

**APCTT-CSIR Regional Workshop on New Paradigm in Technology Transfer and
Commercialisation**

8-10 July, 2019, CSIR-HRDC Ghaziabad

International Organizations in Promoting Cross-border Technology Transfer

**Dr. Krishnan S Raghavan
Coordinator, Technology Transfer
United Nations APCTT-ESCAP**

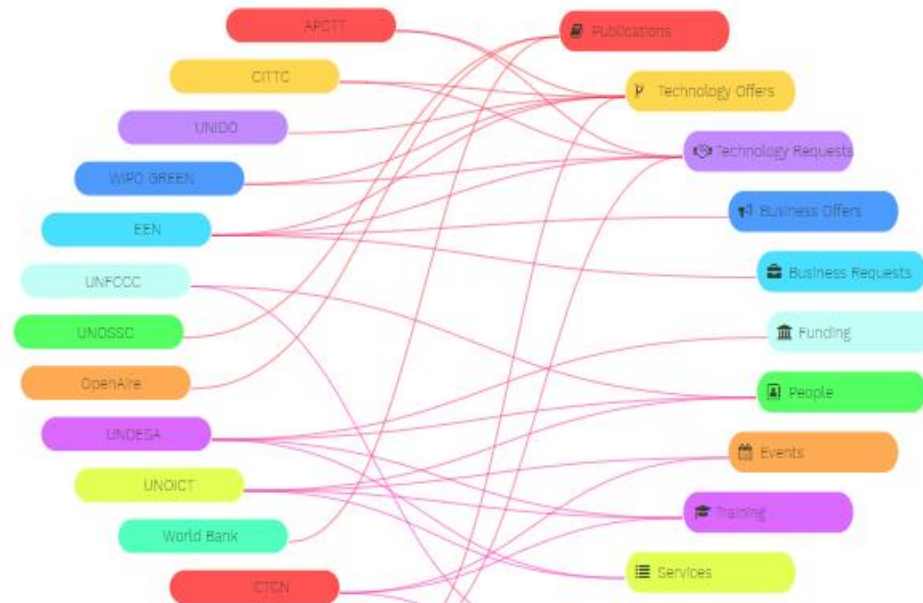
Outline

1. International Organizations in Technology Transfer
2. Introduction to APCTT
3. Objectives
4. Key Focus Areas of APCTT
5. APCTT's Work Programme
6. APCTT's Web-based Platforms and Tools for Technology Transfer and Market Linkages
7. Selected Examples of Key Accomplishments
8. Concluding Remarks

International Organizations in Technology Transfer

- International Organizations play a crucial role in facilitating technology transfer (TT) among countries, **as they work across borders**
- Many international organizations have **established dedicated networks and initiatives** for promoting cross-border technology transfer.
- They contribute significantly to the worldwide **exchange of knowledge and best practices**, addressing the lack of awareness and the need for capacity-building.
- International organizations facilitate **access to technologies, partnerships, finance and various other support mechanisms**
- The **Online Platform of the Technology Facilitation Mechanism (TFM)** is an excellent example of what International Organizations can do to facilitate cross-border TT

International Organizations in Technology Transfer



Introduction to APCTT

Asian and Pacific Centre for Transfer of Technology (APCTT) was established in 1977 by the member countries of the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP).

Located initially in Bangalore, India. It is now based in New Delhi, India since 1993.



*The APCTT building inauguration on 16th July, 1977
Bangalore.*



*The APCTT building inauguration on 18th November,
1993 New Delhi.*

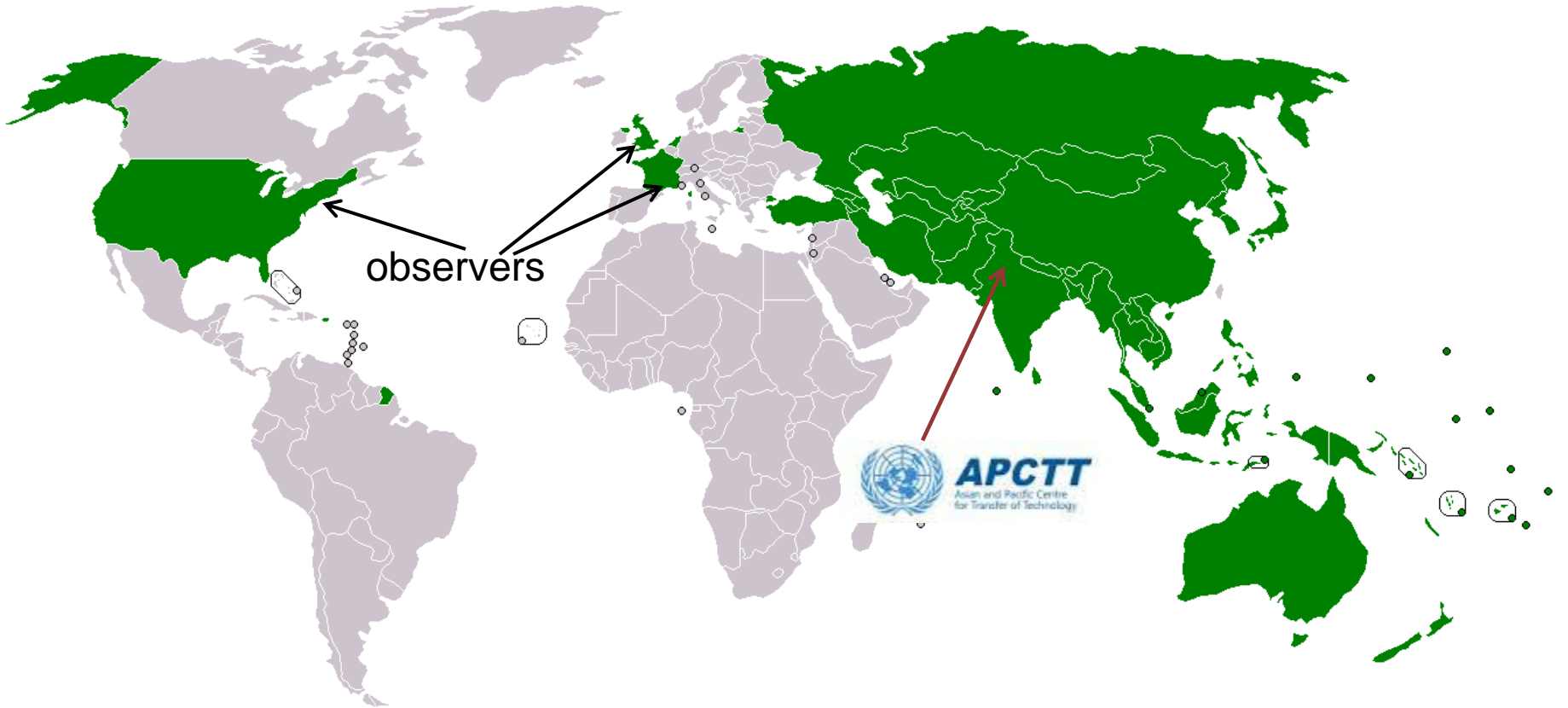
Objectives

Assist member and associate member countries of United Nations ESCAP in strengthening their capabilities to:

- *Develop and manage national innovation systems;*
- *Develop, transfer, adapt and apply technology;*
- *Improve the terms of transfer of technology; and*
- *Identify and promote the development and transfer of technologies relevant to the region..*



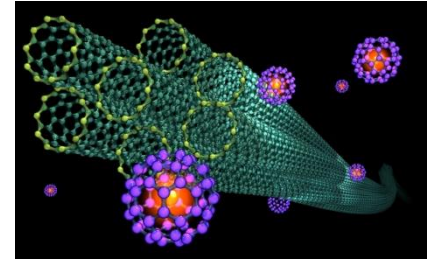
Member Countries



Key Focus Areas of APCTT

Science, Technology and Innovation (STI)

Development and adoption of sound science, technology and innovation (STI) policies and support mechanisms by member countries for fostering technology innovation, technology-based entrepreneurship and competitiveness of SMEs.



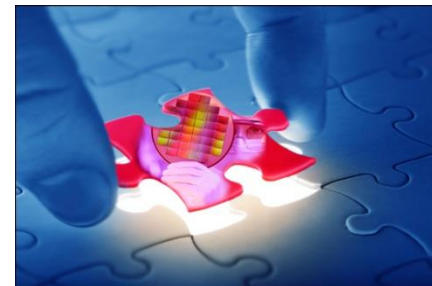
Technology Transfer

Member country institutional capacity building to identify, acquire and adopt technologies and provide IT-enabled mechanisms to facilitate technology transfer and related intermediary services.



Technology Intelligence

Provide IT-enabled access to technology information services to technology stakeholders in member countries and undertake normative and analytical studies.



APCTT's Work Programme

- ✓ Enabling member countries to continuously upgrade the **technology transfer capacity of SMEs and technology intermediaries** through “training of trainer” programmes;
- ✓ Assisting them to refine **their national innovation systems** to promote sustainable and inclusive development, and foster social entrepreneurship
- ✓ Promoting the **development of networks** among R&D institutes in the Asian and Pacific region to enhance collaboration, the sharing of experiences and the benchmarking of effective research and development management practices in new and emerging technologies
- ✓ Fostering **South-South, North-South as well as triangular cooperation** in technology transfer to address issues related to poverty alleviation, energy security, and low-carbon green growth

APCTT's Web-based Platforms and Tools for Technology Transfer and Market Linkages

APCTT has developed various free of cost, regional information repositories in the form of internet-based on-line tools and information platforms. Some of the key technology transfer on-line tools / information platforms are provided below:

- ❖ **Technology4sme Database (www.apctt.org)**
- ❖ **Global Technology Databases (www.apctt.org)**
- ❖ **Renewable Energy Technology Bank (www.apctt.org)**
- ❖ **Tech Monitor. Net (www.techmonitor.net)**

APCTT's Web-based Platforms and Tools....

Technology4sme is

- A regional platform for technology suppliers and seekers from the Asia-Pacific region and beyond
- An IT powered mechanism that helps technology based small and medium enterprises in exploring opportunities across the region
- An effective source of information on technological development at regional level and also on technology related events such as conferences, workshops, exhibitions organized in the Asia Pacific region

APCTT's Web-based Platforms and Tools ...

Target Group

- **SMEs:** the technology based small and medium enterprises (SMEs) primarily from the Asia Pacific region;
- **Tech Suppliers:** the technology developers keen on selling their technologies to potential customers from the Asia Pacific region;
- **Tech Seekers:** the SMEs from the Asia Pacific region keen to source new technologies to upgrade, expand, or start new ventures;
- **Policy Makers:** the technology experts keen to know about the technology trends, tech news and tech events in the region


APCTT's Web-based Platforms and Tools ...

Why Technology4SME?


- Free of cost service provided by UN-APCTT
- Transparency
- To explore market opportunities / technologies in the Asia Pacific region and beyond
- Opportunity to showcase the technologies / products in the main page, free of cost for a fortnight

APCTT's Web-based Platforms and Tools ...

Home About APCTT Focus Areas Member Countries Events Resource Centre Contact Us

 **APCTT**
Asian and Pacific Centre
for Transfer of Technology

Asian and Pacific Centre for Transfer of Technology
of the United Nations Economic and Social Commission for Asia and the Pacific

 UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

Technology Offers (855)

[Submit Technology Offer](#)

Sectors

- Aerospace (6)
- Textile (4)
- Energy (23)
- Environment (23)
- Food Processing (40)
- Garment (1)
- Information Technology (61)
- Instrumentation (4)

Technology4SME Database

- [Login](#)
- [Register](#)
- [Technology Offers](#)
- [Technology Requests](#)
- [Joint Venture & Partnership](#)

Preparing & Uploading Tech offers / Tech requests

Uploading Tech Offers

Submit Technology Offer

This section enlists all the technology offers available under various sectors. The members can browse and submit a new technology offer. While submitting tech offers, the members should fill in the fields appropriately as it makes their technology offers stand out better.

* Indicates fields are mandatory

* Title of Technology	<input type="text"/>
* Sector	Select
* Country	India
* Description	<input type="text"/>
* Area of Application	<input type="text"/>
Advantages	<input type="text"/>
Environmental aspects	<input type="checkbox"/> Cleaner Production <input type="checkbox"/> Energy efficiency <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waste utilization <input type="checkbox"/> Systems integration <input type="checkbox"/> Other
Development Status	<input type="checkbox"/> Idea <input type="checkbox"/> Laboratory Model <input type="checkbox"/> Commercial Prototype <input type="checkbox"/> Design <input type="checkbox"/> Pilot Plant <input type="checkbox"/> Fully Commercialized
Legal Protection	<input type="checkbox"/> Trade Mark <input type="checkbox"/> Patent <input type="checkbox"/> Others
Technical specifications	<input type="text"/>
* Transfer Terms	<input type="checkbox"/> Consultancy <input type="checkbox"/> Technical services <input type="checkbox"/> Turnkey <input type="checkbox"/> Subcontracting <input type="checkbox"/> Technology Licensing <input type="checkbox"/> Others <input type="checkbox"/> Joint Venture <input type="checkbox"/> Equipment Supply
Target Countries	Afghanistan Albania Algeria American Samoa (For multiple selection use "ctrl" key)
Estimated cost(US\$)	<input type="text"/>
Upload	<input type="text"/> <input type="button" value="Browse..."/>
Upload	<input type="text"/> <input type="button" value="Browse..."/>
Contact Details (Click to fill / Edit)	
Do You wish to display your contact details online?	<input checked="" type="radio"/> Yes <input type="radio"/> No

Submit

Uploading Tech Requests

Submit Technology Request

This section enlists all the technology requests available under various sectors. The members can both browse and submit a new technology request. While submitting tech requests, the members should fill in all the fields appropriately as it makes their technology requests stand out better.

* Indicates fields are mandatory

* Title of Technology	<input type="text"/>
* Sector	Select
* Country	India
* Description	<input type="text"/>
* Area of Application	<input type="text"/>
* Keywords	<input type="text"/>
* Transfer Terms	<input type="checkbox"/> Consultancy <input type="checkbox"/> Joint Venture <input type="checkbox"/> Technology Licensing <input type="checkbox"/> Subcontracting <input type="checkbox"/> Technical services <input type="checkbox"/> Others <input type="checkbox"/> Turnkey Plant <input type="checkbox"/> Equipment Supply
Studies Available	<input type="checkbox"/> Feasibility Report <input type="checkbox"/> Environmental Impact Studies (EIA/EIS) <input type="checkbox"/> Others
Project Type	<input type="radio"/> Start Up <input type="radio"/> Diversification <input checked="" type="radio"/> New Idea <input type="radio"/> Expansion/Modernisation
Estimated project cost (US\$)	<input type="text"/>
Target Countries	Afghanistan Albania Algeria (For multiple selection use "ctrl" key)
Assistance sought from potential partner	<input type="text"/>
Additional information	<input type="text"/>
Upload	<input type="text"/> <input type="button" value="Browse..."/>
Upload	<input type="text"/> <input type="button" value="Browse..."/>
Contact Details (Click to fill/ Edit)	
Do You wish to display your contact details online?	<input checked="" type="radio"/> Yes <input type="radio"/> No

Submit

Global Technology Databases

Global Technology Databases

APCTT has compiled a list of global as well as country-wise technology databases that deal with the technology transfer related services for SMEs and entrepreneurs.

If a particular technology search has been made using APCTT's Technology4SME database and if the search did not yield desired results, the users could use this section to extend their search to other databases listed in this section.

Over 10 technology databases could be readily accessed through this service of APCTT. More technology databases from countries across the globe will be added periodically for the benefit of SMEs and entrepreneurs.

Enterprise Europe Network

<http://www.enterprise-europe-network.ch/marketplace/index.php?file=bbs-search.php&disregion=0>

Find innovative technologies and co-operation partners in your sector by searching the technology profiles database which contains thousands of offers and requests from companies and R&D institutions...

UNIDO ITPO Tokyo's Environmental Technology Database

http://www.unido.or.jp/en/activities/technology_transfer/technology_db/

Renewable Energy Technology Bank



Asian and Pacific Centre for Transfer of Technology
of the United Nations Economic and Social Commission for Asia and the Pacific



Contact Us

Renewable Energy
Technology Bank
(RET-Bank)

Renewable Energy
Business Directory

RET-Bank

Search

Country

Technology

Submit

View RET-Bank

Quick Links

Objectives

Target Countries

Cooperation Mechanisms

Renewable Energy Technology Bank (RET-Bank)

APCTT's Renewable Energy Cooperation-Network for the Asia Pacific (RECAP) is an institutional cooperation mechanism that has been set up in accordance with United Nations ESCAP Commission resolution 64/3 of 30 April 2000 on promoting renewables for energy security and sustainable development in Asia and the Pacific. APCTT received generous funding support of the Ministry of New and Renewable Energy, Government of India for establishing this institutional cooperation mechanism for promoting cross-border cooperation in the promotion of renewable energy among countries in the Asia-Pacific region. RECAP aims to strengthen the capacity of member countries to promote the utilization and development of renewable energy technologies (RETs) to meet their energy needs and foster sustainable development. As on date, there are 15 member countries, viz. Bangladesh, China, Fiji, India, Indonesia, Islamic Republic of Iran, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Republic of Korea, Sri Lanka, Thailand, and Viet Nam are part of the RECAP network. This Institutional Cooperation Mechanism is in the form of a network of member countries, facilitated by APCTT, that would continue to perform four major functions, namely: (1) collection and dissemination of information on renewable energy technologies (RETs), (2) sharing of best practices on renewable energy (RE) promotion and utilization, (3) developing capacity to plan and implement RET transfer projects, and (4) promoting research and development (R&D) collaboration in renewable energy technologies. Since June 2009, APCTT planned and implemented several activities towards establishing this cooperation mechanism including the design and development of RECAP website and RECAP On-line Solution Center to cater to the need of renewable energy practitioners in member countries in the Asia-Pacific region.

The primary objective of RECAP network is to facilitate technology transfer cooperation among countries in the Asia-Pacific region in the area of renewable energy. Towards this end, APCTT has developed a "Renewable Energy Technology Bank (RET-Bank)" of tested and proven renewable energy technologies (RETs) initially in the areas of solar, biomass, wind, mini-hydro power and geothermal energy. It is envisaged that this technology bank would act as a repository of information on renewable energy technologies that are readily available for transfer and deployment. APCTT has developed the Renewable Energy Technology Bank as on-line technology database freely available for public access through its RECAP website.

Technology Intelligence

Strengthening innovation-driven inclusive and sustainable development

Asia-Pacific

Tech Monitor

Vol. 29 No. 3 Jul - Sep 2012



Accessing the Biotechnology
Global Value Chain
Partnering Opportunities
for SMEs of Asia-Pacific



Plus
Technology News and Events



VATIS UPDATE

Food Processing

Vol. 3 No. 114 • Oct - Dec 2012
ISSN 0971-5649

Apprise yourself with the latest technological innovations

Highlights

- Mobile food allergen testing device
- Tasty and gluten-free pasta and pastries
- New coating increases shelf-life of fruits
- Technology for low-cal carbonated lassi
- The packaging that boils egg
- Supercritical fluid extractor



VATIS UPDATE

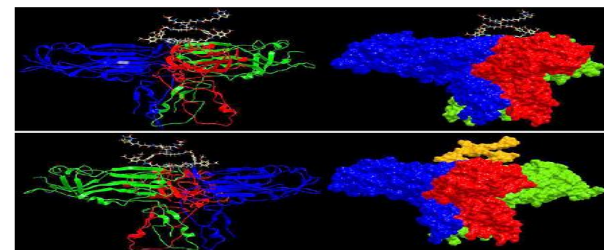
Biotechnology

Vol. 1 No. 118 • Apr - Jun 2013
ISSN 0971-5622

Apprise yourself with the latest technological innovations

Highlights

- Human genomes relate to zebrafish genomes
- Wound-healing genes found in flies
- Metabolic fingerprinting to identify proteins
- Glass and plastic implants to repair broken bones
- Radioactive bacteria targets pancreatic cancer
- Super salt-tolerant rice from wild parent



APCTT's Direct Technology Transfer Facilitation Mechanisms

- APCTT is ready to assist SMEs, R&D Institutions, Researchers, Technology Seekers, Technology Providers, Government Organizations and other relevant stakeholders in multiple ways including, **sharing information on technology sources, technology based business partnerships, latest trends in specific technological sectors (through publications) as well as cross-border technology transfer events (B2B meetings in specific sectors).**
- Besides, APCTT organizes **“Training of Trainers”** programmes in the area of technology transfer in partnership with key government organizations and public institutions.

Selected Examples of Key Accomplishments (Contd.)

Establishment of India SME Technology Services Limited

In partnership with the Small Industries Development Bank of India (SIDBI), APCTT incubated the **Technology Bureau for Small Enterprises (TBSE)** in its premises by providing access to technology transfer networks that the Centre had established over a period time as well as the technology databases. TBSE has been renamed as **India SME Technology Services Limited (ISTSL)**. It is currently operating independently and providing vital support to Indian SMEs in technology transfer and financing.

Selected Examples of Key Accomplishments (Contd.)

Establishment of Technology Parks and Indian University Technology Database

- ❖ APCTT in partnership with UNDP implemented a project entitled, “Nurturing Technological entrepreneurship through S&T Entrepreneurship Parks (STEPS) & Technology Business Incubators (TBIs)”.
- ❖ **Two technology business incubators** were established. In partnership with Science and Technology Park, University of Pune and UNDP
- ❖ APCTT also set up the **University Grants Commission’s Indian University Technology Database** which is the key technology transfer database for technologies developed by Indian universities. This database covered about **17 technological sectors**.

Selected Examples of Key Accomplishments (Contd.)

Technology Transfer Capacity Building

Training of Trainers Programme on Technology Transfer

APCTT has been organizing Training of Trainers (ToT) programmes on Planning and Managing Technology Transfer projects for strengthening the technology transfer capacity of ESCAP member countries. Over the years, around 5000 technology transfer professionals have been trained by APCTT in Thailand, Philippines, India, Japan, Fiji Islands, Pakistan, Islamic Republic of Iran, Sri Lanka, Viet Nam, Malaysia, Indonesia and China.

Selected Examples of Key Accomplishments

SATNET Asia Programme of Work – South Asia Component

1. Established a Biological Control Unit in the National Plant Protection Centre, Bhutan to assist Bhutan in its Organic Agriculture Roadmap.
2. Trained over 400 participants from 6 countries in South Asia (Afghanistan, Bangladesh, Bhutan, India, Nepal and Pakistan) on various aspects of sustainable agriculture and agricultural trade facilitation.
3. A smallholder farmer association in South India got market access to Iran for their banana exports through the adoption of “Electronic Traceability” related procedures and practices, a Regional Training Workshop organized by APCTT in partnership with TID-ESCAP.



Selected Examples of Key Accomplishments (Contd.)

Renewable Energy Cooperation-Network for the Asia-Pacific (RECAP)

- APCTT, with the active involvement of 15 countries in the Asia-Pacific region established RECAP as an institutional cooperation mechanism for promoting renewable energy in the region (In Support of ESCAP Resolution E/ESCAP/64/L.13/Rev. 1 dated. 29 April 2008)
- A Renewable Energy Technology Bank (RET-Bank) was also established as an on-line repository of information on tested and proven pro-poor renewable energy technologies
- APCTT trained over 350 participants from 15 RECAP member countries on technical, policy as well as business facilitation aspects.

Renewable Energy Cooperation-Network for the Asia Pacific
An initiative of the Asian and Pacific Center for Transfer of Technology (APCTT) | ESCAP

Home | About Us | Target Countries | Services | Solution Centre | Contact Us

Quick Search

Country:

Technology:

Type of Institute:

Training:

Manufacturers:

Go

Quick Links

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- Target Countries
- Cooperation Mechanisms
- RET Resource Assessment
- Services
- Links to our Member Property
- RET Workshops
- RET Training Programs

Plant For Planet Campaign

Welcome to the Renewable Energy Cooperation-Network for the Asia Pacific

At the annual session of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) in Bangkok in April 2008, countries of the Asia-Pacific region took a decision to enhance collaboration to promote renewable energy technologies (RETs) for energy security and sustainable development. A resolution passed during this session proposed the establishment of an institutional cooperation mechanism to strengthen national capacities for renewable energy use in the form of a network of countries that could collect and disseminate RET information, share best practices, develop national capacities to plan and implement RET incentive projects, and provide research and development collaboration.

News From UN

- 12 Asia-Pacific build encourage sustainable, efficient energy use - UN News
- 12 UN gathering, Asia-Pacific nations agree to cooperate on renewable energy

Upcoming Events

- 7-7 Aug 2010 International Conference on Advances in Renewable Energy Technologies (ICAARET 2010) Business
- 7-7 Aug 2010 International Conference on Advances in Renewable Energy Technologies (ICAARET 2010) Business

RECAP Events

- 10-10 Aug 2010 Consultative Meeting on Establishing a Regional Institutional Cooperation Mechanism to Promote Renewable Energy...
- 10-10 Aug 2010 Consultative Meeting on Establishing a Regional Institutional Cooperation Mechanism to Promote Renewable Energy...

Solution Centre
For exchange of technology ideas in renewable energy

News

- UN World Summit Sustainable Development U.S.
- UN World Summit Sustainable Development U.S.
- UN World Summit Sustainable Development U.S.

UN Links

- ESCAP
- UNEP
- UNODD
- UN ENERGY
- UNIDO
- UNFCCC

Other Links

- RECAP
- RECOLD
- OMED
- REN 21

technology 4544.net

National Innovation Systems
United Nations Center

business asia.net

APTITUDE
Search Engine

Publications

Selected Examples of Key Accomplishments (Contd.)

Technical Cooperation Under Livelihoods and Food Security Trust Fund (LIFT)

- APCTT, through its knowledge partner, World Vegetable Centre (AVRDC) transferred **60 elite climate resilient mung bean varieties** from India to Myanmar for supporting smallholder farmers in the central dry zone of Myanmar
- Facilitated the **establishment of several seed banks and farmer-led seed enterprises** in Myanmar
- The Mandalay Farmer Association has **initiated mung bean seed production**
- Several seed producer groups were set up that will multiply the **sun hemp (Crotalaria) green manure seeds**

Selected Examples of Key Accomplishments (Contd.)

Technology Transfer Support Services

- ❖ APCTT's www.technology4sme Database acts as a “**Regional Technology Transfer Market Place**” and offers a free platform for technology seekers and technology suppliers to exchange information on technology-based business partnership opportunities. Currently this database has **more than 1800 technology offers and requests in about 30 industrial sectors.**
- ❖ National Research Development Corporation (NRDC) under DSIR, Government of India **transferred more than 100 technologies from APCTT's Technology4SME database**

Concluding Remarks

- There are **multiple ways** in which international organizations such as APCTT could extend support for cross-border technology transfer
- There are **no charges/fee for using any of the services** offered by APCTT
- Being a Regional Institution of United Nations with a specific mandate to promote technology transfer, APCTT strives to be an **enabling platform for knowledge sharing, regional networking and capacity building**
- APCTT promotes cross-border cooperation for facilitating **technology-driven sustainable and inclusive development** in countries in the Asia Pacific region.

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Designations such as '*developed*', '*industrialised*' and '*developing*' are intended for convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process. Mention of firm names, commercial products and/or technologies does not imply the endorsement of the United Nations Economic and Social Commission for Asia and the Pacific.

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Reach us at

Asian and Pacific Centre for Transfer of Technology

United Nations ESCAP

P.O. Box 4575, C-2, Qutab Institutional Area, New Delhi – 110 016

Tel : 91-11-3097-3758 | Fax : 91-11-26856274

Email : srinivasaraghavan@un.org | Website : www.apctt.org