

# Quantitative Management of Energy Conservation and Carbon Reduction

Material Topics	Greenhouse gas management				
	Fulfill environmental protection and social responsibilities, help				
Importance to	reduce costs and improve efficiency. At the same time, it can create a				
the Company	good corporate image and enhance competitiveness, thereby				
	achieving the goal of sustainable development.				
	(1) Pay attention to the updated status of laws and regulations at all				
	time. Review the Company's conformity to regulations and then				
Policy/Commitm	develop various measures for regulatory compliance.				
ent	(2) We integrate the concept of reducing environmental impact into				
	all stages of product life cycles and work together with the supply				
	chain to continue developing energy-saving products.				
	Short-term goal: It is expected that we will obtain the certification of				
	ISO 14064-1 issued by a third-party unit by 2024.				
	Intermediate- and long-term goals: Quantitative management				
Goals	objectives for energy conservation and carbon emissions reduction:				
	The GHG emissions intensity (metric tons/NT\$ million) the previous				
	year is the base period, and the emission intensity of the current year				
	should be reduced by 1% year by year.				
Resources	Replacing traditional lamps with high-efficiency and power-saving				
committed and	lamps is expected to save 2,904 KWH of power each year, which can				
specific results	reduce the Scope 2 greenhouse gas emissions by about 1.44 tons of				
during the year	CO2e/year.				
Responsible					
department	Pingtung Plant				
/Grievance					
measures					
	Quantitative management objectives for energy conservation and				
Evaluation	carbon emissions reduction: The GHG emissions intensity (metric				
measures/Outco	tons/NT\$ million) the previous year is the base period, and the				
me	emission intensity of the current year should be reduced by 1% year				
	by year.				



# 1. Quantitative management objectives for energy conservation, carbon emissions reduction and water and waste management

(1) Energy conservation and carbon emissions reduction

In response to global climate change, countries around the world have spared no efforts in promoting energy conservation and carbon emissions reduction. Quantitative management objectives for energy conservation and carbon emissions reduction: The GHG emissions intensity (metric tons/NT\$ million) the previous year is the base period, and the emission intensity of the current year should be reduced by 1% year by year.

(2) Water management

In response to global climate change, stabilization of water supply has become a problem faced by many countries. In order to fulfill social responsibilities and respond to the issue of global water shortages, the company uses the management objective of per capita water use intensity (thousand liters/person) of the previous year as the base period, and reduces the water consumption intensity of the corresponding period of the current year by 1%.

(3) Waste management

In order to promote sustainability of the environment and cherishing of resources, the management objectives for waste generated from design to production are that the waste intensity (metric tons/NT\$ million) in the previous year is the base period, and the waste intensity of the current year is reduced by 2% year by year.

# 2. Measures for achieving management by objectives

(1) Energy conservation and carbon emissions reduction

For electric lighting, replace traditional lamps with high-efficiency and energy conservation lamps. In the first half of 2023, Pintung Plant II completed the replacement of lighting fixtures in the stairwell. It is expected that the replacement of lighting at Pintung Plant I will be completed in the first half of 2024.

Adjust the lighted paths in the office and factory areas to reduce the lighting region.

Air-conditioning temperature and timer scheduling management. Distribute short-sleeved breathable shirts in summer.



Annual inspection and analysis of the reasonableness of electricity consumption to negotiate the best contract capacity.

(2) Water management

When replacing sanitary equipment, purchase those with water-saving label, and install water-saving devices on hand washing sinks.

Adjust triangular values to reduce water consumption. Annual inspection and analysis of water consumption to ensure the reasonableness in consumption.

Check the toilets in restrooms for water leakage; if so, replace the waterstops.

(3) Waste management

Implement waste categorization and recycling and promote the concept of saving the Earth.

Adhere to the principle of low-carbon procurement and prioritize sourcing from local suppliers. Produce reports in electronic format to reduce paper waste.

Improve the capability of the maintenance team. Maintenance first before replacement, and avoid direct scrapping.

Reuse pallets. Pallets that are kept intact from sea freight are then reused in the domestic factory floor.

# 3. Current achievements

(1) Greenhouse Gas Emission

It is identified that the main greenhouse emission sources are electric power, transportation vehicles (diesel), cooling equipment (coolant) etc. The GHG emission intensity in 2023 was 0.196, a decrease of about 1.51% from 0.199 in 2022. This is due to the decrease in production capacity causing the decrease in electricity consumption, which meets the management objective. The company's energy conservation and carbon reduction management measures will continue to be implemented.

For the greenhouse gas emission for the last three years, please refer to the table below.



Year	Greenhouse Gas Emission			
Item	2021	2022	2023	
Scope 1 (metric tons of CO2e/year)	107.55	112.6	102.00	
Scope 2 (metric tons of CO2e/year)	569.28	427.7	365.98	
Total emissions for the year (metric tons of CO2e/year) (Scope 1 + Scope 2)	676.83	540.3	467.98	
Ablerex parent-only revenue (NT\$ million)	2,550	2,715	2,384	
GHG emissions intensity (metric tons/NT\$ million)	0.2654	0.199	0.196	

Note:

The scope of inventory covers office in Taichung, Pingtung Plant 1 and Pingtung Plant 2.

(2). GWP value adopts the IPCC AR6 value.

(3). Electricity carbon emission factor: The 2023 electricity carbon emission factor of 0.494 kg CO2e/kWh is used; the other years use the electricity carbon emission factor for those years.

(4). The Company currently collects and aggregates data from Scope 1 and Scope 2, excluding Scope 3.

(5). 2023 data not verified by ISO 14064-1.

Energy consumption in 2023 included purchased electricity and diesel. The main energy consumption was with purchased electricity. Renewable energy was not used. Currently, all energy consumed was for in-house use, not sold to other parties. The electricity/oil consumption data of the head office (New Taipei City) and Pingtung plants for the last three years is detailed in the table below:

	Ablerex power consumption Ablerex diesel consumpti	
	(GJ)	(GJ)
2021	4,082.46 (99.53%)	19.150/(0.47%)
2022	3,958.47 (99.67%)	13.070/(0.33%)
2023	3,684.52 (99.66%)	12.728/(0.34%)

Note:

Unit GJ; 1 kWh = 0.0036GJ 1 liter of diesel = 8,400 kcal = 0.03516912GJ. Calculation of various energy calorific values and liters of oil equivalent is based on the "Unit Calorific Value Table of Energy Products" announced by the Bureau of Energy of the Ministry of Economic Affairs. Source: Website of Bureau of Energy, MOEA (http://www.moeaboe.gov.tw/).

#### (2) Water management

The Company offers products in assembly. The waste and sewage discharged at each operating site and factory area are mainly domestic sewage. In order to ensure that the domestic sewage discharged meets the regulations for water pollution

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prevention, the water quality has to meet the standards for effluent, and then the sewage is discharged to the sewer system. The water use intensity in 2023 was 16.500 thousand liters/person, a decrease of 6.65% compared with the water use intensity of 17.675 thousand liters in 2022. The implementation of water consumption management measures effectively reduced the waste of water resources, and we will maintain such efforts. The data on water withdrawal in the last three years are detailed in the table below:

Materinteko turo	Standard/methodology/	Usage amount		int
Water intake type	assumption used	2021	2022	2023
City government water	Water bill	E 001	5,868	5,676
supply (tap water)	(thousand liters)	5,884		
Total water consump	5,884	5,868	5,676	
Total number of e	333	332	344	
Water use	17 (70	17 675	10 500	
(thousand li	17.670	17.675	16.500	

Scope of Statistics: Include Taipei Office, Kaohsiung Office and Pingtung Plant.

### (3) Waste management

The Company offers products in assembly, and the waste in each operating site and factory area is divided into two categories, general waste and hazardous industrial waste. Industrial waste is entrusted to local qualified waste disposal operators to be transported to incinerators or landfills designated by the government. The waste intensity in 2023 was about 0.0023 tonnes per NT\$1 million in revenue, which is about 21% more than 0.0019 tonnes per NT\$1 million in revenue in 2022. This is due to more post-pandemic customer visits and meeting, resulting in an increase in domestic waste. Although the management target has not been achieved, the Company's management measures will continue to be implemented. The types of waste and treatment status in the last three years are shown in the following table:

Waste Code	Item	Туре	Treatment	Unit	2021	2022	2023
D- 1801	General industrial waste	Consumer garbage	Incineration	Ton	5.510	5.17	4
E-0217	Hazardous industrial waste	Waste electronic component	Physical treatment	Ton	0.062	0.09	0.147



Waste Code	Item	Туре	Treatment	Unit	2021	2022	2023
		parts, scraps and defective parts					
E-0221	Hazardous industrial waste	PCB waste and powder containing metal	Physical treatment	Ton	0.088	0.11	0.063
Total industrial waste			Ton	5.66	5.37	5.45	
Standalone revenue			NT\$1 million	2,550	2,715	2,384	
Waste intensity			Tonne/ NT\$1 million	0.0022	0.0019	0.0023	

Note: Disclosure of product life cycle management:

(1). The weight of related scrapped products and electronic waste is shown in the table above, and qualified thirdparty vendors are commissioned to clear and transport them.

(2). The generated waste is currently not recycled, so the recycling percentage is 0%.

### 4. Compliance with Environmental Protection Laws

Based on the characteristics of the industry, Ablerex has obtained the ISO 14001 Environmental management system certification to reinforce the operations management of the environment, safety and health in factory areas, and taken actions to respond to environmental impact.

There is no major source of pollution in the production process. However, in response to changes in laws and the needs of operation and management, we have assigned dedicated personnel in charge of environmental protection who check the status of regulatory changes from time to time to determine whether the Company's operations are affected.

The Company's waste water discharge and waste disposal are handled in accordance with relevant laws and regulations, and the leftover, scrap, and waste generated in the production process are entrusted to qualified recycling operators for further treatment.

All employees follow the management standards for environmental protection, safety and health. In 2023, the Company was not fined or sanctioned for pollution, violating environmental laws and regulations nor was it involved in any litigation.