

**Professional Team** 

**Comprehensive Service** 





## Presentation Outline

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

# を整案空調 KUENLING AIR Company Introduction

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

Established Date: April 5<sup>th</sup>, 1988

OTC Date: September 28<sup>th</sup>,2000

Stock Code: 4527

Paid-in Capital: 760 million

Chairman &

General **Chung-Kuo Tseng** 

Manager:

**Manufacturing of Central Air-Conditioning Main Business:** 

INNOVATION

System Chiller Units



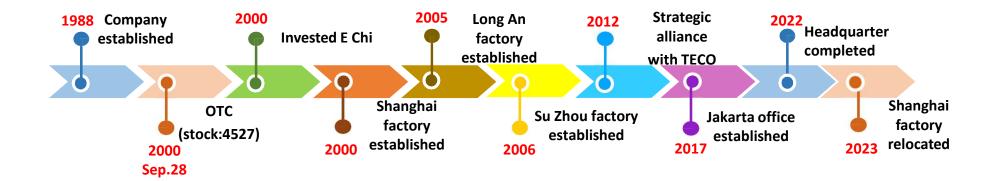


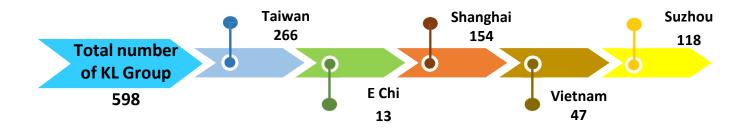


Product Portfolio Operational Performanc

**Future Prospects** 

## **Development History**









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## **Operation Locations**

#### **Kaohsiung Factory**



#### **Suzhou Factory**



#### **Shanghai Office**

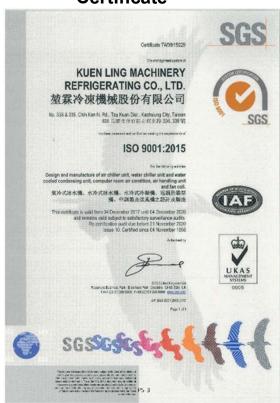


#### **Vietnam Factory**



## **Certificate & Award**

---- ISO Certificate







ISO -9001

ISO -14001

ISO-45001 (OHSAS 18001)

### **Certificate & Award**

Product

Certificate







Water-cooled Testing Lab Certificate (5RT~150RT)

Certification from ITRI and industry associations

**TAF** 

**AHRI** 



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### **Main Products**

#### **Energy Saving High Efficiency Eco-friendly**

#### Manufacturing of Refrigeration and Air Conditioning Equipment



Oil free Magnetic Levitation Centrifugal Chiller



Air-cooled Chiller



Semi-hermetic Scroll
Compressor Flooded-type
Chiller



Hermetic Compressor Chiller



Hermetic Compressor Air-source Water Heater



Ice Storage Tank



Vacuum Freeze Dryer

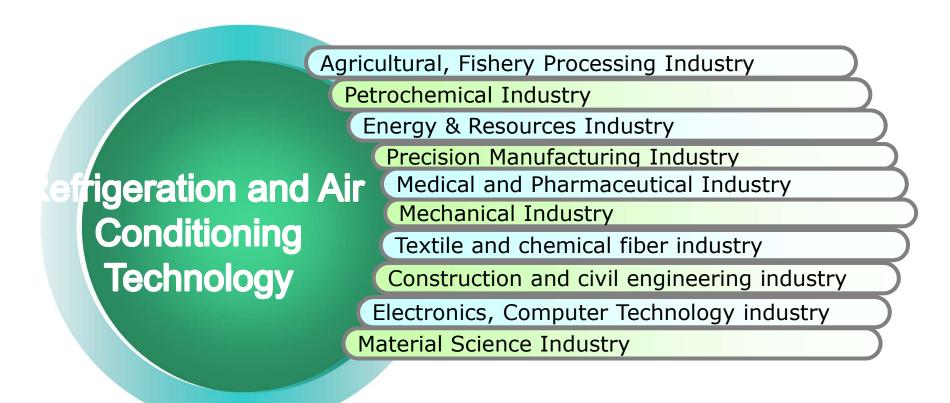


Refrigeration and Freezing Unit





## **Application**

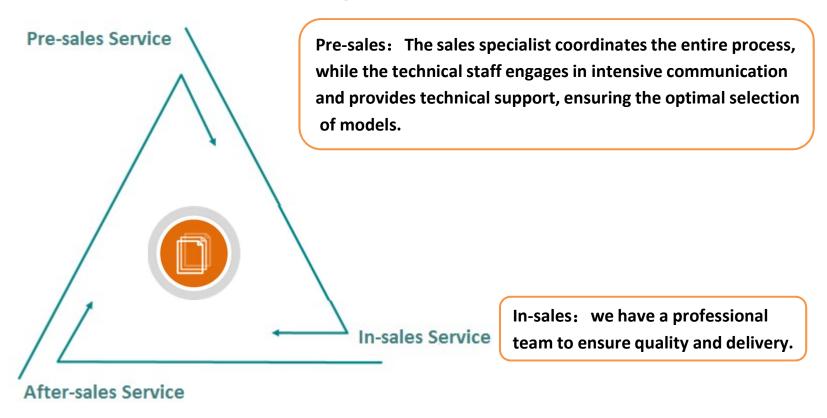




## **Application**

#### **Energy Saving High Efficiency Eco-friendly**

#### System Construction Integration



After-sales: A professional after-sales service team with 26 service locations nationwide, and provide year-round, 24/7 prompt and effective service.









40-49分: 合格級 50-59分: 銀級 60-79分: 黃金級 80分以上: 白金級



## Obtain International-level LEED Gold Certification

The first modern meat processing plant in Taiwan was established in the Pingtung Agricultural Biotechnology Park. This facility has a floor area of 203,550.5 square feet, with seven floors above ground and one basement. In March 2019, it received LEED NC Gold certification.



## **Maintenance Service**

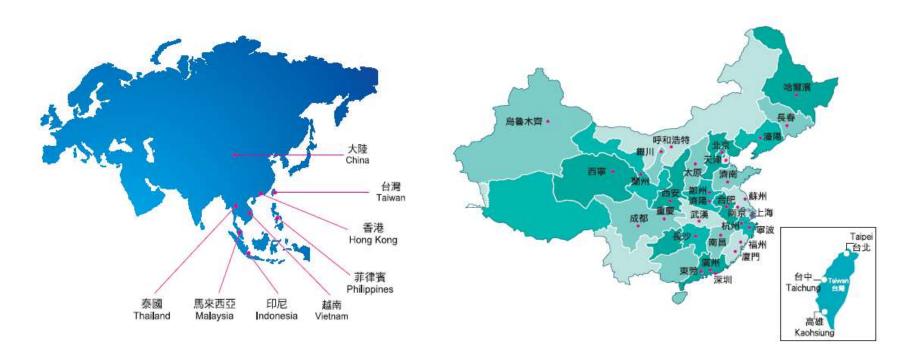
#### Market distribution in Asia

Taiwan: Taipei, Taichung, Kaohsiung

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

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

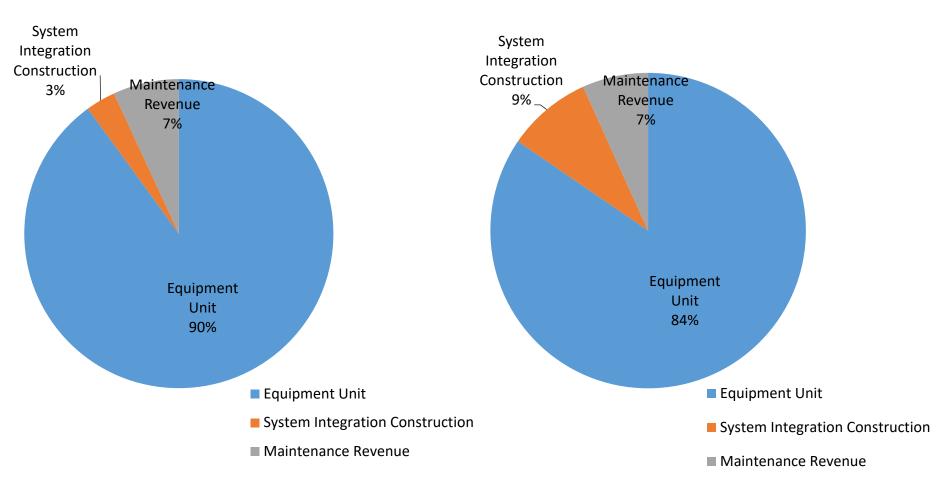
**Thailand** 





## **Main Products**





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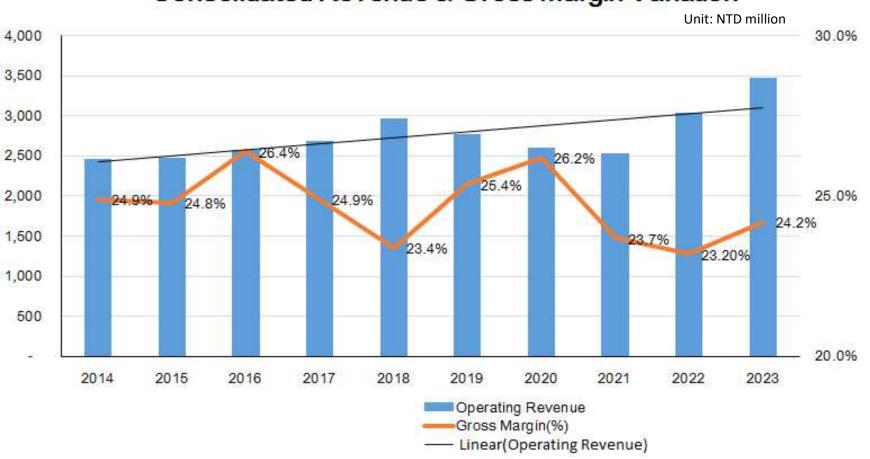


## **Consolidated Income Statement**

Item	2021		2022		2023		YoY
	Amount	%	Amount	%	Amount	%	%
Operating Revenue	2,534	100	3,033	100	3,477	100	15%
Gross Profit	601	24	705	23	841	24	19%
Operating Income	176	7	224	7	315	9	40%
Profit before tax	195	8	252	8	359	10	43%
Net Income for current period	151	6	206	7	278	8	35%
EPS	1.98		2.68		3.39		
Cash Dividends	1.8		2		2.4		
Dividends Payout Ratio(%)	91%		75%		71%		
Dividends Yield(%)	6.18%		5.73%		5.11%		

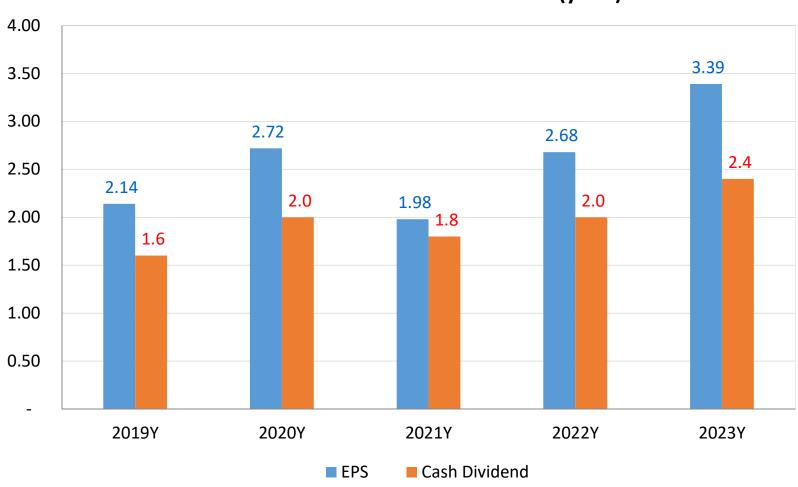
## Consolidated Revenue & Gross Margin Variation

#### Consolidated Revenue & Gross Margin Variation



## **Dividend Strategy**

#### **Historical EPS & Dividend Distribution(yuan)**





## Revenue by Region

Item	2021		20	22	2023		YoY
item	Amount	%	Amount	%	Amount	%	%
Taiwan	1,435	58	1,729	57	1,966	57	14%
China	1,021	40	1,181	39	1,460	42	24%
Vietnam	77	3	123	4	50	1	-59%
Total	2,534	100	3,033	100	3,477	100	15%

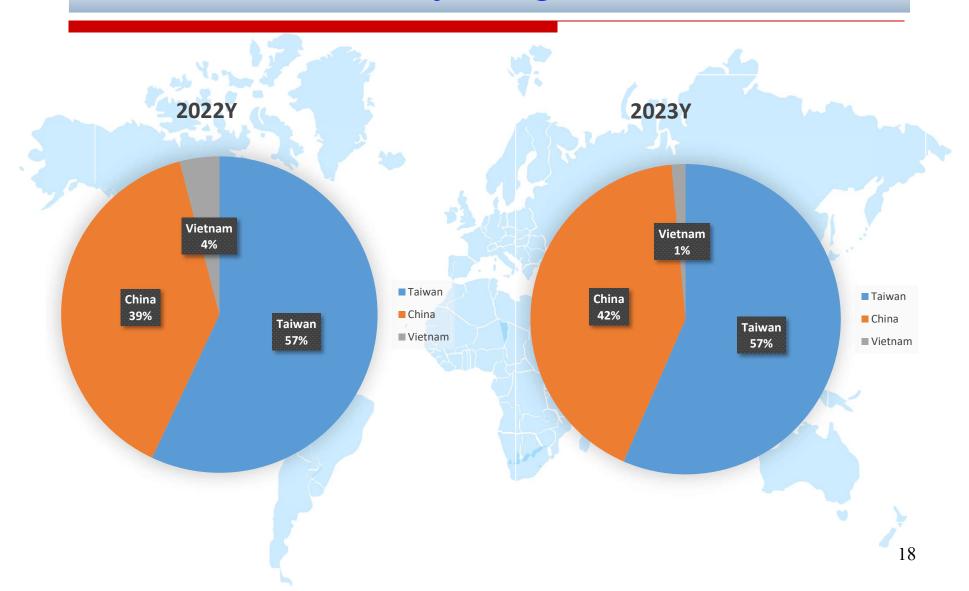


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## Revenue Ratio by Region





## **Consolidated Balance Sheet**

Item	2021		20	)22	2023		YoY
	Amount	%	Amount	%	Amount	%	%
Cash	538	19	403	13	472	13	17%
Account Receivable	911	32	1,285	40	1,592	44	24%
Inventory	573	20	671	21	646	18	-4%
Other Current Assets	135	5	109	3	170	5	56%
Other non-current Asset(real estate, factory, equipment etc.)	712	25	724	23	768	21	6%
Total Asset	2,870	100	3,192	100	3,647	100	14%
Current Liability	1,107	39	1,394	44	1,731	47	24%
Non-current Liability	233	8	162	5	175	5	8%
Total Liability	1,340	47	1,556	49	1,906	52	22%
Share Capital	762	27	762	24	762	21	0%
Total Equity	1,530	53	1,636	51	1,741	48	6%
Total Liability & Shareholder Equity	2,870	100	3,192	100	3,647	100	14%

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## Consolidated Income Statement-Q1~Q3,2024

Item	Q1~Q	3,2024	Q1~Q3,	YoY	
iteiii	Amount	%	Amount	%	%
Operating Revenue	2,577	100	2,230	100	16%
Gross Profit	630	24	480	22	31%
Operating Income	251	10	146	7	72%
Profit before tax	279	11	177	8	58%
Net Income for Current Period	218	8	139	6	57%
EPS	2.85		1.74		64%



## Consolidated Balance Sheet-Q3,2024

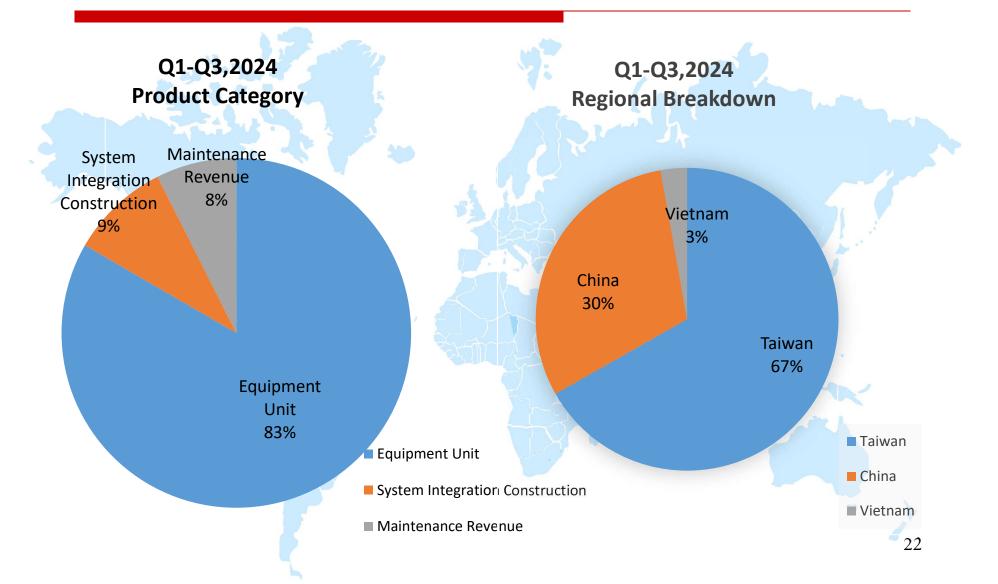
ltem	Sep.30,2024		Dec.3	1,2023	Sep.30,2023		YoY
Itelli	Amount	%	Amount	%	Amount	%	%
Cash	683	20	472	13	469	14	46%
Account Receivable	1,230	36	1,592	44	1,142	35	8%
Inventory	610	18	646	18	752	23	-19%
Other Current Assets	127	4	170	5	131	4	-3%
Other non-current Asset(real estate, factory, equipment etc.)	791	23	768	21	751	23	5%
Total Assets	3,442	100	3,647	100	3,246	100	6%
Current Liability	1,472	43	1,731	47	1,437	44	2%
Non-current Liability	164	5	175	5	183	6	-10%
Total Liability	1,636	48	1,906	52	1,619	50	1%
Share Capital	762	22	762	21	762	23	0%
Total Equity	1,806	52	1,741	48	1,626	50	11%
Total Liability & Shareholder Equity	3,442	100	3,647	100	3,246	100	6%



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## Sales Information for Q1~Q3,2024





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## **Core Competitiveness**

Professional Customized Products Manufacturing

**Management** 

Mature Industrial Product Technology

Core Competitiveness

Complete Product Family

Professional Pre-Sales & After-Sales Service



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## **Future Prospects**

Magnetic Levitation
DC Variable
Frequency
Centrifugal Chiller

Climate change has led to higher temperature, increasing the demand for air conditioning. In response to ESG, industries pay much attention on energy saving and carbon reduction, market demand is growing year by year.

Ice Storage
System

Balance peak and off-peak electricity usage to achieve energy savings and cost reduction.

Air Conditioning
Products for
Data Center

As Al and cloud computing processing power increases, data centers have higher requirements for cooling efficiency.



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## **Future Prospects**



Magnetic Levitation Variable Frequency Centrifugal Chiller



## Kuen Ling Water-cooled Magnetic Levitation Variable Frequency Centrifugal Chiller Unit 60 USRT~1000 USRT



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## **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 repair and maintenance much easier.



#### **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.



#### Low Noise and Vibration

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



#### **Concise System Design**

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



#### Simple System

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



#### **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.



#### **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. •



#### **Digital Technology**

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

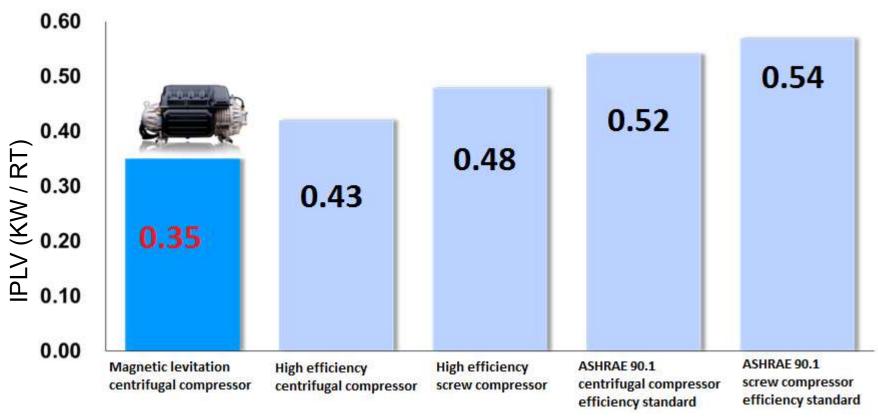
Company

Introduction



## **Future Prospects**

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



#### **Market Segments**

**並霖空調** KUENLING AIR









**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 inTaiwan





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## **Future Prospects**



## Ice Storage System



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## **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



#### Water-cooled Variable Frequency (Fixed-Variable) Flooded-type Brine Unit

- ➤ The unit CNS condition COP of 5.2 is superior to the national energy efficiency level 3 requirement of COP 4.9.
- Under partial load conditions, there are linear control and variable frequency to save energy significantly.
- > Capable of operating in low-temperature air conditioning and ice storage modes, significantly reducing air conditioning contract power demand.
- ➤ Can be paired with an ice storage tank to control unit operating capacity, achieving peak power shifting.





#### **Ice Storage Tank**

- Reduce operating electricity costs basic electricity fee and variable electricity fee
  - ➤ Reduce operating electricity costs-Off-peak electricity price with an additional 40% discount.
  - Reduce air conditioning contracted power because the capacity of the unit and related equipment has been reduced accordingly.
- Electricity transfer at peak hours
  - During peak air conditioning load periods, ice storage tank melting can be used to reduce electricity demand of buildings.
  - During low air conditioning load periods, the ice melting mode can be operated during the day to reduce operating electricity costs.
  - Reduce the pressure on the country to establish power plants, while simultaneously lowering carbon emissions
- Low maintenance cost
  - Water in the tank will not spill out, and the equipment has simple maintenance with low costs.



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**並霖空調** KUENLING AIR

#### **Ice Storage Tank-PE Pipe Freezing**



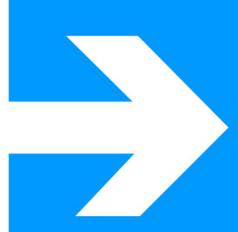


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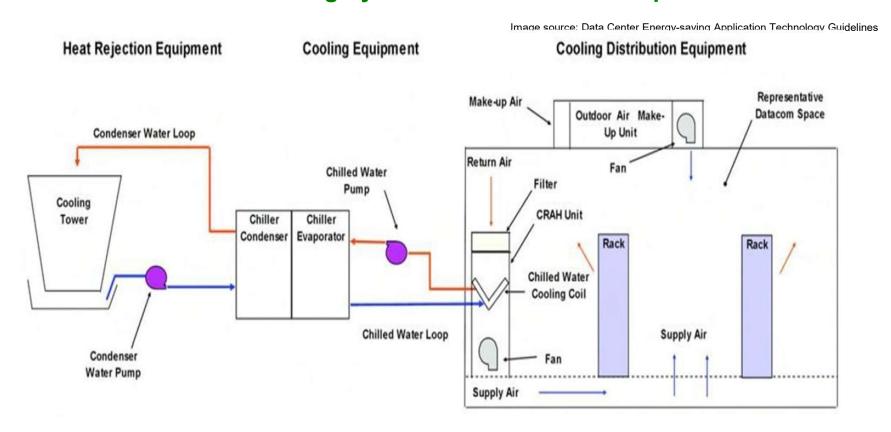
Future Prospects

## **Future Prospects**



## **Air Conditioning Products for Data Center**

#### **Data Center Air Conditioning System Structure and Components**



**Heat Dissipation System** 

**Cooling System** 

**Air Distribution System** 



堃霖空調 KUENLING AIR

#### **Data Center Air Conditioning System**

- □ Computer Room Cabinet-type Cooling System
- □ Liquid Cooling System

High-efficiency variable frequency energy-saving chiller air-cooled chiller

☐ Two-phase direct expansion refrigerant cooling system

Condenser Unit

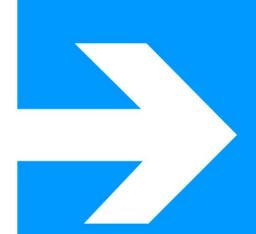






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## Corporate Governance



## 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, composed of 4 independent directors.

## **Corporate Sustainability**

## Sustainable Development Committee Established

To achieve the goal of corporate sustainability development and strengthen sustainability governance.

The first term of sustainable development committee was established in Aug.,2024, composed of chairman Tseng,Chung-Kuo and two independent directors, Hong,Li-Rong and Kuan,Yean-Der who possess expertise and capabilities in sustainability.

## **Corporate Sustainability**

#### **Sustainable Development Advocacy**



Committed to pursuing sustainable development and partnering with sustainability-focused collaborators.

In Oct.,2024, Kuen Ling and E.SUN commercial bank jointly committed to sign ESG sustainable development advocacy, implementing corporate sustainability goals through concrete actions, and formulating strategies and action plans for transformative upgrades.

## **Corporate Social Responsibility**

# **Employee Stock Ownership Trust**

In Nov. 2022, a trust agreement for the Employee Stock Ownership Plan (ESOP) was signed with CTBC Bank.

- ➤ To retain and nurture outstanding talent for the long term, with the aim of motivating employees to continue working with the company and utilize their technical expertise. This initiative also seeks to help employees accumulate wealth and ensure their financial security after retirement or departure from the company.
- ➤ In Sep. 2024, the Employee Stock Ownership Plan held 239,876 shares, representing 0.31% of the company's equity.

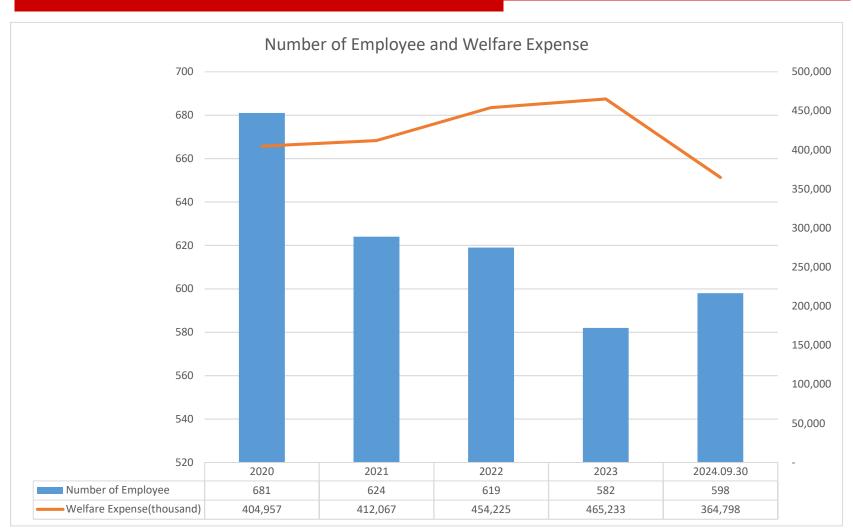


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## **Corporate Social Responsibility**

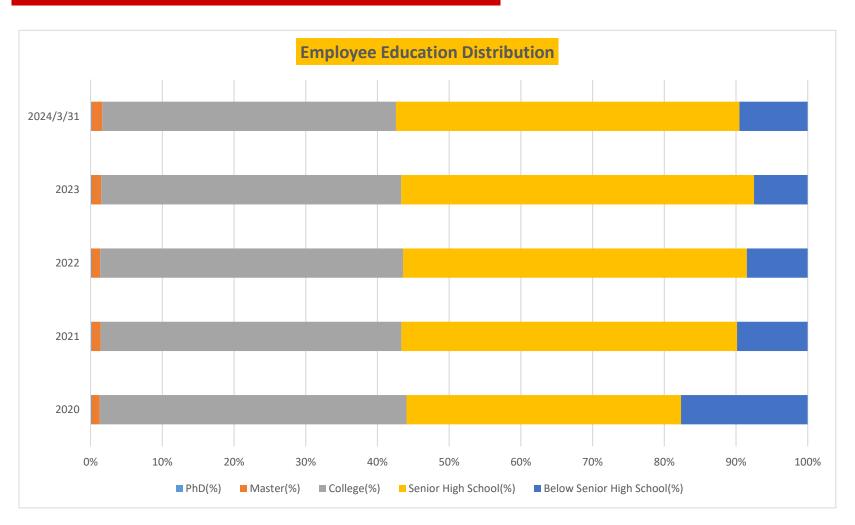




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## **Employee Information**



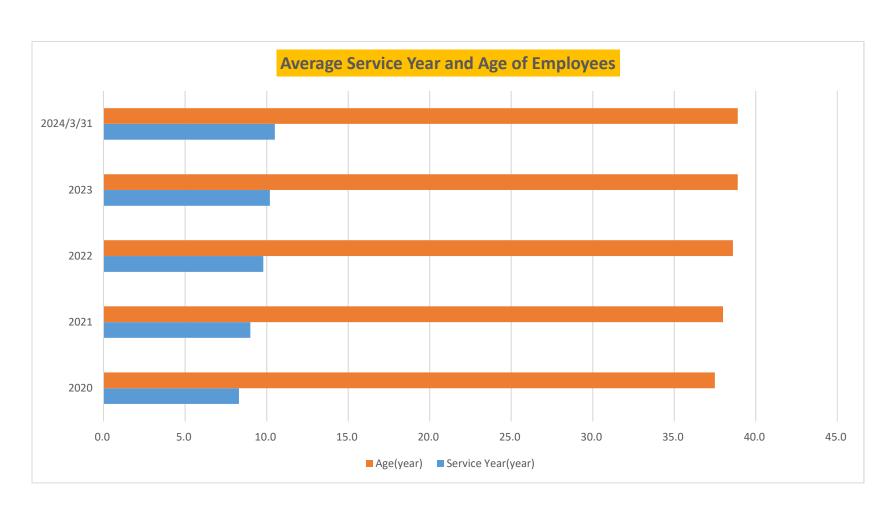


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## **Employee Information**





# Thank You. Q&A

http://www.kuenling.com.tw