

### Industrial Production Status

Indicators	2016	2017												2018				
	Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year	Jan.	Feb.	Mar.	Year(f)
MPI*	1.4	1.0	-1.6	0.9	-1.6	3.0	1.0	4.0	5.6	5.3	1.0	6.3	5.8	2.5	4.7	4.6	2.6	2.5 – 3.0

\*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 **March 2018** remains on the rise for 11 consecutive months since May 2107. **The manufacturing production index (MPI) grew by 2.6 percent** from the same period last year, a result from recovering exports, consistent with the global economic status. Industrial exports in March 2018 grew by 7.7 percent. Furthermore, domestic purchasing power grew in a positive direction, whereby private consumption index<sup>1</sup> expanded from the same time last year, consistent with expenditure which grew in all categories. Expenditure in consumer goods had good growth, evident from the domestic sales volume of automobiles which grew by 12.1 percent and sales volume of services (hotels, restaurants and transportation) which grew consistently by 8.9 percent. The MPI in Q1/2018 grew by 3.93 percent.

Compared to the same period in the previous year (%YoY) for the past 3 months, the MPI of December 2017, January and February 2018 showed a trend of growth, that was in December 2017, January 2018 and February 2018 the rate of change was 5.8 percent, 4.7 percent and 4.6 percent respectively. This was coupled with the **Capacity Utilization Rate (CAP-U) in March 2018 which was 76.06 percent, the highest rate in 60 months** since April 2013. This reflected a stronger and more stable direction of industrial growth.

Indicators	2017												2018		
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
MPI	6.1	0.0	12.0	-20.9	15.0	-3.1	-2.8	4.4	1.6	-5.0	6.5	-3.2	5.0	-0.1	9.9

For the past 3 months (December 2017, January and February 2018) the MPI (%MoM) change rate was -3.2 percent, 5.0 percent and -0.1 percent respectively which was normal, according to seasonal changes throughout the year. MPI of December slowed down after acceleration in November to support purchases during the New Year festivities and slowed down again in February as the month has the least working days in the year.

<sup>1</sup> From Bank of Thailand

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

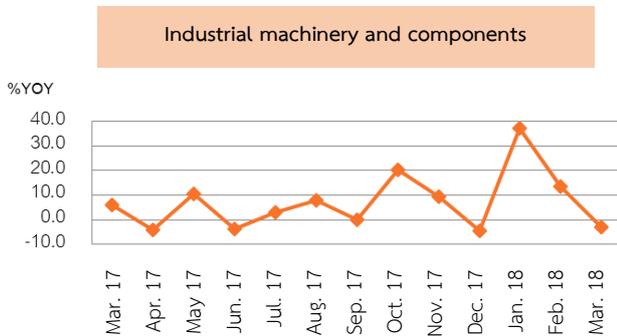
- Automobile - The production increased from last year, from growth in both domestic and export markets. This was a result of consistent growth in the domestic economy, public and private investment, coupled with the expiration for consumers purchasing under the first car scheme and recovering export markets in Asia, Oceania, the Middle East and Africa. Domestic sales grew by 12.1 percent, whereas exports grew by 4.7 percent.
- Sugar - The production increased by 25.59 percent from expansion of plantation area and better weather condition promoting large yields of sugarcane to supply factories.
- Petroleum Refinery - The production increased by 21.98 percent, mostly from Gasohol 91 and 95, diesel fuel and aircraft fuel, in line with growth in the domestic economy, number of automobiles and tourism.
- Vegetable Oil - The production increased mainly from crude palm oil as the previous year faced flooding in the Southern region which led to less yield. Furthermore, this year there was growth in plantation area and better weather condition promoting larger yields in palm.

**The MPI in 2018 is expected to grow in the range of 2.5 - 3.0 percent** (growth in 2017 was 2.5 percent). Exports of goods and tourism are expected to be major driving forces, in line with the evident economic growth of the trading partners and public spending which is projected to remain a major economic driver. Furthermore, there has been progress of major government infrastructure projects and the development of special economic zones. It is expected that this will help boost business confidence and stimulate private investment in the country. Private consumption is expected to continue to grow. This was supported by non-farm household income which showed signs of improvement following rising employment in export-related businesses.

# Other Industrial Economic Indicators in March 2018

## Other Industrial Economic Indicators in March 2018

### ■ Thailand's Industrial Sector Importation



Source: Ministry of Commerce

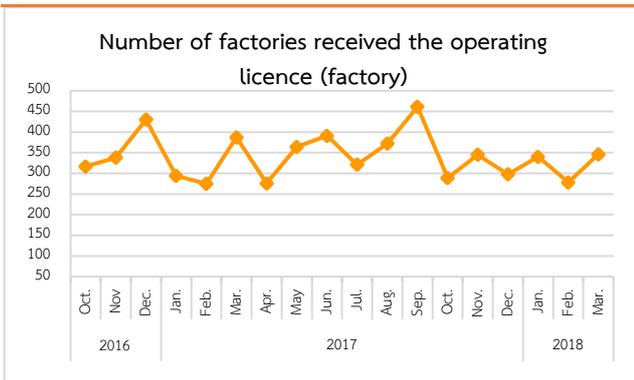


Source: Ministry of Commerce

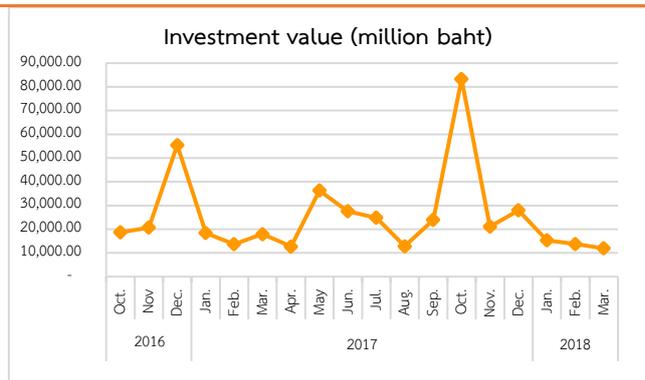
**⊖** The import value of industrial machinery and components in March 2018 was 1,380.6 million USD which decreased by 2.9 percent compared to the same month last year, from a decline in imports of textile machinery, air pumps, liquid pumps, steam turbines and components, construction machinery and components and other industrial machinery and components.

**⊕** The import value of raw material and semi-finished products (excluding gold) in March 2018 was 7,496.4 million USD, a 5.9 percent growth compared to the same month last year, in line with import growth of chemical products, equipment and components of electrical appliances and electronics products; iron, steel and products thereof.

■ Status of Industrial Operations



Source: Department of Industrial Works



Source: Department of Industrial Works

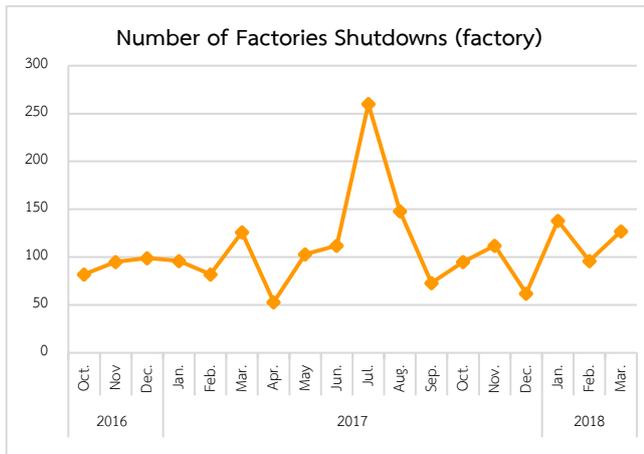
➕ A total of 346 factories obtained licenses for operation in March 2018. The number increased by 24.5 percent from February 2018 (%MoM), but decreased by 10.6 percent from the same month last year (%YoY).

➖ The total value of investment from the factories that obtained licenses for operation in March 2018 was 11,904 million Baht, a decrease by 13.6 percent from February 2018 (%MoM) and 33.5 percent from the same month last year (%YoY).

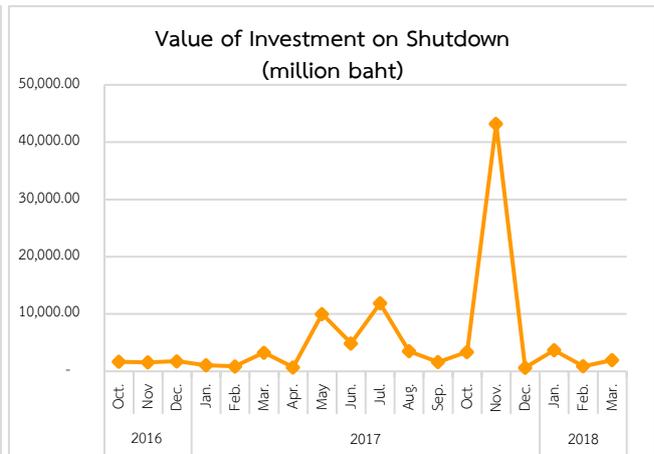
*“The industry with the highest number of new licensed factories for operation in March 2018 was the engine-driven vehicle repair industry (30 factories), followed by the lateritic soil scooping industry for construction and commercial use (25 factories).”*

*“The industry with the highest value of investment in March 2018 was chemical products, chemicals or non-fertilizer chemicals production valued at 1,439 million Baht, followed by industrial waste production to raw materials valued at 917.20 million Baht.”*

■ *Status of Industrial Operations (cont.)*



Source: Department of Industrial Works



Source: Department of Industrial Works

➖ A total of 127 factories ceased operation in March 2018. The number increased by 32.3 percent (%MoM) and increased by 0.8 percent from the same month last year (%YoY).

➕ The lost investment value on cessation of operation equated to 1,946 million Baht, an increase of 115.2 percent from February 2018 (%MoM) but a decrease by 40.3 percent from the same month last year (%YoY).

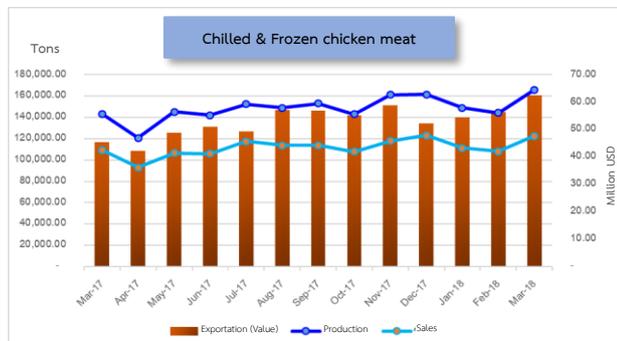
*“In March 2018, factories producing wooden household items, home decoration and wooden furniture had the highest number of shutdowns (15 factories) followed by the gravel, sand and clay digging/scooping industry (13 factories).”*

*“The industry with the highest value of investment with factory shutdowns in March 2018 was the fermentation, carbonizing, clearing, combing, rolling, spinning or dyeing of fibers valued at 537 million Baht, followed by the radio and TV tuner manufacturing, modifying or repairing industry valued at 238 million Baht.”*

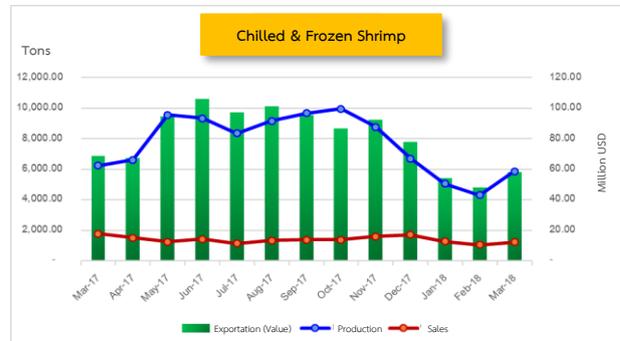
## Industrial Economic Status for January 2018 by Industry

### 1. Food Industry

#### ■ Chilled and Frozen Chicken Meat



#### ■ Chilled & Frozen & Shrimp



⊕ Production of food in March 2018 increased by 23.6 percent last year (%YoY), classified as follows:

1) Export-orientated Products: Production of canned tuna increased (%YoY) by 7.1 percent due to the easing of pressure on raw material price resulting in increased orders.

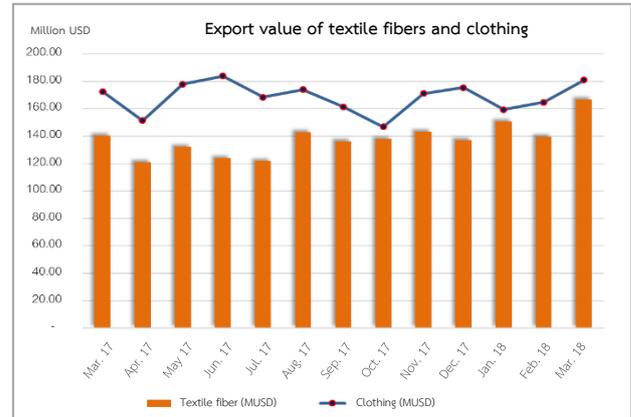
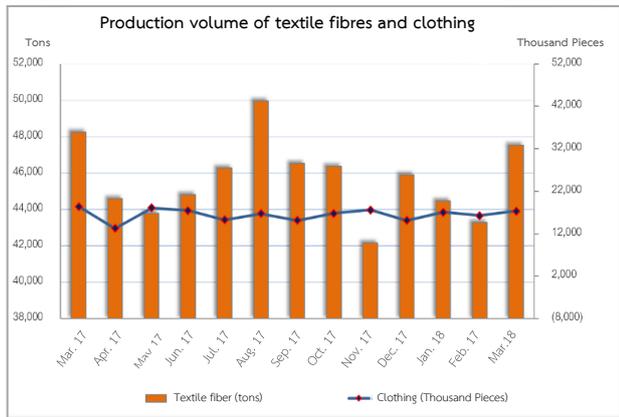
2) Domestic-orientated Products: Production of crude and pure palm oil increased (%YoY) by 54.7 percent and 24.4 percent, respectively due to the increase in palm oil supply from the expansion of plantation areas. This was coupled with the production of frozen chicken which grew (%YoY) by 15.9 percent from a continuous growth in consumption.

⊕ **Domestic market:** Domestic sales volumes of food products grew by 3.7 percent in March 2018 (%YoY), resulting from a positive economic trend.

⊕ **Foreign Market:** The overall value of exports in March 2018 increased (%YoY) by 7.9 percent. Key products included chilled/frozen chicken meat, canned sardines, tapioca products, jasmine rice, instant noodles rice products, canned tuna, and processed chicken increased (%YoY) by 37.6 percent, 28.6 percent, 24.5 percent, 21.0 percent, 16.8 percent, 9.5 percent, 8.5 percent and 1.6 percent respectively. This was from a strong recovery among major trading partners which helped boosting demand for Thai products both directly and indirectly.

⊕ **Production of food industry in April 2018 is expected** to improve from a growth in exports to important trading partners such as Japan, the US, EU and CLMV. This is especially in key products such as chilled and frozen chicken and processed chicken which has seen constant growth as a result of an outbreak of bird influenza and in trading partner and competitor countries, coupled with confidence in the standard of Thai products. Seafood products such as canned tuna and sardines are expected to grow as concerns about raw material prices have relaxed. Furthermore, demand for rice products (white rice and jasmine rice) have also seen increasing demand from trading partners, together with a stable domestic economy and recovering global economy.

## 2. Textile and Garment Industry



### Production

➖ *Textile fibre products* dropped by 1.51 percent (%YoY) from cotton production which had a decline in trend; however, production of synthetic fibres expanded well. Production of fabrics and apparel dropped by 13.90 percent and 5.68 percent respectively, partly due to a fall in domestic demand and stored inventory from production at the beginning of the year which was sufficient for domestic distribution and export.

### Domestic Sales

➖ *Textile fibres, fabrics and garments* decreased by 1.23 percent, 13.0 percent and 3.86 percent respectively, partially because domestic consumption did not grow as consumer confidence had not yet fully recovered.

### Exports

➕ *Textile fibres, fabrics and garments* increased in value by 18.62 percent, 2.89 percent and 4.94 percent respectively, whereby textile fibres grew for 17 consecutive months from November 2016. Key export products were artificial fibres and fabrics made from fibres with special properties, whereby Thailand has potential for both production and export. Key export markets were China, Turkey, Indonesia, Vietnam, and Bangladesh, while key export markets of garments were USA, Japan, and Belgium.

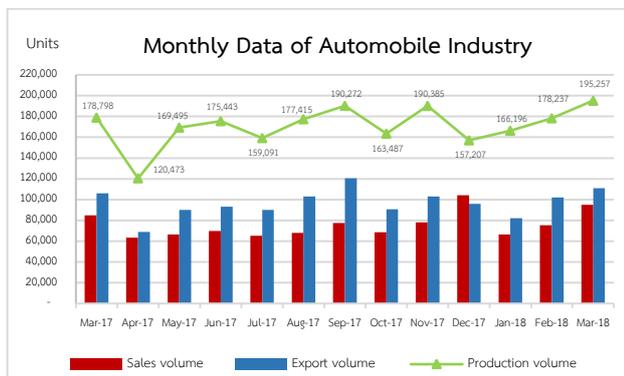
### Forecasts for March 2018

➕ Production of textile fibres and fabrics are expected to grow from exports of synthetic fibres and fabrics made from specialty fibres, within the Asian market.

➕ *Production of garments* are expected to grow as exports of apparel and underwear increase to Japan, South Korea and EU.

### 3. Automotive Industry

#### ■ Automobile Production Industry



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

**+** **Automobile production** in March 2018 reached 195,257 units, a 9.55 percent growth from February 2018 (%MoM) and 9.21 percent from the same month last year (%YoY) from increased production of passenger cars, and 1-ton pickup trucks and derivatives.

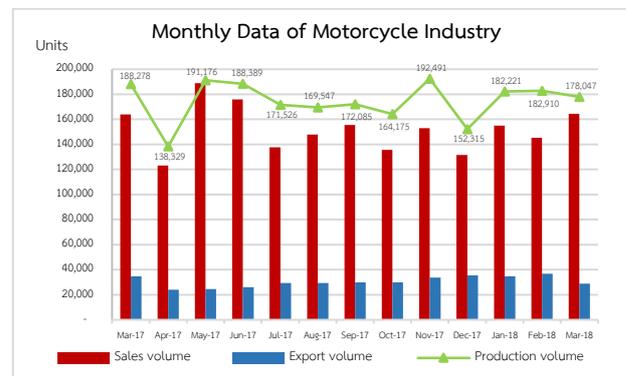
**+** **Domestic sales of automobiles** in March 2018 reached 95,082 units, a 25.99 percent increase from February 2018(%MoM) and 12.12 percent from last year (%YoY), due to an increase in sales of passenger cars, 1-ton pickup trucks, PPV and SUV vehicles. This was a result of large volumes of car reservations from the 39<sup>th</sup> Bangkok International Motor Show which showcased new models, and constant growth in public and private investment.

**+** **Automobile exports** in March 2018 reached 110,946 units, an 8.54 percent growth from February 2017 (%MoM) and 4.70 percent from the same period last year (%YoY). Exports of automobiles grew for 5 consecutive months, the increase was in Oceania, Middle East and Africa countries.

*“In April 2018, the trend of the automobile industry is expected to grow compared to April 2017 from the recovery of both domestic and global economy, coupled with the fifth anniversary of the first car scheme.”*

Source: Office of Industrial Economics; initial 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

**-** **Motorcycle production** in March 2018 reached 178,047 units, a 2.66 percent decrease from February 2018 (%MoM), and a 5.43 percent decrease from the same period last year (%YoY), from a decrease in production of sport motorcycles.

**+** **Domestic sales** of motorcycles in March 2018 reached 164,576 units, a 13.17 percent increase from February 2018 (%MoM), and a 0.33 percent increase from the same period last year (%YoY)

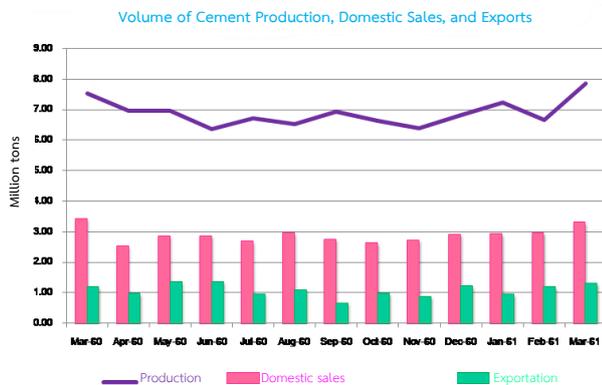
**-** **Exports of motorcycles** in March 2018 reached 28,901 units, a decrease from February 2018 by 21.62 percent (%MoM) and a 16.96 percent drop from the year before (%YoY), whereby export markets that slowed down were the UK, the Netherlands, and Japan.

*“In April 2018, the trend of the motorcycle production industry is expected to grow compared to April 2017 due to the expansion of domestic economy.”*

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

## 4. Cement Industry

### ■ 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

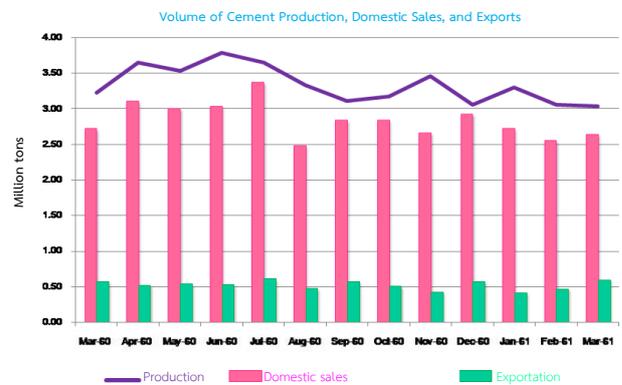
**+** **Production of cement** in March 2018 reached 7.86 million tons, a 17.72 percent growth from February 2016 (%MoM) and 4.25 percent from the same month last year (%YoY) to support forecasted increase in consumption.

**+** **Domestic cement sales** in March 2018 reached 3.32 million tons, a 11.37 percent growth from February 2018 (%MoM) but a drop by 3.16 percent compared to the same month last year (%YoY) as the result of high competition in the market.

**+** **Export of cement** in March 2018 reached 1.32 million tons, an increase by 10.29 percent from February 2017 (%MoM) and 8.41 percent from the same month last year (%YoY), from increased purchase orders from the Philippines and Bangladesh by 3,457.83 percent and 49.88 percent respectively.

**-** In April 2018, the overall cement industry is expected to slow down slightly as the production in March had been increased to support the consumption which is expected to grow.

### ■ 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 March 2018 reached 3.83 million tons, an increase of 11.75 percent from February 2018 (%MoM) and a 4.87 percent increase from the same month last year (%YoY).

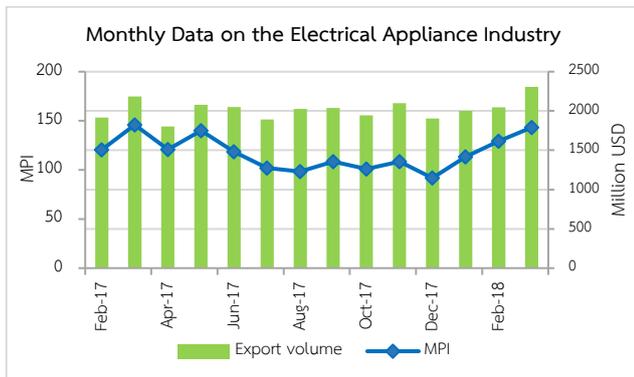
**+** **Domestic cement sales (excluding clinker)** in March 2018 reached 3.29 million tons, an increase by 11.35 percent from February 2018 (%MoM), but a drop by 2.81 percent from the same month last year (%YoY) as the result of high competition in the market.

**+** **Export of cement (excluding clinker)** in March 2018 reached 0.57 million tons, a 6.01 percent growth from February 2018 (% MoM) but a drop by 8.28 percent from the same month last year (%YoY), as a result from a slowdown in purchase orders from key markets including Sri Lanka, Vietnam, Laos, and Cambodia by 100 percent, 100 percent, 24.24 percent, and 13.59 percent respectively

**+** In April 2018, the cement industry (excluding clinker) is expected to grow slightly.

## 5. Electrical and Electronics Industry

### ■ Electrical Industry



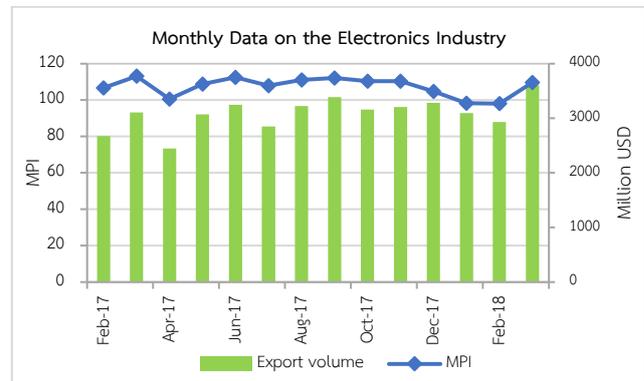
Source: Office of Industrial Economics

➖ **Production of electrical appliances** reached a production index of 143.14, a slight drop by 2.12 percent compared to same month last year. Products which decreased in production were kettles, electrical motors, refrigerators, rice cookers, washing machines and compressors by 32.87 percent, 19.45 percent, 11.29 percent, 10.05 percent and 1.72 percent respectively, as washing machines and refrigerators in the inventory were sold. On the other hand, production of electric wires, household fans, microwaves and air conditioners grew by 24.72 percent, 18.36 percent, 8.26 percent and 0.81 percent respectively. This was because air conditioners sold domestically and exported increased, and electrical wires were used to develop infrastructure in the country.

➕ **Export of electrical appliances** valued 2,304.77 million USD, an increase by 5.47 percent compared to the same month last year. Exports to key markets rose, including China, ASEAN, EU and Japan, with the export of air conditioners reaching 591.29 million USD, rising 15.18 percent, followed by exports of refrigerators and washing machines which valued 150.95 million USD and 132.10 million USD, an increase of 8.51 percent and 10.26 percent respectively.

“The manufacturing production index is forecasted to increase slightly in April 2018, by 4.35 percent compared to the same period last year. Products that are expected to slow down are air-conditioners from less domestic sales and purchase orders from abroad and washing machines from less purchase orders from abroad, whereas products that are expected to grow are electrical wires used in the foundations of construction in the country.”

### ■ Electronics Industry



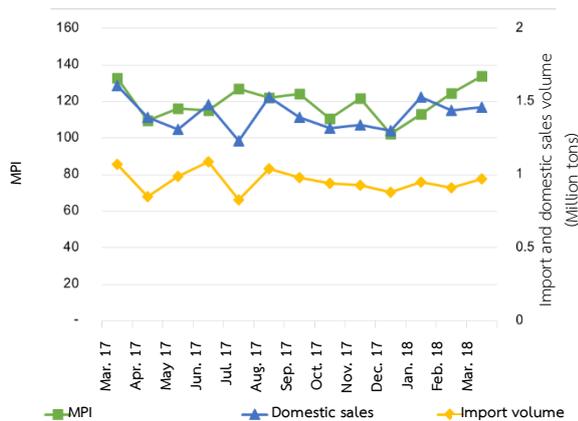
Source: Office of Industrial Economics

➕ **Production of electronics** reached a production index of 109.78, an increase by 3.33 percent from the same month last year. Categories that grew were semiconductors, HDDs, PCBAs, and monolithic ICs by 13.80 percent, 10.02 percent, 6.90 percent and 6.03 percent respectively, in line with the global growth of electronics. Furthermore, ICs are crucial to advanced technological development, used in smart phones, tablets and HDDs, and to expand capacity in cloud storage.

➕ **Export of electronics** valued at 3,603.21 million USD, a 16.01 percent growth compared to the same month last year. Exports to all key markets improved including China, Japan, ASEAN, EU and USA. Electronic products with the highest export value were computer equipment and parts with a value of 1,568.91 million USD, an increase by 11.51 percent, followed by ICs valued at 830.93 million USD.

“The manufacturing production index for electronics in April 2018 is expected to increase by 5.15 percent compared to the same month last year, from exports of computer equipment and parts and ICs which have grown consistently.”

### 6. Iron and Steel Industry



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

**+** The manufacturing production index in March 2018 reached 133.79, an increase by 0.81 percent compared to the same period last year. Analyzed by key products that were flat and long-formed steel, it was found that flat steel increased by 3.99 percent from a 16.54 percent increase in tin-plated steel sheets. This was followed by hot-rolled steel sheets and steel pipes which grew by 9.71 percent and 7.56 percent respectively, from positive price factors which increased and constant industrial demand in the canning industry for example. Long-formed steel dropped by 4.09 percent, whereby deformed steel decreased by 15.61 percent, the sixth consecutive month since October 2017. This was followed by round bars which dropped by 2.29 percent as the domestic construction and real estate industries slowed down.

**-** Domestic sales volume in March 2018 was 1.46 million tons, a 9.24 percent drop from last year. Long-formed steel equated to 0.52 million tons, a 6.05 percent drop, whereby steel rods and structural steel products dropped by 20.84 percent, decreasing for the first month after a two-month consecutive incline; this was due to imports of carbon structural steel and rods which dropped by 35.98 percent and 15.47 percent respectively. Flat steel products dropped by 10.88 percent to 0.95 million tons, whereby hot-rolled steel sheets dropped by 65.86 percent, followed by other-plated sheets, chromium-plated sheets and tin-plated sheets which dropped by 14.99 percent, 11.42 percent and 10.95 percent respectively.

**-** The import volume in March 2018 was 0.97 million tons, a 9.12 percent drop compared to the same period last year. Flat-form steel reached 0.74 million tons, a 13.93 percent drop as imports of hot-rolled stainless-steel sheets, galvanized sheet sheets and hot-rolled carbon steel sheets dropped by 75.18 percent, 47.94 percent and 37.63 percent respectively. Long-formed steel reached 0.23 million tones, a 10.58 percent increase from imports of hot-rolled alloy and stainless structural steel increase by 242.02 percent and 227.69 percent.

“The trend for the steel industry in April 2018 is expected to increase in production by 4.74 percent, with long-formed steel increasing by 8.31 percent, whereby flat-formed steel is projected to increase by 2.58 percent as iron prices in the market have a positive trend. This is coupled with the recovery of downstream industries, however issues to monitor are US trade measures which may become a barrier for steel manufacturers and downstream industries in terms of exports.”