

## Developing Low Carbon and Circular Economy Model for Industry in Eastern Economic Corridor (EEC) Area

### Rational

The growths in GDP and population, including production and consumption pattern in linear economy, have affected natural resources and the environment, leading to resources scarcity and environmental problems in several countries. Thailand recognizes the need to address this concern and decided to apply Circular Economy Concept as a guideline to increase efficiency of natural resources utilization and reduce waste and resource consumption in order to ensure sustainable growth towards security, prosperity, and sustainability as set out in Thailand's 20-year National Strategy.

Thailand Greenhouse Gas Management Organization (Public Organization) or TGO initiates a new project titled "Development of Low Carbon and Circular Economy Model for Industry in Eastern Economic Corridor (EEC) Area" in Fiscal Year B.E.2564 (A.D.2021). Since the EEC area is the Government's target area for promoting investment and drive national economy in the next 20 years, it is necessary to apply circular economy concept into industrial production process in order to increase industrial competitiveness and reduce resources consumption as well as greenhouse gas emissions in industrial sectors.

### Objectives

- 1) To develop a circular economy and low carbon model for industry in the EEC area (CE-EEC model).
- 2) To provide recommendations to promote circular economy for low carbon industry in the EEC area.
- 3) To conduct a survey on low carbon technologies and encourage industries to self-assess their low carbon industry readiness.
- 4) To develop and integrate circular economy database into GHG Mitigation Information Platform developed by TGO.

### Scope of Work

- Develop a CE model for low carbon industries in EEC area.
- Prepare a policy recommendation to promote circular economy for industrial sector in the area.

- Conduct a survey to develop a low carbon technologies database for industries and encourage industries in the area to conduct a self-assessment on low carbon industry readiness using tools provided in the GHG Mitigation Information Platform.
- Develop circular economy database and integrate into the GHG Mitigation Information Platform.

## Outputs

- 1) A circular economy model for low carbon industry in the EEC area.
- 2) A circular economy database, comprising of a set of data on materials, products, by-products, and waste from several industrial sectors, that is integrated into the GHG Mitigation Information Platform.
- 3) A policy recommendation to promote low carbon and circular economy concept for industrial sector in EEC.
- 4) A low carbon technologies database surveyed from 85 factories and results of low carbon industry readiness self-assessment from 75 factories.

## Outcome

- Government and related agencies have access to information, database, and recommendations for setting up a circular economy promotion policy for industrial development in the EEC area and scale-up to nation-wide.
- Industries can use and benefit from the circular economy database to improve their materials and resource management in order to reduce cost of production and increase their competitiveness.
- Improved public and private sectors' awareness and understanding on circular economy and its co-benefits on greenhouse gases emissions reduction and could apply/integrate CE concept into their daily operations to support implementation and achievement of Thailand's emissions reduction target.