

**Report on the Conference on
“Energy Efficiency and Conservation” held on 11th February, 2010**

The Bangalore Chamber of Industry and Commerce (BCIC), under the aegis of the Energy Expert Committee organized a Conference on “**Energy Efficiency and Conservation**” on Thursday, 11th February, 2010.

Inaugural Session

Mr. Shekar Viswanathan, Vice President, BCIC welcomed the gathering and congratulated the Chairman of the Conference, Mr. S. Chandrasekhar, Past President, BCIC for orchestrating this Conference. He then requested Mr. S. Chandrasekhar to deliver the objectives of the Seminar.

In his address, Mr. S. Chandrasekhar said that the International Energy Agency 2007 in its energy efficiency policy recommendations to the G8 2000 Summit laid great stress to adopt a series of 122 energy efficiency measures which included higher efficiency in appliances and equipments, lighting technology, lesser energy intensity in industry and a host of energy efficiency measures across sectors including transportation, buildings etc.

He said that the Government of India also has come out with the National Action Plan on Climate change. The action plan decided to set up 8 national missions to achieve the non-binding emission levels in the year to come. One of the key agenda is to set up a ‘**National Mission for Enhanced Energy Efficiency**’. He congratulated the Bureau of Energy Efficiency (BEE) for undertaking several radical and innovative measures to impart education to the industry and the general public on the importance of the energy efficiency and conservation. He also lauded the efforts of BESCO for bringing out Smart Grid Programmes and also for initiating several user-friendly measures through its nodal agency, KREDL.

Outlining the importance of organizing the Conference, Mr. Chandrasekhar said that the main objective was to disseminate knowledge on energy efficiency from polity to best practices and we have invited very Senior Officials including the Chief of BEE, Dr. Ajay Mathur, and also Senior Executives from both the Public and Private Sectors who will be sharing their knowledge on best practices in various aspects of Industrial and City Energy usage.

Delivering his Keynote Address, Dr. Ajay Mathur, Director General, BEE, emphasized the use of renewable energy and clean development mechanisms which is the need of the hour to overcome and easing the looming climate crisis. He broadly outlined three major hurdles in the area of energy conservation in India viz., (i) lack of information on the amount of energy used (ii) high cost of clean mechanisms and renewable energy technologies and (iii) reluctance to rely on new technology. Dr. Mathur said that the BEE has undertaken Perform Achieve and Trade (PAT) initiative which is a market-based mechanism to enhance the cost effectiveness of improvements in efficiency in energy-intensive large industries and facilities, through certification of energy savings that could be traded. He also said that BEE is coming out with guidelines for fixing mandatory target for achieving energy policy in a phased manner. He said that his Institution is bringing out an energy policy Building code which is applicable to all sectors of industry in general and more particularly to Cement/Fertilizers and Steel industry to tap energy efficiency plant in order to keep the environment clean. He particularly dwelt on the National Mission on Enhanced Energy Efficiency which will be made applicable to educate consumers and come under the Energy Policy Act.

Accordingly, this Mission will cover around 714 industrial plants so that conservation measures can be adopted. Energy conserved in these plants will be monitored over time to reduce their energy consumption and also they will be awarded with Certificates for their efficiency. The criteria will be more percentage of reduction for larger and non-efficiency plants and lesser percentage for energy efficiency plants. Any excess saving beyond the targets will be given to the concerned company along with Energy Saving Certificate which could be traded in the Free Power Exchanges. These policy guidelines will be made available by December and the scheme will be implemented by 1st April, 2011, Dr. Mathur added.

Mr. Tushar Girinath, Managing Director, BSECOM in his inaugural address said that BSECOM is undertaking regular steps to ensure that energy is conserved and several awareness campaigns are being carried out to help energy conservation in and around Bangalore city. He said that as per the recent survey conducted by BSECOM more than 79% of domestic power users are aware of measures to reduce consumption of energy. He said that the State of Karnataka is poised to implement the Smart Grid Project and will be sending its proposals to the Central Government for its approval under the '**Acceleration Power Development and Reform Programme**'. He urged the Centre to sensitize the implementing agencies and its staff through effective training to achieve the goal of energy conservation. With regard to T & D losses, Mr. Girinath said that BSECOM has shown considerable improvement in T & D losses and during the current year, the T&D losses has been at 15.5% as against 16% last year. Various initiatives have been taken to control pilferage of electricity and more than Rs.102 crores have been collected through fines from industry. He said apart from industries, the agricultural sector, which draws over 35 per cent of the power supply in Karnataka, must be brought under a conservation umbrella.

Mr. Kishore Alva, Chairman, Energy Expert Committee proposed a hearty Vote of thanks at the Inaugural session.

Technical Sessions

Following the Inaugural session, there were two Technical Sessions. The First Session was Chaired by Mr. B.G. Rudrappa, Former Chairman, KEB. In his opening remarks, Mr. Rudrappa said that the lifestyle of many Bangaloreans is leading to increased power consumption. He reiterated that Energy Efficiency is a must and both Government and Industry should focus on metering consumption by irrigation pump sets, replacement of incandescent bulbs with compacted fluorescent lamps and effective mechanisms to check distribution losses, which in Karnataka alone are estimated at about 20 per cent. Following his opening remarks, there were Presentations from the following:

Speaker

Topics

Dr. H. Naganagouda
Asst. General Manager, KREDL

Karnataka Renewable Energy Policy,
Renewable Energy and Energy Conservation for
sustainable Development

Mr. Mukund Bapat
Director-Operations
Schneider Electric Conzerv
India Pvt Ltd

Energy Efficiency and overview

Mr. G.R. Narsimha Rao
Fellow and Area Convenor
Industrial Energy Group, TERI

Energy Audits and Implementation
Methodologies

Mr. B.N. Sathyaprema Kumar
General Manager-HRD
BESCOM

Energy Efficiency measures undertaken in
BESCOM

The Technical session I concluded with Q & A.

Technical Session II was Chaired by Dr. S.L. Rao, Board Member, Institute for Social & Economic Change. In his opening remarks, Dr. Rao briefly mentioned on the current energy scenario and also the various avenues of power available to the industry and people. He particularly advocated for private distribution of Electricity in order to reduce T & D losses.

Following his opening remarks, there were Presentations from the following:

Speaker

Topics

Mr. G.K. Ramakrishnan
Senior Manager & Sales Head
Southern India, Tata BP Solar

Solar Energy – Best Alternative

Mr. Kasturi Rangan
Customer Engineering Head
Wipro EcoEnergy

Clean Technology Solutions

Following the Technical Presentations, Dr. Rao invited the industry representatives from the following organizations to share their experiences on Energy Efficiency and Conservation by Innovative Methods:

- (1) Bosch Limited 2) Toyota Kirloskar Motor Pvt Ltd. 3) L & T Komatsu Ltd. (4) Infosys Technologies Ltd 5) Lanco Power (6) Kennametal India Ltd

The technical session II concluded with Q & A.

Valedictory Session

In his welcome address, Mr. Shekar Viswanathan, Vice President, BCIC expressed his profused thanks and gratitude to the Hon'ble Chief Minister for making it to the Valedictory Session despite his pressing engagements.

Mr. P. Panduranga Rao CEO, Udupi Power Corporation Ltd. (Lanco Power) highlighted on the various projects undertaken by Lanco Power in the State to ease out the power situation and he said that the company is investing Rs.600 crore more to enhance the capacity of its thermal power project from the present 1,1015 Mw to 1,200Mw and the construction of Plant has been completed and it will start production by March-end. With the enhancement of the projected capacity of 1,200 Mw, Karnataka will get 1,080Mw, he said.

Before delivering his Valedictory Address, the Chief Minister, Mr. Yeddyurappa handed over awards to seven companies for adopting energy efficient measures. They are: Infosys Technologies, Bescom, Kennametal India Ltd, Bosch Ltd, Toyota Kirloskar India Ltd and Udupi Power Corporation Ltd.

He congratulated BCIC, Government of Karnataka and KREDL for organizing this important conference. He said the State was facing power shortage as the demand for power was growing at a rate of 20 per cent a year owing to rapid urbanization, economic growth and modernization of agricultural practices. He said that the State Government would add around 1200 Mw of power to its grid from various ongoing projects within the present financial year. Already, 1252 Mw of power had been added to the State grid in the last 19 months. He said that the Government would recognize the important role of Independent Power Producers (IPPs) in mitigating the power crisis. He also mentioned that his Government is open to the idea of having public-private-partnership model in power generation

The State Government is drawing up an ambitious plan for setting up 4 Gas based Power plants with a capacity of 2000 MW each in 4 different districts of the State under PPP model. He said that his Government had taken up initiatives to add about 5,000 MW of power through various projects in the 11th Five Year Plan to fight power shortages and listed out new projects which have been commenced or in the pipeline.

In his concluding remarks, Mr. S. Chandrasekhar, Chairman of the Conference, said that today's Conference had a clear message to the participants, that **'Energy saved is energy produced'**. He said that it is the primary duty of all concerned to adapt to energy saving measures without any further delay.

The Conference concluded with vote of thanks by Mr. Kishore Alva, Chairman, Energy Expert Committee, BCIC.
