Industry Overview

- Plastic manufacturing is an extension of the petrochemical industry, where petrochemical products are used as raw materials for the production of primary plastics and plastic resins. These resins are then processed through various molding techniques, such as blow molding and injection molding, to produce semi-finished and finished plastic products. These include plastic films, pipes and fittings, electrical appliance components, electronic components, automotive parts, plastic packaging, construction materials, and consumer goods.
- Acrylonitrile Butadiene Styrene (ABS) and Polycarbonate (PC) resins possess key properties such as strength, flexibility, heat resistance, and impact resistance, making them essential raw materials for manufacturing a wide range of products. These include electrical appliance parts, automotive components, and heat-resistant packaging. In addition, ABS is often blended with PC to enhance its heat and impact resistance, further expanding its applications, particularly in the manufacture of industrial machinery components.
- High-Impact Polystyrene (HIPS) is produced by blending Polystyrene (PS) with Polybutadiene Rubber (PBR), resulting in key properties such as high impact resistance, flexibility, ease of molding, and moderate heat resistance. HIPS is widely used in the production of electrical appliance parts, including televisions and air conditioners. In addition, it is utilized in the manufacturing of furniture parts, toys, and durable packaging that requires strength and resilience.

Situation of Thailand's Plastic and Resin Manufacturing

In 2024, Thailand's plastic and resin manufacturing is expected to improve across almost all product categories, as reflected in the rise of the Manufacturing Production Index (MPI). Notably, the production of primary plastics such as benzene saw a significant MPI increase of 27.6%YoY. For ABS and PC resin production, both of which use benzene and polystyrene (PS) as key raw materials, the MPI showed an increase of 30.5%YoY for ABS and 2.4%YoY for PC. For HIPS, the MPI also showed an increase of 11.9%YoY. These expansion in production can be attributed to Thailand's economic recovery over the past year, largely driven by the rebound in the tourism sector. This resurgence has led to increased household and business income, boosting purchasing power and stimulating production in certain industries. Key sectors benefiting from this trend include consumer goods and household electrical appliances such as electric fans, refrigerators, and washing machines, as well as electronic equipment parts - many of which use ABS, PC, and HIPS resins in the production of their plastic components. In addition, export growth has been a contributing factor, with Thailand witnessing a surge in ABS and PC exports to key markets such as India and ASEAN. The increased demand in ASEAN also aligns with the region's broader economic recovery, supported by the global economic rebound.

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Figure 1 Manufacturing Production Index (MPI) of Primary Plastic





Figure 2 Manufacturing Production Index (MPI) of Plastic Resins

Source: LH Bank Business Research Analysis based on data from the Office of Industrial Economics (OIE) (Based Year = 2021).

Source: LH Bank Business Research Analysis based on data from the Office of Industrial Economics (OIE) (Based Year = 2021).

The prices of key raw materials used for ABS, PC, and HIPS resin manufacturing - crude oil and benzene - experienced a slight decline over the past year. Looking ahead to 2025, global crude oil prices and benzene prices (which are derived from crude oil and condensate), are expected to continue their downward trend. This is mainly due to an increase in oil production from non-OPEC+ countries, particularly the United States, Brazil, and Canada, which could lead to an oversupply in the global crude oil market. In addition, slowing oil demand in China, one of the world's largest consumers, is expected to exert further downward and pressure the oil prices. These factors are likely to lead to a wider price spread, which would be beneficial for plastic producers.



Figure 3 Crude Oil Prices (WTI) and Natural Gas Prices (US, EU)

Source: LH Bank Business Research Analysis based on data from World



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• However, prices of plastics in this group have been on a continuous decline over the past 1–2 years due to an oversupply issue. This situation has been driven by China's self-sufficiency policy, which aims to reduce plastic imports and increase domestic production capacity. As a result, regional demand for plastic resins has weakened, leading to a decline in plastic resin prices both in the region and in Thailand. This has adversely impacted the profitability of Thai plastic and petrochemical manufacturers.

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Figure 4 Prices of Raw Materials for Plastic Resin Production





Figure 5 ABS and HIPS Prices in Thailand



Source: LH Bank Business Research Analysis based on data from Plastic Intelligence Unit (PIU), Office of Industrial Economics (OIE).

Situation of Thailand's Plastic Enterprises

- According to the Office of Small and Medium Enterprises Promotion (OSMEP), in 2023, there were 778 enterprises in Thailand's plastic and petrochemical industry, an increase of 1.6%YoY. The majority were small enterprises, with 451 enterprises (58.0% of all enterprises in the industry), followed by micro enterprises (220 enterprises, 28.3%), medium enterprises (54 enterprises, 6.9%), and large enterprises (53 enterprises, 6.8%). The number of enterprises in the industry has shown a steady growth trend, with an average CAGR of 3.9%, particularly among medium-sized enterprises, which expanded from 39 enterprises in 2019 to 54 in 2023, representing a CAGR of 8.5%.
- The total revenue of all plastic and petrochemical enterprises in 2023 was THB 395,972 million, representing a decline of 19.6%YoY. However, compared to 2019, when the total revenue was at THB 304,840 million, the industry has maintained an overall CAGR of 6.8%. Notably, large enterprises predominantly petrochemical companies dominate the market, accounting for 94.9% of the industry's total revenue. The remaining 5.1% of the market share is distributed among businesses of other sizes, mainly plastic enterprises. When considering revenue growth trends within the plastics industry in recent years, medium enterprises recorded a CAGR of 10.2%, while small and micro enterprises grew at CAGR of 2.2%. This growth rate is notable high, compared to large enterprises in the petrochemical sector, which had a CAGR of 6.8%. One contributing factor to this disparity is the stock loss incurred by petrochemical producers due to fluctuations in raw material prices over the past year.

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Figure 6 Number of Business Enterprises in Thailand's





Source: LH Bank Business Research Analysis based on data from the Office of Small and Medium Enterprises Promotion (OSMEP).

Note: TSIC20131 Manufacture of plastic pallets and plastics in primary forms.

Figure 7 Total Revenue of Plastic Business Enterprises



Source: LH Bank Business Research Analysis based on data from the Department of Business Development (DBD).

Note: TSIC20131 Manufacture of plastic pallets and plastics in primary forms.

Figure 8 Total Revenue of Plastic Business Enterprises, by Business Size



Source: LH Bank Business Research Analysis based on data from the Department of Business Development (DBD). Note: TSIC20131 Manufacture of plastic pallets and plastics in primary forms.

Situation of Thailand's Plastic and Resin Export and Import

Thailand's exports of ABS, PC, and HIPS resins grew slightly from the previous year. In 2024, Thailand's ABS exports were valued at USD 112 million, an increase of 2.9%YoY. The main export markets for ABS are China (40.6% of total ABS exports), ASEAN (22.1%), and India (12.3%). In addition, Thailand's PC exports, valued at USD 873 million, increased by 1.6%YoY. The main export markets for PC are China (36.3% of total PC exports), India (24.8%), and ASEAN (17.9%). For HIPS exports, Thailand export valued only at USD 9.3 million, increased by 18.2%YoY. The main export markets for HIPS are ASEAN (43.8%), Japan (33.8%), and China (3.7%).

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Similarly, Thailand's imports of ABS and PC resins also increased from the previous year, while HIPS imports declined. In 2024, Thailand's imports of ABS amounted to USD 248 million, an increase of 8.4%YoY. The main import markets for ABS are South Korea (39.3% of total ABS imports), China (22.1%), and ASEAN (18.6%). In addition, Thailand's imports of PC totaled USD 144 million, an increase of 9.6%YoY, with the main markets being China (52.7% of total PC imports), Japan (16.7%), and the European Union (13.2%). For HIPS imports, Thailand import valued only at USD 0.8 million, decrease by 35.0%YoY. The main import market for HIPS are Japan (52.1%), China (21.6%), and ASEAN (3.0%).

Figure 9 Thailand's ABS, PC, and HIPS Export Values



Source: LH Bank Business Research Analysis based on data from the Ministry of Commerce.

Note: ABS refers to HS Code: 390330, PC refers to HS Code: 390740, and HIPS refers to HS Code: 3903192000.

Figure 11 Thailand's ABS, PC, and HIPS Import Values



Source: LH Bank Business Research Analysis based on data from the Ministry of Commerce.

Note: ABS refers to HS Code: 390330, PC refers to HS Code: 390740, and HIPS refers to HS Code: 3903192000.

Figure 10 Thailand's Main export markets for ABS, PC, and HIPS



Source: LH Bank Business Research Analysis based on data from the Ministry of Commerce.

Note: AS (9)=ASEAN (9), US=United State, UK=United Kingdorn, EU(27)=European Union, CN=China, JP=Japan, KR=South Korea, IN=India, TW=Taiwan AU=Australia, NZ=New Zealanc

KR CN AS (9) JP EU (27) Others 9.6% ABS 18.6% 5.3% PC 13.2% 8.6% 3.6% CN EU (27) AS (9) KR Others JP HIPS 23.3% .IP CN AS (9) AU Others

Source: LH Bank Business Research Analysis based on data from the Ministry of Commerce.

Note: AS (9)=ASEAN (9), US=United State, UK=United Kingdom, EU(27)=European Union, CN=China, JP=Japan, KR=South Korea, IN=India, TW=Taiwan AU=Australia, NZ=New Zealanc

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Situation of Demand for ABS, PC, and HIPS Resins in Related Industries

Over the past 3-4 years, demand for ABS, PC, and HIPS resins has shown an upward trend, mainly driven by growth in the production of electrical appliances and automotive parts. This trend was particularly evident in the last year, as the production volume of Thailand's major electrical appliances (which are also important export products), such as electric fans, refrigerators, washing machines, and air conditioners, increased significantly. In 2025, demand for these resins is expected to continue to grow in line with the recovery of the Thai economy, which is benefiting from the growth of the tourism sector. This economic recovery is likely to

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Figure 12 Thailand's Main import markets for ABS, PC, and HIPS



increase domestic purchasing power for both households and businesses. However, export-driven demand for plastic and resins may face risks from the escalating trade tensions between the United States and China, the imposition of U.S. import tariffs, and the oversupply issue within the industry.



Figure 13 Production of Key Industrial Products with Plastic Parts Made from ABS, PC, and HIPS

Source: LH Bank Business Research Analysis based on data from the Office of Industrial Economics (OIE).

Future Industry Outlook

- The ABS, PC, and HIPS plastic industry is expected to continue to grow over the next year, albeit at a limited pace. This outlook is supported by the expansion of the Thai economy, which remains supported by the tourism sector and the recovery of downstream industries such as the manufacturing of electrical appliances and automotive parts, which use ABS, PC, and HIPS in the production of components. In addition, the expected slight decrease of raw material prices, such as crude oil and benzene, may contribute to an improved price spread for plastic manufacturers. Furthermore, if the recovery of ABS and PC export markets particularly in China, India, and various ASEAN countries gains momentum, it could help drive demand for Thai plastics. However, the industry faces some significant risks from global economic volatility, particularly as international trade slows down due to U.S.-China trade tensions and geopolitical conflicts. There is also increasing competition within the industry, both from existing producers and new entrants. Moreover, Thailand has seen a rising trend of plastic resin imports from countries such as South Korea, China, and Japan, which further increase competitive pressures. In addition, the industry continues to face price pressures due to the oversupply of plastics in China. This has led to a slowdown in Thailand's plastic exports over the past two years and is expected to continue to suppress regional plastic prices, potentially impacting the profitability of Thai plastic producers.
- Thai SMEs should adapt by diversifying risks, such as expanding raw material sourcing channels and seeking new export markets. Simultaneously, they should focus on enhancing production efficiency and adopting modern technologies to reduce costs. This approach will strengthen their long-term competitive advantage. In addition, staying closely informed on international trade policies and the economic conditions of key trading partners will be crucial to prepare for the impacts of trade wars and future shifts in the global plastics market.

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