Comparison of Greenhouse Gas Emissions of Each Plant			
Plant	**2022**	**2023**	**Difference from the previous year**
Guishan Plant 1	14,712	11,058	(3,654)
Guanyin Plant 2	42,181	40,784	(1,397)
Guanyin Plant 3	60,670	50,308	(10,362)
Guanyin Plant 4	3,968	2,406	(1,562)
Dayuan Plant 5	35,678	20,286	(15,392)
Taipei Office	104	100	(4)
Subsidiary – Hongyousheng	-	3	3
Total	**157,313**	**124,945**	**(32,368)**
Emission Intensity	**0.92**	**0.82**	-

*The scope of emissions in this table is only direct emissions and indirect emissions from energy sources.
*Emission intensity = emissions (direct + energy indirect) metric tons of CO_2e/production (tons)

Unit: CO_2e in metric tons

Since 2020, the Company has been adjusting its energy sources by gradually replacing fuel oil with natural gas.

The natural gas improvement project was completed in 2022, and the key activity data for 2023 show the following changes:

Electricity decreased by 33,169.89 kWh,

Fuel oil decreased by 1,561.3 kiloliters

Bituminous coal decreased by 3,491.364 metric tons

Steam increased by 369 metric tons,

Natural gas increased by 3,555.69 thousand cubic meters.

As a responsible global citizen, and in line with the Company's commitment to environmental protection, the following greenhouse gas reduction initiatives will continue under the Company's greenhouse gas policy in 2024:

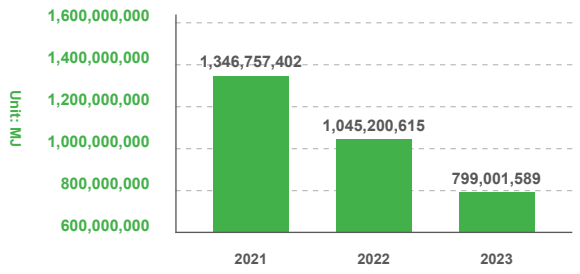
- Continued promotion of energy conservation measures
- Full participation in energy saving and carbon reduction activities
- Comply with environmental regulations, customer needs, and other relevant regulations

4.2.2 Energy Management

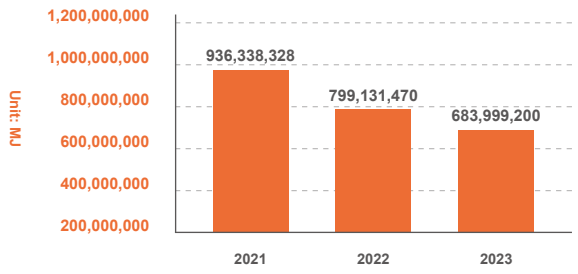
(1) Energy Consumption Statistics

To continuously save energy and reduce carbon emissions while considering our use of electricity, fuel oil, natural gas, bituminous coal and steam, we aim to consume less energy each year compared to the previous year.

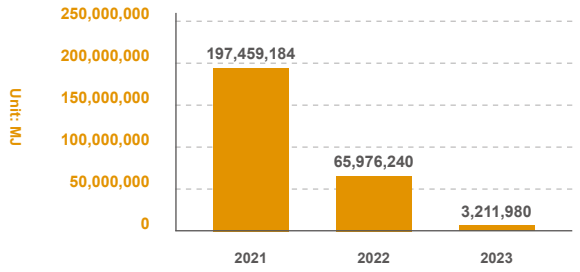
Total Energy Consumption



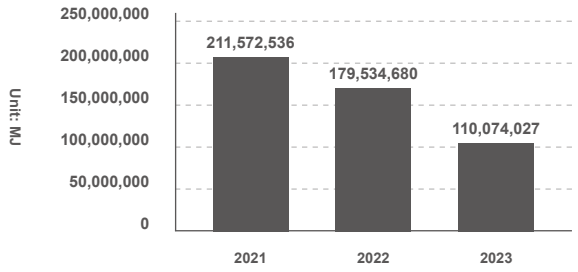
Electricity



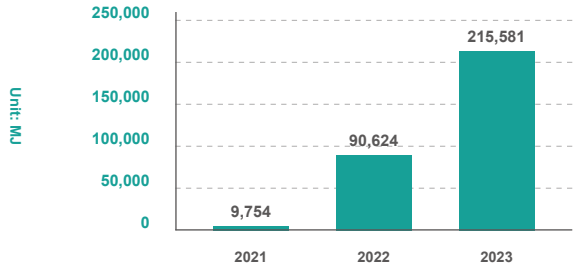
Fuel oil



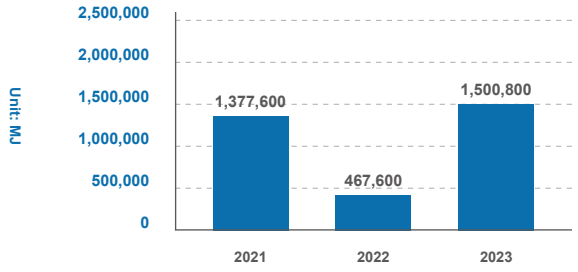
Bituminous coal



Natural gas



Steam



(Energy Administration's calorific value table for energy products per unit)
Electricity: 1 kWh=860 kcal=860*4.184*10^{-3} MJ=3.6 MJ
Fuel oil: 1 L=9600 kcal=9600*4.184*10^{-3} MJ=40.2 MJ
(The calorific value for steam issued by the supplier is 667.96, which lowered to 662.61 after transported to user's end)
Steam: 1KG=662.61 kcal=662.61*4.184*10^{-3}MJ=2.8MJ

(the calorific value provided by the supplier)
(Plant 2) Bituminous coal: 1KG=4842.69kcal=4842.69*4.184*10^{-3}MJ=20.3MJ
(Plant 3) Bituminous coal: 1 KG=4550.27 kcal=4550.27*4.184*10^{-3} MJ=19.0MJ
(Plant 2) Natural gas: 1m^3=8540.77kcal=8540.77*4.184*10^{-3}MJ=35.7MJ
(Plant 3) Natural gas: 1m^3=8539.51kcal=8539.51*4.184*10^{-3}MJ=35.7MJ
(Plant 5) Natural gas: 1m^3=8881.46kcal=8881.46*4.184*10^{-3}MJ=37.2MJ

(2) Energy Saving Results

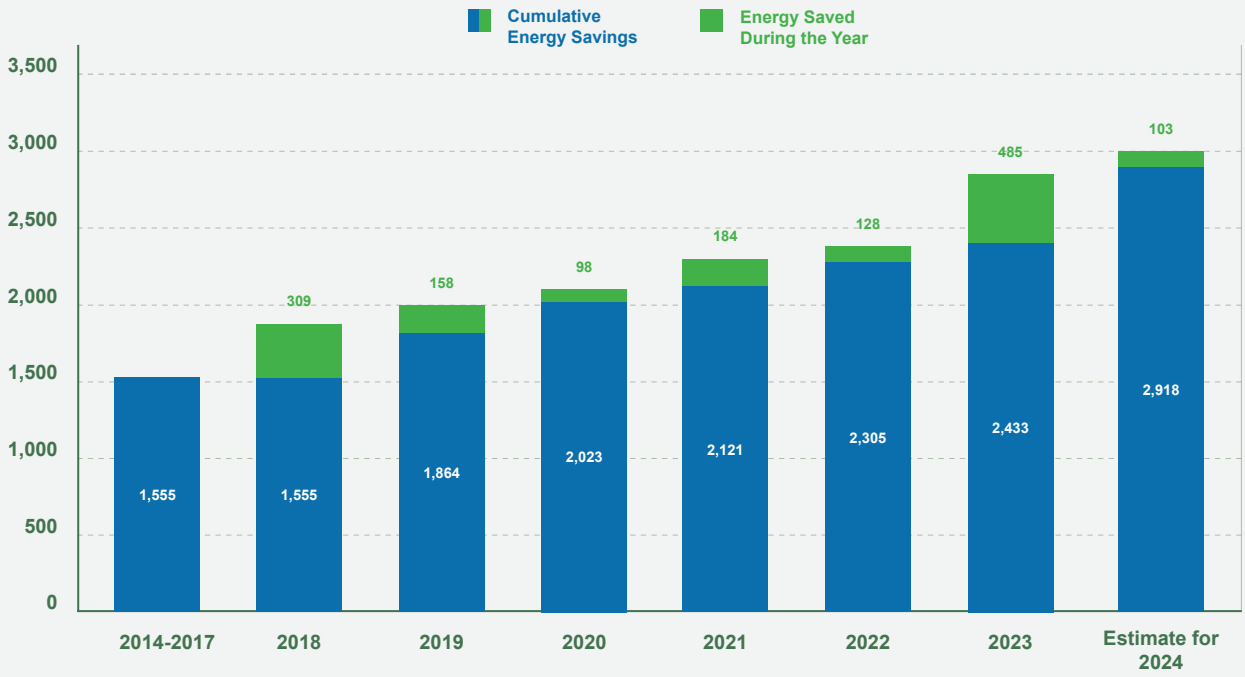
To comply with the energy saving target of achieving an average annual energy-saving rate of over 1% from 2015 to 2024 set by the Energy Administration, Zig Sheng has continued to propose energy saving programs and tracked its progress since 2015. Each plant controls its energy use from the demand side, and has achieved a balance between energy supply and demand by monitoring, control, and optimization. Through these efforts over the past few years, overall energy efficiency has significantly improved. From 2015 to 2023, the Company's average annual energy-saving rate was 1.19%, with a cumulative energy-saving rate of 12.39%.

2023 Progress in Power Saving Targets

Target Value	Actual Value	Power Saving Programs	Electricity saved (kWh)	Unit: NTD thousand
Saved 4.722 million kWh of electricity Invested in an amount of NTD 43.17 million	Saved 4.846 million kWh of electricity Invested in an amount of NTD 43.22 million	DTY machine replacement	74	-
		air compressors replacement	3,760	23,000
		Replacing chillers	442	19,135
		Replacing equipment and adding variable-frequency drives	423	900
		Reducing motor usage by utilizing gravity flow	62	12
		Tube lights are replaced by LED lights	85	170

Cumulative Energy Saving Statistics Table

Unit: 10,000 kWh



Calculation method:
According to the announcement of the Energy Administration, annual electricity savings refer to annual electricity savings from the implementation of various electricity saving measures implemented by Zig Sheng. The calculation period starts from the month following the implementation date and is limited to a maximum of 12 months.
However, if the calculation period crosses the calendar year, the electricity savings is to be calculated on a yearly basis.
(Energy consumption before improvement-energy consumption after the improvement)*operating hours during the reporting period

(3) Energy Saving Planning

Note: The average annual electricity savings rate from 2015 to 2024; electricity consumption in 2024 is assumed to be the same as that of 2023, and then calculations are done in accordance with the regulations of the Energy Administration.

Power Saving Programs	Estimated Electricity Savings in kWh	Unit: NTD thousand
air compressors replacement	802,718	5,500
Replacing chillers	147,456	-
Replacing equipment and adding variable-frequency drives	45,241	279
Adding level controllers	10,439	60
Tube lights are replaced by LED lights	22,888	18

4.2.3 Water Resource Management

Zig Sheng continues to collect statistics on the water consumption of each unit, review whether there is unreasonable water consumption on a monthly basis, and implement improvements as needed. The plant has two wastewater treatment facilities, where the treated water is regularly tested for discharge quality. The facilities adhere to approved water pollution prevention plans and possess the required permits.

The primary water sources are tap water and recycled water. In recent years, the Company has been planning water-saving initiatives, such as rainwater recycling system, reclaimed water recycling, condensate water recycling, etc. In addition to water conservation in the process, we also continue to promote the importance of water conservation in daily life. Based on the average water consumption of the previous five years, we aim to reduce water consumption by 2% per year. In 2023, the Company reduced water consumption by 26.6%.

In 2023, the pure water system at the Dayuan Plant was upgraded from ion-exchange resin treatment to an RO/EDI system, which is expected to reduce the generation of wastewater by 885 tons per year (approximately 14% of pure water consumption). The new system also eliminates the need to use regeneration chemicals such as hydrochloric acid and liquid caustic soda. reducing personnel and environmental hazards.

The water consumption and wastewater treatment volume of each plant in Taoyuan is as follows:

Water consumption statistics

	Water consumption (tons)	Water consumption intensity (tons)	Production volume (tons)
2021	695,569	3.00	232,057
2022	545,553	3.18	171,540
2023	512,364	3.35	152,882

Note: Water consumption intensity = water consumption (tons) / production volume (tons)
Note: Guanyin Plants includes Guanyin Plant 2, Guanyin Plant 3, and Guanyin Plant 4.

Wastewater treatment volume (tons)

	2021	2022	2023
Guanyin Plants	216,324	207,572	206,926
Dayuan Plant	64,221	53,479	45,920
Total	280,545	261,051	252,846

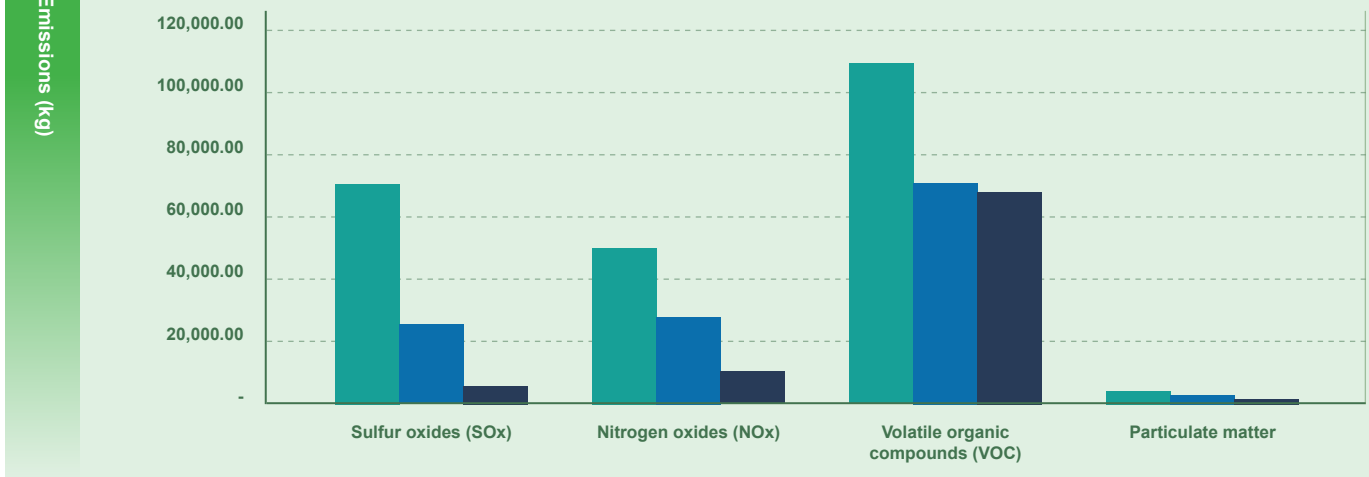
4.3 Energy Transformation

4.3.1 Natural Gas

From 2020 to 2023, we will complete the conversion of seven oil-fired boilers to natural gas boilers to reduce emissions and comply with regulatory standards. In 2023, we will complete one of the natural gas boilers, using 1877 km³ of natural gas. This transition has reduced coal usage, resulting in an estimated reduction of 1,639 metric tons of CO_2e emissions.

Year-by-year comparison of air pollutant emissions

Note: Calculated based on the emission coefficients announced by the Ministry of Environment



Year	Sulfur oxides (SOx)	Nitrogen oxides (NOx)	Volatile organic compounds (VOC)	Particulate matter
2021 Total	72,253.47	50,065.11	109,910.04	4,273.37
2022 Total	24,833.17	27,611.26	74,991.52	2,692.87
2023 Total	5,979.93	10,236.66	70,845.24	1,052.08