

**Industrial Production Status**

| Indicators | 2017 | 2018 | 2019 |      |      |      |      |      |      |      |      |      |      | 2020 |      |      |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|            | Year | Year | Feb. | Mar. | Apr. | May  | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Year | Jan. | Feb. |
| MPI*       | 1.8  | 3.7  | -1.4 | -2.5 | 1.5  | -3.2 | -5.1 | -3.2 | -4.4 | -5.0 | -8.0 | -8.0 | -4.4 | -3.6 | -4.0 | -5.2 |

The industrial economy in **February 2020**, when considered from the **Manufacturing Production Index (MPI)**, contracted by 5.2 percent from the same period last year.

When considering MPI data for the past three months compared to the previous year (% YoY), production in November, December 2019, and January 2020 shrank 8.0 percent, 4.4 percent, and 4.0 percent, respectively.

| Indicators | 2019 |      |       |     |      |      |      |      |      |      |      | 2020 |      |
|------------|------|------|-------|-----|------|------|------|------|------|------|------|------|------|
|            | Feb. | Mar. | Apr.  | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. | Jan. | Feb. |
| MPI*       | -2.7 | 9.9  | -17.6 | 9.5 | -3.6 | -0.6 | 0.6  | -3.4 | -1.2 | 1.0  | 1.8  | 5.1  | -3.9 |

During the past three months (November 2019, December 2019, and January 2020), the MPI change rates (%MoM) were as follows: an increase of 1.0 percent, 1.8 percent, and 5.1 percent in November 2019, December 2019, and January 2020, respectively.

**Key industries that contributed to the decrease of MPI in February 2020** compared to the same month last year were as follows:

- Automobiles and engines decreased by 18.9 percent from the export market, which was affected by the outbreak of the COVID-19 virus. In the domestic market, consumers delayed their purchases.
- Sugar decreased by 36.6 percent from droughts that caused the decline in amount of sugarcane entering crushing process.
- Tires decreased by 23.0 percent as some manufacturers shut down production lines in response to the economic slowdown.

**Key industries that remained on the rise in February 2020** compared to the same month last year were as follows:

- Medicines increased by 40.4 percent as some manufacturers lacked raw materials for production in the previous month and therefore accelerated production and delivery to customers this month instead. Furthermore, in the last year, there were problems with machinery failure and water quality problems used in manufacturing, resulting in production being less than usual.
- Frozen seafood increased by 26.5 percent due to increased demand in this period, mainly frozen fish and minced fish meat due to concerns about the COVID-19 virus outbreak causing consumers to have more need and to stock up.

# Other Industrial Economic Indicators in February 2020

## Other Industrial Economic Indicators in February 2020

### ■ Imports of Thailand Industrial Sector



Source: Ministry of Commerce

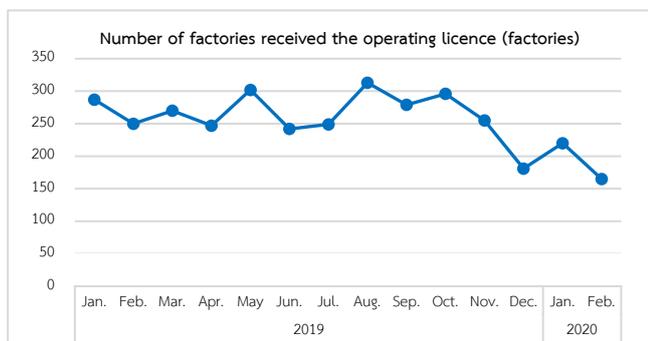


Source: Ministry of Commerce

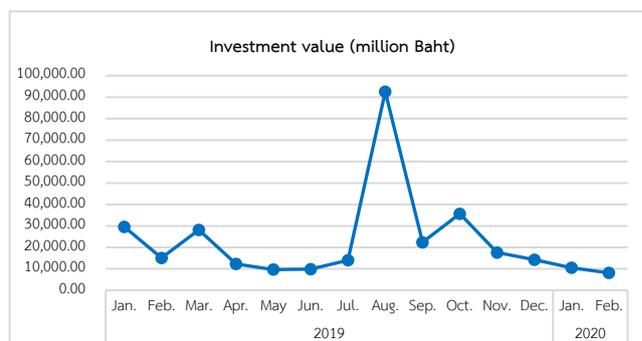
**⊖ Import of industrial machinery and parts** in February 2020 dropped 18.6 percent compared to the same month last year to 1,140.1 million USD, from the decreased imports of engines, transmission shafts and other parts, compressors, liquid pumps, machinery and equipment for construction; jet turbine engines and parts, machinery and equipment for printing. However, imports of some machinery remained on the rise, such as machinery and equipment for rubber and plastic processing, machinery and equipment for metal fabrication.

**⊖ Import of raw and semi-finished goods (excluding gold)** in February 2020, contracted by 5.7 percent compared to the same month last year to 6,021.1 million USD. The contraction was from iron, steel, and products; alloy steel sheets, inorganic chemical products and plastic pellets, fertilizers; pesticides, herbicides, etc.

## Industrial Operation Status



Source: Department of Industrial Works



Source: Department of Industrial Works

- ⊖ The total number of factories licensed for operation in February 2020 was 165 factories, which decreased by 25.0 percent (%MoM) from January 2020 and decreased by 34.0 percent (%YoY) from the same month last year.
  
- ⊖ The total investment from factories licensed for operating in February 2020 decreased by 22.6 percent (%MoM) from January 2020 to 8,134 million baht and decreased by 46.0 percent (%YoY) from the same month last year.

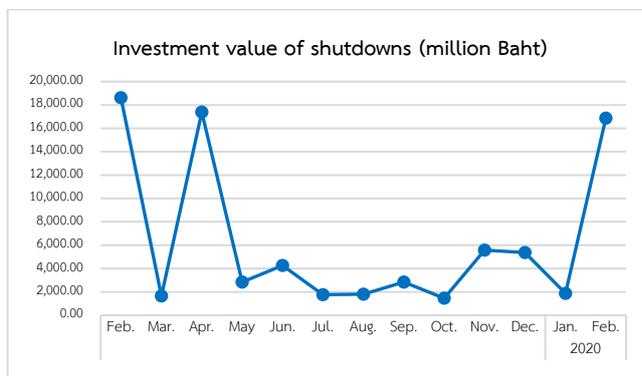
*"The industry which had the highest number of newly licensed factories to operate in February 2020 was the manufacturing industry of concrete products, mixed-concrete, and gypsum products (16 factories), followed by the extraction and dredging of gravel, sand, or soil industry (15 factories)."*

*"The industry with the highest investment value in February 2020 was the manufacturing industry of special parts or equipment for cars or trailers with the investment value of 1,583.00 million Baht, followed by the production of wood chips and particles with the investment value of 1,101.50 million Baht."*

■ Industrial Operation Status (cont.)



Source: Department of Industrial Works



Source: Department of Industrial Works

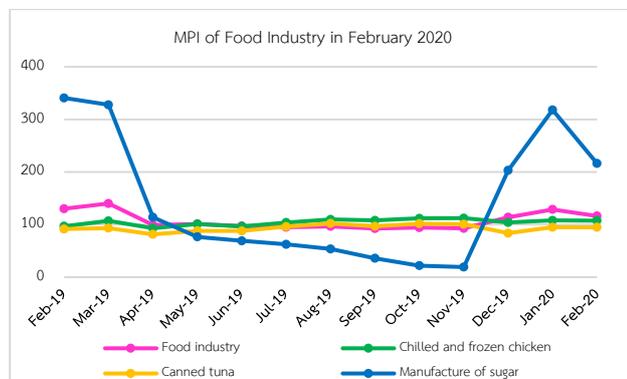
- + A total of 71 factories were shut down in February 2020, a decrease of 13.4 percent (% MoM) from January 2020 and a decrease of 60.6 percent (% YoY) from the same month last year.
  
- + The lost investment value on shutdown in February 2020 increased 800.2 percent from January 2020 (%MoM) to 16,879 million Baht but decreased 9.3 percent (%YoY) from the same month last year.

*“In February 2020, the industry with the highest number of factory shutdowns was the excavation and dredging of gravel, sand, or soil (9 factories), followed by the sand suction industry (5 factories).”*

*“In February 2020, the industry which had the highest operation shutdown with the highest value of investment was the stemming and redrying of tobacco with the investment value of 14,789 million Baht, followed by the industry of printing, manufacturing of files, binding of printed sheets, manufacturing of book covers, or print finishing with the investment value of 985 million Baht.”*

## Industrial Economic Status by Industrial Sectors in February 2020

### 1. Food Industry



Source: The Office of Industrial Economics

**⊖ Production** of food product in February 2020 decreased by 10.6 percent (%YoY). The main factor was the impact of the drought situation. The product groups were classified as follows:

1) Export-orientated product groups, whereby the MPI decreased. Products included sugar as the MPI decreased by 36.6 percent, with the export value falling 16.7 percent in key markets such as Indonesia, South Korea, and Taiwan. The MPI of canned pineapples dropped by 4.9 percent, with fewer raw materials causing the price level to rise. As a result, the export value increased by 47.4 percent from main markets such as the US, Germany, and Saudi Arabia. The MPI for tapioca flour dropped 7.3 percent due to the drought and started being impacted by the transportation problems of the COVID-19 virus outbreak in China and many other countries. As a result, the value of exports decreased by 39.3 percent in key markets such as China, Indonesia, and Taiwan.

2) Domestic-orientation products, whereby the MPI of palm oil fell by 28.1 percent.

The food industry was affected by the COVID-19 virus outbreak, resulting in an increase in the MPI, following increased product demand for food reserves, both domestically and internationally. The product groups include: 1) Instant foods, such as instant noodles and canned tuna, which increased by 17.3 and 3.5 percent, respectively. 2) Frozen foods such as frozen fish and shrimp increased by 47.5 percent and 6.4 percent respectively, including the production of ready-to-eat food for livestock, which increased by 7.0 percent.



Source: Ministry of Commerce

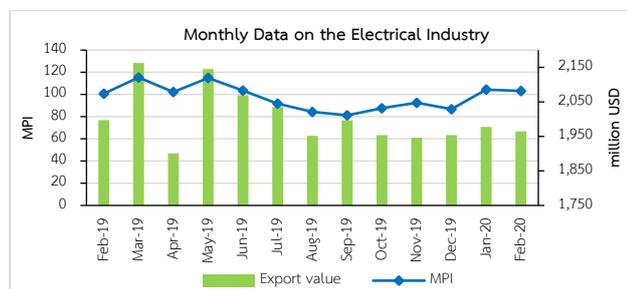
**⊕ The domestic sales of food products** in February 2020 increased by 10.3 percent as demand for food reserves grew, from concerns of the COVID-19 virus outbreak.

**⊖ Export markets** in February 2020, the overall export value of food products dropped 6.3 percent from the same period last year (YoY), with the contraction of significant products such as rice (white rice and jasmine rice), cassava products (tapioca flour) and raw sugar, including chilled and frozen fruits (fresh longan, durian, and bananas). Essential export products such as refrigerated and frozen foods (chilled and frozen chicken, fish, and shrimp), ready-made foods (canned sardine and tuna) and seasonings, grew from increased food reserves for concerns about the virus outbreak.

*The forecasted trend predicts that food production and the general export value in the food industry in March 2020 may decrease from the same period last year from negative factors, including a decrease in the amount of raw materials for agricultural products such as sugarcane, cassava, palm oil, and pineapples, as well as the effects of the COVID-19 pandemic globally, which may result in some fresh foods such as fresh durian, longan, and banana to decelerate, due to its short shelf life and inability to store for a long time. Nevertheless, the said pandemic should result in increased orders in the ready-to-eat food (instant noodles/rice products), beverages, and canned foods (canned fruits/vegetables and canned seafood) industries. Tapioca chips are also expected to increase in orders or accelerate in the delivery of products for stock to support the epidemic outbreak.*

## 2. Electrical and Electronics Industry

### ■ Electrical Industry



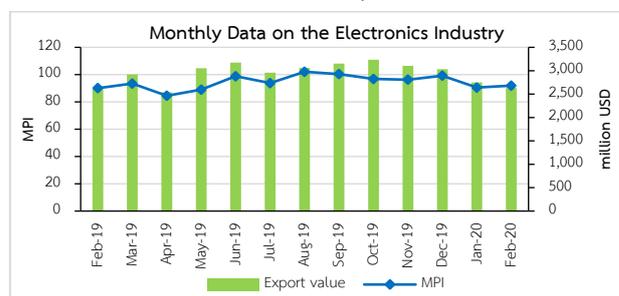
Source: The Office of Industrial Economics, Electrical and Electronics Institute, and Ministry of Commerce

**+** Production of electrical appliances rose 3.0 percent compared to the same month last year. The product groups which grew were electrical transformers, rice cookers, cables, electrical cables, air-conditioners, refrigerators, and compressors which increased by 29.7 percent, 25.0 percent, 21.5 percent, 10.2 percent, 6.8 percent, 5.0 percent, and 0.4 percent, respectively. Air-conditioners and refrigerators increased in domestic and foreign sales, whereas cable and rice cookers increased in domestic sales. Production of transformers increased to replace inventory and to support increased exports, whereas compressors increased in production following exports. On the other hand, products that contracted were washing machines, microwave ovens, thermos, electric motors and household fans, which decreased by 23.7 percent, 18.4 percent, 8.3 percent, 3.8 percent, and 3.1 percent, respectively. Thermos fell in production fewer domestic orders, and electric motors and household fans contracted due to fewer orders from foreign markets. Production of washing machines and microwave ovens decreased due to the decline in both domestic and overseas market sales.

**-** Exports of electrical appliances increased by 1.7 percent compared to the same month last year to 1,964.3 million USD, from the contraction of key markets—Japan, the US, ASEAN, and Europe. Products that decreased in exports were washing/dry-cleaning machines and parts, air-conditioners and parts, which decreased by 39.9 percent to 76.1 million USD. Meanwhile orders for air-conditioners and parts to the US market increased by 7.8 percent to 503.9 million USD, and refrigerator increased by 2.5 percent to 132.2 million USD.

*“Production outlook in March 2020, the electrical appliances industry is expected to decline by 4.8 percent due to the COVID-19 virus. The global pandemic caused disruptions in production within the countries of origin, which had impacts on the imports of middle-stream raw materials in Thailand, as Thailand has to rely on mid-stream raw materials from many countries that were affected by the COVID-19 virus outbreak, which is likely to stop production in some areas from disease control measures.”*

### ■ Electronics Industry



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

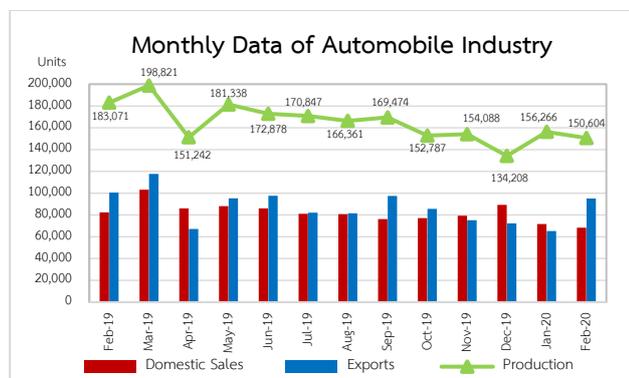
**+** Production of electronics increased by 3.4 percent compared to the same month last year, reaching an MPI of 91.9 points. Products that increased were PCBAs, ICs, and HDDs, which grew by 23.6 percent, 1.9 percent, and 0.5 percent, respectively. This was due to the increase in orders from overseas. Meanwhile, production of electronics that decreased were printers (22.2%) as demands from overseas dropped.

**-** Exports of electronics dropped 1.2 percent compared to the same month last year to 2,628.8 million USD. Exports of HDD products to China, ASEAN, the EU rose 16.1 percent to 889.3 million USD. However, exports of ICs decreased by 0.9 percent to 525.4 million USD, as the result of decreasing orders from the US and China markets.

*“Production of the electronics industry in March 2020 is forecasted to decline by 4.2 percent compared to the same month of the year, due to the COVID-19 virus. The global pandemic has negatively impacted the capacity of some suppliers. However, production is still able to continue from remaining stocked inventory or products and parts for production and distribution until April 2020. If the outbreak of the COVID-19 virus continues, it will impact the supply chain of the electronics industry in terms of production and distribution and will subsequently affect employment domestically.”*

### 3. Automotive Industry

#### ■ Automobile Production Industry



Source: The Office of Industrial Economics; data collected from Automotive Division, Federation of Thai Industries

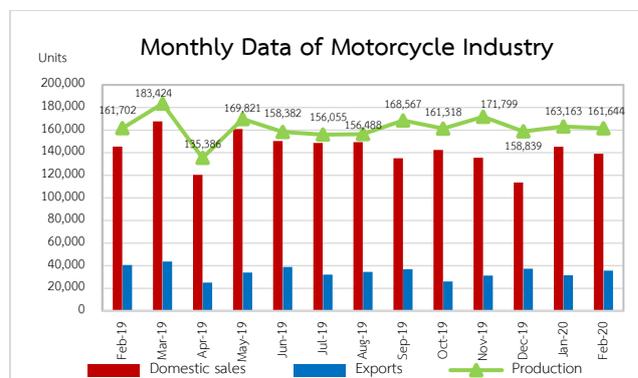
➖ **Automobile production** in February 2020 dropped 3.62 percent (%MoM) from January 2020 to 150,604 units and dropped 17.73 percent (%YoY) from the same month last year, as the result of decreasing in production of passenger car, 1-ton pick-up truck and derivative, and commercial vehicle production.

➖ **Domestic sales of automobiles** in February 2020 decreased by 4.77 percent (%MoM) from January 2020 to 68,271 units and dropped 17.07 percent (%YoY) from the same month last year. The contraction was due to the decrease in sales of passenger cars, 1-ton pick-up trucks and derivatives, commercial vehicles, PPV and SUVs from the decrease in domestic car sales as a result of the slowdown in the domestic economy, drought problems, delayed budget disbursement, the appreciation of the Baht, and the COVID-19 virus outbreak.

➕ **The export of automobiles** in February 2020 grew 45.79 percent (%MoM) from January 2020 to 95,191 units but dropped 5.33 percent (%YoY) from the same month last year. Exports of automobile to Asia, Oceania, Africa, Europe, North America, and Central and South America markets has dropped as the economy of these trading partners slowed down, including the COVID-19 virus outbreak.

*"March 2020 outlook for the automobile industry, the industry is projected to decrease compared to March 2019, as the result of the slowing global and domestic economy, including the COVID-19 virus outbreak."*

#### ■ Motorcycle Production Industry



Source: The Office of Industrial Economics; data collected from Automotive Division, Federation of Thai Industries

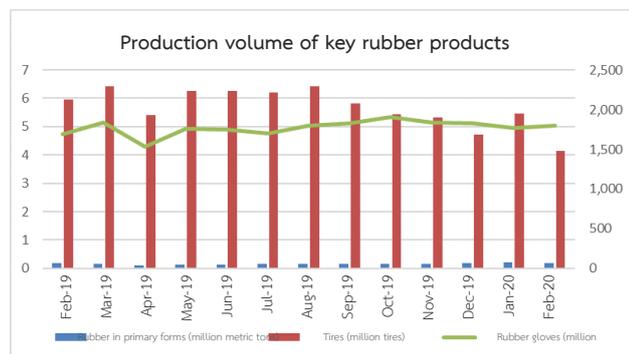
➖ **Motorcycle production** in February 2020 decreased slightly by 0.93 percent (%MoM) from January 2020 to 161,644 units and decreased slightly by 0.04 percent (%YoY) from the same month last year as the result of decreasing in production of sport motorcycles.

➖ **Domestic sales of motorcycles** in February 2020 dropped by 4.13 percent (%MoM) from January 2020 to 138,998 units and decreased by 4.37 percent (%YoY) over the same month last year due to a fall in sales of 51-110 cc and 111-125 cc motorcycles.

➕ **Exports of motorcycles** in February 2020 increased by 12.66 percent (%MoM) from January 2020 to 35,588 units but decreased by 5.13 percent (%YoY) from the same month last year. Exports of motorcycle dropped to the US, Canada, and Myanmar.

*"Motorcycle production industry outlook for March 2020, the industry is project to slow down compared to March 2019 due to the slowdown of global and domestic economy, including the COVID-19 virus outbreak."*

## 4. Rubber and Rubber Products Industry



Source: The Office of Industrial Economics

### Production

➖ Processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) decreased by 1.53 percent.

➖ Automotive tires decreased by 30.52 percent as one of the major manufacturers in Thailand reduced their production in order to reduce expenses according to the company's policy.

➕ Rubber gloves increased by 6.69 percent because of the situation of COVID-19 resulting in the higher demand for medical uses.

### Domestic Sales

➕ Processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) increased by 19.08 percent, from an increase in latex products for use in rubber gloves.

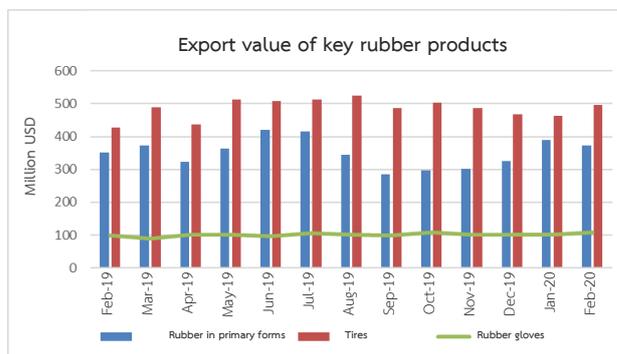
➕ Automotive tires increased by 2.94 percent following the expansion of the domestic replacement market.

➕ Rubber gloves increased by 45.56 percent from increased purchase orders due to higher medical demand.

### Exports

➕ Processed rubber in primary forms (smoked rubber sheets, rubber blocks, and concentrated latex) increased in value by 6.24 percent, from the growth of exports of all types of rubber, especially in the concentrated latex segment which grew 21.37 percent from exports to the China.

➕ Automotive tires increased in export value by 15.99 percent following the growth of the US market, which increased by 22.17 percent.



Source: Ministry of Commerce

➕ Rubber gloves increased by 10.35 percent due to the expansion of the China market from the COVID-19 situation, causing demand in China and the US to increase, which are key export markets of Thailand.

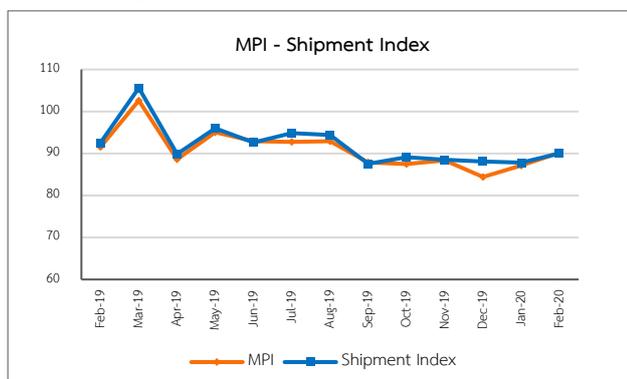
### Industry Outlook in March 2020

Production and sales of upstream rubber are expected to decrease compared to the same period last year, like China, a key market for Thailand in terms of upstream rubber products, dealt with the domestic virus outbreak. Many ports were ordered to close, causing difficulties for Thai business operators to deliver products to China; some had to postpone deliveries and bare higher freight costs. Automotive tire production is expected to slow due to the contraction of the automotive industry. Meanwhile, domestic sales of tires are expected to continue growing from the previous month, following the growth of the replacement market. The production and domestic sales of rubber gloves are expected to continue growing from the last month as well due to the COVID-19 situation, resulting in a higher demand for medical use and, therefore, increased orders.

Exports of upstream processed rubber are expected to decrease in value from the prolonged outbreak of the COVID epidemic. China has announced to postpone the opening of the port from mid-March 2020 to late May or early June 2020. Exports for tires and rubber gloves are expected to increase in value accordingly. The demand for rubber products from Thailand to substitute products from China and the US is expected to grow.

## 5. Plastics Industry

### MPI and Shipment Index



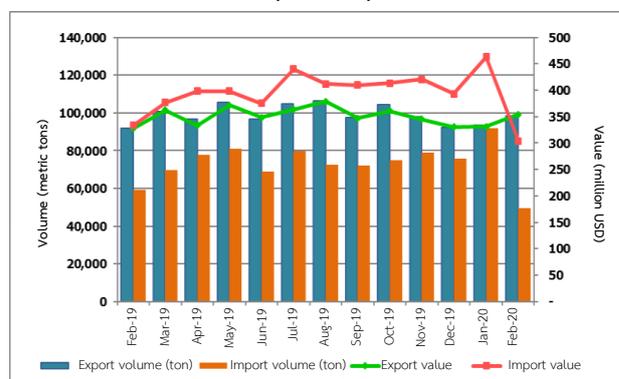
Source: The Office of Industrial Economics

**⊖** The MPI of February 2020 was 90.18 points, a contraction of 1.22 percent compared to the same period last year. The MPI shrank in many product groups, such as plastic films which contracted by 19.50 percent, tableware, kitchenware and toilet articles ware by 13.73 percent, and plastic sacks by 10.98 percent. The contraction came from droughts, which affected agricultural products, resulting in decreased demand for plastic sacks.

**⊖** The Shipment Index of February 2020 was 90.03 points, down 3.69 percent compared to the same period last year. Plastic products that decreased in shipment index were the plastic film (20.92%), followed by tableware, kitchenware, and toilet articles (17.79%) and plastic sacks (17.26%).

**⊕** Exports in February 2020 increased by 8.14 percent compared to the same period last year to 354.07 million USD. Plastic products with the highest increase in exports were floor coverings (HS 3918) with an increase of 116.49 percent, followed by monofilament (HS 3916), which increased by 100.49 percent. Exports grew in key markets such as the US, Vietnam, and China.

### Volume and value of exports-imports

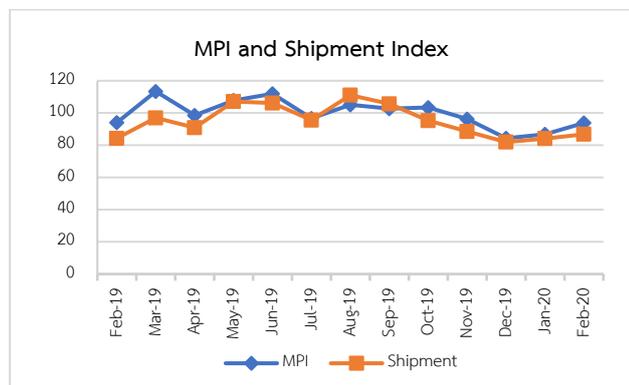


Source: Customs Department, Ministry of Finance

**⊖** Imports in February 2020 dropped 8.88 percent compared to the same period last year to 303.62 million USD. Major products that contributed to the decreased in import were sanitary ware. (HS 3922), tableware, kitchenware, other household articles (HS 3924), and monofilament (HS 3916), which decreased by 66.4 percent, 43.24 percent, and 41.28 percent, respectively.

*March 2020 outlook for plastic industry, it is predicted the production continue to contract, and exports are expected to expand. However, there are still factors that need to be monitored, such as the situation of the COVID-19 virus that will affect the global economic recovery. The global crude oil prices also need to be monitored, given the continuous decline and the environmental conservation trend, which may affect the production of some single-use plastics.*

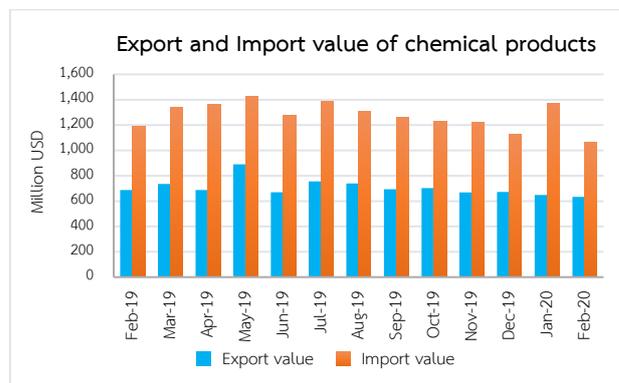
## 6. Chemical Industry



Source: The Office of Industrial Economics

**+** The manufacturing production index in February 2020 reached 93.80, a growth by 0.16 percent compared to the same period last year. Production in upstream chemical groups grew by 12.89 percent. The products with the highest growth were ethanol production, which grew by 23.29 percent from the COVID-19 virus, causing increased demand for ethanol to produce hand washing gel. Meanwhile, downstream chemicals contracted by 4.12 percent.

**+** The shipment index of the chemical industry in February 2020 grew by 1.73 percent compared to the same period last year to 86.76 points. The shipment index of upstream chemical products increased by 10.70 percent, and ethanol products were upstream chemicals with the highest MPI increase. For the downstream chemicals, the shipment index dropped 0.91 percent from fertilizers mainly.



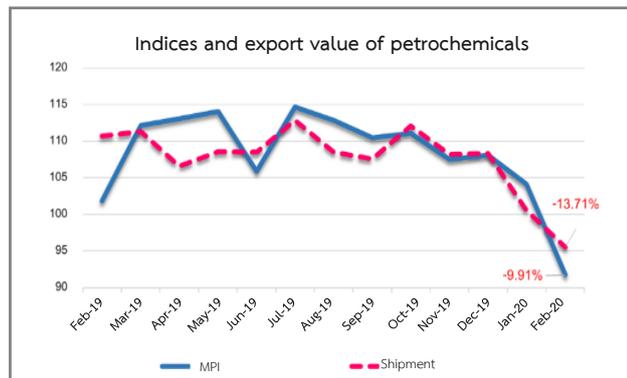
Source: Customs Department, Ministry of Finance

**-** Exports in February 2020 decreased by 7.88 percent compared to the same period last year to 634.00 million USD. The value of exports for upstream chemicals was 329.99 million USD, a decrease of 0.08 percent. For downstream chemicals, the export value was 304.00 million USD, a decline of 15.07 percent. Products that caused the value of exports to decline included cosmetics, which contracted by 31.09 percent and organic chemicals, which decreased by 18.99 percent. Exports contracted in key markets such as China, Vietnam, and Indonesia.

**-** Imports in February 2020 decreased by 10.88 percent compared to the same period last year to 1,062.48 million USD. Imports of upstream chemical products dropped 8.73 percent from the same period last year to 653.76 million USD. As for downstream chemicals, import value decreased by 14.11 percent to 408.72 million USD. Products that decrease in import value were organic and inorganic chemicals and paints.

*Outlook for Chemical industry*, it is expected that production will increase in March 2020, whereas exports are expected to shrink. However, there are still factors that need to be monitored, such as the COVID-19 virus situation that may affect the global economic recovery, coupled with the crude oil price situation in the world market, which is continuously decreasing (oil price war between Saudi Arabia and Russia).

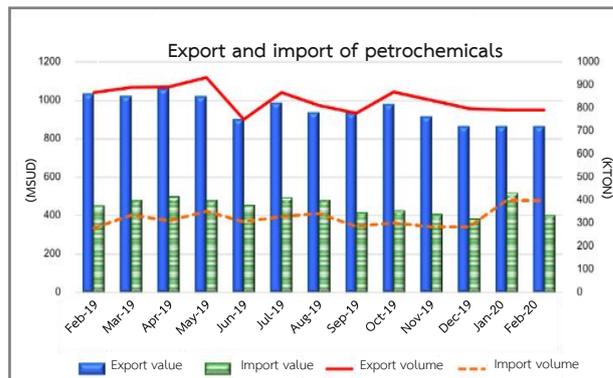
## 7. Petrochemicals Industry



Source: The Office of Industrial Economics

➖ **Manufacturing production index** in February 2020, the index declined by 9.91 percent compared to the same period last year to 91.74 points. The production of upstream petrochemicals used as precursors in the petrochemical industry, e.g., Ethylene, Propylene, and Benzene decreased by 18.18 percent, 15.63 percent, and 3.06 percent, respectively. Meanwhile, downstream petrochemical used to produce plastic pellets, e.g., PS, PE, EPS, and PET resins for the production of foam, plastic packaging and products, and drinking water bottles, dropped 33.01 percent, 12.48 percent, 6.50 percent, and 1.39 percent, respectively.

➖ **Shipment index** in February 2020 reached 95.53 points, a contraction of 13.71 percent compared to the same period last year. The shipment index of upstream petrochemicals used as precursors in the petrochemical industry such as Propylene, Benzene, and Ethylene decreased by 18.18 percent, 14.14 percent, and 6.15 percent, respectively. Downstream petrochemical products used in the production of automobile parts, electronic components, plastic packaging and products, such as ABS, PE, PS, and SAN resins contracted by 24.68 percent, 21.19 percent, 19.54 percent, and 13.02 percent, respectively.



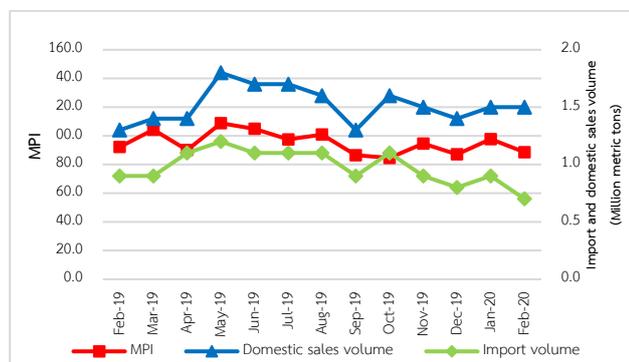
Source: Customs Department, Ministry of Finance

➖ **Exports** in February 2020 valued 863.93 million USD, a contraction of 16.49 percent compared to the same period last year. The contraction was in upstream petrochemicals—Para-Xylene, Terephthalic Acid, and Toluene—that used as solvents and precursors in the petrochemical industry and in the downstream petrochemical such as PE, PP, PC, and PET resins, which used in the manufacturing of plastic packaging and products and drinking water bottles.

➖ **Import** in February 2020 dropped 11.73 percent compared to the same period last year to 400.25 million USD. The contraction was in downstream petrochemicals used in the production of plastic packaging and products and synthetic rubber, such as PS, PP, Nylon, and BR resins. Meanwhile, imports of upstream petrochemicals increased among substances used as precursors to manufacture PVC, polyester resins, and precursors of other petrochemicals, such as Vinyl Chloride, Ethylene Glycol, Propylene, etc.

Outlook for petrochemicals industry in March 2020, it is expected that overall exports of petrochemical will continually decline compared to the same period last year. This is due to the crude oil price in the world market, which dropped considerably. As a result, the export price of oil and petrochemical products also decreased. However, the COVID-19 situation may result in higher demand for downstream petrochemicals for use in downstream industries, such as medical masks, face shields, safety glasses, rubber gloves, boots, etc.

## 8. Iron and Steel Industry



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

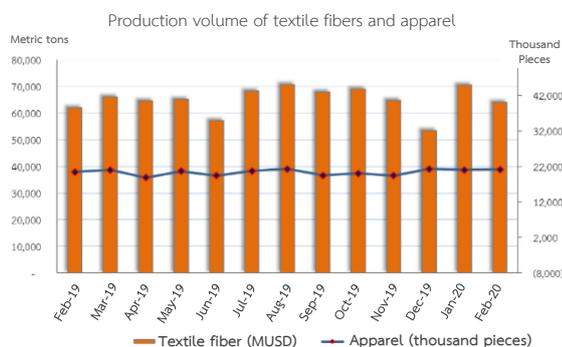
**-** The MPI in February 2020 decreased by 3.9 percent compared to the same period last year to 88.6 points. When considered by key products namely, long and flat products, the MPI of both groups decreased because of the slowdown of production in related industries such as the construction and automotive industries, following a downturn of the global and domestic economic condition. The MPI of long products reached 90.1 points, a decline by 1.1 percent from the production of round bars, which decreased by 27.1 percent (contracting for two consecutive months), followed by wire rods and deformed bars by 12.7 and 7.9 percent, respectively. Flat products reached an MPI of 84.6 points, a decrease of 5.0 percent from the production of cold-rolled sheets, which decreased by 47.3 percent, followed by tin plates and galvanized sheets which fell by 6.4 percent and 4.5 percent, respectively.

**+** Domestic sales in February 2020 increased by 6.8 percent compared to the same period last year to 1.5 million metric tons. Sales increased in both long and flat products. The long products reached a sales volume of 0.6 million metric tons, an increase of 10.5 percent from the sale of rebar and hot rolled structural steel sections, which grew by 28.4 percent. Flat products reached a sales volume of 0.9 million metric tons, an increase of 4.7 percent from the consumption of hot-rolled sheets and other types of coated steel sheets, which increased by 26.3 percent and 6.1 percent, respectively.

**-** Imports decreased by 23.7 percent compared to the same period last year to 0.7 million metric tons in February 2020 (decreasing for the fourth consecutive month). Imports of both long and flat products dropped. The import volume for long products was 0.1 million tons, down 39.8 percent due to the imports of hot-rolled carbon steel structural sections which decreased by 77.7 percent (Japan was a major country where Thailand lowered imports of the products.), followed by alloy steel wire rods and seamless steel pipes which decreased by 51.0 percent and 36.5 percent, respectively. Flat products reached an import volume of 0.6 million tons, down 18.1 percent from the imports of hot-rolled alloy steel plates which decreased by 77.5 percent (China and Japan were major countries where Thailand lowered imports of the products), followed by Cold-formed structural steel sections and tin plates which decreased by 67.2 percent and 45.5 percent respectively.

*“March 2020 outlook for steel industry, it is forecasted that production will decline compared to the same period of last year. Issues worth following include the global economic situation, the COVID-19 virus, and government construction projects following the long-term transportation action plan. Such projects include the Department of Rural Road’s development plan, and the Mass Rapid Transit Authority of Thailand’s electric train construction project, of which the said situation will affect the production and consumption of steel products domestically.”*

## 9. Textile and Wearing Apparel Industry



Source: The Office of Industrial Economics

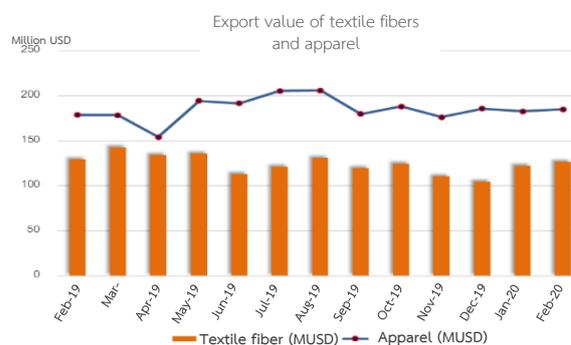
### Production

➕ *Production of textile fibers* increased by 3.16 and 3.51 percent (%YoY) partially from preparation for hygienic face mask production due to the COVID-19 outbreak. The demand is likely to continue to grow.

➖ *Production of fabrics* decreased by 6.42 percent (%YoY), partly as a result of reduced purchasing power from domestic customers.

### Domestic sales

➖ *Domestic sales of textile fibers, fabrics, and wearing apparel* decreased by 2.02 percent, 3.71 percent, and 26.79 percent (%YoY) respectively, as the result of decreasing demands for raw material to export, including the slowdown of domestic purchasing power.



Source: Ministry of Commerce

### Exports

➖ *Textile fibers* decreased in export value by 2.40 percent (%YoY), especially China, which is Thailand's number one market, because of the COVID-19 outbreak. This caused shutdowns of textile and garment factories, resulting in a decrease in exports of Thai textile fibers.

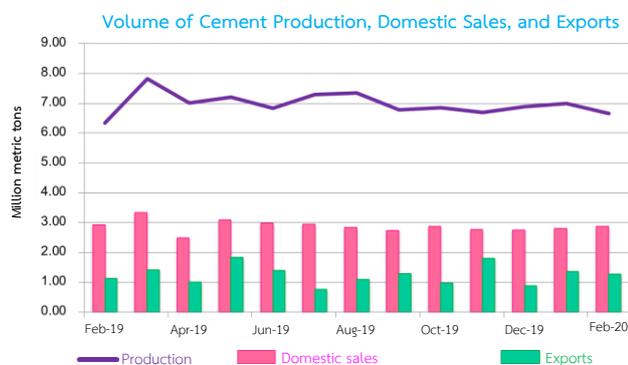
➕ *Fabric and wearing apparel* increased in export value by 9.95 percent and 3.52 percent (%YoY), respectively. Growing fabric markets included Vietnam, Bangladesh, and Myanmar, which were imported from Thailand instead of imported fabrics from China. The export of men's and women's clothing to the EU continued to grow. In addition, in South Korea, purchased apparel from Thailand in place of orders from China, which was in the midst of the COVID-19 epidemic.

### Outlook for March 2020

Production of textile fibers is expected to increase to support demand from domestic downstream industries. However, fabrics and apparel may drop in exports to the EU and the US, affected by the outbreak of COVID-19.

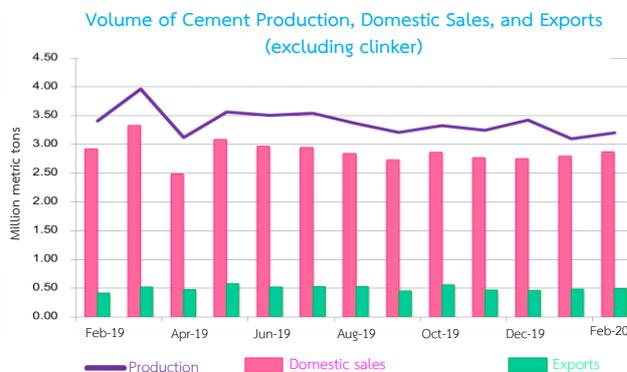
## 10. Cement Industry

### Overall Cement Industry



Source: 1. Domestic production and sales volume: Division of Industrial Economics Information and Indices, The Office of Industrial Economics  
2. Export volume: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce.

### Cement Industry (excluding clinker)



Source: 1. Domestic production and sales volume: Division of Industrial Economics Information and Indices, The Office of Industrial Economics  
2. Export volume: Information and Communication Technology Center, Office of the Permanent Secretary, Ministry of Commerce.

➕ **Total production of cement** decreased by 4.90 percent from January 2020 (%MoM) to 6.65 million metric tons but increased by 4.93 percent (%YoY) from the same month last year.

➕ **Total domestic sales of cement** increased by 2.61 percent (%MoM) from January 2020 to 2.87 million metric tons but decreased by 1.74 percent (%YoY) from the same month last year.

➕ **Total exports of cement** decreased by 7.01 percent (%MoM) from January 2020 to 1.27 million metric tons but increased by 13.40 percent (%YoY) from the same month last year. This was due to the increase of orders compared to the same month last year from key export markets, including Bangladesh, Myanmar, and Cambodia.

The textile and garment industry are expected to grow in textile fibers to support domestic downstream industries. Fabrics and apparel may slow due to exports to the EU market and the US, affected by the COVID-19 outbreak.

➕ **Cement production** (excluding clinker) increased by 3.41 percent (%MoM) from January 2020 to 3.20 million metric tons but decreased by 6.04 percent (%YoY) from the same month last year.

➕ **Domestic sales of cement** (excluding clinker) increased by 2.61 percent (%MoM) from January 2020 to 2.87 million metric tons but decreased by 1.74 percent (%YoY) from the same month last year.

➕ **Export of cement** (excluding clinker) increased by 0.71 percent (%MoM) from January 2020 to 0.49 million metric tons and increased by 17.71 percent (%YoY) from the same month last year. This was due to the increase of orders from neighboring countries, e.g., Myanmar and Cambodia.

The cement production industry (excluding clinker) in March 2020, compared to the same period last year, may begin to decrease due to the spread of the COVID-19 virus, which negatively affects the economy and purchasing power of consumers. It also affects business operators' uncertainty in expanding investments in new real estate.