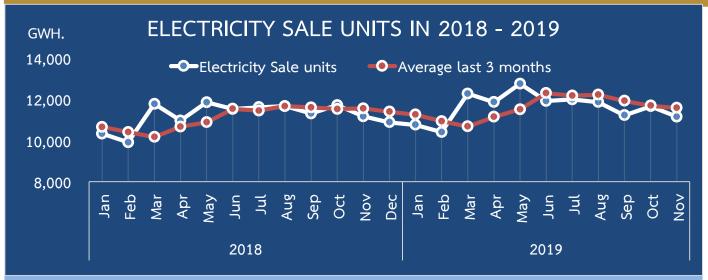
The Electricity Sales Report of PEA in November 2019



The electricity sale units of PEA in November 2019 minimally decreased 0.13% YoY which continued easing for 3 months from September to November, owing to a drop in an export from trade barrier and world economic recession causing 5 important segments in manufacturing sector fell. In November 2019 production capacity was 63.2%, while there was 69.4% of production capacity in last year. Nonetheless, tourism sector still rose by the number of tourists, resulting from exemption of visa on arrival fee and Russian economic recovery.

According to the chart, the forecast growth rate in December 2019 is forecasted to decline from cold weather in Northern and Northeastern region that temperature is expected to be lower than previous year. Then, the electricity consumption in residential and industrial sector will reduce.



In November 2019, PEA had total electricity sales 11,149.82 million units. It plunged at 0.13% YoY.

The residential sector went up 4.78% YoY seeing that large residence which consumed electricity more than 150 units surged at 7.30% YoY.

Growth of small industrial sector varied at 1.59% YoY. Due to a deceleration of global economic from trade barrier which caused a drop in export, Medium and large industrial sector eased at 0.73% and 3.53% YoY.

Specific business grew 1.15% YoY, owing to the expansion of Chinese, Indian and Taiwanese tourists.

To compare the growth rate between 2019 with base year 2016, it has found that the electricity sales reduced by 4.92% YoY.



Large Customers

Growth rate dipped at 2.82% YoY. Thanks to, a drop in industrial sector's customers at 3.90% YoY from trade barrier causing economic deceleration and appreciation of Baht currency. There was a dip in partners' orders affecting to export.

While, large commercial sector rose at 1.51% YoY, resulting from a surge in people who went back to hometown on special occasion in November relating to an increase in electricity consumption of transportation segment at 0.92% YoY.

Accordingly, the electricity sales heightened by 0.05% YoY (compared with base year 2016).

Small Customers

Enlarged at 4.01% YoY due to a surge in residential and small commercial sectors at 4.78% and 1.88% YoY. The cause was special occasion on $4^{th} - 5^{th}$ November only in Bangkok and Nonthaburi in order to attendances' facility in ASEAN's Meeting. It had a good effect on domestic tourism because people went to domicile. There was also more expenditure.

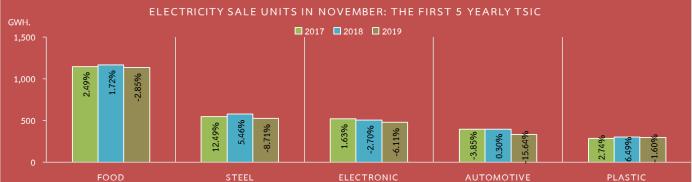
To compare with 2016, the electricity sales accreted by 14.75% YoY.

Governmental and Others

Increased at 2.74% YoY, owing to a growth in electricity consumption of governmental and state owned enterprise sector at 0.77. Moreover, the others surged 6.79% YoY because free electricity which was consumed by street light rose at 4.65% YoY from a longer night during the winter season.

Growth (Up/Down) of electricity sale units compare with previous years





Manufacturing sector plunged at 4.80% YoY. There were 5 segments in manufacturing sector.

Food Segment sank at 2.85% YoY. Seeing that, electricity consumption in rice mill, which was 14.46% of food segment decreased at 7.78% YoY. Besides, tapioca flour production being 8.48% plunged at 18.88% YoY.

YoY owing to a fall in vehicle's orders causing electrical usage in basic iron and steel factory dropped at 14.09% YoY.

Electronics segment ebbed at 6.11% YoY, resulting from trade barrier between U.S.A. and China which caused a fall in demand for electronics goods like smart phone, computers, semiconductor, electronic parts and screen.

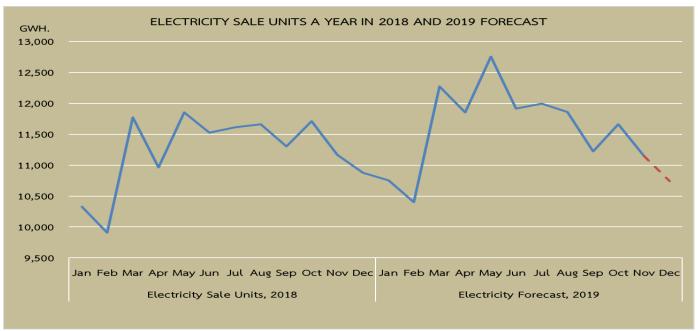
Automotive Industry diminished at 15.64% YoY following an easing in financial loan from economic deceleration causing a drop in vehicle's sales. There were less cars sold in November 2019 than in November 2018 which constituted 16.21% from 79,299 to 94,643 cars.

Plastic Segment dipped at 1.60% YoY, by no plastic bags campaign in convenient stores causing a plummet in domestic demand for plastic bags.

Sales & Hotel sector reduced at 0.54% YoY. Due to the fact that the weather in November 2019 was cooler than November 2018 being 0.3 degree Celsius, electricity consumption of air condition went down.

The Social Services sector rose at 0.16% YoY, in consequence of electrical consumption in hospitals and national defense expanded at 0.80% and 0.88% YoY, respectively.

Agricultural sector varied at 4.44% YoY, on account of livestock's electricity consumption being up 3.19% YoY. The electricity consumption in fisheries grew at 1.54% YoY.



Electricity Sale Forecast

PEA forecasts the electricity sale situation in 2019 to improve around 2.63% YoY which was lower than an estimation. The committee approximated (approximated in September 2018) the electricity sale situation in 2019 that will be expanded 3.81% YoY. There are many factors to impact the electricity sales 2019.

Positive factors

- 1.There were stimulus policies in the end of the year 2019:
- Budget measure to relieve trouble from natural disaster
- Measure to support domestic consumption like "Shim Shop Shai" project
- Income guarantee project and administration in tapioca measure
- Measure in reduction of residence purchase burden
- Loan for "a Thai community business" project
- Supportive project in production cost for farmers
- Measure to assist a harvest fee and rice quality improvement
- 2. There was an upward trend in the number of tourists.
- 3.Department stores' marketing strategies in the end of the year to support New Year festival.

Negative factors

- 1. There was continuously trade barrier between U.S.A. and partnerships.
- 2. The political situation between U.S.A. and Iran was severe.
- 3. World economic deceleration and Baht currency appreciation caused a fall in export.
- 4. There were production base movement and industrial divestment.
- 5. Supportive policies for SPP Cogeneration, which encouraged private sector to play a role in generating electricity for distribution. Then, they caused more and more losing customers to SPP.
- 6. The weather in the end of year was getting cooler.