## Report on activities of Japan-India Technology Matchmaking Platform (JITMAP)

## (IGES-TERI efforts to promote environmental technologies & better operational practices in India)





## Japan-India Technology Matchmaking Platform (JITMAP)

- In order to promote low-carbon technology (LCT) transfer and diffusion in India, IGES and TERI jointly launched the Japan-India Technology Matchmaking Platform (JITMAP) in July 2016 with the support of the Ministry of the Environment of Japan.
- JITMAP is a multi-stakeholder platform to match Japanese manufacturers of Environmental Technologies (ETs) including LCTs with Indian companies that are looking for such technologies.



#### JITMAP Activities (FY2016~FY2022) Seminars and workshops:



#### <u> Total: 16</u>

Compressed air system: 5 EHP/Refrigeration system: 2 Steam management system: 4 Energy-saving transmission belt: 1 CEMS: 2 General: 2



#### Feasibility study (preliminary energy audit):

#### <u>Total: 54</u>

Compressed air system: EHP/Refrigeration system: Steam management system: Energy-saving transmission belt:



Identification of Indian companies, matchmaking with Japanese companies



Meeting with stakeholders for policy and regulation, etc.

Step 3 Application of technologies Analysis of economic and environmental improvements of applications <u>Step 4</u> Dissemination and expansion of applied technology Dissemination of economic and environmental

environmental improvements of applications



#### **Training of trainers: Total: 6**

Compressed air system: **5** Steam management system: **1** 

trainers for

energy

auditors



#### Meeting with stakeholders: <u>Total: 5</u>

Compressed air system: **2** EHP/Refrigeration system: **2** Energy-saving transmission belt: **1**<sup>3</sup>

#### JITMAP Partners, Collaborators & Locations of the Activities



### Examples of outcomes of JITMAP activities

[Example 1] Electric heat pump (EHP) & Refrigeration System (RS) (In cooperation with Mayekawa Mfg. Co., Ltd.)

<u>• Date</u>: December 2018 • <u>Location</u>: Andhra Pradesh

·Activities:

- 1) Feasibility Studies at 10 seafood processing companies.
- 2) Consultative meetings on results of the FS with Andhra Pradesh State Energy Conservation Mission (APSECM) and Andhra Pradesh State Energy Efficiency Development Corporation (APSEEDCO).
- 3) Awareness raising workshops for 7 seafood processing companies.

·<u>Outcomes</u>:

- 1) Energy-saving potentials by adopting the target technologies were identified in most companies, while Awareness of the APSECM, the APSEEDCO and those companies on the technologies was raised.
- 2) <u>Awareness of the APSECM and the APSEEDCO on necessity of regulatory measures to</u> promote energy efficient and environmentally safer RS, was also raised.



## Examples of outcomes of JITMAP activities

#### [Example 2] Energy-saving transmission belt (EETB) (In cooperation with Bando Chemical Industries, Ltd.)

- Period: August-September 2018 Location: Ankleshwar, Gujarat
- Target industries: Pharmaceutical, glass and comprehensive chemical

·Activities:

- 1) Introductory seminar on the EETB for the Ankelshwar Industries Association.
- 2) **FSs** at selected companies which had interests in application of the EETB.

<u>•Outcomes</u>:

- 1) Awareness of about 110 local stakeholders on the EETB was raised, and <u>5 local companies</u> adopted the EETB.
- Energy-saving potentials of about 5 to 15% were identified, while it was also found that much of the equipment used at these companies is up to European standards, Therefore, the company proposed to replace both the belt and pulley in such a case, and two companies adopted it.
- 3) As a result of a follow-up survey in FY2020, it was confirmed the EETBs were introduced in 6 local SMEs and 5 large enterprises.



## Examples of outcomes of JITMAP activities

#### [Example 3] Awareness Workshops (Webinar) on Japanese Environmental Technology (In cooperation with Japan Environmental Technology Association (JETA))

- · <u>Date</u>: Dec. 9, 2021
- · <u>Objectives</u>:
- 1) Sharing experiences of India, Japan, and other countries on air pollution.
- 2) Exchanging views on Japan-India cooperation to overcome air pollution in India.



- <u>Participants</u>: About 100 participants including CPCB, SPCBs in Gujarat & Maharashtra, International Organizations, Japanese local governments, private companies in India & Japan, universities and research institutes, etc.
- •<u>Outcomes</u>: Awareness of the participants on Japanese technology to monitor emissions from energy intensive industries and importance of the accurate measurement and evaluation was raised.

• <u>Way forward</u>: Implementation of a Needs Assessment on the National Clean Air Programme in India & a Seminar on Progress and Challenges of the NCAP in 2023.

## Lessons learned and Way forward of JITMAP activities

Lessons learned	Way forward
1. Necessity of JITMAP activities to enhance the understanding of various Indian stakeholders, especially SMEs on Japanese Low Carbon and Environmental Technologies.	<b>Continuous implementation of JITMAP</b> <b>activities especially for SMEs</b> in cooperation with the Japanese & Indian stakeholders including the MOEJ, the Embassy of Japan in India and private companies.
2. Necessity of strengthening the organization and activities of the JITMAP.	2-1. Expansion of target technologies including environmental technologies and collaborations with Japan Platform for Redesign: Sustainable Infrastructure (JPRSI), the Blue Sky Initiatives, Japan Environmental Technology Association (JETA), The Energy Conservation Center, Japan (ECCJ), etc.

## Lessons learned and Way forward of JITMAP activities

Lessons learned	Way forward
2. Necessity of strengthening the organization and activities of the JITMAP.	2-2. Technology Needs Assessment to identify new target technologies and Implementing Partners.
3. Improving the sustainability of JITMAP activities.	3-1. Formation of model clusters for technology transfer through intensive implementation of JITMAP activities.
	3-2. Seeking and establishing deeper cooperation with the local JITMAP Partners in implementing the JITMAP activities through their own energy efficient programs (e.g. Demonstration Projects, Training for Energy Auditors and Managers).

# Thank you for your kind attention

