

# Report on the Industrial Economics Status

Q4/2023  
and Outlook for Q1/2024



## Table of contents

	Page
<b>Executive Summary</b>	3
<b>Part 1</b> Thailand Economic and Industrial Overview for Q4/2023	5
<b>Part 2</b> Thai Industrial Economic Sectors in Q4/2023 and Outlook for Q1/2024	14
2.1 Iron and Steel Industry	15
2.2 Electrical appliance Industry	16
2.3 Electronics Industry	17
2.4 Automotive and Part Industry	18
2.5 Motorcycle and Part Industry	19
2.6 Chemical Industry	20
2.7 Plastics Industry	21
2.8 Petrochemical Industry	22
2.9 Pulp, Paper and Print Media Industry	23
2.10 Ceramic Industry	24
2.11 Cement Industry	25
2.12 Textile and Wearing Apparel Industry	26
2.13 Wood and Wooden Furniture Industry	27
2.14 Pharmaceutical Industry	28
2.15 Rubber and Rubber Product Industry	29
2.16 Footwear and Leather Product Industry	30
2.17 Gems and Jewelry Industry	31
2.18 Food Industry	32

## Executive Summary

### Summary of Thai Industrial Economic Status in Q4/2023

The industrial economy status in Q4/2023, when considered from the Manufacturing Production Index (MPI), reached 89.35, a contraction of 5.06 percent compared to the same quarter last year. This was the fifth consecutive quarter of a decline. The contraction was mainly a result of decreased production for domestic sales, which was in line with domestic consumption. In addition, household debt was high. Therefore, lending by financial institutions has become more stringent. Furthermore, interest rates continued to rise, causing increased financial costs and debt burdens for businesses. **Key industries that slowed down in Q4/2023** were **automobiles** from the production of 1-ton pickup trucks, mainly from production for domestic sales. This is because the income of farmers, the leading consumer group, decreased from last year, resulting in a slowdown in purchasing power. In addition, the burden of household debt is high. As a result, financial institutions were more stringent in lending. **Electronic components and boards** contracted following the slowdown of the world market, causing the demand for electronic components in the world market to decrease. **Computers and computer peripheral equipment** decreased mainly from Hard Disk Drives due to a slowdown in demand for storage equipment, combined with the change in technology, wherein other devices for storing data have more storage space and higher efficiency. **Industries that grew in Q4/2023** were **refined petroleum products**. The growth was from production to meet increasing demand from the domestic and export markets, following the continuous recovery of the tourism sector. In addition, during the same period last year, some refineries stopped for maintenance. **Other electronic and electric wires and cables** grew from electrical wires due to increased orders from electric utilities following the maintenance cycles. In addition, there were various projects in both the public and private sectors, resulting in increased demand for electrical wires. **Paper pulp, paper, and paperboard** increased following the growth of the online marketplace, resulting in the expansion of the transportation business. Therefore, the demand for paper packaging products increased.

### Key Industries Outlook for Q1/2024

↓ Iron and Steel: The industry is expected to contract slightly from last year due to the downward trend of iron prices in the world market. This trend has caused consumers to delay orders to monitor price movements, which could potentially affect the demand for steel. However, the accelerated construction activities in the governmental, state enterprise, and private sectors, driven by the recovery of the tourism sector, are anticipated to be supporting factors for the growth of the domestic steel industry.

↓ Electrical Appliances Industry: The MPI is expected to decrease by approximately 3.0 to 6.0 percent. The decline is attributed to the ongoing uncertainty in the global economic situation, which continues to slow down, along with inflation and increased production costs in line with inflation. These factors may adversely impact industry production, leading to a slowdown. Meanwhile, the export value is expected to expand by approximately 1.0 to 3.0 percent. This growth is driven by the trend of Smart City expansion, supported by advancements in Smart Electronics technology and products.

↓ Electronics Industry: The MPI is expected to contract slightly by 1.0 to 3.0 percent due to higher production costs, which may affect the production ability of Thai businesses. Furthermore, the world economy remains uncertain, particularly among key trading partners such as China and the USA. However, the policy to support and promote investment in the Smart Electronics industry may have a positive effect on the production of electronic components in Thailand. Meanwhile, the value of exports is expected to grow by approximately 3.0 to 5.0 percent from the continuous growth of the electronics industry following the needs of the global market and rapidly changing digital technology, including consumer demand for innovation and equipment.

↑ Automobile: The production estimate for Q1/2024 is over 475,000 units, with approximately 45 to 50 percent allocated for domestic sales and 50 to 55 percent for export.

↑ Motorcycle: The production estimate for Q1/2024 is over 525,000 units, with approximately 80 to 85 percent allocated for domestic sales and 15 to 20 percent for export.

↑ Paper pulp, Paper, and Printed Matter: Paper and paper products used to produce packaging boxes are expected to grow following domestic consumption, and their use for packaging various products will grow in the entire supply chain. Pulp exports have continued to expand in China, which is a crucial export market, from the beginning of the year. Meanwhile, the book and publishing sector is expected to continue to slow down due to decreased demand from import markets such as Hong Kong and the USA.

↑ Wood and Furniture: The country's production and sales of wooden furniture are expected to return to growth due to the increasing domestic demand for wooden furniture from the end of 2023. Exports of wood and wood products are expected to continue growing due to the increasing demand from key trading partners, especially the demand for products in the wood and wood panel products group.

↑ Rubber and Rubber Products: the production volume of processed rubber in primary forms (rubber sheets, rubber bales, and concentrated latex), automotive tires, and rubber gloves is expected to expand for all three product categories. Processed rubber in primary forms will expand due to downstream industry demand both domestically and internationally. Automotive tires will expand due to increasing demand trends in key markets such as the USA, Australia, and South Korea. Meanwhile, rubber glove production will grow to meet market demand, primarily within the domestic market.

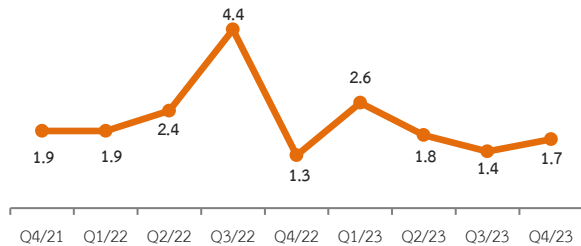
↑ Gems and Jewelry: The industry is expected to see better growth with supporting factors from exports to crucial partner countries and the tourism sector, which has become more active. In addition, many countries have returned to organizing gem and jewelry exhibitions to stimulate public consumption. As a result, the demand for products has increased. However, the geopolitical conflicts must still be monitored as the situation remains protracted and continues to widen. Other factors that need to be monitored include the implementation of strict monetary policies of trading partners, as well as fluctuations from increased energy and transportation costs, which may affect Thailand's production and exports in the future.

↑ Food: The overall MPI is expected to grow compared to the same quarter last year. Supporting factors include government measures that help stimulate domestic demand, including the number of tourists that is likely to increase. Exports are also expected to grow from the market for products from trading partners for food security. However, it is still necessary to monitor the global economic situation that continues to slow down and the geopolitical conflicts in many countries, including the effects of drought that may become more severe.

## **Part 1** Thailand Economic and Industrial Overview for Q4/2023

## Thailand's Economic and Industrial Overview for Q4/2023

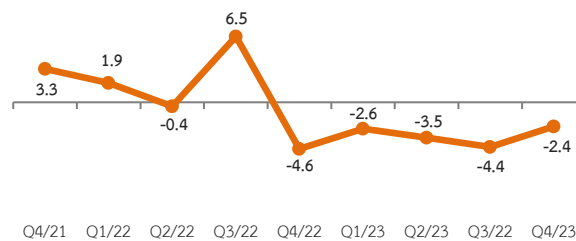
**Gross domestic product**  
increased by 1.7 percent (%YoY)



Source: Office of the National Economic and Social Development Council

The Gross Domestic Product (GDP) in Q4/2023 expanded by 1.7 percent, showing an increase from the previous quarter's expansion of 1.4 percent and an increase compared to the same period last year (2022), which grew by 1.3 percent.

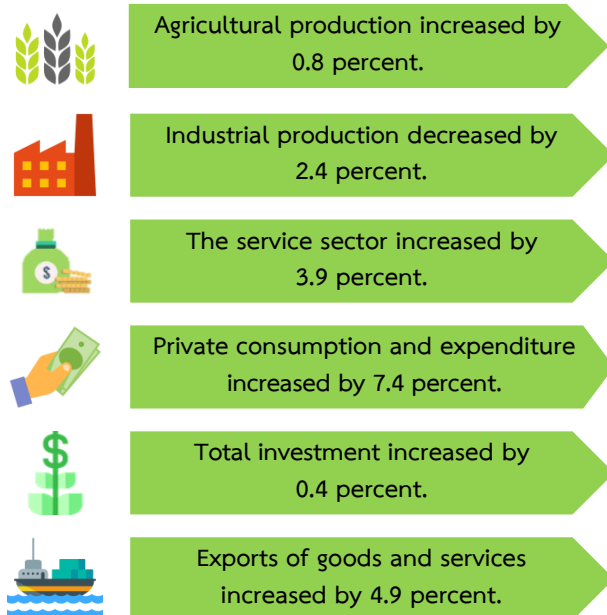
**Industrial sector GDP**  
decreased by 2.4 percent (%YoY)



Source: Office of the National Economic and Social Development Council

The industrial sector's GDP shrank by 2.4 percent in Q4 2023, less than the contraction of 4.4 percent in the previous quarter. However, it increased compared to the same period last year (2022), which had a contraction of 4.6 percent.

### Key factors of GDP growth



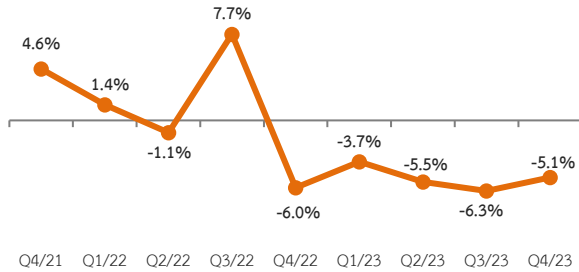
In Q4/2023, agricultural production decreased by 0.8 percent, industrial production decreased by 2.4 percent, and total investment decreased by 0.4 percent. However, the service sector, private consumption expenditures, and exports of goods and services expanded by 3.9 percent, 7.4 percent, and 4.9 percent, respectively.

The Gross Domestic Product of industrial sector in Q4/2023 decreased by 2.4 percent, attributed to the decline in key export-oriented manufacturing sectors such as manufacture of automobiles, electronics components and boards, and computer and peripheral equipment.

## Key Industrial Index

### Manufacturing Production Index

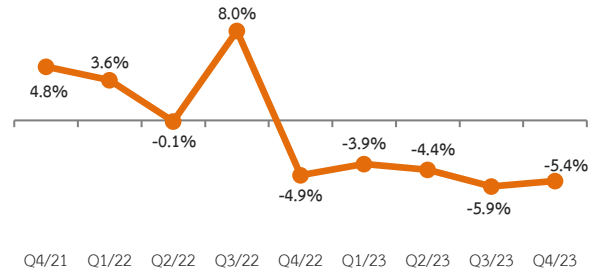
*decreased by 5.1 percent (%YoY)*



Source: The Office of Industrial Economics

### Shipment Index

*decreased by 5.4 percent (%YoY)*



Source: The Office of Industrial Economics

In Q4/2023, the Manufacturing Production Index (MPI) stood at 89.35 points, a decrease of 2.1 percent from the previous quarter (91.29 points) and a decrease of 5.1 percent from the same quarter of 2022 (94.11 points).

Industries contributing to the decrease of the MPI from the previous quarter were the manufacture of automobiles, plastics and synthetic rubber in primary forms, chemical fertilizers and nitrogen compounds.

Industries contributing to the decrease of the MPI from the same quarter last year were the manufacture of automobiles, electronic components and boards, and computers and peripheral equipment.

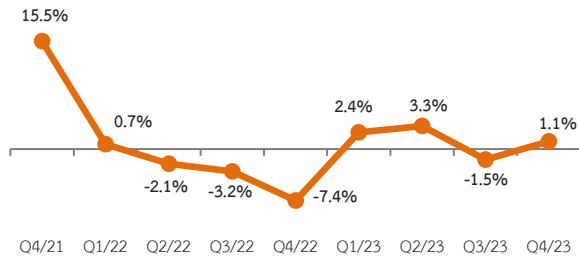
In Q4/2023, the Shipment Index stood at 91.76 points, a decrease of 2.2 percent from the previous quarter (93.86 points) and a decrease of 5.4 percent from the same quarter of 2022 (97.04 points).

Industries contributing to the decrease in the Shipment Index from the previous quarter were the manufacture of electronic components and boards, automobiles, sugar, and synthetic rubber in primary forms.

Industries contributing to the decrease of the shipment index from the same quarter last year were the manufacture of automobiles, electronic components and boards, and air conditioners.

### Finished Goods Inventory Index

increased by 1.1 percent. (%YoY)



Source: The Office of Industrial Economics

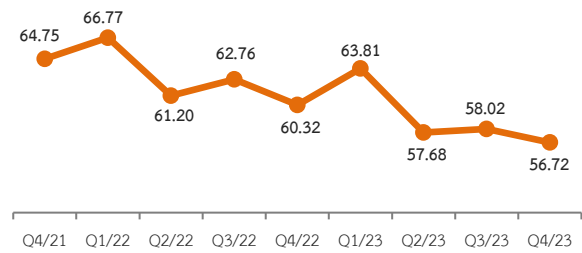
In Q4/2023, the finished goods inventory index stood at 134.60 points, a decrease of 0.9 percent from the previous quarter (135.87 points) but an increase of 1.1 percent from the same quarter of 2022 (133.18 points).

Industries that contributing to the decrease of finished goods inventory index from the previous quarter were the manufacture of sugar, computers and peripheral equipment, and refined petroleum products.

Industries contributing to the decrease of the finished goods inventory index from the same quarter last year (2022) were the manufacture of automobile; raising of aquatic animals and production of fresh, chilled or frozen aquatic animal products; and other electric wires and cables.

### Capacity Utilization Rate

stood at 56.72 percent.



Source: The Office of Industrial Economics

In Q4/2023, the capacity utilization rate stood at 56.72 percent, decreasing from the previous quarter (58.02%) and decreasing from the same quarter of 2022 (60.32%).

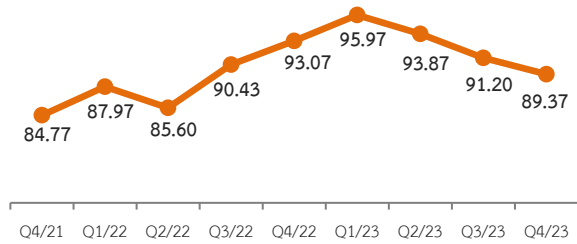
Industries that contributed to the decrease of capacity utilization rate from the previous quarter were the manufacture of automobiles, plastics and synthetic rubber in primary forms, and chemical fertilizers and nitrogen compounds.

Industries that contributed to the decrease of capacity utilization rate from the same quarter last year were the manufacture of automobiles, electronic components and boards, and computers and air conditioners.



## Industrial Sentiment Index

in Q4 stood at 89.37 points.



Source: The Federation of Thai Industries

In Q4/2023, the industry sentiment index was 89.37 points, decreasing from last quarter (91.20 points) and decreasing from the same quarter last year (93.07 points). Meanwhile, the three-month forecast for the sentiment index was at 96.0 points, decreasing from the same quarter of 2022 (98.57 points).

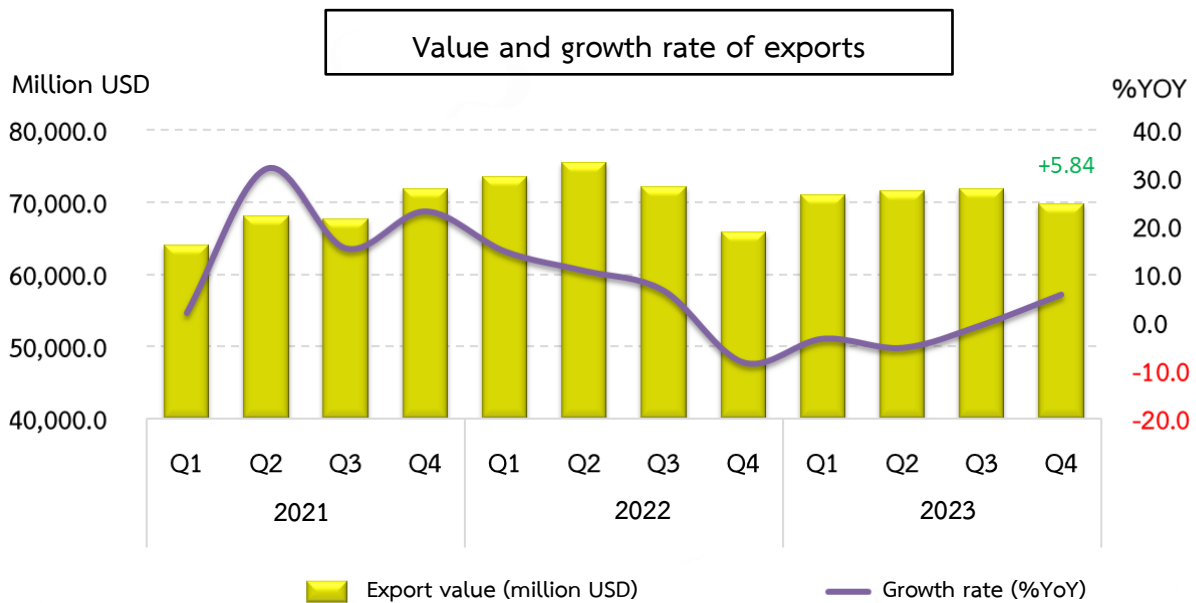
Factors contributing to the decline in industrial confidence in Q4/2023 stemmed from persistent internal risks within the country, including high living costs and household debt levels that remained elevated from the previous quarter, resulting in weakened purchasing power. Additionally, the upward adjustment of interest rates by the Bank of Thailand further increased financial costs and debt burdens for entrepreneurs. Nevertheless, positive signals from the global economy, particularly from trading partner countries, which saw continuous export expansion in the final quarter of the year, were supported by sustained growth in the tourism sector, resulting in domestic consumption and expenditure.

## Thailand's International Trade

"In Q4/2023, Thailand's international trade grew by 5.82 percent compared to the same period last year (%YoY), improving from the previous quarter following the recovery of domestic demand, especially demand from the USA and China, resulting in improved global trade volumes. However, the conflict in the Middle East between Israel and the Hamas group has resulted in increased energy and commodity prices in the world market. Additionally, inflation in many countries remains stable and above target. The central banks of most countries have maintained their policy interest rates at consistently high levels. As a result, the world economy will recover slower than expected."

Thailand's international trade in Q4/2023 reached a total value of 141,959.10 million USD, with exports valued at 69,850.09 million USD, expanding by 5.84 percent (%YoY) compared to the same period last year, and imports valued at 72,109.01 million USD, expanding by 5.80 percent (%YoY) compared to the same period last year. The trade balance in Q4/2023 was in a deficit balance of 2,258.92 million USD.

### Export Structure

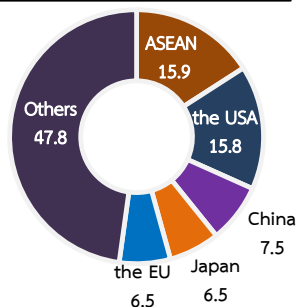


Source: Ministry of Commerce

In Q4/2023, Thailand's exports were valued at 69,850.09 million USD, an increase of 5.84 percent compared to the same period last year (%YoY). The main product categories that changed were agricultural products, with an export value of 6,153.17 million USD, an increase of 3.68 percent (%YoY); agro-industrial products, with an export value of 5,176.39 million USD, an increase of 3.70 percent (%YoY); industrial goods, with an export value of 55,150.89 million USD, an increase of 4.56 percent (%YoY); mineral and fuel products, with an export value of 3,369.64 million USD, an increase of 45.09 percent (%YoY).

## Export Markets

Export proportions (%)

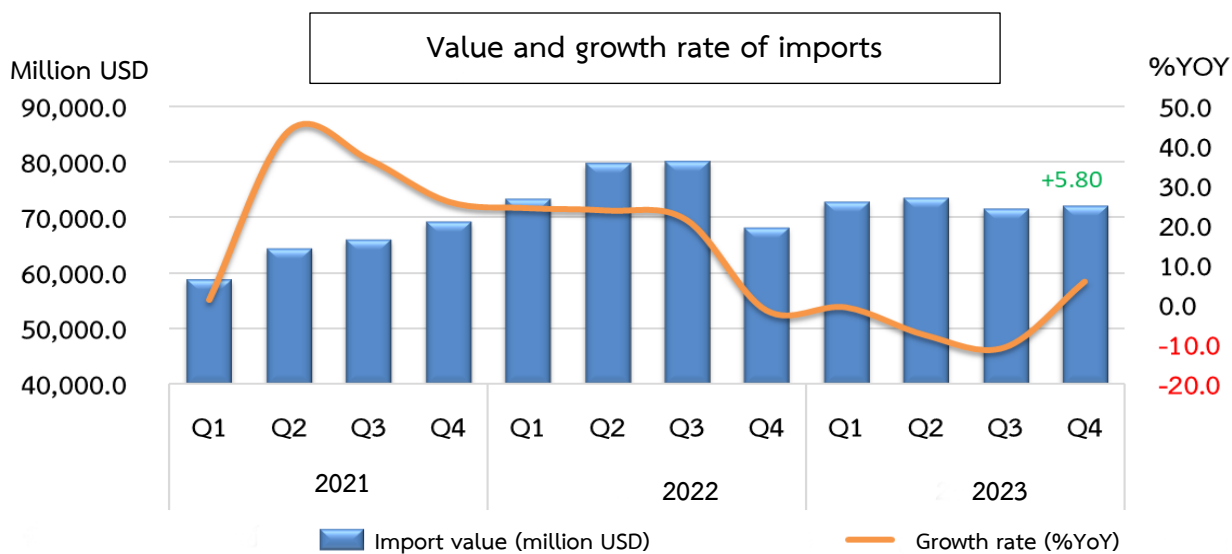


In Q4/2023, Thailand's proportion of exports to five major trading partners, including ASEAN, the USA, China, Japan, and the EU (27 countries), accounted for 52.20 percent of total exports. The remaining 47.80 percent of exports were destined for other markets as the following details:

Source: Ministry of Commerce

- The proportion of export value to ASEAN, the USA, China, Japan, and the EU (27 countries) were 15.90, 15.80, 7.50, 6.50, and 6.50 percent, respectively.
- Thailand's export value was 69,850.09 million USD, an increase of 5.84 percent compared to the same period last year (%YOY). Among the major trading partners, exports to the EU experienced the most significant contraction (-4.02%), followed by Japan (-0.88%), ASEAN (9) (-0.83%), however, exports increased in the USA (9.65%) and China (1.583%).

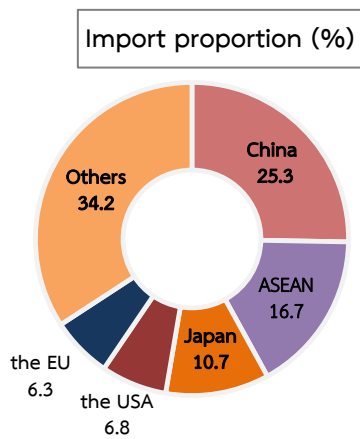
## Import Structure



Source: Ministry of Commerce

In Q4/2023, Thailand's goods imports were valued at 72,109.01 million USD, an increase of 5.80 percent compared to the same period last year (%YOY). Changes in the import of key products were fuel products, with an import value of 13,530.91 million USD, an increase of 4.72 percent (%YOY); capital goods (with an import value of 18,160.14 million USD, an increase of 15.68 percent (%YOY)); raw materials and semi-finished products (with an import value of 27,171.91 million USD, a decrease of 0.63 percent (%YOY)); consumer goods (with an import value of 8,367.93 million USD, an increase of 4.09 percent (%YOY)); vehicles and transportation equipment (with an import value of 3,910.87 million USD, an increase of 20.28 percent (%YOY)). Lastly, weapons, military supplies, and other goods (with an import value of 967.27 million USD, an increase of 7.28 percent (%YOY)).

## Import markets



Source: Ministry of Commerce

In Q4/2023, Thailand's proportion of imports from five major trading partners, including China, ASEAN, Japan, the USA, and the EU (27 countries), accounted for 65.80 percent of total imports, and imports from other markets account for 34.20 percent of total imports, with details as follows.

- Thailand's imports from China, ASEAN, Japan, the USA, and the EU (27 countries) accounted for 25.30 percent, 16.70 percent, 10.70 percent, 6.80 percent, and 6.30 percent, respectively.
- Thailand's import value reached 72,109.01 million US dollars, an increase of 5.80 percent compared to the same period last year (%Y0Y). Imports from the USA recorded the highest expansion at 10.42 percent, followed by China (9.39%), Japan (3.43%), and the EU (27 countries) (3.01%). However, imports from ASEAN countries decreased by 2.03 percent.

## Global Economy in Q4/2023

*The global economy in Q4/2023 improved from the previous quarter following the recovery of domestic demand from the service and manufacturing sectors. Furthermore, the economies of major countries like the USA had good growth. Unemployment rates in key countries such as the USA and China were low, while global inflation is likely to continue to slow down. In addition, most central banks stopped raising interest rates. However, the global economic outlook still has risks that need to be monitored due to the stringent monetary policies of major central banks in the past and international trade that may slow down by more than expected, especially in China, including geopolitical conflicts that are continuing.*

### Summary of Key Economic Indicators in Q4/2023

Quarterly Growth (%YoY)

	GDP	Inflation	MPI	Export	Unemployment Rate	Policy Rate
the US	↑ 3.1	↑ 3.2	↓ -0.2	↓ -1.3	3.5	5.25-5.50
China	↑ 5.2	↓ -0.3	↑ 6.0	↓ -1.2	5.1	3.45
Japan	↑ 1.0	↑ 2.9	↓ -0.4	↓ -0.7	2.4	-0.10
Malaysia	↑ 3.0	↑ 1.6	↑ 1.0	↓ -9.4	3.3	3.0
Vietnam	↑ 6.7	↑ 3.5	↑ 5.3	↑ 6.9	2.3	3.0
Thailand	↑ 1.7	↓ -0.5	↓ -5.1	↑ 5.8	N.A.	2.5

Source: ceicdata, <https://www.nesdc.go.th>, and <https://tradingeconomics.com>

In Q4/2023, crude oil prices in the world market decreased when compared to the same period last year due to (1) China's economic slowdown, which affected the demand for oil in the world market. (2) Central banks in major economies maintained high policy interest rates, resulting in a slowdown in economic activity, and (3) the USA commercial crude oil reserves increased by 1.5 percent compared to the same period last year.

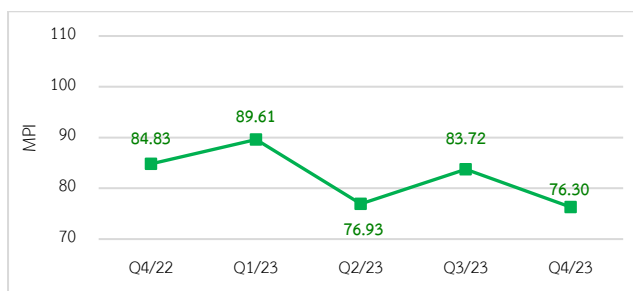
In 2024, the world economy is likely to continue growing at a slower rate compared to 2023 following the slowdown of the major economies, including the USA, Japan, and China. The US economy is likely to slow down in line with domestic demand, and private investment is expected to decrease. The Japanese economy is predicted to slow down due to reduced private consumption. The Chinese economy is also likely to continue to slow amid debt problems in the real estate sector. Inflation is expected to ease following the central bank's tight monetary policy in the past. Central banks of important countries will likely begin to reduce their policy interest rates gradually. In addition, the geopolitical conflict situation in many regions is limited and has not escalated in intensity to the point of affecting the world economy.

**Part 2** Thai Industrial Economic Sectors in Q4/2023  
and the Outlook for Q1/2024

## Iron and Steel Industry

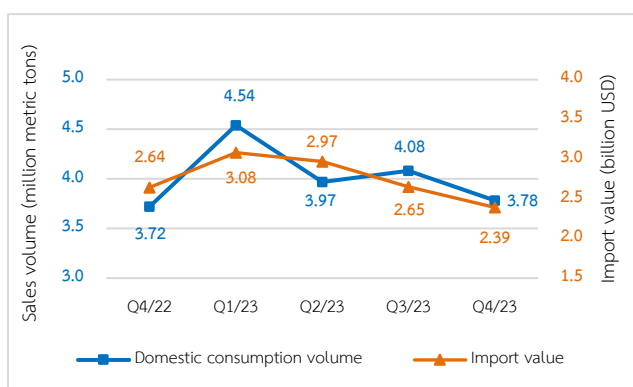
The iron and steel industry's MPI in Q4/2023 contracted compared to the same quarter of 2022 from the reduced production of iron products such as round bars, wire rods, tinplates, and hot-rolled coils. However, the domestic consumption expanded by 1.8 percent from the consumption of iron products such as galvanized sheets and tin plates.

### Manufacturing Production Index (MPI)



Source: The Office of Industrial Economics

### Domestic consumption and import value



Source: The Office of Industrial Economics / Iron and Steel Institute of Thailand

**Production:** In Q4/2023, the industrial production index was 76.3 points, a decrease of 10.1 percent (%YoY) from the same quarter last year and a decrease of 8.9 percent (%QoQ) compared to the previous quarter. The production of long products, compared to the same quarter last year, decreased by 10.6 percent. The product with the highest decreased production was round bars (-42.9%), followed by wire rods (-25.5%) and cold-formed structural steel sections (-16.3%). The production of flat products also decreased by 8.5 percent, with the highest decrease in tinplates (-12.0%), followed by hot-rolled coils (-11.0%) and galvanized sheets (-10.7%).

**Domestic consumption:** In Q4/2023, domestic consumption in Thailand reached 3.8 million metric tons, an increase of 1.6 percent (%YoY) from the same quarter last year but a decrease of 7.3 percent (%QoQ) compared to the previous quarter. Consumption of flat products, compared to the same quarter last year, increased by 3.3 percent with the highest consumption in other coated sheets (22.4%), followed by galvanized sheets (20.0%) and tinplates (11.8%). However, the consumption of long products decreased by 0.6 percent.

**Imports:** In Q4/2023 were valued at 2.4 billion USD, a decrease of 9.5 percent (%YoY) from the same quarter last year and a decrease of 9.8 percent (%QoQ) from the previous quarter. Imports of long products, compared to the same quarter last year, decreased by 15.2 percent, with the highest contraction in seamless steel pipe (-48.9%) (key sources of imports being China, Japan, and South Korea). This was followed by hot-rolled structural stainless-steel sections (-43.0%) and alloy steel rebars (-21.3%). Imports of flat products also decreased by 6.8 percent. Long product experiencing the highest decrease in imports was chromium-coated sheet (-48.2%) (key sources of imports being China, Japan, and South Korea). This was followed by hot-rolled carbon steel plates (-39.1%) and ERW pipes (-27.2%).

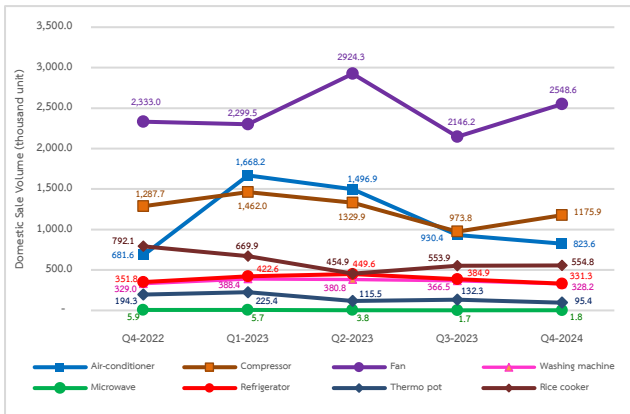
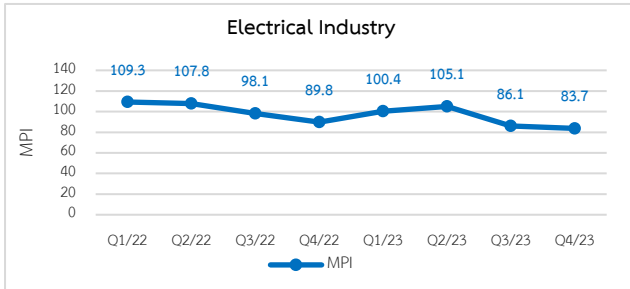
### Iron and Steel Industry Outlook for Q1/2024

In Q1/2024, the iron and steel industry is expected to contract slightly from last year due to the downward trend of iron prices in the world market. This trend has caused consumers to delay orders to monitor price movements, which could potentially affect the demand for steel. However, the accelerated construction activities in the governmental, state enterprise, and private sectors, driven by the recovery of the tourism sector, are anticipated to be supporting factors for the growth of the domestic steel industry.

## Electrical appliance Industry

The production of the electrical appliances industry in Q4/2023 decreased by 6.8 percent compared to the same quarter last year, as the demand in the world market fell and the world economy slowed down. Products that saw a decrease in production included thermo pots, compressors, electric transformers, rice cookers, electric motors, microwave ovens, air conditioners, and cables. In addition, exports to Europe and ASEAN markets decreased.

### MPI, Import and Export Value, and Domestic Sales of Electrical Appliances



Source: The Office of Industrial Economics, Ministry of Commerce, and Electrical and Electronics Institute

**Production of electrical appliances:** In Q4/2023, the MPI stood at 83.7 points, a decrease of 2.8 percent from the previous quarter (%QoQ) and a decrease of 6.8 percent compared to the same quarter last year (%YoY). Products with a decrease in production included thermo pots (-53.7%), compressors (-36.9%), transformers (-27.1%), rice cookers (-26.4%), electric motors (-19.8%), microwave ovens (-17.1%), air conditioners (-10.6%), and cables (-0.6%). The decrease was due to a decline in global market demand, and the slowdown of world economy. However, there was an increase in the production of electric wires (67.6%), refrigerators (23.3%), washing machines (15.4%), and household fans (10.2%).

**Domestic sales:** In Q4/2023, the products that decreased in sales compared to the same quarter last year were microwave ovens (-69.4%), thermo pots (-50.9%), rice cookers (-30.0%), compressors (-8.7%), refrigerators (-5.8%), and washing machines (-0.3%). On the other hand, products that increased in sales were air conditioners (20.9%) and fans (9.2%).

**Imports of electrical appliances:** In Q4/2023, imports of electrical appliances were valued at 5,550.3 million USD, an increase of 25.5 percent compared to the previous quarter (%QoQ) and a decrease of 19.5 percent compared to the same quarter of the previous year (%YoY). Main products that experienced a decrease in imports were air conditioners (62.0%), washing machines (27.2%), refrigerators (21.5%), and fans (17.4%).

**Exports of electrical appliances:** In Q4/2023, exports of electrical appliances amounted to 6,477.7 million USD, declining by 8.4 percent compared to the previous quarter (%QoQ) and by 6.3 percent compared to the same quarter of the previous year (%YoY). This decline was observed in the European and ASEAN markets, decreasing by 13.7 percent and 5.7 percent respectively. Products that experienced significant declines include electric transformers (-49.7%), rice cookers (-47.2%), microwave ovens (-33.8%), air conditioners (-29.8%), and fans (-4.6%) due to the global economic slowdown.

### Electrical Appliance Industry Outlook for Q1/2024

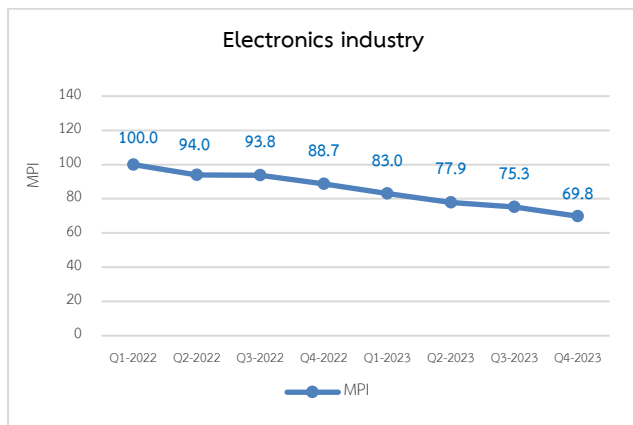
In Q1/2024, the MPI is expected to decrease by approximately 3.0 to 6.0 percent. The decline is attributed to the ongoing uncertainty in the global economic situation, which continues to slow down, along with inflation and increased production costs in line with inflation. These factors may adversely impact industry production, leading to a slowdown. Meanwhile, the export value is expected to expand by approximately 1.0 to 3.0 percent. This growth is driven by the trend of Smart City expansion, supported by advancements in Smart Electronics technology and products.



## Electronics Industry

The production in the electronics industry in Q4/2023 decreased by 21.4 percent compared to the same quarter last year due to higher production costs and insufficient raw materials to meet the global market's demands. Products that saw a decrease in production included semiconductor device (transistors), printed circuit board assembly (PCBA), printers, integrated circuits (ICs), HDDs, and Printed Wiring Board (PWBs). However, the export value of computer and components increased in China and the USA markets.

### MPI, Import and Export Value of Electronics



Source: The Office of Industrial Economics, Ministry of Commerce, and Electrical and Electronics Institute

*The electronics production* in Q4/2023 reached an MPI of 69.8 points, a decrease of 7.3 percent compared to the previous quarter (%QoQ) and 21.4 percent compared to the same period last year (%YoY). Among electronic products that decreased in production were semiconductor devices (transistor) (-30.0%), Printed Circuit Board Assembly (PCBAs) (-30.0%), printers (-23.7%), Integrated Circuits (ICs) (-20.4%), Hard Disk Drives (HDDs) (-18.0%), and Printed Wired Boards (PWBs) (-6.5%). The primary reason for this decline is attributed to the rising production costs and insufficient raw materials to meet global market demand.

*Imports of electronics products* in Q4/2023 amounted to 12,644.6 million USD, increasing by 10.7 percent compared to the previous quarter (%QoQ) and by 17.8 percent compared to the same quarter of the previous year (%YoY). The main products that experienced increased imports include diodes, transistors, semiconductor devices (77.9%), and integrated circuits (12.2%) compared to the same period last year.

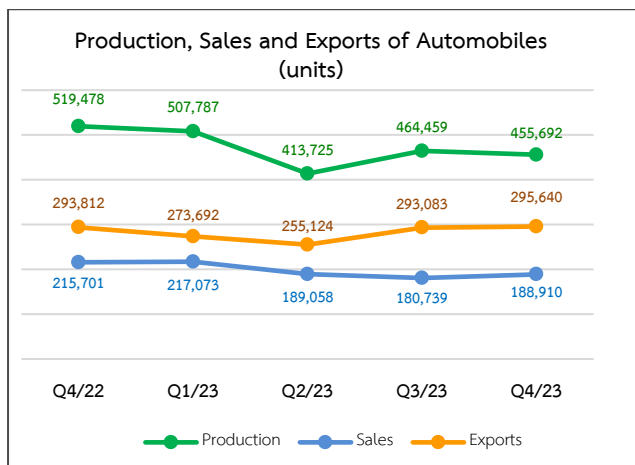
*Exports of electronics products* in Q4/2023 amounted to 12,004.4 million USD, decreasing slightly by 0.2 percent compared to the previous quarter (%QoQ) and increasing by 5.7 percent compared to the same quarter of the previous year (%YoY). Exports increased in China and the USA markets by 8.7 percent and 2.6 percent, respectively. The main products that experienced increased exports include computers and components, which increased by 66.5 percent.

### Electronics Industry Outlook for Q1/2024

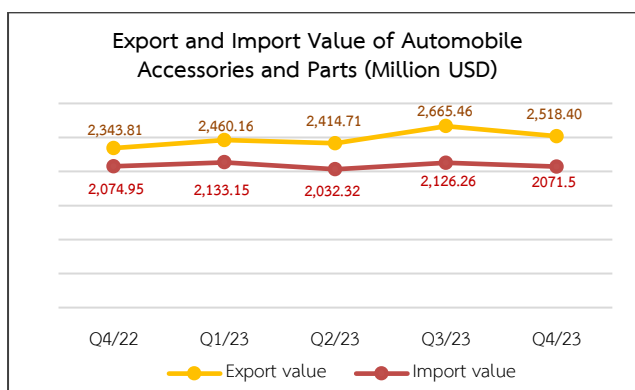
In Q1/2024, the MPI is expected to contract slightly by 1.0 to 3.0 percent due to higher production costs, which may affect the production ability of Thai businesses. Furthermore, the world economy remains uncertain, particularly among key trading partners such as China and the USA. However, the policy to support and promote investment in the Smart Electronics industry may have a positive effect on the production of electronic components in Thailand. Meanwhile, the value of exports is expected to grow by approximately 3.0 to 5.0 percent from the continuous growth of the electronics industry following the needs of the global market and rapidly changing digital technology, including consumer demand for innovation and equipment.

## Automotive and Part Industry

In Q4/2023, automobile production volume decreased compared to the same period last year. The domestic market experienced a slowdown due to the stringent approval process for financial institution loans, coupled with an increase in interest rates. However, there was an expansion in the export market for 1-ton pickup trucks and PPVs.



Source: The Office of Industrial Economics; data gathered from the Automotive Industry Club, The Federation of Thai Industries



Source: Information and Technology Communication Center, Office of the Permanent Secretary, Ministry of Commerce in collaboration with Customs Department.

### Automotive Industry Outlook for Q1/2024

According to estimates from the Office of Industrial Economics (OIE), in Q1/2024, over 475,000 units of automobiles will be manufactured. Of these, 45 to 50 percent will be designated for domestic sales, while 50 to 55 percent will be manufactured for exports.

### Automotive Production

In Q4/2023, automotive production decreased by 1.89 percent compared to Q3/2023, totaling 455,692 units, and decreased by 12.28 percent compared to the same quarter last year (%YoY). The production breakdown comprised passenger cars (36%), 1-ton pickup trucks and derivatives (61%), and other commercial vehicles (3%).

### Domestic Sales of Automobiles

In Q4/2023, domestic sales reached 188,910 units, an increase of 4.52 percent (%QoQ) from Q2/2023 but a decrease of 12.42 percent (%YoY) from the same quarter last year. The sales were comprised of passenger cars (57%), 1-ton pickup trucks and derivatives (37%), and other commercial vehicles (6%).

### Automotive Exports

In Q4/2023, automobile exports increased by 0.87 percent (%QoQ) from Q3/2023, totaling 295,640 units and increased by 0.62 percent (%YoY) from the same quarter last year. The export proportion consisted of passenger cars (29%), 1-ton pickup trucks (58%), and PPVs (13%).

### Export Value of Automotive Parts and Accessories

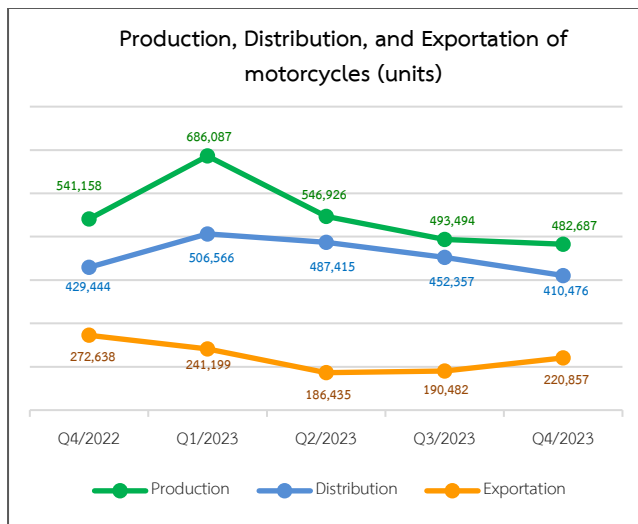
In Q4/2023, exports were valued at 2,518.4 million USD, a decrease of 5.52 percent (%QoQ) from Q3/2023 but an increase of 7.45 percent (%YoY) from the same quarter last year. Key export markets for automotive parts and accessories were the USA, Japan, and Malaysia.

### Import Value of Automotive Parts and Accessories

In Q4/2023, imports were valued at 2,071.50 million USD, a decrease of 2.58 percent (%QoQ) from Q3/2023 and a decrease of 0.17 percent (%YoY) from the same quarter last year. Key import markets for automotive parts and accessories were Japan, China, and the USA.

## Motorcycle and Part Industry

The production volume of motorcycles in Q4/2023 slowed down compared to the same period last year, from a slowdown in the domestic market and export markets, following the domestic economy and the economy of trading partners.



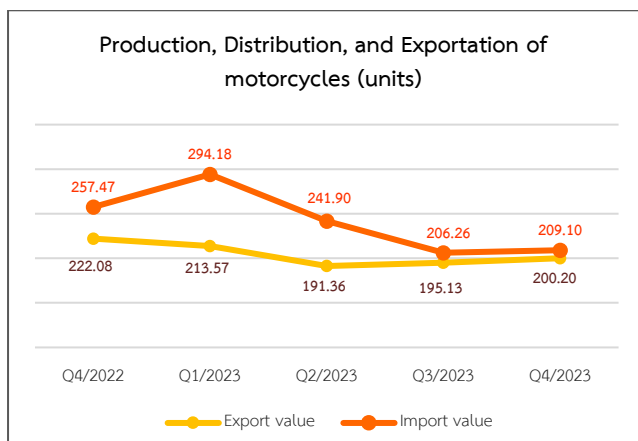
Source: The Office of Industrial Economics; data gathered from the Automotive Industry Club, The Federation of Thai Industries

**Motorcycle Production:** In Q4/2023, automotive production decreased by 2.91 percent (%QoQ) from Q3/2023 to 482,687 units and decreased by 10.80 percent (%YoY) from the same quarter last year.

### Domestic Sales of Motorcycles

In Q4/2023, domestic sales decreased by 9.26 percent (%QoQ) from Q3/2023 to 410,476 units and decreased by 4.42 percent (%YoY) from the same quarter last year.

**Motorcycle Exports:** In Q4/2023, motorcycle exports amounted to 220,857 units, an increase of 15.95 percent (%QoQ) from Q3/2023 but a decrease of 18.99 percent (%YoY) compared to the same quarter last year. Among these, exports as completely built units (CBU) accounted for 118,926 units, while exports as completely knocked-down units (CKD) amounted to 101,931 sets.



Source: Information and Technology Communication Center, Office of the Permanent Secretary of Commerce in collaboration with Customs Department

**Export Value of Motorcycle Parts:** In Q4/2023, exports were valued at 200.20 million USD, an increase of 2.60 percent (%QoQ) from Q3/2023 but a decrease of 9.85 percent (%YoY) from the same quarter last year. Key export markets for motorcycle parts included Cambodia, Japan, and Brazil.

### Import Value of Motorcycles Parts and Accessories

In Q4/2023, imports of motorcycle parts and accessories were valued at 209.10 million USD, an increase of 1.38 percent (%QoQ) from Q3/2023 but a decrease of 18.79 percent (%YoY) from the same quarter last year. Key import markets for motorcycle parts and accessories were the USA, Japan, and China.

## Motorcycle Industry Outlook for Q1/2024

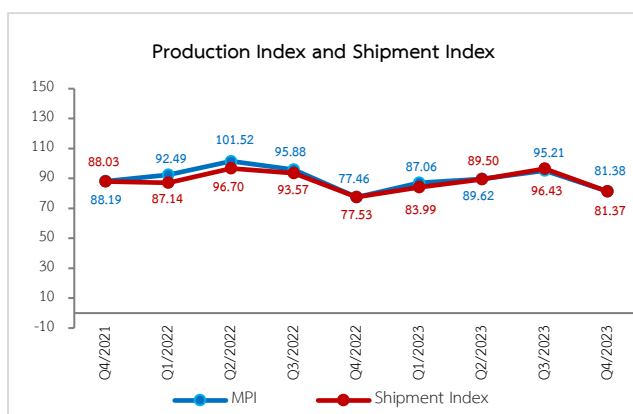
According to estimates from the Office of Industrial Economics (OIE), in Q1/2024, the production of motorcycles is projected to exceed 525,000 units. Among these, 80 to 85 percent are the production for domestic sales, while 15 to 20 percent are the production for exports.

## Chemical Industry

In Q4/2023, the chemical industry's export value grew compared to the same quarter of the previous year. This is because domestic consumption increased. As a result, some related chemical products increased in production following consumer demand. Exports this quarter grew from main markets such as China.

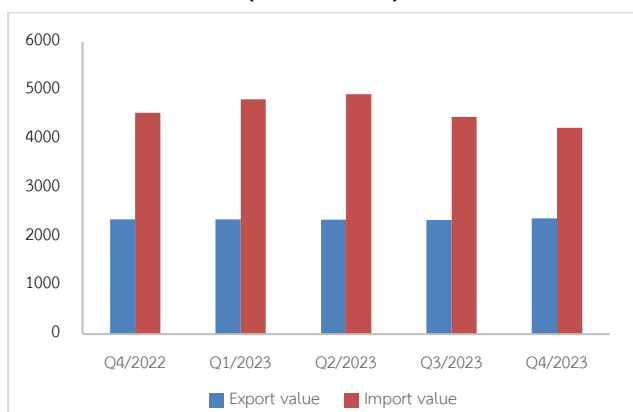
### Marketing and sales

MPI and Shipment Index



Source: The Office of Industrial Economics

Export and import value of chemicals products  
(Million USD)



Source: Information and Technology Communication Center, Office of the Permanent Secretary of Commerce in collaboration with Customs Department

### Chemical Industry Outlook for Q1/2024

In Q1/2024, the chemicals industry is expected to increase production compared to the same quarter of the previous year due to increased domestic consumption. Production of related chemical products is expected to grow. Additionally, chemical exports are likely to grow compared to the same quarter of last year due to growing demand for products from major markets such as China, India, Vietnam, and the USA.

**Manufacturing Production Index:** In Q4/2023, the MPI decreased by 5.06 percent compared to the previous quarter (%QoQ) but increased by 14.58 percent compared to the same quarter last year (%YoY). Among products that increased in MPI were chemical fertilizers, talcum powder, and dishwashing liquid.

**Shipment Index:** In Q4/2023, the shipment index decreased by 4.96 percent from previous quarter (%QoQ) but increased by 15.65 percent compared to the same quarter last year (%YoY). Among products that increased in shipment index were chemical fertilizers, dishwashing liquid, and enamel paint.

**Exports of chemicals:** In Q4/2023, exports were valued at 2,372.86 million USD, an increase of 1.42 percent compared to the previous quarter (%QoQ) and an increase of 0.76 percent compared to the same quarter last year (%YoY). Key products contributing to the increase of export value were chemical fertilizers, cosmetics, and organic chemicals.

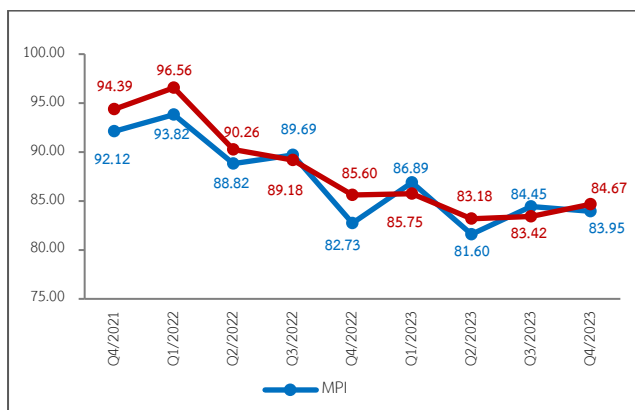
**Import of chemicals:** In Q4/2023, imports were valued at 4,233.70 million USD, a decrease of 4.92 percent compared to the previous quarter (%QoQ) and a decrease of 6.83 percent from the same quarter last year (%YoY). Key products contributing to the decrease of import value were miscellaneous chemicals, organic chemicals, and surfactants.

## Plastics Industry

Production in the plastics industry in Q4/2023 grew compared to the same quarter last year due to increased domestic consumption. Exports rose from critical markets, including the USA, Vietnam, China, and Malaysia.

### Production and Sales

MPI and Shipment Index

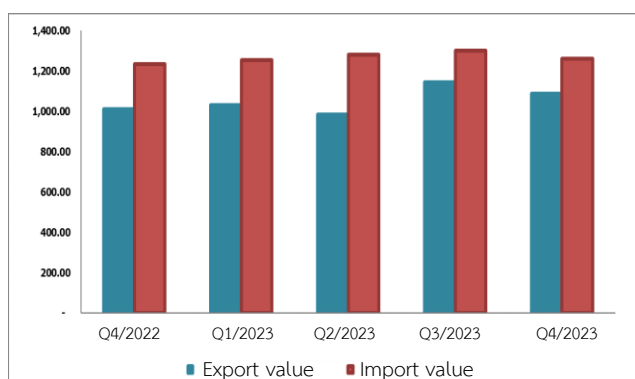


Source: The Office of Industrial Economics

**Manufacturing Production Index:** In Q4/2023, the MPI decreased by 0.41 percent compared to the last quarter (%QoQ) but increased by 1.47 percent compared to the same quarter last year (%YoY). The products that experienced the most increase in MPI included plastic film; plastic tableware, kitchen and toilet articles; and plastic sheets.

**Shipment Index:** In Q4/2023, the shipment index increased by 2.42 percent compared to the previous quarter (%QoQ) but decreased by 1.08 percent compared to the same quarter of the previous year (%YoY). The products that experienced the most increase in shipment index included plastic sacks, other plastic packaging, hose and pipe fittings.

Export and Import Volume (metric tons)



Source: Information and Technology Communication Center, Office of the Permanent Secretary of Commerce in collaboration with Customs Department

**Export Value:** In Q4/2023, the value of exports amounted to 1,086.78 million USD, a decrease of 5.01 percent compared to the previous quarter (%QoQ) but an increase of 7.46 percent compared to the same quarter last year (%YoY). The product category that experienced the most significant increase in exports was plastic floor coverings.

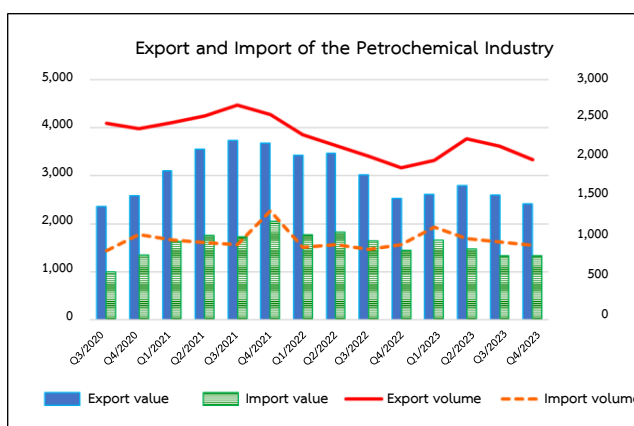
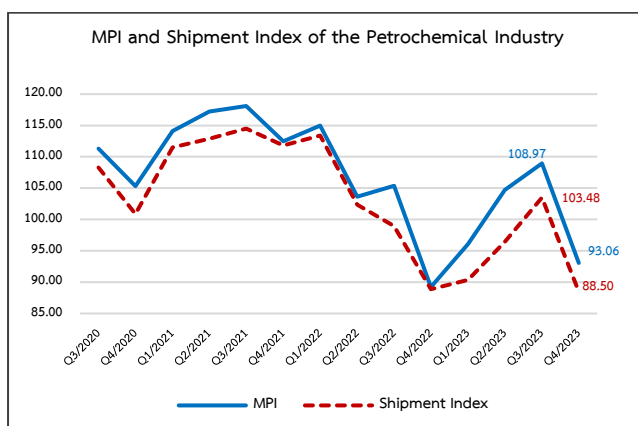
**Import Value:** In Q4/2023, the value of imports decreased by 3.14 percent compared to the previous quarter (%QoQ) but increased by 2.08 percent compared to the same quarter last year (%YoY). The product category with the most increase in imports was monofilament products.

### Plastics Industry Outlook for Q1/2024

In Q1/2024, production is expected to grow from increased domestic product consumption. As a result, the output of related plastic products will grow following consumer demand. Exports are expected to increase as destination demand rises, and most buyers purchase more at the beginning of the year, during the festive season.

## Petrochemical Industry

In Q4/2023, the Manufacturing Production Index (MPI) of the petrochemical industry increased by 4.30 percent compared to the same quarter last year. However, the shipment index decreased by 0.33 percent (%YoY), and both imports and exports declined by 8.63 percent and 2.46 percent (%YoY), respectively, compared to the same period last year. These declines were attributed to the impact of rising oil prices on global trade and transportation. Additionally, the strengthening of the US currency and global inflation contributed to decreased exports of petrochemical products in this quarter.



Source: Customs department, Ministry of Finance Note: \* predicted by the Office of Industrial Economics

**Manufacturing Production Index (MPI):** In Q4/2023, the MPI of the petrochemical industry was at 93.06 points, an increase of 4.30 percent from the same quarter last year. Among the basic and downstream petrochemicals that contributed to the rise of MPI in this quarter were ethylene, PP and PE resins. The increase was partly due to the resuming of production after maintenance shutdowns of basic petrochemical production plants and the production delay due to inventory depletion.

**Shipment index:** In Q4/2023, the shipment index was at 88.50 points, a decrease of 0.33 percent from the same quarter last year. Among the basic and downstream petrochemicals that contributed to the rise of the shipment index in this quarter were ethylene and PP and PE resins.

**Exports of petrochemicals:** In Q4/2023, petrochemical exports were valued at 2,467.14 million USD, reflecting a decrease of 2.46 percent compared to the same quarter of the previous year. The decline in petrochemical exports was observed in major export destinations, including China, Vietnam, and Japan. The decreased exports were primarily attributed to reduced shipments of basic and downstream petrochemical products such as PC (polycarbonate) and PE (polyethylene) resins, propylene, and toluene during this quarter.

**Imports of petrochemicals:** In Q4/2023, petrochemical imports amounted to 1,337.42 million USD, a decrease of 8.63 percent compared to the same quarter of the previous year. Petrochemicals were imported from key countries such as Japan, China, and the USA. The decline in imports of basic petrochemical groups like Propylene and Ethylene, as well as downstream petrochemical groups such as PE resin and PET resin, contributed to this reduction. One factor contributing to the decrease in imports was the increase in domestic plastic recycling following the approval of using packaging made from recycled plastic for food contact purposes.

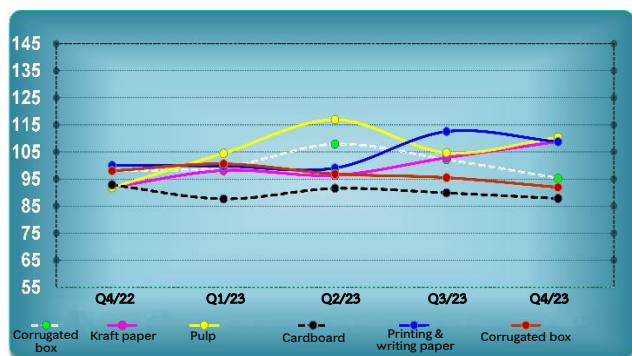
### Petrochemical Industry Outlook for Q1/2024

In Q1/2024, the overall industry is expected to contract following global inflation, which is affected by the protracted geopolitical conflicts in many areas, causing world energy prices to increase. Furthermore, the economies of many countries have slowed down. However, factors that must be monitored include the announcement of figures on the US economic situation and China's low national growth, which will affect the global economic trend. When compared to Q4/2023, the petrochemical industry in this quarter is likely to be stable. Production, product delivery, and exports will slow down due to a slowdown in orders and price levels following a decrease in demand.

## Pulp, Paper, and Print Media Industry

In Q4/2023, the industrial production index for the pulp, paper, and printing industry showed a slight decline of 0.23 percent (%QoQ) compared to the previous quarter. However, it increased by 2.83 percent (%YoY) compared to the same period last year. Overall exports increased by 6.63 percent (%QoQ) compared to the previous quarter and by 15.26 percent (%YoY) compared to the same period last year. On the other hand, there was a decrease in import value both quarter-on-quarter (-1.97%) and year-on-year (-1.91%). It is expected that in Q1/2024, there will be positive adjustments driven by domestic spending and various sectors receiving market stimulation at the beginning of the year.

### MPI in Pulp, Paper and Print Media Industry



Source: The Office of Industrial Economics

**Production:** In Q4/2023, overall production of paper and paper products, the MPI decreased slightly by 0.23 percent (%QoQ) within the paper product group, such as cardboard, corrugated paper, and paper boxes. However, Kraft paper and printing and writing paper expanded by 5.44 percent and 5.78 percent respectively. When compared to the same period last year (%YoY), the overall MPI expanded by 2.83 percent within the pulp, cardboard, and Kraft paper, which increased by 20.30 percent, 8.71 percent, and 18.36 percent, respectively. This growth was seen both domestically and in exports, with main orders coming from China and countries in ASEAN.

### Export-Import of Pulp, Paper and Printed Materials



Source: Information and Technology Communication Center, Ministry of Commerce

**Exports:** In Q4/2023, the total value of pulp and paper product exports reached 696.32 million USD, marking an increase of 6.63 percent compared to the previous quarter (%QoQ). This increase was observed in pulp (7.21%) and paper and paper products (7.06%). Compared to the same quarter last year (%YoY), the export value rose by 15.26 percent. Pulp exports increased by 28.02 percent, with over 98.0 percent of these exports going to China. Additionally, exports of paper and paper products increased by 11.43 percent, with key markets including Vietnam, India, and Indonesia. However, exports of books and printed materials decreased both %QoQ and %YoY, with major export destinations including Hong Kong, Myanmar, and the USA.

**Imports:** Imports of pulp and paper products in Q4/2023 reached 782.98 million USD, a decrease of 1.97 percent and 1.91 percent, compared to last quarter (%QoQ) and the same quarter the previous year (%YoY), respectively. The contraction was due to the decrease in domestic purchasing power from the economic situation and the rising costs of various products. Additionally, increased domestic production to meet local demand led to a reduction in imports, particularly of reusable paper or cardboard. However, imports of sanitary paper, paper packaging, and paper products experienced an increase.

### Pulp, Paper, and Print Media Industry Outlook for Q1/2024

In Q1/2024, paper and paper products used to produce packaging boxes are expected to grow following domestic consumption, and their use for packaging various products will grow in the entire supply chain. Pulp exports have continued to expand in China, which is a crucial export market, from the beginning of the year. Meanwhile, the book and publishing sector is expected to continue to slow down due to decreased demand from import markets such as Hong Kong and the USA.

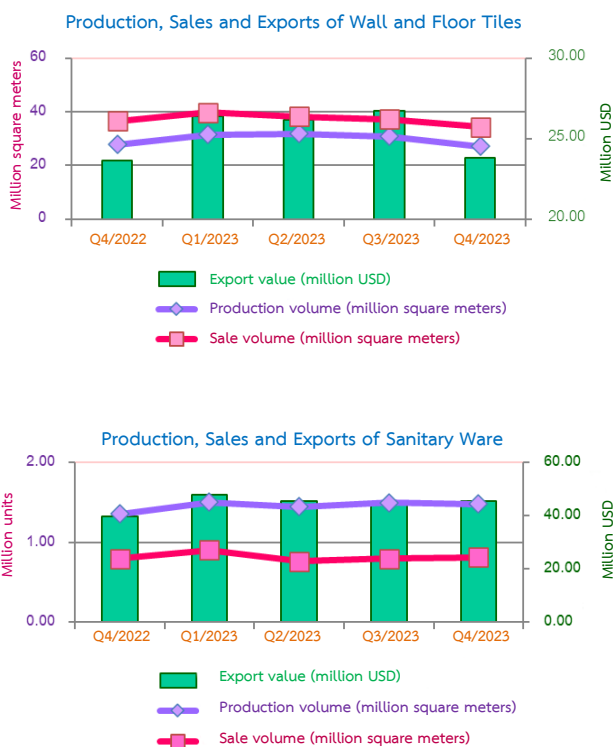
### Related Government Policies

Products controlled by standards that will be enforced by 2024 by the Thai Industrial Standards Institute (TISI) include food contact paper that is cooked with heat, paper covers used for cooking food that is subjected to heat, such as paper used in hot air ovens, tea bags, coffee filter paper, and baking paper. The paper must be made from virgin pulp or pure pulp mixed with synthetic fibers that do not contain dyes and used to filter hot liquids, heat food, or cook food at a temperature not exceeding 220 degrees Celsius. The standard has requirements to control contamination of heavy metals that are harmful to health, such as lead, cadmium, chromium, and mercury. When the paper is heated, the contamination must not exceed the standard criteria and must not contain bleach and antimicrobial substances that are harmful to the body.

## Ceramic Industry

The production volume and sales of floor and wall tiles in Q4/2023 shrank due to the slowdown of the domestic economy, which was affected by higher raw material costs. The production, sales, and export volume of sanitary ware grew due to domestic demand from the residential and condominium construction sector and increased orders from key markets, including the USA, China, and Japan.

### Production, Sales, and Export of Ceramics



**Production:** In Q4/2023, the production of floor and wall tiles reached 27.15 million square meters, a contraction of 1.95 percent (%YoY) due to a slowdown in the domestic market, which was affected by the cost of living and decreased orders from key export markets. Nevertheless, the production of sanitary ware reached 1.48 million units, a growth of 9.17 percent (%YoY) from increased demand, mainly from the domestic market.

**Sales:** In Q4/2023, floor and wall tiles sales reached 30.00 million square meters in Q4/2023, contracted by 6.01 percent (%YoY) due to the decreased purchasing power of consumers following the economic climate, which was affected by many factors, such as the increase in product prices, especially the cost of materials and construction labor. Sanitary ware reached a sales volume of 0.81 million units, a growth of 1.95 percent (%YoY) from demand in the residential and condominium construction sector.

**Exports:** In Q4/2023, the export value of floor and wall tiles reached an export value of 23.77 million USD, a growth of 0.58 percent (%YoY). Sanitary ware reached a value of 45.40 million USD, a growth of 13.82 percent (%YoY) from increased orders from main markets, including the USA, China, Japan, the Philippines, Malaysia, and CLMV countries.

- Source: 1. Domestic Production and Sales: Division of Information and Industrial Economic Indices, Office of Industrial Economics  
 2. Export Value: Information and Technology Communication Center, Office of the Permanent Secretary, Ministry of Commerce



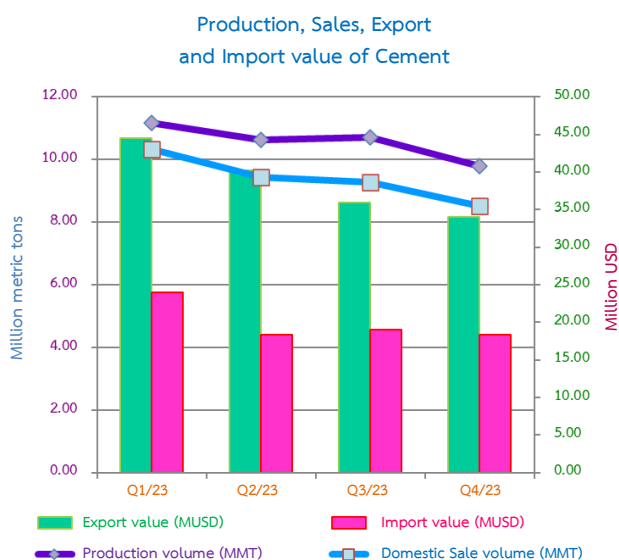
### Ceramic Industry Outlook for Q1/2024

The production and domestic sales of ceramics in the first quarter of 2024 are expected to stabilize. The conditions are in line with the domestic economy, which is affected by many factors, such as the price increase of all types of products, private sector market competition, and the rise of loan interest rates. Exports are likely to remain stable due to the uncertainty of the world economy and imports of cheaper products from China. Key export markets include the USA, China, Japan, the Philippines, Malaysia, and CLMV countries. There are also important factors that must be closely monitored, namely the price of energy, raw materials, inflation, increasing interest rates, and high costs of living that may affect production and domestic sales.



## Cement Industry

In Q4/2023, the cement industry's production and domestic sales decreased compared to the same quarter of last year due to a slowdown in government construction and real estate projects. Exports also decreased following the slowdown of the world economy. In Q1/2024, the cement industry is expected to grow from the construction of government infrastructure and private real estate.



Source: 1. Domestic Production and Sales: Division of Industrial Economics Information and Indices, Office of Industrial Economics  
2. Export-Import Value: Information and Technology Communication Center, Office of the Permanent Secretary of Commerce

**Cement production** (excluding clinker) in Q4/2023 reached 9.80 million metric tons, a contraction of 3.08 percent (%YoY) compared to the same quarter of last year due to decreased demand in the domestic market and from important trading partner countries.

**Domestic sales of cement** (excluding clinker) in Q4/2023 reached 8.51 million metric tons, a contraction by 4.47 percent (%YoY) compared to the same quarter of last year from a slowdown in government construction projects and private real estate such as residential houses and condominiums.

**Cement exports** (excluding clinker) in Q4/2023 reached an export value of 34.05 million USD, a contraction of 11.71 percent (%YoY) compared to the same quarter of last year due to the slowdown of the world economy. As a result, orders decreased in critical markets such as CLMV countries and Bangladesh.

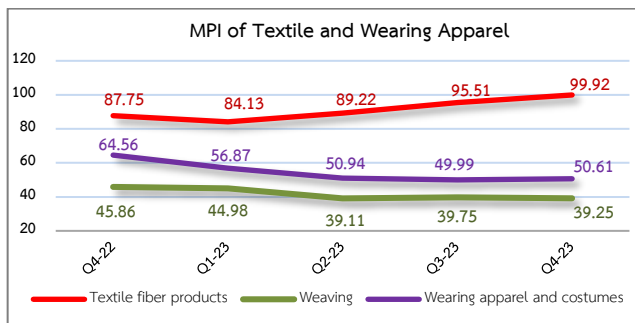
**Cement imports** (excluding clinker): In Q4/2023, exports were valued at 18.39 million USD, a decrease of 3.32 percent compared to the same quarter last year. This decline was attributed to reduced demand in markets such as Lao PDR, China, and Bangladesh.

### Cement Industry Outlook for Q1/2024

The cement industry (excluding clinker) in Q1/2024, compared to the same quarter of the previous year, is expected to expand in production and sales driven primarily by domestic demand. This demand is led by construction sectors, both infrastructure and real estate projects, particularly large-scale projects linked to the Eastern Economic Corridor (EEC) development area and residential projects along new rail and transportation routes. Government economic stimulus measures also contribute to investor confidence. Export trends are expected to remain stable and aligned with the economic conditions of key trading partners, especially the CLMV group of countries. Import trends are expected to expand due to the demand for specialty-grade cement from the Netherlands.

## Textile and Wearing Apparel Industry

In Q4/2023, the MPI of textile fibers increased from last year due to the production of artificial fibers (polyester fiber and other fibers). The MPI for textile fibers also increased compared to last quarter due to increased orders both domestically and overseas for use as raw materials for the production of different products with special properties. Meanwhile, the MPI of fabrics and apparel continued to contract due to fewer orders from trading partners.

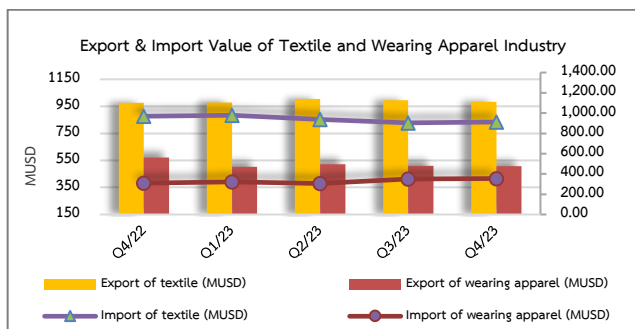


### Production

The MPI of textile fibers grew by 13.87 percent compared to the same quarter last year (%Y0Y) from the production of artificial fibers in the polyester fiber product group and other synthetic fibers such as rayon fibers and spinning of thread from synthetic fibers. The growth was from increased orders, both domestically and abroad, to be used as raw materials for producing a variety of products. As it is a fiber and yarn that has unique properties, it is used as a raw material in the production of sports clothing, home textiles, and automotive parts. Fabrics shrank by 14.41 percent, while apparel shrank by 21.61 percent from clothing production and clothing made from knitted and crocheted fabrics, a result of decreased orders from trading partners. Compared to the Q3/2023 (%QoQ), textile fibers grew by 4.62 percent in all product groups from increasing demand both domestically and abroad.

### Domestic Sales

Compared to the same quarter last year (%Y0Y), textile fibers grew by 2.52 percent for all product groups, including polyester fibers, other artificial fibers, cotton yarn, and yarn from artificial fibers. Fabrics shrank by 11.56 percent from woven fabrics (cotton), woven fabric (synthetic fiber), and towels. Apparel shrank by 17.55 percent as a result of reduced production coupled with a slowdown in consumer demand and behavior changes towards cheaper products from China.



### Exports-Import

**Exports:** Overall, textiles and garments valued 1,490.58 million USD, a contraction of 3.66 percent compared to the same quarter last year (%Y0Y). When considering each product group, textiles had an export value of 982.63 million USD, a growth of 0.66 percent from artificial fiber exports to essential trading partners, including China, the USA, and Indonesia. Wearing apparel had an export value of 507.95 million USD, shrinking 11.04 percent due to fewer orders from key trading partners such as the USA and Japan, coupled with the global economic situation that continued to slow down from the use of monetary policy to control inflation in many countries, affecting the purchasing power and economic activities of consumers.

**Imports:** Overall, textiles and garments were valued at 1,275.20 million USD, a contraction of 1.53 percent compared to the same quarter last year (%Y0Y). When considering each product group, textiles had an import value of 911.70 million USD, a contraction of 5.87 percent in the thread and fiber and fabric groups. Wearing apparel had an import value of 354.57 million USD, a growth of 14.97 percent, with a large number of cheap to moderately priced products being imported from China for sale by online merchandisers. Additionally, consumers have changed their purchasing behavior to adjust to the economic slowdown by reducing the purchase of luxury items to reduce daily expenses.

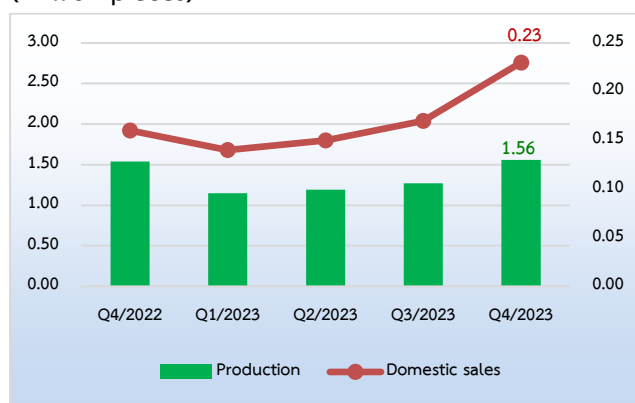
### Textile and Wearing Apparel Industry Outlook for Q1/2024

The textile and garments production industry is expected to slow down in line with the global economic situation. However, the production of textile fibers, especially artificial fibers, is likely to expand slightly to support the production of textiles with unique properties, with new technologies and innovations, in line with the changing industrial structure of the world market. Factors that must be monitored include the situation in the Red Sea, which may affect the import and export of goods from the European zone, especially garments from essential trading countries. Furthermore, the geopolitical conflict situation remains protracted. This may be a pressuring factor that causes the economy of trading partners to slow down. In addition, production costs are high, and strict financial conditions affect Thailand's competitiveness. Textile and garment businesses will need to prepare for changes and adapt to accommodate the uncertainty that may impact the textile and garments industry.

## Wood and Wooden Furniture Industry

Compared to the same quarter of last year, the production of wooden furniture in Q4/2023 increased in volume from the output to meet the demand of the domestic market. Meanwhile, the overall export value of wood and wood panel products increased from the demand for products in the wood product group and wood and wood panel products of important trading partner countries that increased.

### Domestic Production and Sales of Wooden Furniture (million pieces)



Source: The Office of Industrial Economics

*Production of wooden furniture* in Q4/2023 reached 1.56 million units, a growth of 22.83 percent and 1.30 percent from the previous quarter and the same quarter of the prior year, respectively. The growth was mainly a result of production to meet domestic demand.

*Domestic sales of wooden furniture* in Q4/2023 reached 0.23 million units, a growth of 35.29 percent and 43.75 percent from the previous quarter and the same quarter of the previous year, respectively. The growth was due to increased retail orders.

### Export Value of Wood and Wooden Products (million USD)



Source: Office of the Permanent Secretary, Ministry of Commerce

*Exports value of wood and wooden products* in Q4/2023 amounted to a total value of 1,128.74 million USD, increasing by 3.93 percent and 16.25 percent from the previous quarter and the same quarter of the previous year, respectively. The exports were categorized into furniture and parts, wood products, and wood and plywood products, with values of 258.23, 37.31, and 833.19 million USD, respectively. Compared to the same quarter of the previous year, the value of furniture and parts exports decreased by 4.31 percent, while wood products and wood and plywood products increased by 6.93 percent and 25.06 percent, respectively. Overall, the value of wood and wood product exports increased continuously for the second quarter, which is attributed to the growing demand for these products from key trading partners, particularly the increased demand for processed wood products in the China market.

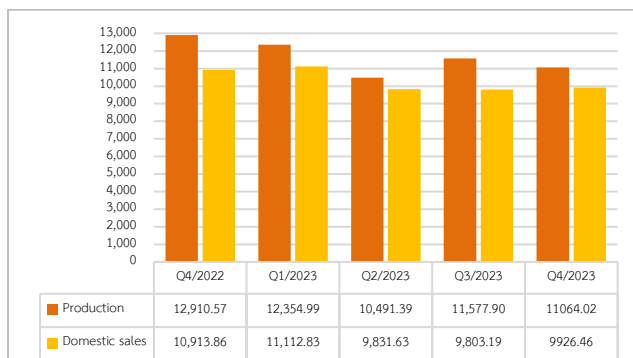
### Wood and Wooden Furniture Industry Outlook for Q1/2024

In Q1/2024, the country's production and sales of wooden furniture are expected to return to growth due to the increasing domestic demand for wooden furniture from the end of 2023. Exports of wood and wood products are expected to continue growing due to the increasing demand from key trading partners, especially the demand for products in the wood and wood panel products group.

## Pharmaceutical Industry

In Q4/2023, pharmaceutical production and domestic sales are expected to contract compared to last year, in line with the decreasing volume of orders and demand for medicines to treat diseases for exports. The contraction is partly due to the declining demand in key markets, especially countries in ASEAN and the USA.

### Domestic Production and Sales (metric tons)



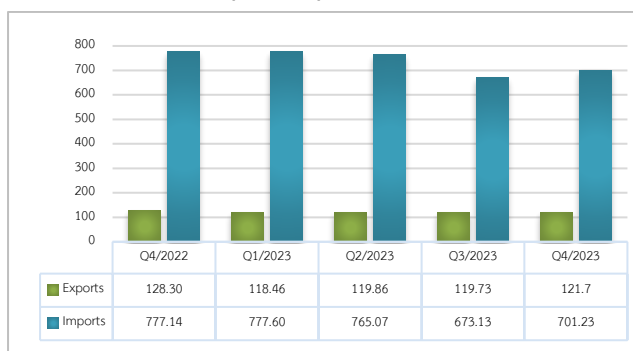
Source: The Office of Industrial Economics

Note: The survey data framework has been updated from 2023

**Pharmaceutical production** in Q4/2023 amounted to 11,064.02 metric tons, a decrease of 14.30 percent compared to the same quarter last year. This reduction was attributed to a contraction in the production of cream, injection, powder, liquid, and tablet medicines, with decreases of 29.13, 26.31, 16.99, 16.37, and 9.02 percent, respectively, due to increased orders from drug stores and hospitals.

**Domestic sales of pharmaceuticals** in Q4/2023 amounted to 9,926.46 metric tons, a decrease of 9.05 percent compared to the same quarter of the previous year. This decrease was due to the contraction in the sales of powder, injection, cream, tablet, and liquid medicines, with decreases by 26.07, 24.05, 13.81, 10.41, 14.47 and 7.16 percent, respectively. Meanwhile, the distribution of capsule medicines increased by 28.16 percent, respectively. The decrease was aligned with the demand for medicines for disease treatment.

### Pharmaceutical Import-Export Value (Million USD)



Source: Ministry of Commerce with the cooperation of the Customs Department

Note: Import-Export database adjustment using HS3001, 3002, 3003, and 3004

**Exports of pharmaceuticals** in Q4/2023 amounted to 121.70 million USD, a decrease of 5.15 percent compared to the same quarter last year. This decline was attributed to reduced demand in key markets, particularly ASEAN and the USA.

**Pharmaceutical imports** in Q4/2023 were valued at 701.23 million USD, a decrease of 9.77 percent compared to the same quarter last year as the domestic demand for pharmaceuticals dropped. This decline was primarily driven by fewer imports from Asian and European countries such as Singapore, Japan, Ireland, and Spain.

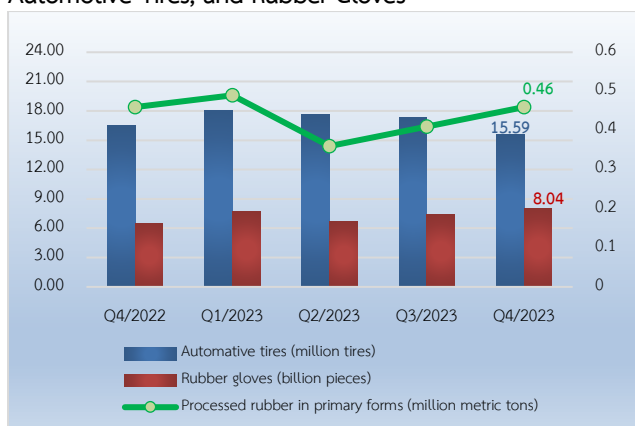
### Pharmaceutical Industry Outlook for Q1/2024

In Q1/2024, the production and domestic sales volume of pharmaceuticals is likely to see a slight increase compared to the same quarter last year, following the trend of orders and demand for medicines to treat diseases that are expected to increase according to the winter epidemic and the PM 2.5 dust situation during January and February. This will result in respiratory diseases such as influenza and COVID-19, and allergies tend to be more severe. Exports are expected to grow as demand is still high in primary markets such as the USA and ASEAN countries.

## Rubber and Rubber Product Industry

In Q4/2023, the production of processed rubber in primary forms increased due to higher demand from downstream industries both domestically and abroad. Tire production decreased mainly due to the slowdown in the domestic market. Meanwhile, the production of rubber gloves increased due to the high demand for medical rubber gloves in the country.

### Production Volume of Processed Rubber in Primary Forms, Automotive Tires, and Rubber Gloves

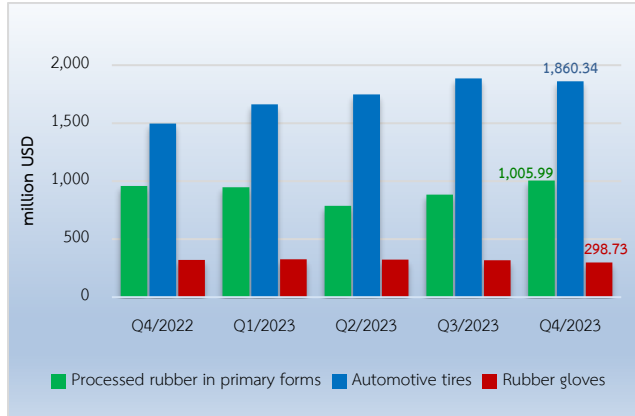


Source: The Office of Industrial Economics

*Production of processed rubber in primary forms, automotive tires, and rubber gloves* in Q4/2023 amounted to 0.46 million metric tons, 15.59 million pieces, and 8,046.69 million pieces, respectively. Compared to the same quarter last year, the production of processed rubber in primary forms increased by 1.29 percent, mainly due to increased production of concentrated latex. The production of automotive tires decreased by 5.23 percent due to the reduced production of tires for passenger cars, pickups, trucks, buses, and tractors. Nevertheless, the production of rubber gloves increased by 23.46 percent, mainly from the increase in domestic demand.

*Sales of processed rubber in primary forms, automotive tires, and rubber gloves* in Q4/2023 reached 0.13 million metric tons, 5.99 million tires, and 692.41 million pieces, respectively. Compared to the same quarter of the previous year, the sales of processed rubber in primary forms increased in volume by 17.52 percent from the growth of demand in the downstream industry. The sales of automotive tires decreased by 41.02 percent, in line with the slowdown of the automobile industry and Replacement Equipment Manufacturing (REM) market. On the other hand, the domestic sales of rubber gloves increased by 21.69 percent due to the growing demand for medical rubber gloves.

### Export Value of Processed Rubber in Primary Forms, Automotive Tires, and Rubber Gloves (million USD)



Source: Ministry of Commerce

*Exports of processed rubber in primary forms, automotive tires, and rubber gloves* in Q4/2023 were valued at 1,005.99 million USD, 1,860.34 million USD, and 298.73 million USD, respectively. Compared to the same quarter of the previous year, exports of upstream processed rubber and automotive tires increased by 6.00 percent and 24.26 percent due to good growth of exports to important markets. Meanwhile, rubber glove exports decreased by 6.81 percent due to reduced global demand from the past period.

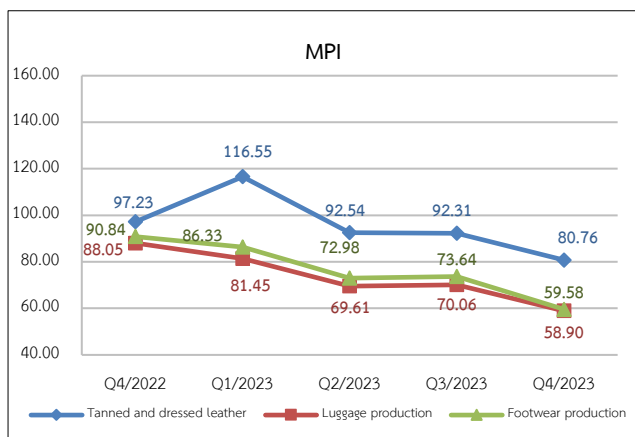
### Rubber and Rubber Products Industry Outlook for Q1/2024

In Q1/2024, the production volume of processed rubber in primary forms (rubber sheets, rubber bales, and concentrated latex), automotive tires, and rubber gloves is expected to expand for all three product categories. Processed rubber in primary forms will expand due to downstream industry demand both domestically and internationally. Automotive tires will expand due to increasing demand trends in key markets such as the USA, Australia, and South Korea. Meanwhile, rubber glove production will grow to meet market demand, primarily within the domestic market.

## Footwear and Leather Product Industry

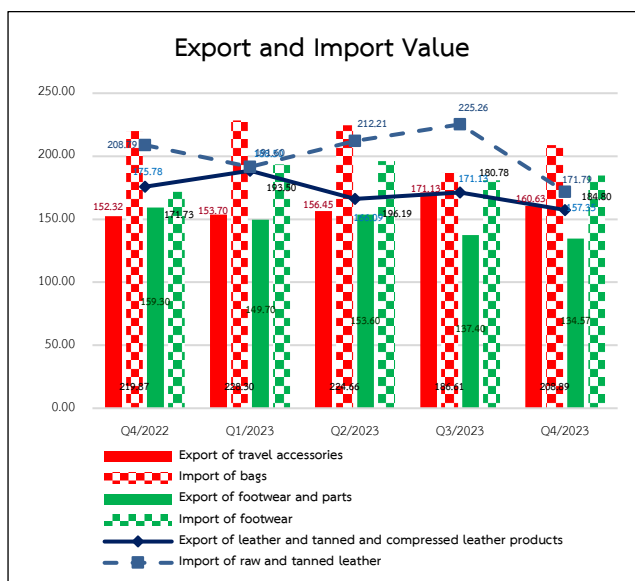
In Q4/2023, compared to the same quarter of the previous year, tanned and finished leather products, luggage, handbags, and footwear production decreased due to decreased demand from foreign markets and domestic consumption from the world economic situation that slowed down. As a result, consumers were more careful with their spending. The geopolitical conflicts had to be monitored, putting pressure on production costs. Additionally, escalating interest rates and inflation contributed to a worldwide economic slowdown, subsequently reducing consumer purchasing power.

### Production, Exports, and Imports (MUSD)



### Production

In Q4/2023, the MPI of leather tanning and finishing decreased by 16.94 percent compared to the same quarter of the previous year (%YOY) from lower international market demand. Part of this comes from changing consumer behavior, which gives importance to the environment and principles of morality and ethics by turning to alternative products to replace animal leather or materials used to replace traditional leather. Similarly, the production of luggage and handbags decreased by 33.11 percent due to lower domestic consumption as a result of economic uncertainty, which affects consumer spending. Production of footwear decreased by 34.41 percent as a result of consumers turning to buy imported shoes from China, which are cheaper than those produced domestically.



Source: 1. MPI and Shipment Index — the Office of Industrial Economics  
2. Export and import value — Ministry of Commerce

### Exports-Imports

**Exports** in Q4/2023, the value of exports of leather, tanned leather, and bonded leather products decreased in value by 2.27 percent compared to the same quarter of the previous year (%YOY) as a result of reduced demand in the Chinese, Indian, and USA markets. Exports of footwear and parts decreased by 16.88 percent due to fewer exports to foreign markets such as the USA, Myanmar, and India. Travel equipment increased in export value by 5.45 percent due to increased orders from trading partners such as China, Switzerland, and Japan.

**Imports** in Q4/2023 of raw and tanned leather and bags decreased by 24.63 percent and 4.99 percent compared to the same quarter of the previous year (%YOY). Meanwhile, the import value of footwear increased by 7.61 percent due to changes in the behavior of domestic consumers due to economic uncertainty. As a result, consumers turned to buying cheaper shoes imported from China.

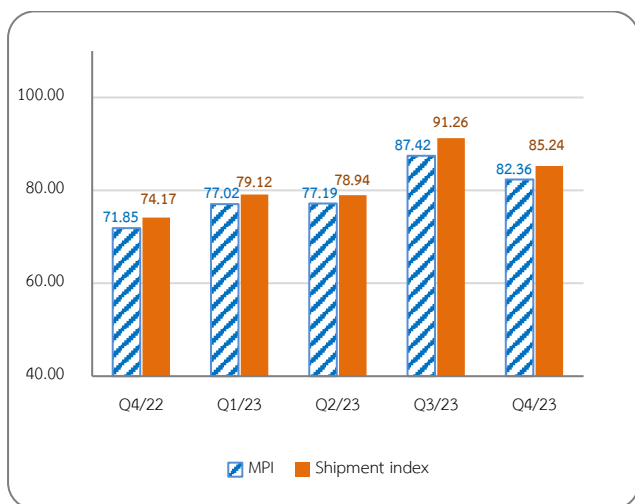
### Footwear and Leather Production Industry Outlook for Q1/2024

The production of leather goods and footwear in Q1/2024, compared to the same quarter of the previous year, expects to see the output of tanned and finished leather and the production of bags and footwear decrease due to fewer exports to foreign markets and decreased domestic sales following the global economic situation that is recovering slowly. However, factors that need to be monitored are the geopolitical conflict situation, which puts pressure on production costs, including rising interest rates and higher inflation, which affects the purchasing power of consumers and the global economy. Furthermore, environmental issues are essential to monitoring, especially with trading partners that prioritize environmental protection. Businesses in the footwear and leather industry must change technology in various areas and opt for technology to achieve greater productivity that conserves the environment; this will help increase business competitiveness.

## Gems and Jewelry Industry

Overall production, sales, and exports of gems and jewelry in Q4/2023 grew compared to the same quarter last year as a result of the growing market demand of trading partners from starting the year-end shopping season. In addition, the tourism sector is continuously recovering. Factors that still need to be monitored include the geopolitical conflicts which remain protracted and expansive. Other factors include the implementation of strict monetary policies of trading partner countries, as well as fluctuations from increased energy and transportation costs, which may affect Thailand's production and exports in the future.

### Production, Sales, and Exports

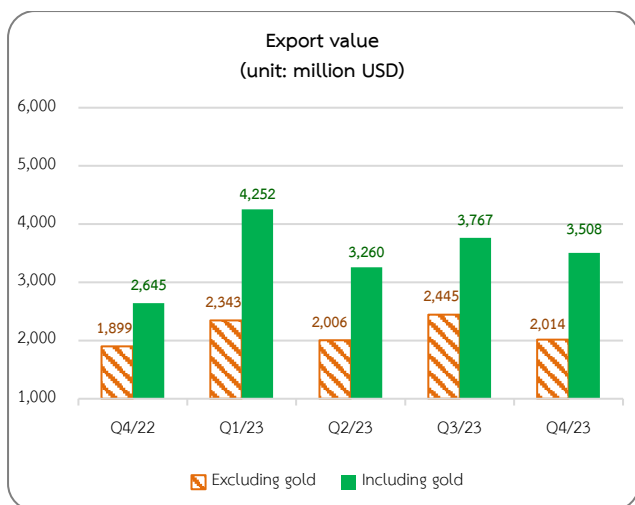


#### Production

Overall gem and jewelry production in Q4/2023 increased by 14.61 percent compared to the same quarter last year (%Y0Y), from genuine and artificial jewelry, which increased by 16.66 percent and 12.23 percent for exports following market demand in the USA, Germany, India, Hong Kong, and Belgium, and increased domestic sales. Production of diamonds decreased by 39.77 percent due to reduced demand from both domestic and international markets.

#### Sales

In Q4/2023, Sales of gems and jewelry in Q4/2024 increased by 14.92 percent compared to the same quarter last year (%Y0Y), from genuine and artificial jewelry, which increased by 15.69 percent and 12.92 percent as a result of starting the year-end shopping season. In addition, the tourism sector continuously recovered. As a result, the demand for products increased. Diamond sales decreased by 14.78 percent due to today's consumers turning to synthetic diamonds that are less expensive.



#### Exports

In Q4/2023, Gems and jewelry (excluding unformed gold) exports in Q4/2023 reached a total value of 2,013.05 million USD, an increase of 6.06 percent compared to the same quarter last year (%Y0Y) from the value of a gemstone, genuine jewelry, and artificial jewelry exports that increased by 21.54 percent, 12.51 percent, and 7.33 percent, respectively. The growth was a result of many countries holding trade shows for gems and accessories that helped stimulate purchases and demand during the year-end shopping season. The value of diamond exports decreased by 28.17 percent. Considering gem and jewelry exports as a whole, the total value was 3,507.64 million USD, an increase of 32.62 percent from exports to Switzerland, the USA, and Singapore. The value of unformed gold exports was valued at 1,494.13 million USD, an increase of 100.18 percent from the previous year due to increased exports to trading partner countries, including Switzerland, Singapore, and Cambodia. This is a result of investors and central banks around the world holding gold to reduce risks from tensions in the Middle East coupled with consumer demand during the year-end shopping festival.

Source: 1. MPI and Shipment Index — the Office of Industrial Economics  
2. Export and import value — Ministry of Commerce

### Gems and Jewelry Industry Outlook for Q1/2024

Overall production and export of gems and jewelry in Q1/2024, the industry is expected to see better growth with supporting factors from exports to crucial partner countries and the tourism sector, which has become more active. In addition, many countries have returned to organizing gem and jewelry exhibitions to stimulate public consumption. As a result, the demand for products has increased. However, the geopolitical conflicts must still be monitored as the situation remains protracted and continues to widen. Other factors that need to be monitored include the implementation of strict monetary policies of trading partners, as well as fluctuations from increased energy and transportation costs, which may affect Thailand's production and exports in the future.

## Food Industry

The MPI of the food industry in Q4/2023 decelerated compared to the same period last year from the continuously slowing economy, including natural disasters affecting agricultural raw materials. However, domestic consumption demand and the tourism sector are likely to improve. The government's economic stimulus policy is also a supporting factor. Products that saw a growth in exports were rice due to concerns about food security in various countries.

### MPI, Sales, Exports, and Imports of industrial products



Source: The MPI and Sales volume collected from the Office of Industrial Economics.  
Export-import value compiled from the Ministry of Commerce by the grouping of the Office of Industrial Economics

**The MPI of the food industry** In Q4/2023, the Manufacturing Production Index (MPI) for the food industry reached 96.2, a slowdown of 6.0 percent (%YoY) compared to the same quarter of the previous year. Products that saw a contraction included sugar, which shrank 19.4 percent from white sugar, which shrank 17.0 percent due to the acceleration of sugar stocks in the third quarter before price increases in the fourth quarter in November. Furthermore, the production season of 2023/2024 commenced later than the previous years, and the amount of sugarcane crushed decreased compared to the prior year. Fishery products shrank by 13.8 percent from canned tuna, which shrank by 22.3 percent due to reduced consumption demand in both the domestic and international markets. Cassava shrank 12.6 percent due to the main product being cassava starch, shrinking 13.3 percent due to droughts and the outbreak of cassava leaf spot disease in the previous period, causing farmers to turn to grow corn to feed animals instead, resulting in the cultivation area and the amount of cassava production decreasing. Processed fruits and vegetables decelerated by 4.3 percent from essential products, including canned pineapples, by 61.7 percent due to planting production in some areas decreasing as the drought and livestock production slowed by 4.0 percent. Chilled and frozen chicken meat contracted by 7.4 percent due to a slowdown in consumer purchasing power, resulting in decreased consumption demand

**The MPI of beverage** decreased by 8.6 percent from rice, whisky, beer, and energy drinks.

**Domestic sales:** In Q4/2023, sales volume amounted to 68,033.58 thousand metric tons, an increase of 4.1 percent (%YoY) compared to the same quarter last year. Among the products that showed an increase in domestic consumption were instant noodles, which increased by 5.4 percent, followed by table seasoning, ready-to-drink milk, and cake, which increased by 4.3, 3.3, and 2.1 percent, respectively.

**Exports:** In Q4/2023, exports were valued at 8,407.58 million USD, a growth of 1.6 percent (%YoY) compared to the same quarter of the previous year. Products with increased export value included rice due to the need to import the product from many countries for food security.

**Imports:** In Q4/2023, imports were valued at 4,060.93 million USD, a contraction of 5.8 percent (%YoY) compared to the same quarter of the previous year. Products that were contracted included oilseeds and oilseed meal. However, some products grew, including cereals, followed by flour products to support downstream industries, especially instant noodles.

### Food Industry Outlook for Q1/2024

The overall MPI is expected to grow compared to the same quarter last year. Supporting factors include government measures that help stimulate domestic demand, including the number of tourists that is likely to increase. Exports are also expected to grow from the market for products from trading partners for food security. However, it is still necessary to monitor the global economic situation that continues to slow down and the geopolitical conflicts in many countries, including the effects of drought that may become more severe.

### Government Policies Relevant to the Food Industry

The Easy e-Receipt measure helps stimulate household consumption by specifying that the income earner is a natural person and must produce evidence of electronic tax invoices (e-Tax Invoice) or electronic receipts (e-Receipt) for goods and services purchased from stores registered in the Value Added Tax (VAT) system to receive a tax deduction of up to 50,000 Thai Baht from 1 January 2024 to 15 February 2024.



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<ul style="list-style-type: none"> <li>● Chemical Industry</li> </ul>	Division of Industrial Policy by Sector 1	0-2430-6804
<ul style="list-style-type: none"> <li>● Plastics Industry</li> </ul>	Division of Industrial Policy by Sector 1	0-2430-6804
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<ul style="list-style-type: none"> <li>● Cement Industry</li> </ul>	Division of Industrial Policy by Sector 2	0-2430-6805
<ul style="list-style-type: none"> <li>● Textile and wearing apparel Industry</li> </ul>	Division of Industrial Policy by Sector 2	0-2430-6805
<ul style="list-style-type: none"> <li>● Wood and Wooden Furniture Industry</li> </ul>	Division of Industrial Policy by Sector 2	0-2430-6805
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<ul style="list-style-type: none"> <li>● Rubber and Rubber Products Industry</li> </ul>	Division of Industrial Policy by Sector 2	0-2430-6805
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