



Regional Workshop on Technology Transfer

Renewable Energy Technologies for Climate Change Mitigation

24-25 September 2020, Bangkok, Thailand

Organized by

Asian and Pacific Centre for Transfer of Technology (APCTT) of the
United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

Jointly with

Ministry of Higher Education, Science, Research and Innovation (MHESI), Thailand
and
Thailand Institute of Scientific and Technological Research (TISTR)

Background

The Asia-Pacific is one of the most vulnerable regions to climate change and accounts for nearly half of global greenhouse gas (GHG) emissions.¹ The region is striving to mitigate the impacts of climate change under the frameworks of SDG 7 (Ensure access to affordable, reliable, sustainable and modern energy for all), SDG 13 (Take urgent action to combat climate change and its impacts), and the Paris Agreement on climate change. The *Asia-Pacific Renewable Energy Status report 2019* reveals that the sub-regions with the highest penetrations of renewables in the energy mix are Southeast Asia (45.7%) and South Asia (42%), and the countries with the highest shares of renewables in total energy consumption are Myanmar (68%), Sri Lanka (51.3%), the Philippines (47.5%) and Indonesia (47%), driven by hydropower and bioenergy.²

Today, there are many renewable energy sources and technologies that can reduce carbon intensity in key sectors such as energy, industry and buildings. They offer significant benefits in terms of Greenhouse Gas (GHG) reduction, through energy efficient buildings, transportation, low-carbon products and services. Yet, there are many challenges for policy makers, technology promotion agencies, research and development institutions and industry to promote and adopt renewable energy technologies. It is important for policy makers to design and implement effective policy instruments and strategies to accelerate renewable energy technology transfer and adoption. Poor linkages between research institutions and industry are a matter of concern for effective technology transfer and commercialization. Entrepreneurs often face impediments to access appropriate modes of finance for projects based on renewable energy technologies. There are also challenges for the industry in the local adaptation of technologies in terms of availability of local supplies of raw materials, skills and equipment.

The Regional Workshop will bring together policymakers as well as international and national experts to deliberate on policy strategies, institutional and financial mechanisms, and innovative business models for renewable energy technology transfer. It will facilitate discussion on collaboration networks and platforms, case studies and related best practices on renewable energy technology transfer, adoption, and deployment.

Objectives

- Enhance understanding on enabling policies and strategies to promote renewable energy technologies for climate change mitigation
- Share regional experiences, business models and best practices to adopt and benefit from renewable energy sources in Asia-Pacific

¹ <https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/helping-countries-tackle-climate-change>

² *Asia and the Pacific Renewable Energy Status Report 2019*,
https://www.unescap.org/sites/default/files/REN21_Asia_Report_2019_Web.pdf

- Promote regional cooperation for cross-border transfer, diffusion and deployment of renewable energy technologies

Expected Outputs/Outcomes

- Enhanced knowledge and understanding on the enabling policy tools, strategies and support mechanisms to promote renewable energy technology transfer and deployment
- Increased awareness on innovative models and best practices for technology transfer, financing, and adoption of renewable energy technologies
- Increased understanding on facilitating cross-border technology cooperation

Participants

Policy makers, government officials, scientists, private sector representatives, technology intermediaries and other stakeholders involved in renewable energy including bio-energy and climate change related issues from ASEAN and other Asia-Pacific countries

Tentative Programme

September 24, 2020 (Thursday)

0830-0900	Registration	
0900-0930	Opening Session	
	Welcome Address	Dr. Chutima Eamchotchawalit Governor Thailand Institute of Scientific and Technological Research (TISTR)
	Opening Address	Ms. Michiko Enomoto Head, Asian and Pacific Centre for Transfer of Technology (APCTT), ESCAP
	GROUP PHOTO	
0930-0950	TEA / COFFEE	
0950-1200	<p>Session I: Enabling policy frameworks for Renewable Energy Technology Transfer – Global, Regional and National perspectives</p> <p>National policy frameworks play a critical role in clean and renewable energy transition. This session will deliberate on the implications of global frameworks and enabling national policies to facilitate renewable energy technology innovation and transfer. The session will discuss on issues and challenges on innovative</p>	

policy instruments which promote renewable energy applications in key sectors of the economy.

Moderator: Dr. Aparat Mahakhant, Deputy Governor, TISTR, Thailand (Tbc)

0950-1015	Harnessing renewable energy technology innovations for inclusive and sustainable development	Ms. Michiko Enomoto Head, APCTT-ESCAP
1015-1040	Renewable Energy technology transfer and diffusion in the Asia-Pacific – Role of Global and regional mechanisms	Prof. Sivanappan Kumar Department of Energy, Environment, and Climate Change, School of Environment, Resources and Development, Asian Institute of Technology, Thailand
1040-1105	Promotion of renewable energy technologies in the Asia-Pacific – Role of national policies and strategies	Mr. Michael Williamson Section Chief, Energy Division, ESCAP
1105-1130	Innovative policy instruments and strategies to promote renewable energy – Perspectives from Thailand	Dr. Apiradee Thammanomai Engineer (Senior Professional Level) Representative from Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand (TBC)
1130-1200	Discussion	
1200-1330	LUNCH	
1330-1700		
Session II: Facilitating Renewable energy technology innovation and transfer		
Successful innovation, transfer and deployment of renewable energy technologies at the industry and community levels depend on several critical factors. This session aims to discuss enabling environments and factors to advance adoption, sustainable operations and maintenance of renewable energy systems.		
Moderator: Prof. Sivanappan Kumar , Department of Energy, Environment, and Climate Change, School of Environment, Resources and Development, Asian Institute of Technology, Thailand		
1330-1355	Access to clean energy technologies in developing countries – Role of intellectual property	Dr. Yorimasa Suwa Senior Researcher, WIPO GREEN/Asia Pacific Industrial Property Center, Japan Institute for Promoting Invention and Innovation (JIPII), Japan
1355-1420	Transfer and diffusion of renewable energy technologies – Experience from Thailand	Mr. Natee Sithiprasasana Vice Chairman-Biomass Energy of Renewable Energy Industry Club, Thailand

1420-1445	Sustainable business models for renewable energy technology commercialization – Thailand experience	Ms. Sawita Sarah Tinsuntisook Deputy Managing Director, Zero Waste Co.,Ltd., Thailand
1445-1500	Discussion	
1500-1520	TEA / COFFEE	
Session II: Facilitating Renewable energy technology innovation and transfer (contd.)		
Moderator: Mr. Michael Williamson, UNESCAP		
1520-1545	Commercialization of renewable energy technology innovation and accessing the international market – A start-up experience from India	Dr. Vaibhav Tidke Chief Executive Officer, Science for Society (S4S) Technologies, India (TBC)
1545-1610	Public-private partnerships to accelerate renewable energy technology deployment	Mr. Deepak Krishnan Associate Director, World Resources Institute (WRI), India
1610-1635	Facilitating regional cooperation in promoting cross-border technology partnerships – The Role of APCTT	Mr. Satyabrata Sahu Coordinator, ESCAP-APCTT
1635-1650	Discussion	
1650-1700	Wrap-up	

September 25, 2020 (Friday)

0900-1040		
Session III: Financing mechanisms to facilitate transition to renewable energy		
<p>Provision and access to finance is vital for promoting renewable energy technology development, transfer and deployment. Governments need to establish enabling policy tools to facilitate fiscal incentives, early stage financing for technology development, and encouraging public and private sector funds for renewable energy projects, particularly at the community level and off-grid areas. The session deliberates on innovative financing strategies and innovative funding mechanisms for renewable energy projects.</p>		
Moderator: Michiko Enomoto, ESCAP-APCTT		
0900-0920	Innovative mechanisms for financing renewable energy projects – International perspectives	Mr. Tirthankar Mandal World Resources Institute (WRI), India
0920-0940	Best practices in Public and Private Sector Partnership (PPP) in renewable energy in Asia-Pacific	Professor Tabuchi , Toyo University, Research Center for PPP, Tokyo, Japan
0940-1000	Financing support system for renewable	Representative from DEDE (TBC)

	energy in Thailand	
1000-1020	Improving access to finance for clean energy projects in developing countries	Mr. Jens Radschinski UNFCCC Regional Collaboration Centre in Bangkok, Thailand (TBC)
1020-1040	Financing renewable energy technology transfers for sustainable development	Ms. Monica Gullberg Division of Mitigation and Adaptation, Green Climate Fund, Republic of Korea
1040-1100	Discussion	
1100-1120	TEA / COFFEE	
1120-1220		
<p>Session IV: Regional and South-South cooperation to promote renewable energy and climate technologies</p> <p>Regional and South-South cooperation are vital for cross-border transfer and diffusion of renewable energy technologies while contributing to SDG 7 and 17. This session discusses various modalities to facilitate regional cooperation between countries for international trilateral transfer and diffusion of renewable energy technologies.</p> <p>Moderator: TISTR</p>		
1120-1140	Regional cooperation to promote appropriate SDGs-ready technologies and innovations in the Asia-Pacific	Dr. Shahbaz Khan Director, Regional Science Bureau for Asia and the Pacific, UNESCO Jakarta, Indonesia (TBC)
1140-1200	Sustainable energy cooperation in the ASEAN	Mrs. Munlika Sompranon Director of Energy Cooperation Section, Department of Alternative Energy Development and Efficiency, Thailand (TBC)
1200-1220	Discussion	
Closing Session		
1220-1230	Closing Remarks	Dr. Aparat Mahakhant Deputy Governor, Thailand Institute of Scientific and Technological Research Thailand Ms. Michiko Enomoto Head, APCTT ESCAP
1230-1330	LUNCH	