

**Industrial Production Status**

Indicators	2016	2017		2018												
	Year	Dec.	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year(f)
MPI*	1.4	5.8	2.5	4.7	4.6	3.2	3.1	2.9	5.0	4.9	0.8	-2.7	5.8	0.9	0.8	2.8

\* MPIs have been adjusted for 2018 under ISIC Rev.4 classifications which cover 21 divisions, 57 industrial groups and 235 products. The industrial index was formed using the Laspeyres formula based on the 2011 fixed weights, with added value and output value referenced from “The 2012 Business Trade and Industry Census: The Manufacturing Industry” produced by the National Statistical Office of Thailand. Furthermore, the weights of weighted value have been adjusted with added value to reflect the current industrial structure

The industrial economics status in **December 2018**, when considering the **manufacturing production index (MPI)**, grew positively from November 2018, with an increase of 0.8 percent from the same period last year resulting from the increase of domestic consumption, which grew by 3.5 percent.

When considering the MPI data for the past 3 months compared with the previous year (%YoY), the trend of industrial production projected in a good direction despite the temporary contraction in September but expanded again in October. In September, October, and November the rate of change was -2.7 percent, 5.8 percent, and 0.9 percent respectively, resulting in a 2.8 percent growth of the average MPI for the year 2018, an improvement compared to the average MPI of 2017 which had an average growth of 2.5 percent.

Indicators	2017	2018											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
MPI	-3.2	5.0	-0.1	10.5	-20.9	14.7	-1.1	-2.8	0.2	-1.9	3.2	1.6	-3.4

For the past three months (September, October, and November 2018), the MPI (%MoM) has changed as follows. In September, the MPI was -1.9 percent. According to the normal seasonality in the year, the MPI normally increases during September; however, the MPI of September this year was affected by the temporary decrease of exports. As for October and November 2018, the rate of change was 3.2 percent and 1.6 percent respectively.

Key industries that contributed to the MPI growth in December 2018 were:

- Automobile and engines: The MPI grew by 9.65 percent from pickup trucks, medium-sized passenger cars, diesel engines and gasoline engines. Overall, the growth was from the domestic market, especially pickup trucks and diesel engines, together with new model launches by manufacturers and continuing promotional activities at the end of the year.
- Sugar: The MPI grew by 30.46 percent from most factories commencing sugarcane production, together with increased efficiency of plants resulting in better production.

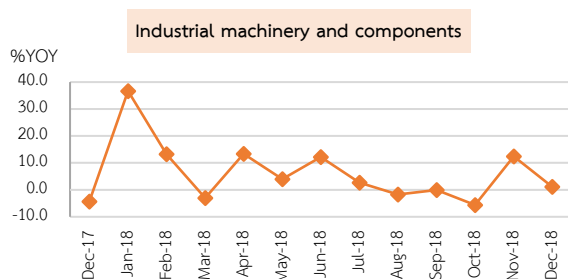
- Electronic components: The MPI grew by 6.96 percent in line with the expansion of global electronic component markets.
- Non-alcoholic beverage: The MPI grew by 14.43 percent from soft drinks, energy drinks, tea and soda water from excelled production after expanding production capacity from opening new production lines, together with sales promotion activities to stimulate the market.
- Bags: The MPI grew by 189.74 percent from handbag products from an acceleration of production and delivery for sale during the New Year festival. This year, customers ordered large volumes of inexpensive bags, mainly from the domestic market.

In 2019, the MPI is expected **to grow positively between 2.0 - 3.0 percent**, with supporting factors from the general election that will affect the confidence of both consumers and investors. Government investment was driven from the progress of major investment projects and operations under the Eastern Economic Corridor (EEC) program.

# Other Industrial Economic Indicators in December 2018

## Other Industrial Economic Indicators in December 2018

### ■ Thailand Industrial Sector's Imports



Source: Ministry of Commerce

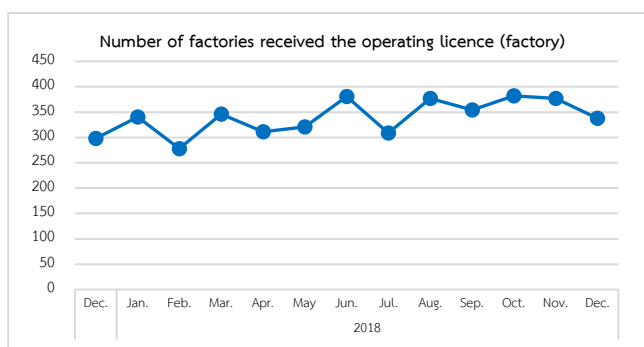


Source: Ministry of Commerce

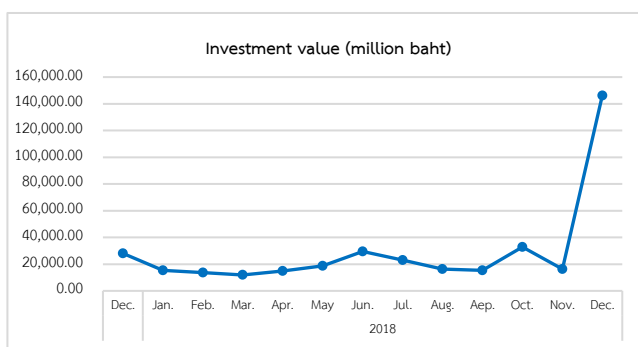
**+** **Imports of industrial machinery and components** in December 2018, valued 1,391.1 million USD, a growth by 1.1 percent compared to the same month last year. The growth came from an increase in imports of machinery used in other industries and components, construction machinery and components and metal processing machinery and components to increase production efficiency or capacity. This was partly due to special measures to stimulate investment by the Board of Investment (BOI) and the government infrastructure construction projects.

**-** **Imports of raw materials and semi-finished products (excluding gold)** in December 2018, valued 6,339.5 million USD, dropping 1.9 percent compared to the same month last year. Products that had fewer imports were iron, steel and products and electrical circuit boards. However, for imports of raw materials and semi-finished products (excluding gold), many items continue to grow, such as chemicals and plastic products, to support production that is likely to improve gradually.

## Industrial Operation Status



Source: Department of Industrial Works



Source: Department of Industrial Works

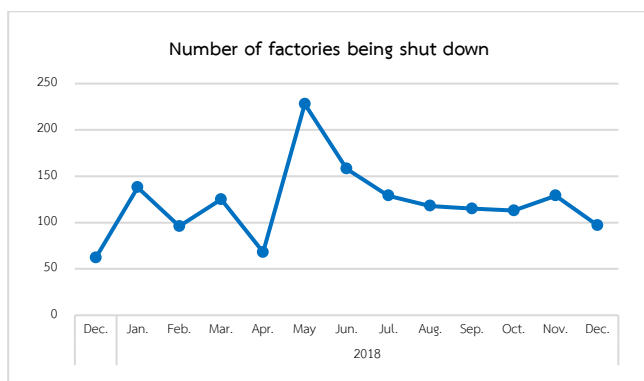
⊕ A total of 338 factories were licensed to operate in December 2018. The number decreased by 10.3 percent from November 2018 (%MoM) but increased by 13.4 percent compared with the same month last year (%YoY).

⊕ The total value of investment from the licensed factories for operation in December 2018 valued 146,235 million Baht, increasing by 793.8 percent from November 2018 (%MoM) and 423.0 percent from the same month last year (%YoY).

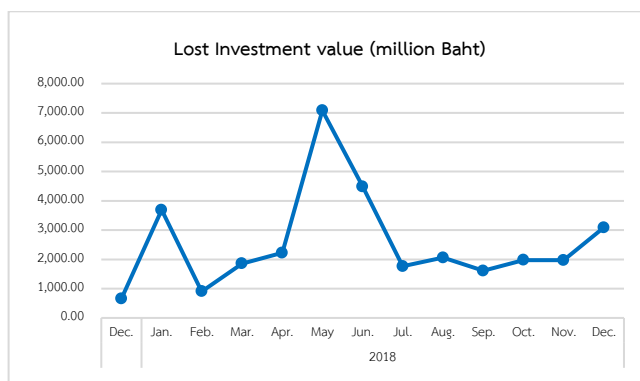
*“The industry with the highest number of new licensed factories for operation in December 2018 was the gravel/sand/clay digging and epilation industry (29 factories), followed by the motor vehicle repair industry (24 factories).”*

*“The industry with the highest value of investment in December 2018 was the production, assembly and repairing of various machinery, electrical appliances, lifting machines, cranes, elevators, escalators, trucks, tractors, and trailers for industrial use, valued at 122,777 million Baht, followed by automobile parts and equipment production industry valued at 2,881 million Baht. ”*

■ Industrial Operation Status (cont.)



Source: Department of Industrial Works



Source: Department of Industrial Works

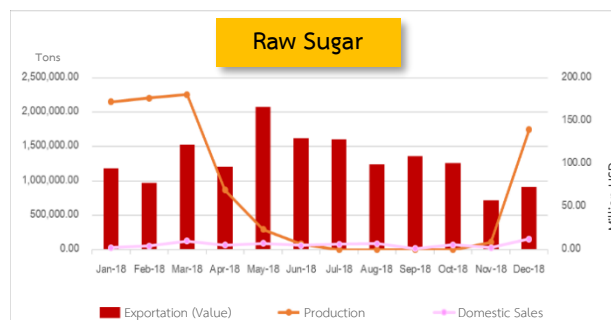
- + A total of 97 factories shut down the operation in December 2018. The number of shutdowns decreased by 24.8 percent from November 2018 (%MoM) but increased by 56.5 percent from the same month last year (%YoY).
- The lost investment value on shutdowns in December 2018 valued 3,087.7 million Baht. The values increased by 56.6 percent from November 2018 (%MoM) and 371.8 percent from the same month last year (%YoY).

*“The industry with the highest number of factory shutdowns in December 2018 was the milling or polishing of rice industry (8 factories), followed by the gravel/sand/clay digging and epilation industry, wooden furniture industry and gas packaging industry (7 factories per industry).”*

*“The industry with the highest value of investment with factory shutdowns in December 2018 was the automobile parts and equipment production industry valued at 876 million Baht, followed by the metal-plated sanitaryware production industry valued at 662 million Baht.”*

## Industrial Economic Status by Industrial Sectors in December 2018

### 1. Food Industry

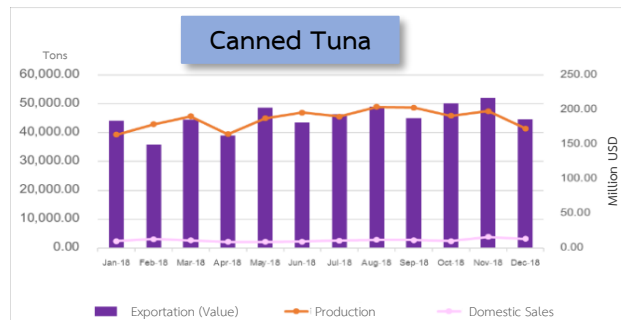


Source: Office of Industrial Economics / Ministry of Commerce

**+** **Production** of food product in December 2018 increased by 16.1 percent (%YoY), classified as follows:

1) Export-orientated products including sugar increased by 29.1 percent (tons -%YoY) as this year sugar production started earlier than the year before to prevent problems of sugar cane being left on the field like last year, with the amount of sugarcane production that is expected to be relatively high. This was combined with the production of canned tuna, processed chicken, and chilled and frozen shrimp which grew by 11.6 percent, 4.5 percent, and 0.4 percent respectively (%YoY) due to a continuously increasing demand among trading partners.

2) Domestic market-orientated products namely, ready-to-drink milk, refined palm oil, and instant noodle increased by 11.8 percent, 3.2 percent, and 0.3 percent (%YoY) respectively from the result of the continuous increase in consumer demand.



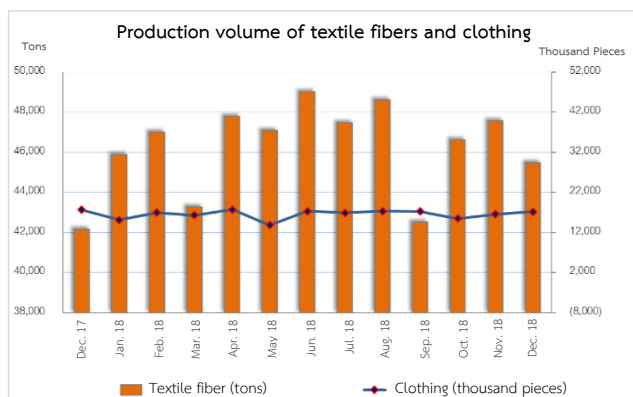
Source: Office of Industrial Economics / Ministry of Commerce

**+** **Domestic sales** volume in December 2018 increased by 11.3 percent (%YoY) from household income in some agricultural areas which maintained at a reasonable level, whereby the prices of some key agricultural products that remained high such as rice and cassava. This was coupled with increased outputs such as unhusked in-season rice, maize, and white shrimp (Vannamei).

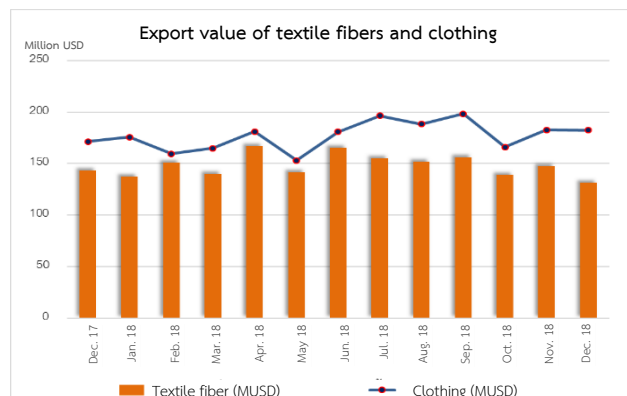
**-** **Export markets:** The overall export value of food products in December 2018 decreased for the second consecutive month, by 4.2 percent (%YoY) in key products such as tapioca strips, canned pineapple, fresh durian, chilled and frozen chicken, chilled and frozen shrimp and tapioca starch by 60.2 percent, 31.7 percent, 13.0 percent, 7.3 percent, 4.8 percent and 2.1 percent, respectively (%YoY). The contractions were due to the world economy which began to grow full potential and the US economy which began to slow down and effects by the Baht appreciation. Furthermore, the industry was impacted by the trade war between China and the US. Meanwhile key products such as rice (white rice and jasmine rice), sugar, processed chicken, canned sardines and canned tuna continued to increase following the demand of the products of the world market.

**Forecasts** for the food industry in January 2019 expect an improvement from gradual growth of demand in both the domestic market and partner countries, including positive factors from EU which removed Thailand from the yellow-carded status in IUU fishing which will boost the Thai fishing industry's reputation. Furthermore, import taxes in the US and China increased from 10 percent to 25 percent for another 90 days.

## 2. Textile and Garment Industry



Source: Office of Industrial Economics



Source: Ministry of Commerce

### Production

⊖ *Production of textiles and fabrics* decreased by 5.97 percent and 11.59 percent respectively (%YoY) due to decreased orders from major trading partners such as Turkey, Bangladesh and South Korea for production of apparel.

⊕ *Apparel* grew by 2.40 percent (%YoY) from the production of men and women's wear for international brand exports.

### Domestic sales

⊖ *Textile and fabrics* decreased by 23.50 percent and 7.44 percent respectively (%YoY) from imports of high-quality fibers from the US finishing fabrics from Taiwan and Vietnam for use as raw materials to produce apparel for export.

⊕ *Apparel* grew by 4.57 percent (%YoY) from the "Bike Un Ai Rak" cycling event, which was distributed to the participants and the 2<sup>nd</sup> "Un Ai Rak Khlai Kwam Nao" (Love and warmth at Winter's End) event which also sold shirts as souvenirs.

### Exports

⊖ *Exports of textile fibers and fabrics* decreased by 9.20 percent and 4.51 percent respectively (%YoY), whereby the export of textile fibers to major markets shrank, namely to Turkey, Bangladesh, South Korea and the US. The major markets of fabrics, such as Vietnam and Myanmar, also decreased, partly due to the political situation in the US and the trade war between the US and China resulting in a slowdown in trade and investment in manufacturing countries, and thus fewer orders for raw materials from Thailand.

⊕ *Exports of Apparel* increased in value by 1.74 percent (%YoY) as Thailand is trusted by the foreign brands to be the contract design and manufacturing source in the production of clothing.

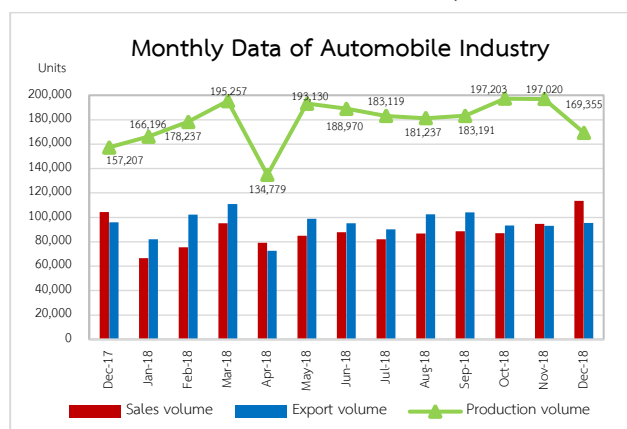
### Forecast for January 2019

In the textiles and apparel industry, production of textile fibers and fabrics are expected to slow down following the projected export trend, due to the political situation in the US and the trade war between the US and China resulting in a slowdown in trade and investment in such markets. The slowdown will impact manufacturers with reduced demand for raw materials from Thailand. Meanwhile, apparel is expected to continue to expand in the production of foreign brands.



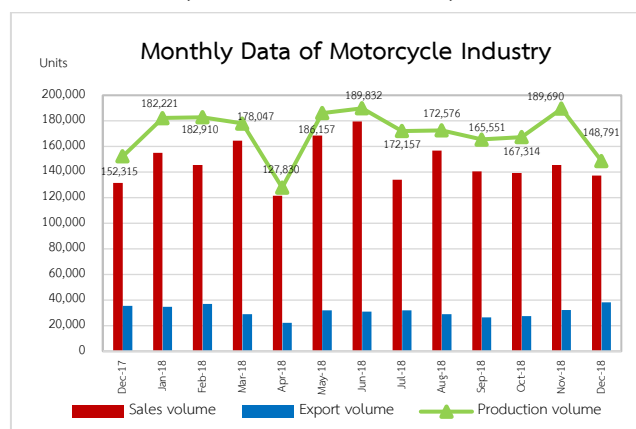
### 3. Automotive Industry

#### ■ Automobile Production Industry



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

#### ■ Motorcycle Production Industry



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

**+** **Automobile production** In December 2018 reached 169,355 units. Production decreased from November 2018 by 14.04 percent (%MoM) but increased by 7.73 percent from the same month last year (%YoY) due to an increase in production of 1-ton pickup trucks and derivatives, and commercial vehicles.

**+** **Domestic sales of automobiles** in December 2018 reached 113,581 units, an increase by 20.01 percent (%MoM) from November 2018 and by 8.90% (%YoY) from the same month last year, from an increase in sales of 1-ton pickup trucks, commercial vehicles and PPV cars combined with SUVs due to public and private investment. This was coupled with the agricultural income index for December 2019 which increased following the agricultural production index adjustments.

**+** **Automobile exports** in December 2018 reached 95,407 units. The number increased by 2.47 percent (%MoM) from November 2018, but dropped by 0.45 percent from the same month last year (%YoY). Exports to Oceania, the Middle East, Europe, Central America and South America dropped from the economic slowdown of trading partner countries.

*"The automotive industry is expected to grow in January 2019 compared to January 2018 as a result of the growing trend of the domestic economy."*

**-** **Motorcycle production** in December 2018 reached 148,791 units. The production decreased by 21.56 percent and 2.31 percent from November 2018 (%MoM) and from the same month last year (%YoY) respectively, resulting from the decrease in production of sport motorcycles.

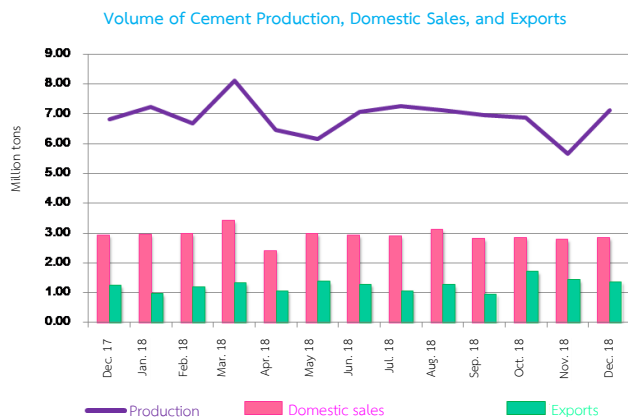
**+** **Domestic sales of motorcycles** in December 2018 reached 137,300 units. The production decreased by 5.72 percent from November 2018 (%MoM) but increased by 4.39 percent from the same month last year (%YoY) resulting from the increase in sales volume of 51-110 cc, 126-250 cc, 251-399 cc. and ≥400 cc. motorcycles.

**+** **Exports of motorcycles** in December 2018 reached 38,324 units. The production increased by 19.11 percent from November 2018 (%MoM) and increased by 7.71 percent from the same month last year (%YoY), whereby exports to the UK, Japan, and Vietnam markets increased.

*"In January 2019, the trend of the motorcycle production industry is expected to growth compared to January 2018."*

## 4. Cement Industry

### Overall Cement Industry



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

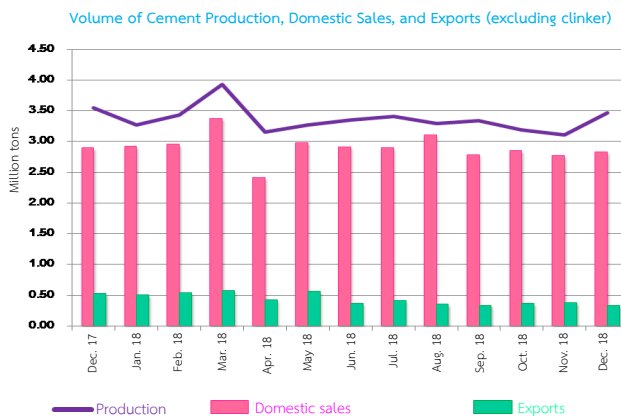
**+** Overall cement production in December 2018 reached 7.13 million tons. The volume increased by 26.06 percent and 4.33 percent from November 2018 (%MoM) and from the same month last year (%YoY) respectively.

**+** Overall domestic cement sales in December 2018 reached 2.84 million tons. The volume increased by 2.08 percent from November 2018 (%MoM); however, the volume slightly decreased by 2.96 percent from the same month last year (%YoY).

**+** Total cement exports in December 2018 reached 1.36 million tons. The volume decreased by 4.27 percent from November 2018 (%MoM) but increased by 10.08 percent from the same month last year (%YoY) as a result of clinker orders from key export markets such as Sri Lanka have increased by 91.80 percent.

The trend of overall cement production industry in January 2019 will rise slightly.

### Cement Industry (excluding clinker)



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

**+** Cement production (excluding clinker) in December 2018 reached 3.47 million tons. The production increased by 11.81 percent from November 2018 (%MoM) but decreased by 2.21 percent from the same month last year (%YoY).

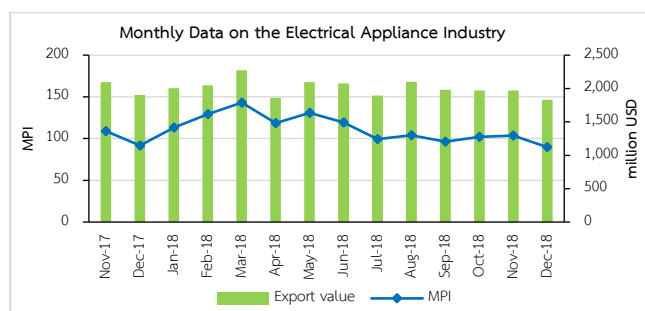
**+** Domestic sales of cement (excluding clinker) in December 2018 reached the total volume of 2.83 million tons. The sale volume increased by 2.27 percent from November 2018 (%MoM) but decreased by 2.29 percent from the same month last year (%YoY).

**-** Export of cement (excluding clinker) in December 2018 amounted to 0.34 million tons, a drop by 11.93 percent from November 2018 (%MoM) and 36.09 percent (%YoY) from the same month of the previous year. The contraction was a result of main export markets—including Laos, Cambodia, and Myanmar—have produced cement locally reducing orders by 40.71 percent, 24.23 percent, and 23.91 percent respectively, as Thai businesses invested in production in key markets.

The trend of the cement industry (excluding clinker) in January 2019 will also continue to rise slightly.

## 5. Electrical and Electronics Industry

### ■ Electrical Industry



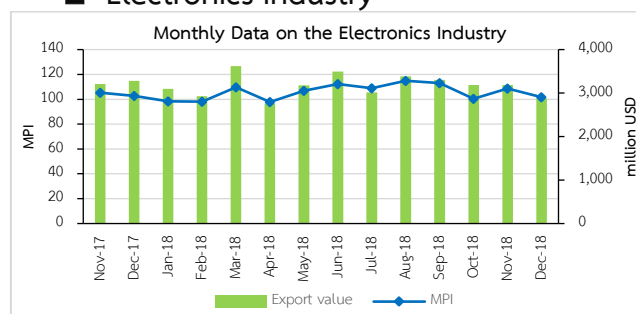
Source: Office of Industrial Economics

❖ **Production of electrical appliances** decreased by 2.1 percent compared to the same month of last year, with the MPI at 89.8. The products that dropped in production were electrical wires, electric motors, washing machines, microwaves and refrigerators by 28.1 percent, 11.6 percent, 11.3 percent, 11.1 percent and 5.8 percent respectively. Electrical wires, electric motors and microwave production shrank from the domestic market, whereas for refrigerators and washing machines, the contraction was due to fewer purchase orders from the US. However, products that grew in production included kettles, air conditioning with split condensing units, air conditioning with split fan coil units, rice cookers, household fans and compressors which increased by 16.1 percent, 14.5 percent, 13.8 percent, 8.7 percent, 6.9 percent and 0.7 percent, respectively. Kettles and air conditioners increased in production both from domestic and foreign markets, whereby air conditioning products grew in Australia, the US, India and Japan, with growth in the Japanese market in preparation of hosting the Olympics in 2020. Rice cookers and fans increased in production from domestic sales.

❖ **Exports of electrical appliances** valued 1,831.5 million USD, a slight drop by 3.8 percent compared to the same month last year as main markets contracted, including the US and China. Switch and electrical control panels valued 156.4 million USD, which was a decrease by 4.4 percent, whereas refrigerators, freezers and components valued 127.5 million USD, a drop by 5.7 percent. Washing machines, dry cleaning machines and components valued 120.5 million USD, a drop by 6.4 percent, contracting by 26.7 percent in the US due to the safeguard on washing machines in the US against Thailand. Meanwhile, air conditioners and components valued 359.9 million USD, an increase of 2.6 percent, from growth by 125.2 percent in the Indian market.

*"Production forecast for January 2019, the electrical industry is expected to increase by 2.45 percent compared to the same last year as a result of increasing order of air conditioners from Japan and ASEAN."*

### ■ Electronics Industry



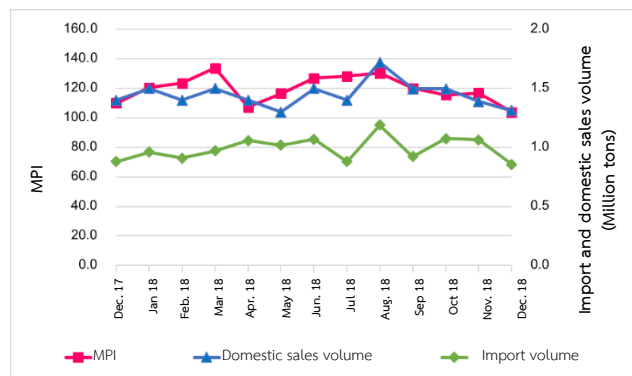
Source: Office of Industrial Economics

❖ **Production of electronics** reached an MPI of 101.6, decreasing by 1.0 percent compared to the same month last year. Electronic products that decreased in production were HDDs, Semiconductor device transistors by 23.5 percent and 11.3 percent respectively due to decreased orders from Hong Kong. Nevertheless, PCBAs, printers, monolithic ICs, and other ICs increased by 22.1 percent, 12.2 percent, 3.4 percent and 2.6 percent respectively. The growth was in line with the expansion of the world's electronics products.

❖ **Exports of electronics** valued 2,878.7 million USD. The value decreased by 12.3 percent compared to the same month last year as a result of dropping in exports to all key markets including Japan, China, ASEAN, the US, and EU. Exports of computers and components reached the export value of 1,084.9 million USD, decreasing by 20.0 percent (exports of HDDs declined by 26.9 percent of which 49.2 percent decreasing in China market). Exports of ICs valued 679.6 million USD, falling by 4.5 percent of which decreased in China and Hong Kong markets by 9.4 percent and 13.5 percent respectively as a result from US-China trade retaliation which affected Thailand's production chains and exports.

*"It is expected that the production of electronics in January 2019 will increase by 3.7 percent compared to the same month last year, from continuously increasing in exports of computers and components, in line with the expansion of the world's electronics products."*

## 6. Iron and Steel Industry



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

**–** The manufacturing production index in December 2018 reached 103.8, a drop by 5.6 percent compared to the same period last year. Analyzed by key products that were flat and long-formed steel, both product groups decreased in MPI. Flat-formed steel reached an MPI of 101.8, a drop by 6.9 percent from a decline in the production of hot-rolled steel coils which decreased by 27.9 percent. This was partly a result from the impact of the trade war between the US and China which caused the steel market to slow down, and causing the price of steel products to decrease; businesses in downstream industries, therefore, delayed orders while awaiting the market direction and price. The other reason was that businesses in downstream industries such as seamless steel pipe manufacturers, imported more steel products as there were cheaper alternatives from foreign countries entering the market, such as products from China and Vietnam, resulting in decreased domestic production, whereas tin-plated steel decreased by 24.7 percent due to the increasing imports among manufacturers in downstream industries. Long-formed steel reached an MPI of 106.0, which dropped by 1.3 percent due to the production of cold-rolled structural steel which decreased by 25.3 percent, followed by steel wires and hot-rolled structural steel, which contracted by 18.9 percent and 3.8 percent respectively.

**–** Domestic sales in December 2018 reached 1.3 million tons, a drop by 6.6 percent compared to the same period last year. Sales of flat-formed steel reached 0.8 million tons, a decline by 12.5 percent, as the sale of hot-rolled steel sheets decreased by 31.7 percent, followed by thin hot-rolled steel sheets and galvanized sheet steel (both HDG and EG) which decreased by 9.4 percent and 6.0 percent respectively. Sales of long-formed steel reached 0.5 million tons, an increase of 5.1 percent from the sale of steel bars and structural steel which grew by 7.9 percent.

**–** Imports in December 2018 reached 0.9 million tons, an increase of 2.5 percent compared to the same period last year. Flat-form steel reached 0.6 million tons, a drop by 7.6 percent from fewer imports of carbon hot-rolled steel sheets, which decreased by 32.1 percent from South Korea and Taiwan, followed by seamless steel pipes and alloy cold-rolled steel sheets which dropped by 31.8 percent and 20.9 percent respectively. Products in the long-formed steel category reached an import value of 0.2 million tons, an increase of 14.8 percent due to the import of stainless steel hot-rolled structural steel which increased by 118.0 percent from China and Japan, followed by alloy bars and seamless steel pipes which grew by 70.7 percent and 35.0 percent respectively.

*“The trend for the steel industry in January 2019 is expected to stabilize compared to the same period last year, with supporting factors from the expansion of downstream industries such as the electrical appliances, automotive and construction industries. However, there are still issues to be monitored about the price drop of steel products in the world market as China reduces consumption of steel products as a result of the price reduction of steel products; it is expected that more steel products will be imported. This is coupled with the impact of the announcement of Article 232 (Section 232) of the US, resulting in the inability of many countries to export steel products to the US, and is likely to be sent to Thailand instead from countries such as China and Vietnam, which will affect Thai manufacturers.”*