

International Workshop

on

“Supporting Innovative Entrepreneurs and Role of Technology Transfer”

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Facilitating Cross-border Technology Partnerships – The Role of APCTT-ESCAP

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Introduction

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.*

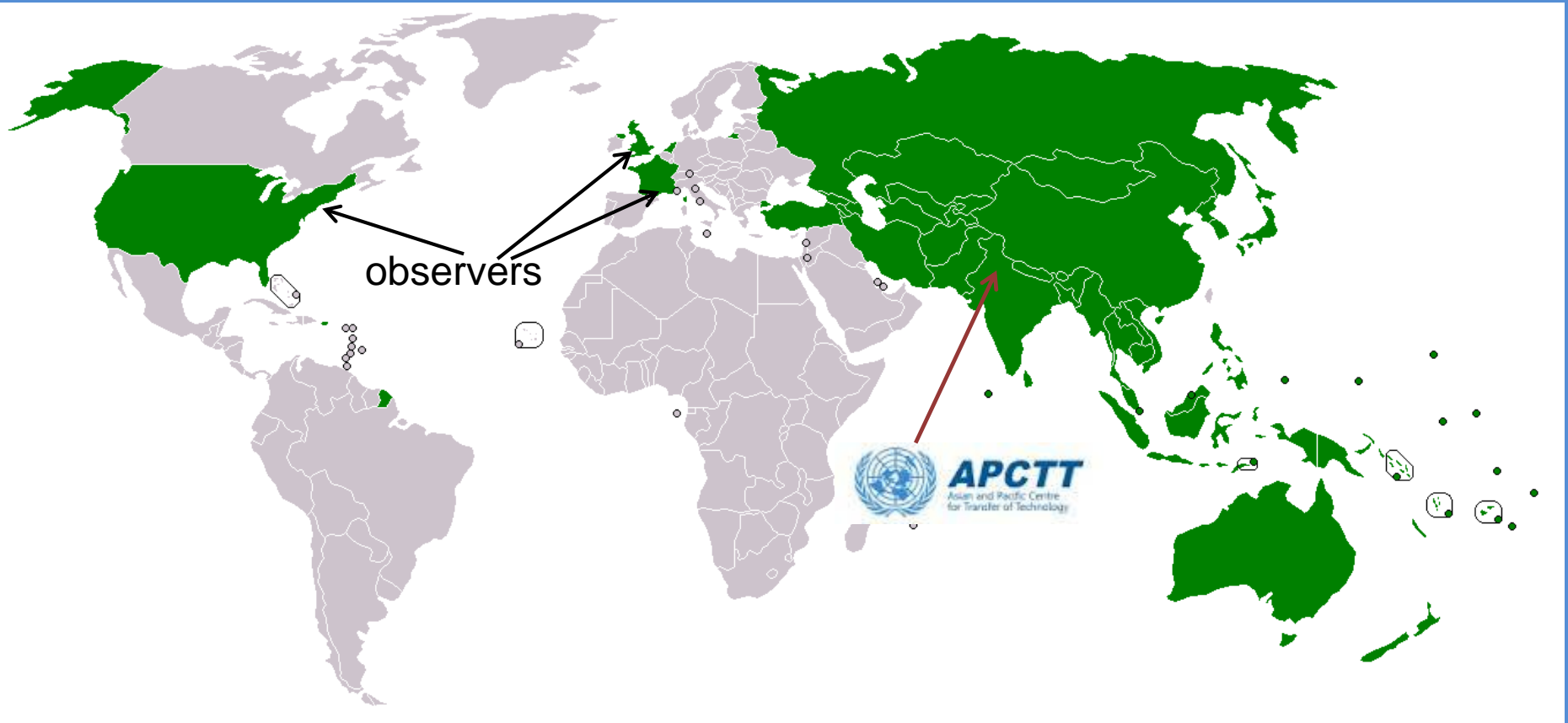
Objectives

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



Brief Overview of ESCAP

- Regional development arm of the United Nations for the Asia-Pacific region
- Established in 1947
- 62 member States, home to 4.1 billion people (or two thirds of the world's population)
- Headquartered in Bangkok with 4 sub-regional offices across the Asia-Pacific

Focus Areas

1. Disaster Risk Reduction
2. Environment and Development
3. Information and Communications Technology
4. Macroeconomic Policy Development
5. Social Development
6. Statistics
7. **Trade and Investment**
8. Transport
9. Sub-regional Priorities
10. Sustainable Development



Sub Regional Offices of ESCAP

ESCAP Sub Regional Office for East and North-East Asia (Incheon, Republic of Korea)



ESCAP Sub Regional Office for South and South-West Asia Office (New Delhi, India)



ESCAP Sub Regional Office for The Pacific (Suva, Fiji Islands)



ESCAP Sub Regional Office for North and Central Asia (Almaty, Kazakhstan)



Regional Institutions of ESCAP

Six Regional Institutions hosted by different member countries addressing specific priority areas and delivering as One ESCAP.

• APCICT - Asia and Pacific Training Centre for Information and Communication Technology for Development (Incheon, Republic of Korea)



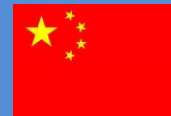
• APCTT - Asian and Pacific Centre for Transfer of Technology (New Delhi, India)



• CAPSA - Centre for Alleviation of Poverty through Sustainable Agriculture (Bogor, Indonesia)



• CSAM - Centre for Sustainable Agricultural Mechanization (formerly UNAPCAEM) (Beijing, China)



• SIAP - Statistical Institute for Asia and the Pacific (Chiba, Japan)



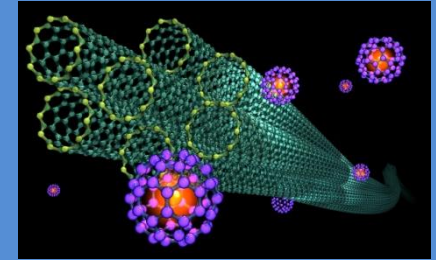
• Asian and Pacific Centre for Disaster Information Management (Tehran, Iran)



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.



Operational Modalities

1. **Capacity Building of Member Countries and Institutions**
2. **South- South Cooperation**
3. **Technology Collaboration Networks**
4. **Technology Intelligence and Digital Engagement**



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 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 ...

[About APCTT](#)[Focus Areas](#)[Member Countries](#)[Events](#)[Resource Centre](#)[Contact Us](#)

Asian and Pacific Centre for Transfer of Technology
of the United Nations 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

Renewable Energy Technology Bank

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.

Global

All

Submit

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/

APCTT Asian and Pacific Centre for Transfer of Technology

United Nations ESCAP Economic and Social Commission for Asia and the Pacific

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

Contact Us

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.

RET-Bank

Search

Country

All

Technology

All

Submit

View RET-Bank

Quick Links

- Objectives
- Target Countries
- Cooperation Mechanisms

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



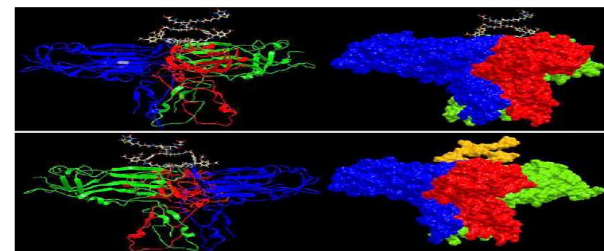
VATIS UPDATE Biotechnology

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 Web-based Platforms and Tools...

Tech Monitor Website (www.techmonitor.net)

Tech Monitor website provides free access to APCTT's On-line publications, Asia Pacific Tech Monitor as well as Value Added Technology Information Service (VATIS).

Asia-Pacific Tech Monitor is a quarterly periodical that brings up-to-date information on trends in technology transfer and development, technology policies, new products and processes.

Value Added Technology Information Service (VATIS) publications provides information on latest technological innovations in five areas namely, Non-Conventional Energy, Waste Management, Ozone Layer Protection, Biotechnology and Food processing from more than 35 countries.

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 is willing to organize “**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, representatives from several SMEs and SME support institutions 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.

The screenshot displays the homepage of the Renewable Energy Cooperation-Network for the Asia Pacific (RECAP). The header features the organization's logo, a globe with green energy lines, and the title "Renewable Energy Cooperation-Network for the Asia Pacific". Below the title, it states "An initiative of the Asian and Pacific Center for Transfer of Technology (APCTT)" and the "UN ESCAP" logo. A navigation bar includes links for Home, About Us, Target Countries, Services, Solution Centre, and Contact Us. The main content area is divided into several sections: a "Quick Search" form with dropdown menus for Country, Technology, Type of Institute, Training, and Manufacturers; a "Quick Links" section listing Objectives, Target Countries, Cooperation Mechanisms, RET Resource Assessment, Services, Links to on Medicinal property, RET Workshop, and RET Training Programs; a "Plant For Planet Campaign" image showing hands holding a small green plant; a "Welcome to the Renewable Energy Cooperation-Network for the Asia Pacific" section with a detailed introductory paragraph; a "News From UN" section with two news items; and "Upcoming Events" and "RECAP Events" sections. On the right side, there are "News" and "UN Links" sections with various links to related organizations and resources.

Selected Examples of Key Accomplishments (Contd.)

Technology Transfer Capacity Building

Technology Transfer Support Services

- ❖ APCTT offers **free technology transfer facilitation services** to ESCAP member countries through its online and offline technology transfer support mechanisms.
- ❖ 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 1000 technology offers and requests in about 30 industrial sectors.**

Concluding Remarks

- **There are multiple ways in which APCTT could extend support for the needs of a wide range of stakeholders in the broad area of 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 South-South Cooperation for facilitating technology-driven sustainable and inclusive development in countries in the Asia Pacific region.**

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