



Professional Team

Comprehensive Service



Presentation Outline

- ▶ Brief Introduction of Kuen Ling
- ▶ Product Portfolio
- ▶ Operational Performance
- ▶ Future Prospects
- ▶ Important Matters

Company Introduction

Company Name: Kuen Ling Machinery Refrigerating Co., Ltd.

Established Date : April 5th, 1988

OTC Date : September 28th, 2000

Stock Code : 4527

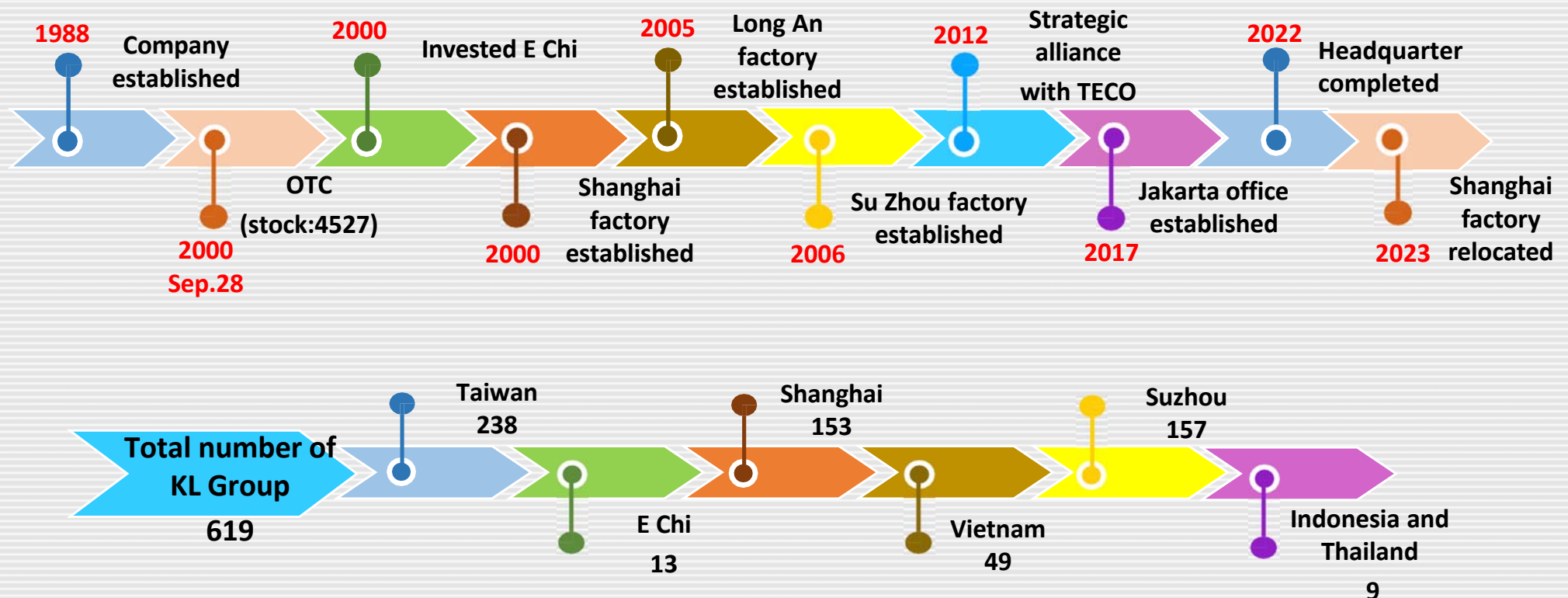
Paid-in Capital : 760 million

**Chairman &
General Manager:** Chung-Kuo Tseng

Main Business : Production of Central Air-Conditioning System
Chiller Units



Development History



*The number of employee dated on Aug. 31st, 2023

Operation Locations

Kaohsiung Factory



Shanghai Office



Suzhou Factory



Vietnam Factory



Certificate & Award

System Certificate

- ◆ ISO 9001
- ◆ ISO 14001
- ◆ ISO 45001



- ◆ TAF (Taiwan Accreditation Foundation) Laboratory Accreditation

- ◆ Test Station Certification by Hefei General Mechanical and Electrical Products Testing Institute

Product Certificate

- ◆ AHRI
- ◆ Mechanical Safety Certification by CUC
- ◆ CRAA product certification
- ◆ China Design License of Special Equipment – Pressure Vessel



Main Products

Energy Saving High Efficiency Eco-friendly

Equipment Unit

Water-cooled Chiller



Flooded Chiller



DC Conversion Chiller Unit



Air-cooled Chiller



Vacuum Freeze Dryer



Packaged Air Conditioner



Computer Room
Packaged Unit



Freeze-up Storage Tank



Air-Cooled Heat Pump Unit



Condensing Unit



Application

Refrigeration and Air Conditioning Technology

Agricultural, Fishery Processing Industry

Petrochemical Industry

Energy & Resources Industry

Precision Manufacturing Industry

Medical and Pharmaceutical Industry

Mechanical Industry

Textile and chemical fiber industry

Construction and civil engineering industry

Electronics, Computer Technology industry

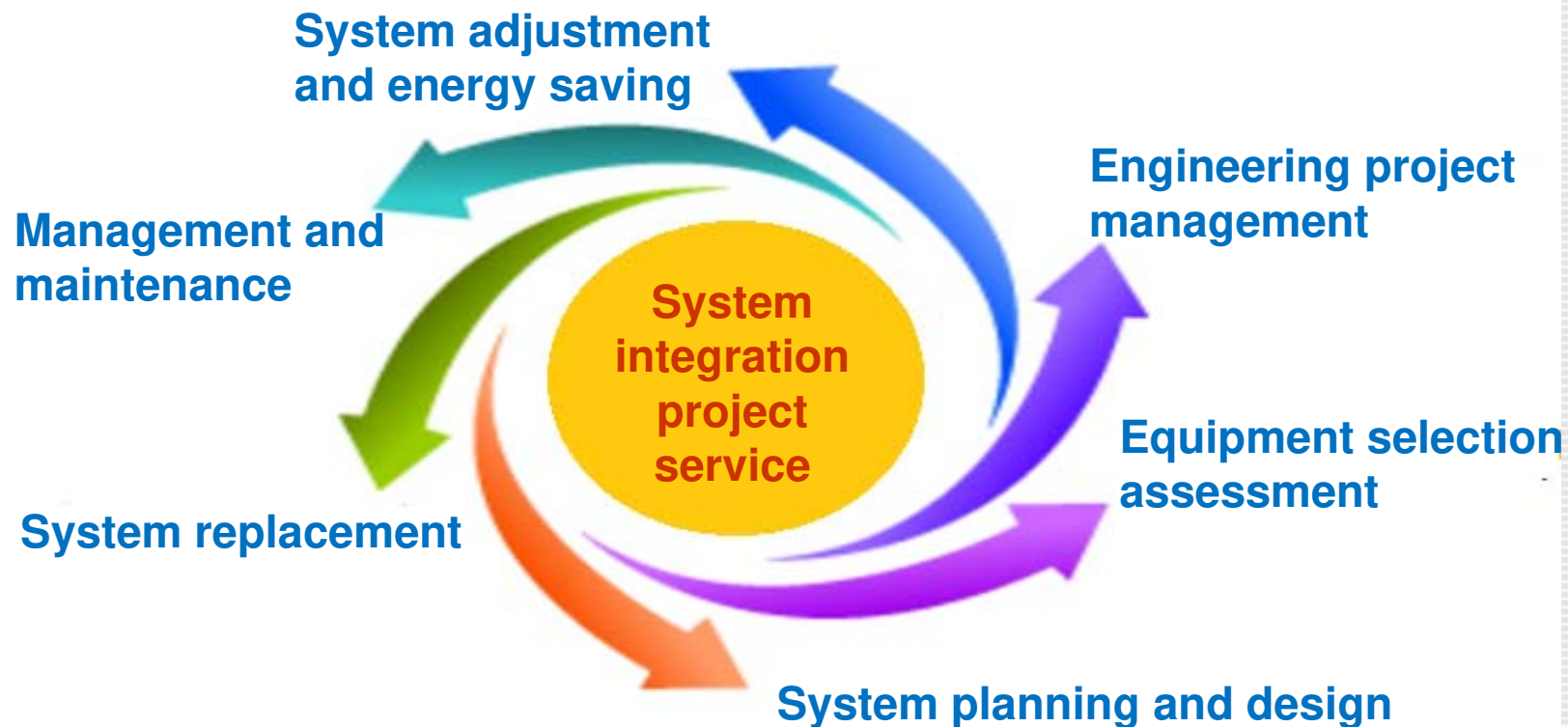
Material Science Industry

Industrial Safety, Health, and Environmental Industry

Main Products

Energy Saving High Efficiency Eco-friendly

System Construction Integration



Program evaluation
efficiency
measurement

Design outsourcing,
negotiation
to sign a contract

Measurement,
responsible for
construction

Responsible for maintenance
and management system energy
saving performance guarantee
for 5 to 10 years

Life cycle
Future contract

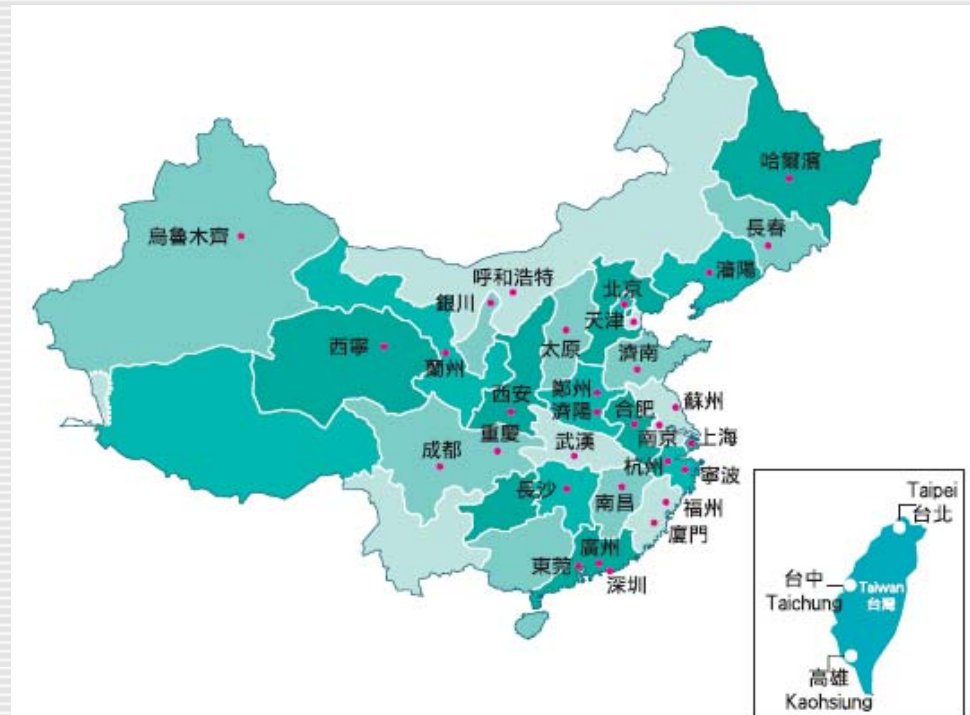
Maintenance Service

Market distribution in Asia

Taiwan : Taipei, Taichung, Kaohsiung

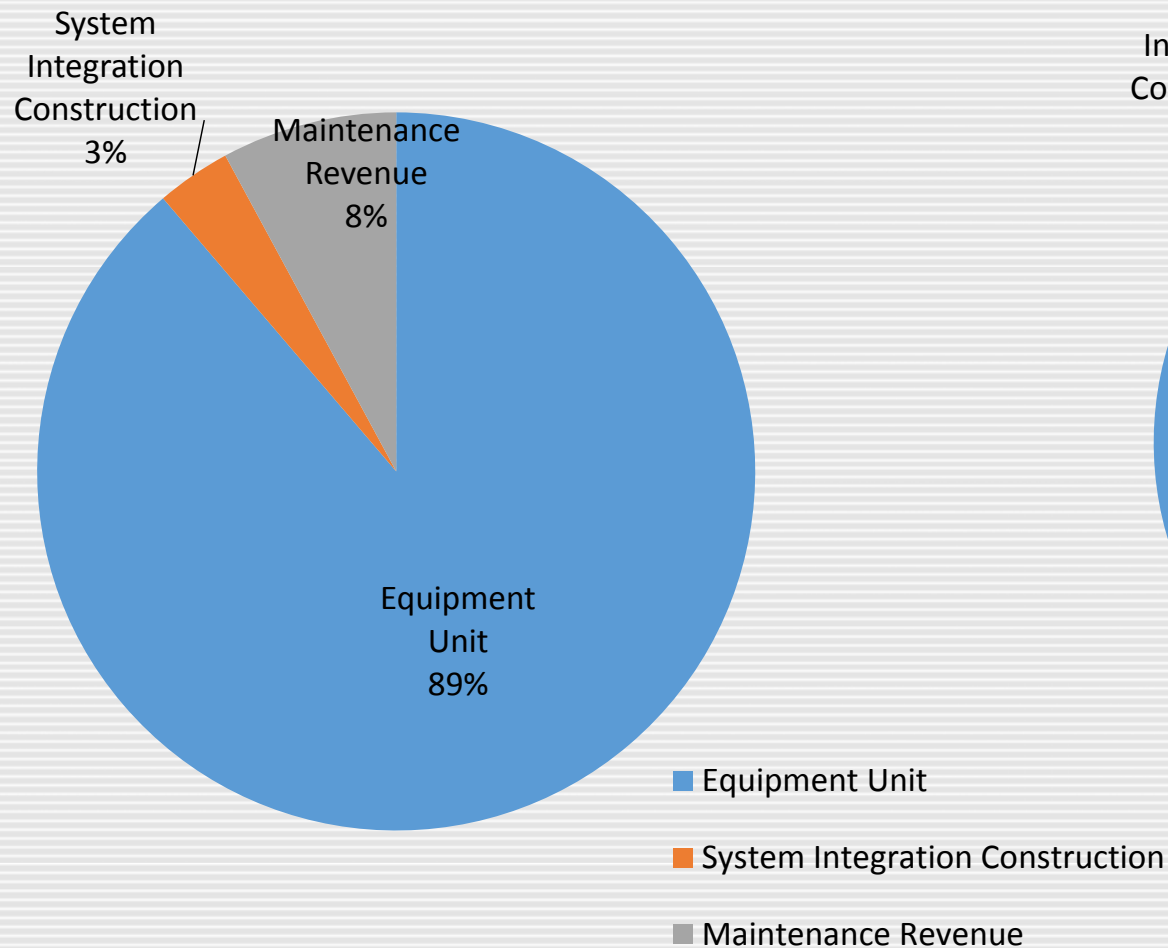
China : There are over 16 sales locations, including Shanghai, Suzhou etc.

Southeast Asia : Vietnam, Indonesia, Hong Kong, Philippines, Malaysia, Thailand

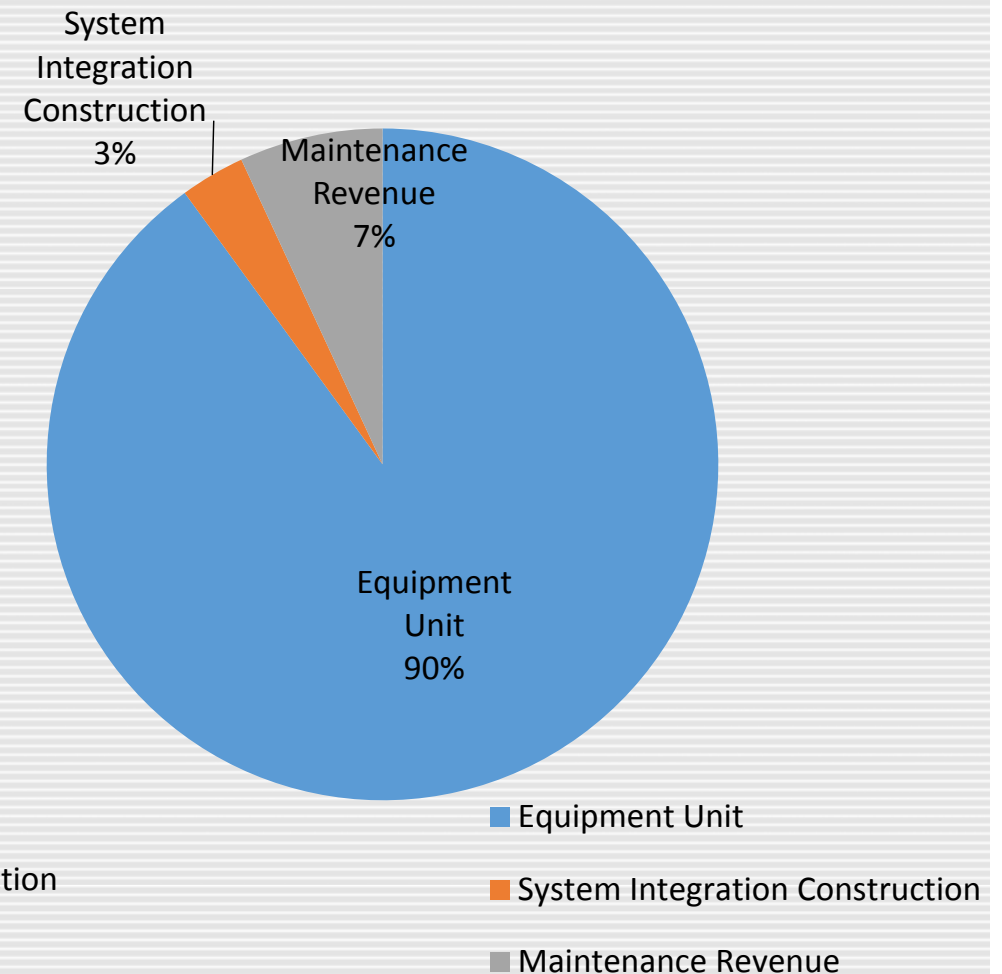


Main Products

2021Y



2022Y



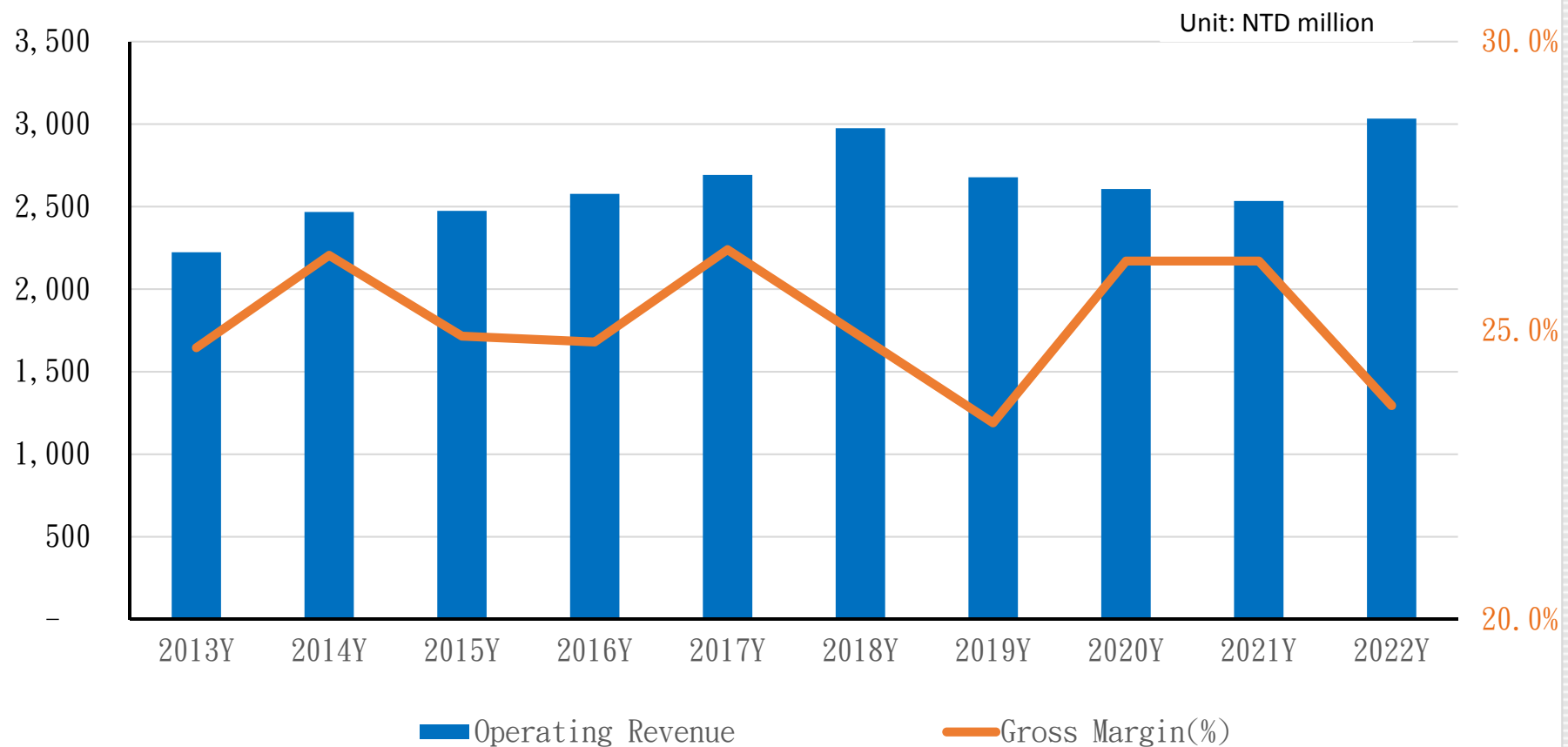
Consolidated Income Statement

Unit: NTD Million

Item	2020		2021		2022		YoY
	Amount	%	Amount	%	Amount	%	%
Operating Revenue	2,607	100	2,534	100	3,033	100	20%
Gross Profit	683	26	601	24	705	23	17%
Operating Income	241	9	176	7	224	7	28%
Profit before tax	261	10	195	8	252	8	29%
Net Income for current period	210	8	151	6	206	7	37%
EPS	2.72		1.98		2.68		
Cash Dividends	2		1.8		2.0		
Dividends Payout Ratio(%)	74%		91%		75%		
Dividends Yield(%)	7.68%		6.18%		5.73%		

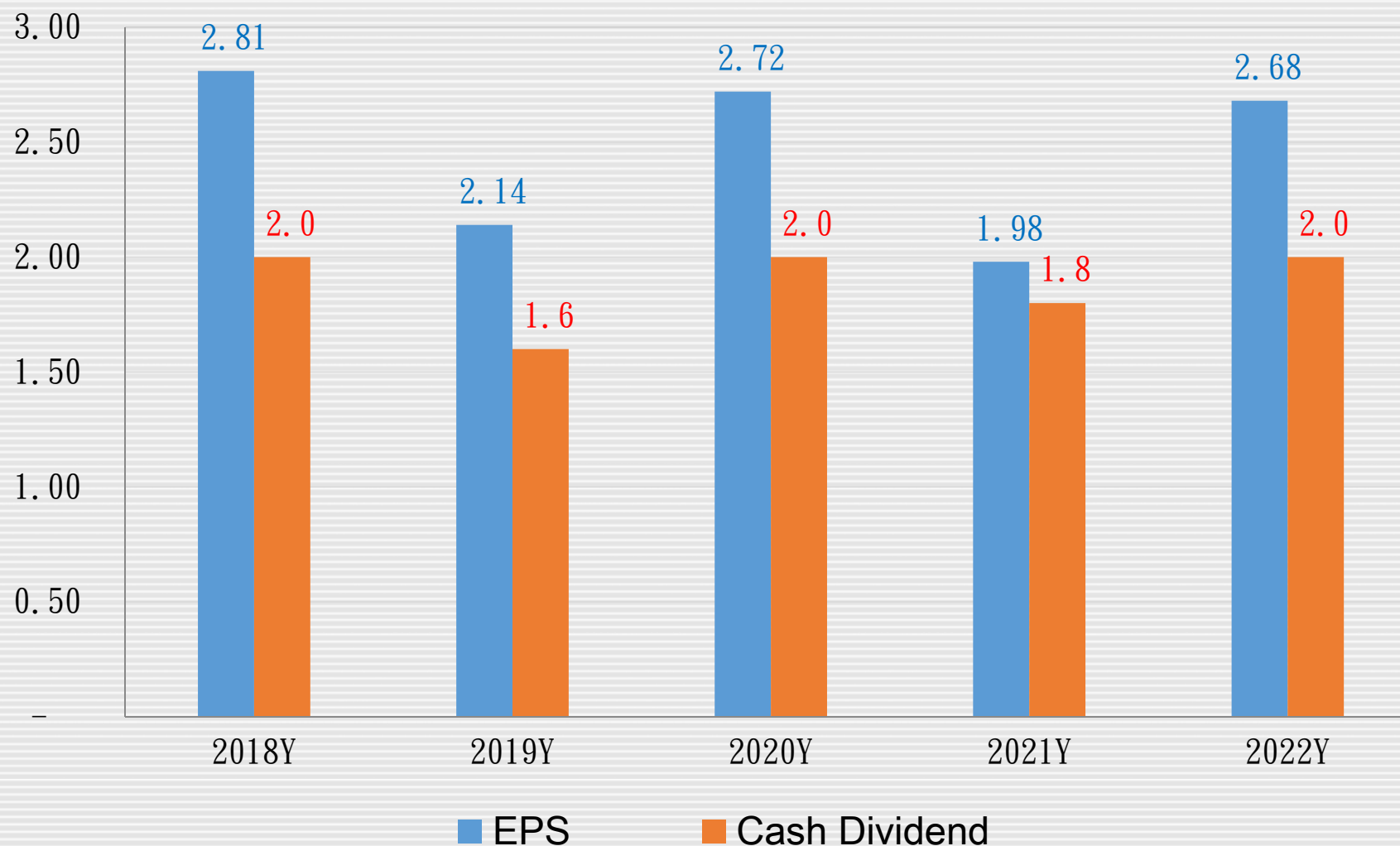
Consolidated Revenue & Gross Margin Variation

Consolidated Revenue & Gross Margin Variation



Dividend Strategy

Historical EPS & Dividend Distribution(yuan)

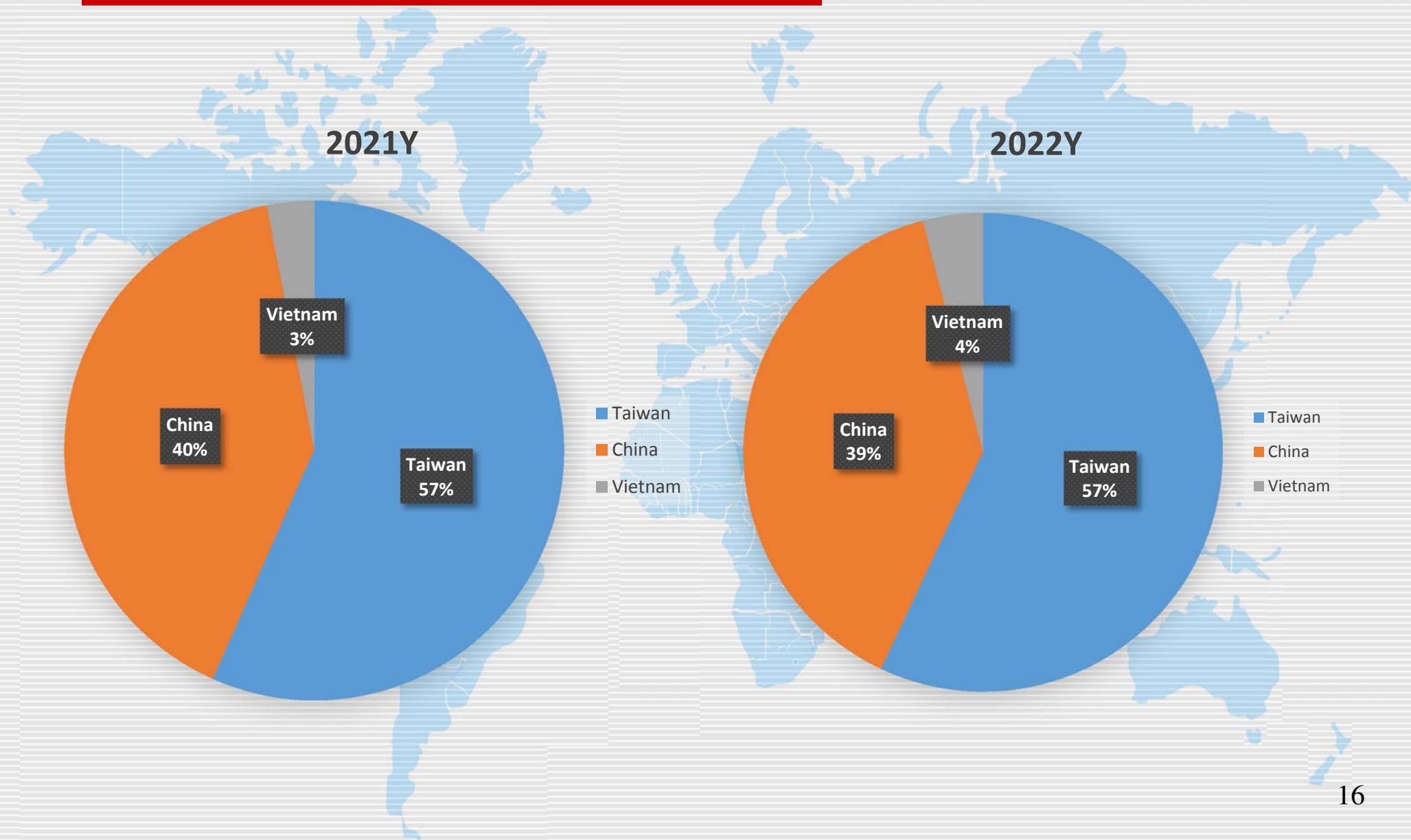


Revenue by Region

Unit : NTD Million

Item	2020		2021		2022		YoY
	Amount	%	Amount	%	Amount	%	
Taiwan	1,625	63	1,435	57	1,729	57	20%
China	894	34	1,021	40	1,181	39	16%
Vietnam	87	3	77	3	123	4	59%
Total	2,607	100	2,534	100	3,033	100	20%

Revenue Ratio by Region



Consolidated Balance Sheet

Unit : NTD Million

Item	2020		2021		2022		YoY
	Amount	%	Amount	%	Amount	%	%
Cash	614	23	539	19	403	13	-25%
Account Receivable	864	32	911	32	1,285	40	41%
Inventory	413	15	573	20	671	21	17%
Other Current Assets	114	4	135	5	109	3	-19%
Other non-current Asset(real estate, factory, equipment etc.)	726	27	712	25	724	23	2%
Total Asset	2,731	100	2,870	100	3,192	100	11%
Current Liability	908	33	1,107	39	1,394	44	26%
Non-current Liability	287	11	233	8	162	5	-30%
Total Liability	1,195	44	1,340	47	1,556	49	16%
Share Capital	762	28	762	27	762	24	0%
Total Equity	1,536	56	1,530	53	1,636	51	7%
Total Liability & Shareholder Equity	2,731	100	2,870	100	3,192	100	11%

Consolidated Income Statement-Q1~Q2,2023

Unit: NTD Million

Item	Q1,2023		Q2,2023		Q1~Q2,2023		YoY
	Amount	%	Amount	%	Amount	%	%
Operating Revenue	650	100	688	100	1,337	100	11%
Gross Profit	145	22	169	25	313	23	20%
Operating Income	30	5	55	8	85	6	83%
Profit before tax	40	6	65	9	105	8	72%
Net Income for Current Period	31	5	49	7	81	6	72%
EPS	0.42		0.62		1.04		51%

Consolidated Income Statement-Q1~Q2,2023

Unit: NTD Million

Item	Q1~Q2,2023		Q1~Q2,2022		YoY
	Amount	%	Amount	%	%
Operating Revenue	1,337	100	1,201	100	11%
Gross Profit	313	23	261	22	20%
Operating Income	85	6	46	4	83%
Profit before tax	105	8	61	5	72%
Net Income for Current Period	81	6	47	4	72%
EPS	1.04		0.69		51%

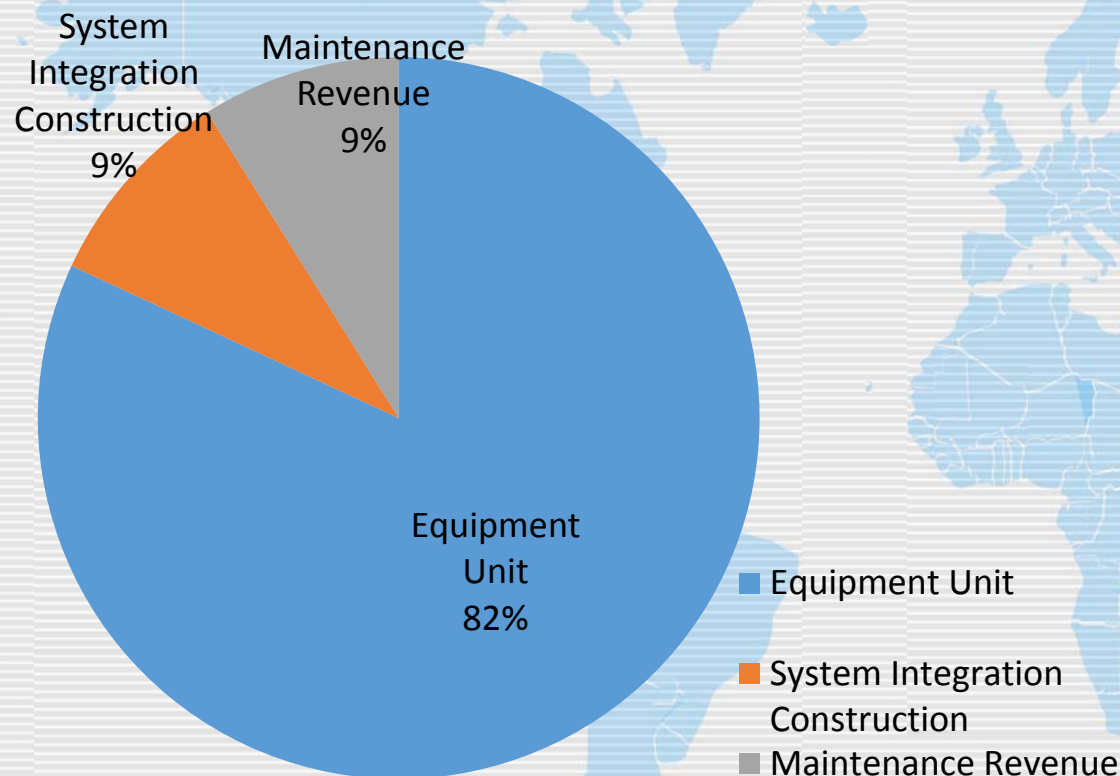
Consolidated Balance Sheet-Q2,2023

Unit: NTD Million

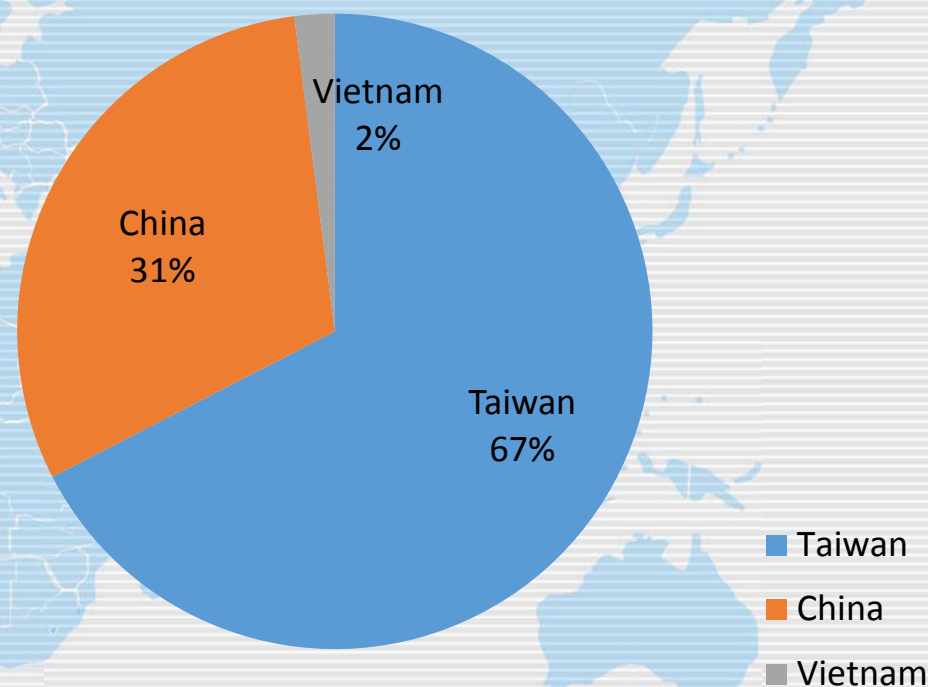
Item	June 30, 2023		Dec.31,2022		June 30, 2022		YoY
	Amount	%	Amount	%	Amount	%	%
Cash	465	15	403	13	363	12	28%
Account Receivable	1,100	36	1,285	40	987	34	11%
Inventory	636	21	671	21	720	25	-12%
Other Current Assets	91	3	109	3	160	5	-43%
Other non-current Asset(real estate, factory, equipment etc.)	742	24	724	23	700	24	6%
Total Assets	3,035	100	3,192	100	2,930	100	4%
Current Liability	1,324	44	1,394	44	1,268	43	4%
Non-current Liability	165	5	162	5	200	7	-18%
Total Liability	1,488	49	1,556	49	1,469	50	1%
Share Capital	762	25	762	24	762	26	0%
Total Equity	1,547	51	1,636	51	1,461	50	6%
Total Liability & Shareholder Equity	3,035	100	3,192	100	2,930	100	4%

Sales Information for Q1~Q2,2023

**Product Category
for the First Two Quarters**

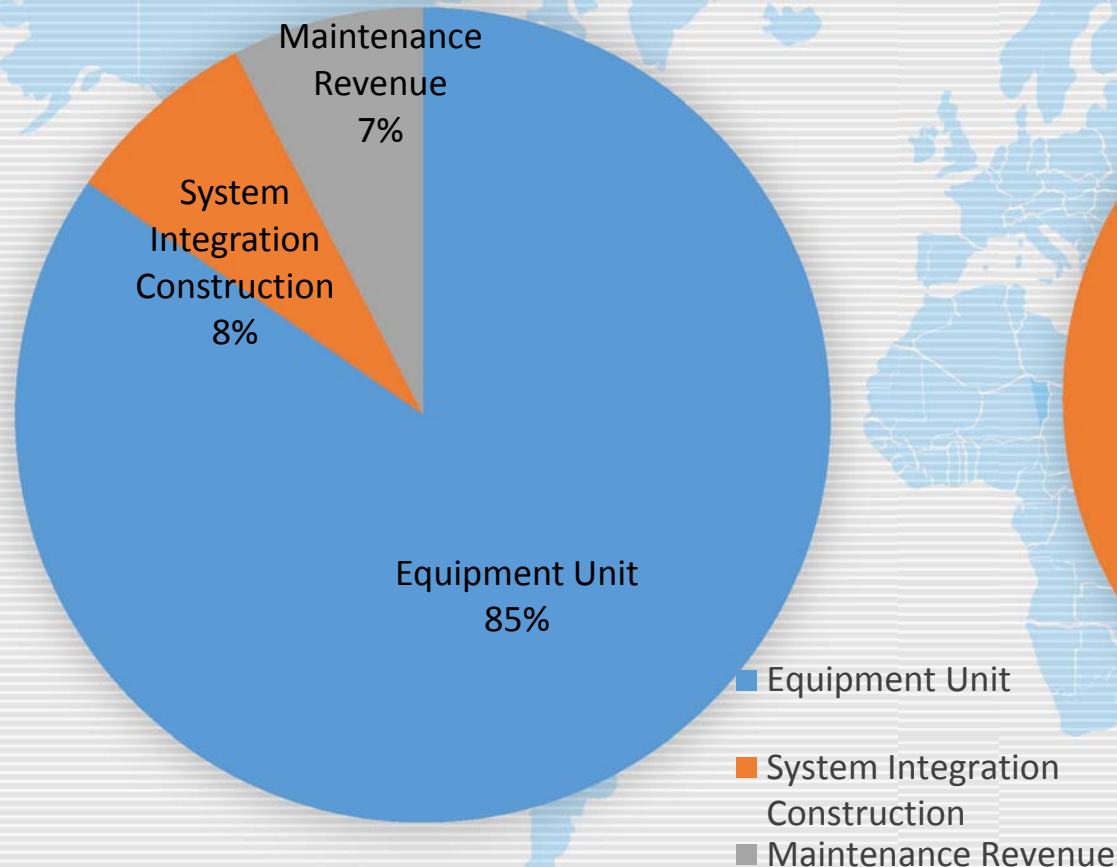


**Regional Breakdown
for the First Two Quarters**

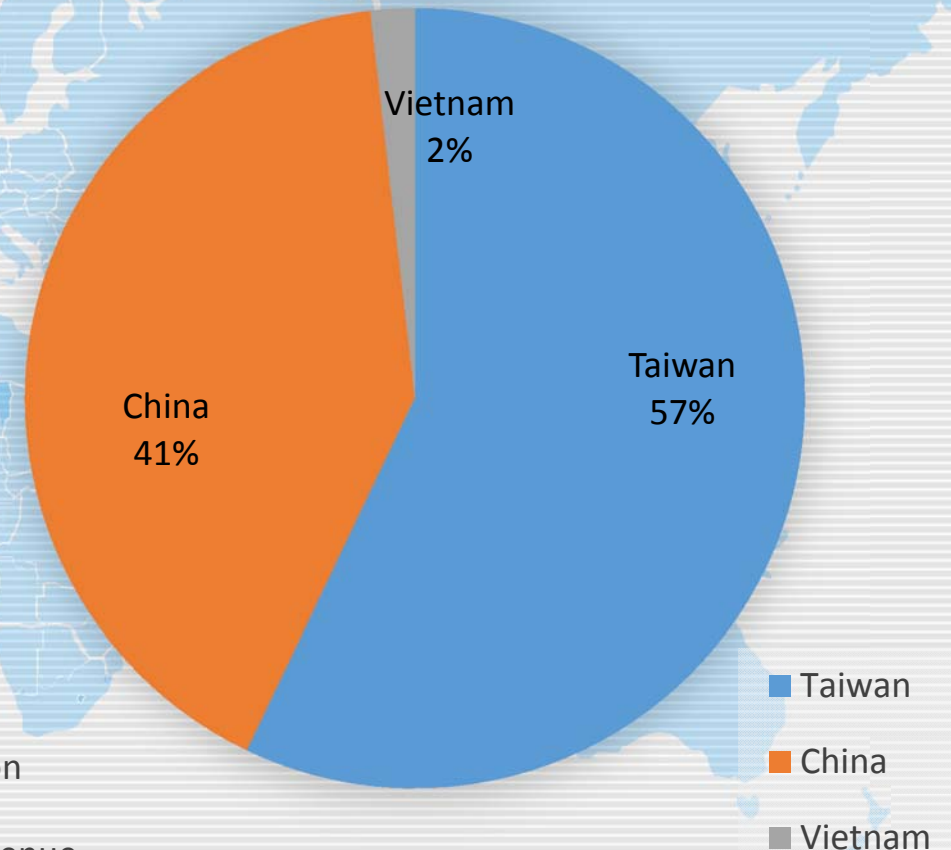


Sales Information for Q1~Q3,2023

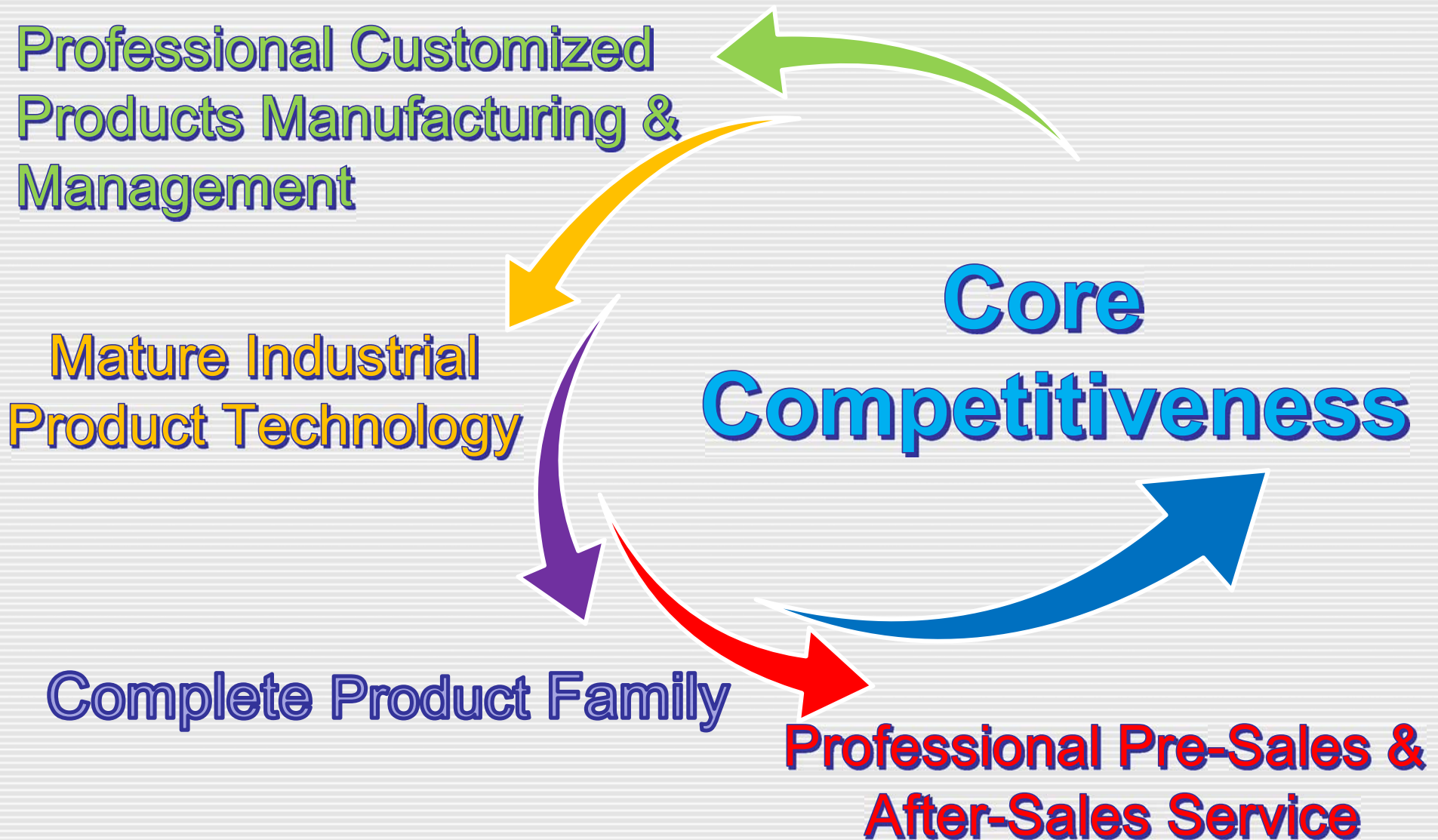
**Product Category
for the First Three Quarters**



**Regional Breakdown
for the First Three Quarters**



Core Competitiveness



Future Prospects

System and
Energy Saving
Integration
Service.

Monitor air conditioning promptly in various environments and collect energy using data to save electricity and money.

Plant Facility
Export

Export refrigeration/freezer equipment to Southeast Asia market and provide plant planning to make production process more smoothly.

Magnetic
Levitation
Centrifugal
Chiller

Due to ESG, industries pay much attention on energy saving and carbon reduction, market demand is growing year by year

DC Conversion
Refrigeration/
Freezer Unit

To meet demands of energy saving and reducing noise required by convenience stores, it has been successfully developed and sold.

Future Prospects



**Magnetic Levitation Variable
Frequency Centrifugal Chiller**

Future Prospects

Kuen Ling Water-Cooled Magnetic Levitation Variable Frequency Centrifugal Chiller Unit **60 USRT~1000 USRT**



Future Prospects

Magnetic Levitation Variable Frequency Centrifugal Chiller



Savings on Energy and Operating Electricity

Excellent full-load and partial-load operating efficiency, providing high-efficiency IPLV value and the lowest life cycle operating cost when unit is partially operating.



Oil Free

Using magnetic bearings the system eliminates the need for lubricating oil, allowing unit to operate 100% oil-free, making maintenance and servicing much easier.



Low Noise and Vibration

Low noise and vibration during operation, no special noise and vibration-proof devices are required in the air-conditioning room.



Simple System

Magnetic bearing is the only moving part, resulting in a simple mechanical structure and reduced repair and maintenance cost.



High Reliability

The unit has a long service life and can withstand more than 100,000 switching operations. In case of abnormal power failure or tripping the circuit breaker, the UPS will supply power by itself, and it will stop normally. °



Variable Speed Operation

Variable-frequency dual-stage compressor impellers automatically adjust their speed in response to changes in air conditioning load and outdoor temperature, aiming to achieve the highest operational efficiency.



Soft Start Device

The starting current of a single compressor is only 2~3Amp, reducing the input current at the moment of starting.



Concise System Design

Small size, easy to install, more suitable for use in replacement systems



Eco-friendly Refrigerant

Using eco-friendly refrigerant R-134a that does not harm the ozone layer, friendly to the Earth and caring for the environment.

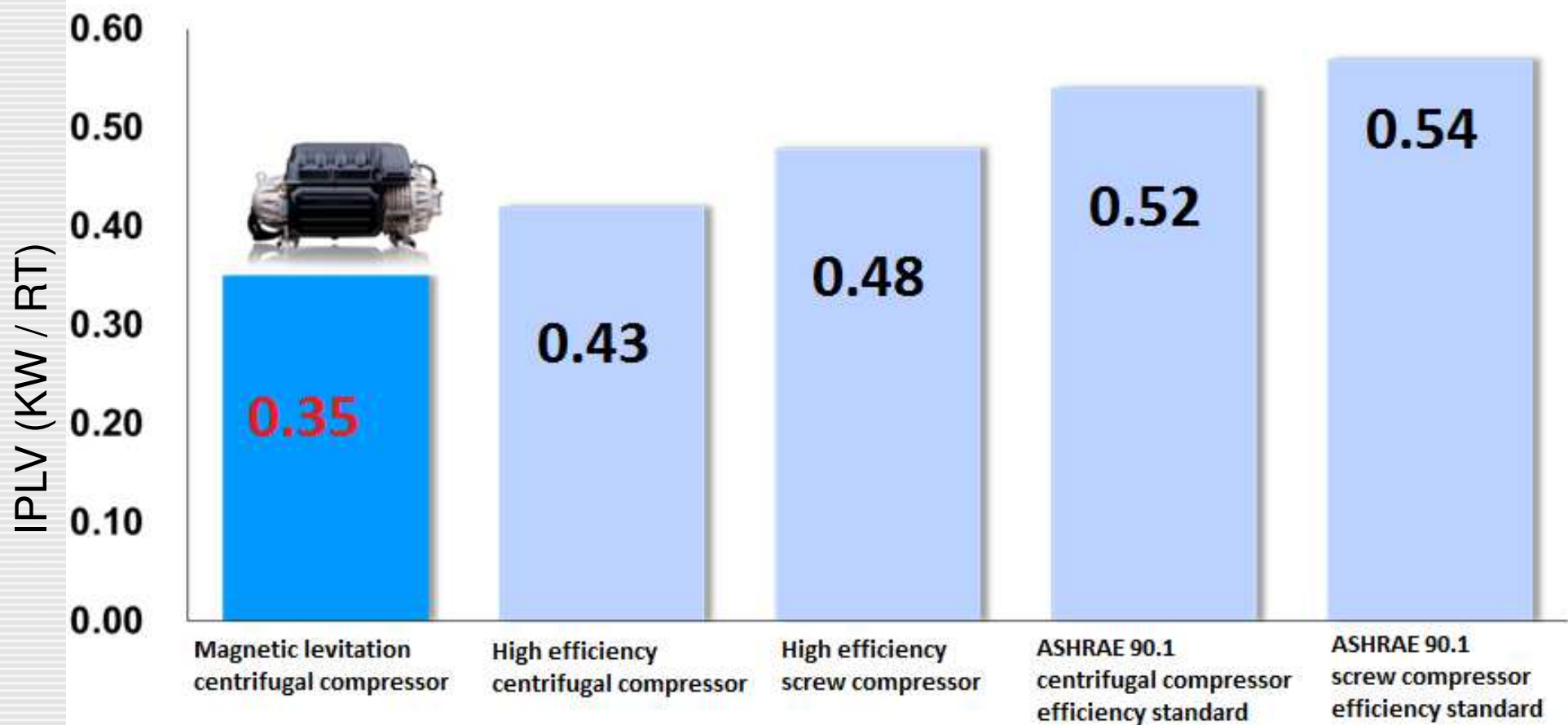


Digital Technology

Using the most advanced human-machine interface control, a fully digital system with system integration, the unit runs at the highest performance.

Future Prospects

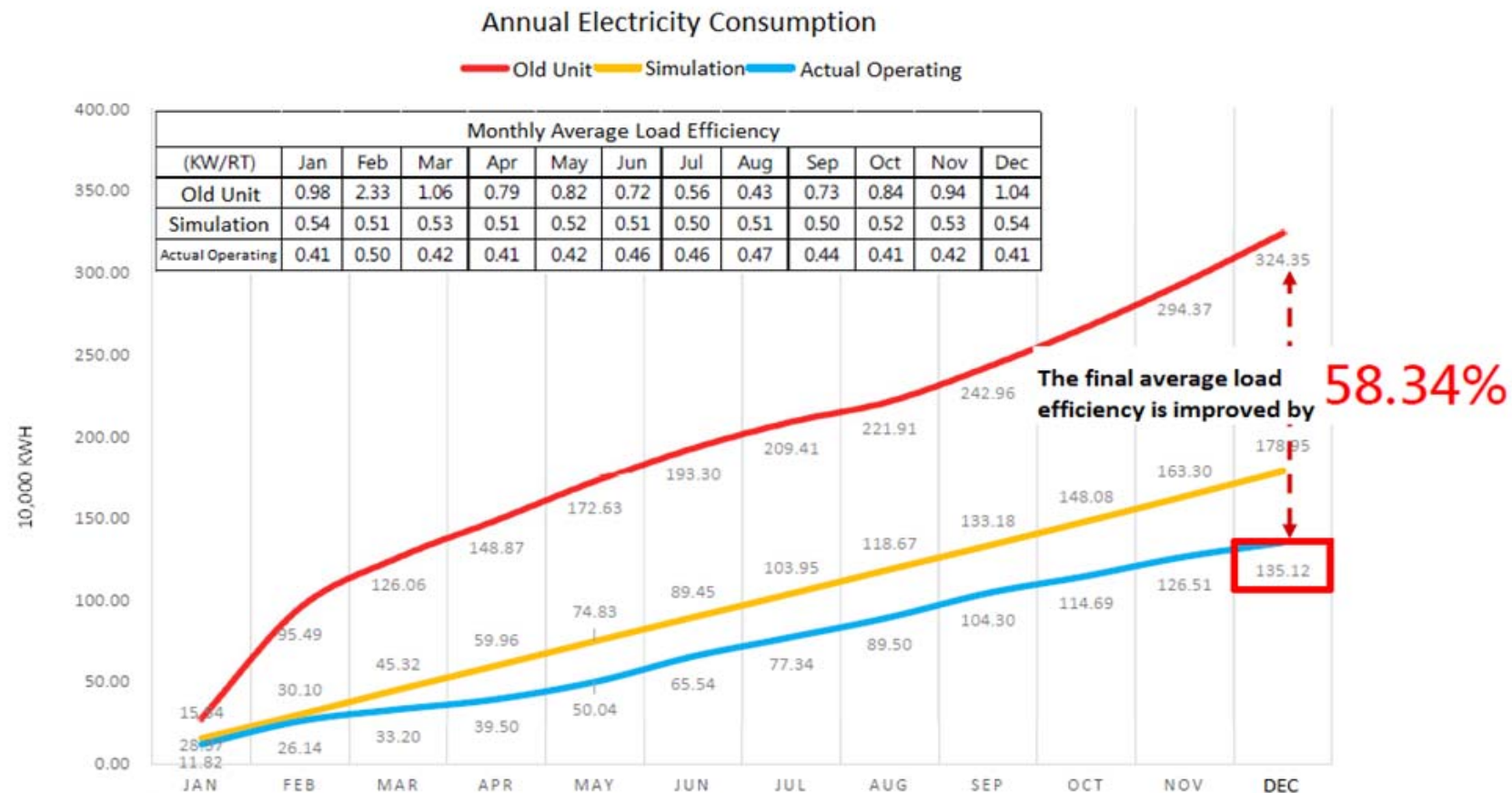
The IPLV efficiency of the magnetic levitation centrifugal chiller is **20%~40% higher** than that of other fixed-frequency chiller unit.



Future Prospects

Case Study of System Improvement

Old Unit vs. Simulation Conditions vs. Actual Operating Conditions



Notes:

1. Evaluation of old unit is according to operation data from DS-CH01
2. The new unit is simulated based on a 400RT magnetic levitation unit.
3. If the temperature of ice water and cooling water are different from the simulation conditions, there may be some variation in efficiency values.
4. COP (KW/KW) = Cooling Capacity / Power Consumption

Future Prospects

Market Segments



Internet Data Center



Hospital



Industrial Process



Office Building



Hyper Market



Government Building



Library



Museum



Hotel



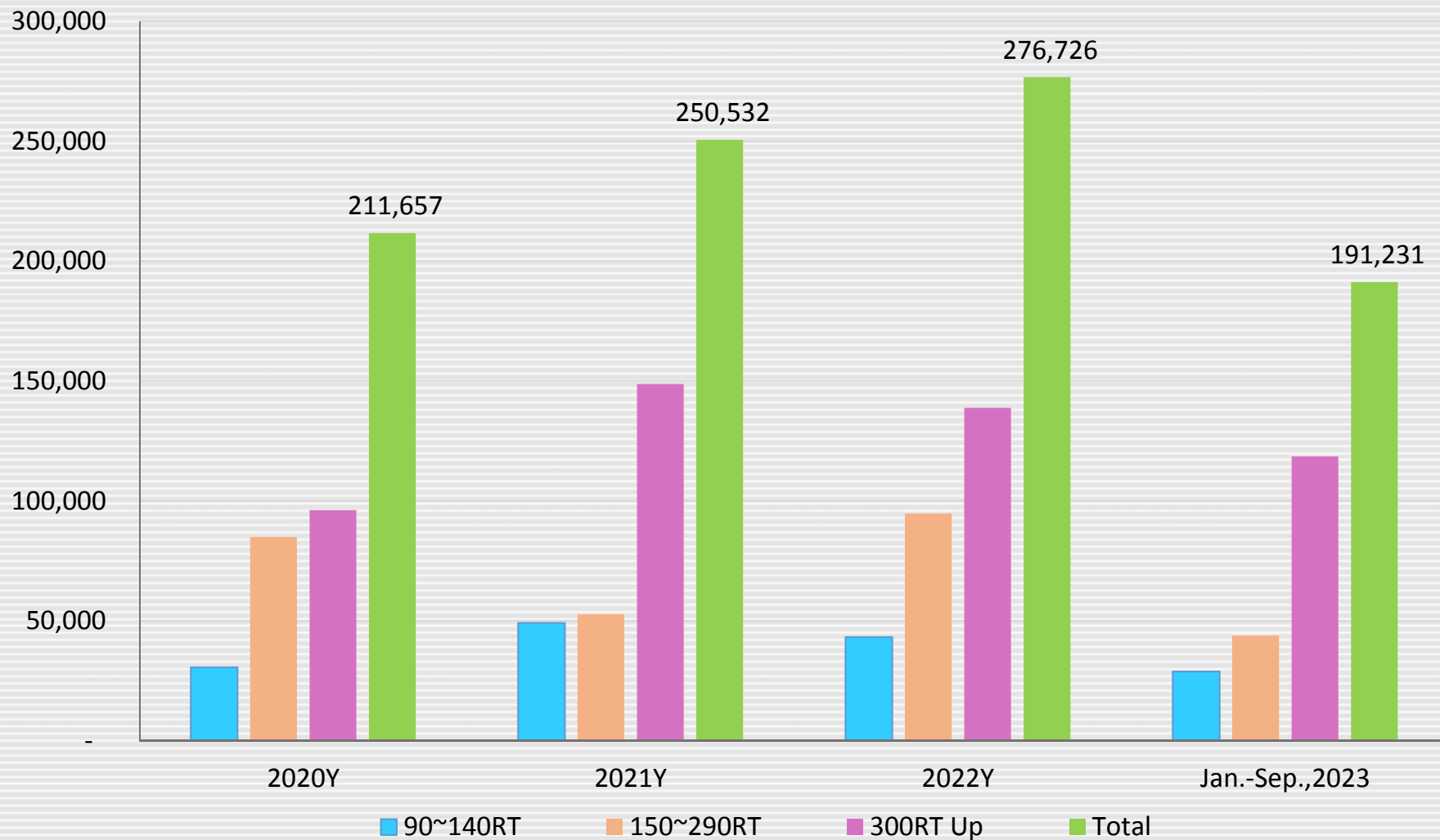
School



Music Hall

Magnetic Levitation Variable Frequency Chiller Sales Amount in Taiwan

Unit: NTD Thousand



Future Prospects



Ice Storage System

Future Prospects

Advantages of Ice Storage Air Conditioning System

Balancing peak
and off-peak
electricity
usage

Efficient utilization of off-peak electricity

Reducing electricity transmission risks and losses

Reducing the need for additional power plants or units

Saving Cost

Increasing equipment utilization rate

Saving electricity expenses

Cushioning increase of future electricity price

Implementing
energy
conservation and
carbon reduction

Greater energy saving potential for temperature differential

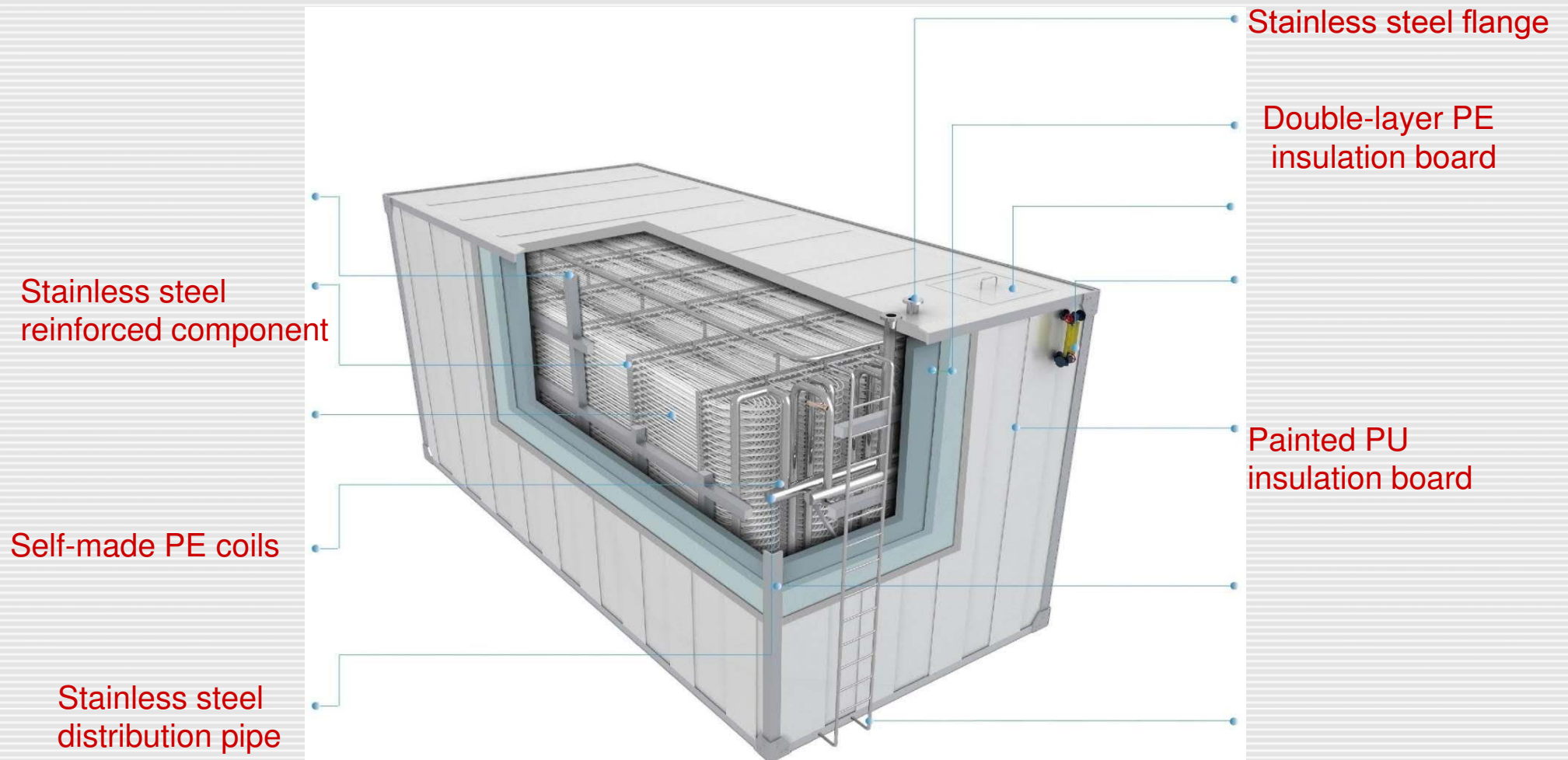
Regulating and utilizing green energy to reduce emissions

Reducing urban heat island effects

A win-win-win solution for the government, Taipower, and users

Future Prospects

Ice Storage Tank Structure



Future Prospects

Ice Storage Tank-PE Pipe Freezing

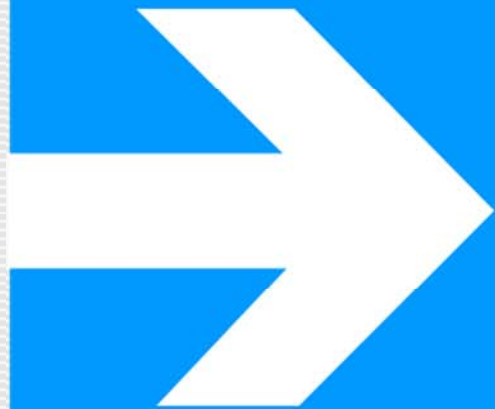


Future Prospects

Applicable Places for Ice Storage System

- ◎ Significant fluctuations in cooling load or longer duration of demand (Supermarkets, Department Stores).
- ◎ Areas with insufficient capacity for electricity feeder line (urban areas)
- ◎ The peak of cooling load is same with that of electricity (office buildings)
- ◎ High cooling load with short duration (Exhibitions, Dojos)
- ◎ Lower temperature cooling load and primarily concentrated during daytime (Food Factories)
- ◎ Existing air conditioning systems cannot meet the cooling needs of air-conditioned rooms(Expansion)

Corporate Governance



Audit Committee Established

**For sound corporate governance,
strengthen the powers of the board of directors.**

Shareholders' meeting was re-elected on July, 2021 and the first term of audit committee was established, consisting of 4 independent directors.

Corporate Social Responsibility



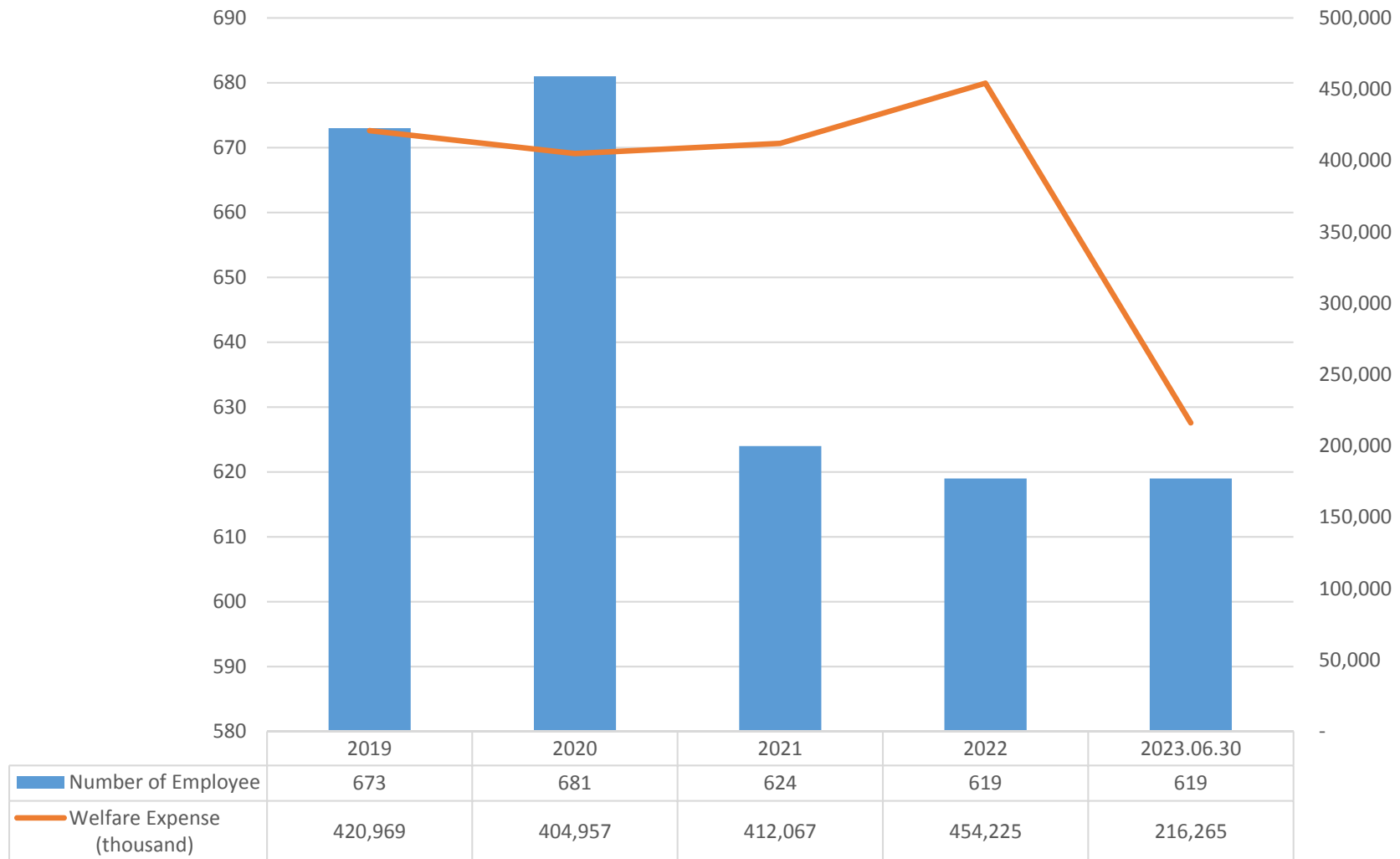
Employee Stock Ownership Trust

Sign a contract of employee stock ownership trust with CTBC bank on Nov.,2022.

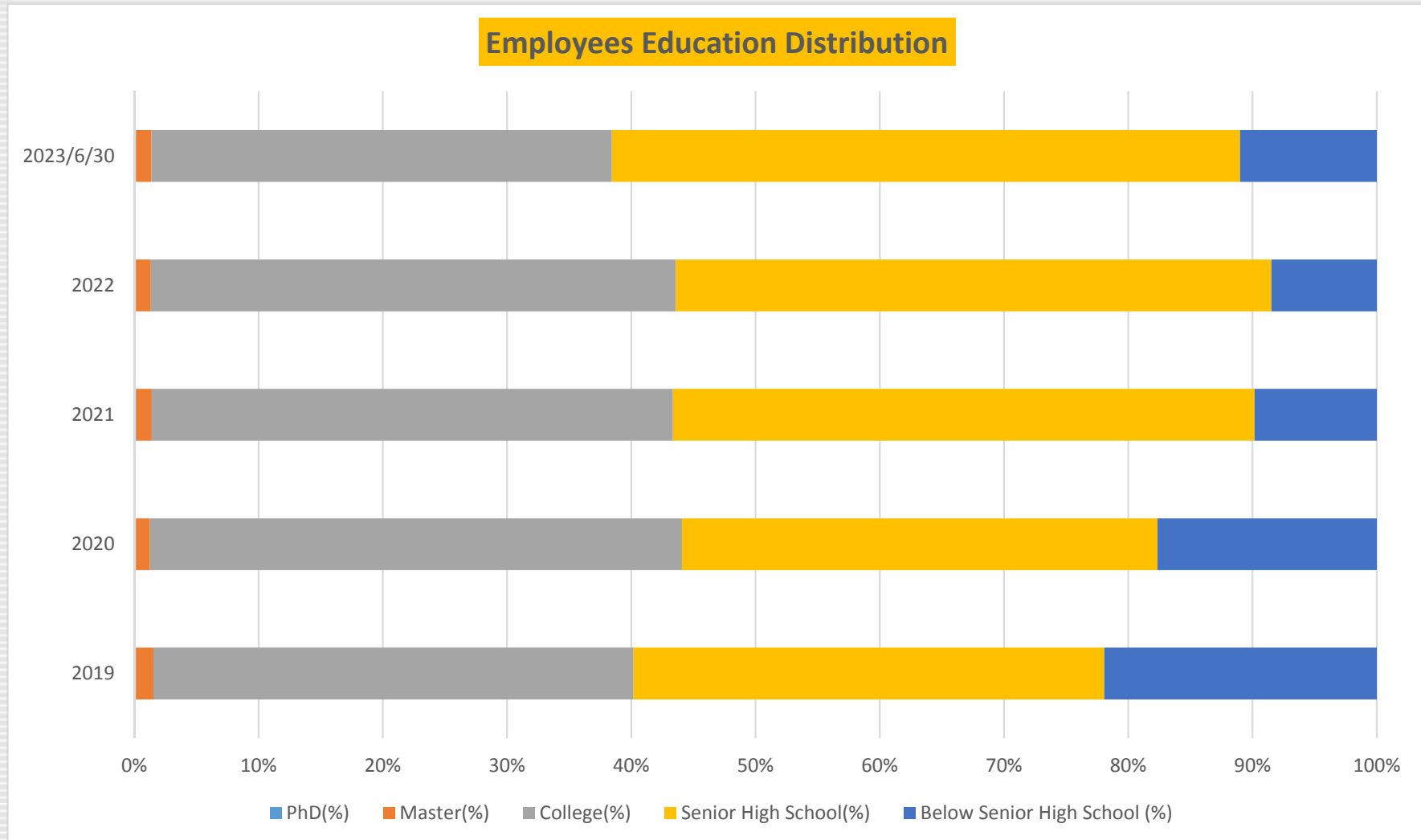
For the purpose of retaining and cultivating top talent, encouraging employees to serve in the company for a long time and develop their special skills in the future, helping employees accumulate wealth to ensure their life stability after retirement or resignation.

Corporate Social Responsibility

Number of Employee and Welfare Expense

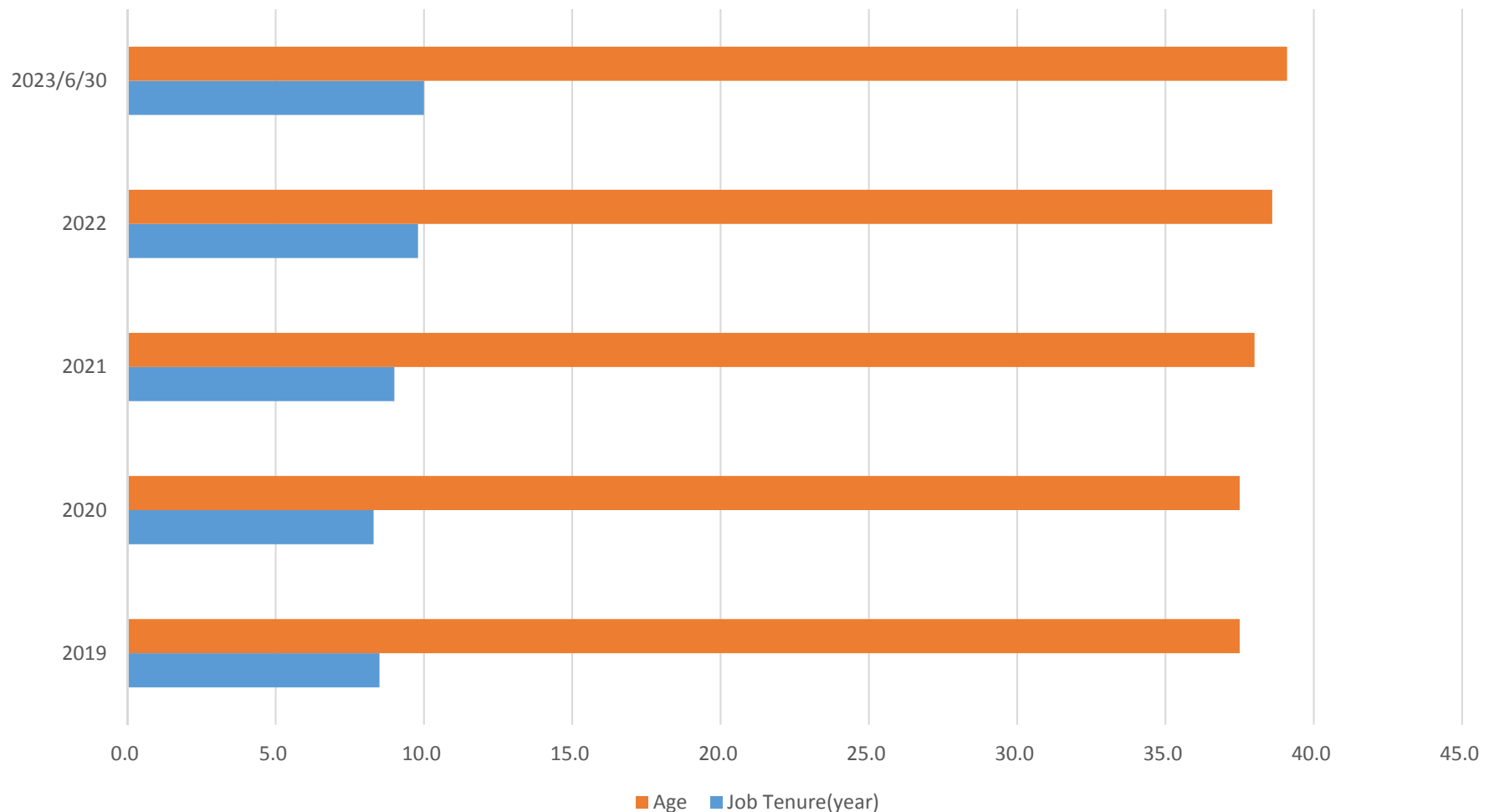


Corporate Social Responsibility



Corporate Social Responsibility

Average Job Tenure and Age of Employees





盈霖冷凍機械股份有限公司
KUEN LING MACHINERY REFRIGERATING CO., LTD.

**Thank You.
Q&A**

<http://www.kuenling.com.tw>