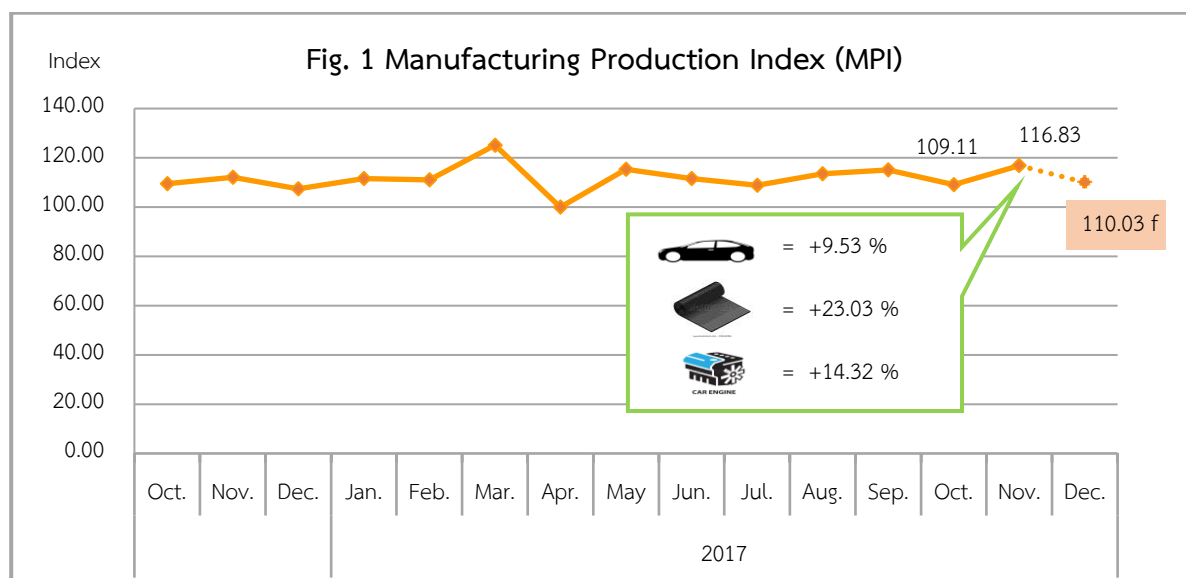


## Domestic Industrial Production Status

In summary, industrial production has a current positive trend which has lasted since July 2017 as shown in Figure 1. Most recent information from November 2017 saw a MPI growth of 4.23 percent and is likely to grow until the end of 2017.



Source: Office of Industrial Economics

\* f = Forecasts by Office of Industrial Economics

## Manufacturing Production Index for November 2017

↑ Industrial Index Overview: Production increased by 4.23 percent compared to the same period last year.

↑ Automobile Industry: Production increased from a rise in domestic sales of small-sized passenger cars and pick-up trucks. This was a result of the recovering economy which led to increased domestic sales. Economies of trade partners also recovered, particularly within ASEAN, Australia, New Zealand and Italy, resulting in more exports of pickup trucks.

↑ Non-Tire Rubber Products Industry: Production increased from rubber sheet and block products, resulting from more market expansions. In addition to this, China experienced a drop in the rubber stocks which resulted in higher demand for imported products.

↑ Auto-Parts Industry: Production increased from the higher domestic sales of diesel engines. This was a result from more purchase orders from manufacturers in support of the Motor Expo. Exports on the other hand increased from growing purchase orders from Australia and trade partners in ASEAN.

*Industrial Economic Status Forecasts for December 2017*

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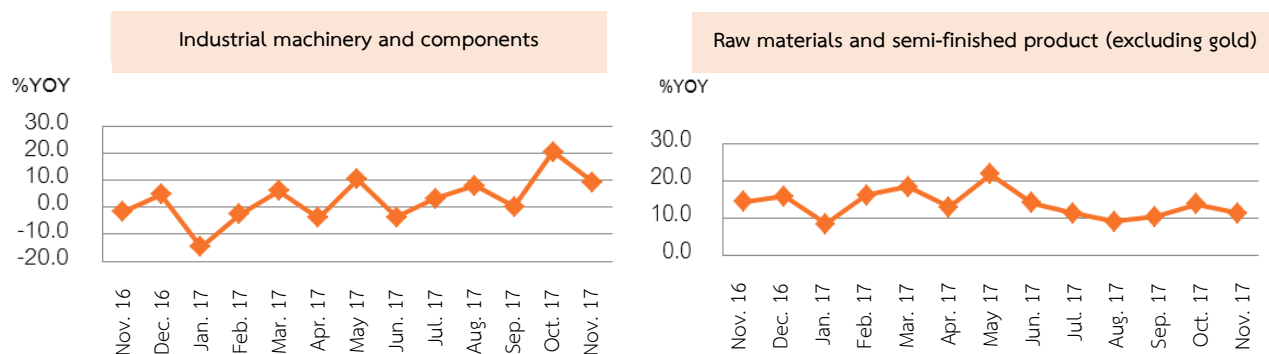
↑ Thailand's Manufacturing Production Index (MPI) for December 2017 is forecasted to hit 110.03 points, a growth rate in the 2.0-2.5 percent range from the same period last year, and a 4.56 percent growth from this November. Key industries with forecasted growth include **electronic components** (due to the increasing global demand for electronic components from the demand for high technology. The result is more production and export) and **production of vegetable oil** (due to expansion of palm plantations 2-3 years ago, now outputs are beginning to reach the market resulting in more raw materials and increased production).

## Other Industrial Economic Indicators

### in November 2017

## Other Industrial Economic Indicators in November 2017

### Thailand's Importation of Industrial Sector



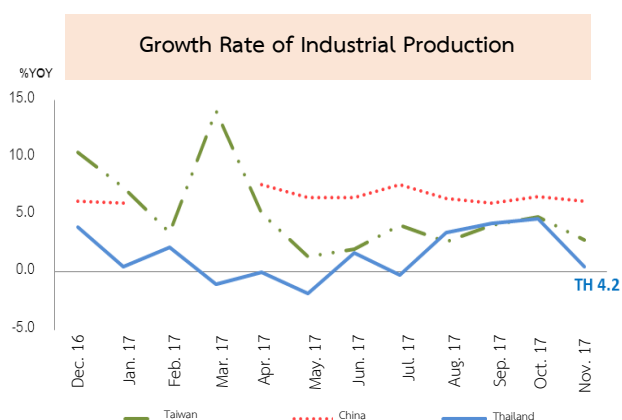
Source: Ministry of Commerce

Source: Ministry of Commerce

😊 The import value of industrial machinery and components in November 2017 was 1,539.3 million USD which grew by 9.3 percent compared to the same month last year, from increased imports on engine, drive shaft and components; steam turbines and parts; and machinery in the printing industry.

😊 The import value of raw material and semi-finished product (excluding gold) in November 2017 was 6,863.2 million USD which grew by 11.4 percent compared to the same month last year, in line with import growth of chemicals; iron, steel and products; equipment and parts of electrical appliances and electronics.

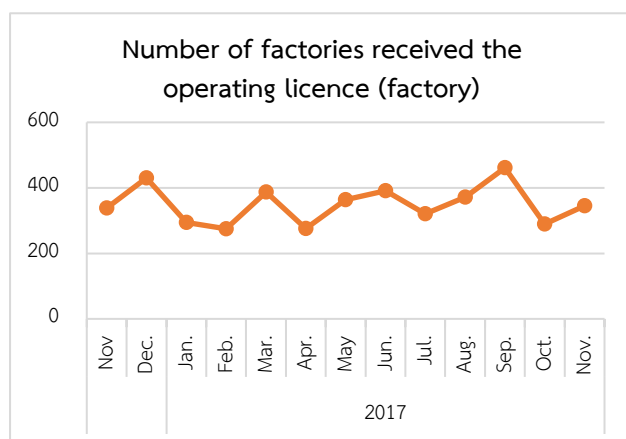
### Thailand's Industrial Production Growth Compared with Major Countries in Asia



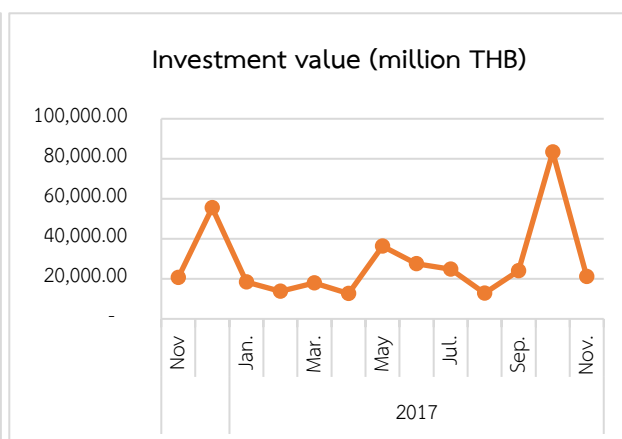
Source: Data collected by Office of Industrial Economics

😊 Thailand's industrial production grew by 4.2 percent in November 2017 compared to the same month last year, and still higher than the previous month. Compared with other major countries in Asia, it was found that China and Taiwan also increased production growth from the same month last year, whereby growing 6.1 percent and 1.2 percent respectively, but slowing down compared to the previous month.

## ■ Status on Industrial Operations



Source: Department of Industrial Works



Source: Department of Industrial Works

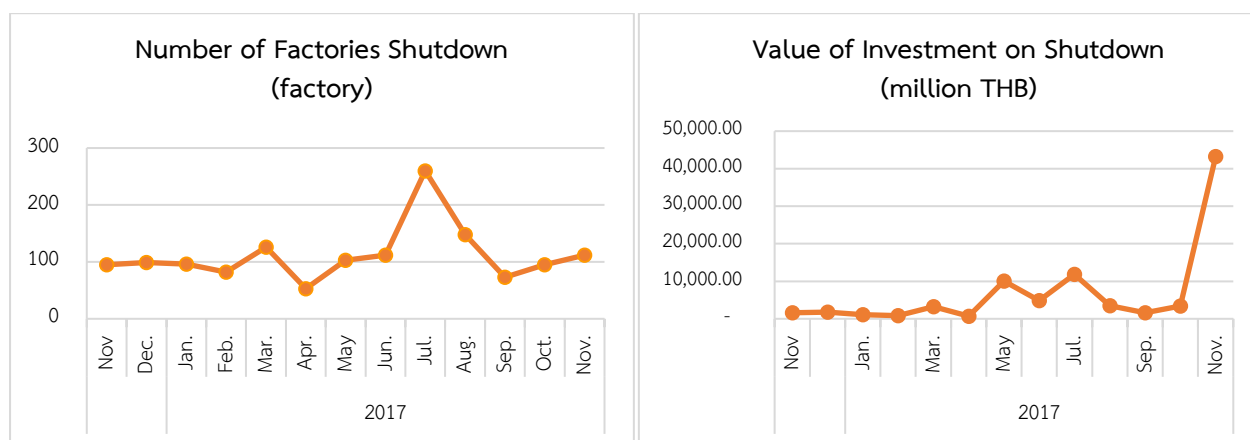
😊 A total of 345 factories obtained licenses to operate in November 2017, a growth of 19.38 percent from October 2017 (%MoM) and an increase of 2.07 percent from the same period last year (%YoY).

😐 The total value of investment from the factories that obtained licenses to operate in November 2017 was 21,122 million THB, a decrease of 74.64 percent from October 2017 (%MoM) but an increase of 2.04 percent from the same month last year (%YoY).

*“In November 2017 the automobile repair or automobile parts industry had the highest number of new licensed factories for operation with 22 factories, followed by the gravel, sand and clay digging/scooping industry (20 factories)”.*

*“The industry with the highest value of investment in November 2017 was thermoelectricity valued at 3,547 million THB, followed by seasoning or food ingredients valued at 2,614 million THB.”*

## ■ Status on Industrial Operations (cont.)



Source: Department of Industrial Works

Source: Department of Industrial Works

☹ A total of 112 factories ceased operation in November 2017, an increase from October 2017 by 17.90 percent (%MoM) and 17.90 percent from the same month last year (%YoY).

☹ The value of investment lost on cessation of operation equated to 43,220 million THB, an increase from October 2017 by 1,177 percent (%MoM) and 2,640 percent from the same month last year (%YoY).

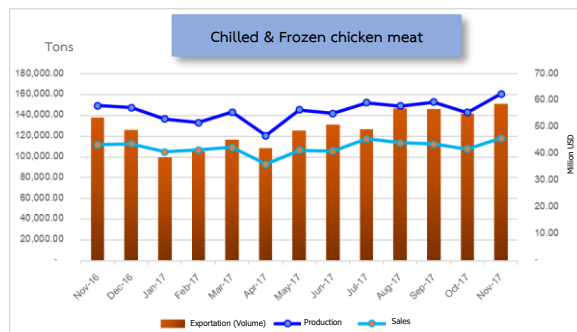
*“In November 2017, the gas packing industry had the highest number of factory shutdowns (16 factories) followed by the concrete, gypsum concrete and plaster production industry (8 factories).”*

*“The industry with the highest value of investment with factory shutdowns in November 2017 was the chemical, chemical substance or chemical material production industry with 36,300 million THB, followed by the general packing industry with 5,253 million THB.”*

## Industrial Economics Status for November 2017 by Industry

### 1. Food Industry

#### ■ Chilled & Frozen Chicken Meat



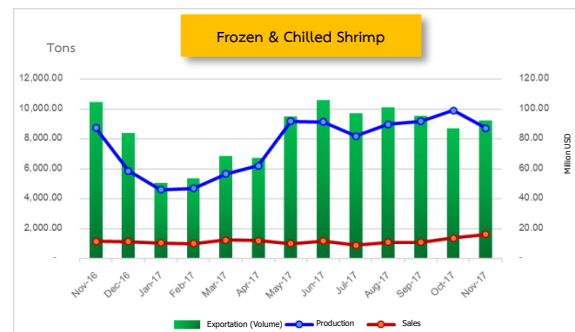
☹️ The production of food products increased in line with increased agricultural outputs and was boosted significantly by exports from continuously growing consumption. Domestic consumption also increased from the positive trend of economic recovery.

☹️ Production of food in November 2017 saw an increase of 14.6 percent from last year (%YoY). The details are:

1) Export-orientated Products: Cassava increased (YoY) by 19.2 percent as China started to increase purchase orders, followed by processed chicken products which increased (YoY) by 3.8 percent resulting from constant demand in export markets in support of year-end travelling. In addition to this, South Korea, Japan, USA and many European countries faced problems with bird influenza which led to importers ordering more processed chicken meat, particularly in key import markets such as Japan, UK and the Netherlands.

2) Domestic-orientated Products: Palm oil, sugar, animal (chicken) feed and frozen and chilled chicken meat increased (YoY) by 119.0 percent, 43.0 percent, 11.9 percent and 7.6 percent respectively, to support increased outputs particularly for palm oil. In addition to this, there was a continuous rise in consumption for food products.

#### ■ Chilled & Frozen Shrimp

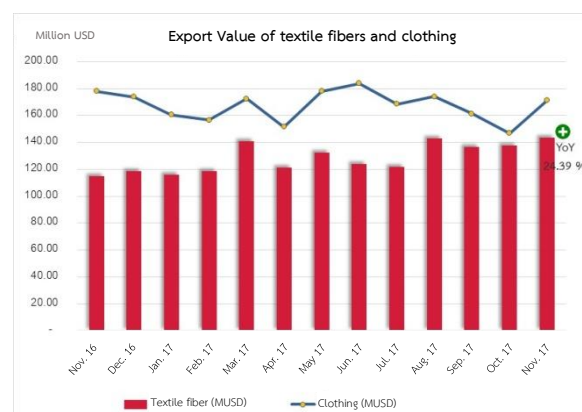
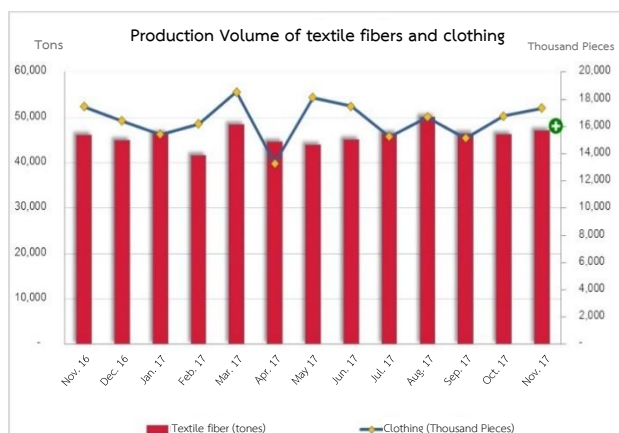


😊 **Domestic Market:** Domestic sales volumes for food products increased by 11.8 percent in November 2017 (YoY), resulting from a positive economic trend. The end of year shopping tax break in 2017 was also an advantage to further drive domestic consumption.

😊 **Foreign Market:** The total export of food products in November 2017 increased (YoY) by 20.1 percent. Key products included wheat products and other ready-made meals, sugar, canned tuna, processed chicken, chilled/ frozen chicken meat and rice products which increased (YoY) by 40.7 percent, 28.4 percent, 19.6 percent, 14.6 percent, 9.7 percent and 9.3 percent respectively, in response to increased purchase orders from importers.

*“Production and export of food products in December 2017 are expected to increase from the same period last year, as a result of positive factors motivating production of key products such as poultry (frozen/ chilled/ processed chicken meat) which has seen a constant growth as a result of an outbreak of bird influenza and in support of the travelling season in trade partner countries (Japan and South Korea). Furthermore, demand for canned pineapples have increased as pineapple products have become cheaper in line with the price of raw materials. Rice products (white rice and jasmine rice) have also seen increasing demand, coupled with a stable domestic economy and the advantage of the end of year shopping tax break in 2017, as well as the recovering global economy,”*

## 2. Textile and Garment Industry



### Production

➕ Production of textile fibers increased by 2.1 percent (YoY), particularly in the polyester and special fibers segment such as collagen and composite fibers. Production increased to support the growth of exports.

➖ Production of fabrics and garments shrank 10.9 percent and 0.6 percent (YoY) respectively. This was partially because the base volume last year was relatively high from demand of black clothes and fabrics used for decorations and worn during the mourning period for the His Majesty King Rama 9, and also because exports of apparel to key markets such as EU and USA slowed down.

### Domestic Sales

➖ Textile fibers, fabrics and garments decreased by 10.2 percent, 15.7 percent and 0.5 percent in sales, partially because the base volume last year was relatively high from demand of black clothes and fabrics worn and used for decorations during the mourning period for the His Majesty King Rama 9.

### Exports

➕ The export value of textile fibers and fabrics increased by 24.4 percent and 15.2 percent respectively. Textile fibers have consistently grown over 13 months from November 2016, with the key export product being specialty fibers and fabrics made from specialty fibers. For these product segments, Thailand still has potential to produce and export to major markets including Indonesia, Vietnam, Turkey and Bangladesh.

➖ The export value of garments shrank 3.9 percent, mostly in key markets such as USA and EU where Thailand is not part of the Generalised Scheme of Preferences (GSP). On the other hand, exports of female undergarments to Japan and Europe and exports of apparel to ASEAN markets continued to grow.

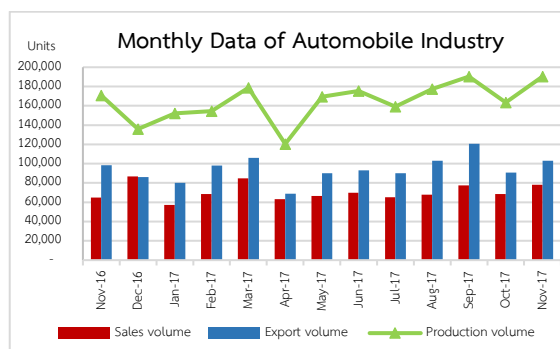
### Forecasts for December 2017

➕ Production of textile fibers are expected to grow from exports of synthetic fibers and specialty fibers, especially within the ASEAN market.

➖ Production of fabrics and garments are expected to slow down as exports are still faced with uncertainty in USA and EU especially, where Thailand is not part of the Generalised Scheme of Preferences (GSP).

## 3. Automotive Industry

### ■ Automobile Production Industry



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

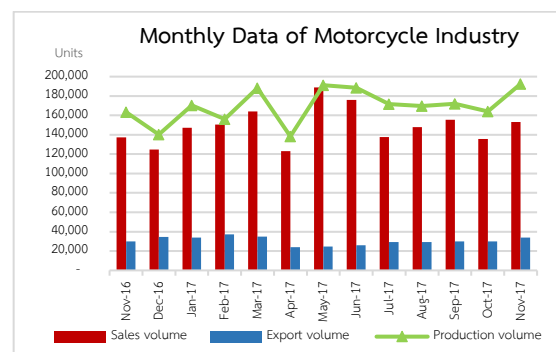
😊 **Automobile production** in November 2017 reached 190,385 units, the highest volume in the past 20 months. This was an increase by 16.45 percent from October 2017 (%MoM) and 11.48 percent from the same month last year (%YoY) from increase production of passenger cars, 1-ton pickup trucks and derivatives, and commercial vehicles.

😊 **Domestic sales of automobiles** in November 2017 reached 78,082 units, an increase of 13.90 percent from October 2017 (%MoM) and 20.55 percent from the same period last year (%YoY) from increased sales of passenger cars and 1-ton pickup trucks for commercial use, coupled with PPV and SUV vehicles from consistent demand for new models which several manufacturers have released into the market. In addition to this, there was also a consistent inflow of tourists into Thailand, increased exports and recovering private investment, as well as acceleration of public investment.

😞 **Automobile exports** in November 2017 reached 103,042 units, an increase by 13.43 percent from October 2017 (%MoM) and 4.64 percent from the same period last year (%YoY), due to growing exports of pickup trucks to almost all markets, except Europe and Northern America.

*"In December 2017, the trend of the automobile industry is expected to grow compared to December 2016 as both the domestic and global economy is on a rising trend."*

### ■ Motorcycle Production Industry



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

😊 **Motorcycle production** in November 2017 reached 192,451 units, an increase of 17.22 percent from October 2017 (%MoM) and 17.78 percent from the same period last year (%YoY), from an increase in multipurpose and sport motorcycle models.

😊 **Domestic sales of motorcycles** in November 2017 reached 153,058 units, an increase of 12.90 percent from October 2017 (%MoM) and 11.48 percent from the same period last year (%YoY)

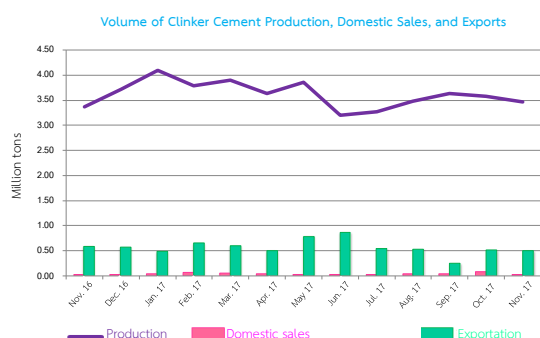
😊 **Exports of motorcycles** in November 2017 reached 33,822 units, an increase of 13.35 percent from October 2017 (%MoM) and 12.99 percent from the same period last year (%YoY). Export markets which expanded included the USA, Myanmar and Canada.

*"In December 2017, the trend of the motorcycle industry is expected to grow compared to December 2016."*

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

## 4. Cement Industry

### ■ Clinker Cement Industry



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

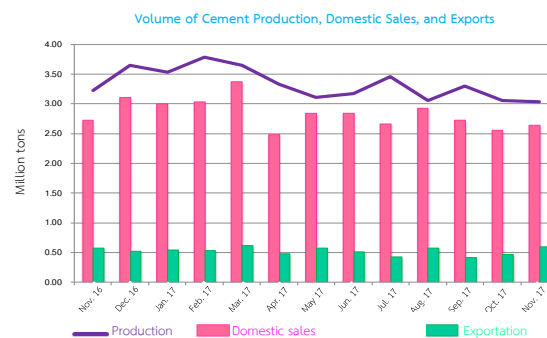
☹️ **Clinker cement production** in November 2017 reached 3.46 million tons, a drop of 3.16 percent from October 2017 (%MoM) but an increase of 2.76 percent from the same month last year (%YoY).

☹️ **Domestic clinker cement sales** in November 2017 reached 0.02 million tons, a drop of 73.05 percent from October 2017 (%MoM) but the same volume as the same month last year (%YoY).

☹️ **Export of clinker cement** in November 2017 reached 0.5 million tons, a drop of 2.24 percent from October 2017 (%MoM) and 15.16 percent from the same month last year (%YoY), as a result of less purchase orders.

☹️ *In December 2017, the clinker cement industry is expected to slow down compared to the same month last year.*

### ■ Cement Industry



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

☹️ **Cement production** in November 2017 reached 3.04 million tons, a drop of 0.73 percent from October 2017 (%MoM) and 5.83 percent from the same month last year (%YoY).

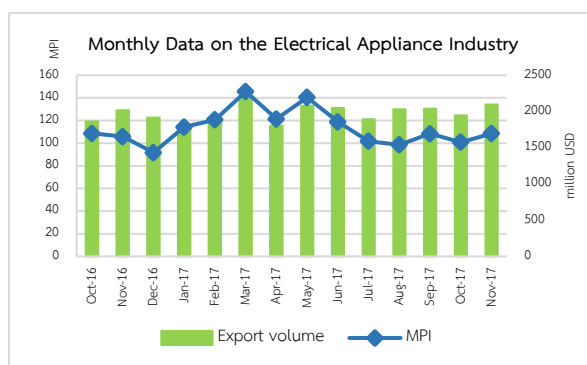
☹️ **Domestic cement sales** in November 2017 reached 2.65 million tons, an increase by 3.10 percent from October 2017 (%MoM). This is because after the new fiscal year commences, the public sector will be able to continue on construction of infrastructure and the private sector was able to continue on projects as the rainy season slowed down. However, when compared to the same month last year (%YoY), production dropped by 3.11 percent from higher market competition than last year.

😊 **Export of cement** in November 2017 reached 0.61 million tons, an increase of 26.80 percent from October 2017 (%MoM) and 4.54 percent from the same month last year (%YoY), as a result from recovering export markets.

😊 *In December 2017, the cement industry is expected to grow slightly from domestic construction which has started to grow from government investments, and from growing export markets.*

## 5. Electrical and Electronics Industry

### ■ Electrical Industry



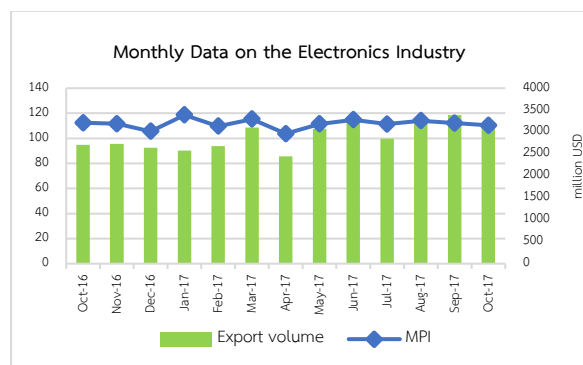
Source: Office of Industrial Economics and Electrical and Electronics Institute

😊 **Production of electrical appliances** reached a production index of 108.53, an increase of 2.66 percent compared to last year. Categories that grew were washing machines, compressor, kettles, rice cookers and electric wires which increased by 43.57 percent, 4.06 percent, 1.21 percent, 3.14 percent and 13.56 percent respectively. Higher production arose from more domestic consumption, coupled with more purchase orders from foreign buyers. On the other hand, production of air conditioners, fans, refrigerators microwaves and electronic motors dropped 4.71 percent, 2.50 percent, 3.73 percent, 3.45 percent and 0.90 percent respectively.

😊 **Export of electrical appliances** valued at 2,097.15 million USD, an increase of 16.41 percent compared to the same month last year, and an adjustment by 11.45 percent. Exports to key markets rose, including China, Japan, ASEAN, EU and USA with the export of air conditioners, a high-value product rising 13.06 percent to reach 305.08 million USD, followed by washing machines with a 72.64 percent climb from last year valuing 150.77 million USD.

*“The manufacturing production index is forecasted to increase slightly in December 2017, by 0.85 percent compared to the same period last year, as the production of washing machines exported to key markets, particularly USA have increased and because electric wires are important to the expanding domestic infrastructure.”*

### ■ Electronics Industry



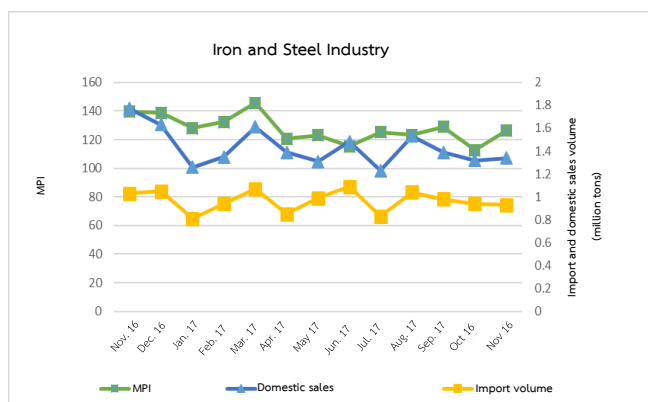
Source: Office of Industrial Economics and Electrical and Electronics Institute

😊 **Production of electronics products** reached a production index of 110.34, an increase of 1.14 percent compared to the same month last year. Key categories included semiconductors, HDD and PCBA which grew by 6.57 percent, 22.03 percent and 7.77 percent respectively, resulting from a growth in global electronic products.

😊 **Export of electronics** valued at 3,478.46 million USD, an increase of 19.62 percent 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 1,396.51 million USD, an improvement of 20.03 percent compared to last year, followed by ICs valued at 715.65 million USD, an increase of 5.69 percent from last year.

*“The manufacturing production index for electronics in December 2017 is expected to increase by 7.87 percent compared to the same month last year, from an increase in exports of mainly computer equipment and parts and integrated circuits.”*

## 6. Iron and Steel Industry



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

☹️ **The manufacturing production index** in November 2017 reached 126.35, a drop of 9.36 percent compared to the same period last year. Production of long-formed steel decreased by 14.28 percent whereby deformed bars decreased by 17.85 percent due to faulty machinery in 1 major manufactures facility, resulting in less production. In addition to this price of materials increased, therefore some manufacturers slowed down production. Flat steel decreased by 7.26 percent (chromium coated sheets decreased by 32.56 percent as continuous industry, that is the canned fish sector, reduced production), whereas structural steel products increased 4.88 percent, with cold rolled steel increasing 16.59 percent, as the production compensated for the lowered storage of products.

☹️ **Domestic sales volume** in November 2017 was 1.34 million tons, a decrease of 24.60 percent compared to last year. Long-formed steel equated to 0.52 million tons, a decline by 33.8 percent, whereby steel rods and structural steel products dropped 47.6 percent, decreasing for the third consecutive month since September-November 2017; this was due to the stagnant construction industry. Flat steel products shrank by 16 percent dropping to 0.83 million ton, whereas chromium-plated steel sheets shrank by 41.4 percent.

☹️ **The import volume** was 0.93 million tons, dropping 9.60 percent compared to the same period last year. A total of 0.23 million tons of long-formed steel products was imported, a decrease of 1.7 percent, whereas 0.70 million tons of flat steel was imported, dropping 11.9 percent.

*“The trend for the steel industry in December 2017 is expected to drop by 11.48 percent with long-formed steel decreasing 24.97 percent, whereby deformed steel is projected to decrease by 28.78 percent, followed by steel rods by 11.26 percent, as a result of a slowdown in the construction industry. Flat formed steel is projected to drop by 0.47 percent, whereby chromium-plated steel sheets is projected to drop 22.69 percent from price competition arising from imported products from China and hot-rolled stainless steel sheets is projected to decrease by 15.72 percent, whereby structural steel is projected to increase by 11.65 percent. On the other hand, hot-rolled structural steel is expected to grow by 17.83 percent.”*