

Energy Management



Commitment and Goals

The inherent limitations of domestic energy resources, coupled with a significant reliance on imported fossil fuels for primary electricity generation, have resulted in volatile and consistently escalating energy costs.

Recognizing these challenges, Thai Wacoal is committed to optimizing electricity consumption to ensure maximum efficiency. This commitment is driven by a dedication to the sustainable utilization of natural resources and a proactive approach to minimizing environmental impact. Furthermore, the company aims to achieve substantial reductions in energy expenditures. To this end, an organizational energy performance indicator has been established, targeting a reduction of energy consumption by more than 2% (kWh.) relative to the Energy Baseline derived from the period of January 2021 to December 2022.

Management Strategies

1. The operation under rules, regulations and international standards

Thai Wacoal is willful to operate the lingerie manufacture business with the least energy usage in manufacture and the least effect to environment. Apart from compliance to regulations and laws, the company also has appointed an ISO 50001 energy management system working group to implement the energy conservation policy by setting goals, planning, implementing plans and monitoring performance in accordance to the guideline of the international energy management system requirement: ISO 50001. The company was certified on the standards by Bureau Veritas Certification (Thailand) Ltd., which is the practice that given the company to have efficient energy conservation and continuously improve the energy consumption practice every year.

2. The increase of efficient energy usage and continuous improvement

Thai Wacoal consistently executes energy conservation initiatives through a comprehensive framework encompassing control, promotion, and support measures. This strategic approach is designed to optimize energy efficiency across all operational facets. The company places significant emphasis on both capital-intensive and non-capital-intensive energy conservation projects, while concurrently conducting in-depth research into cutting-edge energy-saving technologies. These technologies are then rigorously evaluated and implemented to maximize benefits for the organization.

3. Fostering Awareness on energy conservation to employees in the organization

The Company implements annual employee training programs, with the 2024 curriculum featuring a course titled "Energy and Environmental Conservation Awareness." This initiative aims to cultivate a comprehensive understanding and heightened awareness of energy conservation principles among employees, thereby fostering a robust organizational culture committed to sustainability.

4. Enhancement of personnel ability on energy conservation

Thai Wacoal is committed to the strategic development of its workforce, focusing on enhancing employee potential and cultivating specialized expertise. This commitment ensures that personnel possess the requisite skills and in-depth knowledge to perform their roles with proficiency, adapt effectively to dynamic operational environments, and apply these capabilities to optimize organizational processes. Furthermore, this initiative is seamlessly integrated into the company's energy management framework, driving continuous improvement and sustainable practices.

5. Preventive working

The company has set the plan for maintenance of machines, the main equipment that consume high energy like the machine for utility by focusing on Preventive Maintenance in order that the machine and equipment will be ready for usage, be maintained in good condition and be prevented from damage. Moreover, there is also the continuous implementation of control measures for efficiency or capability value of the significant machine. The most efficient machine will then be prioritized for use, including the utilization of information technology systems to assist management. This affects the ability to effectively control the work of the machine and equipment, the work safety and the reduction of energy loss and mitigation of environmental effects.

2024 Performance

The company has begun utilizing a primary source of energy, which is direct energy sourced from solar rooftops, as well as a secondary source of energy, which is indirect energy sourced from the Metropolitan Electricity Authority, in its manufacturing process.

In 2024, the company consumed 6,365,000 kWh. of electricity, which represented a 2.65% decrease over the previous year's consumption of 6,538,000 kWh. When considering the company's Energy Baseline statistical model equation (from January 2021 to December 2022), which the company has set as an indicator of energy performance of the organization, it was found that electricity consumption had decreased by 17.45% due to energy conservation measures. When considering the Specific Energy Consumption (SEC) value, electricity consumption was 3.322 megajoules per piece in 2024.

4 energy conservation measures were implemented in 2024, aimed at improving energy efficiency and investing in technology that utilize energy from renewable energy sources. These measures consisted of the following projects:

1. Project to improve the building envelope according to BEC (Building Energy Code) standards at Building 4.
2. Project to replace the 1,000 kVA transformer with an 800 kVA transformer.
3. Project to change the 72,000 BTU. Split-type air conditioners in the Board of Directors' reception room.
4. Project to change the 80,000 BTU. Split-type air conditioners in the Building 2.

2024 Energy Saving Performance



Energy saving result compared to energy baseline was **1,345,574.00** kWh./Year

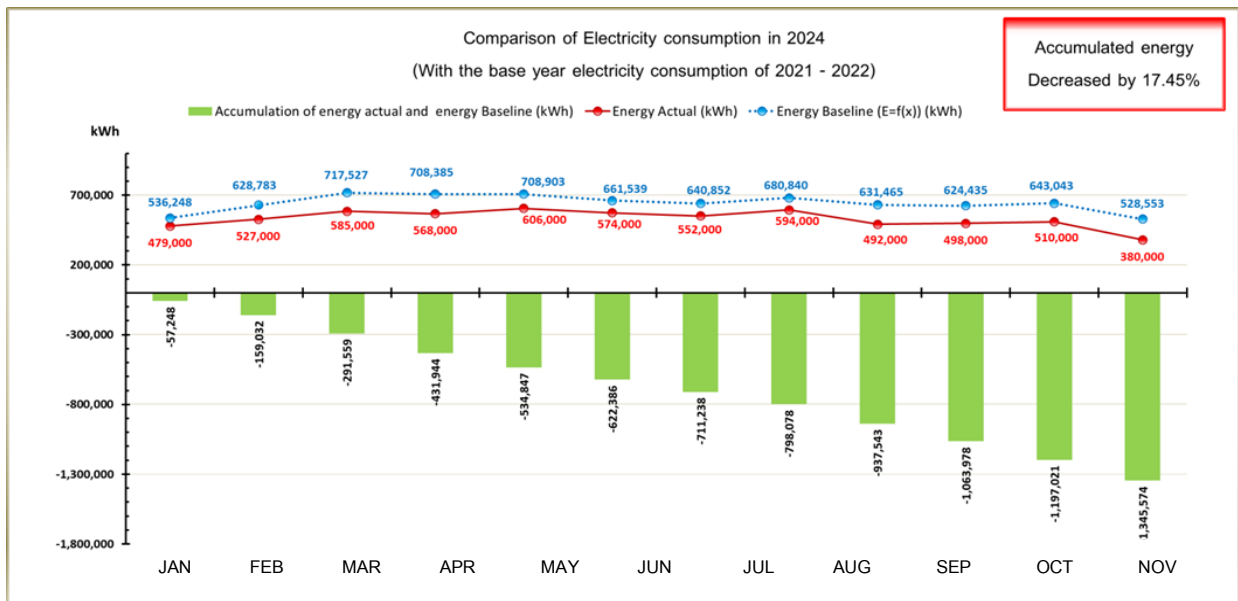


Energy costs reduced **6,418,386** Baht/Year

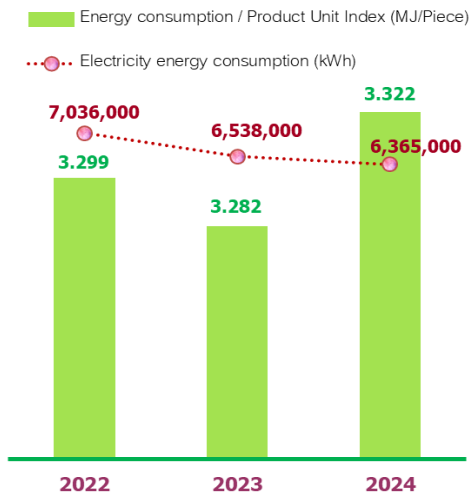


Reduced greenhouse gas emission: **73.78** TonCO₂e

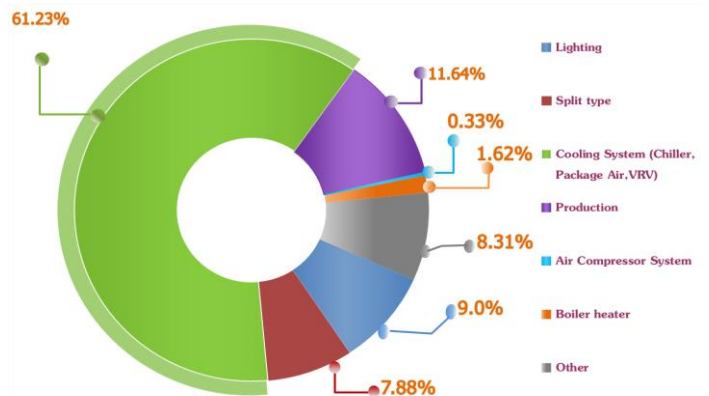
Comparison graph of the electricity consumption in 2024 with the amount of electricity consumption in the energy baseline year (January 2021 - December 2022)
(Energy Baseline statistical model equation)



Energy Intensity



Proportion of electricity Consumption in 2024



Energy and Greenhouse Gas Management

Energy and greenhouse gas information	Unit	2022	2023	2024
Electricity usage for the entire organization	Kilowatt-hour	7,036,000	6,538,000	6,365,000
Energy consumption index	Megajoules per piece	3.323	3.282	3.322
Electric energy consumption reducing from the implementation of the measure	Kilowatt-hour	225,908.35	1,060,086	146,750
Amount of greenhouse gas emission	TonCO ₂ e	3,517.30	3,268.34	3,181.86
Amount of greenhouse gas emission reduction	TonCO ₂ e	112.7	529.93	73.36