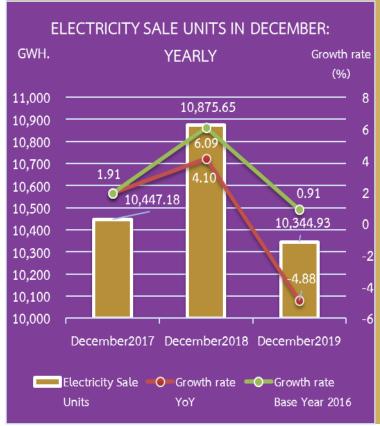


The electricity sale units of PEA in December 2019 decreased 4.88% YoY which continued easing for 4 months from September to December, owing to a drop in an export from trade barrier and world economic recession causing a fall in important segments in manufacturing sector such as food, steel, electronics, automotive and plastic. Furthermore, residential and business sector like small businesses, department stores and hotels less consumed electricity because of the cold weather.

According to the chart, the forecast growth rate in January 2020 is forecasted to decline from cold weather in Northern and Northeastern region that temperature is expected to be lower than previous year. This caused an easing trend in electricity consumption of residential sector and industrial sector. Nonetheless, electricity usage in tourism segment varied following the proper weather for tourism, the number of tourists to travel or visit their hometown and New year's parties.



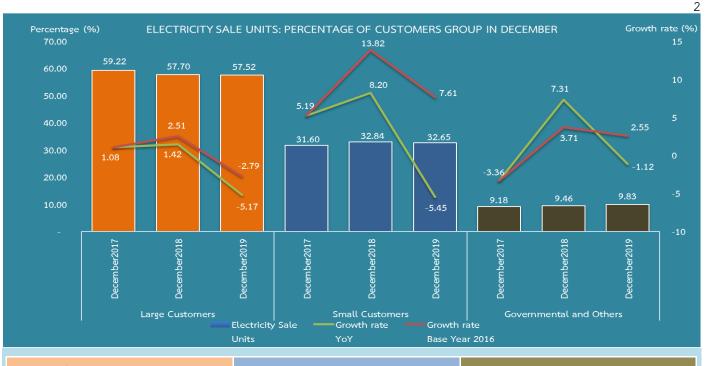
In December 2019, PEA had total electricity sales 10,344.93 million units. It plunged at 4.88% YoY.

The residential sector fell at 5.63% YoY seeing that the weather was cold in Northern and Northeastern region.

Growth of small industrial sector dipped at 5.10% YoY. Due to a deceleration of global economic from trade barrier which caused a drop in export, Medium and large industrial sector eased at 4.85% and 4.84% YoY.

Specific business decreased 4.13% YoY, while electricity consumption of pumping for agriculture grew at 6.92% YoY.

To compare the growth rate between 2019 with base year 2016, it has found that the electricity sales reduced by 0.91% YoY.



### Large Customers

#### Small Customers

Growth rate plunged at 5.17% Thanks to, a drop in YoY. industrial sector's customers at 5.53% YoY from trade barrier causing economic deceleration and appreciation of Baht currency. Besides, there was а dip in partners' orders affecting to export. The electricity demand for manufacturing sector reduced 6.10% YoY.

While, large commercial sector fell at 3.85% YoY which related to a decrease in electricity consumption of commercial and hotel sector at 5.83% YoY.

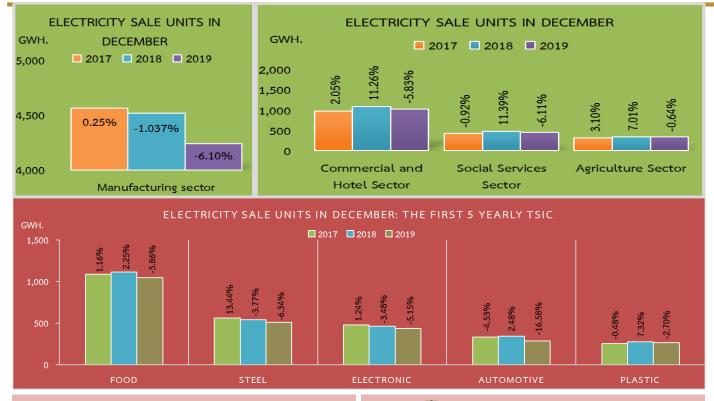
Accordingly, the electricity sales declined by 2.79% YoY (compared with base year 2016). Declined at 5.45% YoY due to a fall in residential sectors at 5.63% YoY. Resulting from cold weather, a small residence which used electricity less than 150 units reduced 5.63% YoY, while large residence consuming electricity more than 150 units dwindled 4.42% YoY.

Small commercial sector diminished 4.97% YoY because there was an easing in electricity consumption of convenient stores, grocery stores and retail stores.

To compare with 2016, the electricity sales accreted by 7.61% YoY.

### Governmental and Others

Eased at 1.12% YoY, owing to a dip in electricity consumption of governmental and state owned enterprise sector at 4.12% YoY from cold weather affecting to air condition's usage. Moreover, the others surged 4.41% YoY because free electricity which was consumed by street light rose at 5.69% YoY from a longer night during the winter season.



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

Manufacturing sector plunged at 6.10% YoY. There were 5 segments in manufacturing sector.

**Food Segment** sank at 5.86% YoY. Seeing that, electricity consumption in ice factory, which was 17.37% of food segment decreased at 8.67% YoY. Besides, rice mill being 12.48% plunged at 11.57% YoY.

Steel Segment declined at 6.34% YoY owing to a fall in vehicle and construction causing electrical usage in basic iron and steel factory dropped at 8.61% YoY.

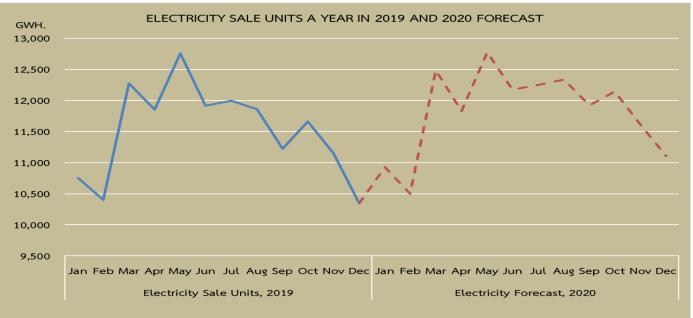
**Electronics segment** ebbed at 5.15% YoY, resulting from trade barrier between U.S.A. and China which caused a fall in demand for electronics goods like smart phone, computers and electronic appliance.

**Automotive Industry** diminished at 16.58% YoY following an easing in vehicle's sales. This caused a drop of 20.75% YoY in automotive production in December 2019 because of a decrease in domestic demand from ascetic credit approval and trade barrier affecting to economic of partnership. Plastic Segment dipped at 2.70% YoY, by no plastic bags campaign in convenient stores causing a plummet in domestic demand for plastic bags.

Sales & Hotel sector reduced at 5.83% YoY. Due to the fact that the weather in December 2019 was cold, electricity consumption of air condition in department store went down.

The Social Services sector eased at 6.11% YoY, in consequence of electrical consumption in hospitals and schools decreased at 6.30% and 7.69% YoY, respectively.

Agricultural sector dipped at 0.64% YoY, on account of livestock's electricity consumption being down 1.99% YoY from output of swine. The electricity consumption in fisheries fell at 2.62% YoY, resulting from a drop in aquatic and freshwater animals. Besides, electricity consumption for agricultural pumping which was the third biggest of electricity usage grew at 5.26% YoY.



# **Electricity Sale Forecast**

The committee approximated (approximated in 19<sup>th</sup> September 2019) the electricity sale situation in 2020 that will be expanded 4.57% YoY, while PEA forecasts the electricity sale situation in 2020 to improve around 2.5 - 2.8% YoY because of the economic deceleration in 2019. There are many factors to impact the electricity sales 2020.

## Positive factors

1. There was an increase in usage of smart devices for commercial, financial transaction and entertainment like watching movies or series.

2. There were stimulus policies such as policy to solve poverty problem for farmers, poor, aging people, employees and entrepreneurs.

3. The weather will be hotter in summer.

4. The policy rate was cut to save business cost.

# Negative factors

1. There was continuously trade barrier between U.S.A. and partnerships.

2. The political conflict in foreign countries may be happened again.

3. There were diseases like Corona virus and Bird flu which affected to tourism, consumption and export of Thailand.

4. Natural disasters like drought impacting on economic.

5. Population's income declined, whereas debt increased.

6. Customers in industrial sector increasingly generated electricity for consumption.

7. Business could not accommodate to customer's behavior which was changed immediately.

8. The fluctuation of Baht currency was difficult to impose a policy.