

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

by

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&

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1. Introduction of Japan-India Technology Matchmaking Platform (JITMAP)

(Reference) Introduction of The Energy and Resources Institute (TERI)

- Year of Establishment: 1974, with support from Tata Group
- Location: Headquarters in Delhi. Regional centers in Bangalore, Goa and Guwahati. Presence in Japan.
- Number of staff: 600+
- Main activities: Research programs on climate change, energy, environment, sustainable habitat, sustainable agriculture
- Others: 1) Japan-India Technology Matchmaking Platform (JITMAP) set up in 2016 by IGES and TERI with the support of Ministry of the Environment, Japan (MOEJ) to facilitate the transfer of ETs from Japan for adoption by Indian industrial end-users.
2) Flagship event "World Summit on Sustainable Development (WSDS)" organized every year in February



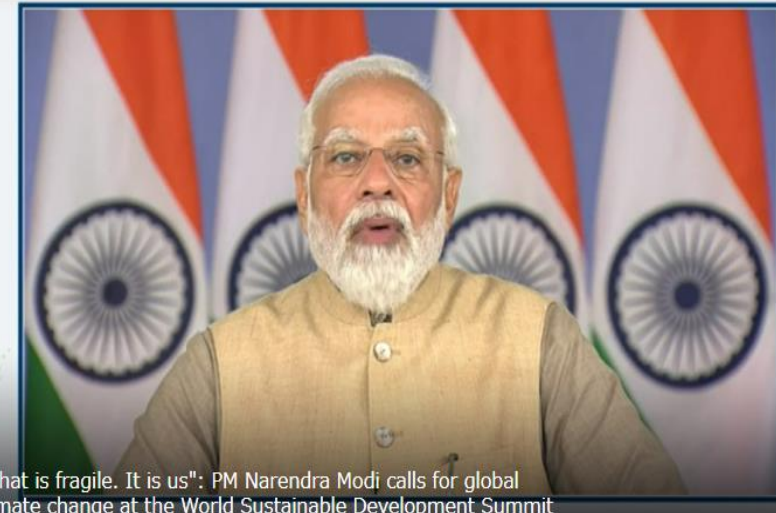
WORLD SUSTAINABLE
DEVELOPMENT
SUMMIT 2022

TOWARDS A RESILIENT PLANET:
ENSURING A SUSTAINABLE AND EQUITABLE FUTURE



Press Release

"It is not the planet that is fragile. It is us": PM Narendra Modi calls for global alliances to tackle climate change at the World Sustainable Development Summit



Progress: A decade of promoting Japanese Environmental Technologies in India

2010~2014	SATREPS project successfully implemented Japanese technologies (gas heat pump (GHP) and electric heat pump (EHP)) and introduced better operating practices in induction furnaces and compressed air systems to Indian companies.
2014	JCM (Joint Crediting Mechanism) feasibility study to raise the awareness about JCM scheme among Indian stakeholders and conduct feasibility studies regarding the application of compressed air system in Indian industry.
2015	Ministry of the Environment of Japan (MOEJ) project to identify the possibility of applying Japanese technologies (once-through boilers, steam management systems, and compressed air systems) in India by analyzing opportunities and challenges/barriers.
2016~	Japan-India Technology Matchmaking Platform (JITMAP) launched to promote Japanese low carbon technologies (LCT) such as compressed air system, steam management system, refrigeration system including EHP and energy-efficient transmission belts .
2020~	Target technologies for JITMAP were expanded to Japanese environmental technologies .

*SATREPS: Science and Technology Research Partnership for Sustainable Development joint fund by JICA and JST

Japan-India Technology Matchmaking Platform (JITMAP)

- JITMAP is a multi-stakeholder platform to match Japanese manufacturers of **Environmental Technologies (ETs)** with Indian companies that are looking for such technologies.



Seminar and Workshop



Feasibility Study



Seminar, Workshop Feasibility study Training of trainers for energy auditors Meeting with stakeholders for policy and regulation, etc.

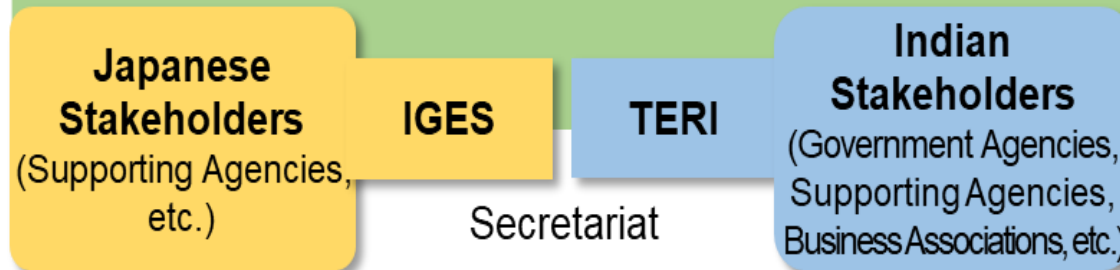


Training of Trainers



Meeting with stakeholders

Supports through JITMAP activities



JITMAP Activities (FY2016~FY2022)

Seminars and workshops:

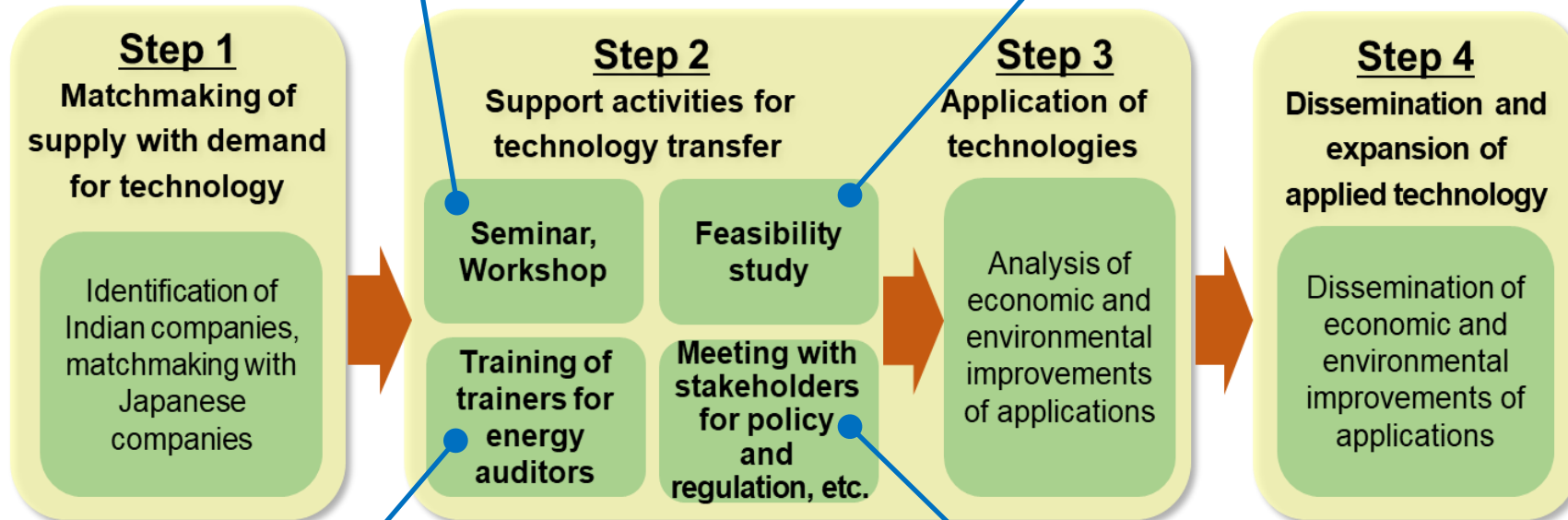
Total: 17

- Compressed air system: 5
- EHP/Refrigeration system: 2
- Steam management system: 4
- Energy-saving transmission belt: 1
- CEMS: 3
- General: 2

Feasibility study (preliminary energy audit):

Total: 56

- Compressed air system: 23
- EHP/Refrigeration system: 13
- Steam management system: 14
- Energy-saving transmission belt: 6



Training of trainers:

Total: 6

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

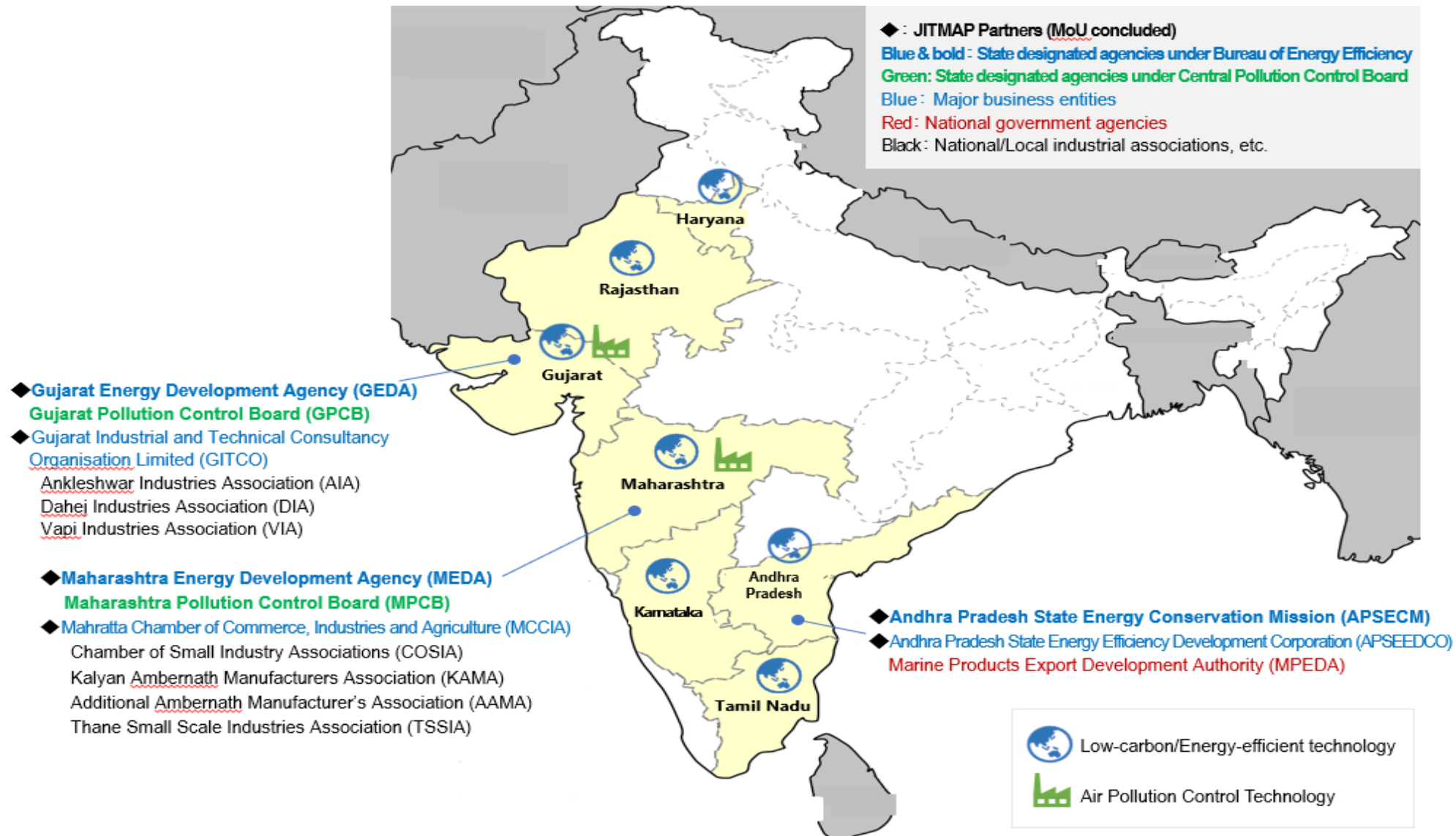
Meeting with stakeholders:

Total: 5

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



JITMAP Partners, Collaborators & Locations of the Activities



2. Outcomes, Issues & Way Forward of JITMAP activities

Examples of outcomes of JITMAP activities

【Example 1】 Awareness Seminar on “Promoting India-Japan collaboration on environment technologies” (In cooperation with Japan Environmental Technology Association (JETA))

- Date: February 14, 2023 • Place: Pune in Maharashtra
- Objectives:
 - 1) To share experiences in India, Japan & other countries to tackle air pollution.
 - 2) To introduce Japanese environmental technologies to participants.
- Participants: About 65 participants from government agencies, energy-intensive companies, universities & research institutes, etc.
- Main outcomes:
 - 1) It was found that **the government agencies welcomed Japanese cooperation in air quality monitoring.**
 - 2) It was found that there are **local needs of improving technical capacities to tackle air pollution.**



Examples of outcomes of JITMAP activities

[Example 2] Situational Analysis & Needs Assessment on the National Clean Air Programm in India

- Period: Feb.~Jun., 2023. • Target State: Maharashtra.
- Target Areas: **Ambient Air Quality Monitoring & Stack Monitoring**.
- Implementors: IGES & TERI in collaboration with JETA.
- Activities: Literature review & Interviews with stakeholders in Pune.

- Findings:
 - 1) **Issues on Ambient Air Quality Monitoring**: (1) Insufficient number of measuring stations, (2) Insufficient monitoring and measures for PM2.5 & PM10, (3) Capacity building of stakeholders implementing the AAQM, etc.

 - 2) **Issues on Stack Monitoring**: (1) Stringent implementation of emission regulations & measures by relevant agencies, (2) Capacity building of stakeholders implementing the SM, (3) Access to information on regulations, standards & their effects, etc.



Examples of outcomes of JITMAP activities

[Example 2] Situational Analysis & Needs Assessment on the National Clean Air Programm in India

- **Outcome: Project Proposal on Improvement of Air Pollution through Collaboration between Government, Industry, Academia & People in India.**

- **Project Purpose:** In a model area in **Pune, Maharashtra**, an **effective air pollution control plan** that is supported by air pollution factor analysis & contributes to reducing the health hazards of residents is developed through **collaboration of industry-government-academia-industry**.
- **Outcomes:**
 1. **Air quality monitoring capacities** of the Maharashtra Pollution Control Board & Pune Municipal Corporation are enhanced to identify sources of air pollution.
 2. **Capacities to monitor smoke emissions from target industries** in the model area are enhanced.
 3. **Residents of the model area are provided with information on air pollution** (including information to avoid health hazard) & their ideas on air pollution are communicated to the Air Quality Monitoring Committee.

Examples of outcomes of JITMAP activities

【Example 3】 Approx. 30% energy saving by improving the operating practices

· Activity:

Feasibility study (Sep.2017)
Follow-up survey (Jan.2020)

· Location: Maharashtra

· Target industry: Automobile parts

· Recommendations on the FS by the expert of compressed air system:

- 1) To **replace** an outdated reciprocating air compressor with **an energy-efficient inverter compressor**.
- 2) To **improve the operating practices** such as reducing the air leakage.

· Findings in the follow-up survey:

By implementing most of the recommendations, the company **reduced the annual power consumption by about 1.8 million kWh, which was equivalent to about INR16 million (JPY 2.3 million)**.



【Example 4】 Awareness raising of steam management system in a seminar by the state government

· Date: Feb. 2020 · Venue: Gujarat

· Activity: Introduction of **Steam Management System of TLV International, Inc.** in a seminar of the state government.

· Implementing Partners:

- 1) **Gujarat Energy Development Agency (GEDA)**
- 2) **National Productivity Council (NPC)**

· Participants: **About 120 Certified Energy Auditors and Energy Managers.**

· Outputs:

Understanding of participants on energy saving by using efficient steam valves & traps based on the results of feasibility studies in Indian industries was increased.



Issues & Way forward of JITMAP activities

Issues	Way forward
1. Necessity of JITMAP activities to enhance the understanding of various Indian stakeholders, especially SMEs on Japanese Low Carbon & Environmental Technologies.	Continuous implementation of JITMAP activities in cooperation with the Japanese & Indian stakeholders.
2. Necessity of strengthening the organization & activities of the JITMAP.	2-1. Expansion of target environmental technologies & collaborations with Japan Platform for Redesign: Sustainable Infrastructure (JPRSI), the Blue Sky Initiatives, JETA, JICA, etc.

Issues & Way forward of JITMAP activities

Issues	Way forward
2. Necessity of strengthening the organization and activities of the JITMAP.	2-2. Situational Analysis & Technology Needs Assessment to identify/update detailed local needs & issues, new target technologies & Implementing Partners. 2-3. Making project proposals & seeking the funds.
3. Improving the sustainability of JITMAP activities.	3-1. Formation of model clusters/areas, etc. for technology transfer through intensive implementation of JITMAP activities. 3-2. Seeking & establishing deeper cooperation with the local JITMAP Partners in implementing the JITMAP activities for their own programmes, projects & initiatives (e.g. Demonstration Projects, Capacity Buildings for Local Gov. officials, Training for Energy Auditors & Managers).

PR activities on JITMAP activities and their results

Information on JITMAP activities and their results are shared with you in the JITMAP website & brochures, etc.



Workshop, Seminar, etc.



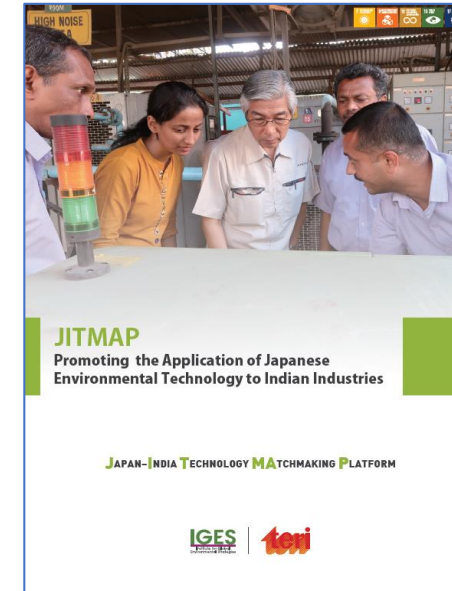
JITMAP Website (English ver.)

<http://jitmap.org/>



JITMAP Website (Japanese ver.)

<https://www.iges.or.jp/jp/projects/jitmap>



JITMAP Brochure



JITMAP Booklet

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

