

## 

BIOTECHNOLOGY PLATFORM

EECi BIOPOLIS located at Wangchan Valley, Rayong Province, is an innovation platform under the Eastern Economic Corridor of Innovation (EECi) aimed at promoting bio-based industries in accordance with the government's B-C-G policy (Bioeconomy, Circular Economy and Green Economy), as well as supporting Thailand's agricultura direction toward value addition and environmenta sustainability through technology and innovation. This will enhance productivity with limited resource utilization to serve increasing demand, reduce greenhouse gas emissions and enable adaptability to climate change.

EECi BIOPOLIS focuses on advancing the following target industries from lab to commercial market and ultimately, strengthening the nation's prosperity sustainably

- Innovative Agriculture
- Chemical and Bioprocess Technology
- Functional Ingredients

EECi BIOPOLIS offers large scientific infrastructures The Plant Phenomics is a solution center that provides a wide range of services, for instance, physiology of plant-environment interactions for the production of functional ingredients utilized in many industries, field or lab test to evaluate productivity and improve agricultural practices for commercial-scale production. Also, it lends itself to an HRD center for modern agriculture including consultation and training to develop skillful personnel in relevant technologies.

In addition to farming technology, is also addresses at EECi modern aquaculture technology. A high density aquaculture system has been developed to achieve the self-sustaining culture system which minimizes losses and increases productivity while reducing water consumption and environmental footprint in one goal.

Furthermore, the valorization of produce from modern agriculture as well as biomass residues, i.e. sugarcane bagasse, cassava pulp, empty palm fruit bunch, is of great importance. With the maximum fermentor size of 15,000 litres, Biorefinery Pilot Plant at EECi provides GMP and Non-GMP platforms which allow the conversion, from a laboratory level to a multi-ton scale, of such biomass to a wide range of high value bio-based products, i.e. biochemicals, biomaterials, functional ingredients, food additives, cosmeceuticals and nutraceuticals.

