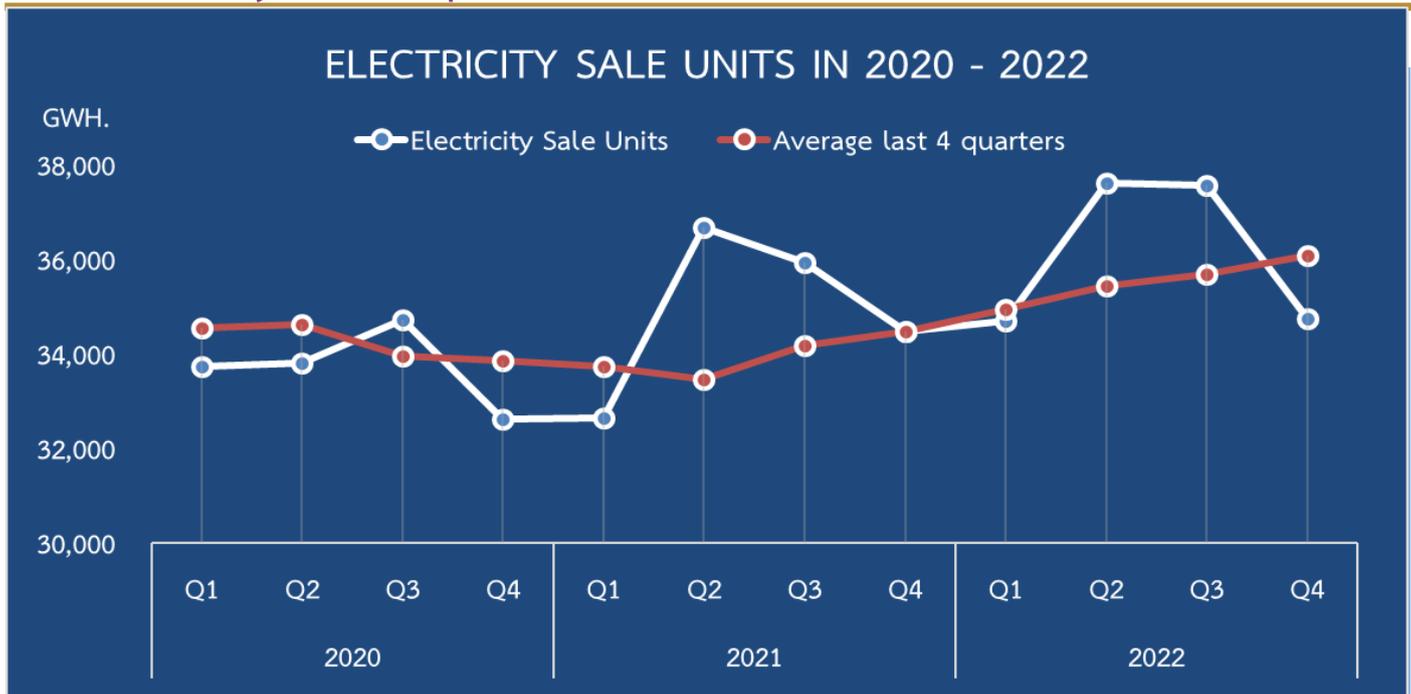
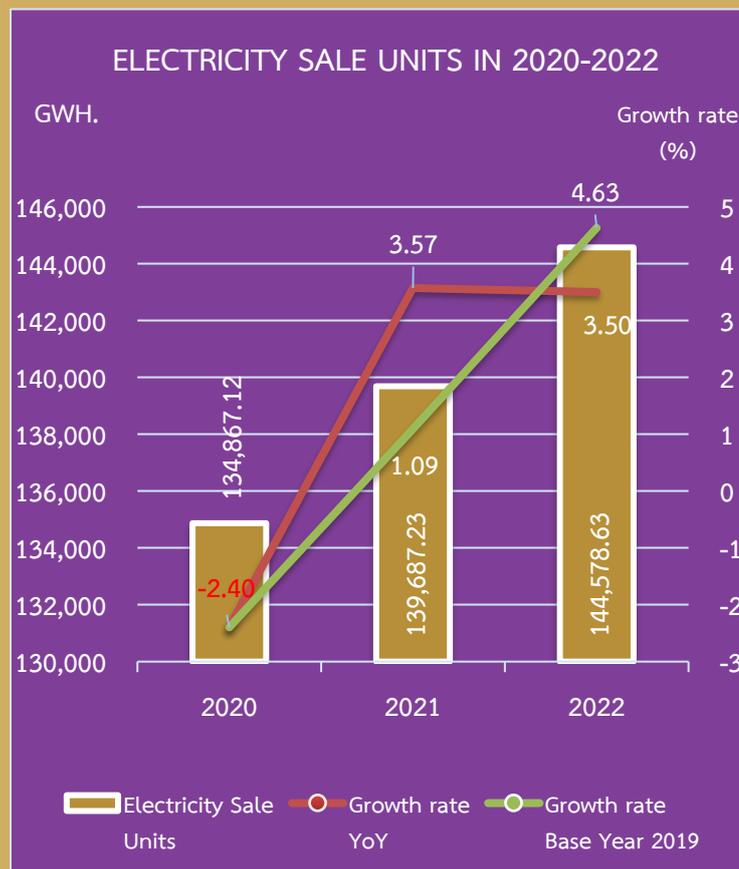


The Electricity Sales Report of PEA in 2022



In 2022, The electricity sale units of PEA increased by 3.50% YoY from a growth of domestic and international travelers causing an increase in service sector and private consumption. Moreover, export has orders from partners like United States, China and Japan. Government launched policies to stimulate household expenditure, tourism and project's investment for attracting foreign investors.

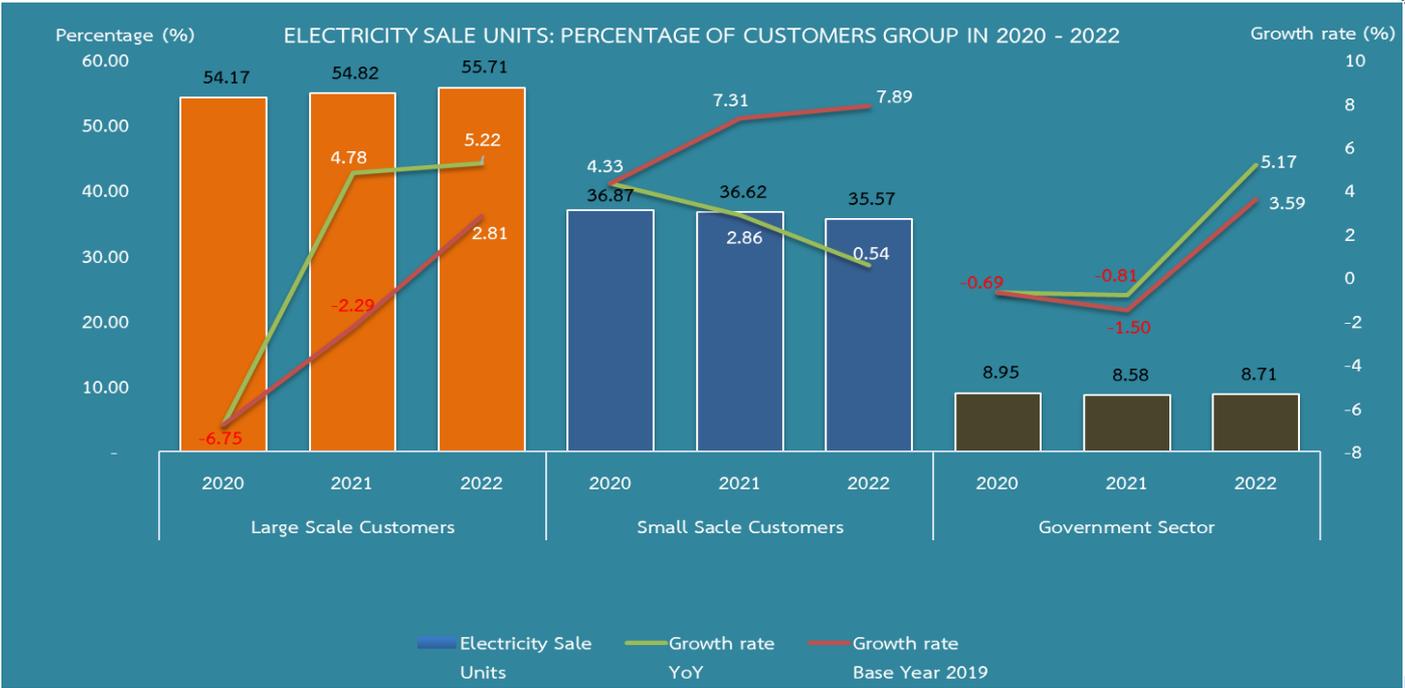


In 2022, PEA had total electricity sales 144,578.63 million units. It grew up 3.50% YoY which was lower than approximation increasing 3.51% YoY (approximated on October 20th, 2022).

The residential sector dropped at 0.66% YoY owing to the lower temperature. Furthermore, there were heavy rainfall and flood in many areas since July 2022.

Small, Medium and Large general service went up 3.92%, 3.45% and 3.30% YoY, respectively, following the demand for goods from partners and household expenditure.

Specific business service rocketed at 38.61% YoY, especially hotel sector, because of the particularly increase in tourism.



Large Scale Customers	Small Scale Customers	Government Sector
<p>Growth rate enlarged at 5.22% YoY.</p> <p>Electricity consumption of the industrial sector grew at 3.08% YoY from the rise in orders for important products such as rice, rubber and automobile in United States, India Malaysia and Australia.</p> <p>Electricity consumption of large scale commercial sector rose at 14.92% YoY resulting from relaxation of COVID-19 which affected to a growth of tourism from domestic and international travelers. These was an effect on related business's income like hotels, tourism business and transportation.</p>	<p>This segment rose at 0.54% YoY.</p> <p>The electricity consumption in residential sector declined at 0.66% YoY owing to the lower temperature, heavy rainfall and floods since the third quarter.</p> <p>Besides, small scale commercial customers increasingly consumed electricity by 4.19% from higher income of household and government spending policies such as "Half-Half" scheme and financial support from social security. Besides there was a high electrical consumption from retail and wholesale sectors in World Cup festival in the end of year.</p>	<p>Rising at 5.17% YoY on account of electrical consumption in schools and government buildings like administrative offices.</p>

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



Manufacturing sector expanded at 2.61% YoY. There were 5 segments in manufacturing sector.

Food Segment slightly ascended at 1.80% YoY due to the ice production rose 1.04% YoY from restaurants and entertainment venues in World Cup. Besides, electricity consumption of rice mill grew 6.12% YoY following export to Iraq and United States.

Steel and basic metals segment mostly expanded by 2.90% YoY owing to demand for steel and steel products from India, Malaysia and Philippines. Moreover, there was an export of rolled steel to Vietnam and Belgium. The order of aluminum products from United States, Japan and India increased.

Electronics segment decreased at 2.39% YoY from using Solid-State Drive instead of Hard Disk Drive in personal computer. so, the export of Hard Disk Drive to Hong Kong and Netherlands declined.

Automotive Industry highly spread at 3.61% YoY following the growth of vehicle exports to Australia, Vietnam and Philippines. There was an order of motorbikes from Belgium, China and Japan and domestic demand for cars following the supportive campaign to increased 11.89% YoY of car sales or 849,388 cars.

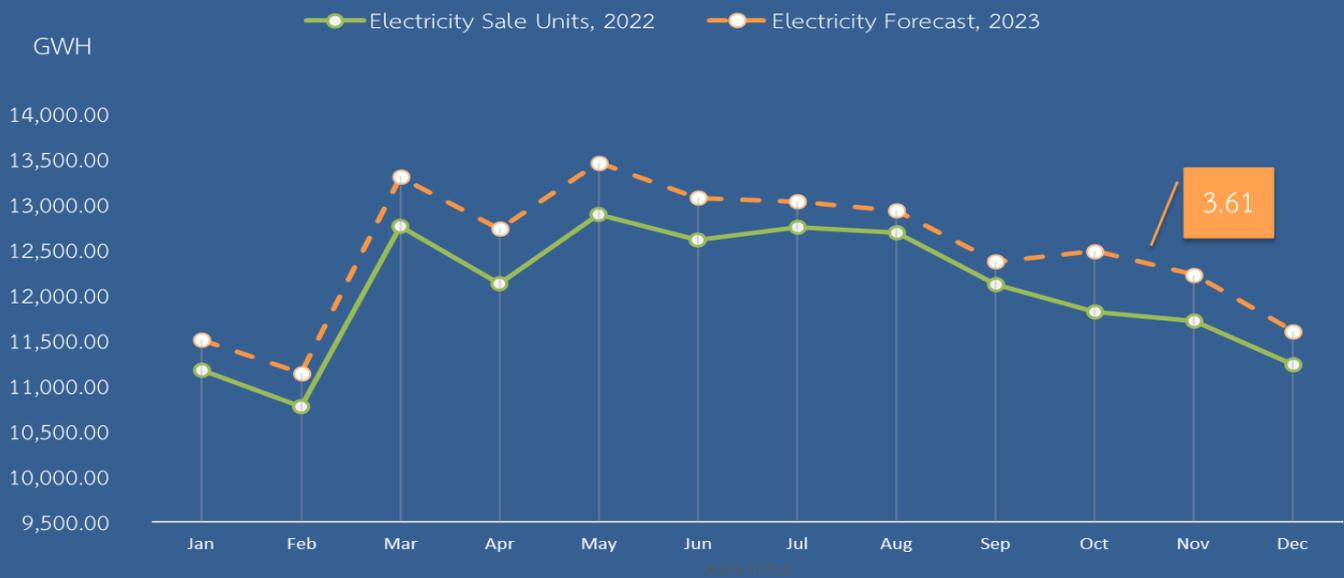
Plastic Segment fell at 0.01% YoY, thanks to a fluctuation of crude oil price that caused a drop of food delivery and plastic production from a cancellation of non-recycling products.

Sales & Hotel sector enhanced at 15.85% YoY due to the number of tourists especially Malaysian, Indian and Russian. Apart from, supportive campaign and long holidays.

Social Services sector grew 8.92% YoY, in consequence of electrical consumption in academy and government offices.

Agricultural sector plummeted at 1.12% YoY, on account of electrical usage in livestock, agricultural pumping, in-shore and off-shore fishery and orchard.

ELECTRICITY SALE UNITS A YEAR IN 2022 AND 2023 FORECAST



Electricity Sale Forecast

The electricity sales in 2022 went up 3.50% YoY was lower than approximation which increased 3.51% YoY (approximated in October 2022).

PEA forecasts the electricity sale situation in 2023 to improve. The committee approximated that will be expanded 3.61% YoY. There were many factors to impact the electricity sales.

Positive factors

Tourism

It was a key factor to drive Thai economic from international tourists such as European, Chinese and Indian. Furthermore, there was domestic travelers following the policy to support tourism which was “We travel Together fifth phase”. These caused tourism supply chain like hotels, airlines, travel agencies, car rents and medical centers. In 2023, Tourism Authority of Thailand forecasted that the number of tourists is 25 million people.

Export

Thailand have new markets to export food, automobile parts, air conditions and building material to Central East countries like Saudi Arabia, United of Emirates and Qatar. In part of South Asia markets, the target is export of chemical products,

Plastics, automobile and automobile parts to India, Bangladesh and Nepal. Furthermore, building material, electrical appliances, plastics, textile and clothing are exported to CLMV markets; Cambodia, Laos, Myanmar and Vietnam.

The relaxation of “Zero COVID” in China

This measure recovered tourism, consumption, production and public investment of China. The companies owned by foreigners can run business which are positive effect to Thai export and increase confident for economic activities.

Expenditure in household and private sectors

Household income increase from tourism and high price of agricultural products. Besides, private sector is getting better from public investment in Mega projects.

Infrastructure

The infrastructure in Eastern Economic Corridor or EEC in second phase are the High-Speed Rail Linked 3 Airports project, Eastern Airport City, Laem Chabang Port project and Map Ta Phut Pier project give an opportunity to invest in many industries, especially in Electrical Vehicle, smart electronic, digital business and modern medicine. In addition, Land bridge project connecting

Gulf of Thailand and Andaman sea is the center of marine logistic by connecting between EEC and southern Economic Corridor: SEC.

Inflation rate

The inflation is going to be a downtrend in the half of 2023 because Federal reserve launched policy to increase interest rate and oil price decrease.

Negative factors

The Recession

- The conflict between United States and China caused an export control of high technology products from China such as semiconductor.

- China and Taiwan conflict affect to production of semiconductor of TSMC which is the second exporters of the world because there is no supply to produce.

- Many countries like United States and European union ostracize Russia by not exporting technology products, not giving loan, not accessing foreign currencies, sequestering personal asset of Russian government, controlling the financial activities and decreasing energy import because of Russia and Ukraine geopolitical.

Trade barrier

Trade barrier is severely to protect domestic market from COVID-19 and conflict of the developed countries. There is carbon barrier to trade in many countries such as European launched European Green Deal to declare Carbon Border Adjustment Mechanism: CBAM for imported goods which affect to Thai exported goods like steel, aluminum and plastics. United States bill Clean Competition Act (CCA) to collect carbon tax for products which made from fossil, petroleum, petrochemical, fertilizer, steel and coal. This caused Thai entrepreneurs and government changed technology to release carbon in the limited level and BCG model which lead industrial

Sector to net zero emission.

Interest rate

The trend of Thai interest rate depends on inflation and interest rate of Fed. The highest interest rate of Thailand is around 1.75% - 2% which affect to liquidity of business, income of household and debt.

Increasing minimum wage

Wage council declared new minimum wage to be 328 – 354 baht per day and enforced on 1st October 2022 which caused a high cost for business and industries.

Inclement weather

In 2023, Thailand may face drought because La Nina changes to El Nino causing hot weather and low precipitation.

Political uncertainty

There may be fiscal burden from policies to support cost of living after election in early 2023.