

The Ministry of Industry Mr. Suriya reports bio-industry businesses are continuing to invest, reaching almost 150 Bn Baht to enhance factory types and measures to support the bio-industry and to stimulate the GDP with the goal of Thailand becoming the ASEAN bio-hub.

*The Ministry of Industry reported that the Cabinet had resolved to acknowledge the progress of measures to develop Thailand's bio-industry and accelerate the drive of the bio-economy in line with the BCG (Bio-Circular-Green Economy) Model. Private investment exceeds 149,000 million Baht, with hopes to stimulate the GDP and support Thailand to be an ASEAN bio-hub. The Office of Industrial Economics (OIE) takes on the next step to expedite discussions with the Ministry of Finance on extending the measures to stimulate the use of biodegradable plastics (Green Tax Expense) and reduce corporate tax by 1.25 times, incentivizing shops to use bioplastics in a replacement at a rate of at least 10% per year.*

The Minister of Industry, Mr. Suriya Juangroongruangkit, reported that the Cabinet (August 17, 2021) acknowledged the progress of measures to develop Thailand's bio-industry in 2018-2027. The Ministry of Industry and relevant agencies have accelerated the development of the bio-economy, one of the new economic models of the BCG Model, following government policy. In particular, it has improved regulations to facilitate the development of targeted industries (S-Curve), including unlocking the 50-kilometer factory distance regulation by allowing other factories that use sugarcane as raw materials, such as ethanol and biochemical plants, to be located near the sugar factory. Amendments were made to add three types of biochemical factories: (1) manufacture of chemical products from agricultural raw materials or co-products from biochemical processes, (2) production of bioplastics from chemicals produced from agricultural raw materials or co-products, and (3) the production of bioplastics from chemicals derived from agricultural raw materials or byproducts combined with petroleum-based feedstocks and biodegradable. The amendment will help oversee the main factory operations related to the bio-industry to be clearer and more efficient. It also includes issuing standards related to biological products and amendments to the Ministerial Regulations to enforce the comprehensive town planning in potential provinces such as Chaiyaphum, Ubon Ratchathani, and Lopburi, to support the expansion of the bio-industry in the country.

Mr. Suriya added that some projects had faced obstacles from the COVID-19 situation. As a result, the construction of the factories has not been as planned. However, many private sector companies are still committed to pushing forward investments in the domestic bio-industry, such as the Nakhon Sawan Bio-Complex project of GGC KTIS Bioindustrial Co., Ltd. (GKBI), a joint investment with Nature Works Asia Pacific Ltd., from the USA, to produce biopolymer polylactic acid (PLA) with a production capacity of approximately 75,000 tons annually. Phase 2 of the project has an investment value of 21,430 million Baht, which received investments by the Thai government. Construction is expected to begin in early 2022, and commercial production to start in 2024.

In addition, many projects are in the process of driving private investment, such as the Bio Hub Asia project of Impress Green Energy Co., Ltd., in Chachoengsao Province, with an investment value of 57.6 Bn Baht. The project has attracted many foreign investors interested in investing in such projects, such as the Netherlands, the US, Canada, Germany, the United Kingdom, China, and France. There are plans to invest more in the production of medical-grade cannabis products. There is also the Lopburi Bio-Complex project of Farmer Sugar Industry Co., Ltd. in Lopburi Province, with an investment value of 32 Bn Baht. The project is in the design phase and negotiations with interested investors, preparing an Environmental Impact Assessment (EIA) report. There is the Bioeconomy Industrial Estate Project of Mitr Phol Sugar Co., Ltd., in Khon Kaen Province, with an investment value of 29,705 million Baht, currently studying the impact on animal species in the area around the project and studying the possibility of investing in the production of high-value-added products such as low-calory sugar and baking yeast from molasses. The Ubon Ratchathani Industrial Estate Project of Ubon Ratchathani Industry Co., Ltd., has an investment value of 8.4 Bn million Baht, is currently making an EIA report and considering the revision of the overall Ubon Ratchathani town plan. The project has opened to listen to feedback and create awareness with the communities surrounding the project.

**Mr. Suriya** reiterated that if the private sector can implement the projects reported to the Cabinet as planned, over 149 Bn Baht will be invested in the domestic bio-industry. In addition to creating economic value and helping to support the GDP of Thailand to grow further, the development of the bio-industry also benefits the country socially and environmentally. It creates jobs and generates income for farmers and workers in Chachoengsao, Lopburi, Khon Kaen, and Ubon Ratchathani areas, promoting a better quality of life for people. The Ministry of Industry believes that the measures taken can drive the expansion of the bio-industry in all areas of the country, in line with the government's BCG Economy policy and stepping into becoming the ASEAN bio-hub, according to the goals set.

**OIE Director-General Mr. Thongchai Chawalitpichaet** added that in addition to improving regulations to facilitate investment in the bio-industry, creating domestic demand is another important issue. The OIE has issued a certificate to manufacturers to certify that the biodegradable plastic products have passed the criteria (converter). It is for the first purchaser who purchases such products according to the type specified by the Revenue Department, as evidence for applying for a corporate income tax deduction of 1.25 times the cost of purchasing biodegradable plastic products. From 2019 to July 2021, the OIE has issued certification for 48 products from 4 manufacturers, most of which are plastic tube products.

Currently, the OIE and the Ministry of Finance are under consideration to extend the period of measures to stimulate the use of biodegradable plastics (Green Tax Expense) for a while. Such measures will help build confidence in entrepreneurs that there is a sufficient market to support them and incentivize various department stores to change to biodegradable plastic products to replace at least 10% per year of the total consumption of waste plastic products, such plastic shopping bags, garbage bags, plastic glasses, plastic cutlery, plastic straws and single-use plastic containers, which would translate to approximately 43,000 tons a year of bioplastic resins to be processed into such products. This will give consumers the confidence to consume environmentally friendly products and is a part that will help reduce the amount of domestic plastic consumption as well.