



European Business and Technology Centre



## Applications of Clean Technologies from European Union: Energy, Environment, Transport and Biotechnology

West Bengal – Towards Sustainable Growth, BCCI, April 12, 2012

[www.ebtc.eu](http://www.ebtc.eu)

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## EBTC's Mission

- Establish cooperation in Business and R&D for clean and green technologies

## EBTC's Vision

- The competent **reference point** for bringing European clean technologies to India
- Enhancing existing networks, initiatives, partners, and institutions - both in Europe and India - in order to create a real European added value.



**Developing a powerful, pragmatic platform**

## 4 locations across India

- New Delhi (HQ), Mumbai, Bangalore and Kolkata

## 4 Specialists for each Sector

- Biotech, Energy, Environment and Transport

## 4 steps from Visibility to Incubation

- Promoting Europe in India and India in Europe
- Providing Information and Intelligence
- Supporting the market entry process from scratch
- Providing full service incubation support for businesses and R&D



**High growth market, dynamic sectors**



# EBTC Intro Consortium Partners

1. Denmark – Danish Technological Institute
2. Estonia – Baltic Innovation Agency
3. France – Lyon Chamber of Commerce and Industry
4. Finland – Finpro
5. Germany – Fraunhofer Institute for Factory Operation and Automation
6. Germany – Steinbeis-Europa-Zentrum
7. Germany – DII
8. Italy – Piemonte Agency for Investments, Export and Tourism
9. Italy – Politecnico di Torino
10. Italy – Milan Chamber of Commerce
11. Italy – Unioncamere Piemonte
12. UK – Coventry & Warwickshire Chamber of Commerce
13. UK – Coventry University Enterprises
14. UK – One Nucleus
15. Spain – Acc10
16. Sweden – IVL Swedish Environmental Research Institute

# EBTC Intro Shareholder Partners

1. Agence Wallonne à l'Exportation et aux Investissements Etrangers (AWEX)
2. British Business Group (BBG) India
3. Euro-India Research Centre (EIRC)
4. European Business Group (EBG) India
5. European Hydrogen Association (EHA)
6. European Renewable Energy Council (EREC)
7. Indo-Belgian-Luxembourg Chamber of Commerce & Industry (IBLCCI)
8. Indo-German Chamber of Commerce (IGCC) – **Founding Shareholder**
9. Indo-Italian Chamber of Commerce & Industry (IICCI)
10. Indo-Spanish Chamber of Technology (ISCT)
11. Indo-French Chamber of Commerce and Industry (IFFCCI)
12. Luxembourg European Institute for Asian Studies (LEIAS)
13. Portugal Global (AICEP)
14. The Council of EU Chambers of Commerce in India (EUCCI)



**Collaboration is the foundation**

## EBTC – Serving the European Business & Research Communities

EBTC as first  
contact point



### Market Intelligence

- Advice on securing, developing & marketing IPR in India
- Information on 'doing business in India'
- Assistance in dealing with legal & regulatory requirements
- Information on Standards & Norms
- Identification of funding sources
- Market overview reports & feasibility studies
- Sectoral market studies with focus on NTBs

### Connecting EU and Indian Business & Research Communities

- Identification of projects at Indian State level & building of EU-wide consortia
- Organization of sector-specific pan-EU Business & Research Delegations to India
- Business & Research Partner Search
- Facilitating trade fair and conference participation

### Supporting Services

- Cleantech Incubator: offering individual workstations in EBTC's office premises
- Advice on market access issues
- Support in Business to Government (B2G) activities

Market  
Entry



## **EBTC has helped to facilitate technology transfer to India from countries including:**

1. Poland - RAFAKO
2. Sweden – The municipality of Sundsvall
3. Sweden - Winova
4. France – Ciel et Terre, Tech Sub
5. Spain – Idener
6. Spain – PICVISA

## **EBTC also works to identify project opportunities and build capacity in India:**

7. Capacity Building in Karnataka & Tamil Nadu.



# EBTC Case Study 1: Poland – RAFAKO



- **Technology / Project type:** 'Circulating Fluidised Bed Boilers.'
- **Organisations:** RAFAKO (Poland) & Hari Machines Ltd. (Kolkata, India)
- **EBTC's role:** technical and business development expertise which resulted in an agreement signed between the two organisations in August 2011 during EBTC's flagship energy mission.
- **Status:** As at March 2012, Hari machines is quoting CFBC boilers, based on the RAFAKO technology, to different clients. They are projecting a market of 62 crores. The capacity of the boiler that a Hari machine is dealing with is up to 150 MW.



# EBTC Case Study 2: Sweden – The municipality of Sundsvall



- **Technology / Project type:** Waste-to-Energy
- **Organisations:** The municipality of Sundsvall (Sweden) & Satarem (India)
- **EBTC's role:** partner research and identification, matchmaking, and facilitating the relationship. EBTC organized and co-ordinated Satarem India's visit to Sundsvall Energi in Sweden (Feb 2012.)
- **Status:** Discussions will continue to explore the parameters for a win-win collaboration.



*Photos courtesy: Lars Ling*

# EBTC Case Study 3: Sweden – Winova



- **Technology / Project type:**  
Non-alcoholic environmentally friendly hand sanitizers
- **Organisations:** Winova Technology AB (Sweden) & Shivram Associates (Bangalore, India)
- **EBTC's role:** Partnership facilitation
- **Status:** Winova Technology AB visited Bangalore, India in March 2012 to discuss the next steps.

# EBTC Case Study 4: France – Ciel et Terre, Tech Sub



## 1. Technology / Project type:

Floating solar PV systems

**Organisations:** Ciel et Terre (France) & Enzen Global (Bengaluru)

## 2. Technology / Project type:

Rejuvenation and restoration of lakes and water bodies

**Organisations :** Tech Sub (France) & Enzen Water Solutions(Bengaluru, India)

- **EBTC's role:** partner research and identification, matchmaking, and facilitating the relationship.
- **Status:** the teams are developing bid documents for projects.

# EBTC Case Study 5: Spain – Idener



## Stages of development of JV:

1. Memorandum of Understanding
2. Co-development
3. Pilot project
4. Commercialize technology

### 1. **Technology / Project type:**

Fuel cell technologies

**Organisations:** Idener & Anabond Sainergy Fuel Cell India Private Ltd.

### 2. **Technology / Project type:**

Solar cooling

**Organisations :** Idener & Bharat Forge

### 3. **Technology / Project type:**

Anaerobic digesters

**Organisations :** Idener & Chempure Technologies Pvt. Ltd.

- **EBTC's role:** Partnership facilitation and technology management
- **Status:** First meeting March 2012 and Agreements being discussed

# EBTC Case Study 6: Spain – PICVISA



- **Technology / Project type:** MSW sorting and treatment.
- **Organisations:** PICVISA machine vision systems & Chempure Technologies Pvt Ltd.
- **EBTC's role:** Partnership facilitation
- **Status:** As of Feb 2012, the association is moving ahead, and they have jointly bid for a consulting project in Tamil Nadu. This will give an opportunity for PICVISA to stamp its foot in India.

*"I am glad that EBTC has brought together my firm Chempure Technologies Pvt Ltd with the Spanish firm PICVISA which specializes in MSW sorting and treatment".*

- P. Devanand, Director Technical & Business Development, Chempuretech

# EBTC Case Study 7

## Capacity Building in Karnataka & Tamil Nadu

1



2



3



1. Vellore Institute of Technology (VIT)
2. Tamil Nadu Energy Development Agency (TEDA)
3. Karnataka State Pollution Control Board (KSPCB)
4. Karnataka Renewable Energy Development Ltd. (KREDL)

4





- High-level Workshop on Public Procurement for best practices from Europe, New Delhi, Date TBA.
- IPR Sessions at EBTC Events, Pan India, April-Dec 2012
- Research to Business Session at the World Renewable Energy and Technology Congress, New Delhi, 25-27 Apr, 2012
- Biotech Business and Research Delegation - Virtual matchmaking, 28 May–1 June 2012, Bengaluru
- **Water, Waste-treatment and Green Building Mission, Kolkata, 5-7 June 2012**
- Conference on Renewable Energy in India – Technology, Regulation and Finance, Mumbai, September 2012
- Workshop on funding facilitation of projects with relevant and demanded EU technologies in India, Mumbai, September 2012
- Seminar on utilisation of mini-grids, off grid energy solutions, New Delhi, September 2012
- EBTC Smart Grid Event, Location TBD, October.
- Biotechnology Business & Research Delegation, Bengaluru, 5-9 November 2012
- Energy Business & Research Delegation to Renewable Energy World Conference and Expo, New Delhi, 7–9 November 2012
- Environment Business & Research Delegation, Mumbai, October 2012
- Transport Business & Research Delegation to the Urban Mobility Conference cum Exhibition, New Delhi, 5-8 December 2012
- Workshop and Roundtables joining energy and climate change issues with sustainable transport strategies, New Delhi, 5-8 December 2012
- Seminar on Sustainable Solutions for Jatropha-based Biofuels in India, New Delhi, 11-12 December 2012
- Final workshop on IPR issues in 2012, Location TBD, January 2013



# Thank You



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