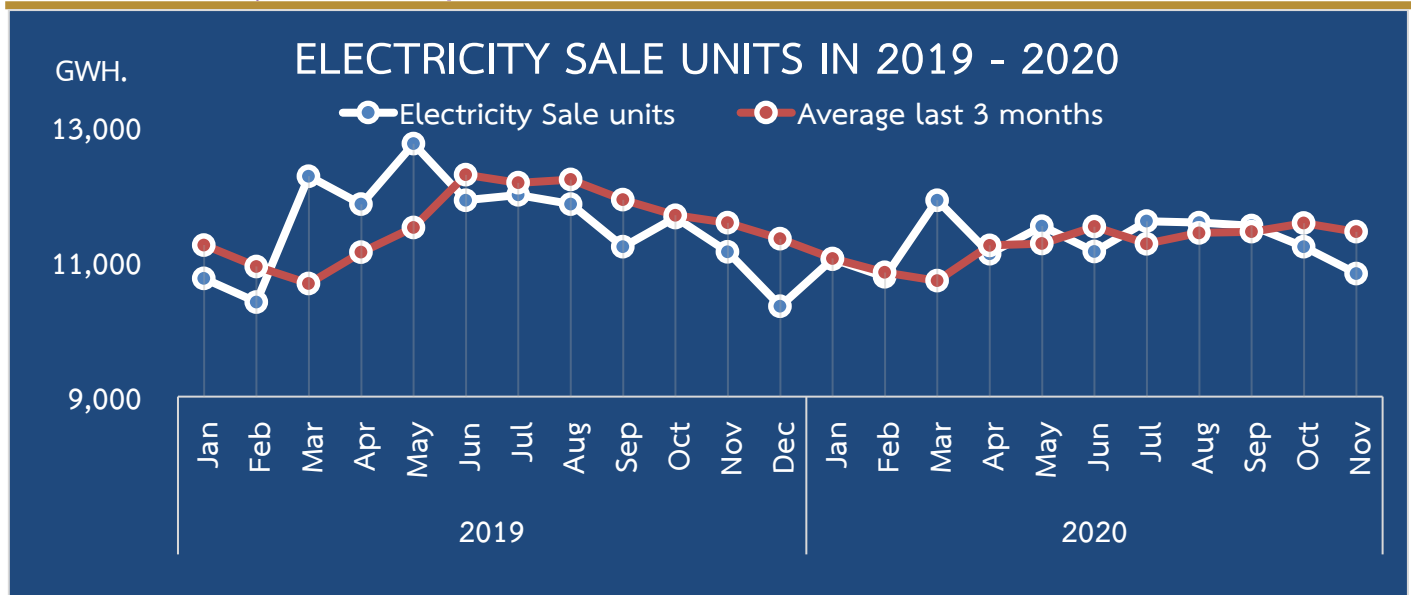


## The Electricity Sales Report of PEA in November 2020



The electricity sale units of PEA in November 2020 fell 2.89% YoY. Due to a drop of electricity consumption in large commercial sector, hotels and department stores were affected from no travelers because of COVID-19 pandemic. Moreover, domestic tourism didn't recover having effect to small commercial sector like retail stores. Besides, the electricity consumption of residential and governmental sectors declined on account of cold weather which caused a dip in electrical demand for cooling system.

However, industrial sector slightly rose from more exportation to business partners thanks to the low production in many countries from pandemic measures. By reason of the pandemic in Samut Sakhon, if it has to close manufactures or spread out to crowded areas such as Rayong, it will affect overall electricity sales significantly.

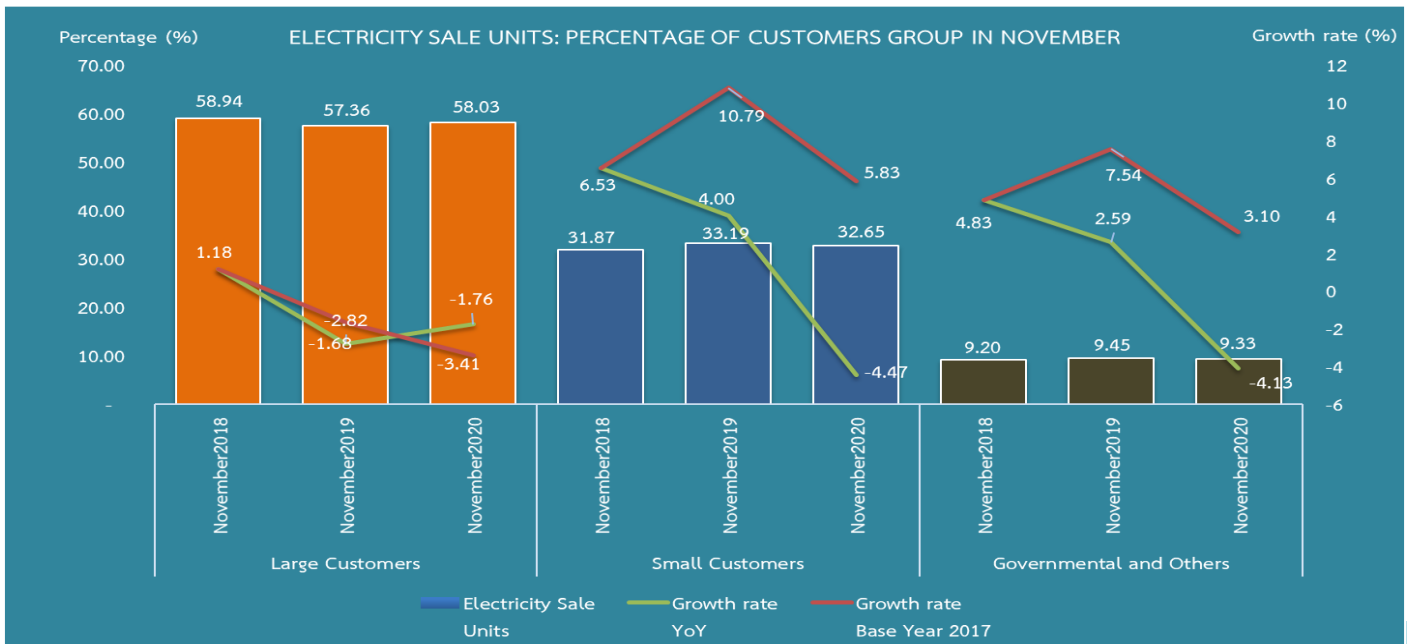


In November 2020, PEA had total electricity sales 10,826.25 million units. It decreased at 2.89% YoY.

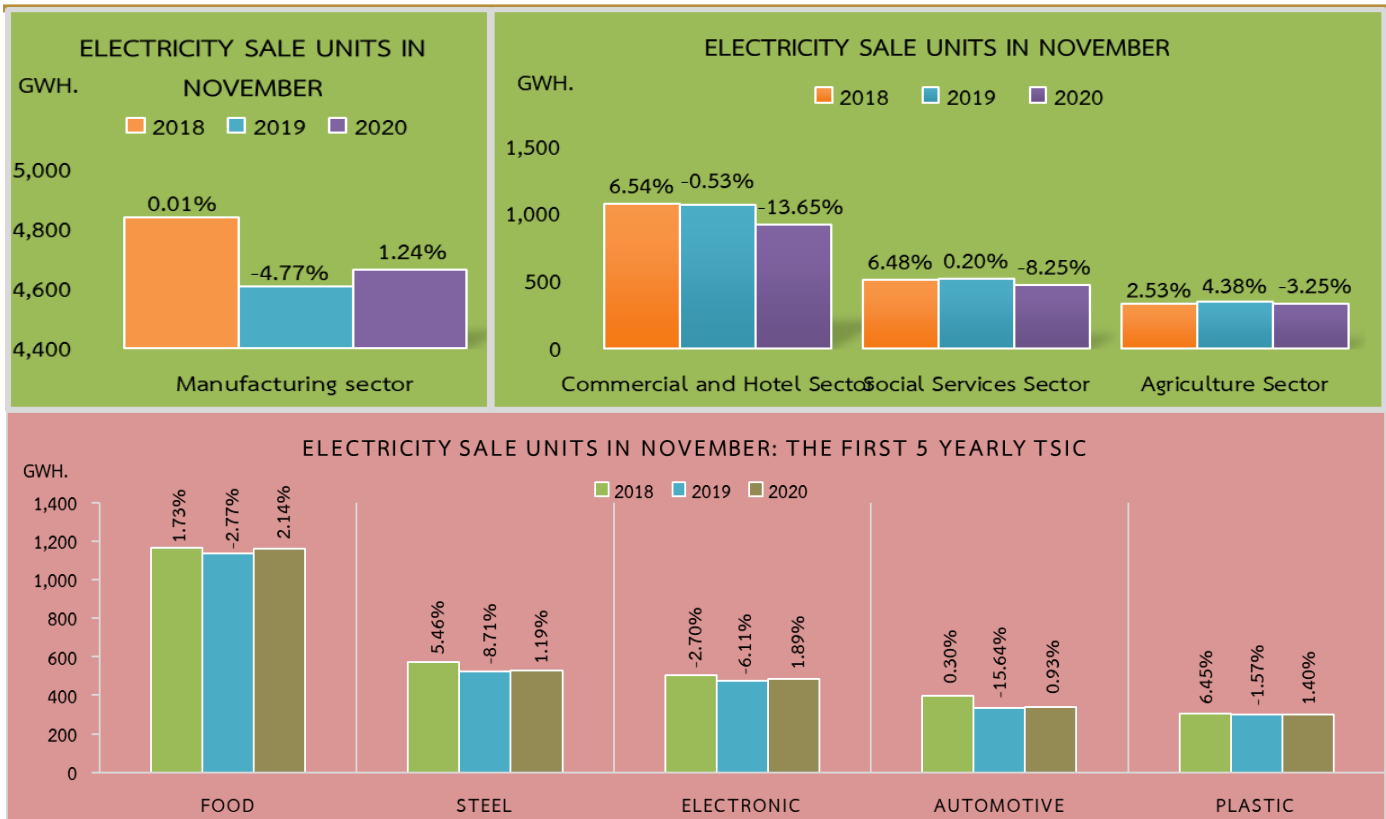
The residential sector fell at 3.87% YoY owing to a decline in electricity consumption from cold weather.

A small and medium dropped at 5.96% and 3.33% YoY following an export, while, a large industrial sector increased at 0.85% YoY because of more demand for goods in main partners.

Specific business plummeted at 30.45% YoY, resulting from tourist limitation. Even if, there was domestic tourism's supportive policies which caused more local people travelling in areas near Bangkok such as Bang Sean and Hua Hin. Besides, Thais preferred to travel during the holidays than workdays.



Large Customers	Small Customers	Governmental and Others
<p>Electricity sale units plunged at 1.76% YoY.</p> <p>An industrial sector rose at 1.04% YoY from a growth of export in automobile, rubber product, air conditioner and rubber to U.S.A., Japan and Australia. It resulted from high demand for goods, especially rubber gloves, during COVID-19 pandemic.</p> <p>On the other hand, a large commercial sector sharply fell at 12.43% YoY by reason of no tourist's arrival causing a plummet in electricity consumption in hotel segment like resorts, guesthouses and hostels at 36.19% YoY. However, the electricity consumption of hotels in some areas were steady from public policies to support domestic tourism.</p>	<p>Electricity sale units dipped at 4.47% YoY.</p> <p>A decrease in residential sector at 3.87% YoY because the winter season and storms coming from high level of air pressure in China caused a drop of electricity consumption for cooling system.</p> <p>Small commercial sector went down 6.19% YoY following the protection measures for COVID-19 that affected to electrical demand for stores and department stores to drop at 5.94% YoY. In addition, people preferred online shopping than going to stores.</p>	<p>Electricity consumption units abated at 4.13% YoY.</p> <p>An electricity usage of governmental and state-owned enterprise sector like hospitals, universities and local administration grew at 4.92% YoY due to a cold weather.</p> <p>Moreover, the others diminished at 2.60% YoY. There was a plummet in electricity usage for non-profit organization, pumping for agricultural, temporary, stand by and interruptible rate at 6.19%, 36.75%, 17.12%, 34.90% and 4.08% YoY, respectively. While, free electricity escalated at 5.53% YoY seeing that there was the longer night during winter causing more demand for road lighting.</p>



### Manufacturing sector rose at 1.24% YoY.

There were 5 segments in manufacturing sector.

**Food Segment** surged at 2.14% YoY. Seeing that, rice manufacturing grew at 0.46% YoY. In addition, electricity demand for rice mill and tapioca flour's production went up at 4.87% and 2.24% YoY. The electricity consumption for producing animal feed accrued at 2.33% YoY.

**Steel segment** increased at 1.19% YoY owing to a rocket in export to Japan, Vietnam, Australia and Malaysia. Moreover, there was a high demand for automobile which caused high demand for steel.

**Electronics Segment** escalated at 1.89% YoY from a rise in demand of U.S.A., Australia and China for air conditioners, electrical appliances and component. It affected from U.S.A. - China trade barrier, especially in wash machine, causing the move of production base from China to Thailand for more exporting to U.S.A.



### Automotive Industry grew at

0.93% YoY following a demand for automobile, equipment and parts of U.S.A., Japan, Australia, Malaysia and Singapore. In addition, the domestic demand increased in the end of year that caused sales to be usual.



### Plastic Segment accrued at 1.40%

YoY by a growth in demand for plastic bags since there was more plastic usage in delivery.

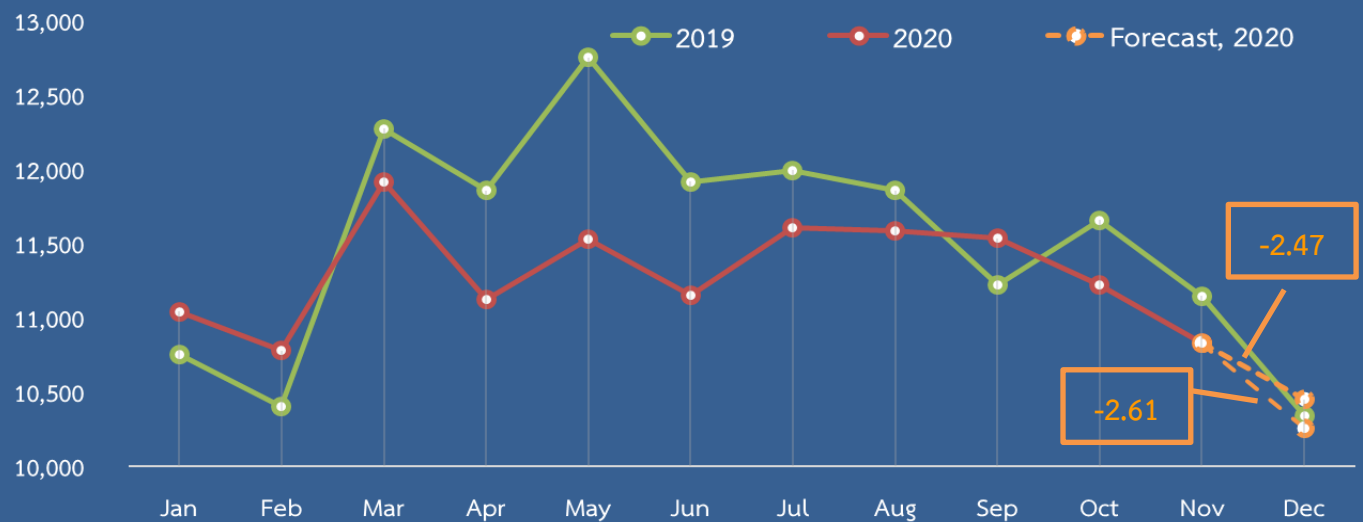
**Sales & Hotel sector** plunged at 13.65% YoY. Due to the fact that the weather was inconvenient for travelling, it less dropped than usual because there were special holidays during 19 -20 November 2020 following tourism measures.

**The Social Services sector** eased at 8.25% YoY, in consequence of a drop of electricity consumption of public and private universities and schools.

**Agricultural sector** dipped at 3.25% YoY. The cause was an easing in electricity consumption of agricultural pumping, fishery, cultivation, animal breeding and farming.

## ELECTRICITY SALE UNITS A YEAR IN 2019 AND 2020 FORECAST

ล้านหน่วย



### Electricity Sale Forecast

PEA forecasts the electricity sale situation in 2020 to decline around 2.47-2.61% YoY. (The year 2019 had expected to grow 2.60%.) Thanks to the second pandemic and a mutation of COVID-19 in many countries, especially a domestic pandemic, it affected to domestic economic from lockdown. These caused high unemployment rate and low income having an effect to expenditure in long term.

### Positive factors

1. A launch of appropriate measures like “Half-Half” project which was famous in Thais.
2. Online business had a trend to grow such as commodities trading, studying and working.
3. Demand for goods like rubber products, automobile and electrical appliances increased in counterparty.
4. There were the signature in Regional Comprehensive Economic Partnership (RCEP).
5. COVID-19 vaccine were provided.

### Negative factors

1. There was the second COVID-19 pandemic coming from Myanmar in Samut Sakhon which was the third largest in electricity consumption.
2. There was the trend of new pandemic and mutation.
3. The public debt increased, resulting from a loan for stimulating economics.
4. There was high unemployment rate.
5. The appreciation of Baht currency affected export.
6. The production bases were migrated to neighborhood countries, especially to Vietnam.
7. The tourism in many areas hadn't a trend to recover.