

Summary of Industrial Economic Status

The Manufacturing Production Index (MPI) in April 2016 continued to expand 1.5% when compared with the same period of the previous year (YoY). The major expanded industries included automobiles, components for automobiles, air conditioners and oil refining.

Automotive industry in April 2016 expanded when compared with the same period of 2015, which it was increasing in domestic market due to some operators produced Pickup Passenger Vehicle (PPV) to meet with a demand of market. Meanwhile, export market remained in a slowdown.

Cement industry in April 2016 continued to expand as well, which production and domestic sales increased due to a rising construction sector as a result of government stimulus measures and accelerating large construction projects of the government. It made that private sector has more confidence in investments. Export value dropped slightly, due to a decrease of order from major export markets, such as Myanmar, Indonesia, and Cambodia.

<u>operations</u>, increased 8.7% from March 2016, the total investment capital expanded 83.3%, but the employment rates dropped 10.3%. The major industry was the production of electricity from solar cells, with 67 plants for a total investment amount of 26,402 million baht and 581 employees hired. When compared with the same month of the previous year, the number of plants that commenced operations increased 17.8% from April 2015. On the other hand, <u>57 plants closed</u> in April 2016, decreased 72.7% from March 2016, and also shrank 35.2% from the same month of the previous year.



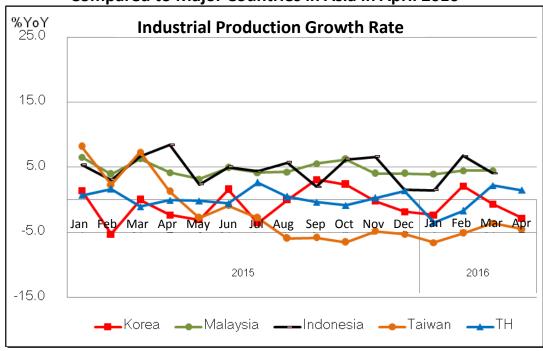
Imports of Thailand's industry sector in April 2016, an import of industrial machinery and accessories contracted 8.6% YoY, stemming from a decrease of imports of air pumps, liquid pumps, and machinery used in the processing of metals and parts.

The imports of raw materials and semi-finished goods (excluding gold) had a value of \$5,718.4 million USD, which shrank 7.8% YoY, due to a decrease of imports of yarns and fibers, fabrics, chemicals, and components of electrical appliance.

Energy consumption of manufacturers in April 2016 stood at 10,136.3 million kWh (kilowatt-hour), which decreased 6.2% from March 2016 (10,807.2 million kWh), but increased 7.5% when compared with the same period of 2015 (9,427.7 million kWh). Energy consumption tracking data by business size showed that small sized businesses consumed more energy when compared to the last month and the same period of 2015, but medium and large-sized businesses consumed less energy when compared to the last month, but consumed more energy the same period of 2015.



Thailand's Industrial Economic Conditions Compared to Major Countries in Asia in April 2016



Production situations of Thailand's industry sector considered on the Manufacturing Production Index (MPI) expended 1.5% when compared with the same period of the previous year. Major industries that contributed to the positive index included automobiles, components for automobiles, air conditioners, petroleum and tobacco.

However, the industrial production rate of Taiwan continued to decrease 4.5%.

The industrial production rate of South Korea shrank 2.8%.

The industrial production rates of Malaysia and Indonesia in April 2016 have not been released yet currently, but the trend continued growth from the previous month. In March 2016, the industrial production rate of Malaysia and Indonesia expanded 4.5% and 4.1%, respectively.



Industrial Activity Situations in April 2016

Business establishment situation of manufactures in April 2016 when compared with March 2016 was reported by the Department of Industrial Works (DIW) that 411 plants began operations and increased 8.7% from March 2016 (378 plants), the investment capital valued by amount of 41,667 million baht which expanded 83.3% from March 2016 (22,729 million baht), but the number of employed people was 8,129 persons which decreased 10.3% from March 2016 (9,060 employees).

Business establishment situation of manufactures in April 2016 when compared with April 2015 was reported by the Department of Industrial Works (DIW) that the number of plant openings increased 17.8% from April 2015 (349 plants), but the investment capital dropped 38.94% from April 2015 (68,239 million baht), and the number of employed people decreased 36.51% from April 2015 (12,803 employees).

- The industry that had the most factories starting up in April 2016 was the industry of production of electricity from solar cells (67 plants), and the followed industry was the industry of digging for construction (33 plants).
- The industry with the highest level of investment capital in April 2016 was the industry of production of electricity from solar cells (26,402.29 million baht), and the followed industry was the storage of plant, seeds or plant products in warehouse (4,390.91 million baht).
- The industry that had the most new hires in April 2016 was the industry of production of frozen shrimp, aquatic animal processing, preserving meat and frozen aquatic animal (1,178 employees), and the followed industry was the production of electricity from solar cells (581 employees).



Business closing situation of manufactures in April 2016 when compared with March 2016 was reported by the Department of Industrial Works (DIW) that the number of plant closures was 57 plants and decreased 72.7% from March 2016 (209 plants), the total amount of investment capital of the closures was 574 million baht which was less than March 2016 (3,371 million baht), and the number of layoffs was 994 employees which decreased from March 2016 (5,891 employees).

Business closing situation of manufactures in April 2016 when compared with April 2015 was reported by the Department of Industrial Works (DIW) that the number of plant closures decreased 35.2% from April 2015 (88 plants), the investment capital loss due to plant shutdowns was less than April 2015 (761 million baht), and the number of layoffs also was less than April 2015 (2,399 employees).

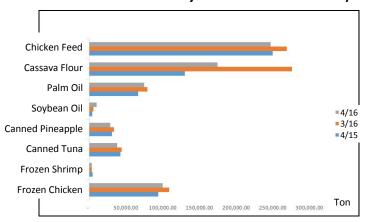
- The industry with the most factory shutdown in April 2016 was the industry of automobiles repairing and painting (6 plants), and followed by the industry of production of concrete products, mixed concrete, gypsum products and plaster (4 plants).
- The industry that lost the most investment capital due to factory shutdowns in April 2016 was the industry of sewing clothing, handkerchiefs, neckties, gloves, socks made from fabric and leather (153 million baht), and followed by the industry of printing, document files, stapling, bookbinding, and furnishing publications (61 million baht).
- The industry which the most employees were laid off in April 2016 was the industry of sewing clothing, handkerchiefs, neckties, gloves, socks made from fabric and leather (150 employees), and followed by the industry of weaving or yarn preparation for weaving (103 employees).



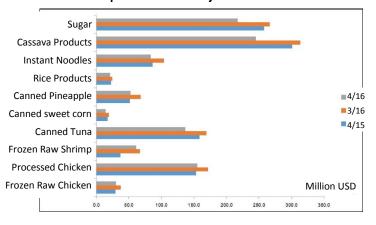
I. Food Industry

Production situation of the food industry in April 2016 improved from the same period of previous year (YoY), due to an increase of raw materials in the market, as well as the domestic consumption also increased, due to the soybean oil prices was close to the oil palm price, thus consumers turned to consume the soybean oil instead. Meanwhile, the export amount contracted stemming from a slow of order from importing countries according to the global economy continued to slow down.

Production Volume of Major Products in Food Industry



Exports Value of Major Products in Food



1. Production

In April 2016, production of major products in food industry (excluding sugar) expanded 8.7% YoY, and the details are as follows.

- 1) <u>Products based on export market:</u> cassava starch increased 34.3% due to now is a production season so raw material volume was increased, chilled, and frozen fresh chicken expanded 5.9% due to an increasing of consumption demand in both domestic and oversea markets.
- 2) <u>Products based on domestic market:</u> Products used domestic raw materials as palm oil increased 12.5% and products used imported raw materials as soybean oil also increased in production by 158.7% due to a rising of consumption demand in both domestic and export markets.

2. Sales

- 1) <u>Domestic Market</u>: In April 2016, the domestic sales value of food and agricultural products (excluding sugar) expanded 14.03% YoY, and a consumption demand of soybean oil increased 87.48% due to the soybean oil prices was close to the oil palm price, thus consumers turned to consume the soybean oil instead.
- 2) International Markets: The total export value of the food industry export (excluding sugar) in April 2016 dropped 6.6% YoY. The dropped products included cassava products, canned sweet corn, canned tuna, rice products and Instant noodles which declined 18.5%, 17.7%, 13.7%, 6.1%, and 3.4% respectively, due to the global economy remained in a slow, the product price dropped in line with a decreasing of the oil price, as well as an excessive supply in the market, but there was a shortage of raw materials of the fishing industry, fishery breaking the IUU rules of EU, a cancel of concessions in Indonesia's territorial waters, and stopping of operation of some fishing boats for compliance with new fishing law. However, some products increased in export value such as frozen shrimp, chilled, and frozen fresh chicken, canned pineapple, and processed chicken increased 66.0%, 2.4%, 1.8%, and 1.2% YoY, respectively due to an increasing of order from oversea. The export value of sugar dropped 15.8% YoY, owing to a slowdown of order from partner countries such as China, Japan, South Korea, and Taiwan, but major market such as Indonesia increased order almost double.

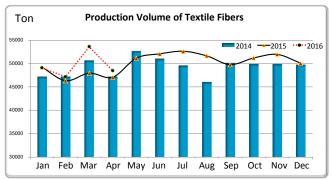
3. Trends

Production and exports in overall are forecasted to increase slightly from the previous year, owing to negative factors such as the illegal labor using, the fishery breaking the IUU rules of the EU, and the slowing demand from China and the product price dropped according to a decreasing of the oil price. However, there are positive factors in several products such as livestock products (processed chicken) which there are an increase of orders from oversea, an increase of pre-order of sugar products, fishery products such as shrimp with a recovering of Thailand's shrimp production from an outbreak of EMS, as well as the government has applied urgent economic stimulus measures, financial assistance measures for SMEs, and investment accelerating measures in special economic zones in various forms, and tourism stimulus measure that affect a food consumption in the country. As a result, the production and exports of food industry will expand as well.

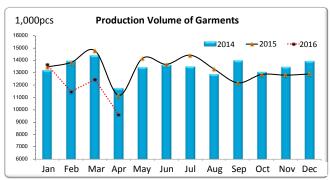


II. Textile and Garment Industry

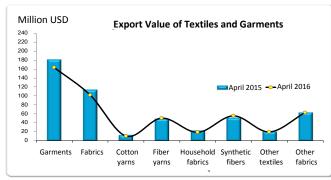
"Manufacturing of textile fibers sector increased in an expansion of synthetic fibers production, but yarns production decreased in line with a drop of fabrics group production. In garments sector, the production declined in both of knitted and woven garments. Exports of readymade garments made from wool and other textile materials expanded as well."



Source: The Industrial Economics Information Center, the Office of Industrial Economics



Source: The Industrial Economics Information Center, the Office of Industrial Economics



Source: The Information and Communications Technologies Centers, the Department of Trade Negotiations, the Ministry of Commerce

1. Production

- **Textile sector**: When compared with the same period of the previous year, the manufacturing of textile fiber products increased 2.94% in synthetic fibers group, but the manufacturing of yarns group decreased in line with a production of fabrics which fell 14.39%.
- Garment sector: When compared with the same period of the previous year, the manufacturing of readymade garments decreased 13.93% in both knitted clothes and woven garments, due to a decrease of orders of domestic and aboard, as well as an increase of imports of the readymade garments from China, Cambodia, Vietnam, Bangladesh, and Hong Kong.

2. Sales

- Domestic sale: When compared with the same period of the previous year, the sale volume of Textile fibers products, fabrics, and readymade garments dropped 12.48%, 17.59%, and 20.29%, respectively, due to public slowed down their spending according to the domestic economy continued to slow, as well as there was long holiday and the government's economic stimulus measures, it made other spending instead.
- Export value: Export value: When compared with the same period of the previous year, the export value of textile fibers products such as the export value of synthetic fibers increased 5.87%, due to an increase of demand from partner markets such as Turkey, China Bangladesh, and Japan. Meanwhile, the export value of textile products decreased 10.45% in Vietnam, Indonesia, and China markets. The export value of readymade garments also declined 10.15% due to o decrease of order from major markets such as ASEAN, Japan, the US, and the EU according to a slowdown of the global economy. However the readymade garments made from wool and other textile materials expanded as well.

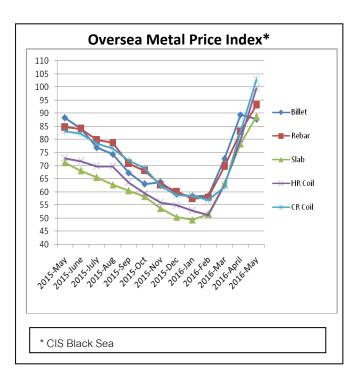
3. Trends

Manufacture of textiles fibers sector is forecasted to stable, due to a decrease of demand of fabrics and readymade garments, as well as some operator expanded manufacturing base to other countries in ASEAN. Domestic sales are forecasted to slow down according to the domestic economy. Exports are expected to slow in line with the economy of partner countries that continue to slow down. Imports are forecasted to shrink in textile fibers and fabrics, but to expand in readymade garments, especially fashion garments in line with a demand of fashion goods of domestic consumer.



III. Iron and Steel Industry

The US announced to tax AD Cold-rolled steel imported from China at a rate of 522%, after found that such as products were imported to the US in below cost pricing and have received subsidies from the Chinese government, causing unfair competition.



1. Production

The manufacturing situation of iron industry in April 2016 increased YoY, which the MPI in this month stood at 119.54 points with an increase of 5.32% YoY, due to following reasons.

- The MPI of flat-steel products expanded 4.47% YoY, which Hot-rolled steel coil increased 42.24%, Chromed plated steel improved 8.22%. According to the data from the Iron and Steel Institute of Thailand, it found that the domestic demand in the flat-steel products was 1,005,791 tons with an increase of 21.7%, which Hot-rolled thin steel and hot rolled thick steel plate increased 41.3%, and 30.8%, respectively. Imports of flat-steel products increased 20.4%, which Cold-formed structural steel and hot rolled thick Alloy steel expanded 1,373.6%, and 434.8%, respectively. Exports of flat-steel products dropped 12.1%, which Electro Galvanized Steel Sheet (EG) decreased 64.7%.
- The MPI of long-steel products increased 6.09% YoY, which steel wire and wire rod increased 19.80% and 19.57%, respectively. According to the data from the Iron and Steel Institute of Thailand, it found that the domestic demand in long steel products increased 90.5%, which rebar and structural steel expanded 138.4%, and wire rod rose up 28.9%. Imports increased 16.9%, which Hot-rolled structural steel expanded 135.9%. Exports decreased slightly by 3.0%, which wire rod and stainless steel rebar dropped 48.1% and 42.3%, respectively.

2. Metal Prices

According to the international steel price index of the Iron and Steel Institute of Thailand, the Free-On-Board (FOB) prices at Black Sea ports in May 2016 when compared with the same period of the previous year, the prices of almost iron products increased such as the price of Hot-rolled steel sheet increased 36.61%, from \$72.82 USD to \$99.48 USD per ton, the price of slab steel rose up 24.83%, from \$71.16 USD to \$88.83 USD per ton, the price of Cold-rolled steel sheets increased 23.60%, from \$83.17 USD to \$102.8 USD per ton, and the price of rebar expanded 10.05%, from \$84.86 USD to \$93.19 USD per ton, but the price of billet steel bar decreased 0.53%, from \$88.23 USD to \$87.76 USD per ton.

3. Trends

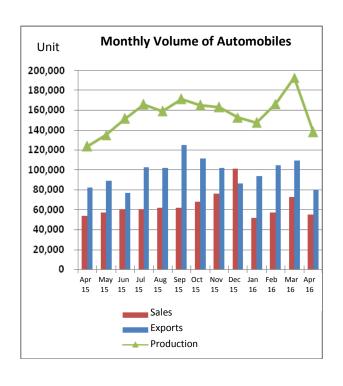
Thailand's iron production situation in May 2016 is expected that total iron production will increase YoY, and the steel bar will expand due to a decrease of inventory, it causes that manufacture will produce products more. The log-steel products are forecasted to increase, in line with the forecast of downstream industries such as electric appliance and automobile increased.



IV. Automotive Industry

Automobiles

The automotive industry in April 2016 expanded when compared to the same period of 2015, which it was increasing in domestic market due to some operators produced Pickup Passenger Vehicle (PPV) to meet with a demand of market. Meanwhile, export market remained in slowdown.



1. Production

Manufacturing volume of automobile in April 2016 was 138,237 units, which increased 11.51% from April 2015 which produced 123,968 units, due to an increase of production of passenger cars, 1-ton pickup trucks and its derivatives, and commercial cars.

2. Sales

Sales volume of automobile in April 2016 was 54,986 units, which decreased 1.72% from April 2015 which sold 54,058 units, due to an increase of sales of 1-ton pickup trucks, Pickup Passenger Vehicle (PPV), and Sport Utility Vehicle (SUV).

3. Export

Export volume in April 2016 was 80,491 units, which declined 2.00% from April 2015 which exported 82,130 units, which the export market slowed down in Central and South America, Middle East, and Oceania.

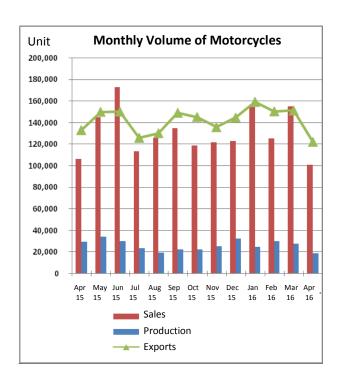
4. Trends

The automotive industry in May 2016 is forecasted to expand when compared with May 2015. The production in May 2016 is expected to reach by 40% for domestic sale and by 60% for exports.



Motorcycle

The Motorcycle industry in April 2016 was slowdown when compared with the same period of 2015, due to a decrease of domestic market and export markets.



1. Production¹

Manufacturing volume of motorcycles in April 2016 was 122,101 units which decreased 8.29% from April 2015 which produced 133,134 units, owing to a decrease in production of versatile-type motorcycles.

2. Sales²

Sales volume of motorcycles in April 2016 was 100,708 units which dropped 5.27% from April 2015 which sold 106,315 units.

3. Export of finished motorcycles (CBU)

Export volume was 19,245 units in April 2016 which dropped 38.13%, from April 2015 which exported 31,106 units, due to a slowdown of exports market in the US, Netherland, and China.

4. Trends

The motorcycle industry in May 2016 is expected to expand compare with May 2015. The production in May 2016 is forecasted by 78% for domestic sales and by 22% for exports.

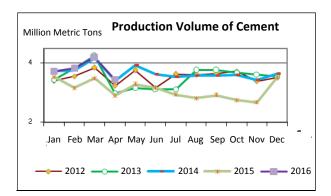
Note: ¹ Since January 2016, the motorcycle production data is revised by addition more one manufacturer's information. Type of motorcycles is changed from family-type to versatile-type (family-type and scooters-type).

² Since March 2016, the motorcycle sales data is revised type of motorcycles from family-type and scooters-type and sport-type to motorcycles is less than or equal to 100 cc, 101-125 cc, 126-150 cc, and more or equal to 151 cc. Therefore, it is able to compare the growth rate in overall only.

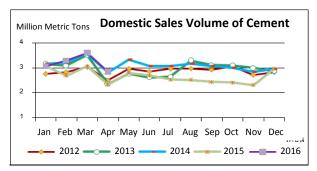


V. Cement Industry

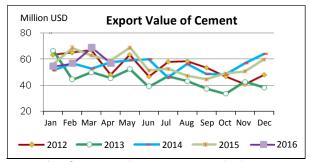
"Cement industry in April 2016 continued to expand as well, which production and domestic sales increased due to a rising construction sector, as a result of government stimulus measures and accelerating large construction projects of the government. It made that private sector has more confidence in investments. Export value dropped slightly, due to a decrease of order from major export markets, such as Myanmar, Indonesia, and Cambodia."



Source: The Industrial Economics Information Center, the Office of Industrial Economics



Source: The Industrial Economics Information Center, the Office of Industrial Economics



Source: The Information and Communications Technologies Centers, the Office of the permanent Secretary Ministry of Commerce

1. Production and Domestic Sales

When compared with the same period of the previous year, Production and sales volume of cements (excluding clinker) in April 2016 increased 18.96% and 22.84%, respectively.

Cement industry continued to improve as well, in both of production and domestic sales. Referring to the violet line in the left graphs, it demonstrated that the cement industry has grown as well since December 2015 stemming from government economic stimulus measures, and accelerating the infrastructures construction such as Double-track railway and motorway, which some project were tendered completely in some distances and 3 projects has started to construction such as Double-track railway of distance of Road Jira Junction Khon Kaen, Motorway between the cities of Pattaya Maptaphut, and Development projects of the coastal ports of Laem Chabang, therefore, the demand of cement in the country and production increased.

2. Export

Export value of cement in April 2016 contracted 3.81% YoY, due to the major partner countries such as Myanmar, Indonesia and Cambodia reduced order cement from Thailand quite significantly. The reason that export figures of this month did not decline so much, was a good expansion in Bangladesh and Laos markets. Bangladesh imported clinker mostly from Thailand, while Laos imported Mortar mainly and is likely to increase an import of cement from Thailand in the future, due to their cement production volume is insufficient to meet demand in the country, and they cannot produce some kinds of high quality cement by themselves.

3. Trends

Domestic production and sales of cement industry are likely to expand as well, due to due to several measures from government as well as accelerating the infrastructure construction projects which some projects are on auction and some projects have started construction. It makes that the domestic economy is likely to expand as well, and the private sector has a confidence to invest more.

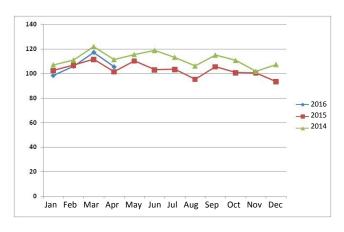
Export value is forecasted to decline YoY, due to the reference base of year 2015 was quite highly, and an increase of the domestic demand according to an expansion of construction sector in both projects of public and private sectors. So the producers may reserve the cement for to use in domestic more and reduce export volume.



VI. Electrical and Electronics Industry

Overall manufacturing of electrical and electronics industry in April 2016 improved 3.84% YoY. The electrical industry increased 6.36% YoY, due to an expansion of air conditioners. The electronics industry expanded 1.91% YoY, stemming to an increase of production of ICs.

MPI of Electrical Appliances and Electronics Industry



Source: The Office of Industrial Economics

<u>Table 1: Top Value of Electrical Appliances and</u> <u>Electronic Products Exported in April 2016</u>

Electrical / Electronic Products	Value (Million USD)	%YOY
Computer components	1,211.87	-10.59
Integrated circuits	593.82	-2.65
Air conditioners	435.26	8.05
VDO cameras & Digital cameras	122.83	0.67
Total of electrical / electronic product	4,065.84	-7.08

Source: The Electrical and Electronics Institute

1. Production

In overall manufacturing situation of the electrical and electronics industry in **April 2016**, the MPI stood at 105.37 points with an increase of 3.84% YoY. The MPI of electrical industry sector stood at 121.90 points with an increase of 6.36% YoY. Almost electrical appliances expanded, which split-type air conditioner's condensing unit, split-type air conditioner's evaporator unit, compressors, rice cooker, electrical wire and television increased 11.60%, 12.12%, 5.48%, 25.87%, 16.19%, and 0.30% YoY, respectively, due to an increase of domestic sales and a recovery of exports to the EU market.

The MPI of the electronics industry sector in April 2016 stood at 95.06 points with an increase of 1.91% YoY, which other ICs and Monolithic ICs expanded 9.43% and 3.66% YoY, respectively, due to they were important components in products developed to digital system. The exports increased in some major markets such as the EU, Japan, and China. Meanwhile, HDD and Semiconductor dropped 6.90% and 23.0% YoY, respectively, due to a demand of computers/notebooks decreased continuously.



VI. Electrical and Electronics Industry (Continue)

2. Export

Total export of the electrical appliances and electronics industry in April 2016 valued \$4,065.84 million USD, with a decrease of 7.08% YoY.

Electrical products had export value by \$1,781.90 million USD, with a decrease of 7.88% YoY, due to a decrease of export to ASEAN, China, the US the EU with a decrease of 1.92%, 19.20%, 20.69%, and 9.80% YoY, respectively, except the exports to the EU increased 6.89% YoY. The products with largest export value was air conditioners with export amount of \$435.26 million USD, with an increase of 8.05% YoY due to an increase of exports to ASEAN, the US, and China by 31.59%, 41.25%, and 18.22% YoY, respectively. The followed product was refrigerator with export amount of \$122.83 million USD with an increase of 0.67% YoY, due to an increase of the exports to the major markets such as ASEAN, the EU, the US, and Japan by 8.34%, 20.40%, 12.38%, and 3.24% YoY, respectively.

Electronics products had export value by \$2,283.94 million USD, with a decrease of 6.45% YoY, due to a decrease of export to the major markets such as the EU, China, the US, and Japan by 6.29%, 7.56%, 8.61%, and 10.75% YoY, respectively, except the export to ASEAN which increased 0.17%. The electronics product with largest export value was components of computers with export amount of \$1,211.87 million USD, with a decline of 10.59% YoY, due to a decrease of exports to the major markets such as the EU, China, the US, and Japan by 17.43%, 5.08%, 15.85%, and 10.68% YoY, respectively. The followed product was ICs with export amount of \$593.82 million USD, with a decline of 2.65% YoY, due to the export to ASEAN and the US dropped 6.81% and 2.83% YoY, respectively.

3. Trends

According to the leading index model conducted by the Electrical and Electronics Institute, overall the electrical and electronics industry production in May 2016 is forecasted to increase 3.76% YoY. The electrical industry is expected to expand 5.74% YoY, owing to domestic sales begin to recover, especially air conditioner and refrigerator, as well as the exports to AEAN markets will expand well. The electronics industry is expected to contract 1.77% YoY, stemming to exports of ICs increase according to the products are developed more to digital system.