

CTCI Corporation The 1st Investor Conference, 2022

2022.3.23



Disclaimer

- The consolidated financial statement is hereby based on International Financial Reporting Standards (IFRS) and 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

Top 100 of International Engineering Companies

2021 continues to be listed by **ENR** within Top 100 of international engineering companies



Carbon Disclosure Project

Climate Change Score: B
Supplier Engagement Rating: A-



DJSI Index

A component of DJSI's Emerging Markets index for seven years in a row

Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA

MSCI ESG and Constituent Stocks

MSCI ESG Rating: BBB
A constituent stock in Emerging Markets Small Cap Index



Top 5% performer in the Corporate Governance Evaluation

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



Taiwan Corporate Sustainability Award

- Top 10 Domestic Companies Sustainability Model Awards
- Top 100 Best Performing Companies for Carbon Reduction in Taiwan 《Business Weekly》
- Top 100 Performing Companies for Excellence in Corporate Social Responsibility 《Common Wealth Magazine》



2021 Year In Review

Deploy New Field (High-Tech/Green Technology)

- After setting up a dedicated business group, quickly achieved results in the United States and Taiwan
- Actively developing in Green Technologies (low-carbon energy including hydrogen energy, energy storage, carbon capture and reuse, etc.)

Open up the New Market

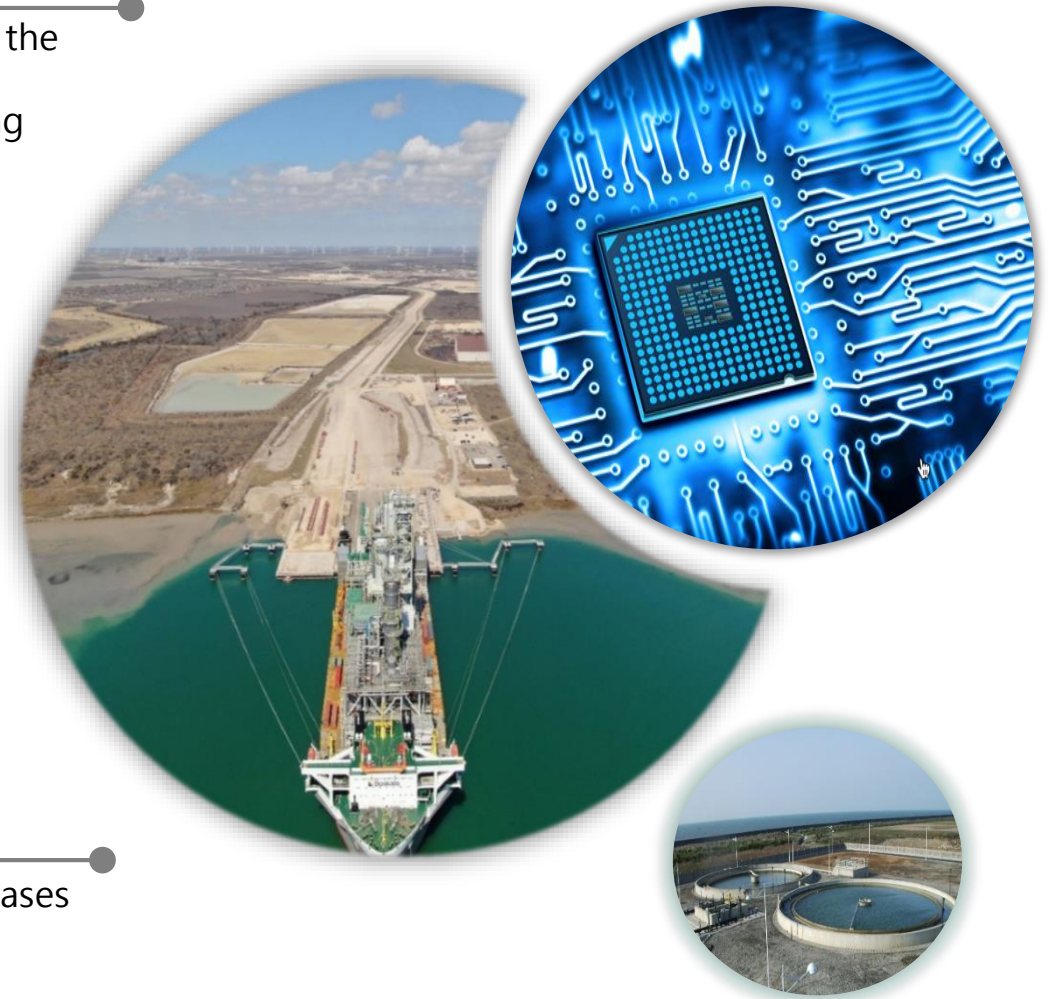
- The U.S. Subsidiary grows rapidly by grasping the market trend to accumulate experience, and focus on high-tech and renewable fuels
- Setting up a subsidiary in Indonesia and deploying local market

Robust New Contracts, Rising Backlog

- The new contract value has been achieved about NT\$130 billion both in 2020 and 2021
- Strong advantages in new contracts awarded to support backlog to break through NT\$ 300 billion of a all time high records

Manage the Impact of Rising Prices

- All bids have taken into account the cost and trend of sharp price increases
- Quote the price increase instructions of the Public Works Committee, and handle the price increase compensation with the clients
- Risk sharing with owners, vendors and suppliers
- No longer compete at low prices and obtain bids at reasonable prices



ESG Sustainability Progress

Environment (E)



- Advocating net zero, leading net zero EPC
- Responding to Taiwan energy policy of “Reducing Coal, Increasing Gas, and Promoting Green”, actively participating in clean energy and effectively promoting the circular economy.
- Low carbon/environmental protection/green technology construction in progress and contracted value continue to grow
- Implementing TCFD Recommendations to assess financial impact, risks and opportunities

Social(S)



- CTCI University's online platform for talent cultivation without borders and zero time difference
- Committing to promote engineering education by establishing “CTCI Learning Network ” and opening hundreds of professional courses to the public to promote sustainable co-reading through CTCI Education Foundation and promote social prosperity and common good.
- Creating a happy and healthy workplace and being awarded “the Best Employer Award in Asia”

Governance (G)



- Setting up a corporate sustainability and net zero committee on the Board
- Linking ESG sustainability performance to KPIs
- Total participation CSR excellent practice and fulfilling ESG
- Continuing to receive domestic and foreign corporate governance awards of DJSI, MSCI, TCSA, TWSE, etc. for many years



Green financing

CTCI MAC

2021.11

NT\$ 0.8 billion
Green Letter of Guarantee

The First Green Guarantee Letter of Sustainable Development Linked by Crédit Agricole

ECOVE

2021.05

NT\$ 1 billion
Green Bonds

For Solar photovoltaic power plant **development** and installation

CTCI

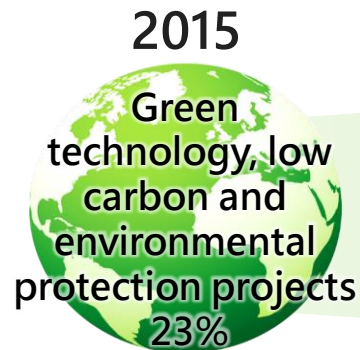
2020.12

US\$20 million
Green Finance Loans

Sustainability Performance Linked Loans

Green Technology, Low Carbon and Environmental Protection Projects

December 2021



Backlog : 450% growth



Zhong Neng/CFXD and Yunlin Offshore Wind Farm-TP Fabrication



Molie Quantum Energy Hi-Tech Battery Plant Project



Renewable Diesel Project in the U.S.



Multiple Solar Power Plants



Sunba 1,000MW Independent Power Producer Project, Taiwan

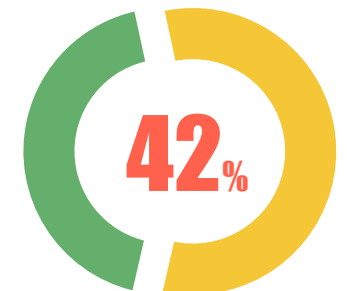


Changhua Xizhou and Kaohsiung Gangshan EfW Plant O&M and Remapping Service

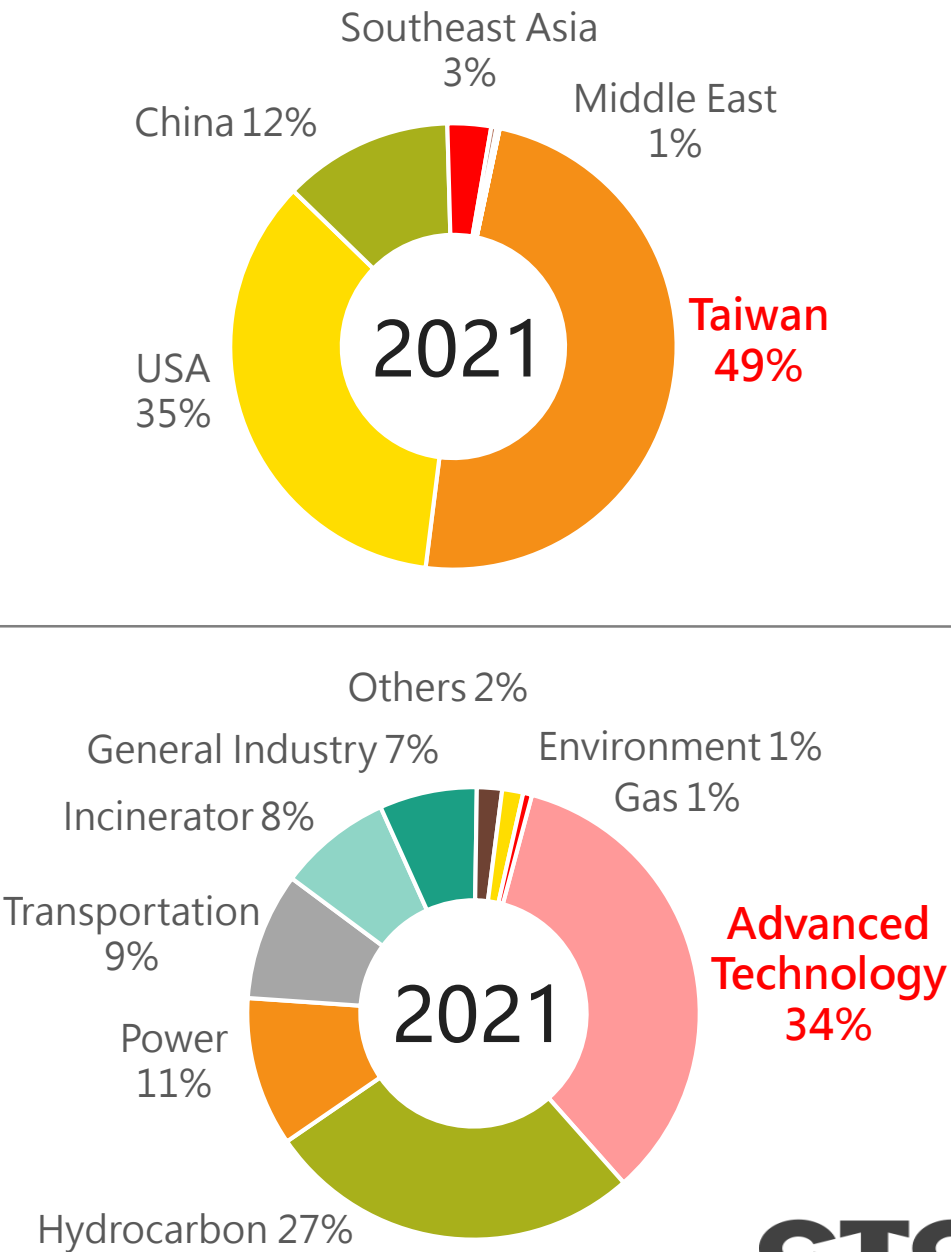
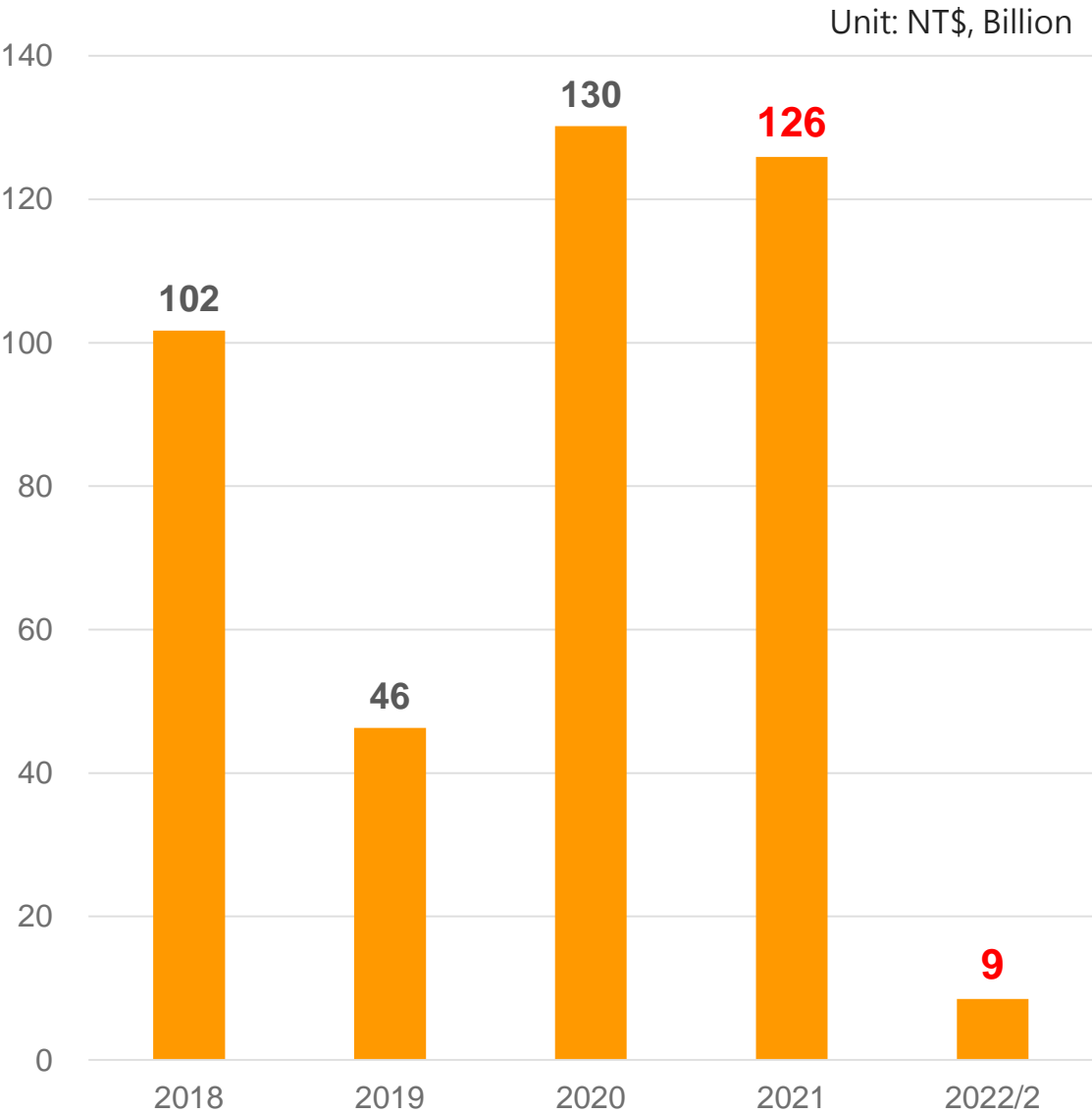


DAKA Renewable Resources Center of Hualien Plant

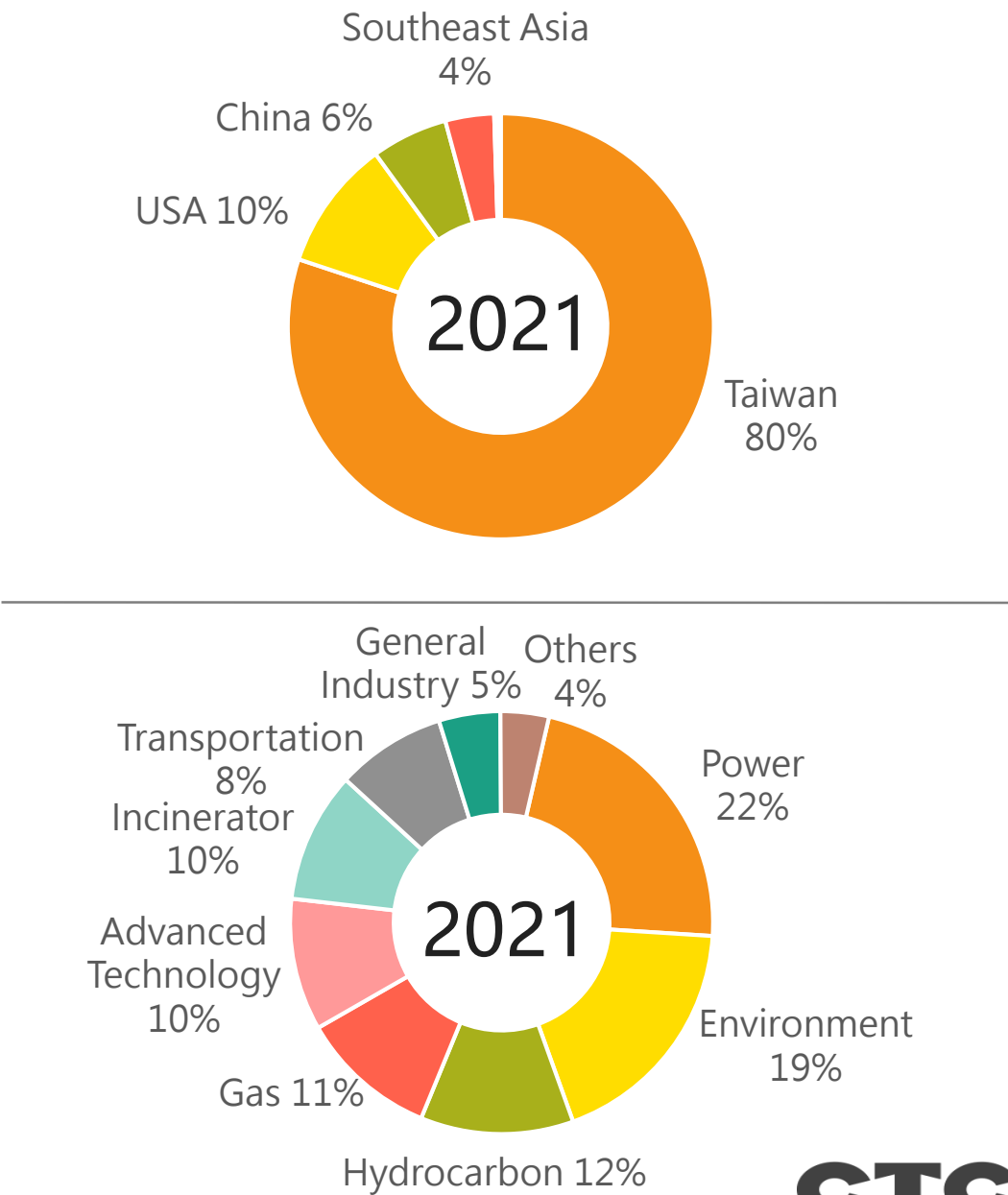
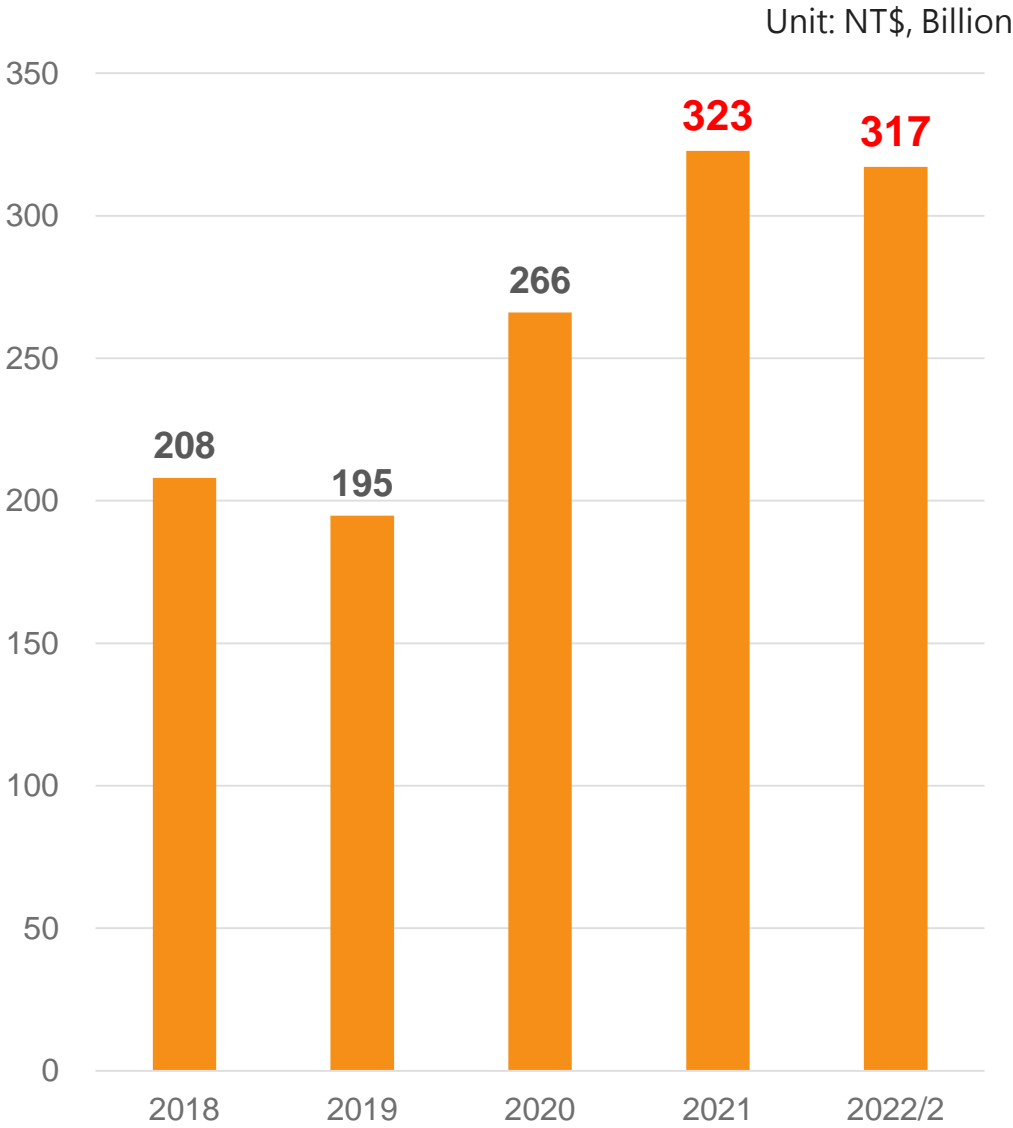
New Contracts up
to December, 2021



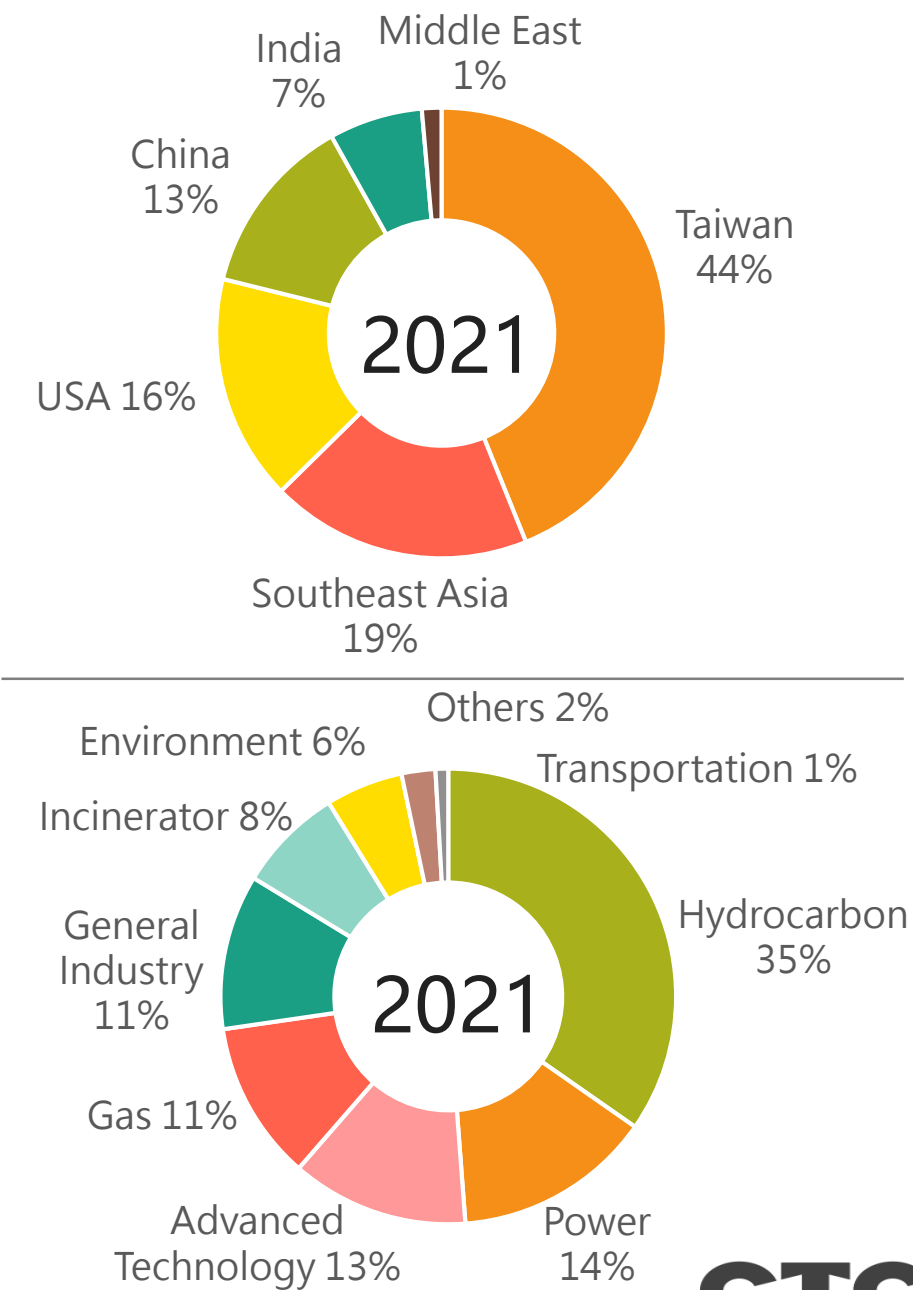
New Contracts and Distribution



Backlog and Distribution

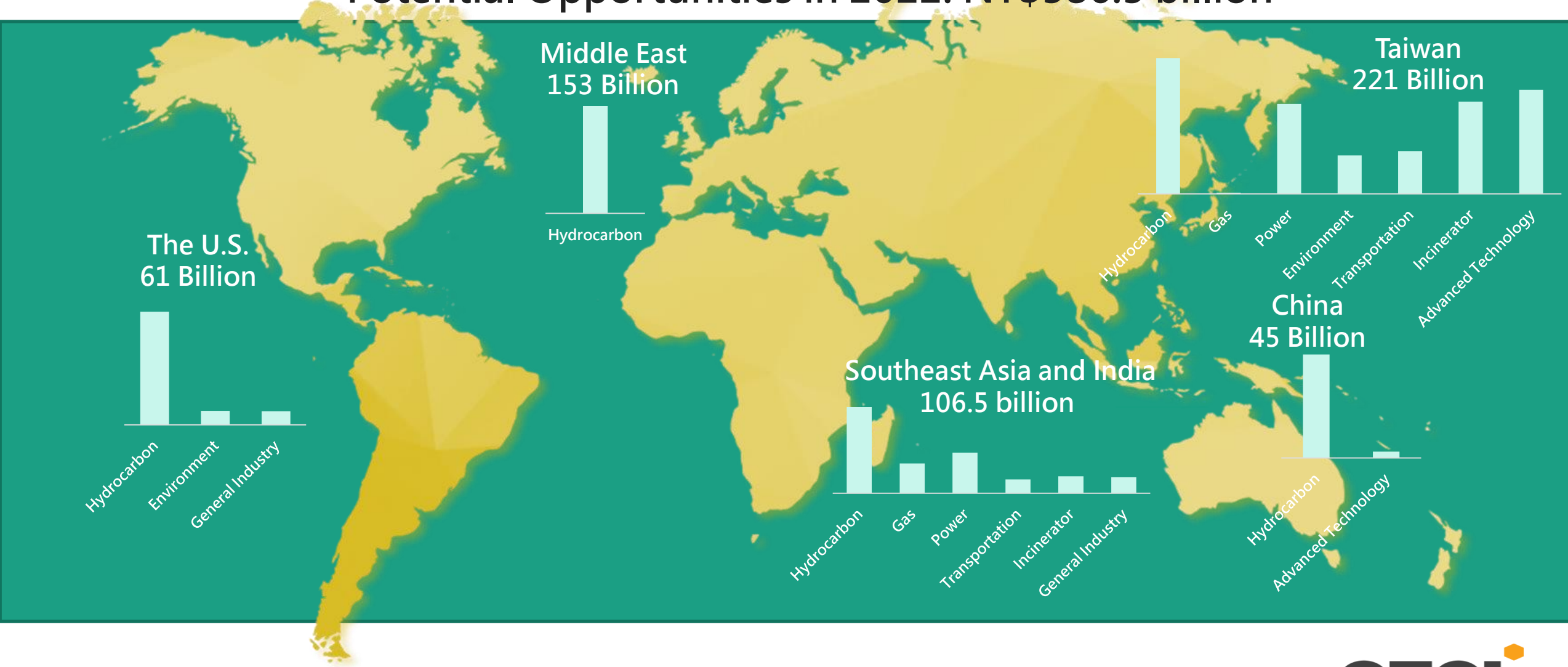


Revenue and Distribution



Potential Opportunities in 2022

Potential Opportunities in 2022: NT\$586.5 billion



Financial Highlights

2021 Consolidated Income Statement

Unit: NT\$, Thousand

	2021/1/1~12/31		2020/1/1~12/31		YOY
	Amount	%	Amount	%	%
Sales Revenues	70,540,414	100.0%	55,558,409	100%	27.0%
Operating costs	(66,538,507)	-94.3%	(51,914,759)	-93.4%	28.2%
Gross Profit	4,001,907	5.7%	3,643,650	6.6%	9.8%
Operating expenses	(1,826,660)	-2.6%	(1,586,371)	-2.9%	15.1%
Operating income	2,175,247	3.1%	2,057,279	3.7%	5.7%
Total non-operating income and expenses	858,281	1.2%	(293,259)	-0.5%	392.7%
Profit before income tax	3,033,528	4.3%	1,764,020	3.2%	72.0%
Income tax expense	(630,517)	-0.9%	(458,874)	-0.8%	37.4%
Profit for the period	2,403,011	3.4%	1,305,146	2.4%	84.1%
Profit attributable to Owners of the parent	1,642,175	2.3%	766,548	1.4%	114.2%
Total basic earnings per share	2.15		1.01		

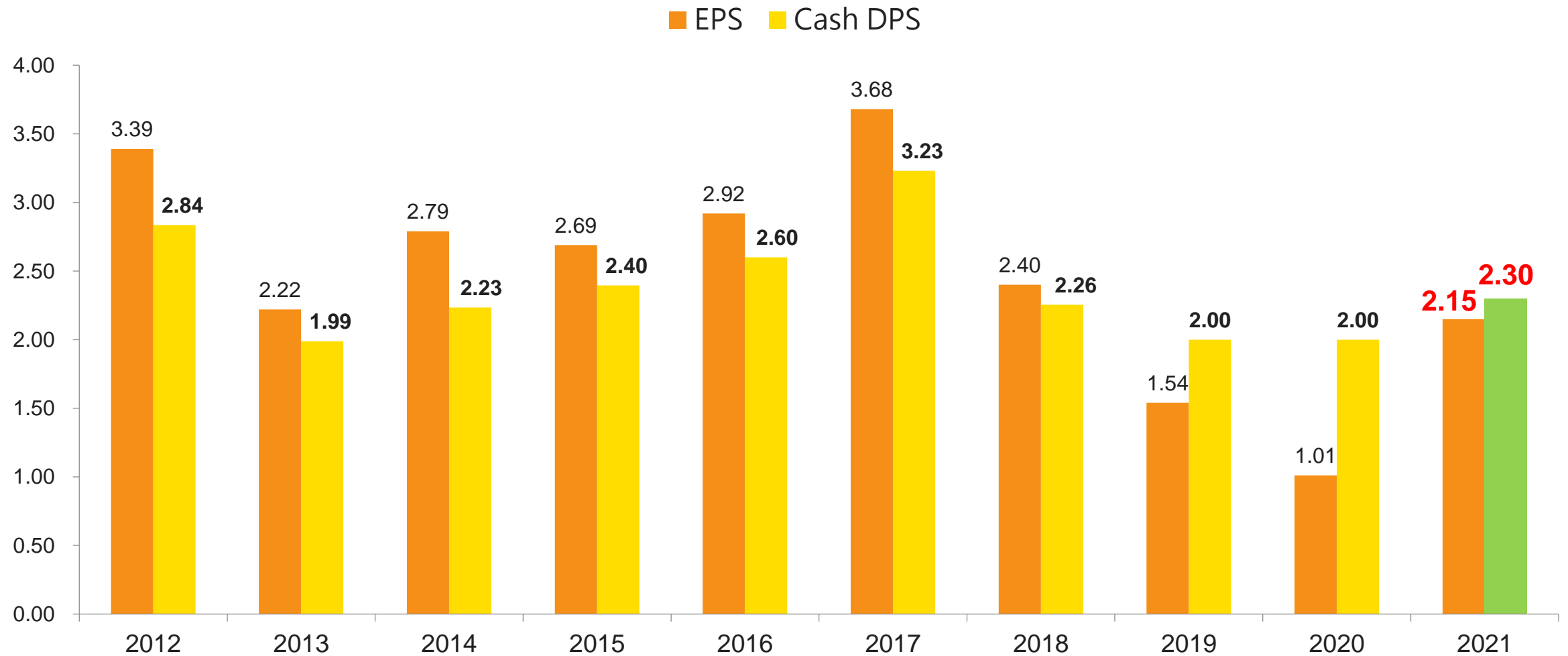
2021 Consolidated Balance Sheet

Unit: NT\$, Thousand

	2021/12/31		2020/12/31	
	Amount	%	Amount	%
Current assets*	61,324,660	70%	47,518,372	67%
Non-current assets	26,100,045	30%	23,269,591	33%
Total assets	87,424,705	100%	70,787,963	100%
Current liabilities	48,579,666	56%	34,849,103	49%
Non-current liabilities	18,284,174	20%	16,904,623	24%
Total Liabilities	66,863,840	76%	51,753,726	73%
Equity attributable to owners of The parent	16,580,555	19%	15,827,557	22%
Non-controlling interest	3,980,310	5%	3,206,680	5%
Total equity	20,560,865	24%	19,034,237	27%
Total liabilities and equity	87,424,705	100%	70,787,963	100%

*Cash and cash equivalents in current assets are NT\$21.4 billion

Dividend Payout



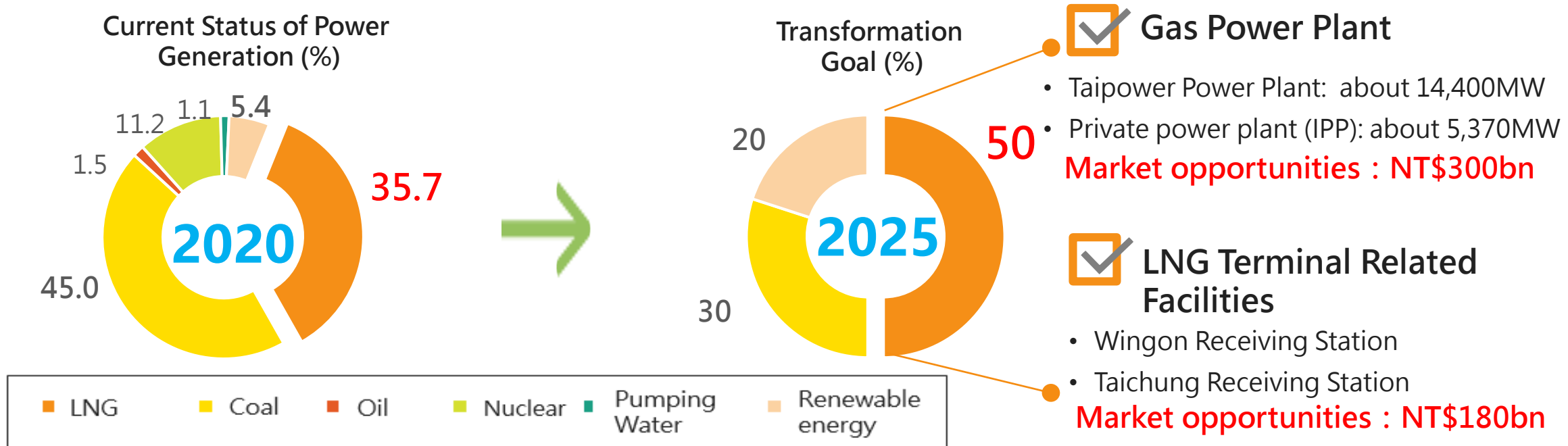
■ The net amount of other equity deductions decreased, so the special surplus reserve was reversed to undistributed earnings, resulting in a higher cash dividend per share than EPS in 2021.

Business Outlook

Domestic Clean Energy Opportunities – 1/2

Taiwan 2025 Energy Policy “Reducing Coal, Increasing Gas and Promoting Green”

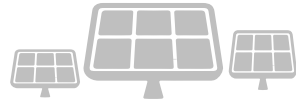
Natural gas imports: 17.75 million tons in 2020 → 2025 demand: 29.5 million tons



- ✓ After Datan Power Plant, the first gas-fired power plant to be outsourced under EPC contract, Taipower released numerous gas-fired power plants totaled of 13,850MW under EPC contracts and CTCI has awarded about 74%.
- ✓ CTCI is the only domestic engineering firm who is capable of executing lump sum contracts for LNG gasification facilities and storage tanks.
- 🎯 **Major achievements within one year: Taichung LNG Receiving Terminal Regas Project, Third LNG Receiving Terminal Tank Project, TPC 3,900MW Hsinta CCPP Project and 2,600MW Taichung CCPP Project, Sunba 1,000MW Independent Power Producer Project.**

Domestic Clean Energy Opportunities– 2/2

Solar Photovoltaic



The participation participates in solar field of ECOVE Solar Energy Corp.:

Investment/development (cumulative)– **126**MW

Operation and Maintenance (cumulative) – **350**MW

- ✓ The obtained development rights in 2021 was increased by nearly 30% compared with 2020
- ✓ The obtained operation and maintenance in 2021 was increased by 2.5 times compared with 2020

Offshore Wind



Total setup capacity in **2025**

5,738MW

Total setup capacity in **2035**

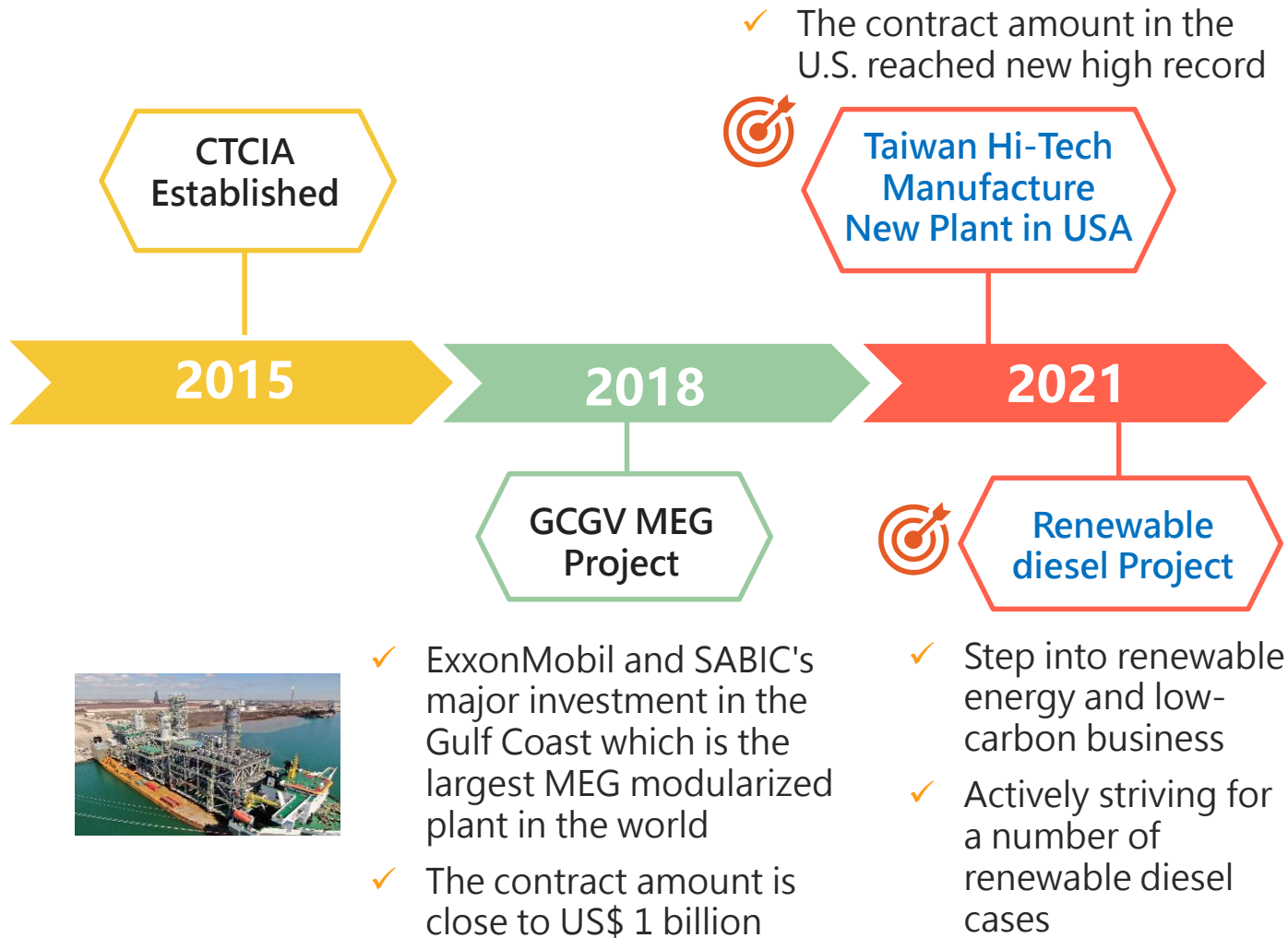
20,738MW

Block development release **1.5GW/year**→
Solar wind turbine demand: 100 pcs/year

60% Localization → The proportion of localization increases, and business opportunities grow

- ✓ CTCI MAC participated in the manufacturing of underwater foundation and transition piece totaled of approximately 1,150MW→ From 2017 to 2021, revenue increased by 40%, and profit increased by more than 130%
- ✓ CTCI and Van Oord has formed a strategic alliance to bid for EPCI work

Deploy Strongly in the U.S. Market



+ Semiconductor Industry Business

- Huge demand for electric vehicles and 5G
- The U.S. intends to expand local semiconductor production capacity and business opportunities for Taiwanese and US Local semiconductor companies' plant-construction
- Drive high-tech industry supply chain manufacturers to copy Taiwan's successful experience to the U.S.

+ Renewable Fuel Business

- The demand for clean energy continues to grow
- Biden government strongly supports green energy and environmental protection industry
- U.S. multi-state governments offer incentive policies for renewable fuels

+ U.S. Infrastructure Bill Business

- U.S. President Biden signed a 1.2 trillion U.S. dollar (33.41 trillion Taiwan dollars) infrastructure bill on November 15
- Major business opportunities include electromechanical engineering of transportation systems, green energy, water conservancy infrastructure and low-carbon technology engineering, etc.

New 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

Investment from Taiwan :

- ✓ Quanzhou Grand Pacific Chemical Co. Ltd.
- ✓ Zhangzhou CHIMEI Chemical Co., Ltd.
- ✓ Formosa Petrochemical Corporation (FPCC)
- ✓ Chang Chun Petrochemical Co., Ltd.
- ✓ Taita Chemical Co., Ltd.



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.



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.



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.



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.



Major achievements within one year: Grand Pacific Chemical Co. Ltd. PDH/PP project, Zhangzhou CHIMEI ABS/AS expansion project, BASF (Guangdong) NIS Cluster project, Ascend Performance Materials Co. Ltd. new plant project

Water Investment Drives Business Opportunities



Construction of sewage sewer system in Zhongli area

BOT

2+33 years

156,000 tons/day

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



Kaohsiung Fengshan Creek Reclaimed Water Plant

BTO

2+15 years

45,000 tons/day

The first domestic municipal sewage recycling BTO demonstration project



Kaohsiung Linhai Sewage Treatment Plant and Reclaimed Water

BTO

3+15 years

33,000 tons/day

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



Tainan Science Park Reclaimed Water Plant

BOT

1.5+20 years

20,000 tons/day

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



Taoyuan North District Water Recycling Center

BTO

3+15 years

40,000 tons/day

Supply Taoyuan Refinery, Guanyin Industrial Zone and Nan Ya Plastics

- ✓ Government continuously plans numerous new reclaimed water plants from 2019 to 2025, together with couple private reclaimed water plants planned in High-Tech Parks of total daily capacity about 500,000 tons. . **Market Opportunities: NT\$50bn(exclusive operation work)**
- ✓ Government plans to release five desalination plants (Taoyuan, Hsinchu, Chiayi, Tainan, Kaohsiung) on investment/construction/ operation basis shortly. **Market Opportunities: NT\$ 60bn (exclusive operation work)**
- ✓ CTCI owns the only two reclaimed water plants awarded on investment/construction/operating basis among the four outsourced plants. And CTCI 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.
- 🎯 **Major achievements within one year: Linhai Sewage Treatment Plant and Reclaimed Water began to supply water; Nanke Reclaimed Water Plant is under commissioning; Taoyuan North District Water Recycling Center (obtained the best applicant qualification)**

Circular Economy Business Opportunities

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

- ✓ From 2020 to 2025, it is expected that 12 municipal waste incineration plants will be replaced or expanded.

Market Opportunities: NT\$140 billion.

- ✓ Recycling and zero waste center business opportunities emerge in response to global trends.

- ✓ 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.

Major achievements within one year: Changbin Industrial Park Resource Processing Center(BOT) · Changhua Xizhou EfW Plant O&M and Revamping Services, Kaohsiung Gangshan EfW Plant O&M and Revamping Services

Rail Transportation Market Potentials

- ➕ From 2021 to 2026, 12 track construction plans are planned, including Taipei Metro's Circular Line North & South Sections (awarded by CTCI), New Taipei Minsheng Xizhi Line-Xizhi East Lake Section, and Keelung MRT Mechanical and Electrical System Project, etc.

Total Route Length: about 190 km

Total Budget of E&M Work: about NT\$166 billion

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



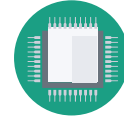
Major achievements within one year: Taoyuan Metro Green Line GC03 MEP Project, Taipei Metro's Circular Line North & South Sections

High-Tech Market Opportunities



Communication Business

The total investment in global data centers is growing at a compound annual growth rate of 9.9%. Google and Microsoft successively expand data centers in Taiwan



Foundry Business

Taiwan's semiconductor leader continues to expand fab capacity until 2023 and plans to invest US\$100 billion to new fab capacity in recent years



Computer & Accessories

Taiwan's Hi-Tech players are deployed in southbound countries to establish new supply chains and are estimated to invest exceed US\$10 billion in Southeast Asia within 10 years



Optics Business

By 2030, the global lithium battery storage market will grow at a compound annual growth rate of 30% to 40%



Taiwan Hi-Tech Chemical Supply Chain

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

Strength

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



Major achievements within one year:
Taiwanese semiconductor manufacturer's U.S. plant construction project, Molie Quantum Energy Hi-Tech Battery Plant and domestic DRAM Factory Work

