of roof top solar projects, IREDA/KfW has to be contacted.

Suggestions:

1. There should be a separate bank/Financial Institutions/entity like IREDA for direct financing of energy efficiency projects.
2. There could be a monitoring software for energy efficiency projects that could be developed as it would help in building the confidence of Financial Institutions and project implementers.

Technical Session-II

The second technical session consisted of presentations from the ESCOs, KfW and an industry. The session was chaired by Smt. Rita Acharya, Senior Advisor, IGEN. The following presentations were delivered in the session:

Presentation 4: Growing potential for EE financing in India by Mr. Stefan Hediger, Deputy Director, KfW

- The presentation started with the mission and objectives of the organization.
- The advantages of an ESCO model of financing were shared along with the methodology that is adopted by the organization while implementation of EE project at site.

- The presentation depicted some of the project sites where EE projects have been implemented through ESCO model and are running successfully.
- The challenges being faced by the organization for getting projects under ESCO model of financing were highlighted. The presentation also mentioned the opportunities that are present in this model.

Presentation 5: IndiaESCO model of financing – Challenges and Opportunities by Mr. Pranay Tagare, Yantra Harvest

- The presentation started with mentioning that ESCO mode of financing is among the top three challenges of the India ESCO market which has been concluded from the survey done by AEEE.
- The challenges for financing EE projects from the financial institutions and ESCOs perspective were mentioned along with a mention of the best suited instruments for the Indian market.
- The ESCO financing routes were talked about along with a way forward on the same by mentioning about the opportunities present in this sector.

Presentation 6: ESCO model of financing – Challenges and Opportunities by Mr. Narendra Kumar, AEEE

- The presentation started with a background of activities that have been carried out by KfW for promotion of environmental and climate protection.
- The different models in which the support has been provided by KfW for achieving the goals of EE improvements and GHG reduction were depicted.
- The quality management system that is followed by KfW in energy efficient construction and refurbishment of buildings was explained.
- Information about the EE homes programme was disseminated.



Presentation 7: Challenges being faced by Industries for EE financing by Mr. Kalayansundaram, AVP – Operations, Tamil Nadu Petroproducts Limited (TPL)

- The presentation started with an introduction to the companies profile followed by the products being manufactured at the plant.
- The block diagram of the entire process of manufacture of various products was depicted.
- A slide depicting the furnace oil price and energy scenario was presented.
- The presentation ended with a proposals of energy saving that are being planned to be carried out in the plant.

Open House Discussions:

The following are the issues raised by the participants in the workshop with solutions/answers given by the speakers.

1. What is the average cost of audit charged by Yantra Harvest?
 - Yantra Harvest that works on ESCO model of financing does not charge for preliminary energy audit.
2. Does Yantra Harvest carry out process audit in industries?
 - Yantra Harvest does not carry out process audit. The audit carried out by them is only relating to the performance study of the equipment.
3. Is there any ESCO model or FI model of financing available for financing grid connected solar power plants with net metering facility?
 - KfW /IREDA is supporting roof top solar projects and could be contacted for the same.
4. An LED replacement programme was carried out in an organization, however it is found that many LEDs have defect. Is there any ESCO that could help for the same?
 - While going for a LED replacement programme, the quality of the LED should be considered as there are large number of manufacturers of LED in the market. However, for the present situation, Yantra Harvest could provide help as they are into LED business.
5. How to secure the payment mechanism for ESCOs in India? Due to this problem of no safety of ESCOs investment in host entities neither ESCOs nor banks are comfortable with EE project implementation/ EE financing.
 - SDA Kerala had suggested that certain policy/guidelines can be developed by BEE that adjudication process being followed by SDA under PAT scheme may be applied on ESCOs related to incentives too.

Concluding remarks:

Director General, BEE in his concluding remarks urged the FIs to put a thrust to financing of energy efficiency projects for pioneering new markets in energy efficiency. It was also indicated that BEE shall modify the existing structure for ESCO market to boost up this business and provide solution to challenges faced by the ESCOs.