

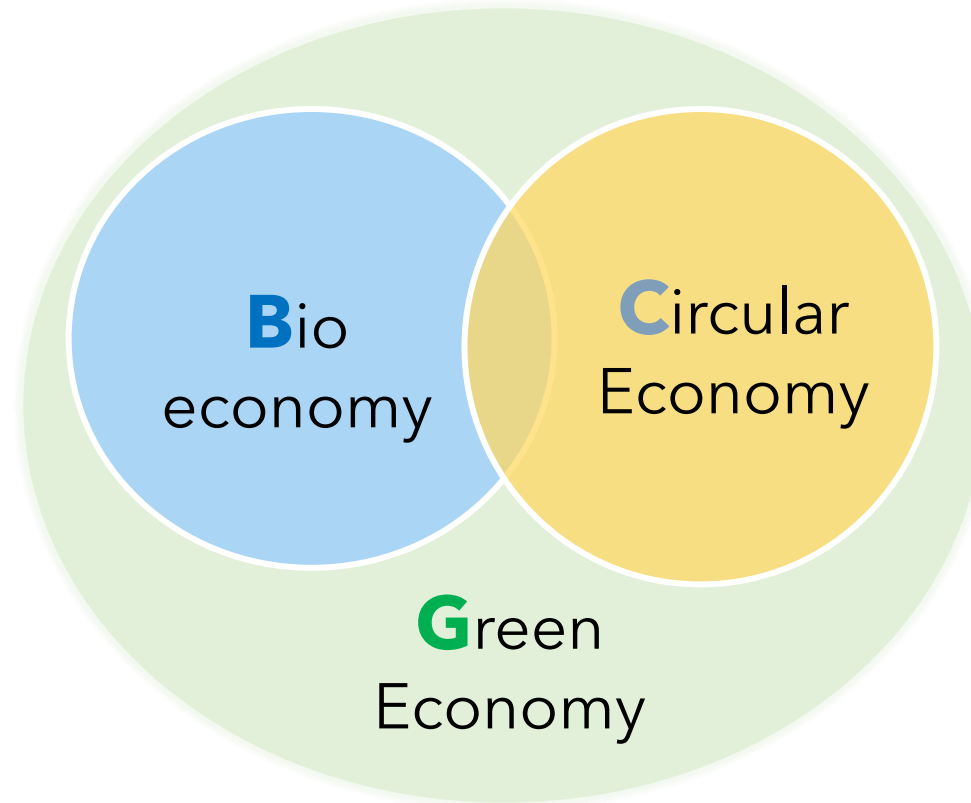
Highlights of Technical cooperation activities under the CSTD: Bio, Circular, and Green Growth

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President, Thailand Science Research and Innovation (TSRI)

29 March 2023

Bio-Circular-Green Economy

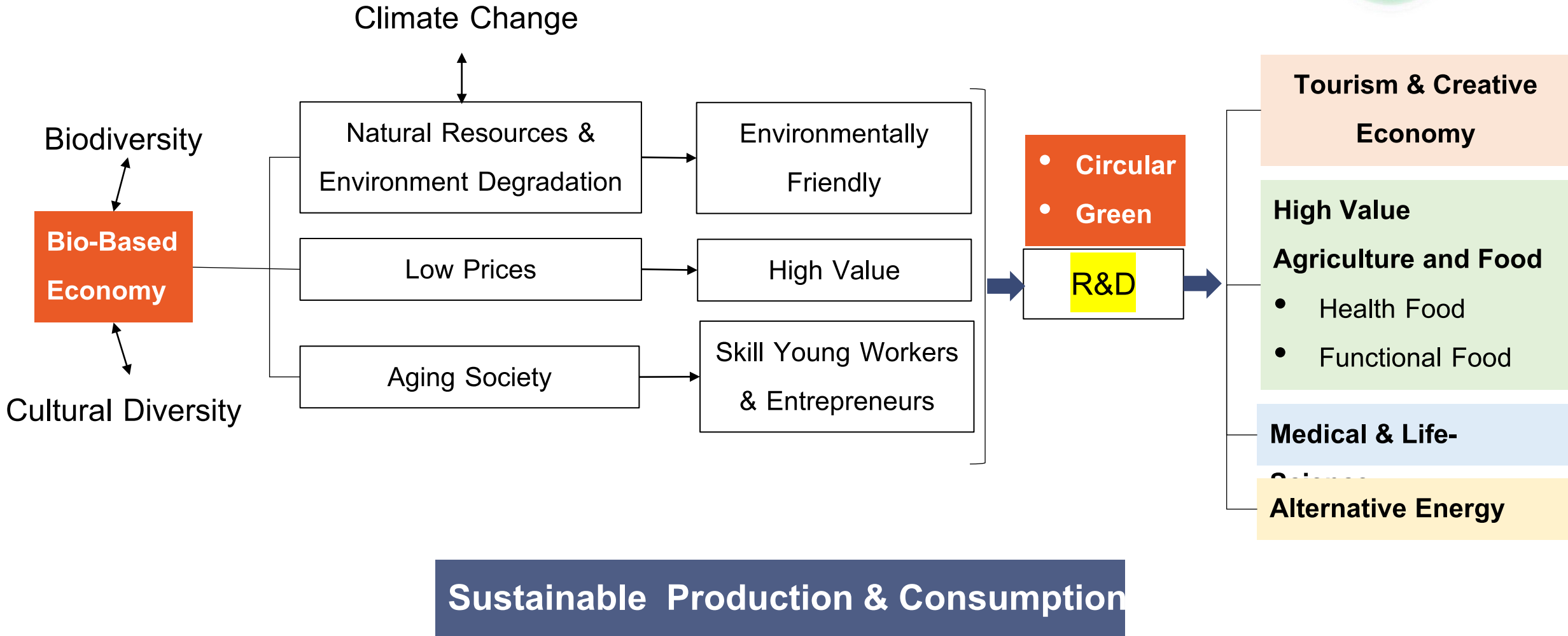


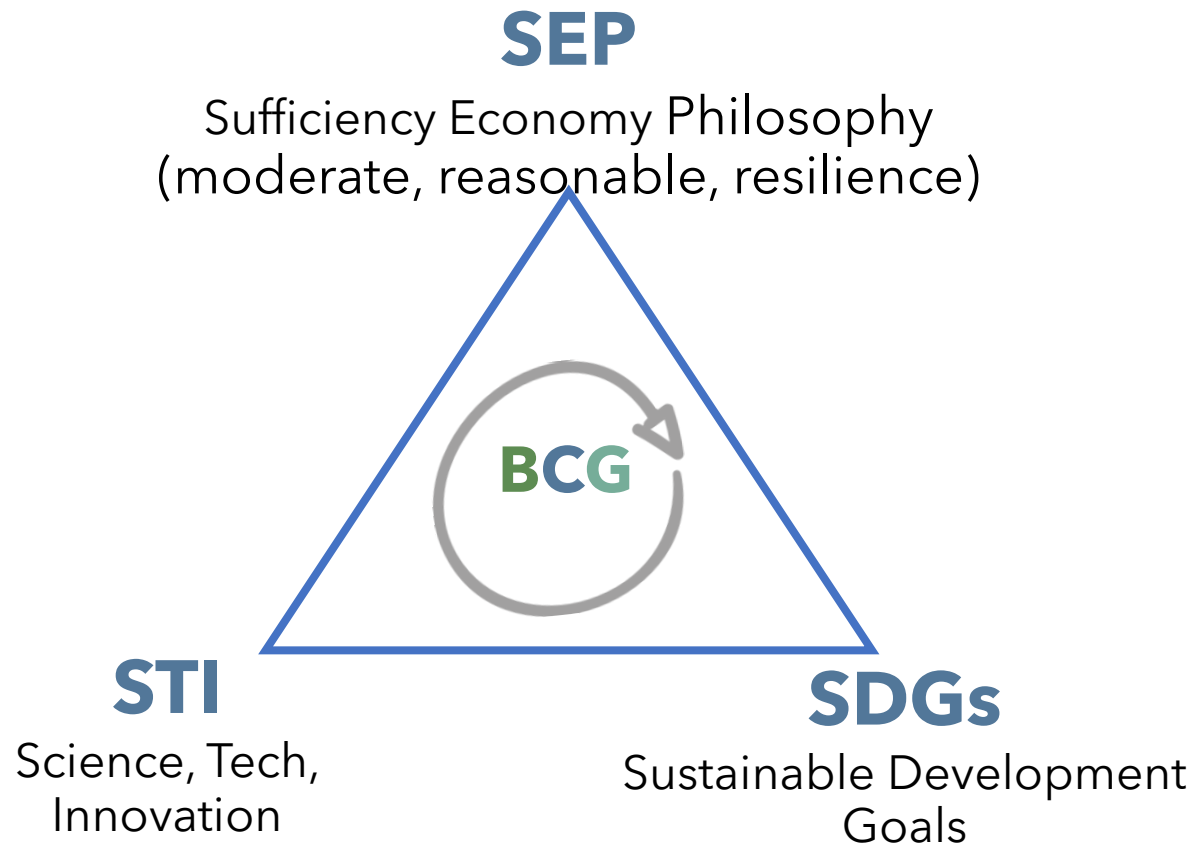
Bioeconomy
Value Creation in bio-based manufacturing and service sectors

Circular Economy
Loop of sustainable resource use

Green Economy
Environment-friendly production

- **BCG for Sustainability**





Movement

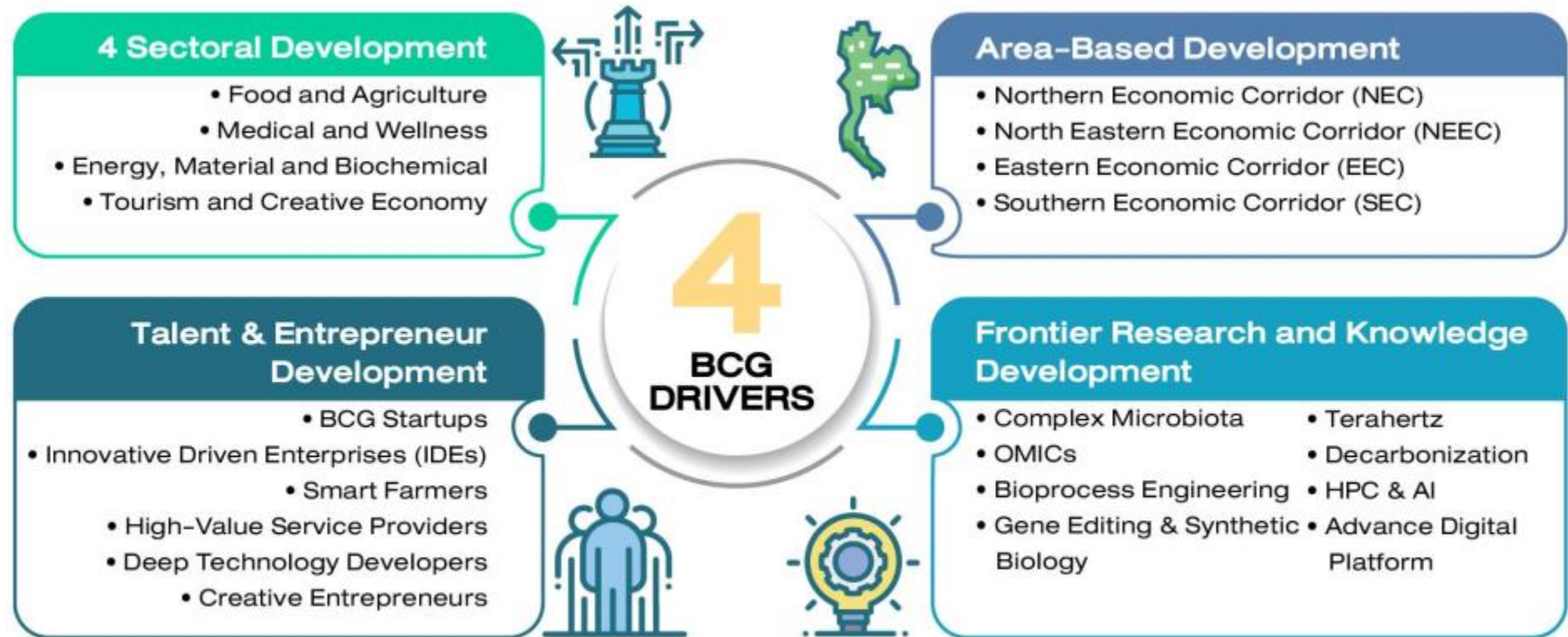
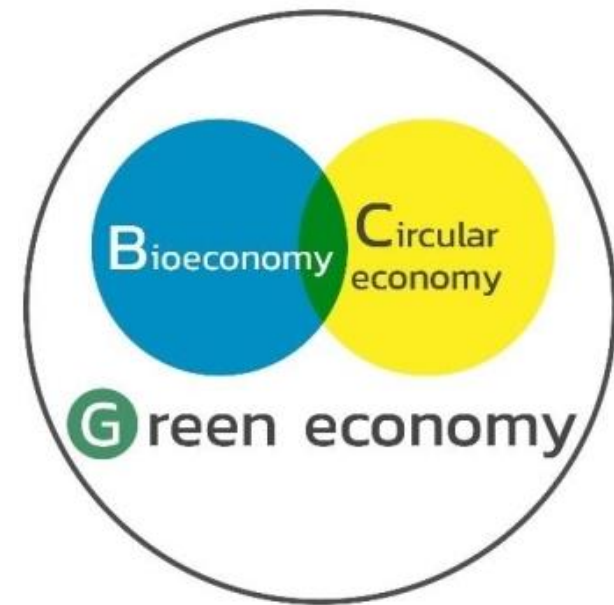
01 Prioritize R&D

02 Strategic investment

03 Quadruple Helix + Global Partnership

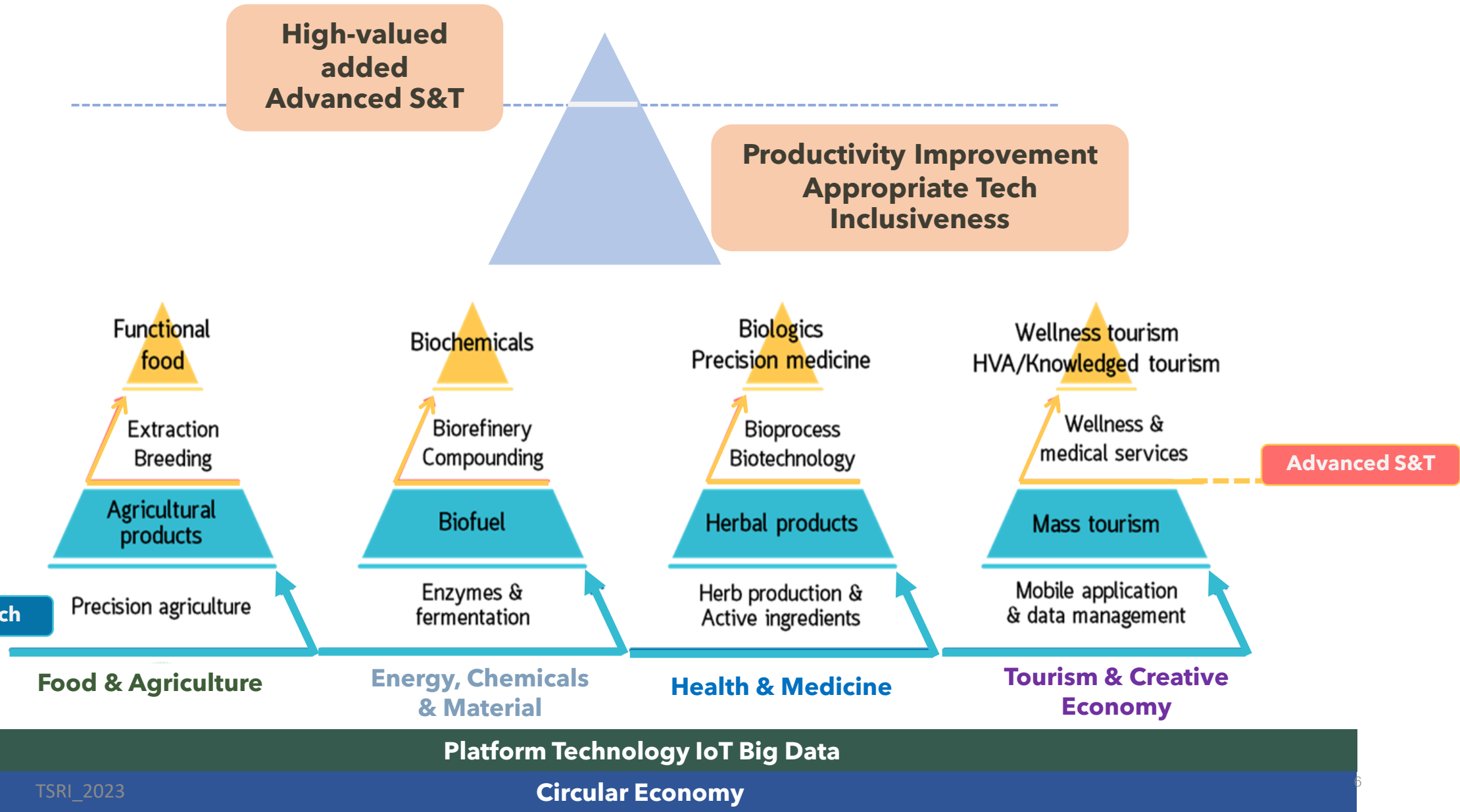
Thailand's Bio-Circular-Green Economy (BCG) Model

A new sustainable growth engine called BCG has been conceptualized to underpin Thailand 4.0 policy as a strategy to drive the economic and social development. BCG is an integration of bioeconomy, circular economy and green economy,



**Dr. Suvit Maesincee, "BCG Model: Sustainable Economic Model"

Current Policy of BCG Economy in Thailand



The BCG Projects and its impact in Thailand

- **National Projects/ Regional development**
- **Sectoral Projects**
- **Communities Projects**
- **International Collaboration**

Government investment in BCG

Northern Economic Corridor (NEC)



- food safety and agricultural health standards
- agro-industry and food processing
- the integration of “Lanna Culture” into the products and services

Central Economic Corridor (CEC)



- waste management
- innovation for ageing-society

Eastern Economic Corridor (EEC)

- fruit production
- the development of future industries.



North-Eastern Economic Corridor (NEEC)

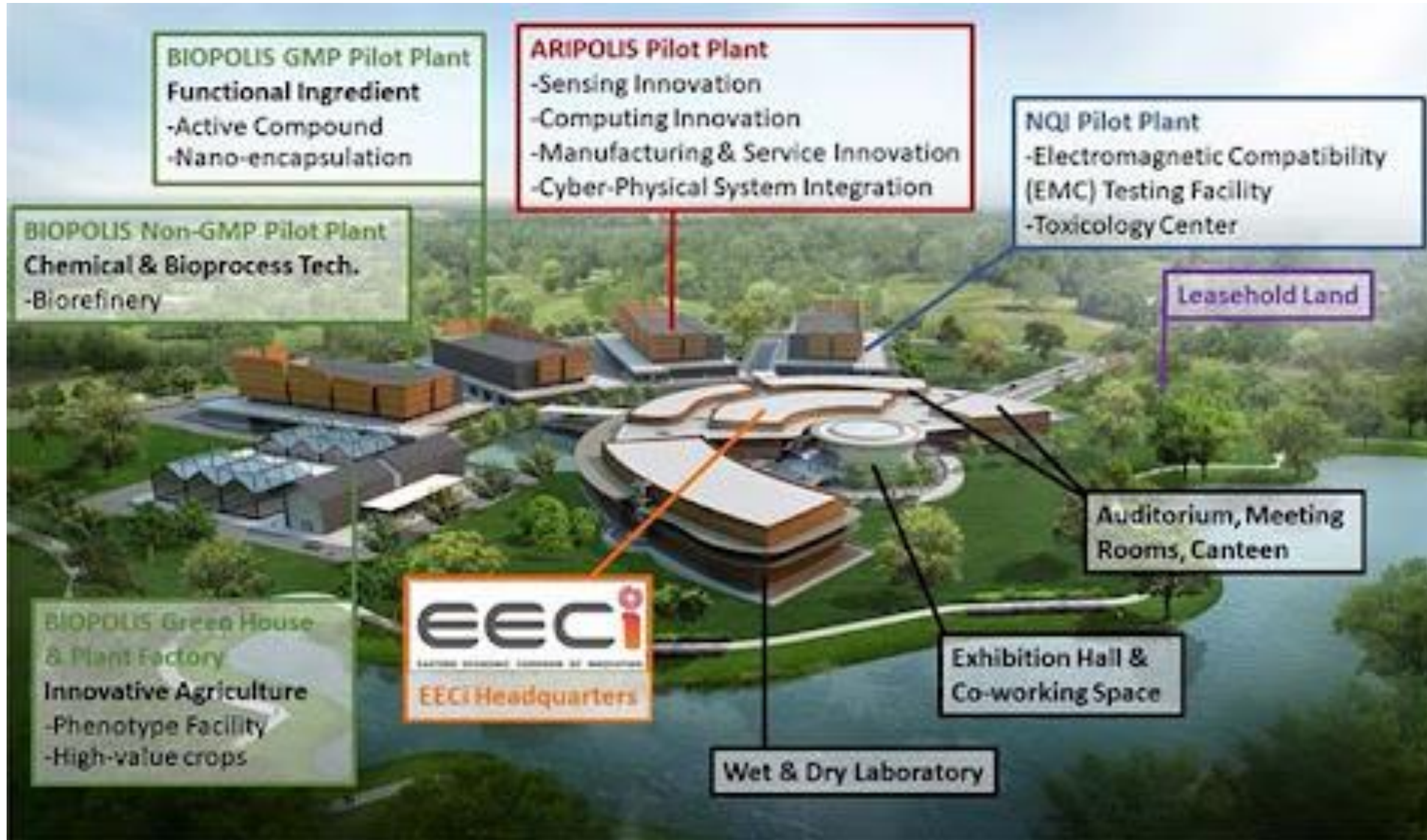
- resolving major health issues inherent to this region such as liver fluke
- promoting insect farming for an alternative protein source
- developing cultural tourism along the Mekong riverbank

Southern Economic Corridor

- precision aquaculture
- innovative halal food products
- development of new tourist destinations



Government investment in BCG



Nakhon Sawan Biocomplex

- **Phase I Bioethanol plant**
- **GGC Bio and KTIS Bioethanol**
- **Phase II Biochemicals & Bioplastic**
- **GC and Nature Work**



Enable community to access to renewable energy without subsidies by developing appropriate technology, entrepreneurship and innovative microfinance



Solar water pump



Biogas from manure



Solar dome for producing dried fruit



University-Industry Collaboration Research Funding on BCG themes By Program Management Unit for Competitiveness (PMU_C)



HVA Food

Functional Food, Natural Extracts,
HVA from agro & food waste



Digital Platform

IoT and Big data for BCG

Technology Localization

Support of scaling up TRL5 technology
or prototyping in non-BCG sector



Health & Medicine

Biosimilars, Vaccine, Gene
Therapy, Med devices



Circular Economy

Second raw material research,
MFA, Platform business

Deep Science & Tech Accelerator

Funding for BCG deeptech startup
incubator



Bio Energy & Chemical

Biomass management,
Bioplastic,



Regional BCG

Appropriate tech development
and tech transfer for rural economy

Global Partnership

Support collaborative research between
Thai and foreign researchers



Tourism & Creative Economy

New routes development, GI

National Quality Infrastructure

OECD compliance of laboratory
standards

PPP-IDE

PMU-C and LE co-funding on SME's
research project



Asia-Pacific Economic Cooperation

KEY
PRIORITY
01

Facilitating trade and investment

In a conducive ecosystem utilizing appropriate economic tools

KEY
PRIORITY
02

Rebooting Regional Connectivity

Particularly in the travel and tourism industry

KEY
PRIORITY
03

Advancing sustainable and inclusive growth

Focusing on alleviating inequalities and protecting the environment

BANGKOK GOALS ON BCG, 2022

- **Zero emission** / carbon neutrality/climate change adaptation, mitigation and resilience
 - Action area - Energy transition, sustainable transport & agriculture
- **Zero waste / SCP**
 - Action area - Circular Economy
- **Preservation and conservation** of environment and biodiversity / Sustainable management of resources
 - Action area - Bio-economy
- **Increase us of STI and digitalization**
 - Action area - Smart city, Sustainable finance
- **Social inclusion**/ human resource development
 - Action area - ESG, Empowering, Reskill-upskill for transition

UNCTAD-TSRI Project

Title

- ***STI Capacity Building Programs on Female Researchers and Entrepreneurs to promote Bio-Circular-Green Economic (BCG) Model***

Term of the project: 12 months

- ***01-04-2023 to 31-03-2024***
- ***Workshop dates: 06-08-2023 to 12-08-2023***

Venue

- ***Bangkok, Thailand***

Eligible Countries

- ***15 CSTD members in Africa and Asia (tbc)***

Objectives

- ***To build STI capabilities among female researchers and entrepreneurs of developing countries to adapt and implement **in their national context** the concepts of the bio-circular-green economy model as an approach to facilitate the achievement of the UN Sustainable Development Goals (SDGs).***

Expectations

Outputs

-
1. Participants can implement the bio-circular-green economic model within their local contexts.
-
2. The project will create a network amongst the female researchers and entrepreneurs from participating countries, to build mutual support and knowledge sharing to facilitate the adoption and diffusion of sustainable production and consumption through the bio-circular-green economic model.
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3. Create a network of participating institutions to share the best practices and benefits of implementing the BCG model in their respective countries.
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4. UNCTAD obtain monitoring and evaluation of the project output and to leverage the results with other developing partners.

Outcomes

-
1. Participating countries can implement the bio-circular-green economic model in their home countries.
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2. Providing an environment of networking and cooperation in technology and innovation among female researchers and entrepreneurs in developing countries as well as among related institutes in participating countries.
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3. UNCTAD will be equipped with tools to improve the project and potentially expand to include more countries.
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- **THANK YOU**

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