

# CTCI Corporation The 2<sup>nd</sup> Investor Conference, 2023

2023.05.09



# 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
- Summary of Financial Highlights
- Business Outlook

# Operation Review

# Honors and Awards

## S&P Global

### The Sustainability Yearbook 2023

Top 1 % Highest Honor  
No. 1 in the Global Construction Industry

**CTCI Corporation**

Construction & Engineering

**Top 1%**

S&P Global ESG Score 2022

## DJSI Index

A component of DJSI's Emerging Markets  
index for eight years in a row  
Top 1 in Global Construction Company

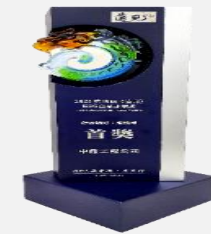
Member of

**Dow Jones  
Sustainability Indices**

Powered by the S&P Global CSA

## Global Views Monthly's CSR & ESG Award

2023 19th Top prize for CSR & ESG Award  
under the Service Industry



## UNFCCC

CTCI Education Foundation is  
the 11th NGO observer in Taiwan  
to be recognized by the United Nations  
Framework Convention on Climate Change



**United Nations**  
Framework Convention on  
Climate Change

## ENR Top-100 Global Engineering Company

International Contractors ranked 60<sup>th</sup>  
Global Contractors ranked 139<sup>th</sup>  
International Design Firm ranked 76<sup>th</sup>



## Top 5% performer in the Corporate Governance Evaluation

3 listed companies in the Group continue to be  
listed by Taiwan Stock Exchange Corporation



# Leveraging our Core Business ESG Opportunities

## Green Contracting

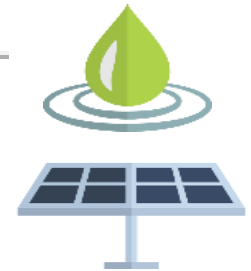
2015  
Green technology, low carbon and environmental protection projects  
23%

Backlog : 404% growth

Mar 2023  
Green technology, low carbon and environmental protection projects  
61%

## Green Investment

- The total amount of green investment by the group exceeds **NT\$40 billion.**  
(Wastewater treatment, Reclaimed Water, Incinerator)
- The group's green finance is approximately **NT\$7 billion.**



## Green Technology

### Benefits to Owners in 2020-2022

- Electricity Saving: **740 million kWh** → About the annual electricity consumption of **182,905** households
- CO2e Reduced Displacement: **22.2 million metric tons** → About **57,112** Daan Forest Park Carbon adsorption capacity in a year
- Water Saving: **275.05 million tons** → About **319 days** of water consumption in Taipei

# 2022 ESG Sustainability Progress

## Governance (G)



- Total participation in ESG to practice Net Zero EPC.
- The 2022 Sustainability Report has been externally verified (SGS) with a Statement of Assurance
- Convened a supplier conference and established a supplier net-zero alliance, and updated the conference video on CTCI University's online platform to expand the promotion and supplier cooperation.
- Planning to Exhibit at Asia Pacific Sustainability Expo in July.

## Environment (E)



- Green engineering keeps growing: with Green Contracting, Green Investment and Green Technology, as the core for the win-win of economy and environment.
- Completed greenhouse gas inventory and external verification (SGS) for the Group companies, completing the requirements of the "Sustainable Development Roadmap for Listed Companies" of the FSC ahead of schedule.
- Completed the identification and impact assessment of the risks and opportunities of climate change with reference to the Climate Related Financial Disclosures (TCFD) guidelines, and met the requirements of the "Code of Conduct for the Preparation and Filing of Continuing Reports by Listed Companies" of the TWSE.
- In response to Earth Hour, turn off the lights for the sustainable development of the earth, and promote it in conjunction with the green new life movement of CTCI employees.

## Social (S)



- The CTCI Education Foundation continues to cultivate sustainable engineering talents, and multinational students team up to complete "Explore Taiwan 120h ".
- Handled the call for submissions for sustainable microfilms, and outstanding works represent the company to participate in the "7th Taipei Golden Eagle Microfilm Exhibition ".
- CTCI corporate culture communication series activities.
- Planning to issue volunteer passports

# 2023Q1 Overview



## New Contract Wins and Backlog Hits New High

- Developed competitive advantage in core business to achieve new contracts reaching \$44.1 billion as of March
- Backlog reached \$359.2 billion as a new high due to the high new contracts signed

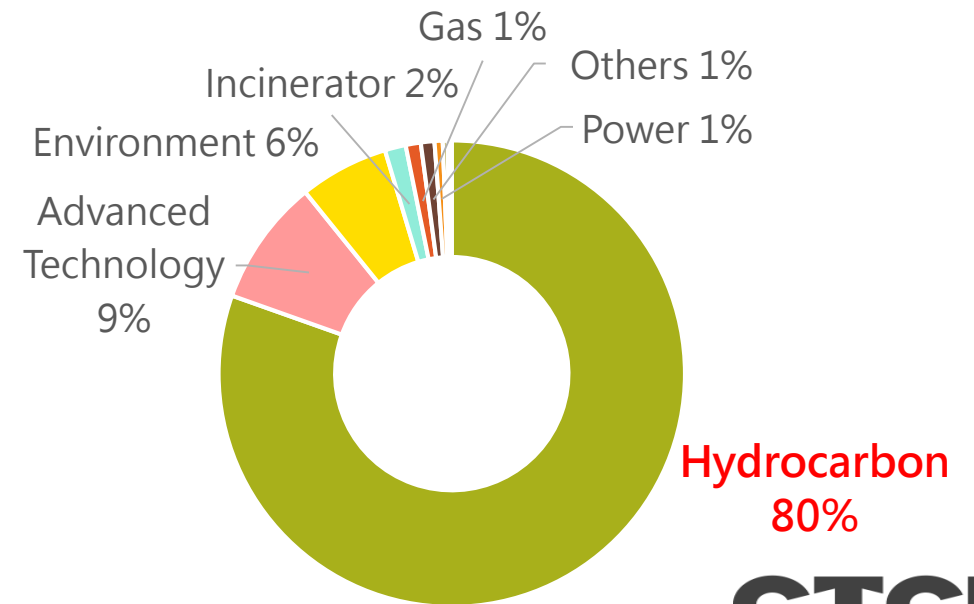
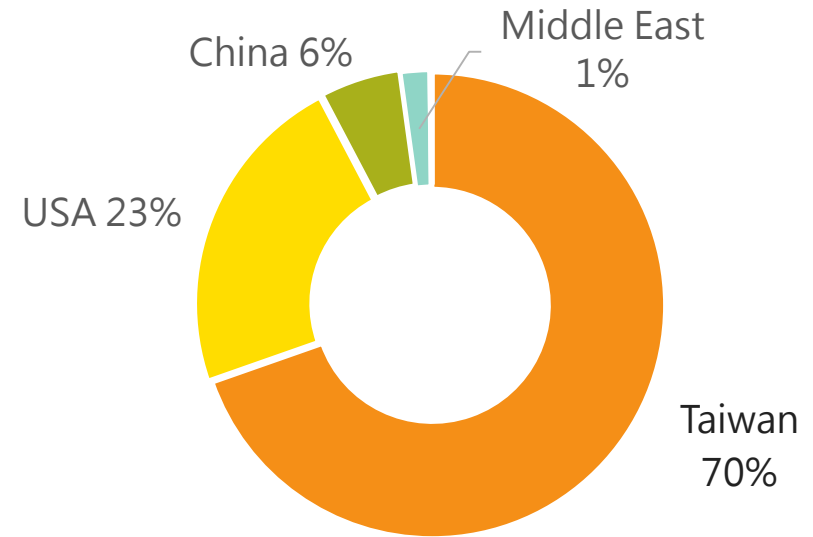
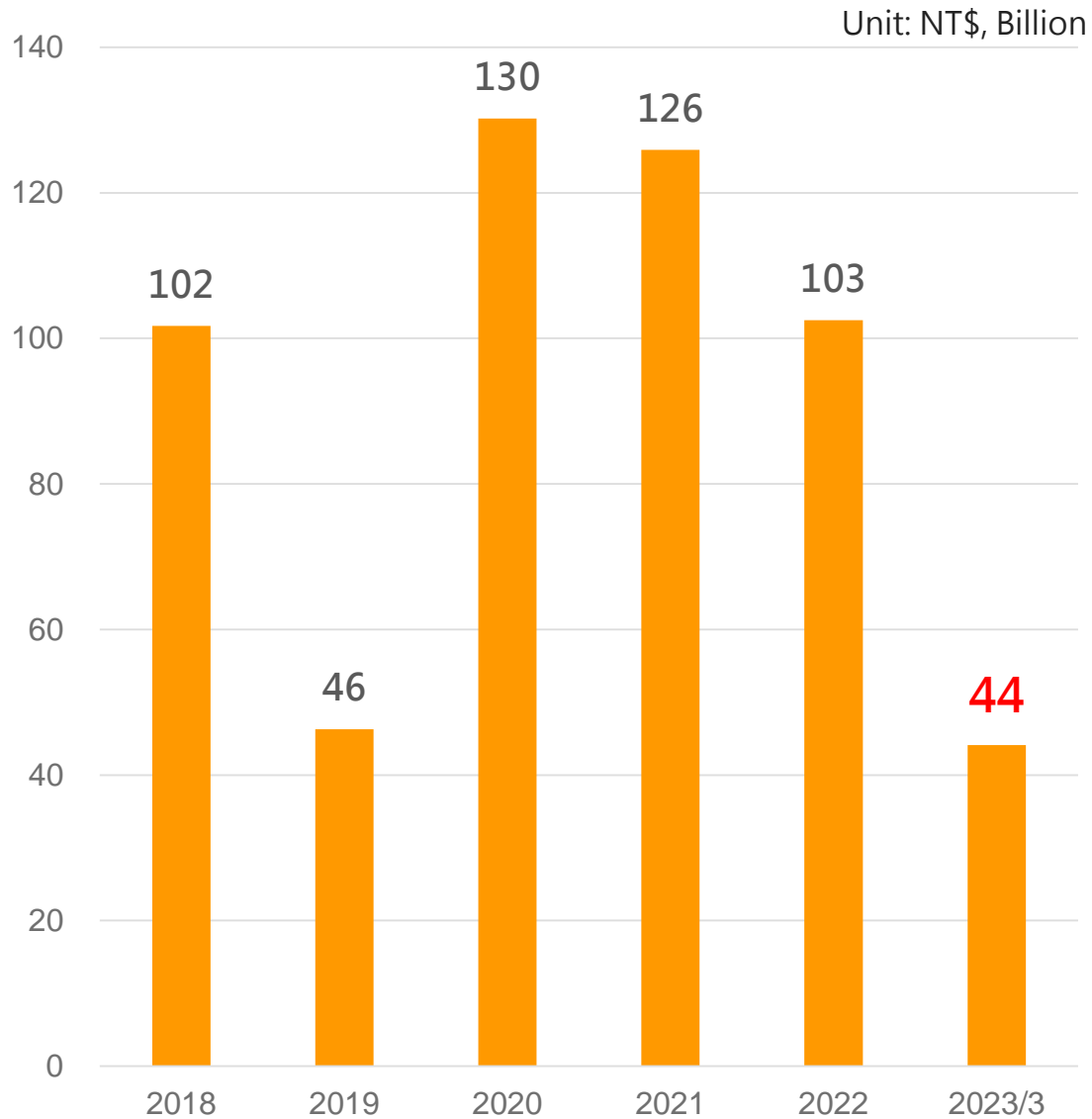


## Revenue Remains Stable

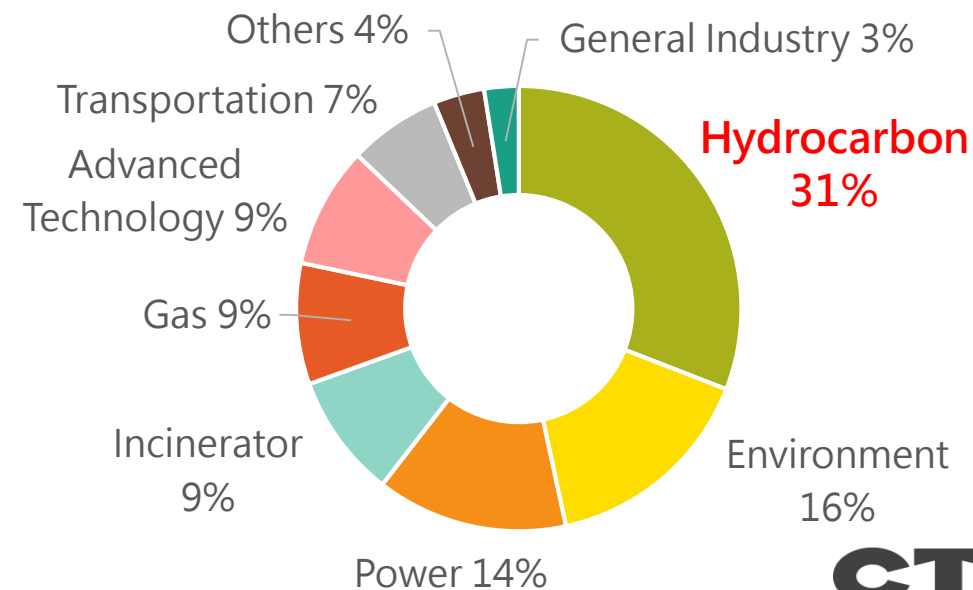
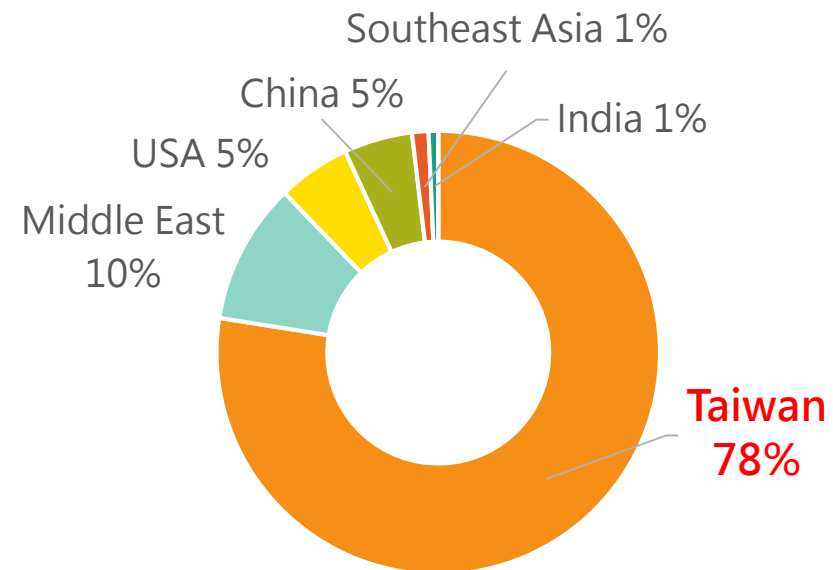
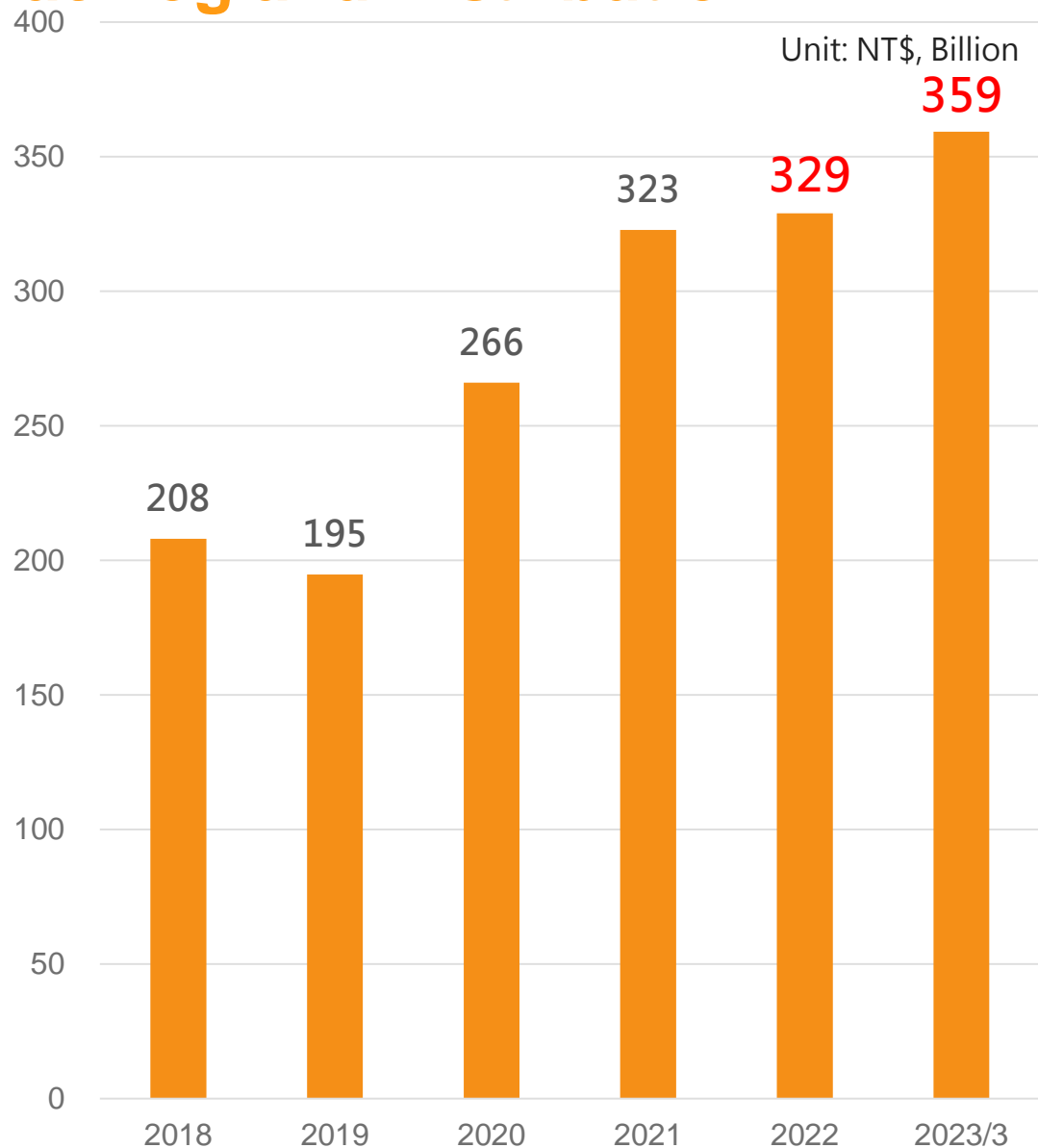
- Some of the new awards in recent years are still in the design stage, and the revenue growth will be more significant once entering the procurement and construction stage later.



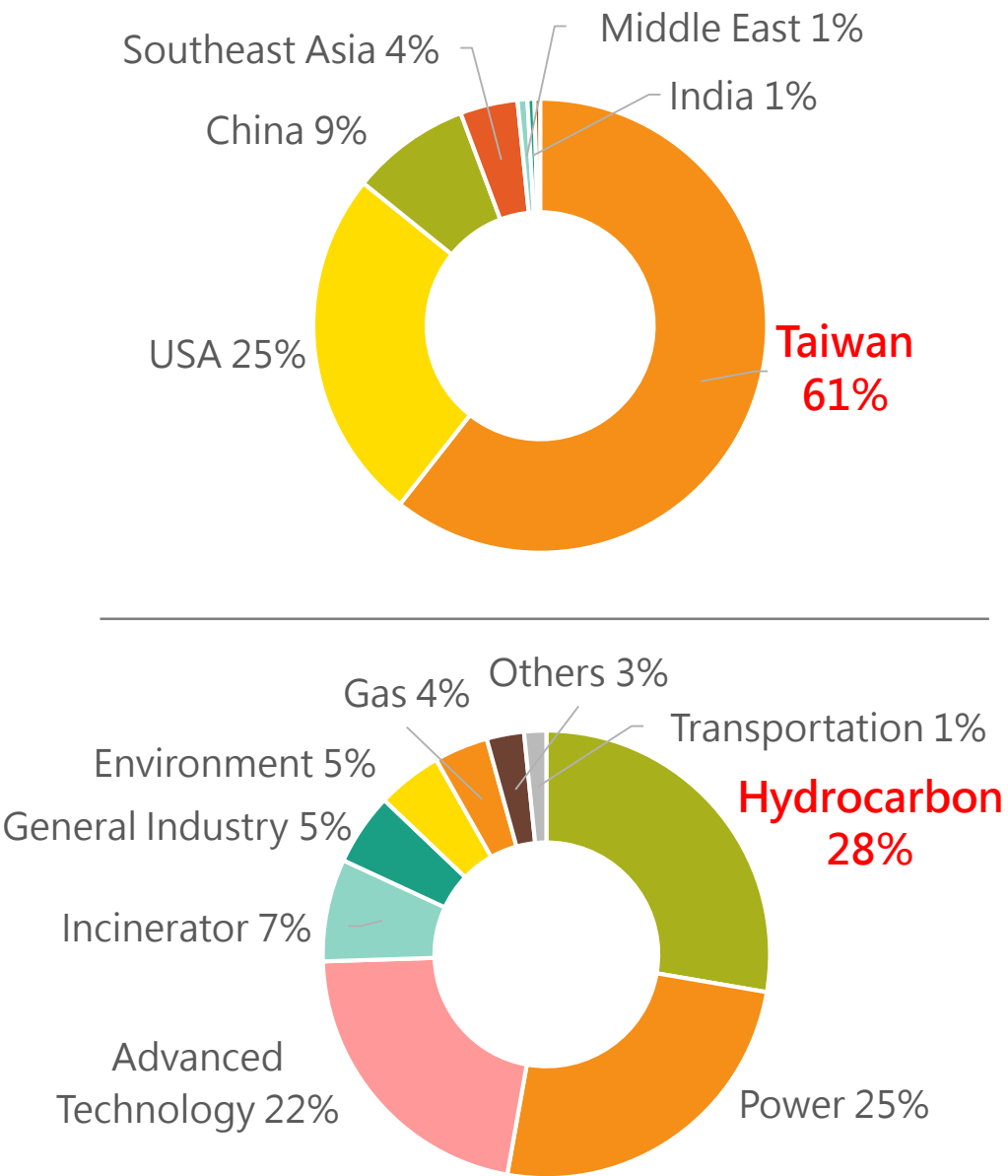
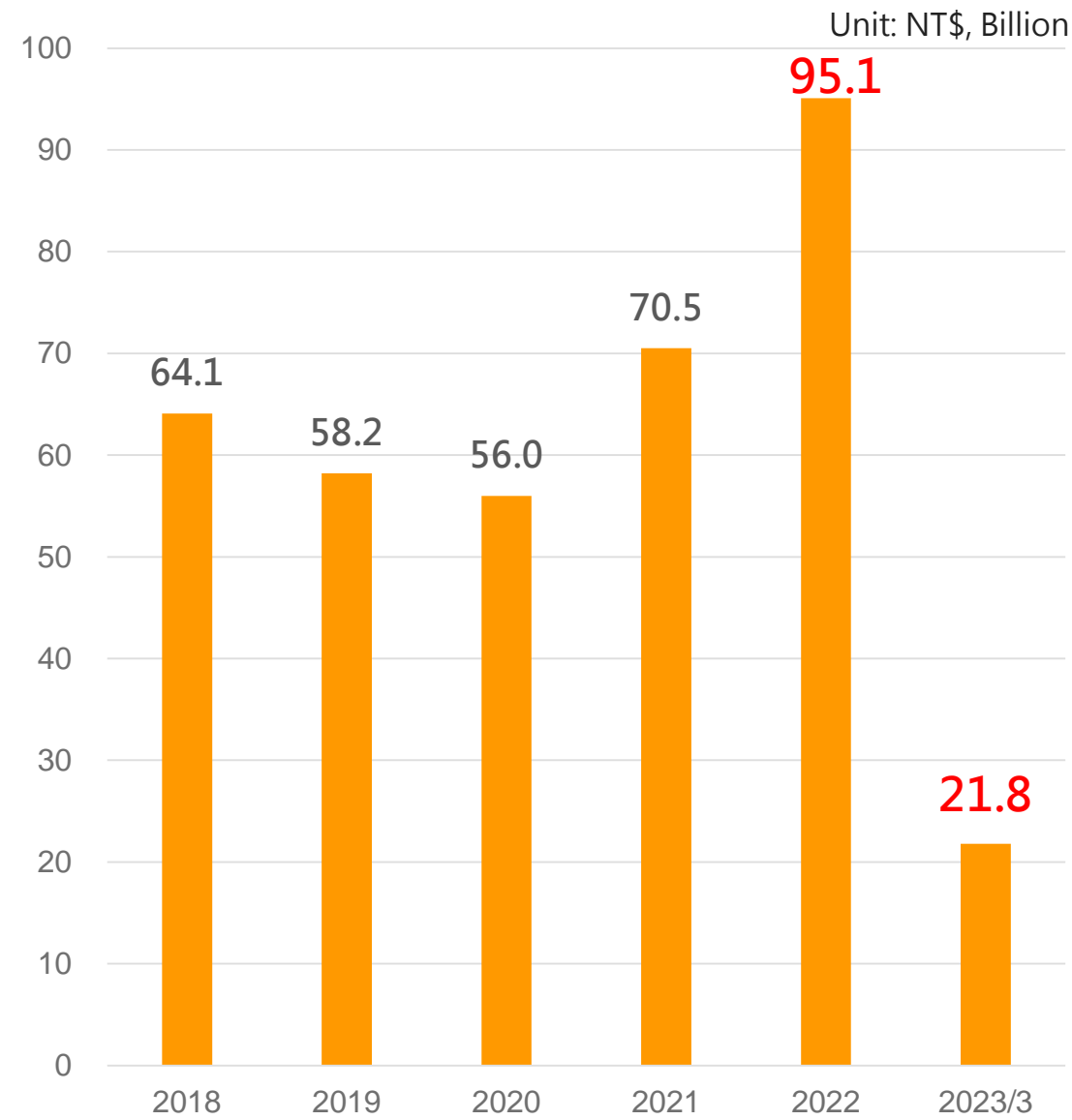
# New Contracts and Distribution



# Backlog and Distribution



# Revenue and Distribution



# Financial Highlights

# 2023Q1 Consolidated Income Statement

Unit: NT\$, Thousand

	2023/1/1~3/31		2022/1/1~3/31		YOY
	Amount	%	Amount	%	%
Sales Revenues	21,845,706	100.0%	22,431,700	100.0%	-2.6%
Operating costs	(20,662,386)	-94.6%	(21,088,208)	-94.0%	-2.0%
Gross Profit	1,183,320	5.4%	1,343,492	6.0%	-11.9%
Operating expenses	(394,647)	-1.8%	(463,353)	-2.1%	-14.8%
Operating income	788,673	3.6%	880,139	3.9%	-10.4%
Total non-operating income and expenses	74,921	0.3%	352,715	1.6%	-78.8%
Profit before income tax	863,594	4.0%	1,232,854	5.5%	-30.0%
Income tax expense	(227,175)	-1.0%	118,942	0.5%	-291.0%
Profit for the period	636,419	2.9%	1,351,796	6.0%	-52.9%
Profit attributable to Owners of the parent	366,132	1.7%	1,147,646	5.1%	-68.1%
Total basic earnings per share	0.47		1.5		

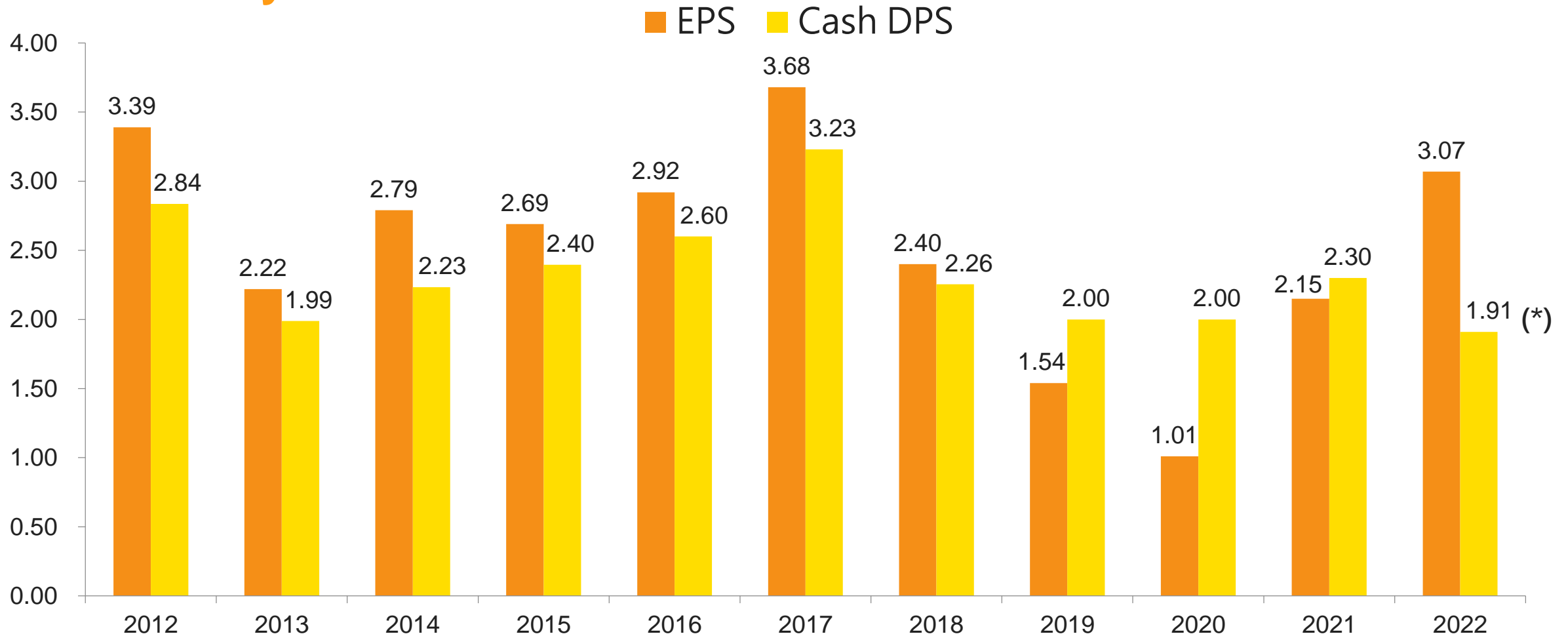
# 2023Q1 Consolidated Balance Sheet

Unit: NT\$, Thousand

	2023/3/31		2022/3/31	
	Amount	%	Amount	%
Current assets*	70,100,048	71%	67,726,560	72%
Non-current assets	28,799,216	29%	26,515,963	28%
<b>Total assets</b>	<b>98,899,264</b>	<b>100%</b>	<b>94,242,523</b>	<b>100%</b>
Current liabilities	58,496,609	59%	53,617,819	57%
Nun-current liabilities	19,774,198	20%	18,325,730	19%
<b>Total Liabilities</b>	<b>78,270,807</b>	<b>79%</b>	<b>71,943,549</b>	<b>76%</b>
Equity attributable to owners of The parent	16,487,840	17%	18,061,379	19%
Non-controlling interest	4,140,617	4%	4,405,542	5%
<b>Total equity</b>	<b>20,628,457</b>	<b>21%</b>	<b>22,298,974</b>	<b>24%</b>
<b>Total liabilities and equity</b>	<b>98,899,264</b>	<b>100%</b>	<b>94,242,523</b>	<b>100%</b>

\*Cash and cash equivalents in current assets are NT\$25.6 billion

# Dividend Payout



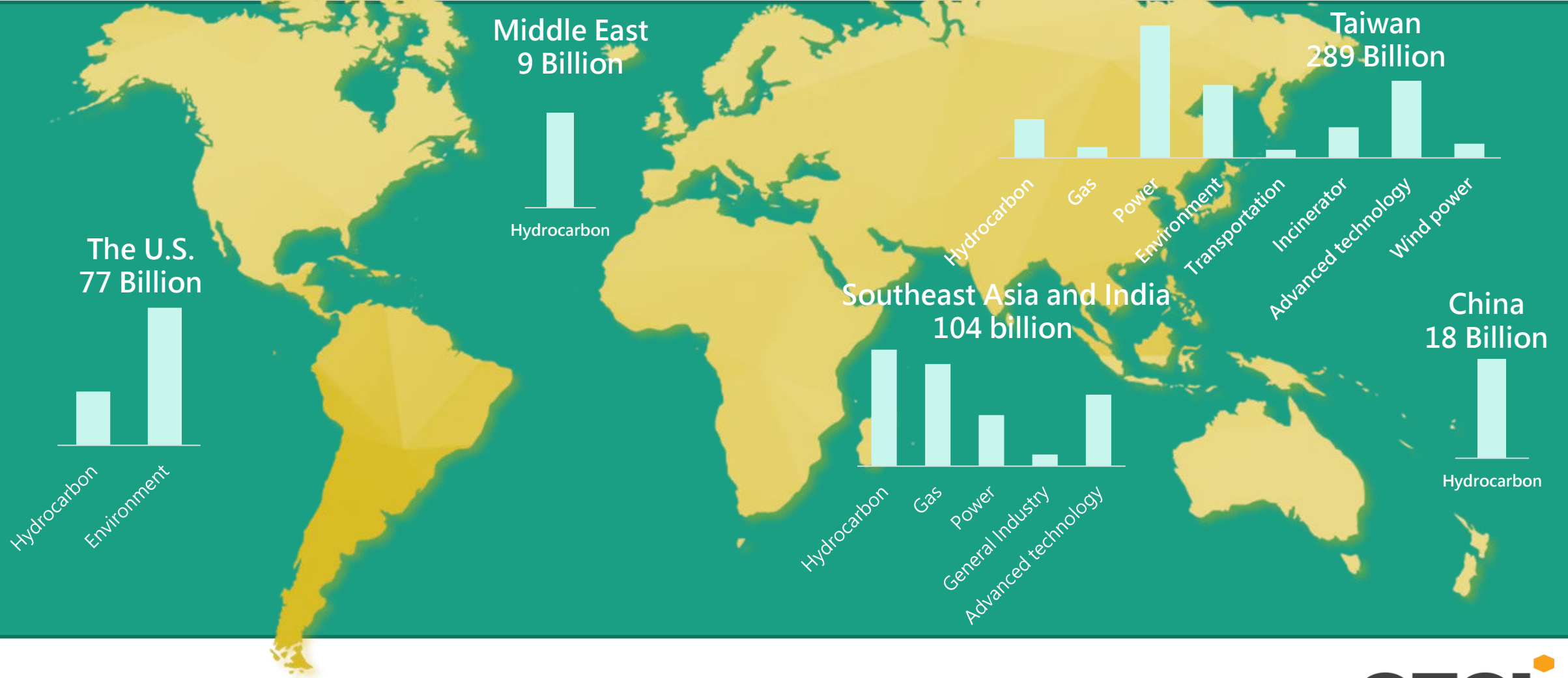
- \* : 1. A portion of the retained earnings was reserved for the Company's capital requirements for future investment/construction/operation projects in reclaimed water, desalination, resource recycling and intelligence.  
2. The net decrease in other equity was increased, so the unappropriated earnings from retained earnings was provided to special reserve.

# Business Outlook



# Potential Opportunities in the Coming 12 Months

Potential Opportunities in the Coming 12 months: NT\$497 billion



# ESG Opportunities - Clean Energy (1/2)



- "Reducing Coal, Increasing Gas " mentions that by 2030, renewable energy will account for 27%-30%, coal will decrease to 20%, and gas will account for 50% of power plants.
- In 2022, gas power plants was 1.1828 million kWh, which accounted for 38.8%.

Taipower will accelerate the expansion and reconstruction of gas power plants such as Dalin, Concord, Tongxiao, Taichung and Xingda power plants which will be launched soon.

The government is actively promoting private power plant (IPP) bids, and plans to achieve the power supply target of 5,060MW between 2025 and 2027.

**Market Opportunities:  
NT\$400bn**



- ✓ CTCI is the sole EPC company who is capable for turnkey projects for natural gas facilities and storage tanks. Taipower released numerous gas-fired power plants totaled of 14,630MW under turnkey basis after Datan Power Plant and CTCI has market shares of 70%.
- ✓ Extend advantages to bid projects in Thailand and Vietnam, strive for opportunities for LNG terminal and subsequent power plants in compliance with local energy policies.
- 🎯 **Recent Major Achievements: three gas-fired multiple-cycle power plants such as Hsinta 3,900MW CCPP Project, Taichung 2,600MW CCPP Project and Sunba Power Phase II 1,000MW IPP Project.**

## ESG Opportunities - Clean Energy (2/2)

### Offshore Wind



Total setup capacity in **2025**

**5,738** MW

Total setup capacity in **2035**

**20,738** MW

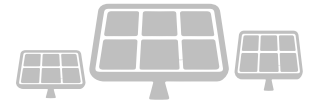
Block development release **1,500** MW/year → 100 fans/year

Wind turbine demand: 100 pcs/year

**60%** Localization → Business opportunities grow following with the proportion of localization increases

- ✓ CTCI MAC participated in the manufacturing of underwater foundation and transition piece totaled of round 1,150MW → From 2017 to 2022, revenue increased by 140%
- ✓ CTCI REI have stepped into Wind Business and awarded design work of underwater foundation
- ✓ CTCI and Van Oord has formed a strategic alliance to bid for EPCI work

### Solar Photovoltaic and Energy Storage



The Group is involved in the field of solar photovoltaic and energy storage:

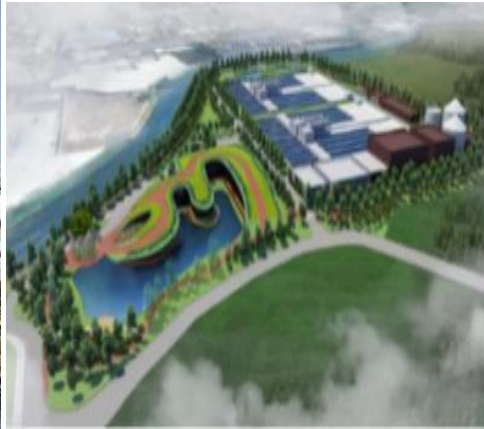
Investment/Development (cumulative) – **156** MW

Operation and Maintenance (cumulative) – **477** MW

- ✓ The U.S. government's investment tax credit, renewable energy incentive system and tariff exemptions for solar components in four Southeast Asian countries are boosting business opportunities in the U.S. solar market
- ✓ Investment in energy storage industry



# ESG Opportunities – Water(1/2)



**TSMC Tainan  
Science Park  
Reclaimed Water Plant**

**Construction of  
sewage sewer system  
in Zhongli area**

**Kaohsiung Fengshan  
Creek Reclaimed  
Water Plant**

**Kaohsiung Linhai  
Sewage Treatment and  
Reclaimed Water Plant**

**Taoyuan North  
District Water  
Recycling Center**

**BOT**

1.5+20 years

**BOT**

2+33 years

**BTO**

2+15 years

**BTO**

3+15 years

**BTO**

3+15 years

20,000 tons/day

156,000 tons/day

45,000 tons/day

33,000 tons/day

40,000 tons/day

The world's first project of high-tech wastewater reclaimed to the semiconductor process

The total length of the pipeline is 246 km, connecting 200,000 households

The first domestic municipal sewage recycling BTO demonstration project

The first domestic project that combines municipal sewage treatment and reclaimed water systems

Supply Taoyuan Refinery, Guanyin Industrial Zone and Nan Ya Plastics

## ESG Opportunities – Water(2/2)

- ✓ Government continuously plans numerous new reclaimed water plants before 2026, together with couple private reclaimed water plants in High-Tech Parks of total daily capacity about 500,000 tons.

Six new desalination plants are planned on investment/construction/operation basis, which are expected to treat 850,000 tons of water per day, Hsinchu and Tainan plans have passed the EIA this year, with a combined capacity of 300,000 tons per day.

**Market Opportunities: NT\$120bn** (exclusive of operation work)

- ✓ Fengshan Creek, Linhai, and Tainan Science Park reclaimed water plants are already in operation, and Chungli sewage plant will enter operation in the 2023H2, and the water treatment output can exceed 31 million tons/year in 2023.

- ✓ CTCI Group owns four reclaimed water plants which are on investment/construction/operating basis and is the only one domestic professional player with both municipal sewage and industrial sewage treatment capabilities, together with the abilities in full life cycle performance in investment/construction/operation in reclaimed water business.

- 🎯 **Recent Major Achievements: Tainan Science Park Reclaimed Water Plant has been commercialized, Taoyuan North District Water Recycling Center**





# ESG Opportunities - Circular Economy(1/2)

## Indicative Performance



### Taichung Uri Resource Recycling Plant

- The first domestic large-scale municipal waste incineration plant launched in BOT model



### Macau Waste Incineration Center

- The first Taiwan player to award overseas waste incineration project and has exported the local expertise to overseas market as a precedent



### ECOVE Solvent Recycling Corp.

- Has obtained "BS 8001 Circular Economy Inspection Statement" in 2020.
- Has passed the BSI verification under PAS 2060 specification by the British Standards Institute, and achieved 100% carbon neutrality in 2021.



### Taoyuan Biomass Energy Center

- Adopting cutting-edge global technologies to allow over 25% power generating efficiency and becoming the best in Taiwan



### Changbin Low Carbon Recycling and Disposal Center

- Enables the Group to provide a complete one-stop service from removal, recycling to incineration and landfill disposal

## ESG Opportunities - Circular Economy(2/2)

- ✓ Waste incineration plants are being replaced or expanded to meet more stringent pollution prevention and control standards, and to achieve the goals of efficient power plants, pollution reduction, energy conservation, carbon reduction, and environmental greening.

**Market Opportunities: NT\$140 billion.**



- ✓ To cope with the rapid economic development, the requirements of quality of life and environmental friendly, waste incinerators becomes the major solution considered in Southeast Asia. In response to the global trend, recycling and zero-waste center opportunities continue to emerge.

- ✓ CTCI is the only professional manufacturer in Taiwan that has the entire life cycle performance and technology covering the investment, construction and operation of waste incineration industry, and is also the first manufacturer in Taiwan to export localized technology overseas.



**Recent Major Achievements: Changhua Xizhou EfW Plant O&M and Revamping Services, Kaohsiung Gangshan EfW Plant O&M and Revamping Services, Changbin Low Carbon Recycling and Disposal Center**

# ESG Opportunities - Rail Transportation

- + From 2021 to 2026, 12 track construction plans are planned. The pre-planning and environmental assessment of rail construction in Taiwan's Forward-looking infrastructure projects have been completed one after another and the subsequent tendering will be proceeded, including the Eastern Section of the Taipei MRT loop, the East Lake section of the New Taipei MRT Shih Chi and Keelung MRT, the brown line of Taoyuan MRT, the Blue Line and green line extension of Taichung MRT, the circular network of Hsinchu Light Rail, the blue line of Tainan Advanced Transportation System Phase I, etc.

**Total Route Length: about 190 km**

**Total Budget of E&M Work: about NT\$150 billion**

- + The government promotes the nationalization policy of the rail industry and actively supports the light rail rapid transit.

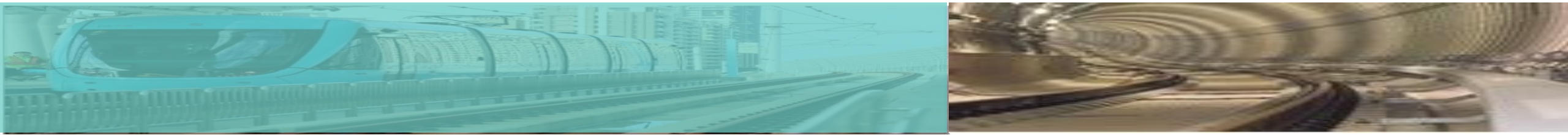
- + South East Asia (e.g. Thailand) MRT projects are being launched

- + **CTCI is the leading player in domestic MRT system E&M work lump sum turnkey business**

The only one player who has the E&M Integration experience and capability

The only one player who has the Detail Design Ability in power supply system

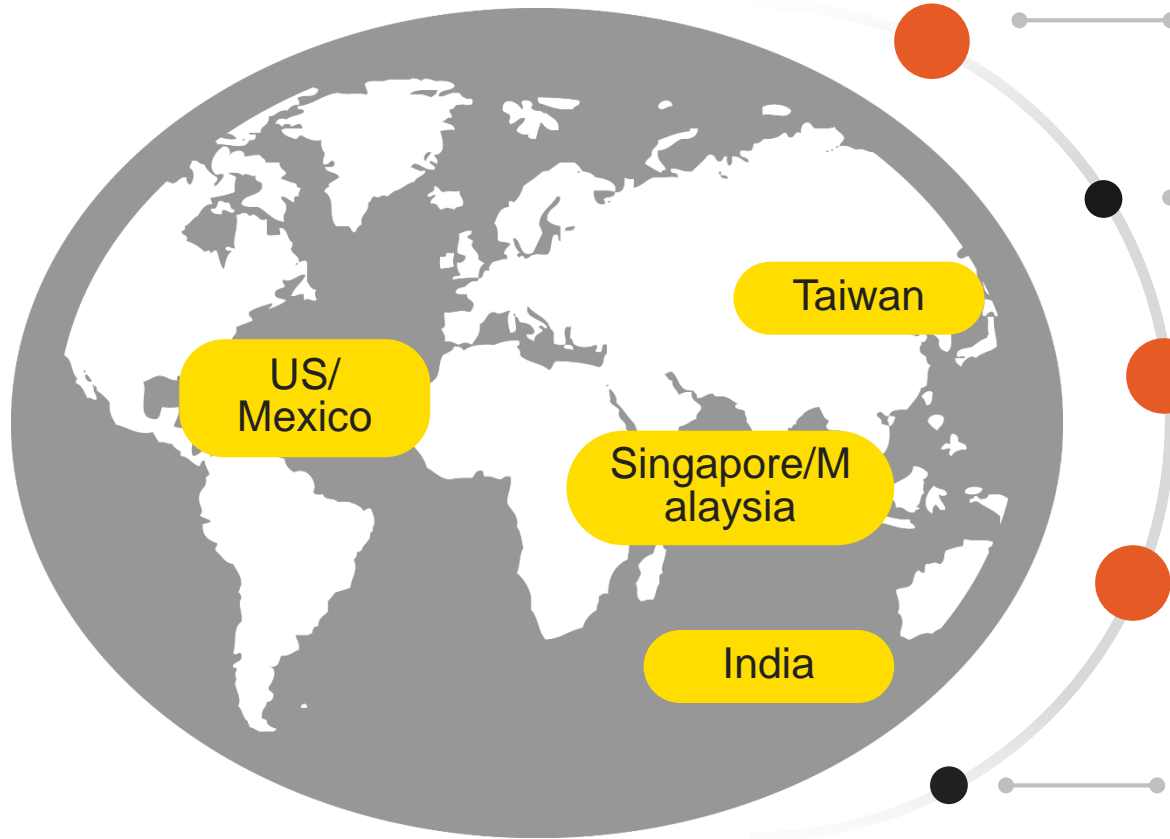
The local player who has the Highest Market Share in E&M work



 **Recent Major Achievements: Taoyuan Metro Green Line GC03 MEP Project, Taipei Metro's Circular Line North & South Sections**



# High-Tech Market Opportunities



## Data Center

Market growth slows, but cloud and data center still in high demand. Microsoft and Google still continue to strengthen cloud services.



## Foundry Business

Global demand slowdown leads to increased inventories and some planned new plant investments turn to wait-and-see. Capital expenditures are expected to decrease by nearly 20% in 2023



## Computer & Accessories

Taiwan electronics makers set up new supply chains in India and Vietnam



## Optics Business

The global power battery market is expected to move from GWh to TWh by 2024 and exceed 3TWh by 2030, benefiting from the demand for electric vehicles



## Taiwan Hi-Tech Chemical Supply Chain

The chemical supply chains follow the semiconductor manufacturers new expansion worldwide to invest new factories.

## Building Differentiation Advantage

### Strength

- Domestic: Planning and Design + Factory Building + Clean Room → **Total Solution**
- Overseas: Combine Overseas Bases → **Expand Global Business Opportunities**



## Recent Major Achievements:

Domestic DRAM factory work, two Foreign invested Data Centers in Taiwan, Kaohsiung Hofa Industrial Park Lithium Battery Project, Taiwan Electronics Factory Construction Project in India, BASF Electronic grade sulfuric acid

# Market Opportunities in the Refining and Petrochemical Industry

Recycling chemicals and low-carbon products and technologies become a necessary options for Global investment in response to ESG trends

The Daling Oil Storage and Transportation Center in the Kaohsiung Port Intercontinental Container Terminal Phase II is a major projects will become the key business opportunities in the domestic market.

The overseas market has regained investment momentum. Middle Eastern clients are benefiting from the rise in oil prices and turn to launch the new investment in revamping their existing oil complex plants and also strengthening the development of natural gas and downstream petrochemical products.



With over 40 years of global engineering experience in refining and petrochemicals, CTCI has a strong competitive edge in the domestic market. In the overseas market, CTCI has been able to create a win-win situation with customers and partners by flexibly deploying strategic partnerships in the Middle East market.



**Recent Major Achievements:** Two refrigerated tanks and a refrigerated unloading facility at Dalin Storage and transportation Center, Qatar RLPP ethylene project., Qatar RLPP ethylene project, Adani Coal to PVC design project.

# Market Opportunities in the Americas (U.S., Mexico)

- ✓ The contract amount in the U.S. reached new high record

Taiwan Hi-Tech  
Manufacture New  
Plant in USA

2018

GCGV MEG  
Project

- ✓ ExxonMobil and SABIC's major which is the largest MEG modularized plant in the world
- ✓ The contract amount is close to US\$ 1 billion

2021

Renewable  
diesel  
Project

- ✓ Develop biofuel process technology experience to seize low-carbon business opportunities

2023

 Sustainable  
Energy

- ✓ Have obtained the front-end design work of several sustainable energy projects and are striving for the subsequent EPC work.

## + Semiconductor Industry Business

- The Chip and Science Act stimulates investment opportunities in the United States
- From 2022 to 2025, more than 40 new fabs worldwide is estimated and most of them will be in the U.S. The new fabs and their industry supply chain will drive business opportunities

## + Sustainable Energy

- Sustainable energy can reduce total lifecycle CO2 emissions by 80%, EU reaches agreement on 70% sustainable aviation fuel by 2050
- U.S. have incentives to encourage local investment

## + Expansion into Mexico

- Benefiting from the U.S.-Mexico-Canada Trade Agreement (USMCA), the electric vehicle and battery industries are gathering in Mexico for new factories, and Taiwanese companies are following one after another
- Mexican subsidiary in the process of being established for local business opportunities



# Market Opportunities in China

Market opportunities : NT\$100 billion

- ✓ BASF Petrochemical Complex Project in Zhanjiang, Guangdong
- ✓ Dow Chemical Manufacturing Hub for Specialty Chemicals in Zhanjiang, Guangdong
- ✓ SABIC/Fuhaichuang Petrochemical Complex Project in Gulei, Fujian
- ✓ Aramco/Huajin AMI Liaoning Complex

## Investment from Taiwan :

- ✓ Quanzhou Grand Pacific Chemical
- ✓ Zhangzhou CHIMEI Chemical
- ✓ Formosa Petrochemical (FPCC)
- ✓ Chang Chun Petrochemical
- ✓ Taita Chemical



## Green and Low-carbon Investment

Under China's carbon peak and carbon neutrality "dual carbon" target, 10 low-carbon investment themes, many provinces in China have finalized green industry investment plans for the next five years, and the average annual investment in green industry is expected to be around RMB 3 trillion.



## China's Fourteenth Five-Year Plan

Announced to accelerate the goal to enlarge high-value downstream polymers, implement the elimination of backward production, and promote the integration of production capacity.



## Foreign Investment Returns

The relaxation of foreign investment restrictions has prompted the increase in new investment projects by foreign businessmen in China, consolidating the competitive advantage for the advantage of a few BASF designated partners.



## Advantages of Deep Farming

CTCI Beijing has been in China close to 30 years and is one of the few foreign engineering companies that entered China in the 1990s. The localization and the Class A qualifications of chemical and petrochemical, municipal administration, etc., enhance the competitiveness.



**Recent Major Achievements: BASF (Guangdong) NIS Cluster project, Ascend Performance Materials Co. Ltd. new plant project, Formosa Plastics Ningbo Ethylene Cryogenic Tank Project, China-Korea CoreX New Material Project, Zhangzhou Chi Mei polycarbonate new plant project**

