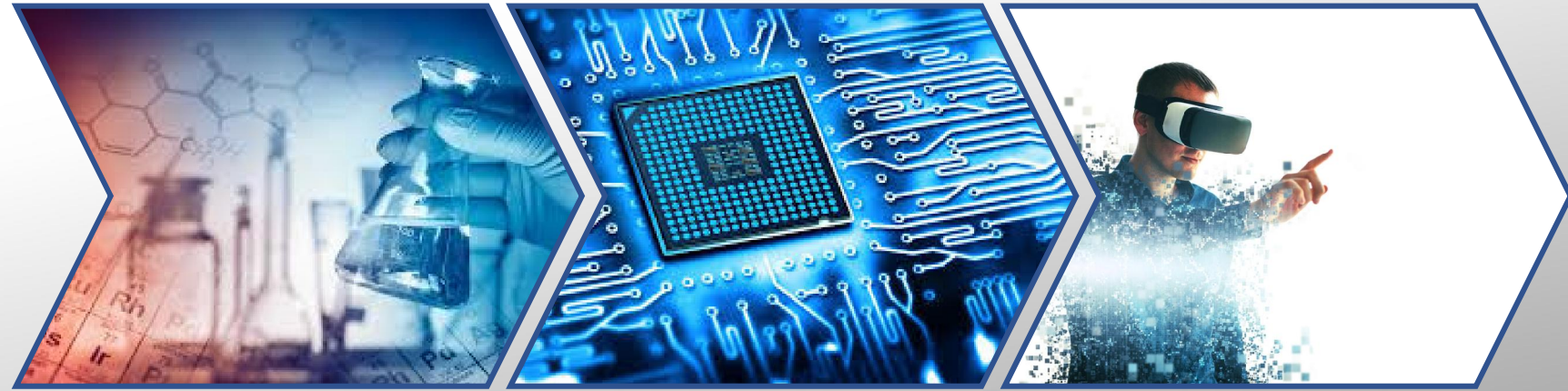


Thailand's Transformation through



Science
Technology
Innovation



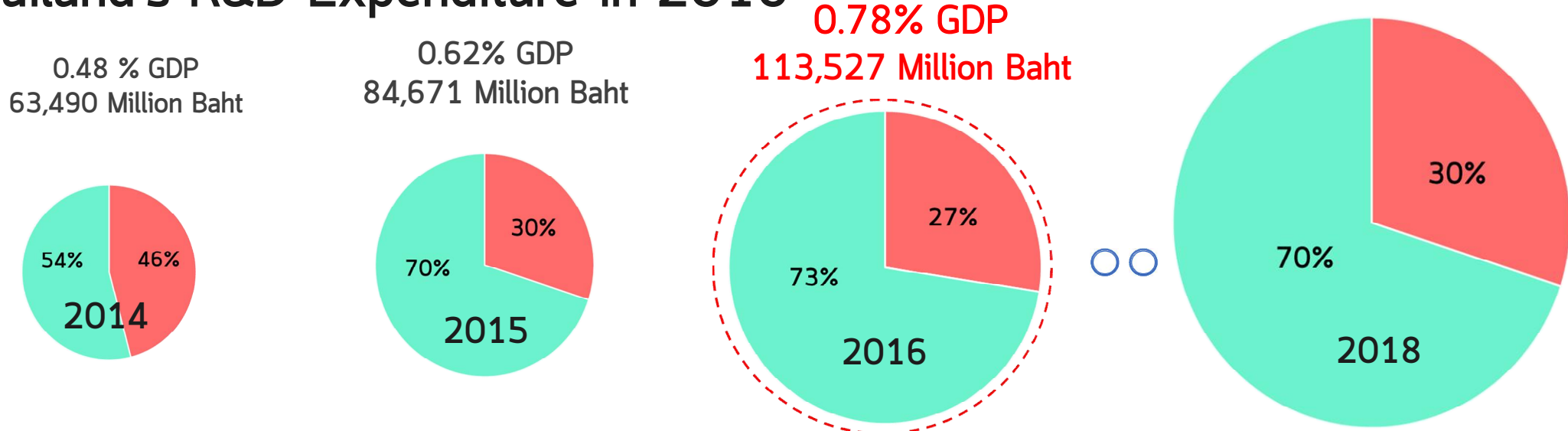
Suvit Maesincee
Minister of Science and Technology

19 March 2018

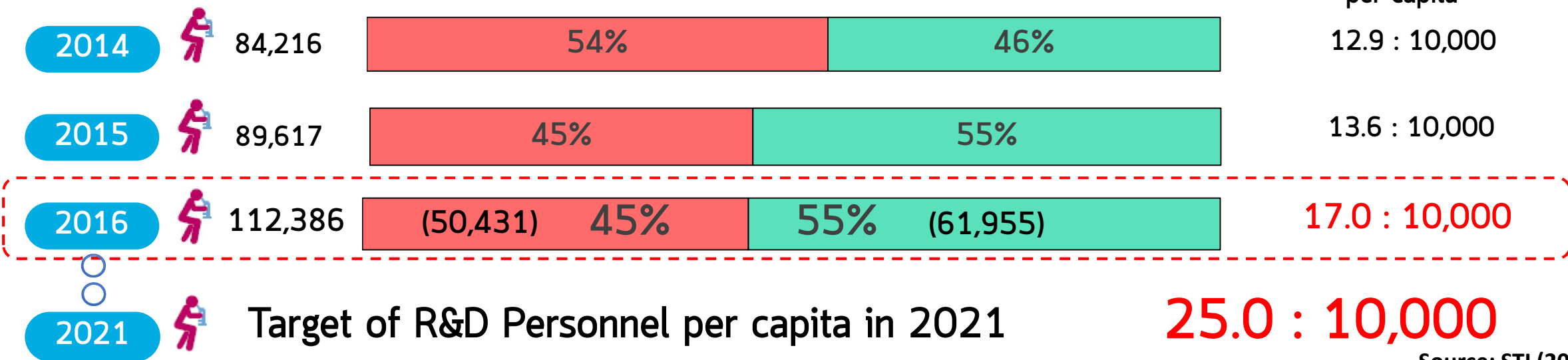
Thailand's STI is Moving Forward

Public Sector
Private Sector

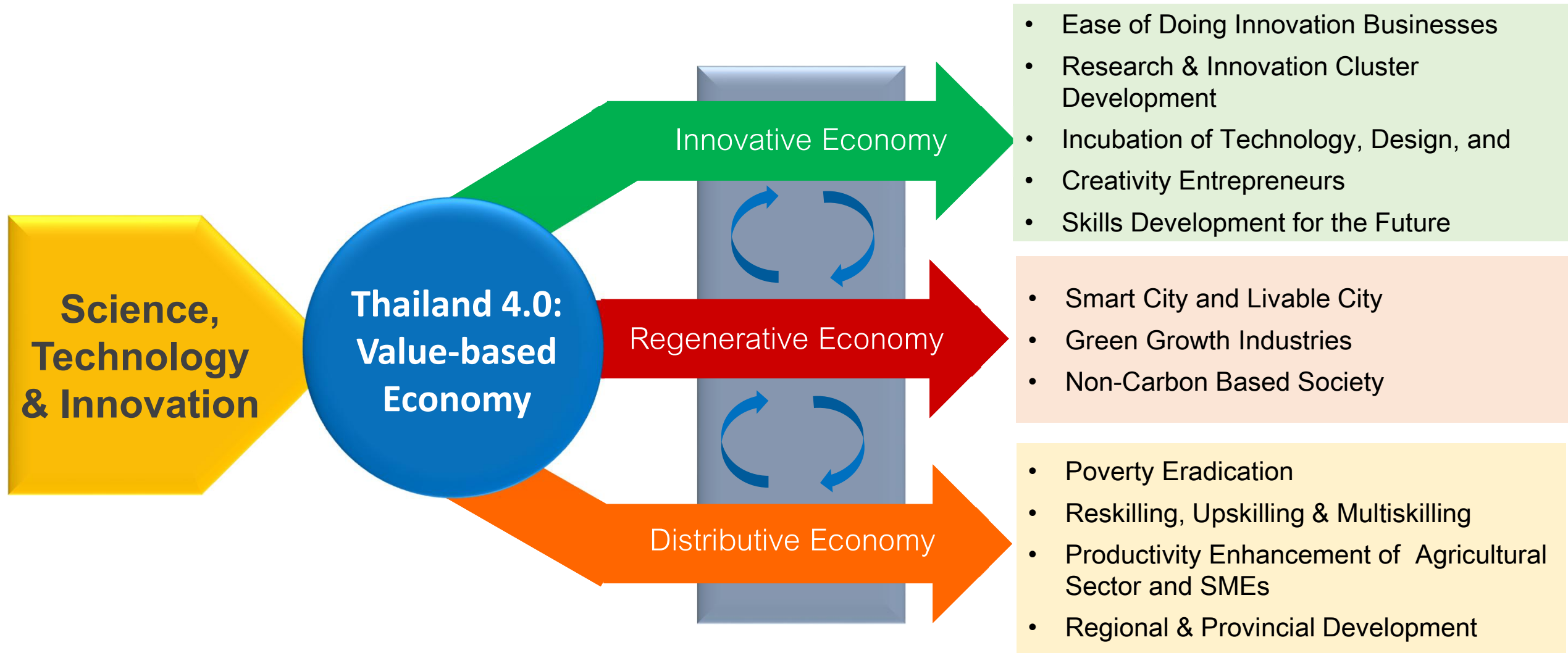
Thailand's R&D Expenditure in 2016



No. of R&D personnel per capita is increasing continuously



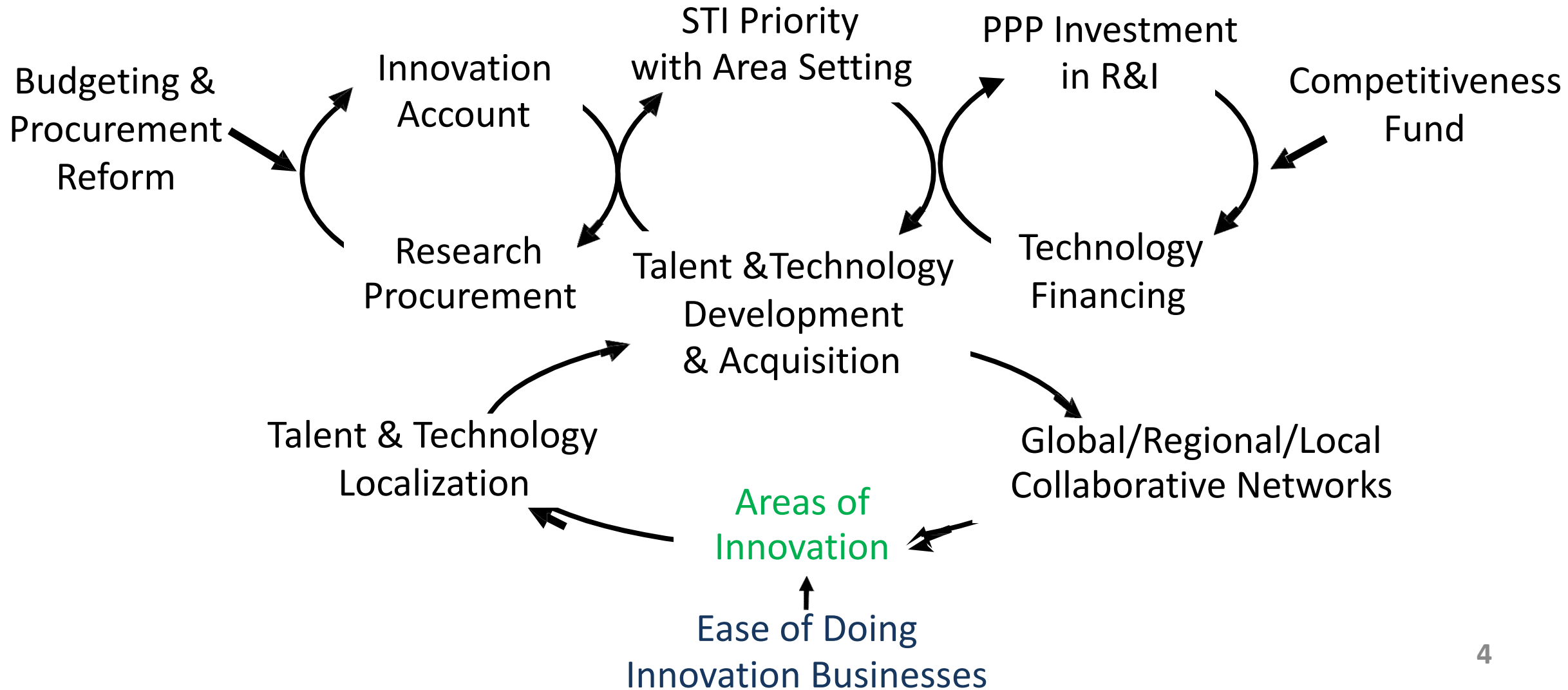
STI as a Key Driver for Thailand 4.0



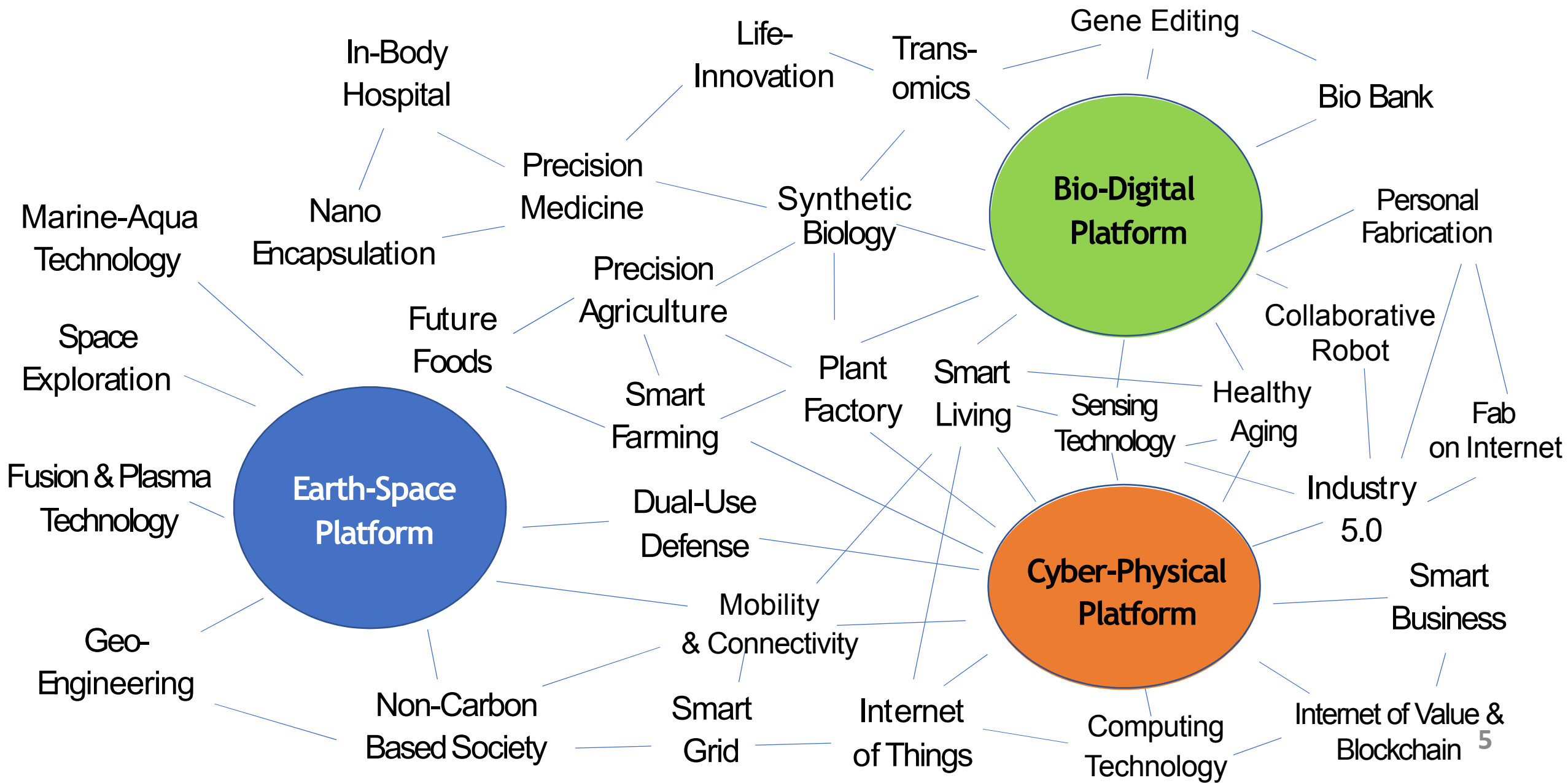
STI Strategic Map

Thailand 4.0

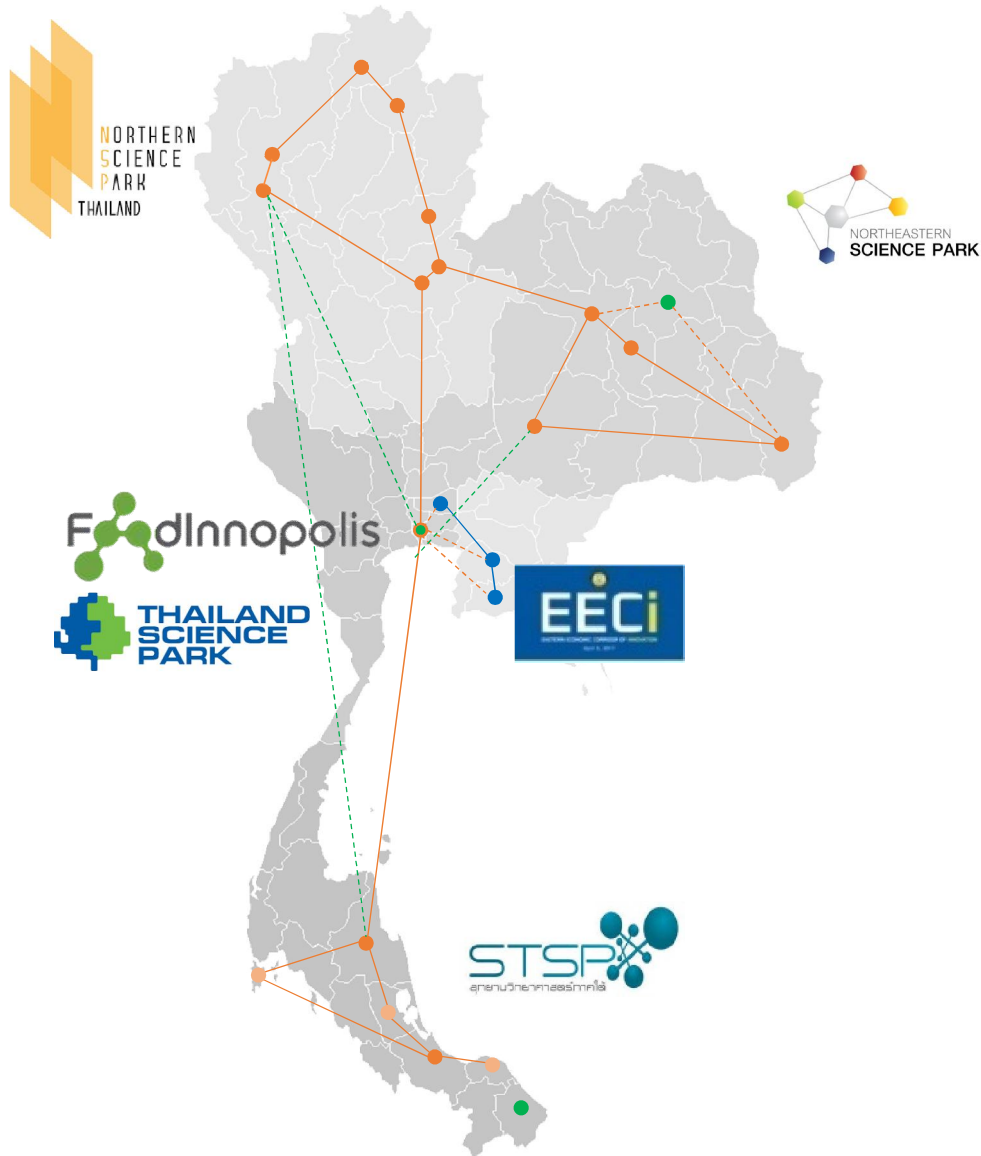
Key Technologies
of National
Importance



Key Technologies of National Importance



Areas of Innovation



Internationalization: EECi



Specialization: Food Innopolis

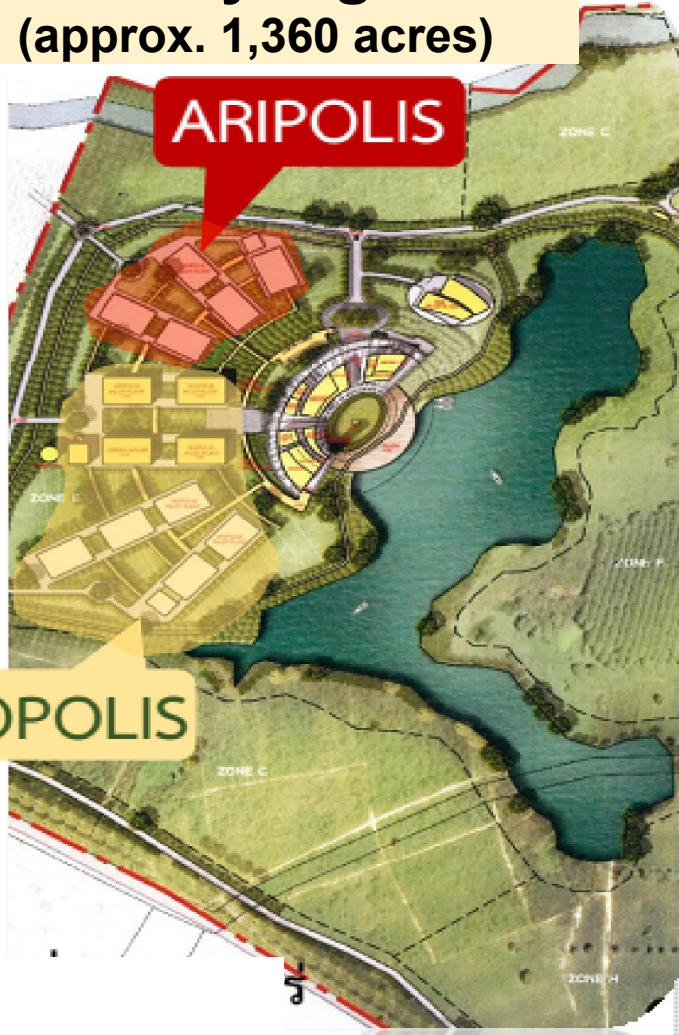


Regionalization: Regional Science Park



Eastern Economic Corridor of Innovation (EECi)

Wangchan Valley, Rayong (approx. 1,360 acres)



3 Innopolis



Key Features

- Frontier & Translational Research
- Research Procurement
- Area for Regulatory & Technological Sandbox
- National Quality Infrastructure for Target Industries

Space Krenovapolis, Chonburi

approx. 50 acres



6 Focused Industries in 3 Innopolis



**Modern Agriculture
& Biotechnology**



**High Performance Battery
& Modern Transports**



Aerospace & Aviation



**Biofuels & Bio-
chemicals**



Intelligent Systems



Medical Devices



ARIPOLIS

BIOPOLIS

Construction Start: Oct 2018
Ready to Operate: Oct 2020

**Triple Helix / Quadruple Helix
Innovation Ecosystem
Open Innovation**



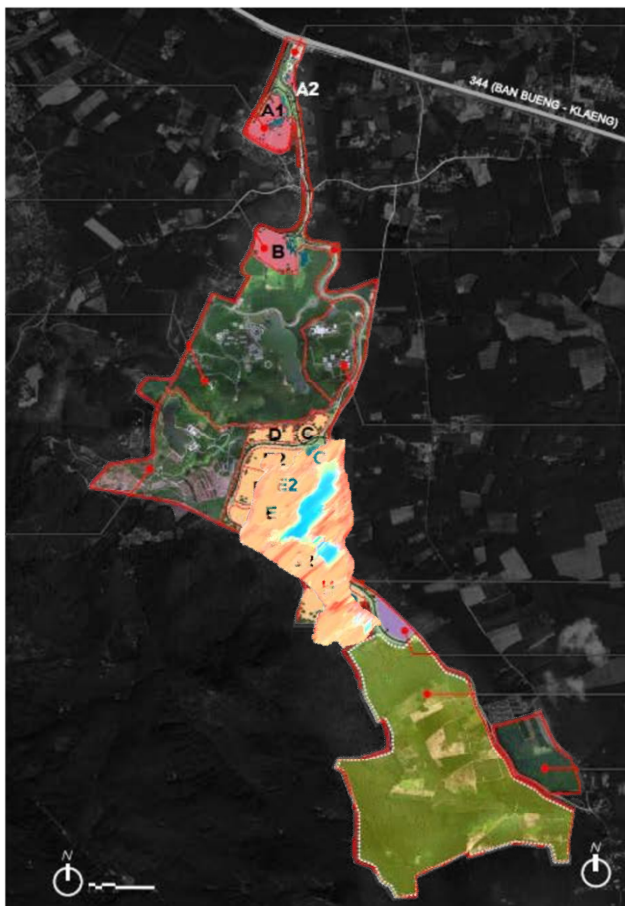
Innovation Clusters



**SPACE
KRENOVAPOLIS**

Ready to Operate

EECi at Wangchan Valley



Initial Investment (2013-2016)

9,000 MB



Sponsored by



Further Investment (2017-2022)

3,000 MB⁺⁺

Total Investment in 10 years

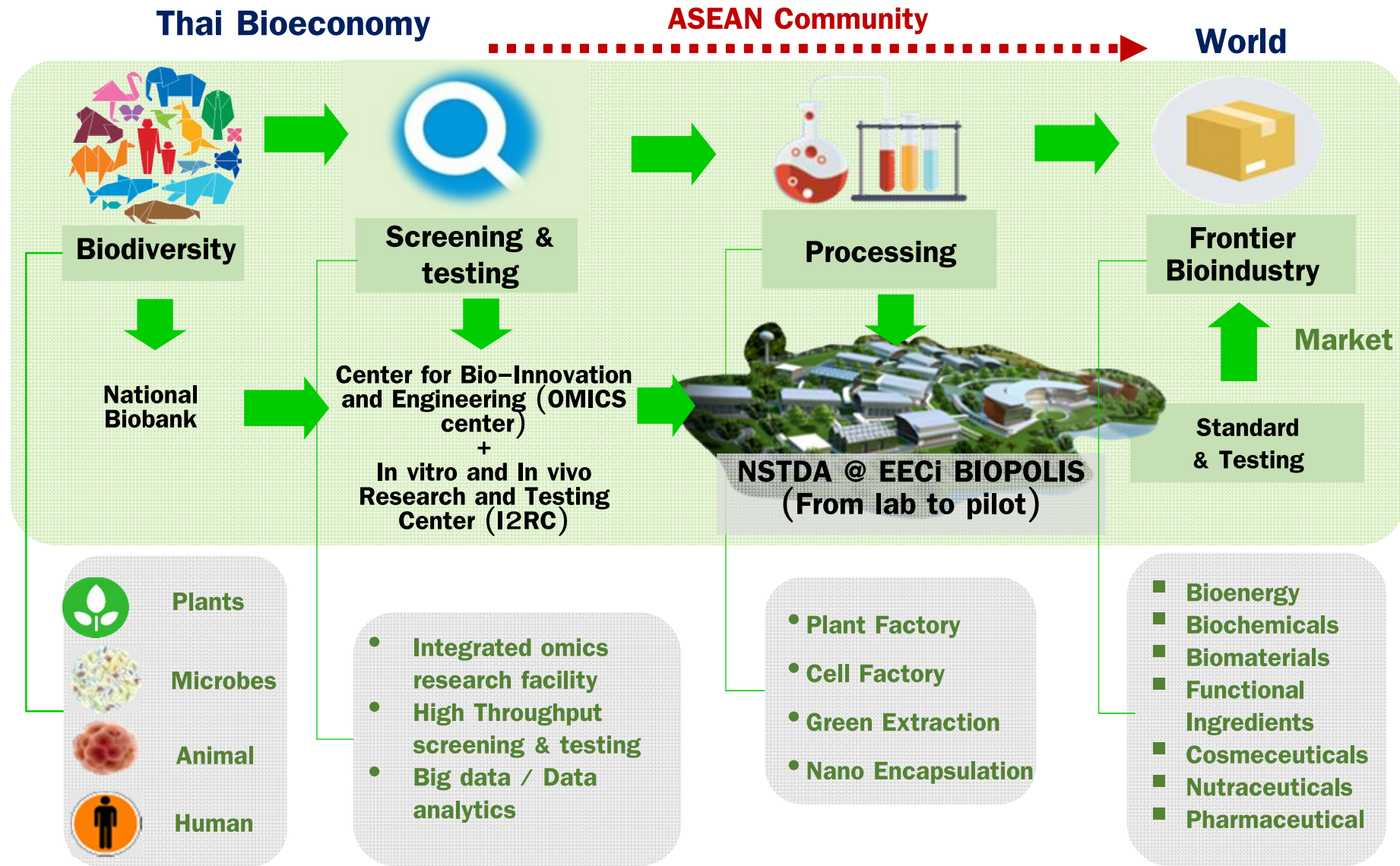
12,000 MB⁺⁺

EECi at Wangchan Valley: BIOPOLIS & ARIPOLIS

BIOPOLIS & ARIPOLIS in EECi

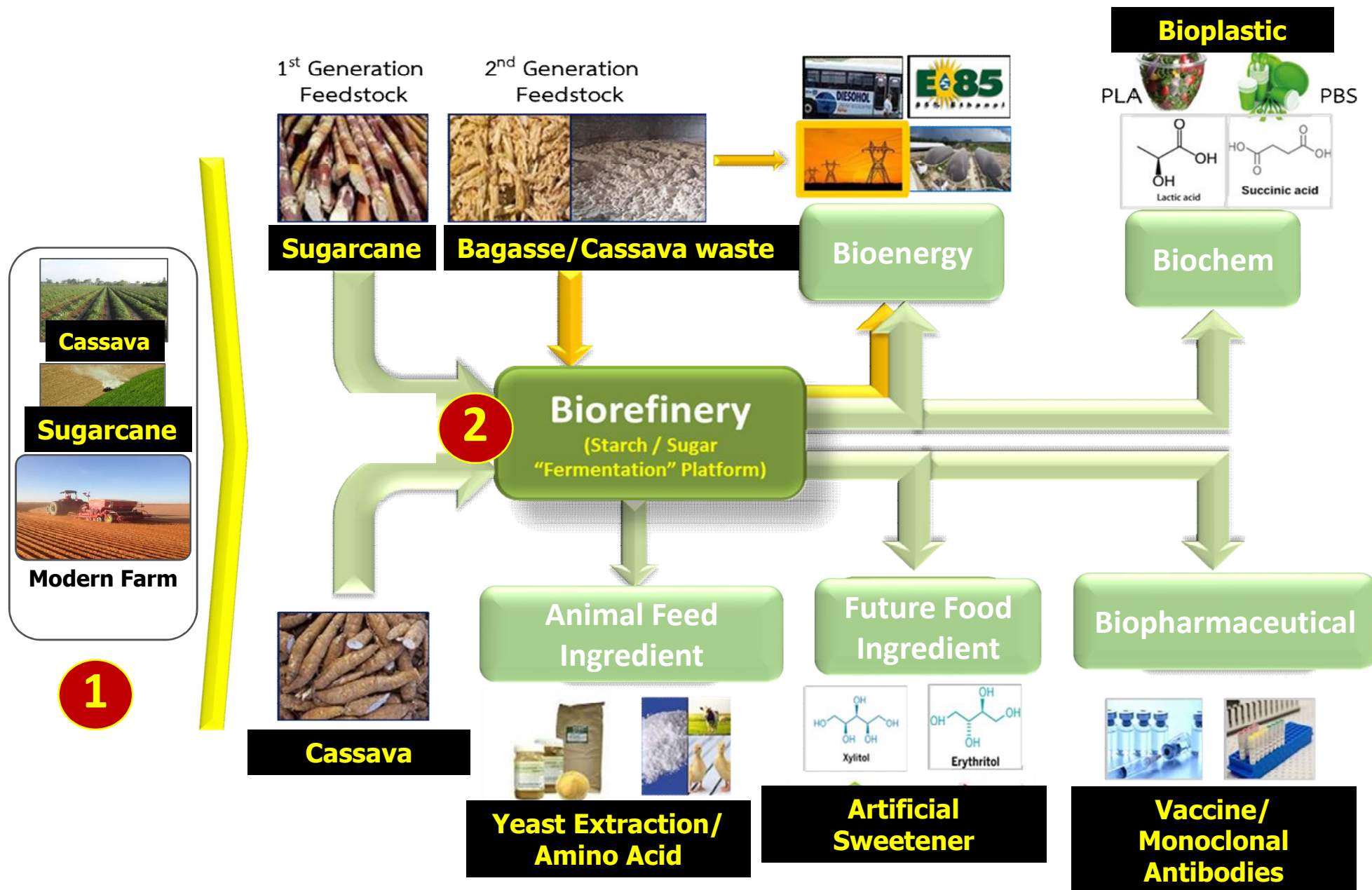


BIOPOLIS: Enabling Platform for Thailand Frontier Bioindustry

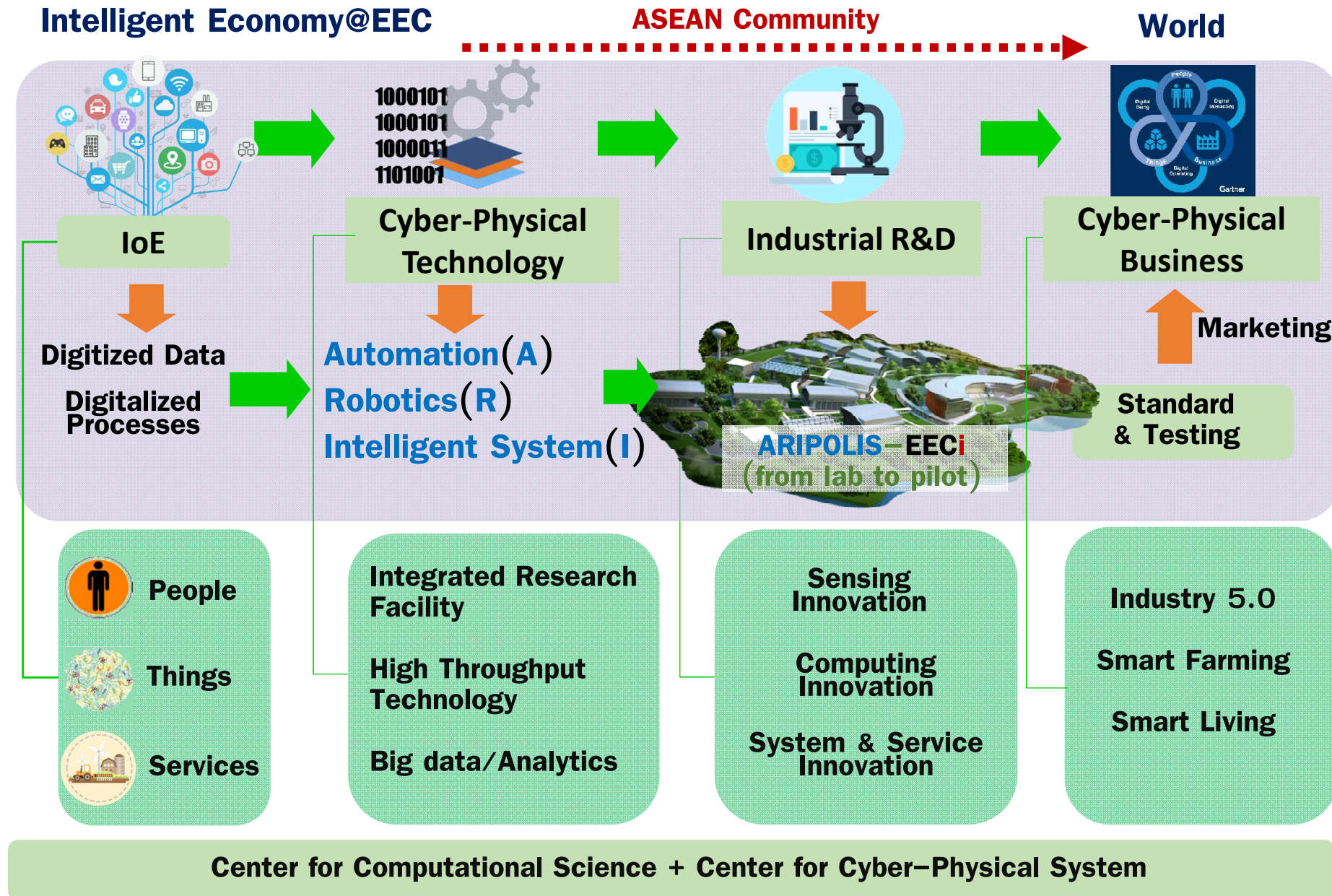


Example

Transformation's Game Changers: From Value Added to Value Creation



ARIPOLIS: Completing Thailand Intelligent Economy Roadmap



Example

EECi Living Lab for Autonomous Vehicles

A regulatory sandbox for next generation vehicles

ADAS

Regulatory
Sandbox

Testing
Center

GNSS
Reference
Station

Expandable
Infrastructure

Sensing
Innovation



EECi at Space Krenovapolis

Education

Burapha University



Kasetsart University



Social

- Laemchabang village
- Sahapat village
- Ao-Udom village



Sport / Leisure:
 - Badminton court
 - Fitness



Industry

- Laemchabang Industrial Estate
- Pinthong
- Etc..

Digital Park Thailand

Support Infra.

- Hospital
- Internet (CAT)
- Water supply
- Electricity

Residence

- +100 Units for staffs
- +24 Units for guests

EECi (SKP)

Infrastructure



: Aerospace Structures and Materials



: Space Learning Kingdom



: GNSS Innovation Center



: Geo-informatics center



: Air-Space Management and Mission Planning

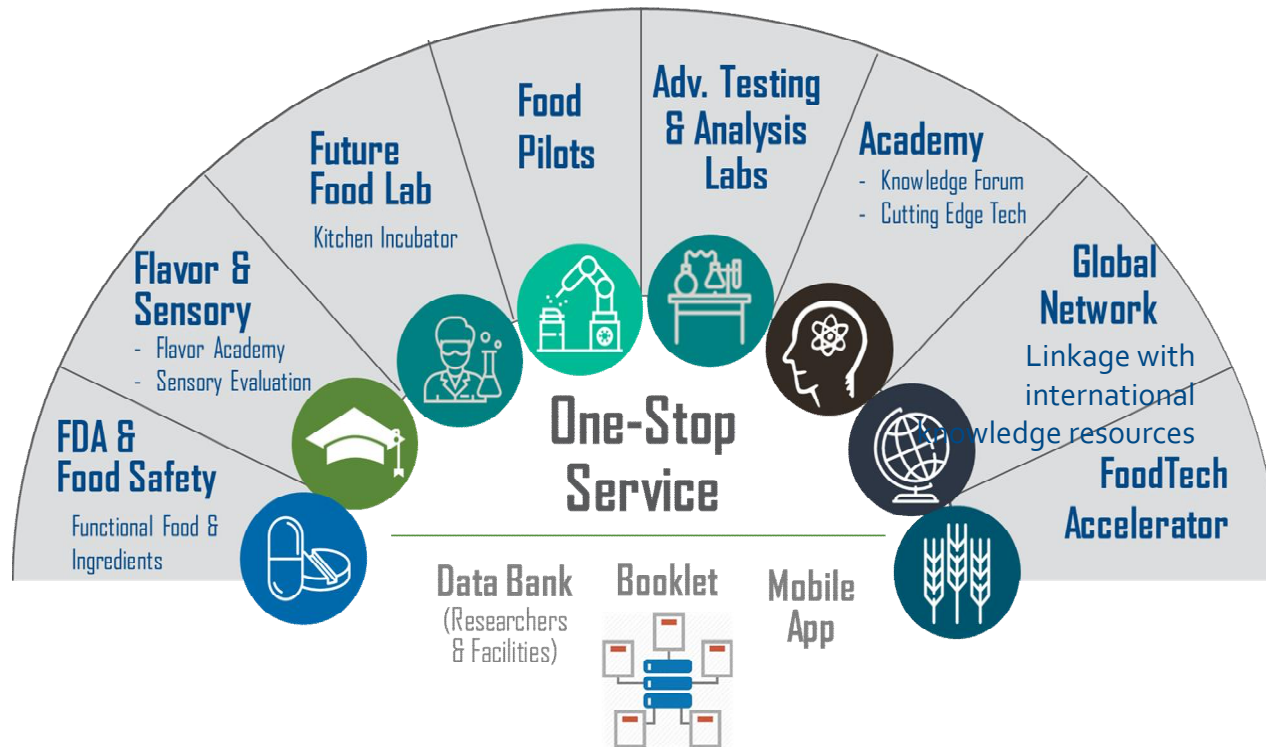
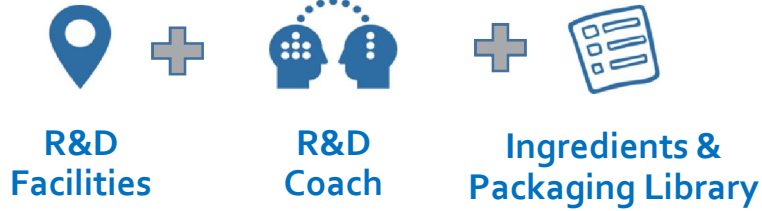


Space Innovation Projects
 : In-house Ground - Satellite Innovation

Examples of Partner



Food Innopolis



Collaborative Network & Partners

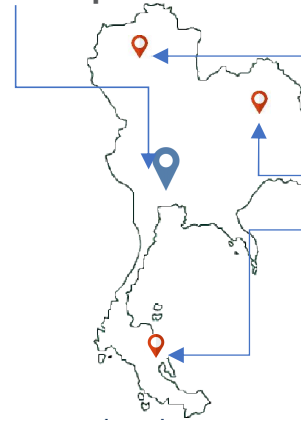
- 36 Private Companies
- 23 Universities
- 12 Government Agencies



Food Innopolis Development Roadmap

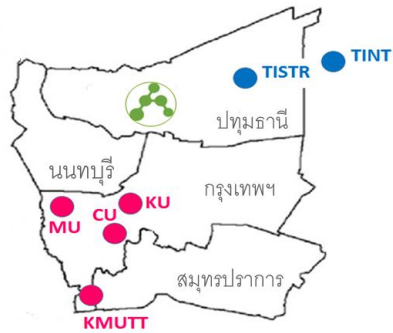


Food Innopolis
Headquarter



Regional Science Park

- CMU : Healthy & Functional Food
- KKU : Functional Ingredients
- PSU : Seafood & Halal Food



FI Phase I

@ Thailand Science Park

Invite World-Class Food Contract Research Organization (CRO) to establish in Food Innopolis

FI Phase II

@ RSP, Universities, and Government Agencies

FI Phase III

@ Private RDI Center

Regional Science Park



Northern Science Park
(Chiang Mai)

- Rice Innovation
- Agriculture and Food Processing
- Software & Digital Content
- Energy & Material Innovation



Northeastern Science Park
(Khon Kaen)

- Smart Devices
- Livestock
- Area-Specific Disease
- Energy Storage



Southern Science Park
(Songkla)

- Rubber-based Research
- Food and Processing
- Healthcare
- Smart Farming

Ease of Doing Innovation Business

- National Quality Infrastructure
- Innovation Lists
- Research Procurement
- Bayh-Dole Act
- Regulatory & Technical Sandboxes
- IP Management System
- Start-Up Business Act
- Etc.