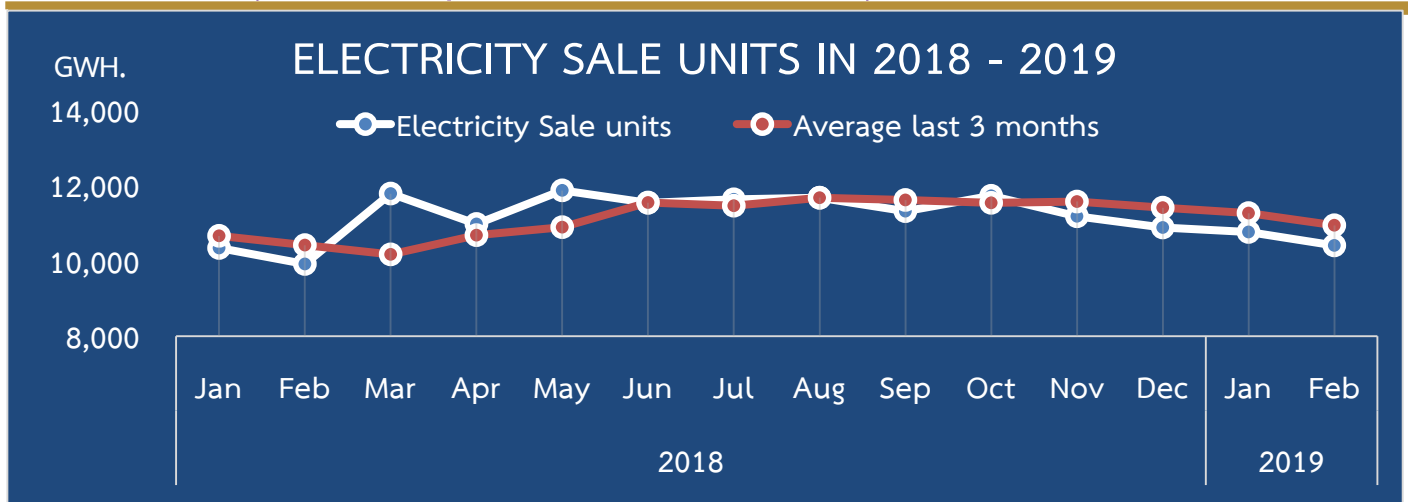
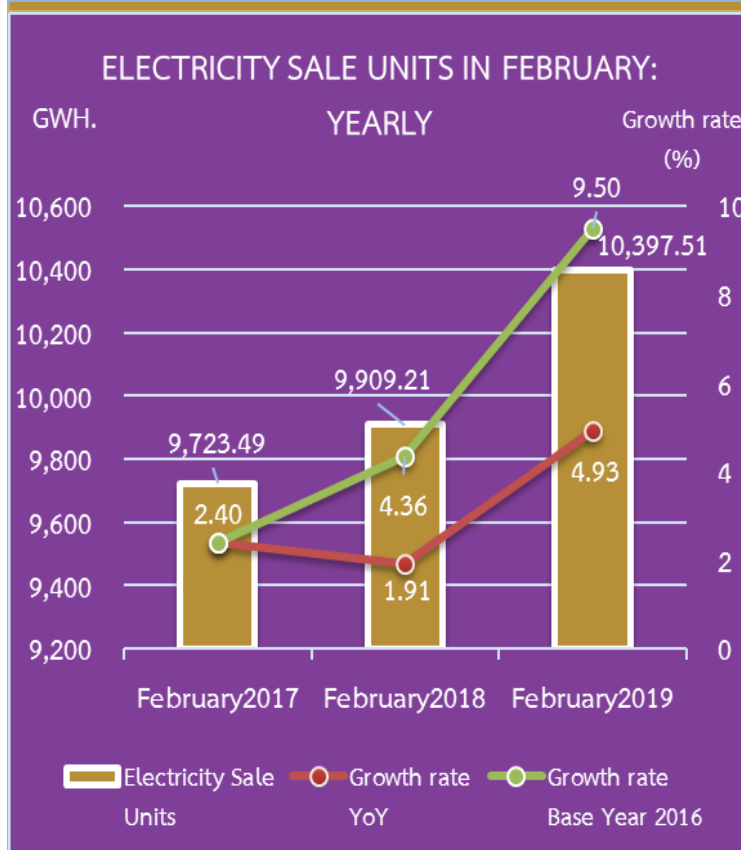


## The Electricity Sales Report of PEA in February 2019



The electricity sale units of PEA in February 2019 has increased at 4.93% YoY owing to a growth of domestic demand from high private consumption index, fixed cost of government expenditure and tourism. Moreover, household income in agricultural sector accelerated following a variation of products such as oil palm, rubber and rice. As, income in non-agricultural sector rose. The average temperature also was higher affecting an expansion of totaling electricity demand. Nonetheless, electricity consumption eased 3.28% MoM, resulting from a slowdown of manufacturing sector which was influenced by a decline of export following the economic deceleration and the effect of China-United States trade war.

According to the chart, the forecast growth rate in March 2019 has enhanced by positive factors e.g. temperature is going to higher. As, domestic consumption and investment of public and private escalated. Tourism also still expanded. In addition, there was more perspicuity of the election situation.



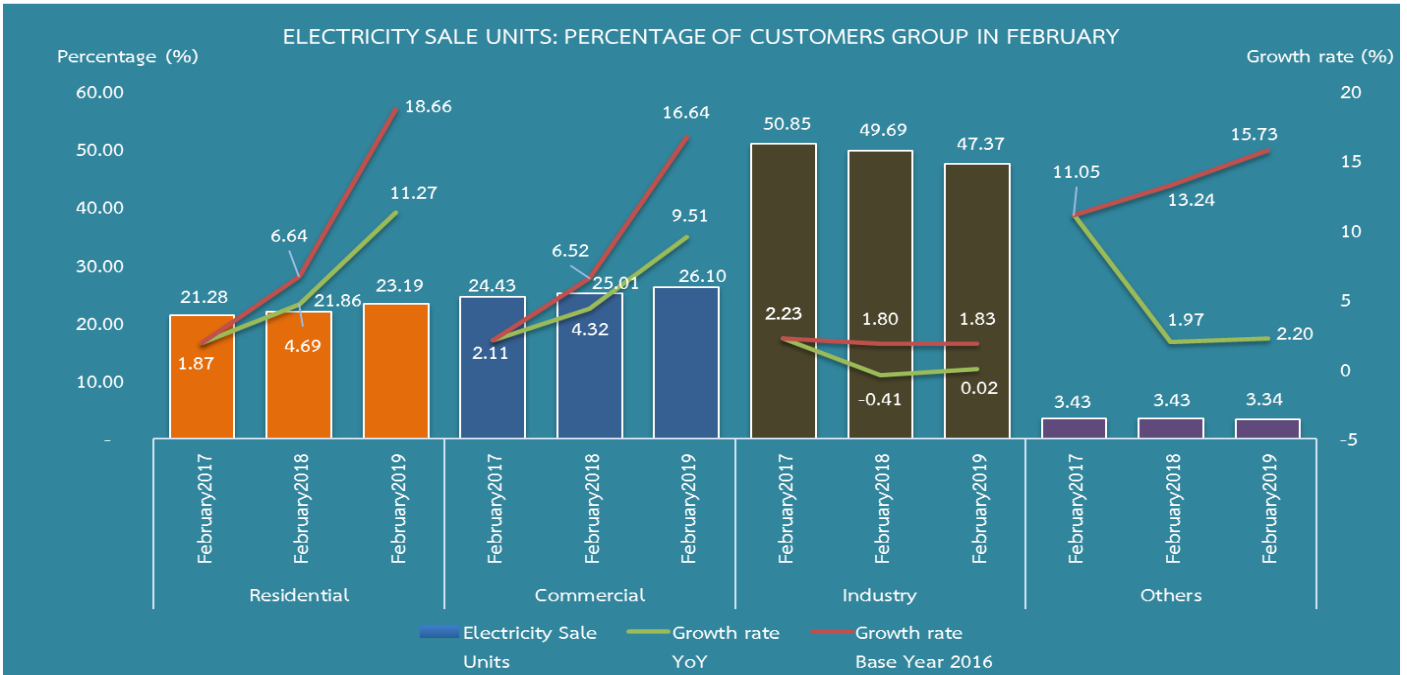
In February 2019, PEA had total electricity sales 10,397.51 million units. It magnified 4.93% YoY.

The residential sector went up 11.27% YoY, with large (more than 150 units) and small (less than 150 units) residential increased 13.87% and 4.02% YoY. Now that, the temperature got higher than normal.

Growth of large Industrial sector reduced 0.16% YoY following a fall of global demand for goods such as electronics, steel and automotive.

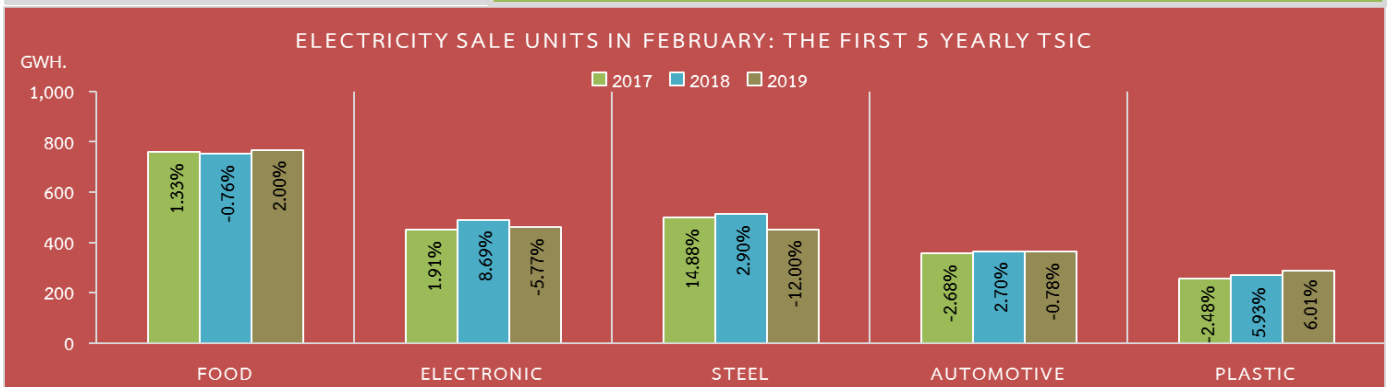
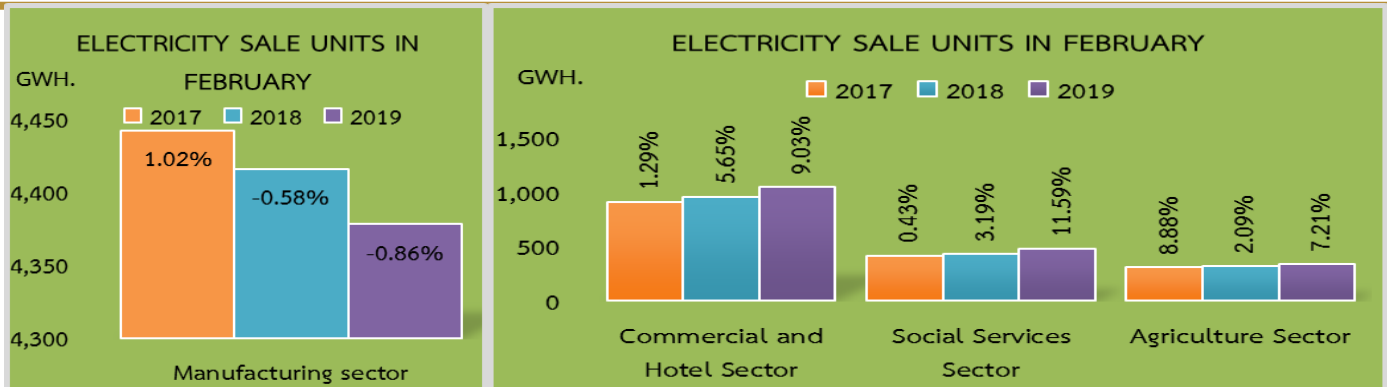
Specific business surged 9.39% YoY, resulting from a jump of sales and services in business sector at 9.03% YoY.

To compare the growth rate between 2019 with base year 2016, it has found that the electricity sales inflated by 9.50% YoY.



Residential	Commercial	Industry	Others
<p>Growth rate magnified 11.27% YoY. Thanks to, the higher temperature. In February, the average temperature was 28.2 degree Celsius. The household income in non- agricultural and agricultural sectors remained steady at high level conforming with an elevated customer confidence. Accordingly, the electricity sales heightened at 18.66% YoY ( compared with base year 2016).</p>	<p>Enlarged by 9.51% YoY due to a surge of private consumption and government expenditure. These caused electricity demand for wholesale and retail rising 8.61% and 8.22% YoY, respectively. Besides, the electricity consumption of department stores expanded 5.41% YoY. While, tourists continually travelled in Thailand. To compare with base year 2016, the electricity sales accumulated 16.64% YoY.</p>	<p>Plummeted by 0.02% YoY, owing to a government’s investment in infrastructure and orders from domestic and international in manufacturing sectors like food and plastic segments. In addition, there was a higher temperature. These caused an electricity consumption in ice factory intensifying 11.53% YoY. Comparing with base year 2016, the electricity sales grew up 1.83% YoY that the trend stabilized. Moreover, customer loss to SPP and broken machine of GJ Steel Public Company Limited influenced a drop of electricity consumption.</p>	<p>2.20% YoY was escalated in consequence of a higher temperature initiating electricity consumption of pumping for agriculture which sharpened by 2.61% YoY. Besides, the electricity consumption of offices in nonprofit organization segment accrued by 10.27% YoY. To compare with 2016, the electricity sales surged 15.73% YoY which was a trend to get higher.</p>

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



**Manufacturing sector** reduced by 0.86% YoY. There were 5 segments in manufacturing sector.

**Food Segment** went up 2.00% YoY. Seeing that, electricity consumption in slaughterhouse varied because of an escalation of livestock export, especially chicken. In addition, the electricity consumption in manufacture of meat and other food products such as spices and herbs exported to Myanmar, Pakistan and Japan. Besides, an export of tapioca flour to China and Indonesia increased. For all, these share was 34.36% which accelerated 8.29% YoY.

**Electronics segment** ebbed 5.77% following a down cycle of export in electronics. For, the inventories were plummeted. Furthermore, consumers in PEA Area 1 (Central) plunged 8.68% YoY or 15 million units by moving to consume electricity from SPP.

**Steel Segment** abated by 12.00% YoY owing to a continually import of tinplate from China and South Korea to use in manufacture. Besides, the machine of GJ Steel Public Company Limited was broken which culminated in 42 million units of electricity consumption.

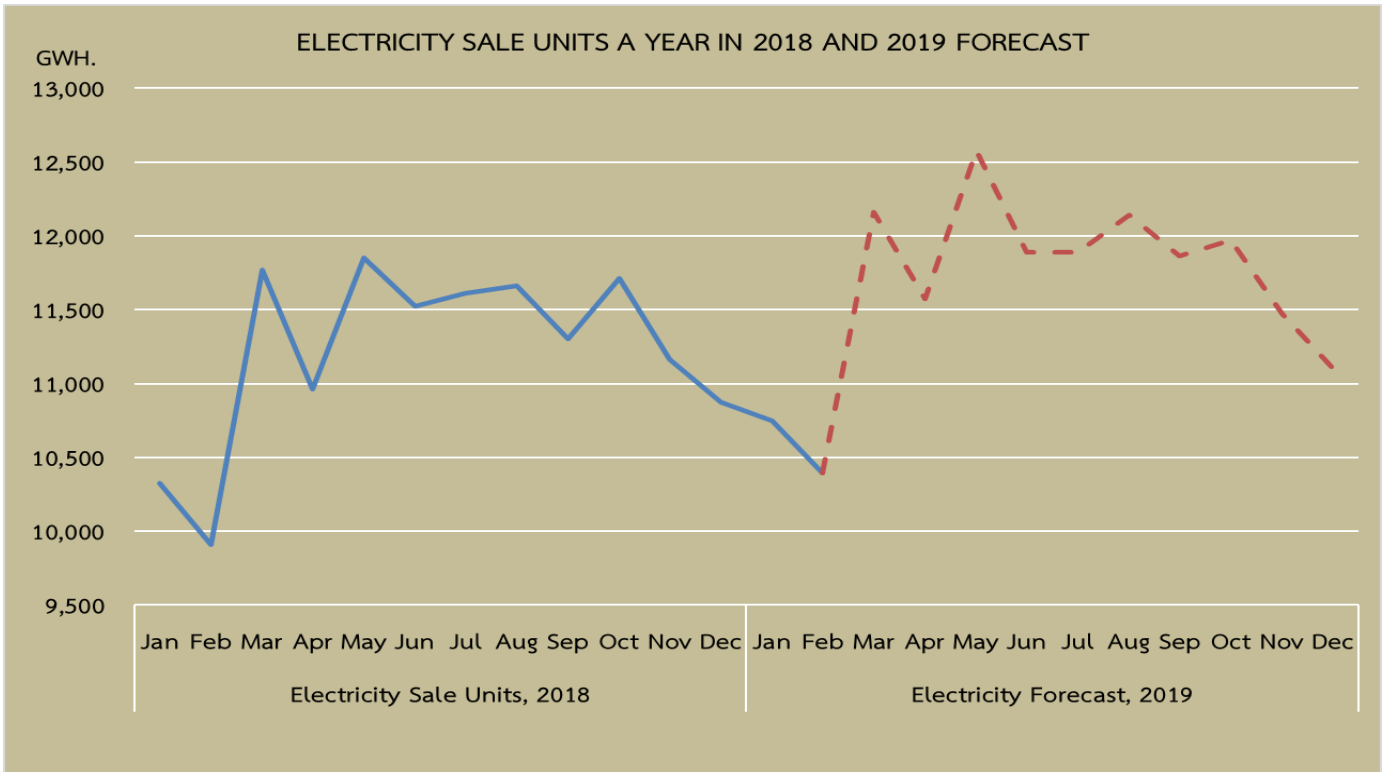
**Automotive Industry** fell by 0.78% YoY, resulting from a decline of car exportation to Australia, Philippines and U.S.A.

**Plastic Segment** accumulated by 6.01% YoY, by reason of export to U.S.A., Vietnam and Philippines.

**Sales & Hotel sector** increased by 9.03% YoY due to visitation of Malaysian tourists by relieving about an epidemic in Thailand-Malaysia border. Moreover, there were a rise of South Korean, Japanese, Indian and Taiwanese travelers from exemption of Visa on arrival fee affecting electricity consumption in hotel segment accrued 6.70% YoY.

**The Social Services sector** rose 11.59% YoY, in consequence of climate variability causing a higher average temperature initiated an increase of electrical consumption in office.

**Agricultural sector** varied by 7.21% YoY, on account of livestock's electricity consumption which exported chicken to Japan and United Kingdoms. While, electricity demand for plantation of vegetables, fruits and horticulture also surged, reflecting from a suitable temperature for plantation.



### Electricity Sale Forecast

PEA forecasts the electricity sale situation in 2019 to improve. 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. The election was due on 24<sup>th</sup> March 2019 resulting to investor confidence.
2. Extension of waiver Visa on arrival for 21 countries due to 30<sup>th</sup> April 2019.
3. New technologies like Big Data, AI, Machine Learning, Internet of Things (IoT) and 5G were used for analysis and goods improvement for responding various customers demand.
4. In early 2019, the weather had a trend to be hotter than previous year.
5. The improvement of main 5 infrastructure projects in EEC and Suvarnabhumi airport project might make more confident of private to invest, if they were still following the government plan.

#### Negative factors

1. Supportive policies for SPP Cogeneration, which encourage private sector to play a role in generating electricity for distribution. Then, there was more and more losing customers to SPP.
2. The effect of trade barrier between U.S.A. and China which couldn't conclude. Apart from, the economic shrank in many countries.
3. Free Trade Agreement (FTA) between England and others was uncertain if Britain exiting the EU (Brexit) on March 29<sup>th</sup>, 2019.
4. An easing of Chinese tourists from overlapping of Chinese New Year in early February caused urgent travel of Chinese tourists.
5. Steel situation still was worrying and risky. Seeing that, low-cost steel was imported from abroad. Besides, there was not extend the safeguard policy of hot rolled steel flat products with certain amount of alloying element