

Training Program

Japanese low carbon technologies and best operating practices

Date & Time: October 15, 2018, 10:00-16:30
Venue: TERI Southern Regional Centre, 4th Main, 2nd Cross,
Domlur II Stage, Bangalore, Karnataka
Organiser: Institute for Global Environmental Strategies (IGES) and
The Energy and Resources Institute (TERI)

Institute for Global Environmental Strategies (IGES) and The Energy and Resources Institute (TERI) in India co-organized a training of trainers program titled “Japanese low carbon technologies and best operating practices of compressed air system” on October 15, 2018 in Bangalore, Karnataka, India. It was held as part of the activities under the Japan-India Technology Matchmaking Platform (JITMAP), an initiative jointly implemented by IGES and TERI for promotion of low carbon technologies in India with support from the Ministry of the Environment, Japan. Key objective of this training was to share basic knowledge and best operation practices of compressed air systems with energy managers and auditors to improve their management and auditing skills. A total of about 50 participants from TERI, energy auditing firms and private companies in Bangalore attended the training.

At the opening session, Mr. Girish Sethi from TERI explained the aim of the training which is to support more energy saving of Indian industries through promoting application of available low carbon technologies provided by Japanese companies in India. Subsequently, Mr. Toshizo Maeda from IGES supplemented it by introducing the long-term partnership between IGES and TERI for sustaining such activities.

In the technical session, Mr. Tsukasa Saito, a compressed air system expert from Japan, explained from the basics of the system to the efficient operation and management methods including checking points for walk-through survey, calculation of economic loss by air leakage, appropriate piping system, ways to analyze audited air flow data, energy saving effect of inverter compressor, appropriate combined usage of old and new compressors, and lifecycle cost of air compressors, among others.

The technical session was very interactive with many questions posed by the participants. The Q&A session moderated by Dr. G R Narasimha Rao from TERI also received many practical questions based on participants’ actual issues, such as how to identify air leakage, how to design the piping size and air velocity, and appropriate piping length and necessity to install inter-mediate pressure tanks or not. In response to these points, Mr. Saito provided his preliminary assessment and suggested possible options for improvement.

At the wrap-up session, Mr. Sethi explained that TERI and IGES supports low-carbon technology transfer through this kind of training program as well as through arrangements of feasibility studies at selected factories, business matchmaking between technology suppliers and potential recipients, and online knowledge sharing under JITMAP. Mr. Maeda appreciated the participants' active participation and admired their extensive knowledge on the compressed air system that made the training meaningful.

As a result of the training, more than 90% of the participants answered in the post-training questionnaire survey that their knowledge of the compressed air system improved and they would use it for their energy auditing and energy management.

Following the training, Mr. Saito visited two companies in Bangalore with energy auditors of TERI to study how the compressed air systems are set up and managed in actual situations. Through this survey, he has identified some areas for improvement and summarized it in the feasibility study reports which were shared with the companies afterwards for their consideration.



Mr. Saito, an expert of compressed air system, lectured to the participants



Participants of the training



Opening session of the training



Participants of the training



Feasibility study of a textile company in Bangalore



Feasibility study of a chemical company in Bangalore

In this way, IGES not only organizes a training program but also learns the on-site situation for improving the training contents. Through this, IGES also contributes in improving energy management of selected companies and provides an on-site training opportunity for TERI staff.