

Initiatives and issues related to the transfer of Japanese environmental technologies in India through the Japan-India Technology Matchmaking Platform (JITMAP)

13 January 2023 | New Delhi

IGES and TERI jointly organized a seminar on initiatives and issues related to the transfer of Japanese environmental technologies in India through the Japan-India Technology Matchmaking Platform (JITMAP) on Day 2 of the India-Japan Environment Week held on 12-13 January 2023 in New Delhi.

The objective of this seminar was to introduce the outline and outcomes of activities to promote Japanese environmental technologies to Indian government agencies, experts such as energy auditors, and business people, etc. through JITMAP in order to raise awareness of JITMAP and to promote understanding of the benefits of introducing the technology, including its superior performance and advantages in life-cycle cost. In addition, business people and other stakeholders from Japan and India were invited to share information about specific barriers and challenges to the introduction of Japanese environmental technologies and specific solutions to them, including cooperation between the governments of Japan and India.

At the outset of the session, in his welcome remarks Dr. Satoshi Kojima, Programme Director, Kansai Research Centre, Institute for Global Environmental Strategies, appraised the participants about the background of the JITMAP platform and focus of the discussion covering details of the platform, experience, and challenges faced during implementation of JITMAP activities including solution.

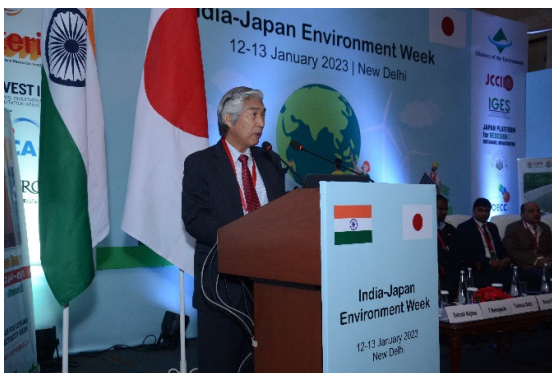


In special remarks, Mr. Yasuo Takahashi, Executive Director, IGES, appreciated and acknowledged the support extended by all host organizations in making the program successful and funding institutions in promoting Japanese environment-friendly low-carbon technologies in India. He also mentioned that since its inception in 2016, with financial support from the ministry of environment and forest of Japan (MOEJ) and cooperation of the Indian Ministry of Environment, Forest and Climate Change (MOEFCC), the activities of JITMAP platform helped some of the Indian MSMEs to reduce GHG emission from their process. These fruitful results are beneficial for both governments of Japan and India towards their country's commitment.

The technical session under Seminar was on “Overview, Accomplishments, and Challenges of JITMAP,” which was moderated by Mr. Girish Sethi, Senior Director, Energy Program, TERI. Mr. Sethi, in his remarks, thanked IGES for providing opportunities to associate with JITMAP activities and

expressed willingness to continue the ongoing association and support promotion of the JITMAP platform with Japanese low-carbon technologies among Indian MSMEs.

Mr. Toshinori Hamaguchi, Programme Manager, Kansai Research Centre, IGES, presented “Report on JITMAP Activities (General).” JITMAP was launched in 2016, with the support of the Ministry of Environment of Japan, for the transfer and diffusion of low-carbon technologies in India. He highlighted the activities conducted under JITMAP between FY 2016-22 and cited achievements of these activities



Mr. Tsukasa Saito, IGES Fellow and former employee of Hitachi Industrial Equipment Systems, presented “Report on JITMAP Activities on Compressed Air System.” Mr. Saito mentioned that the compressed air system and distribution network incurs significant energy consumption in the industrial process but are generally not given proper attention to optimizing system performance. He appraised the participants about the share of energy consumption by

compressed air system, which is around 20–25% of total energy consumed by industry and provides good opportunities to reduce both energy consumption and GHG emission.

Mr. Dinesh Raskar, Trinity Engineers Pvt. Ltd shared their experiences while presenting “Introduction of Energy Efficiency Improvement through JITMAP Activities.” Mr. Raskar thanked the organizers for inviting their company representative to present case studies covering JITMAP activities in their factory premises, which is a Pune-based forging industry engaged in manufacturing products for both automotive and non-automotive applications. The realisation of the proposed saving has also motivated management to work out a future implementation plan for the remaining energy-saving proposals, such as a dedicated air distribution piping network to each shop separately with loop and pressure regulation from the main air compressor to avoid air leakages.



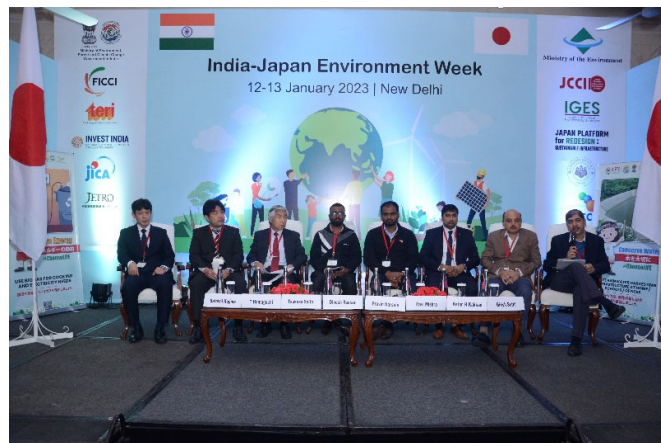


Mr. Ravi Mishra, TLV PTE LTD., India Liaison Office, presented “Report on JITMAP Activities on Steam Management System” to share the benefits of a better steam management system under the JITMAP initiative in India. Providing an overview of his organization, Mr. Mishra spoke about the objective, framework, and activities to improve steam systems. He mentioned that improving process efficiency, avoiding unwanted shutdowns, and conserving

energy as well as water are a few key benefits of a better steam system.

In the panel discussion on “Issue for Introduction of Japanese Environmental Technologies and Their Solutions,” the following panelists shared their views:

- i. Mr. Ketan H Kakkad, Senior Consultant, Gujarat Industrial and Technical Consultancy Organisation Limited (GITCO)
- ii. Mr. Tsukasa Saito, IGES Fellow
- iii. Mr. Dinesh Raskar, Trinity Engineers Pvt Ltd
- iv. Mr. Ravi Mishra, TLV PTE Ltd, India Liaison Office



The key points are summarised below:

- Mr. Kakkad, while answering the scaling up of JITMAP activities, expressed his concern about inconsistent initiatives and suggested more initiatives at regular intervals focusing on industry sectors or cluster-specific intervention to disseminate established results from earlier interventions using working experiences and lessons learnt in other clusters with similar industries. He further mentioned that the results of Pune forging industries could be replicated either in Rajkot or Chennai forging cluster. Similarly, learnings from the textile cluster may be transferred to other textile clusters in India. He also suggested to explore more Japanese LCT be evaluated through a feasibility study to provide a basket of LCT options for Indian industries.
- Mr. Saito, while answering his views on promoting energy efficiency in the compressed air system of Indian MSMEs, said the adoption of customized inverter type energy efficient compressors considering life cycle cost instead of capital investment is the only option. Further, he suggested improvement in skill set through training or refresher courses would have added advantages.

- While answering the approach to sustain established results and disseminate the same to similar beneficiaries, Mr. Raskar suggested
 - A regular energy audit may be quarterly is essential
 - Monitoring and controlling of energy consumption through IOT based system
 - Awareness among shop floor personnel on BOP
 - The pneumatic grinder may be replaced with electrical grinder to reduce compressed air demand resulting in lower energy consumption in the compressed air system.

- Mr. Mishra, while answering to promote energy-efficient steam management system, said regulation related to low-cost procurement (L1) in public institutions might be revised suitably considering the life cycle cost and quality of the product to accommodate price sensitivity of the Indian market.

Dr. Satoshi Kojima closed the session by thanking all speakers, panelists, organizers, and participants for their active participation in the discussion and for sharing views on JITMAP activities, achievements, and proposed future follow for promoting Japanese LCT among Indian MSMEs. He assured that the proposed suggestion would be considered to address the highlighted challenges and plan subsequent activities accordingly for broader dissemination of LCT and sustainability of the JITMAP platform.