



# EECi: Corridor to Thailand Innovation and Investment

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# Background of EEC & EECi

**Special Zone : Eastern Economic Corridor (EEC) : 13,000 Km<sup>2</sup>**

**Public and Private investment**  
(\$ 43 Billion USD in the first 5 years)



**Strategic location:**

- > 30 industrial estates
- Gate way to ASEAN



**An Innovation Component of EEC**



**Wangchan Valley,  
Rayong Province**

High-speed train & Dual-track railway



Map Ta Phut  
Sea Port

Smart city  
development

Industry  
development

U- Tapao International Airport



# EECi Overall Development & Zoning

## Community Zone



Community Mall  
Hotel & Serviced Apartment  
International School

Highway No. 344  
(Ban Bueng - Klaeng)

Gas Station

PTT Art Gallery & Energy Museum

## Innovation Zone 1

EECi Headquarters

## Education Zone



Kamnoetvidya Science Academy  
(KVIS)

Vidyasirimedhi  
Institute of Science  
and Technology  
(VISTEC)

Wangchan  
Forest Project



PTTEP Technology  
and Innovation  
Center

Synchrotron Facility  
(3 GeV)

## Innovation Zone 2

Innovative Agriculture  
Learning Center

Utility Center

Solar Farm

Wangchan Valley,  
Rayong Province

Total Area	3,454 Rai (552.64 ha)
• Community Zone	178 Rai (28.48 ha)
• Education Zone	1,186 Rai (189.76 ha)
• Innovation Zone 1	989 Rai (158.24 ha)
• Innovation Zone 2	946 Rai (151.36 ha)
• Innovative Agriculture Learning Center	155 Rai (24.8 ha)



# EECi: A Translational Platform for Frontier Industries

TRL: 1 2 3 4 5 6 7 8 9

**TRL4.** Key elements validated in laboratory environment

**TRL5.** Key elements validated in relevant environment

**TRL7.** System prototype demonstration in an operational environment

**TRL8.** Actual system qualified through test and demonstration

**TRL9.** Actual system proven through successful mission operations

**Frontier Technology Development**

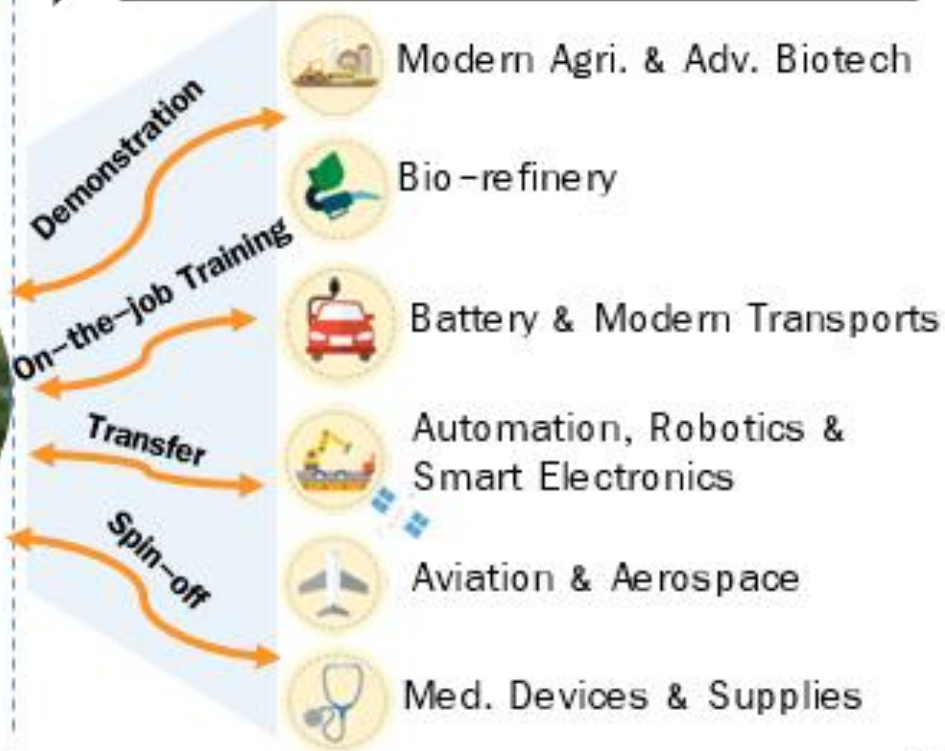
**Translational Research Platforms In EECi**

**Frontier Industry Development**



Pilot Plant Test Bed Testing Facilities

Living Lab Proving Ground Regulatory Sandbox



# EECi Technology Platforms

## EECi | BIO POLIS Biotechnology Platform

- Innovative Agriculture
- Chemical and Bioprocess Technology
- Functional Ingredients

## FdInnopolis an anchor of EECi Food Innovation Platform

- IoT for Food
- Food Automation

## EECi | ARI POLIS

### Automation, Robotics and Intelligent Electronics Platform

- Sustainable Manufacturing Center
- Smart Agriculture Center
- Smart Living Center
- High Performance Computing Center

## EECi | SPACE INNopolis

### Aviation and Aerospace Technology Platform

- High Altitude Pseudo-Satellite Unmanned Aerial Vehicle (HAPS UAV) and Global Navigation Satellite System (GNSS)
- Aerospace NQI



SYNCHROTRON  
THAILAND  
CENTRAL LAB

### SLRI\_SPS-II

- Latest (4<sup>th</sup> generation) and largest synchrotron light source in ASEAN
- Infrastructure for innovation-oriented cooperation of academic and industrial research



# เมืองนวัตกรรมชีวภาพ (BIOPOLIS)

- อุตสาหกรรมเกษตรสมัยใหม่ (Modern Agriculture)
- อุตสาหกรรมฐานชีวภาพ (Bio-based Industry)



# EECi and Modern Agriculture

## Phenomics Greenhouse



## Plant Factory



## UAV Sandbox & AI for Precision Agriculture



ITAP

บริษัท ลอฟท์ บิโอดอร์ จำกัด



EEC  
EASTERN ECONOMIC CORRIDOR  
THE PRIME GATEWAY TO ASIA



R&I Partners



# EECi and High Value Ingredients and Biochemicals



## Food Supplement and Nutraceuticals:

- Functional Ingredients
- Flavor Enhancer
- Super Antioxidants
- Alternative Proteins
- Specialty Carbohydrates
- High Value Fatty Acids

## Cosmeceutical:

- Bioactive Compounds

## Biochemical & Biomaterials:

- Bio-Plastics
- Bio-Surfactants
- Bio-Controls
- Industrial Enzymes

## Non-GMP Biorefinery Pilot Plant (Generic and Open Platform)



## Herbs and Agro Wastes

## R&I Partners



Sumitomo Heavy Industries  
Process Equipment Co.,Ltd.



'TORAY'



# EECi Biorefinery Ecosystem

## 4 Joint Labs & Centers of Excellence (Research Work & Engineering Capability)

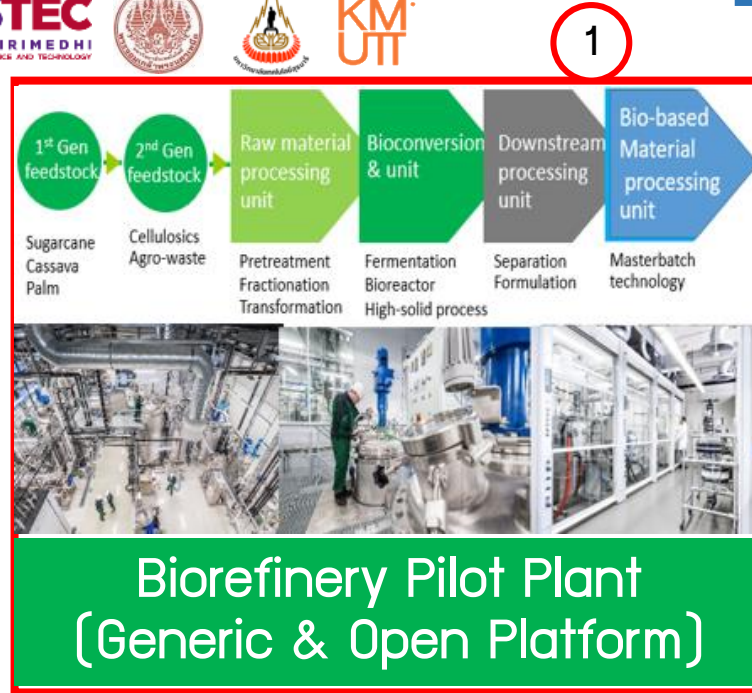


## 3 International Research Projects & Partnership



## 2 Professional Management

## 10 NQI for Biorefinery



## 5 Human Resource Development



## 6 Demand-Led Consortium



## 7 Domestics & International Users

## 8 R&I Funding & Market Jumpstart

## 9 Proprietary Tech. Providers

# EECi Progress Updates



EECi Ground Breaking Ceremony by PM



EECi Headquarter Complete Jun 2021

Ready to Move in  
Oct 2021

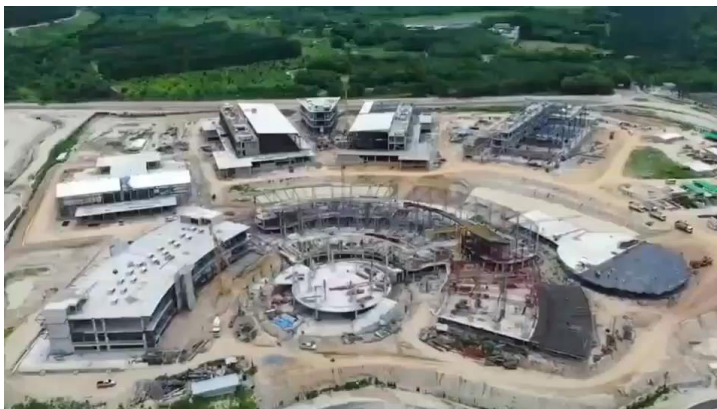
2019

2020

2021

2022

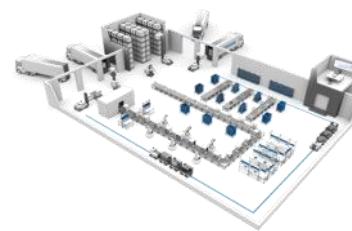
Progress **50%** (as of October 2020)



Biorefinery  
Pilot Plant  
(2020-2022)



Greenhouse/  
Plant Factory  
(2021-2023)



Sustainable  
Manufacturing  
Center (SMC)  
(2021-2025)



3-GeV Synchrotron  
Facility  
(2021-2027)



# Opportunities for Partnership

- ◎ Localization of **Advanced Technology** for **Thailand and ASEAN Market**
- ◎ Joint Research between **International Firm & Research Institutes** with **Local Counterparts**
- ◎ Shared use of **Advanced Translational Infrastructure** in EECi
- ◎ Joint Development of **Talents**
- ◎ Other Win-Win Partnering Arrangement!





# Privileges & Incentives



Translational  
R&D Infra.



Advanced  
National Quality  
Infrastructure  
(NQI)



Regulatory  
Sandbox



Smart Visa for  
international  
experts



Advanced  
Technology  
Development  
Through Open  
Innovation



13 years  
(maximum)  
corporate  
income tax  
exemption



17% flat rate  
personal income tax  
for international  
(and reverse brain  
drain) experts



Pool of  
Talents



# EECi

Eastern Economic Corridor  
of Innovation



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