Promoting cleaner Technologies in SMEs: WSDS side event

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As a side event during the World Sustainable Development Summit (WSDS) organized by TERI in February 2019, IGES–TERI conducted a discussion on 'Promoting Cleaner Technologies in SMEs'. Besides IGES and TERI, the participants included representatives from Bureau of Energy Efficiency (BEE) and Ministry of MSME (MoMSME), Government of India; Embassy of Japan in India; JICA; State Designated Agencies like GEDA and MEDA; SIDBI; industries associations; technology/equipment manufacturers; and other stakeholders. Key points from the presentations and discussions are summarized below.

Mr Girish Sethi, Senior Director, TERI.

- The focus of JITMAP will continue to be on the highly industrialized states of Gujarat and Maharashtra, as reflected in the presence of GEDA and MEDA at the meeting.
- The aim is to expand JITMAP's reach and activities to bring in more stakeholders in Japan and India, and to cover other states/regions of the country.

Prof. Kazuhiko Takeuchi, President, IGES

- Japan has increased its overall energy efficiency (EE) by around 40% since the oil crisis (early 1980s), through a mix of enabling policies such as Energy Conservation Act; mandatory measures like standards, benchmarks, etc.; and incentives for EE covering different sectors of the economy
- Japan– India collaboration in low carbon technologies (LCTs) started with the SATREPS program, and saw the successful development and application of a B2B model for transfer of LCTs from Japan to India through synergies with organizations like GEDA, MEDA and GITCO. Under JITMAP, the network of stakeholders is expanding to include organizations and institutions like Ministry of MSME, SIDBI, the Embassy of Japan in India, and more industries and industry associations in India and Japan.
- It is hoped that this Japan–India collaboration in LCTs can be given further impetus through a multi-year program with the support of JST, JICA and others.

Mr Sudhir Garg, Joint Secretary, MoMSME

- Knowledge spreads among MSMEs in India through a 'wait and watch' approach. This approach must be taken into account while planning initiatives aimed at promoting and scaling up EE technologies in the MSME sector.
- Even when payback periods on EE technologies are attractive, their replication is often slow because of the concern, among MSMEs, that the new/innovative technology might adversely affect product quality.

- Among its initiatives for promoting EE in the MSME sector, MoMSME is focusing on lean manufacturing (LM) and knowledge sharing.
- Under a pilot initiative in Aurangabad aimed at strengthening linkages between academia and local MSMEs, MoMSME has supported over 600 students in conducting 200 projects among local industrial units. A number of success stories have resulted, and this initiative is now being extended to other parts of Maharashtra.

Dr Rabhi Abdessalem, Principle Programme Manager, IGES & Mr Prosanto Pal, Senior Fellow, TERI

- Made joint presentation on 'Promoting LCTs among SMEs in India'. Outlined the continuous engagement of IGES and TERI, along with a growing network of Japanese and Indian partners, in successfully promoting LCTs among Indian end-user industries, and underlined the trust this has generated among stakeholders in both countries.
- Emphasized the importance of skilling plant personnel in best operating practices through TOT programs, in order to ensure the successful deployment of LCTs. Also stressed bridging gaps in information and knowledge on LCTs among Indian SMEs, citing as example a workshop on compressed air (CA) technologies provided by Kobelco, Japan, which evoked interest among all the SME participants, of whom 92% admitted they were not even aware that such CA technologies existed.
- In coming years under JITMAP, IGES and TERI are keen to undertake deep-dive interventions in select SME clusters in India to promote commercially available Japanese LCTs on a wide scale. The deep-dive approach is built around detailed energy audits (DEAs) and follow-up engagements with entrepreneurs; its success hinges on establishing engineers/technically proficient personnel at the local (cluster) level to provide support services—ranging from conducting DEAs to identification of vendors, implementations, and post- implementation support. Examples were provided of successful deep-dive interventions: in Rajkot and Howrah foundry clusters under SDC-supported project, and in the Ankleshwar chemicals cluster and Pune forging cluster under WB-GEF-SIDBI supported project.
- The WB-GEF-SIDBI project provided an interesting insight into how SMEs raise finance for energy conservation measures (ECMs): although the project was supported by SIDBI, most of the implemented ECMs were financed by SMEs from their own funds.
- Under an SSEF-supported project, an innovative ESCO model was successfully designed and applied in the Ankleshwar cluster to promote IE3 motors on a wide scale.

Mr Abhay Bakre, Director General, BEE

- Finance remains a major challenge in scaling up the adoption of EE technologies among SMEs. The barriers that stand between banks/FIs on the one hand and SMEs on the other include low awareness/knowledge regarding EE technologies and their financing; risk perceptions; and management constraints
- Banks/FIs might see solar-based technologies as a simpler, more attractive option for financing, as such technologies generally require less post-implementation monitoring.

Dr. Ajay Mathur, Director General, TERI

- SME entrepreneur faces management constraints—because the typical entrepreneur functions as CEO/COO/CFO rolled into one, and therefore has neither the time nor wherewithal to consider introducing a 'new' technology that might affect the production process.
- The successful deep-dive interventions and the JITMAP experience underline that rather than take loans from banks/FIs, SMEs would prefer that the vendor guarantees the benefits of the EE technology. For banks/FIs, this opens up the possibility of financing vendors rather than SMEs; however, this also carries its own implications and challenges, which need to be discussed and resolved

Roundtable discussions

Mr Prashant Girbane, MCCIA

- Stressed the effectiveness of LM as an approach to promote EE among SMEs. Cited the example of a successful LM intervention undertaken jointly by MCCIA and MoMSME , in which a local consultant was made responsible for formulating and demonstrating LM measures. This initiative created many 'local heroes' and led to far many more replications than earlier awareness generation programs that covered over 1000 SMEs.
- Warned against the perils of marketing a 'stated demand' rather than an 'expressed need' while underlining the importance of understanding the technological needs of the local SMEs, and providing solutions adapted to meet those needs.

Mr Shankar Haldar, SIDBI

- Agreed that while SMEs mostly used their own funds to acquire EE technologies under the GEF-WB-SIDBI project, the experience and lessons from the project helped SIDBI in developing innovative finance schemes for EE: e.g., interest subvention under a GEF-supported scheme.
- It remains a challenge to integrate the technological and financial aspects and thereby promote the EE technology as a 'package', making it as simple to access and implement as a car loan.

- With the typical ESCO model, in which the ESCO takes charge of both the technology and finance elements, the challenge is converse—to segregate these two elements.

Mr Sho Miura, Second Secretary (Environment), Embassy of Japan

- Japan's Joint Crediting Mechanism (JCM) is a good way to promote LCTs in developing countries, with the reductions in CO2 emissions being shared between Japan and the recipient country. Considering the good rapport between India and Japan, particularly their respective leaders, he expressed optimism that JCM would be implemented soon in India, benefiting both nations.

Mr Fujimoto, Mayekawa

- Citing the experience with promoting LCTs in India, he remarked that for Indian end-users, cost is the primary factor that influences the decision to adopt an LCT; environmental arguments carry little weight.

Mr Abhijit Bhide, Sales and Marketing, JFE Engineering India

- JFE Engineering, India undertakes projects in the area of waste to energy and waste heat recovery in large industries. Are keen to work in SME sector also under the JITMAP initiative.

Mr Antriksh Singh Rajput, National Product Manager-P&E, HORIBA India

- Horiba is a leading manufacturer of portable instruments It is interested in reaching out to SMEs under JITMAP and provide solutions in monitoring and control space.