



**International Conference on
Bio-Circular-Green Economy and Technology Transfer
for Small and Medium Sized Enterprises**

**23 September 2020
BITEC, Bangkok, Thailand**

Organized by

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

Jointly with

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

Background

Climate change has become one of the major threats being faced by the world with the magnitude and frequency of impacts increasing in the past few decades. The differential vulnerability to the impacts of climate change is an important factor to consider while moving towards solutions. According to the Global Climate Risk Index, four of the world's ten countries most affected by climate change are located in Southeast Asia including Myanmar, the Philippines, Thailand, and Viet Nam¹. The impacts of climate change are widespread across sectors and cause disruption of business and society in a wide area.

¹ https://germanwatch.org/sites/germanwatch.org/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_10.pdf

In the face of the pressing social, economic and ecological challenges of climate change, there is growing emphasis on managing our finite resources in a sustainable manner. A shift towards Bio-Circular-Green (BCG) economy can be a potential solution to this challenge. The BCG economy represents the integration of biological usage, economic activity and environmental wellbeing in a sustainable context. The concept of Bio Economy advocates for deriving industry inputs from renewable biological resources as well as bio-technology applications. Circular Economy aims for minimal input and minimal production of waste. Green Economy became mainstreamed after the 2012 UN Conference on Sustainable Development in Rio de Janeiro and was defined by United Nations Environment Programme (UNEP) as improved human well-being and social equity, while significantly reducing environmental risk and ecological scarcities.

The ASEAN region represents one of the most dynamic part of the global economic growth. Resource consumption is continuously rising to serve the market requirement. Adopting BCG model and shifting towards circular economy is a strategy that ASEAN member countries have agreed at the 10th Sustainable Development Symposium in “Circular Economy” that promotes responsible consumption and production. In addition, it is the object of the UN’s Sustainable Development Goals (SDGs). In the ASEAN region, transition to a BCG economy will require an integrated approach with involvement of multi-stakeholders. Since Small and Medium Sized Enterprises (SMEs), comprising of 97-99% of total enterprises in most ASEAN countries, play an important role in the economy of the region, they can be crucial vehicles to achieve this goal. Therefore, it is important for ASEAN countries to build the adaptive capacity and resilience of their SMEs. It is equally crucial to utilize the maximum potential of SMEs for climate change mitigation by adopting appropriate BCG technologies and practices.

Given the growing emphasis on sustainability and the pivotal role of SMEs in shifting towards BCG economy, Asian and Pacific Centre for Transfer of Technology (APCTT) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Ministry of Higher Education, Science, Research and Innovation (MHESI), and Thailand Institute of Scientific and Technological Research (TISTR) are well placed to organize an International Conference Bio-Circular-Green Economy and Technology Transfer for SMEs. The event will provide platform for knowledge and experiences sharing on the BCG model for sustainability, climate change mitigation and adaptation and the ways to support SMEs in taking up inclusive BCG technologies in the ASEAN region.

Objectives

- Create awareness on the concept and strategies of BCG economy, role of BCG technology transfer and commercialization for SMEs
- Facilitate sharing of best practices and policy options to advance BCG economy and BCG technology transfer

- Identify strategies to empower SMEs to develop, adopt and adapt BCG technologies
- Facilitate regional cooperation among member countries to advance BCG economy and BCG technology transfers.

Target Audience

Government officials, research scientists, private sector representatives, technology intermediaries, SMEs and other relevant stakeholders involved in BCG economy and technology transfers.

Expected Outputs/Outcomes

- Enhanced awareness on the role of BCG economy model for climate change mitigation and adaptation
- Increased awareness on best practices to advance BCG technology transfers and regional and global perspectives
- Increased understanding on inclusive BCG innovation and the strategies to empower SMEs

Tentative Agenda

0900-0920	Registration	
	Inaugural Session	
0920-1000	Welcome Remarks	Senior representative from Thailand Institute of Scientific and Technological Research (TISTR)
	Opening Remarks	Ms. Michiko Enomoto Head, Asian and Pacific Centre for Transfer of Technology (APCTT), UNESCAP
	Keynote Speech	Assoc. Prof. Soranit Siltharm Permanent Secretary, Minister of Higher Education, Science, Research and Innovation, Thailand (TBC)
	Group Photo	
Technical Session I – Shifting to BCG Economy		
<p>Designing and adopting strategies for BCG Economy can play a major role in achievement of SDGs in the ASEAN region. This session will deliberate on the concept of BCG economy, policies, best practices to advance BCG economy and BCG technology transfers.</p> <p>Moderator: Ms. Michiko Enomoto, Head, APCTT</p>		

1000-1020	Bio, Circular, and Green Economy: Same same or different?	Dr. Stefanos Fotiou Director, Environment and Development Division, ESCAP
1020-1040	Adoption of BCG economy related policies and practices from ASEAN/ Asia-Pacific Region	Prof. Sivanappan Kumar Department of Energy, Environment, and Climate Change, School of Environment, Resources and Development, Asian Institute of Technology, Thailand (TBC)
1040-1100	BCG technologies towards supporting the Sustainable Development Goals (SDGs) – Imperatives for Asia Pacific	Ms. Michiko Enomoto Head, APCTT-ESCAP
1100-1110	Discussion	
1110-1130	Coffee break	
Panel Discussion I		
Moderator: TISTR Thailand		
1130-1200	Best practices and strategies to promote BCG technologies - role of regional cooperation	Panelists: Dr. Aparat Mahakhant , Deputy Governor of Research & Development Group for Sustainable Development, Thailand Institute of Scientific and Technological Research (TISTR) Prof. Dr. Mohd Sobri Takriff , Centre for Sustainable Process Technology, Universiti Kebangsaan Malaysia Mr. Ruhimat Soerakoesoemah Head, Sub-regional Office for Southeast Asia, United Nations Economic and Social Commission for Asia and the Pacific (TBC)
1200-1315	Lunch	
Technical Session II – Inclusive Bio, Circular and Green innovations for Small and Medium Sized Enterprises (SMEs)		
<p>SMEs form an important part of the economy of the ASEAN community while they are adversely affected by climate change. There is a need to enhance their adaptive capacity and to promote inclusive BCG innovations. This session aims to deliberate the current status of impacts of climate change particularly on SMEs. It will also discuss on how inclusive BCG technologies would support vulnerable SMEs and to help them to adapt impacts of climate changes</p>		
Moderator: From ASEAN (To be suggested by TISTR)		

1315-1335	Climate Change Impacts on ASEAN community	Representative from Ramkhamheang University Center of Regional Climate Change and Renewable Energy (RU-CORE), (TBC)
1335-1355	ASEAN and Climate Change: Awareness and Response from SME Sector	Miss. Pongvipa Lohsomboon , Deputy Executive Director of Thailand Greenhouse Gas Management Organization (Public Organization), TGO
1355-1415	Renewable Energy Technologies for Climate Change Mitigation and Adaptation – example of adoption by SMEs	Mr. Deepak Krishnan Associate Director, World Resources Institute (WRI) (TBC)
1415-1435	Energy Conservation Technologies for Climate Change Mitigation for SMEs	Representative from Department of Electrical Engineering, Faculty of Engineering, King Mongkut's Institute of Technology Ladkrabang, (TBC)
1435-1445	Discussion	
1445-1500	Coffee break	
Technical Session II - Inclusive Bio, Circular and Green innovations for Small and Medium Sized Enterprises (SMEs)		
Moderator: Prof. Sivanappan Kumar, AIT		
1500-1520	Ignite startups and SMEs in commercializing Inclusive BCG Innovations	Dr. Vaibhav Tidke Chief Executive Officer, Science for Society (S4S) Technologies, India (TBC)
1520-1540	How can SMEs in Thailand adapt and mitigate Climate Change impacts through BCG technologies; study results and experiences	Dr. Kanjana Tuantet Research Officer, Thailand Institute of Scientific and Technological Research (TISTR)
1540-1600	Business Continuity Management: Survival Strategy for SME	Representative from Department of Industrial Engineering, Faculty of Engineering, Chulalongkorn University, (TBC)
1600-1615	Discussion	
Panel Discussion for Policy Recommendations		
Moderator: Prof. Sivanappan Kumar, AIT		
1615-1645	Inclusive BCG economy for Resilience to Climate Change – Role of SMEs	Panelists: Miss. Pongvipa Lohsomboon Deputy Executive Director of Thailand Greenhouse Gas Management Organization (Public Organization), TGO (TBC)

		<p>Mr. Deepak Krishnan Associate Director, World Resources Institute (WRI) (TBC)</p> <p>Representative from ASEAN member countries</p>
1645-1700	Closing Remarks	<p>Dr. Aparat Mahakhant Deputy Governor, Thailand Institute of Scientific and Technological Research Thailand</p> <p>Ms. Michiko Enomoto Head, Asian and Pacific Centre for Transfer of Technology</p>