

# JAPAN-INDIA TECHNOLOGY MATCHMAKING PLATFORM (JITMAP)

Facilitating Japanese Low Carbon  
Technology Transaction in India



A partnership initiative of:

Supported by:



## Background

India's Nationally Determined Contribution (NDC) under the Paris Agreement includes a commitment to reduce its emission intensity of GDP by 33~35% below 2005 levels by 2030. In India, the industrial sector has a share of 58% of the total energy consumption. Adoption of low carbon technologies (LCTs) in the industrial sector can accelerate India's efforts in GHG emissions reduction. Japanese companies are globally renowned for their LCT products, and technology transfer between Japan and India could facilitate mutually beneficial transaction.

The Institute for Global Environmental Strategies (IGES), Japan, and The Energy and Resources Institute (TERI), India, have been working together to promote Japanese LCTs in India through business matchmaking. IGES-TERI's activities to promote business matchmaking include the following:



Arranging business meetings with stakeholders



Facilitating on-site feasibility studies



Implementing (pilot) projects



On-site and in-house capacity building



Outreach & dissemination events (Workshops, seminars, forums)

Online knowledge and information sharing:

<http://jitmap.org/>

IGES-TERI have worked on the following cross cutting technologies provided by leading Japanese companies:

| Technologies                    | Technology Providers   |
|---------------------------------|--|
| Heat Pumps (Electrical and Gas) | -Mayekawa MFG Co. Ltd.<br>-Yanmar Energy System Co. Ltd.                             |
| Once-Through Boiler             | -Miura Co. Ltd.  |
| Air Compressors                 | -Hitachi Industrial Equipment System Co. Ltd.<br>-Kobelco Compressors India Pvt Ltd. |
| Steam Management Systems        | -TLV International INC.  |
| Energy-Efficient Belts          | -Bando Chemical Industries Ltd.  |

The selected technologies are applicable in large industries, SMEs, and in the sectors listed under the Perform Achieve and Trade (PAT) scheme.

## Need for a technology transfer platform

Based on the previous activities in LCT transfer under various projects funded by the Japanese Government from 2010-2016, IGES-TERI found that, despite the huge potential, LCT market in India remains largely untapped by Japanese companies mainly due to the following key constraints:

|                                 |
|---------------------------------|
| Information/knowledge gap       |
| Access to "top" decision makers |
| Higher upfront cost             |
| Maintenance/after sale services |
| Policy/regulations/standards    |

IGES-TERI found that various stakeholders from Japan and India are making efforts to address these constraints; however, individual efforts are not well coordinated.

Hence IGES-TERI propose establishing a platform for the coordination of efforts in LCT transaction amongst; research institutes, business associations, financing agencies, and government agencies. Based on their core competencies, the organisations can come together to provide the required support in terms of awareness enhancement, networking assistance, financial assistance, technical assistance and policy /regulatory assistance to accelerate the LCTs flow process between Japan and India. The levels and types of support could vary according to businesses' needs throughout the steps of LCT transfer flow:

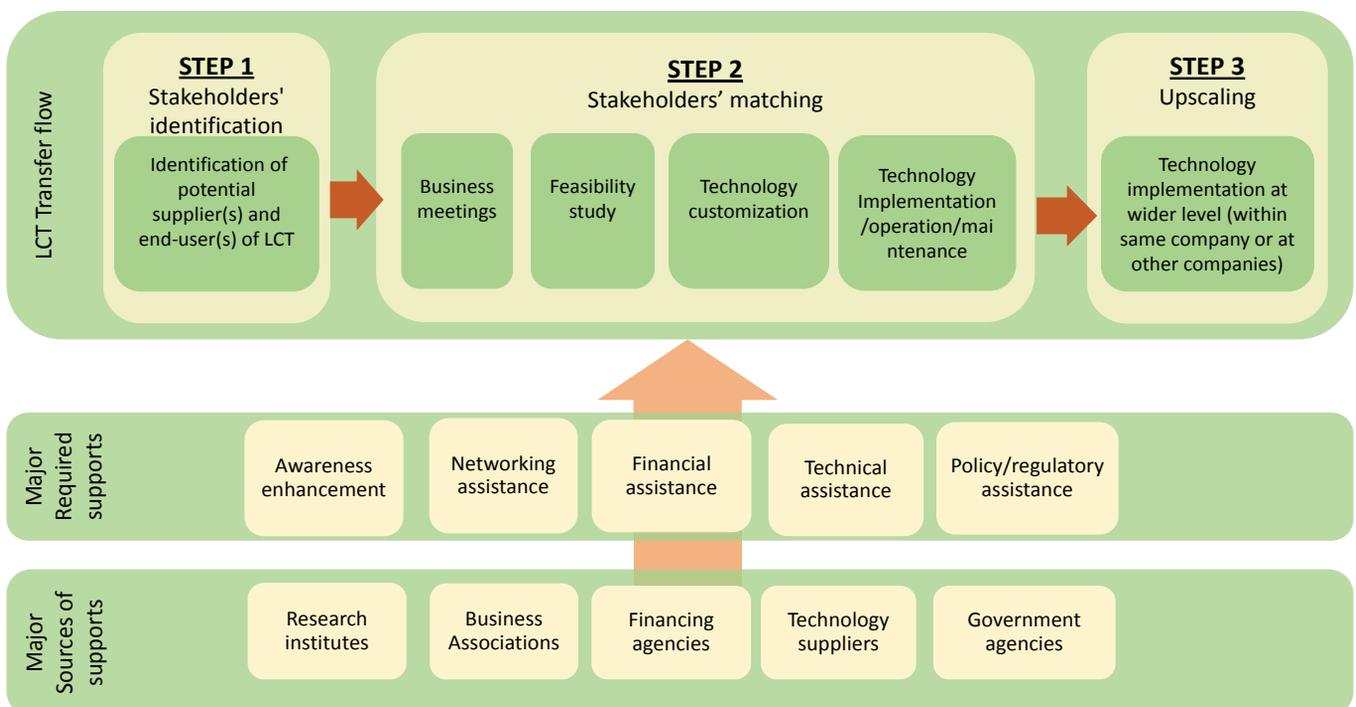
According to IGES-TERI, there are three key steps that constitutes the LCT transfer flow;

**Step 1:** Stakeholders identification, mainly the LCT suppliers and end users;

**Step 2:** Stakeholders matching: Business meetings, feasibility studies, and technology customisation and technology implementation;

**Step 3:** Upscaling the technology within or outside the company.

IGES-TERI propose the following framework to identify, source and mobilise the supportive resources required to facilitate smooth and effective LCT transfer flow.



Schematic diagram of LCT transfer process and the required supports to accelerate it

In order to engage adequate stakeholders from India and Japan who are willing to promote LCT in India, to ensure smooth coordination/collaboration among the stakeholders, and to facilitate the required support in a timely and adequate manner: IGES-TERI launched the Japan-India Technology Matchmaking Platform (JITMAP)

# Launch of JITMAP

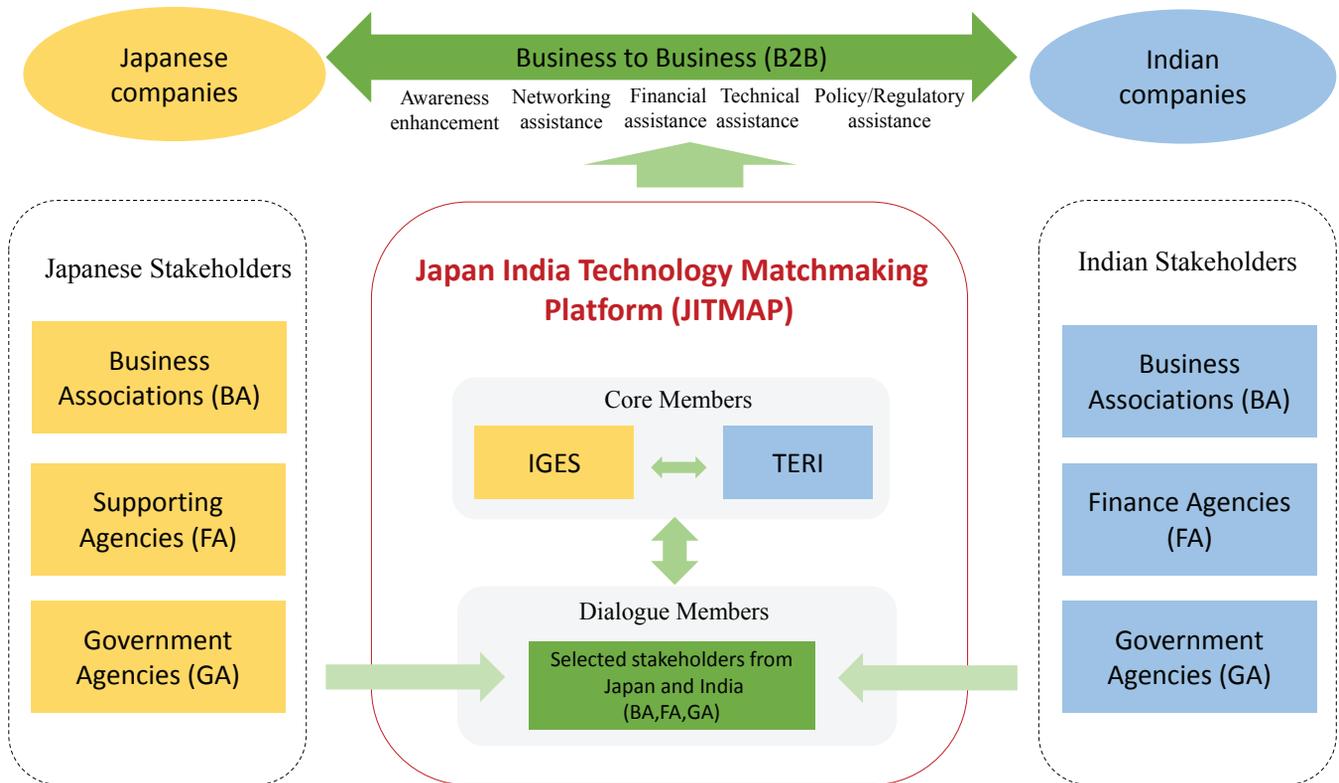
IGES-TERI launched the 'Japan India Technology Matchmaking Platform' (JITMAP) in July 2016 as part of the project on evaluation and verification of CO<sub>2</sub> emissions reduction technologies (TA project) funded by the Ministry of the Environment, Japan (MOEJ).



Launch of JITMAP in July 2016, Yokohama, Japan by TERI and IGES

IGES and TERI are JITMAP's Core Members. They invite appropriate stakeholders from Japan and India to join JITMAP as Dialogue Members (collaborators). Dialogue members are selected mainly from Business Associations (BA), Funding/Supporting Agencies (FA), and Government Agencies (GA).

JITMAP Core Members and Dialogue Members collaborate and support matching of Japanese manufacturers of low carbon technologies with Indian industries looking for such technologies through awareness enhancement, networking assistance, financial assistance, technical assistance and policy /regulatory assistance.



Schematic diagram of JITMAP as a supporting mechanism to promote business matchmaking

## Case study on how JITMAP works

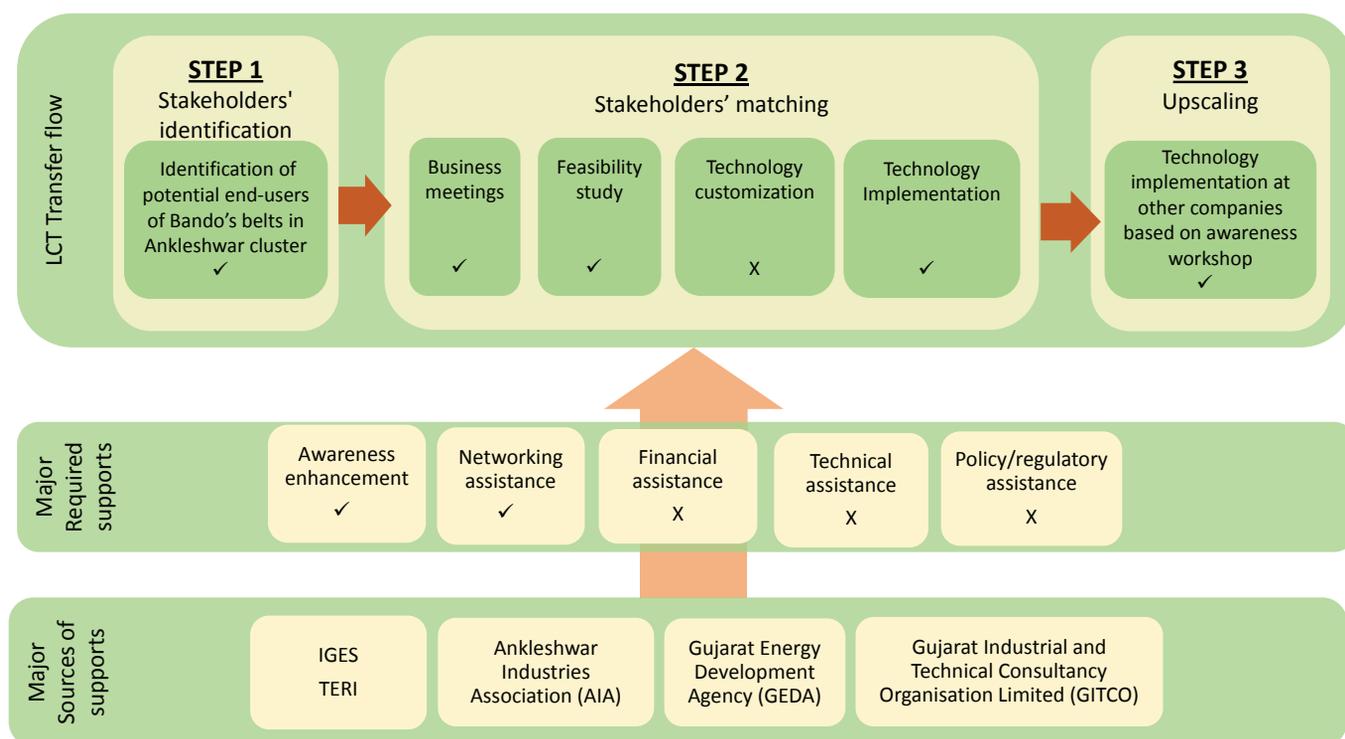
The kind of support provided under JITMAP can be explained by the following case study: Promoting transmission belts in Gujarat

Bando Chemical Industries Ltd. (hereafter Bando) showed interest to collaborate with IGES-TERI, under JITMAP initiative, to promote the diffusion of its transmission belts in India. The activities/support under JITMAP were as follows:

**Step 1:** IGES-TERI conducted market assessment and suggested Ankleshwar cluster as a potential industrial area to target for Bando's belts implementation. Bando shared a list of potential customers and requested support to access to them;

**Step 2:** IGES-TERI coordinated with the Gujarat Energy Development Agency (GEDA), Gujarat Industrial and Technical Consultancy Organisation Ltd (GITCO), Ankleshwar Industries Association (AIA) and arranged meetings for Bando with "top" decision makers at four sites. (Financial, technical and policy/regulatory assistances were not required). Based on discussion at the business meetings and the findings from the feasibility studies, end-users approved the implementation of Bando's belts on a trial basis. (Technology customization was not required.)

**Step 3:** IGES-TERI-GEDA-GITCO-AIA co-organized a technology awareness workshop (WS) in Ankleshwar. Thanks to the efforts of the Dialogue Members, more than 100 participants attended the WS, among which 89% were unaware of Bando before. By the end of the workshop, Bando received series of enquires about its technology and many participants expressed interest to implement the technology.



### Key features of JITMAP

**Bilateral:** Exclusive platform for Japan and India;

**Practical/comprehensive:**

"On the ground" support/interventions coupled with "Online" knowledge and information sharing;  
 Concise information and knowledge sharing about **technologies, policies, and financing** options;  
 Multi tiered support is provided to businesses to facilitate successful LCT transaction;  
 Ambits technology matchmaking for SMEs and large scale industries.

**Complementary:**

Complementary to other existing initiatives between India and Japan; Complementary to ongoing business's efforts.

## Online information/knowledge sharing

JITMAP website (<http://jitmap.org/>) provides comprehensive information for the businesses on available technologies, financing options, policies from India and Japan, and database of over 40 feasibility studies across multiple sectors demonstrating energy savings by LCT implementation.

Companies interested to know more about the content and/or to get in touch with potential counterpart in India or Japan can contact IGES-TERI for further details.

JITMAP aims to support the "online" and the "on the ground" business matchmaking. A snapshot of the website is as follow:



JITMAP website (<http://jitmap.org/>)

## Current JITMAP Members and Way Forward

JITMAP is working in highly industrialized states in India, namely Maharashtra and Gujarat. The State Designated Agencies (SDAs) for energy efficiency, Maharashtra Energy Development Agency (MEDA) and Gujarat Energy Development Agency (GEDA) and experienced organizations like Mahratta Chamber of Commerce, Industries & Agriculture (MCCIA) and Gujarat Industrial and Technical Consultancy Organisation Ltd (GITCO) are active Dialogue Members of JITMAP. From fiscal year 2018, JITMAP's activities expanded in Andhra Pradesh. While extending the work to Andhra Pradesh, IGES-TERI will continue to engage adequate stakeholders from India and Japan as JITMAP Dialogue Members.

Currently, JITMAP activities are supported by the Ministry of the Environment, Japan (MOEJ). Activities in Gujarat State in particular are supported also by Hyogo Prefectural Government, Japan through the activities of the IGES Kansai Research Centre as they have signed a Memorandum of Understanding (MOU) with the State Government of Gujarat.

### For more information, contact:

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