

Promoting India-Japan collaboration on environment technologies

14 February 2023 | Pune

IGES and TERI, jointly with Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA), organised a workshop on promoting India-Japan collaboration on environment technologies under the Japan-India Technology Matchmaking Platform (JITMAP) on 14 February, 2023 in Pune. The objective of the event was to understand the main barriers/challenges to solving the air pollution problems in Maharashtra and discuss remedial measures.

About 60 participants attended the workshop, which was organised in hybrid mode. Participants included representatives from government bodies, industrial units, academic institutions, equipment suppliers and energy consultants. Mr. Girish Sethi, Senior Director, Energy Program, The Energy and Resources Institute (TERI) in his opening remarks thanked to MCCIA for their support in organising the workshop and welcomed to all the participants from industry. MCCIA has been a partner of TERI in Maharashtra. JITMAP is a facilitating mechanism organising workshops, feasibility studies and so on. It is supported by MoEJ. Japan is a leader in energy field. There are many areas of cooperation between the two countries in energy and environment.

Mr. Sudhanwa Kopardekar, Director, Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) in his special remarks underlined the importance of sustainable practices. MCCIA's activities to support industry and entrepreneurship development in the state of Maharashtra. MCCIA is doing many activities for the benefit of MSMEs. He encouraged IGES and TERI to participate in collaborative activities in the state.



Mr. Yasuo Takahashi, Executive Director, Institute for Global Environmental Strategies (IGES) in his special remarks appreciated the efforts of MCCIA and TERI and thanked MOEJ for their support. IGES and TERI has been working for over 10 years. JITMAP was started in 2016. In 2021, the project has expanded to environmental technologies. In 2020-21, two awareness workshops were organised on environmental areas. He wished the seminar all success.

Dr. Satoshi Kojima, Programme Director, Kansai Research Centre, IGES made a background presentation on JITMAP activities, achievements, and challenges. A total of 17 seminars and 56 feasibility studies have been conducted. The focus states have been Maharashtra, Gujarat and Andhra Pradesh. He gave examples of few specific activities conducted under JITMAP and elaborated lessons learned and way forward. Originally JITMAP focused on energy efficiency but later expand to environmental technologies. Presently the focus is on situational analysis and needs assessment on National Clean Air Program in India.

Mr. Takeshi Kobayashi, Chairman, Overseas Committee, Japan Environmental Technology Association (JETA) made a presentation outline of JETA and their activities. Monitoring of wastewater and has. Japanese monitoring technology cooperation with other counties like China. Japan and China have been cooperating on environmental field for past 10 years. He outlined the benefits of strengthen cooperation between Japan and India on environmental technology field. They would like to understand the present challenges and barriers in India and what kind of support that can be provided by Japan.



Mr. Kunal Soni, Deputy Segment Head – P&E, Horiba India introduced Horiba and their technologies. The products cover automotive, process and environment, medical semiconductor and scientific. It is present in 27 countries. Technical centre in Pune. Horiba provides monitoring devices for combustion stack gas monitor, process gas analyser, ambient air and water quality monitoring. Accurate monitoring is important to take corrective action. He explained how different metals in the air can be measured.

Round table discussion: What kind of support and cooperation should India, Japan and JITMAP provide to resolve the environment issues faced by Maharashtra.

Dr. Satoshi Kojima, Programme Director, Kansai Research Centre, IGES, mentioned the objectives of the panel discussion was to understand the issues and challenges to solving the air pollution problems in Maharashtra.



Mr. Nitin Shinde, SRO, Maharashtra Pollution Control Board (MPCB), Pune mentioned the activities of MPCB. That board ensures that laws made by CPCB is enforced in the state. They do ambient air monitoring continuously of the city. Six cities from Maharashtra are covered for ambient air monitoring. The emission index is calculated. The water and air discharged by industries have to be monitored. The focus is on recycling of water and water conservation. Also change over to cleaner fuels (from FO to NG) is encouraged. Most industries have switched over to cleaner fuel. The industries are encouraged to adopt rainwater harvesting. MPCB is also focusing on building and construction product and sewage treatment. Chemical and metallic hazardous waste from automobile industry is collected and treated centrally. Pune municipal corporation is setting-up new STPs with loan from JICA. Environment is a combined responsibility and hence a cooperative effort is required. MPCB sought help from Japan in technologies related to ambient air monitoring. Mr. Shridhar Yewalekar, Pune Municipal Corporation, Pune highlighted the activities Pune city is doing to control air pollution. He mentioned that there is a good scope to collaborate with Japan on environmental issues and the municipal corporation welcomes the JITMAP initiative.

Mr. Bal Krishan Saini, Director – Operations, Emcure Pharmaceuticals Ltd has achieved about Rs 6 million in power in compressed air. Have achieved zero discharge and recycling water. Emcure is keen to reduce the plastic waste. However the maintenance of new technology could be a problem.

Mr. A V Ghugari, Director, Trinity Engineers has changed all air-cooled compressors to water-cooled machines. There is more focus on reducing the compressed air leakages. The cost of natural gas has increased to Rs 60-65 per standard cubic metre recently. Hence the company is interested in solar system



Mr. Susanta Kumar Pradhan, Plant Head, Maass Flange India was using diesel air compressor. After IGES study they switched over to screw compressed. Also improved the compressed air pipeline and reduced air leakage. They are interested in improving the forging technology and also gain from environmental technologies.



Mr. Chetankumar Sangole, Head - Sustainability, MCCA, Pune has shared his experience of working with Japanese experts under JITMAP. He felt that feasibility studies conducted under the project has led to huge energy savings. Also, the technical capability of the Indian partners has increased due to the technical exchange. Organizing a greater number of capability building programs would be helpful.

Mr. M A Bawase, General Manager, ARAI, Pune mentioned that vehicular pollution is a major concern. The number of vehicles on the road in India would increase. The regulatory framework in India has been strengthened. There are many factors that affect vehicular pollution including quality of fuels, technology, driving habits, road conditions and so on. Now the focus on biofuel blended petrol and adoption of electric vehicles in India.

Mr. S H Arjunwadkar, Chairman, National Centre for Technical Services, The Institute of Indian Foundrymen (IIF), welcome the technology from Japan and expressed his interest to cooperate with Japanese's expert.

Mr. P Nagarkar, XL Consultants mentioned that disposal of compressor oil is becoming a problem. He explained other issues related to compressed air system operation.

Mr. Takeshi Kobayashi, Chairman, Overseas Committee, JETA shared his experience how Japan side has been able to overcome similar challenges. Quick understanding of the situation and proper action plan is very important. Exchange of information is very important.

Mr. Madhav Jagtap, Dy. Commissioner (Encroachment and Environment) Pune Municipal Corporation, Pune mentioned the local government project being implemented by support from JICA.

Discussions:

There is very good scope to cooperate with mid-size cities in Maharashtra in implementing environmental improvement.

Industries face issues to treatment of water. However, operating cost of some of zero discharge technology for MSMEs and industry is a major challenge.

More testing laboratories locally would be helpful for scaling up new building materials.

Many concrete suggestions on how to promote technology cooperation between India and Japan.

Thanks for your active cooperation.

Vote of Thanks

Mr. Prem Gajpal, Director Operations, Advik Hi-Tech Pvt. Ltd, Pune delivered the vote of thanks. He has personally learned a lot from Japan on concepts like 5S, TPM and so on. He thanked all the speakers. Everyone emphasized the importance of cost-effective technology solutions.

Mr Girish Sethi also thanked the IGES colleagues and Japanese speakers for their support in organising the event.