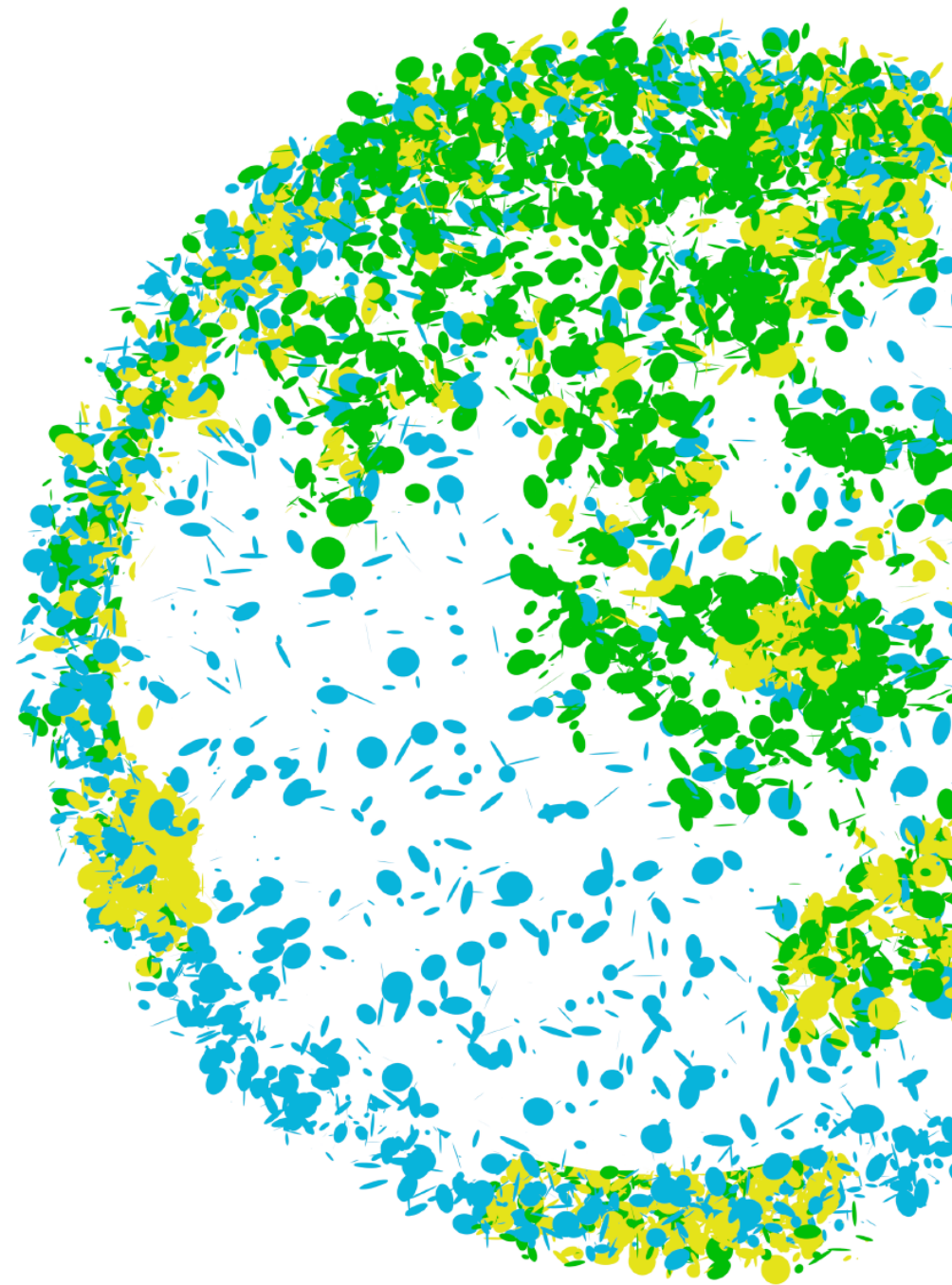


# **ECOVE Environment Corp. 2023 4<sup>th</sup> Institutional Investor Conference**

**2023.11.02**



# Disclaimer

- The consolidated financial statement is hereby based on International Financial Reporting Standards (IFRS) and reviewed/ audited by CPA.
- This presentation may include forward-looking statements with respect to the operations and business of the company other than the historical results. The actual results may differ from those indicated forward-looking statements due to unknown risks and uncertainties. Investors should make their own judgement and control the investment risk.



# Agenda

- Operation Review
- Financial Highlights
- Future Outlook

# Operation Review

# Awards & Honors



## Environment



## Social



## Governance

- The high Distinction Award of 2022 Incineration Plant Audit & Evaluation by Ministry of Environment.
- Kaohsiung City Government' s "2023 Photovoltaic Smart Building Award" Silver Award.
- Ranked as the second place in the Environmental Sanitation Services category of the "Top 650 Service Industries 2022" by CommonWealth Magazine.
- Greenhouse gas emissions inventory passes external verification
- Ministry of Labor and National Science and Technology Council "Excellent Occupational Safety and Health Unit."
- "No Lost Time Injuries Hours: 2 Million Hours" certification by the Ministry of Labor.
- Certification of Health Workplace by the Ministry of Health and Welfare
- 2023 Outstanding Young Engineer Award by the Chinese Institute of Engineers
- Chinese Institute of Environmental Engineering "2023 Service Contribution Award, Outstanding Engineer Award, Outstanding Young Engineer Award."
- Consistently ranked in the top 5% in the Corporate Governance Evaluation by the Financial Supervisory Commission for 9 consecutive terms.
- Ranked in the top 10% of non-financial electronic listed and OTC companies with a market capitalization of over NT\$10 billion by the Financial Supervisory Commission (the only OTC company to achieve this for 5 consecutive years).
- "2022 Green Procurement Excellent Enterprise" by Taipei and Kaohsiung City Government.
- New Taipei City Government and Taoyuan International Airport Corp., Ltd. "Excellent Supplier Performance Evaluation."

# Energy-from-Waste ( 1 / 2 )



- Partnering with our parent company, CTCL, to participate in the BOT project for the green energy sustainable recycling center in Chiayi City, providing comprehensive services including investment, development, construction, waste collection and management, as well as operational management.
  - Qualifying as the top applicant, currently in negotiations.
  - Basic Information :

<b>Region</b>	Taiwan(Chiayi City)
<b>Waste Type</b>	Urban waste and general business waste
<b>Grate Type</b>	Reciprocating (JFE)
<b>Processing Capacity</b>	500 tons/Day
<b>Power Generation Efficiency</b>	Over 25% (Applicable for renewable energy electricity purchase rates)
<b>Franchise Period</b>	27 years



**Green Energy Sustainable Recycling Center in Chiayi City**



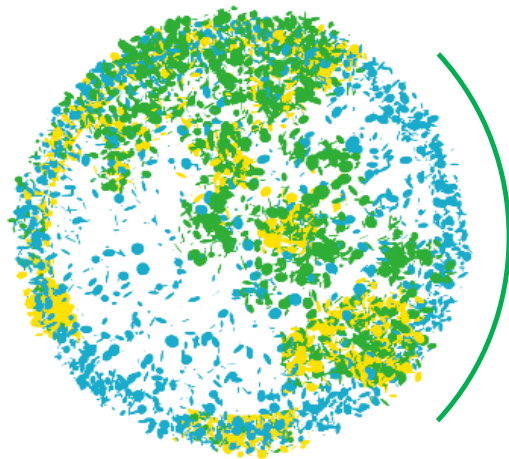
# Energy-from-Waste ( 2 / 2 )



- Acquiring the environmental protection land in the Lunwei West Second Zone of Changhua Coastal Industrial Park and handling the environmental impact assessment (EIA) process.
- Our partner has won the best applicant for the Melaka case in Malaysia and is currently in the investment contract signing process with local government.
- Currently operating 10 large urban incineration plants (8 in Taiwan + 2 in Macau). Assisting owners to properly dispose of waste and turn it into energy.
- The monthly collection, transport, and management of waste is approximately 24,000 tons, accounting for about 35% of the total volume entrusted for collection and management in the country's major urban waste incineration plants.



Environmental Protection Land in the Lunwei West Second Zone of Changhua Coastal Industrial Park



## Contribution to Circular Economy

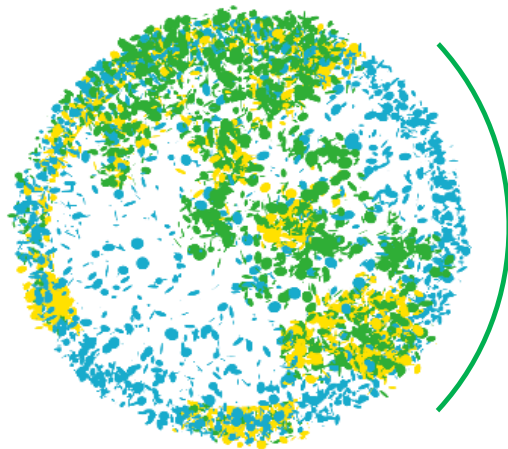
- ✓ In 2023, incineration plants is expected to handle approximately **2.6 million** tons of waste.
- ✓ In 2023, Energy-from-Waste is expected to generate **1.4 billion** kWh of electricity, about **400,000** house holds annual electricity consumption. It is expected to reduce CO2 emissions **by 700,000 tons**, which is equivalent to the annual carbon absorption approximately **1,800** Daan Forest Parks in Taipei City.

# Renewable Energy

- Solar power development of over 157MW capacity has been obtained:
  - connected to the national grid around 106MW
  - under construction around 51MW
- In addition to steady expansion in the domestic market, the second-phase expansion project in New Jersey, USA, is undergoing the process of obtaining state government registration and approval.
- Will continuously strive for large-scale external maintenance projects. The total maintenance quantity is 479MW with steady expansion of our own projects.
- Taipower's Regulation Reserve Ancillary Service of 5MW project is conducted.
- Energy-heavy industries are active for green energy procurement. Currently, the signed green energy supply contracts account for around 16MW.



Signed a memorandum of understanding for renewable energy procurement cooperation with NJIT



## Contribution to Circular Economy

- ✓ In 2023, solar power plants are expected to generate **130 million kWh** of electricity, about **40,000** household's annual electricity consumption. In 2023, it is expected to reduce CO2 emissions by **70,000 tons**, which is equivalent to the annual carbon absorption approximately **170 Daan Forest Parks** in Taipei.



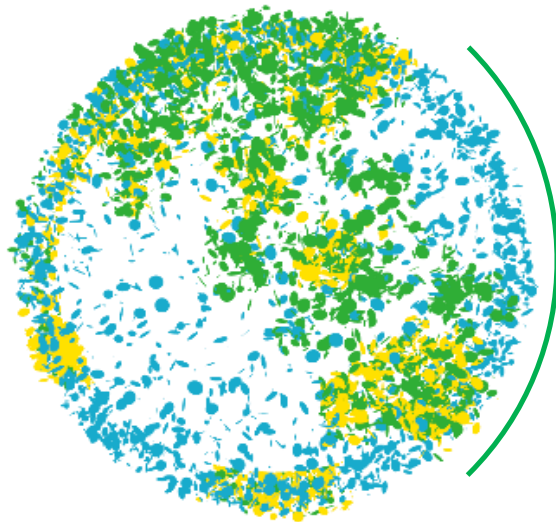
# Recycling and Reuse (1/2)

## Waste Isopropanol Recycling

- Obtained National Science and Technology Council and the Ministry of Economic Affairs' general reuse case, and the production capacity utilization rate is already at full capacity.
- The purity of our waste isopropanol product has been increased from 99.5% to 99.9%, which has increased the value of the product.



ECOVE SRC Waste Isopropanol Recycling Plant



### Contribution to Circular Economy

- ✓ Recycled around **15,000 tons** of W-IPA. **3,500 tons** of industrial grade of IPA were reproduced.
- ✓ Can reduce the use of raw materials and cut carbon emissions by approximately **3,200 tons**, which is equivalent to the annual carbon absorption approximately **8 Daan Forest Parks** in Taipei.

# Recycling and Reuse (2/2)

## Water Treatment

- **Group's water supply operations**

- TSMC Southern Taiwan Science Park Reclaimed Water Plant
- Kaohsiung Fengshan River Reclaimed Water Plant
- Kaohsiung Linhai Wastewater Treatment and Reclaimed Water SPC Plants

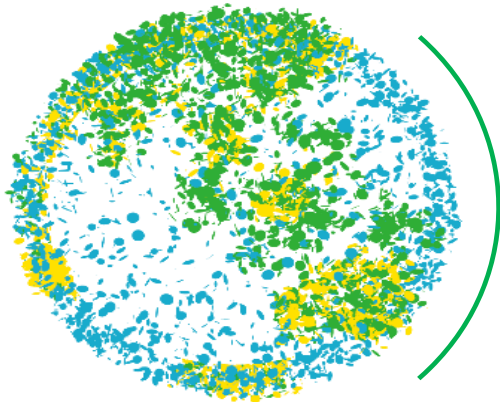
- **Wastewater operation**

- New Taipei City Linkao and Pingtung Agricultural Biotechnology Park Water Resource Fields
- New Taipei Yingge, Sanxia and Jinshan etc. 12 contact bed treatments

- Wastewater Sewer System Construction in Zhongli (not yet operational)
- Taoyuan North District Water Resources Recycling Center (not yet operational)



Wastewater Sewer System Construction in Zhongli



### Contribution to Circular Economy

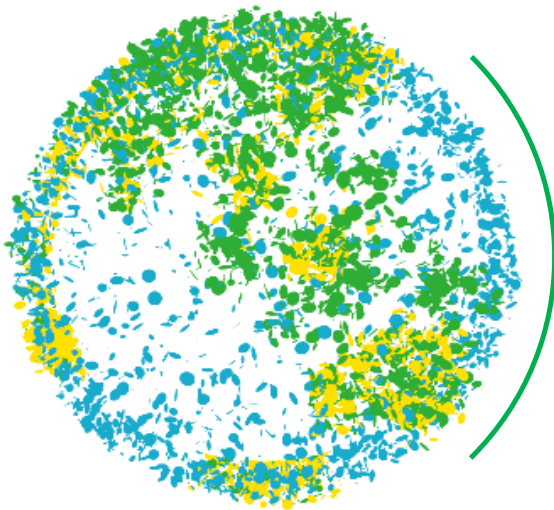
- ✓ In 2023, the expected sewage disposal capacity is around **27.5 million tons**. It's equivalent to the annual sewage treatment of **300,000 people**.
- ✓ In 2023, the wastewater treated by the CTCI Group's reclaimed water is expected to be approximately **31 million tons**.

# Mechatronic Maintenance

- Acquired the establishment and O&M project of waste solvent recovery and reuse equipment for a high-tech plants.
- Execution of expansion work for self-contained solvent recovery system in international fabs.
- Operation of international high-tech manufacturers' public facilities.
- Maintenance project for electromechanical equipment in transportation stations.
- The improvement of EfW plant equipment performance and replacement of old equipment (e.g. STSP, Gangshan, Xizhou EfW plants)



Electrical panel equipment maintenance



## Contribution to Circular Economy

- ✓ Leveraging high-tech recycling and reuse technologies to expand opportunities for establishing high-tech industrial waste recycling facilities.
- ✓ Through intelligent management of the incineration plant, effective equipment upgrades and expansion of the incineration plant's life extension business can be achieved.

# Financial Highlights





# Business and development areas

Waste Management

Recycling and Reuse

Renewable Energy

Mechatronic Maintenance

## ECOVE

ECOVE Environment Corporation

ECOVE Ventures into Physical Operations to Obtain Investment Tax Deductions

- Consolidating subsidiary operations to expand the tax base.
- Expand the promotion and participation project bidding and execution.

Investment and operations



Operational management



Cleaning, transport, and maintenance services



- Waste-to-Energy Plant
- Hazardous Waste Treatment Plant
- Final Disposal Plant
- Resource Recovery and Recycling Plant
- Wastewater Treatment and Reuse Plant

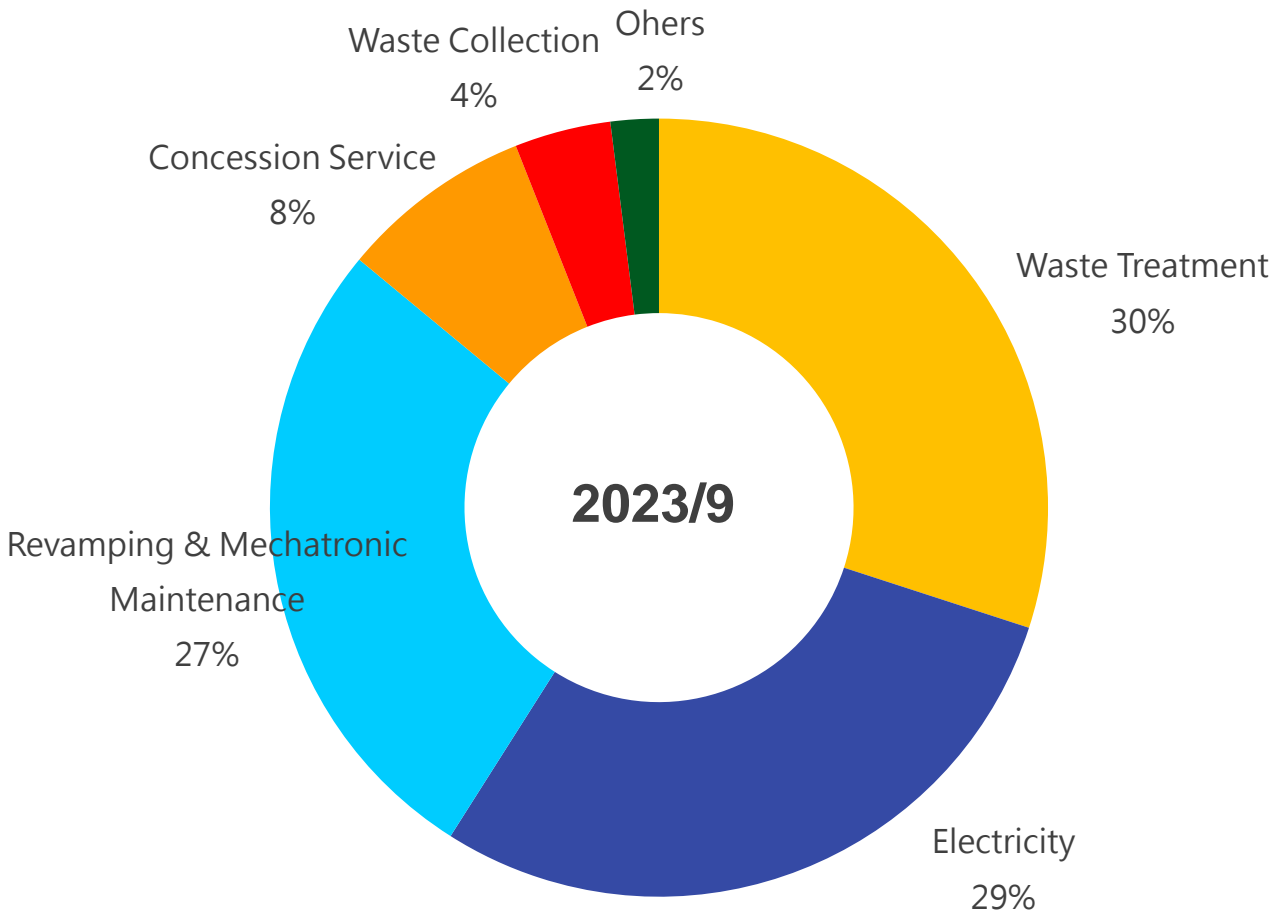
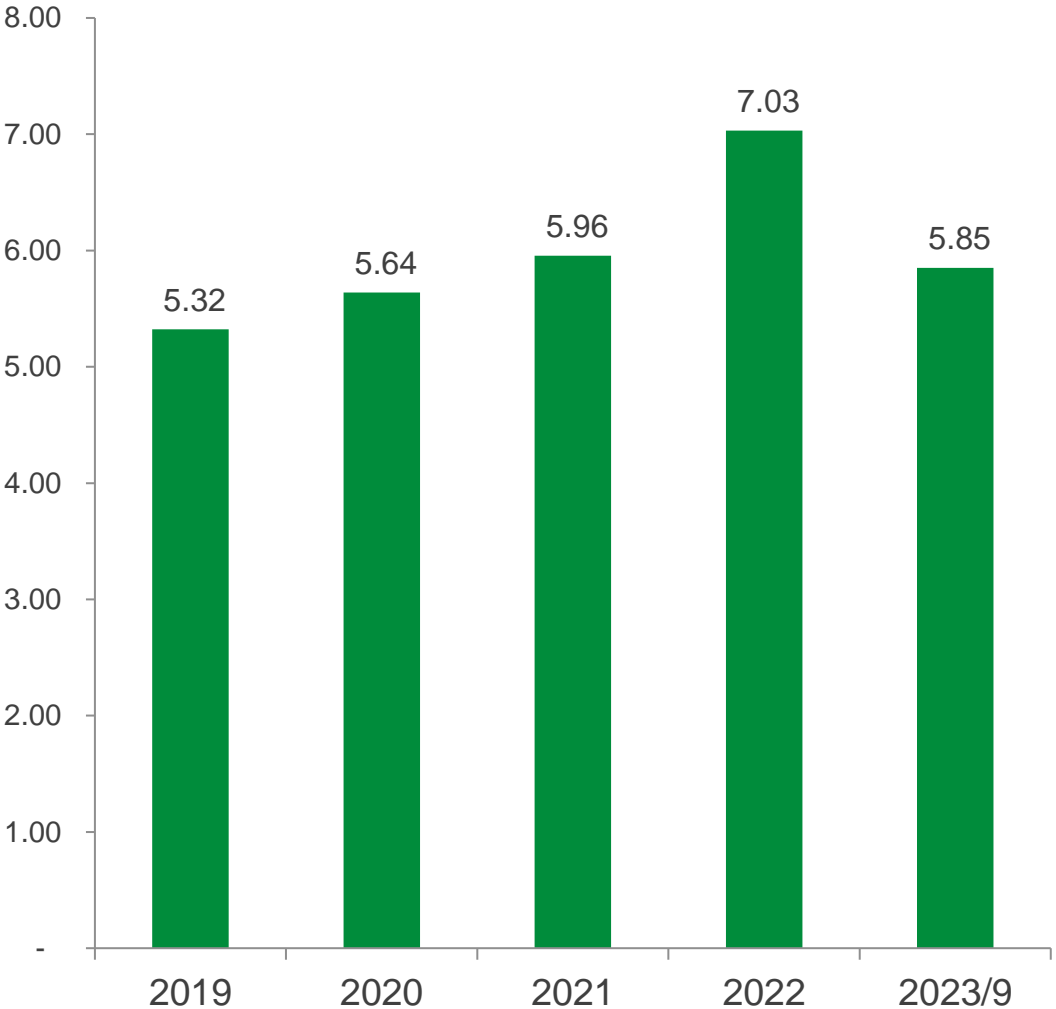
- Solar Photovoltaic Plant and Green Energy Supply
- Energy Storage Power Auxiliary Services
- Biomass Power Plant

- Waste Collection, Transport, and Dispatch Management
- Electromechanical Maintenance and Revamping
  - ✓ Incineration Plant
  - ✓ Airports and Rail Stations
  - ✓ Solar Photovoltaic Plant
  - ✓ High-Tech Plant



# Consolidated Revenue Breakdown

Unit: NT\$, Billion



# 2023 Q3 Consolidated Income Statement

Unit: NT\$, Thousand

	2023/1/1~9/30		2022/1/1~9/30		YOY
	Amount	%	Amount	%	%
Operating Revenue	5,850,126	100.0%	5,180,612	100.0%	12.9%
Operating Costs	(4,528,915)	-77.4%	(3,933,644)	-75.9%	15.1%
Gross Profit	1,321,211	22.6%	1,246,968	24.1%	6.0%
Operating Expenses	(119,736)	-2.0%	(123,370)	-2.4%	-2.9%
Operating Profit	1,201,475	20.6%	1,123,598	21.7%	6.9%
Total Non-Operating Income and Expenses	104,469	1.8%	54,643	1.1%	91.2%
Profit before income tax	1,305,944	22.4%	1,178,241	22.8%	10.8%
Income Tax Expense	(197,876)	-3.4%	(236,660)	-4.6%	-16.4%
Profit for the period	1,108,068	19.0%	941,581	18.2%	17.7%
Profit attributable to Owners of the parent	943,139	16.1%	796,804	15.4%	18.4%
Earnings Per Share	<b>13.28</b>		<b>11.40</b>		16.5%

# 2023 Q3 Consolidated Balance Sheet

Unit: NT\$, Thousand

	2023/9/30		2022/9/30	
	Amount	%	Amount	%
<b>Current assets*</b>	5,243,157	39.52	4,795,335	37.09
<b>Non-current assets</b>	8,024,456	60.48	8,132,616	62.91
<b>Total assets</b>	<b>13,267,613</b>	<b>100.00</b>	<b>12,927,951</b>	<b>100.00</b>
<b>Current liabilities</b>	2,948,142	22.22	2,956,978	22.87
<b>Non-current liabilities</b>	3,782,886	28.51	3,889,165	30.09
<b>Total Liabilities</b>	<b>6,731,028</b>	<b>50.73</b>	<b>6,846,143</b>	<b>52.96</b>
<b>Current liabilities</b>	6,108,360	46.04	5,663,409	43.81
<b>Non-current liabilities</b>	428,225	3.23	418,399	3.23
<b>Total Liabilities</b>	<b>6,536,585</b>	<b>49.27</b>	<b>6,081,808</b>	<b>47.04</b>
<b>Current liabilities</b>	<b>13,267,613</b>	<b>100.00</b>	<b>12,927,951</b>	<b>100.00</b>

\* Cash and cash equivalents:NT\$1.022bn.

# Future Outlook

# Energy-from-Waste

## D o m e s t i c

Continue to monitor the planning of new municipal waste incineration projects in counties and cities, and actively allocate resources to pursue these opportunities.

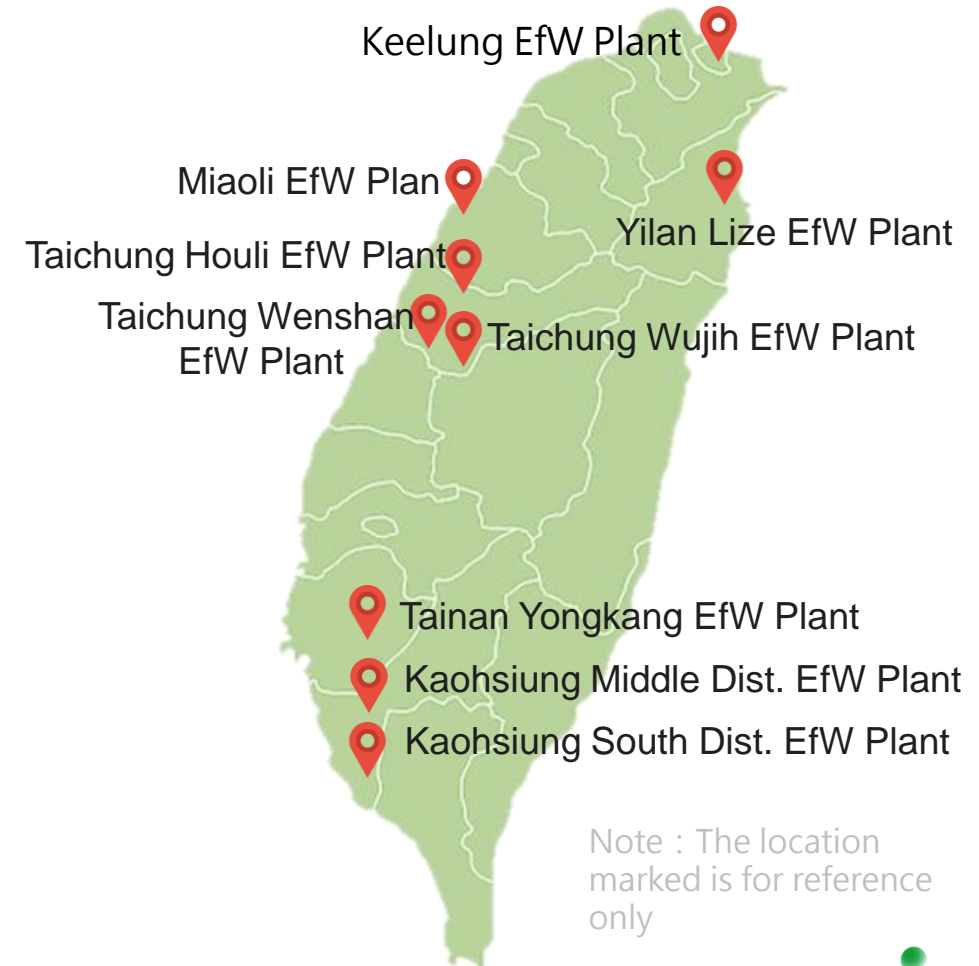
- Cooperate with Group for newly built or operation of EfW plants.
- Using the experience of revamping and implementation in multiple plants, including Tainan, Xizhou, and Gangshan, to pursue the ROT revamping and operation project for the incineration plant.

## O v e r s e a s

- Combining with the government's southbound policy, we aim to collaborate with local developers abroad to export our experience and technology in waste management and incineration, and seek business opportunities.



Incineration opportunities  
in the next 5 years





# Renewable Energy

## D o m e s t i c

- Follow the development direction of government policies to steadily expand solar power and energy storage investment.
- Currently in negotiations for several green energy procurement contracts in response to the needs of large electricity consumers and the 2050 net-zero emissions target.
- Paying attention to the government's energy storage policy planning and continuously monitoring related businesses such as power auxiliary services.
- Expanding maintenance business scale by leveraging accumulated maintenance experience and implementing tools to continuously improve efficiency.



Taichung Wujih  
Solar Photovoltaic Plant

## O v e r s e a s

- Leveraging the successful experience of developing solar photovoltaic power plants in the U.S., paying attention to overseas market trends, and prioritizing mature markets.
- The passage of the U.S. anti-inflation bill incentivizes the development of renewable energy and energy storage markets. Additionally, taking advantage of the opportunity for project evaluation in the U.S. to master critical development processes.
- Actively expanding the investment scale in the U.S. solar photovoltaic market while simultaneously assessing opportunities for the development of solar photovoltaic combined with energy storage business.



Tainan Tree Valley Park  
Solar Photovoltaic Plant

# Recycling and Reuse

## Water Treatment

**Will continue to pay close attention to the trend of promoting reused water resource and will work with Group to strive for construction and operation projects.**

- **The government and high-tech companies plan to build new reclaimed water plants of approximately 500,000 CMD/Day.**
- **The government's promotion of seawater desalination plants of approximately 850,000 CMD/Day.**

## Hi-tech Industry Waste

- **Negotiating with technology sources for cooperation with Taiwan's high-tech manufacturers in waste recycling and reuse, pursuing opportunities in the recycling and reuse business, and evaluating the investment for establishing plans.**
- **Pursuing the operation and maintenance services for the High-Tech Circular Economy Innovation Center.**



**Water-related business opportunities in the next 5 years (Reclaimed Water, Sea Water Desalination Plant)**



# Electromechanical Maintenance and Revamping

- Continuously seeking opportunities for the maintenance of the mechanical and electrical equipment of completed MRT facilities in recent years.
- Actively seeking opportunities to provide maintenance, repair and operation services for water, gas, and electricity utilities in high-tech industrial parks.
- Actively monitoring the planning of the Zero Waste Center in the industrial park and striving for the opportunity to establish processing or reuse facilities within the park.
- Continuously striving for the improvement of incineration plant equipment efficiency and the replacement of old equipment with new ones.



Cleanroom process equipment maintenance



Chiller equipment maintenance



Wind turbine motor replacement

# ECOVE<sup>®</sup>

Every Resource Counts

