



TT8: "India-Japan Environmental Cooperation for Realization of Net Zero Society in India (Toward India-Japan Environmental Week)"

December 1, 2022









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1. 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.

	Japanese companies	Technology transfer companies			
Seminar and Workshop	Seminar, Workshop	Feasibility study	Training of trainers for energy auditors	Meeting with stakeholders for policy and regulation, etc.	Training of Trainers
PASTERIOR MAIAT	Suppo	orts throug	gh JITM/	AP activities	
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	Japanes Stakehold (Supporting Ag	ers IGES	TERI	Stakeholders (Government Agencies,	
Feasibility Study	etc.)		cretariat	Supporting Agencies, Business Associations, etc.)	Meeting with stakehold

ISAP2022 JITMAP Activities (FY2016~FY2021)



seminars and workshops:

Total: 15

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

Feasibility study (preliminary energy audit):

Total: 54

Compressed air system: 21 EHP/Refrigeration system: 13 Steam management system: 14 Energy-efficient belt: 6

Step 1 Matchmaking of supply with demand for technology

> Identification of Indian companies, matchmaking with Japanese companies

<u>Ste</u> Support act technology	tivities for	/	Step 3 Application of technologies
Seminar, Workshop	Feasibility study		Analysis of economic and
Training of trainers for energy auditors	Meeting with stakeholders for policy and regulation, etc.		environmental improvements of applications

Step 4 **Dissemination and** expansion of applied technology

Dissemination of economic and environmental improvements of applications



Training of trainers: Total: 6

Compressed air system: 5 Steam management system: 1



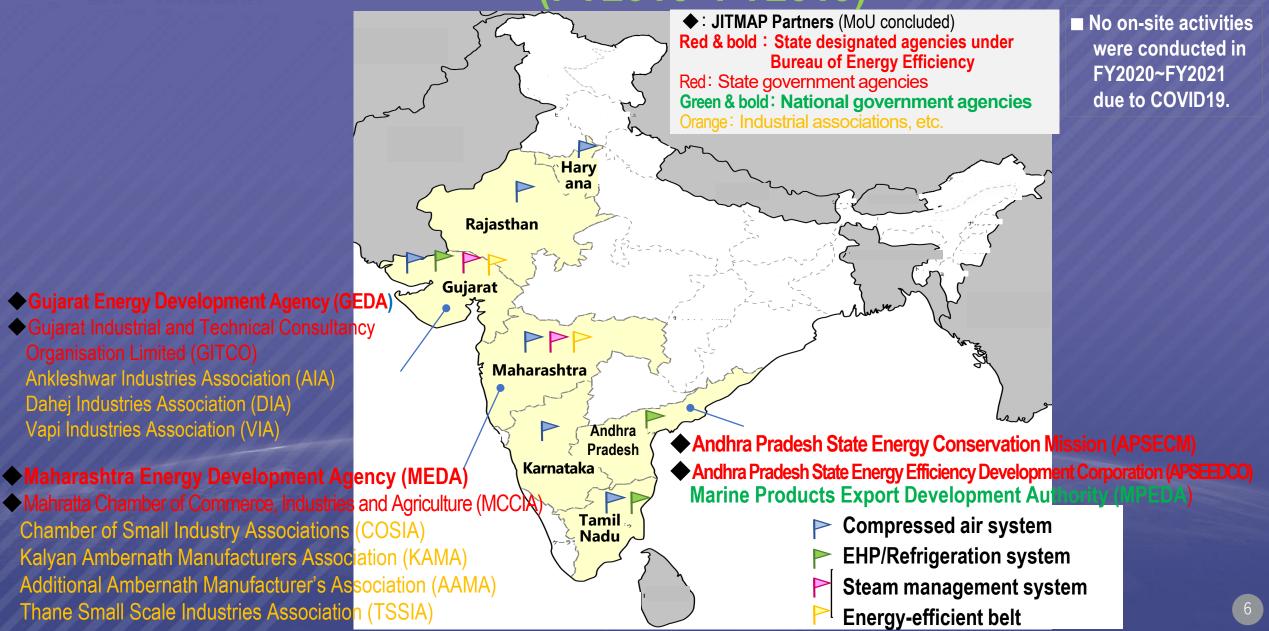
Meeting with stakeholders: **Total: 5**

Compressed air system: 2 EHP/Refrigeration system: 2 Energy-efficient belt: 1



JITMAP Partners & Locations of the Activities (FY201<u>6~FY2019</u>)









Time	Activity
May, 2022	Consultative (online) meeting on Japanese low carbon technologies for foundry and textile sectors: Opportunities, barriers & remedial actions (Completed).
Nov. 2022 -Jun. 2023	Situational Analysis and Needs Assessment on the National Clean Air Programme in India in cooperation with MOEJ, Japan Embassy in India & JETA.
Jan. 2023	Seminar on Initiatives and Issues on Transfer of Japanese Environmental Technology in India through JITMAP Activities in India-Japan Environmental Week.
Feb. 2023	Seminar on Progress and Challenges of India's NCAP and Potential for India-Japan Cooperation (Tentative).





2. Examples of outcomes & issues of JITMAP activities

ISAP 2022 Outcomes of JITMAP activities



[Case 1] Awareness raising of steam management system in a seminar of the state government

- ·<u>Date</u>: Feb. 2020 · <u>Location</u>: Gujarat
- <u>Activity</u>: Introduction of **Steam Management System of TLV International, Inc.** in a seminar of the state government.

<u>Implementing Partners</u>:
 1) Gujarat Energy Development Agency (GEDA)
 2) National Productivity Council (NPC)

• <u>Participants</u>: About 120 BEE Certified Energy Auditors and Energy Managers.

Outputs: Possibility of energy saving by using the



steam valves and traps was explained based on results of feasibility studies in Indian indusrties.

[Case 2] 30% energy saving by improving the operating practices

<u>Activity</u>:
 Feasibility study (Sep.2017)
 Follow-up survey (Jan.2020)

· Location: Maharashtra



- · <u>Target industry</u>: Automobile parts
- <u>Recommendations on the FS by the expert of</u> **compressed air system**:
- 1) To adopt an energy-efficient inverter type compressor.
- 2) To improve the **operating practices** such as reducing the air leakage.

·<u>Outcomes of the follow-up survey</u>:

By implementing most of the recommendations, the annual power consumption was reduced by about 1.8 million kWh (about INR16 million).

ISAP2022 Outcomes of JITMAP activities



[Case 3] Energy efficient transmission belt (EETB) (In cooperation with Bando Chemical Industries, Ltd.)

<u>Period</u>: August-September 2018 · <u>Location</u>: Gujarat

·Activities:

1) **Seminar on the EETB** for the Ankelshwar Industries Association.

2) **FSs** at local companies which-expressed an interest in its application.

·Outcomes:

1) As a result of the seminar, **awareness of about 110 participants on the EETB was raised**, and <u>5 local companies adopted the EETB</u>.

- 2) As results of the FSs, <u>energy-saving potentials of about 5 to 15% were identified</u>, while it was found that <u>much of the equipment used at companies is of European standards</u>. Therefore, <u>two companies were proposed to replace both the belt and pulley and adopted</u> <u>them</u>.
- 3) As a result of a follow-up survey in FY2020, it was confirmed <u>the EETBs were introduced in</u> <u>6 local SMEs and 5 large enterprises.</u>



ISAP2022 Issues & Way forward of JITMAP



Issues	Way forward
1. Necessity of JITMAP activities to enhance the understanding of various Indian stakeholders, especially SMEs on Japanese Low Carbon and Environmental Technologies.	Continuous implementation of JITMAP activities especially for SMEs 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.

ISAP2022 Issues & Way forward of JITMAP



Issues	Way forward
2. Necessity of strengthening the organization and activities of the JITMAP.	2-2. Situational Analysis and Needs Assessment on the National Clean Air Programme in India (On-going).
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 for their own energy efficient programs (e.g. Demonstration Projects, Training for Energy Auditors and Managers).

ご清聴ありがとうございました。 Thank you very much for your attention.

