# Fiscal 2025 2nd Quarter Financial Results

Seibu Giken Co., Ltd. (Ticker code: 6223)
August 8, 2025

#### Disclaimer regarding forward-looking statements

Because the forward-looking statements contained in this report are based on information available at the time of publication, Actual results may differ from these forecasts due to risk and uncertainty.

- Notes: 1. This is an English translation from the original presentation in Japanese.
  - 2. In this presentation, "Fiscal 2025" or "FY12/25" refers to the year ending December 31, 2025



#### Q2 FY12/25 Results Overview

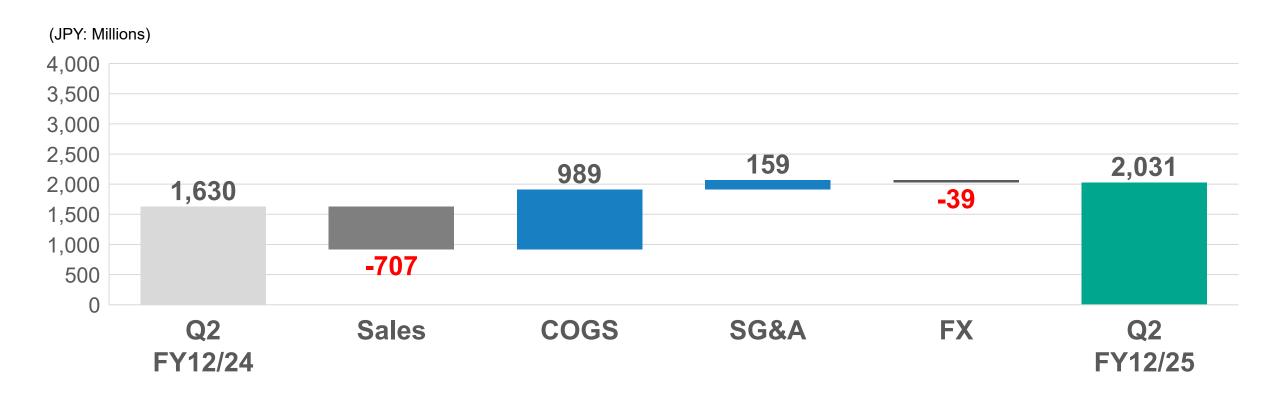
	Q2 FY12/24		Q2 FY12/25		YoY	
(JPY: Millions)	Amount	vs net sales(%)	Amount	vs net sales(%)	Diff.	%
Net sales	14,721		13,897		-824	94.4
Gross profit	4,910	33.4	5,124	36.9	214	104.4
Selling, general & administrative expenses	3,279	22.3	3,093	22.3	-186	94.3
Operating profit	1,630	11.1	2,031	14.6	400	124.6
Ordinary profit	1,744	11.9	1,985	14.3	241	113.8
Quarterly net profit attributable to Seibu Giken Co., Ltd. stockholders	1,390	9.4	1,496	10.8	105	107.6
Quarterly net profit per share (JPY)	67.	.85	74.	.06	-	-
EBITDA*1	2,0	)89	2,4	94	404	119.3
EBITDA margin*2 (%)	14	1.2	18	3.0	-	-

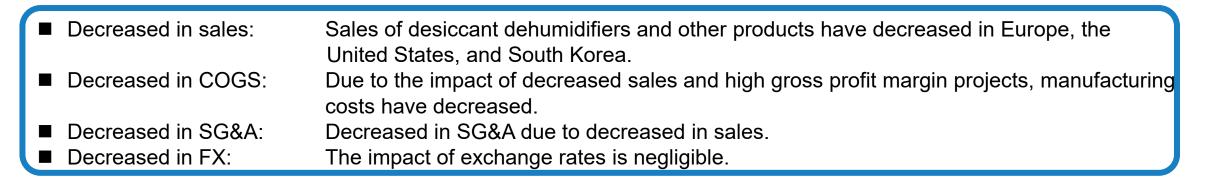
<sup>\*1:</sup> EBITDA = operating income + depreciation

- Net sales (-824 mn): Sales increased in Japan and other parts of Asia (excluding China and South Korea) mainly due to VOC concentrators, while sales of desiccant dehumidifiers and other products decreased in Europe, the United States, and South Korea due to the reaction to large projects in the previous period.
- Operating profit (+400 mn): The increase in operating profit was mainly due to projects with high gross profit margins.
- ⇒ Progress toward full-year forecasts is in line with expectations, and there are no changes to the full-year forecasts.

<sup>\*2:</sup> EBITDA margin = EBITDA/ sales

## **Q2 FY12/25 Operating Profit Factor Analysis**





## **Q2 FY12/25 Net Sales by Product and Business**

Product	(JPY: Millions)	Q2 FY12/24	Q2 FY12/25	YoY (%)
Desiccant dehum	nidifier	9,487	6,888	72.6
VOC concentrato	or	3,917	5,386	137.5
Others		1,316	1,621	123.2
Total		14,721	13,897	94.4
Business	(JPY: Millions)	Q2 FY12/24	Q2 FY12/25	YoY (%)
Core Business : Selling module/e	quipment	10,492	9,518	90.7
<b>Growth Business : Total engineering</b>				
Glowill Busilless.	Total engineering	4,228	4,378	103.6

- Sales of desiccant dehumidifiers decreased in Europe, the United States, and South Korea (due to the reaction to large projects in the previous period).
- · Sales of VOC concentrators increased in Japan and other parts of Asia (excluding China and South Korea).
- Sales of Others increased mainly due to growth in sales of total heat exchangers in Japan.
- By business segment, "Core Business" decreased in sales due to lower sales of desiccant dehumidifiers, while "Growth Business" increased in sales due to higher sales of VOC concentrators.

## Q2 FY12/25 Net Sales by Region

(JPY: Millions)	Q2 FY12/24	Q2 FY12/25	YoY (%)
Japan	5,242	7,130	136.0
China	2,861	2,738	95.7
Korea	1,303	459	35.3
Other Asia	439	971	221.1
Europe	3,470	1,649	47.5
U.S.	1,307	448	34.3
Other North America	5	164	2749.8
Others	90	334	369.7
Total	14,721	13,897	94.4

- Japan and other Asia: Increased mainly due to higher sales of VOC concentrators.
- Europe, U.S. and South Korea: Decreased mainly due to lower sales of desiccant dehumidifiers.
- Others: Increased mainly due to orders for desiccant dehumidifiers in Oceania.

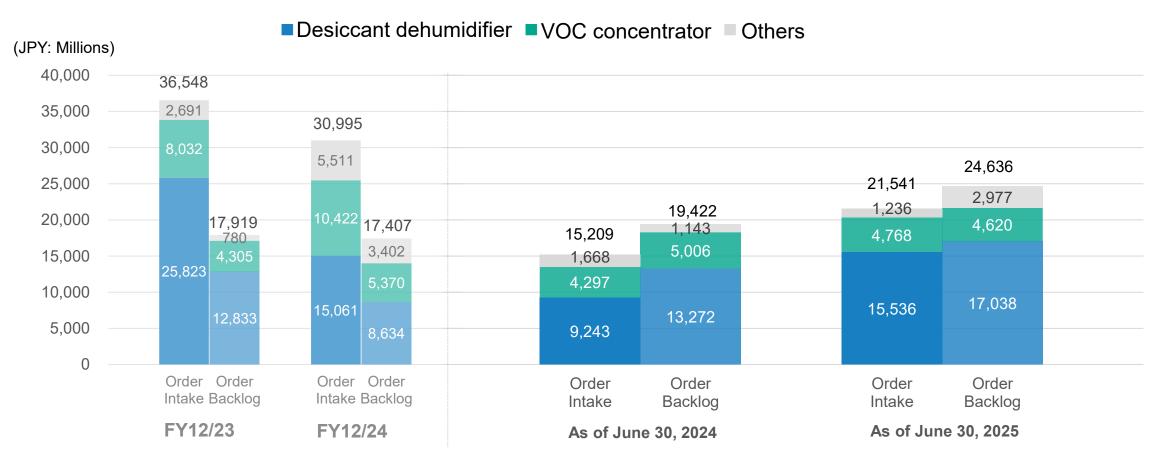
## Consolidated Balance Sheet as of June 30, 2025

(JPY: Millions)	As of December 31, 2024	As of June 30, 2025
Cash and cash equivalents	14,442	14,344
Trade notes and accounts receivable	6,883	6,728
Other current assets	9,384	10,597
Net property, plant and equipment	10,937	11,381
Other fixed assets	1,147	1,298
Total Assets	42,795	44,350
Interest-bearing debt <sup>*1</sup>	1,525	3,660
Other liabilities*2	11,311	12,192
Total Liabilities	12,837	15,853
Total Net Assets	29,957	28,496

<sup>\*1:</sup> Interest-bearing debt = Current portion of long-term debt + Short-term lease + Bonds + Long-term debt + Lease

<sup>\*2:</sup> Other liabilities = Total liabilities – Interest-bearing debt

## Trend of Order Intake and Backlog



Note: The above amounts are stated at the sales price and do not include consumption tax, etc

Order intake for Q2 2025 was 141.6% YoY, and order backlog at the end of June 2025 was 141.5% of the end of 2024

## Major Orders in 1st Half of FY12/25

Customer	Market	Details of order	Approx. amount of order	Expected delivery	Announcement
Japanese capacitor manufacturer	Japan	Factory architectural design, facility design, construction management work, air-conditioning equipment works, dry room works, charging and discharging device (aging process)	JPY 4.83 bn	Q4 FY12/25~ Q4 FY12/26	2025/5/14
Leading Indian automotive battery manufacturer	India	Solvent recovery equipment for leading Indian automotive battery manufacturer (new Indian plant)	JPY 1.06 bn	Q4 FY12/25~ Q1 FY12/26	2025/6/9
Japanese engineering service company	Japan	Low dew point desiccant dehumidifiers for perovskite solar cell manufacturer	JPY 400 mn	Q2 FY12/26	2025/6/26

## Topic for 1st Half of FY12/25

Established Seibu Giken (Thailand) Co., Ltd.

In Thailand, Seibu Giken Co., Ltd. in Japan has been developing business centered on desiccant dehumidifiers.



We have decided to establish a new subsidiary with a view to providing total engineering services, as well as expanding sales and maintenance of energy-saving air conditioning equipment in Thailand, the ASEAN region, India, the Middle East, and other emerging markets.

## **Growth Strategy in Mid-Term Management Plan**

Aiming at sustainable profit growth by gaining market share in our core businesses in Europe and North America and by expanding total engineering business

**Growth Driver** 

**Core Business : Selling module/equipment** 

Module/equipment contributing to the optimal manufacturing environment and reduction of environmental impact for customers



**Growth Business: Total engineering** 



Proposal, design, fabrication, construction, etc. of systems for optimal space creation

Target



**Energy device** 

Battery (EV batteries, Stationary storage batteries, next generation batteries) Other than batteries (Lithium-ion capacitors, perovskite solar cells)



**Priorities** 

Core **Business** 

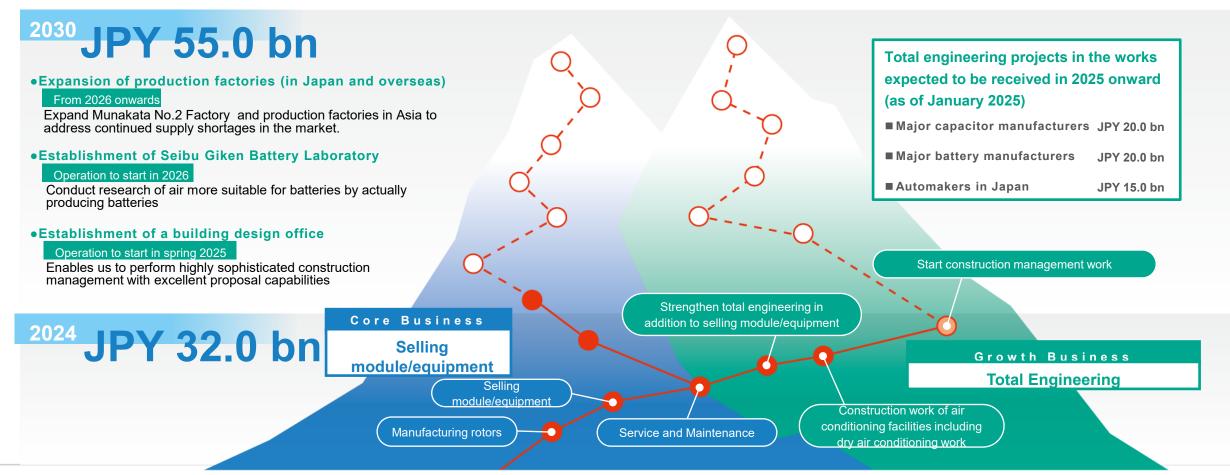
- Gain market share of desiccant dehumidifier in areas where investment is thriving (Japan, U.S. & Europe)
- Improve competitiveness by increasing production capacity with capital investment in target region
- Approach to emerging markets such as Southeast Asia and India
- Expand overseas service business by stimulating demand for rotor replacement

Growth Business

- Expand total engineering business in overseas (U.S. & Korea)
- Establish a future stable earnings base by initiating service DX business

## **Growth Strategy**

Providing a total optimal environment for battery and semiconductor manufacturing processes Combining the strength of our unique products with outstanding environmental engineering, Seibu Giken provides the world with air solutions that only we can create!



## Fiscal 2025 Forecast



	FY2024		FY2025 Forecast		YoY	
(JPY: Millions)	Amount	vs net sales(%)	Amount	vs net sales(%)	Diff.	%
Net sales	32,069		34,632		2,562	108.0
Gross profit	10,904	34.0	11,025	31.8	121	101.1
Selling, general & administrative expenses	6,873	21.4	7,473	21.6	599	108.7
Operating profit	4,030	12.6	3,552	10.3	<b>▲</b> 478	88.1
Ordinary profit	4,190	13.1	3,630	10.5	<b>▲</b> 560	86.6
Net profit attributable to Seibu Giken Co., Ltd. stockholders	3,336	10.4	3,111	9.0	▲224	93.3
EBITDA*1	4,993		4,519		<b>▲</b> 473	90.5
EBITDA margin*2 (%)	15	5.6	13.1		-	-

<sup>\*1:</sup> EBITDA = unaudited figures calculated by operating income + depreciation \*2: EBITDA margin = EBITDA/ sales

Net sales: Increase in energy device investment orders, mainly in Japan, is expected to lead to higher net sales Operating profit: In selling module/equipment, profit margin expected to become tougher due to factors such as sluggish EV investment in Europe and intense competition in China due to a shrinking market.

## **Net Sales by Product and business**

Product	(JPY: Millions)	FY2024	FY2025 Forecast	YoY (%)
Desiccant dehumid	lifier	19,661	19,537	99.4
VOC concentrator		9,572	10,947	114.4
Others		2,835	4,146	146.2
Total		32,069	34,632	108.0
Business	(JPY: Millions)	FY2024	FY2025 Forecast	YoY (%)
Core Business : Selling module/equip	ment	24,022	22,500	93.7
Growth Business : To	Growth Business : Total engineering		12,131	150.7
合計		32,069	34,632	108.0

- Desiccant dehumidifier sales are expected to increase due to increased investment in manufacturing plants for EV batteries in Japan and the U.S., but remain flat YoY due to lower sales in Korea and Europe.
- VOC concentrators sales are expected to decrease due to the absence of sales from a large NMP recovery system project in the previous year
- By business segment, total engineering, a growth business, posted a significant increase in sales due to higher sales of dry rooms and energy management systems in line with increased investment in energy devices in Japan, as well as construction management sales including semiconductor related products.

(JPY: Millions)	FY2024	FY2025 Forecast	YoY (%)
Japan	10,688	14,191	132.8
China	6,851	7,511	109.6
Korea	3,404	2,759	81.1
Other Asia	1,725	1,513	87.7
Europe	5,616	4,203	74.8
USA	3,221	4,178	129.7
Other North America	240	240	100.0
Others	321	35	10.9
Total	32,069	34,632	108.0

Sales in Japan increased mainly in the total engineering business.

Sales in South Korea decreased due to the absence of large projects for desiccant dehumidifiers, etc. in the previous fiscal year, and sales in Europe decreased due to a decrease in projects caused by stagnant EV investment.

The impact of the U.S. tariff policy is expected to be negligible at this point.

- While striving to maintain a healthy financial position and balance internal reserves for the future, rewarding shareholders by implementing and maintaining stable dividends
- Annual year-end dividend with the last day of each fiscal year as the record date is paid once a year
- Aiming at 40% or more consolidated dividend payout ratio as significant indicator
  - Annual dividend for FY2025 is expected to be JPY 70
  - Completion of share buyback announced on Feb. 14, 2025 (Acquisition period: Feb. 17, 2025 to Jun. 2, 2025; Acquisition amount: approximately 1 billion yen; Number of shares acquired: approximately 640,000 shares)

## **Appendix**



## **Cash Flow**

(JPY: Millions)	FY12/23 Q2	FY12/24 Q2	FY12/25 Q2
Operating Cash Flow	1,396	3,147	1,730
Investing Cash Flow	-601	-1,137	-1,088
Free Cash Flow	795	2,010	642
Financing Cash Flow	-207	-1,046	-291
Cash and cash equivalents as of June 30	10,492	13,213	13,917

## Capital Expenditures, Depreciation and R&D Expenses

(JPY: Millions)	FY12/23	FY12/24	Q2 FY12/25	FY12/25 Forecast
Capital expenditures*	2,423 (957)	1,736 (2,483)	1,067 (147)	3,332
Depreciation	893	962	463	967
R&D expenses	302	348	187	362

Note\*: Figures indicated on a cash basis (figures in parentheses on an accrual basis)

## **FY2024 Quarterly Financial Results**

	FY2 Q	024 1	FY2 Q	024 2	FY2 Q		FY2	024 4
(JPY: Millions)	Amount	vs net sales(%)	Amount	vs net sales(%)	Amount	vs net sales(%)	Amount	vs net sales(%)
Net sales	5,777		8,943		8,680		8,668	
Gross profit	1,999	34.6	2,910	32.5	3,040	35.0	2,953	34.1
Selling, general & administrative expenses	1,513	26.2	1,766	19.8	1,753	20.2	1,840	21.2
Operating profit	486	8.4	1,144	12.8	1,287	14.8	1,113	12.8
Ordinary profit	596	10.3	1,148	12.8	1,292	14.9	1,153	13.3
Net profit attributable to Seibu Giken Co., Ltd. stockholders	481	8.3	909	10.2	1,054	12.1	891	10.3
Net profit per share (JPY)	23.	.48	44.	.37	51.	.41	43	.50
EBITDA*1	7′	10	1,3	379	1,5	524	1,3	379
EBITDA margin*2 (%)	12	2.4	15	5.4	17	<b>'</b> .6	15	5.9

<sup>\*1:</sup> EBITDA = unaudited figures calculated by operating income + depreciation \*2: EBITDA margin = EBITDA/ sales

## FY2024 Quarterly Net Sales by Product and Region

## **Product**

(JPY: Millions)	FY2024 Q1	FY2024 Q2	FY2024 Q3	FY2024 Q4
Desiccant dehumidifier	3,543	5,944	5,601	4,573
VOC concentrator	1,541	2,375	2,374	3,280
Others	692	624	704	814
Total	5,777	8,943	8,680	8,668

## Region

(JPY: Millions)	FY2024 Q1	FY2024 Q2	FY2024 Q3	FY2024 Q4
Japan	2,863	2,379	2,653	2,793
China	1,317	1,543	2,073	1,917
Other Asia	663	1,078	1,229	2,157
Europe	677	2,793	949	1,195
North America	205	1,108	1,711	436
Others	49	40	62	168

## FY2024 Quarterly Order Intake and Backlog

**Order Intake** 

(15) ( 14)	FY2024	FY2024	FY2024	FY2024
(JPY: Millions)	Q1	Q2	Q3	Q4
Desiccant dehumidifier	2,807	9,243	12,169	15,061
VOC concentrator	2,297	4,297	7,172	10,422
Others	681	1,668	2,821	5,511
Total	5,786	15,209	22,164	30,995

**Order Backlog** 

eraer zaemeg	FY2024	FY2024	FY2024	FY2024
(JPY: Millions)	Q1	Q2	Q3	Q4
Desiccant dehumidifier	12,338	13,272	9,959	8,634
VOC concentrator	5,202	5,006	5,256	5,370
Others	773	1,143	1,576	3,402
Total	18,314	19,422	16,792	17,407

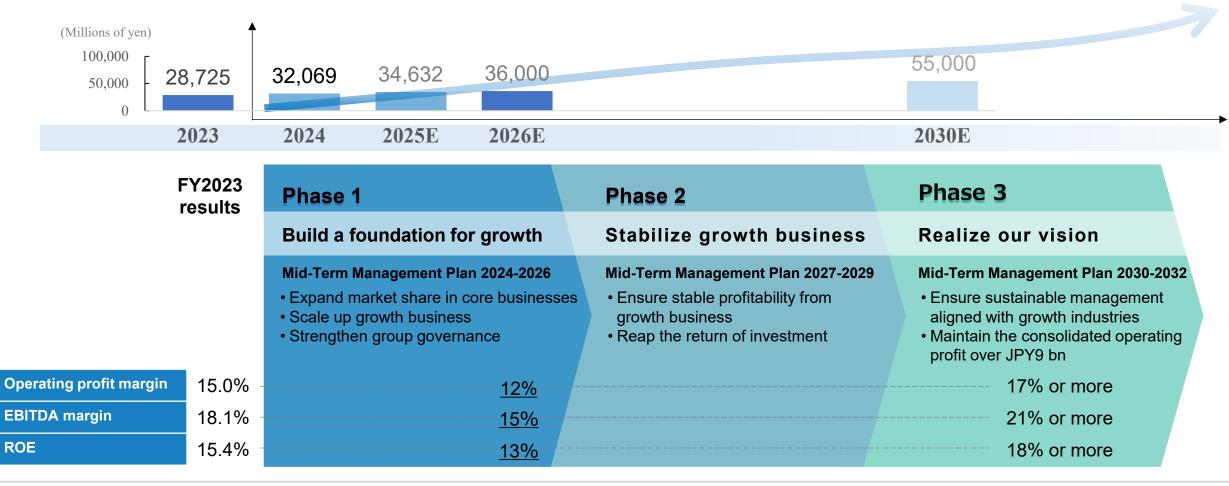
# Medium-Term Management Plan 2024-2026



## Positioning of Mid-Term Management Plan

Building a foundation for sustainable growth for the next 3 years as the first phase toward the realization of 2030 Vision

Continue to be the innovation leader in air processing technology to realize a climate-neutral future



## **Growth Strategy in Mid-Term Management Plan**

Aiming at sustainable profit growth by gaining market share in our core businesses in Europe and North America and by expanding total engineering business

**Growth Driver** 

**Core Business : Selling module/equipment** 

Module/equipment contributing to the optimal manufacturing environment and reduction of environmental impact for customers



**Growth Business: Total engineering** 



Proposal, design, fabrication, construction, etc. of systems for optimal space creation

**Target** 



**Energy device** 

Battery (EV batteries, Stationary storage batteries, next generation batteries) Other than batteries (Lithium-ion capacitors, perovskite solar cells)



**Priorities** 

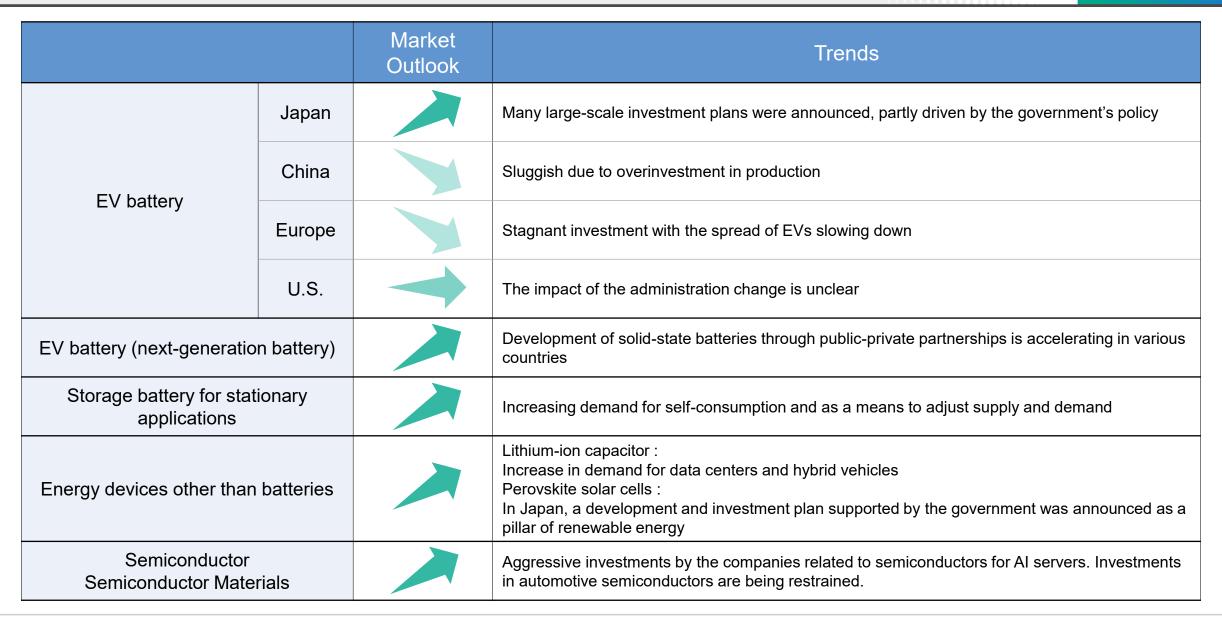
Core **Business** 

- Gain market share of desiccant dehumidifier in areas where investment is thriving (Japan, U.S. & Europe)
- Improve competitiveness by increasing production capacity with capital investment in target region
- Approach to emerging markets such as Southeast Asia and India
- Expand overseas service business by stimulating demand for rotor replacement

Growth Business

- Expand total engineering business in overseas (U.S. & Korea)
- Establish a future stable earnings base by initiating service DX business

## **Business Environment Surrounding Our Growth Areas**



## **Business Overview (1) Our Products**

#### **Desiccant Dehumidifier**







#### EV battery factories

Food

**Pharmaceuticals** 

Perovskite solar cell factory

Lithium-ion capacitor factory

- A European competitor (manufacturer) has a leading share in the global market. We understand that we are the second largest.
- Capable of dehumidifying in the environment at 15°C or lower temperature, which cannot be achieved by the conventional refrigerant dehumidifier
- Differentiate ourselves from competitors with our total engineering covering design and construction work of dry rooms. essential for production processes for Lithium-ion batteries and other energy devices

2022

JPY 15.9 bn

2023 JPY 18.5 bn

<sup>2024</sup> JPY 19.6 bn

**VOC Removal and Solvent Recovery Equipment** 



Sales Composition (FY2024) 29.8%



Semiconductor Semiconductor material

EV battery factories

Painting

Printing

Tire Manufacturing

- · A leading share in the global market
- Grow as solvent recovery equipment for the lithium-ion battery manufacturing process, in addition to existing applications such as exhaust gas treatment for semiconductor/semiconductor material plants and degassing and deodorizing treatment for printing and painting plants
- Grow along with the growth of the energy device market going forward, as higher recovery rates and lower running costs can be expected from replacement from the existing wet-type to our dry and circulating type

2022

2023 JPY 6.5 bn JPY 7.3 bn

<sup>2024</sup> JPY 9.5 bn

#### **Other Products**

Grow due to demand for GX of factories

**Sales Composition** (FY2024) 8.8%



factories

Research

facilities

General condition

Buildings

Hospitals

Honeycomb filter

- Our total heat exchangers have a leading share in the domestic market
- Will continue to progress steadily, as these devices are used universally for general air conditioning facilities in buildings. plants, hospitals, etc.
- On a growth trend, as demand for GX of factories and others is expected to rise with the total heat exchange technology appreciated due to its high CO2 reduction effect

2022 JPY 2.4 bn

2023 **JPY 2.8 bn** 

<sup>2024</sup> JPY 2.8 bn

## Business Overview (2) Net Sales by Business (Core Business and Growth Business

#### Core Business: Selling module/equipment

Total of machinery/devices sales and ancillary maintenance services

FY2023

FY2024

JPY 25.4 bn > JPY 24.0 bn



Segment	2023 Net Sales (JPY: bn)	2024 Net Sales (JPY: bn)
Desiccant dehumidifier	16.4	15.0
VOC concentrator	6.4	6.2
Other	2.5	2.7

#### <Change factor analysis>

Declined due to decreased sales of desiccant dehumidifiers in China

FY2025 forecast

**JPY 22.5 bn** 

#### **Growth Business: Total engineering**

Total of design, construction, and engineering businesses

FY2023

FY2024

JPY 3.3 bn



JPY 8.0 bn

Segment	2023 Net Sales (JPY: bn)	2024 Net Sales (JPY: bn)
Desiccant dehumidifier	2.0	4.5
VOC recovery equipment	0.9	3.3
Other	0.3	0.1

#### <Change factor analysis>

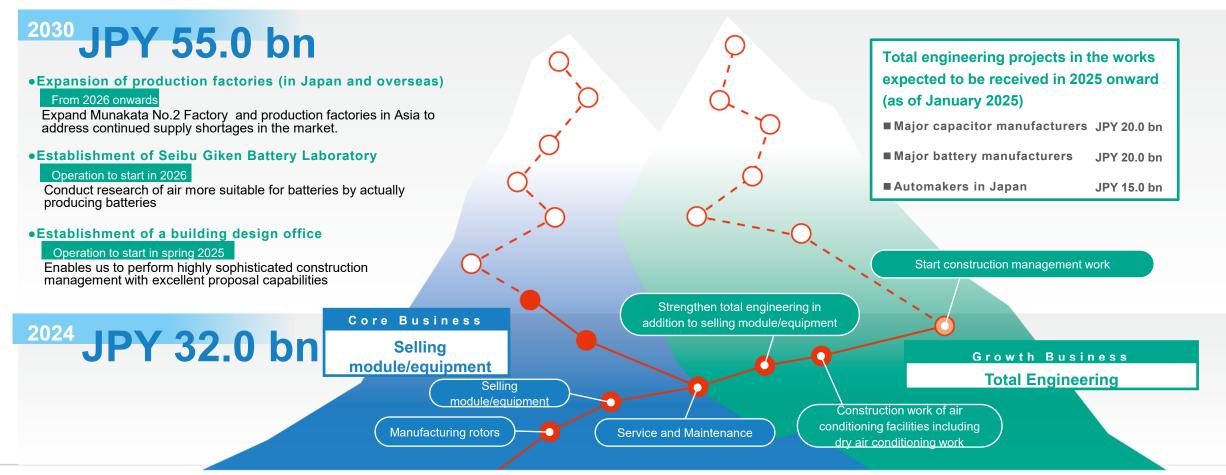
Total engineering business expanded into battery manufacturing and semiconductor industries both in Japan and overseas

FY2025 forecast

**JPY 12.1 bn** 

## **Growth Strategy**

Providing a total optimal environment for battery and semiconductor manufacturing processes Combining the strength of our unique products with outstanding environmental engineering, Seibu Giken provides the world with air solutions that only we can create!



## Seibu Giken Total Engineering (1) -Lithium-ion battery manufacturing process-

Energy is used to produce energy. We aim to resolve this contradiction (energy-reducing technology)-

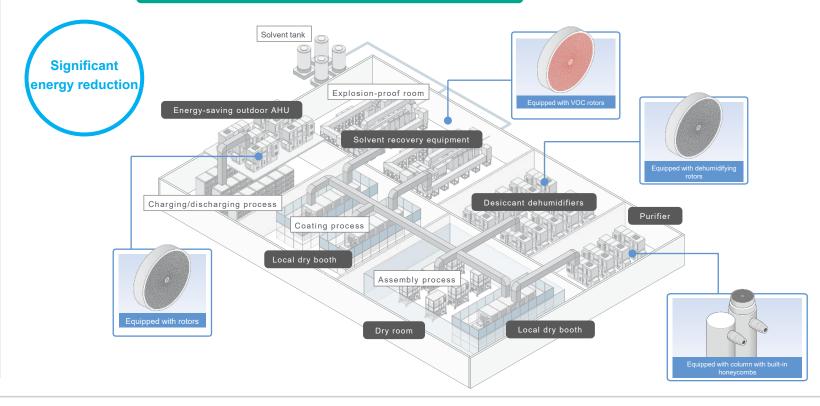
Lithium burns intensely with a small amount of moisture. Therefore, the production process requires a dry environment.

Composition of energies consumed for cell production Consumption for coating drying/dry room is 80% or more Process Energies of Lithium-Ion **Battery Cell Production** Drying Notching 39% Stacking Final sealing 4% Other Dry room 5% 43% Figure 6. Circle diagram with different sources' energy contributions to the total cell production and battery pack assembly energy. Data from Yuan et al. (2017). The processes included in 'other' are: mixing, coating, calendaring, welding & sealing, LiPF6 (electrolyte) filling, and precharging. It is clear here that running dry room equipment and NMPdrying are significantly larger contributors to process energy use than the sources. 出Source: "Lithium-ion Vehicle Battery Production Status 2019 on Energy Use, CO2 Emissions, Use of Metals, Products Environmental Footprint, and Recycling" ivl &

Swedish Energy Agency (2019)

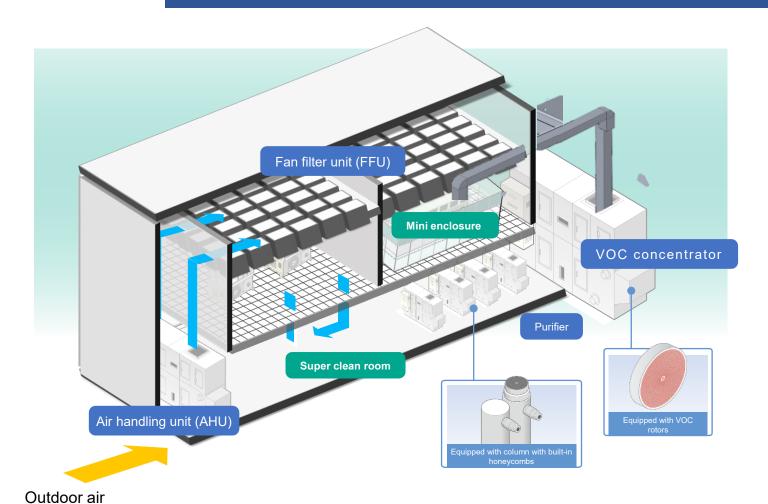
Largest issue for production in Japan In Japan, which depends on overseas energy resources, it is essential to reduce production costs by reducing energy inputs

Seibu Giken's total engineering can cut energy consumption in coating drying and dry rooms in half through proper energy management



## Seibu Giken Total Engineering (2) -Semiconductor material manufacturing process, etc.-

Creation of "Super clean room," essential for semiconductor material manufacturing processes and various other fields



#### Created by air experts

## Super clean room

#### Total engineering covering quality of air

Provide a total solution to create an optimal environment where cleanliness, temperature, and moisture concentration in a clean room are carefully and precisely managed according to the customer's needs

#### Next-generation air conditioning with reduced energy consumption

Under total engineering, energy generated from each device can be utilized and circulated efficiently, creating an energy-saving clean room in total, which cannot be easily achieved by ordering on a unit basis, to contribute to CO<sub>2</sub> reduction

## Cash Allocation (2024-2026)

- Priorities are placed on investment to increase production capacity, improve productivity, and expand business areas for future growth
- ·Shareholder returns are principally based on dividends, and share buybacks are implemented in line with profit growth and capital efficiency

Capital Allocation Plan (3 years: FY2024-FY2026)

Operating Cash Flow JPY 13.0 bn

#### **Investing Cash Flow**

JPY 6.0 bn or more

#### Increase production capacity

• Construction of a new dehumidifying rotor factory in Japan (approx. JPY 0.5 bn as additional costs)

#### Improve productivity

- Construction of a new sheet metal factory in China (approx. JPY 2.0 bn)
- Consistent improvement of productivity (approx. JPY 2.0 bn)

#### Invest to expand business domains

 Investment to expand engineering business, etc. (approx. JPY 1.0 bn or more, including alliances and M&As)

#### **Shareholder Returns**

JPY 6.0 bn or more

- Target dividend payout ratio: 40% or higher
- Share buybacks:
- Execute share buybacks in a flexible manner, taking into account capital efficiency, financial results, and capital conditions
- JPY 2.0 bn planned during the current Medium-Term Management Plan period

Operating CF

JPY 13.0 bn

Investment for growth

JPY 6.0 bn or more

Shareholder returns
JPY 6.0 bn or more

#### **New Product Launched**

Atmospheric carbon dioxide (CO2) concentration and supplying equipment for greenhouse





- Increase in yield Verified by test with strawberry cultivation in elevated beds
- Reduce environmental impact Supply safe and clean CO<sub>2</sub> at normal temperatures without using fossil fuels
- Easy to handle No fuel supply or gas replacement required as capturing CO2 from the atmosphere. Easy installation.





May 2024: Exhibit at J AGRI KYUSHU (Exhibit scheduled for 2025 as well)

#### **Initiatives during the Medium-Term** Management Plan 2024-2026

- Initiatives for Mass Production
- Initiatives for Cost Reduction
- Demonstration tests on plants other than strawberries (tomatoes, etc.) and plant factories (lettuce)

#### **New business targeting agriculture (greenhouse)**

Promoting C-SAVE Green® and energy-saving ventilator (Green Save), aim at generating JPY 1 bn in 2027

## R&D: Technological development to reduce CO<sub>2</sub>

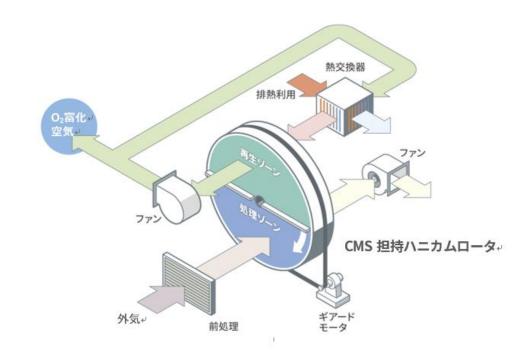


Concentrate CO<sub>2</sub> of low levels (about 10%) discharged from plants to medium (around 60%) to high concentration (over 90%) and recover.

# [Benefits] Quick startup Usable at atmospheric pressure Ensuring safety with no harmful materials 排ガス入口 排ガス出口

#### **Development of oxygen concentrator**

Leading research on direct enrichment of oxygen contained in air using a honeycomb rotor is being conducted in an industryacademia-government collaboration. By introducing air with a higher concentration of oxygen into the combustor, combustion efficiency can be improved and fuel input can be reduced, with the aim of reducing CO<sub>2</sub> emissions as a result.



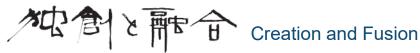
## Company overview / Business overview



## **Corporate Profile**

Company name	Seibu Giken Co., Ltd.	
Incorporation	July 1965	
President	Fumio Kuma	
Address	3108-3 Aoyagi, Koga-shi, Fukuoka, JAPAN	
Number of employees	Non-consolidated: 392 Consolidated: 779 (as of December 31, 2024)	
<b>Business Activities</b>	Developing, manufacturing, selling, and providing maintenance services for desiccant dehumidifiers and VOC concentrators, etc.	
Group Subsidiaries	China - Seibu Giken (Changshu) Co., Ltd Seibu Giken DST China (Changshu) Co., Ltd. Europe - Seibu Giken DST AB (Sweden) - Seibu Giken DST Poland SP. ZO.O. North America - Seibu Giken America, Inc Seibu Giken DST America, Inc Seibu Giken & Kumyoung Environment, Inc. Korea - Seibu Giken Korea Co., Ltd. Others - Seibu Giken DR Engineering Co., Ltd.	

#### **Corporate Philosophy**



By appreciating the originality and creativity of each individual's and simultaneously integrating them at every phase/dimension of development, we continuously create new value.

#### **Group Philosophy**

#### **Purpose**

Provide green air solutions for every environment.

#### Vision

To realize a climate-neutral future by being a leading innovator in air treatment technology.

#### **Core Values**

- ① Earn our customers' trust by delivering high-quality products and services.
- ② Create a positive and collaborative work environment globally.
- 3 Be creative in thought and responsible in action.
- Be frank and act with integrity toward one another.

## **Group History**

1965~1983 **Developed functional** honeycomb forming technology

- ✓ In 1974, developed our honeycomb forming technology and commercialized the first enthalpy wheel in Japan
- ✓ Started supplying honeycomb rotors to equipment manufacturers

1984~1999 Introduced core products worldwide

- Commercialized desiccant rotor with silica gel in 1984
- ✓ Commercialized VOC concentration rotor with synthetic zeolite adsorbent in 1988

2000~2009 **Established integrated** business from development, production to installation, after-sales service

- ✓ Started selling own brand's finished products in the 2000s
- ✓ Started business directly to contractors and end-users

2010~2019 Strengthened global sales network

- ✓ Established overseas offices to provide intensive support
- ✓ Started the system solution business from 2010

2020~ **Expanding to** advanced technology industries

- Targeting advanced technology industries such as rechargeable batteries and semiconductors
- ✓ Increasing production capacity to meet growing demands in China, EU, and the U.S.,



July 1965 Established Seibu Giken Technology Research Co., Ltd



October 1993 Acquired DST Sorption Teknik in Sweden



July 2001 🍩 Established SG America in the US January 2007 Established SG (Changshu) in Changshu-city, China February 2009

Established DST China

April 2012 65 Established DST America in the US

July 2013 Established SG DST Poland

September 2019 Established SG Korea



**April 2022** Munakata Factory built

## Our Strengths 1. Core technologies

- Control the quality of air passing through honeycomb structure
- Provide solution to various problems in the customers' manufacturing/processing environment by adding functions to honeycomb structure

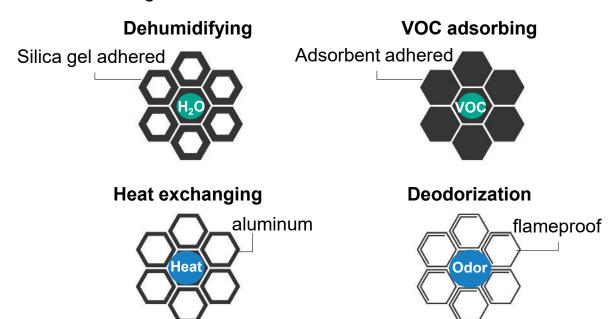
#### **Technology of forming honeycomb structure**

- Capable of processing various materials, e.g., tissues and aluminum sheet, to form honeycomb structure
- 3 benefits of the honeycomb structure:
  - 1) low pressure drop to air
  - 2) high strength
  - 3) a large surface area



#### **Technology of loading and supporting functional agents**

- Add various functions by efficiently adding and supporting various functional agents such as catalysts, adsorbents, deodorizers, etc. to the honeycomb structure
- Apply to desiccant dehumidifiers, VOC concentrators, and total heat exchangers



## Our Strengths 2. Integrated business from development to after-sales service

Strengthen our competitiveness in developing products and sales activities based on customer needs collected directly from our customers by providing the integrated business

**Manufacturing Manufacturing Assembly** Constructing Manufacturing rotor honeycomb module product (Finished product) system Desiccant dehumidifier **SEIBU GIKEN** Handle everything from rotor development and manufacturing of rotor to manufacturing, Constructing of system and providing maintenance of final products.

VOC concentrator







Provide installation, maintenance, and rotor replacement to maximize the performance of our products.







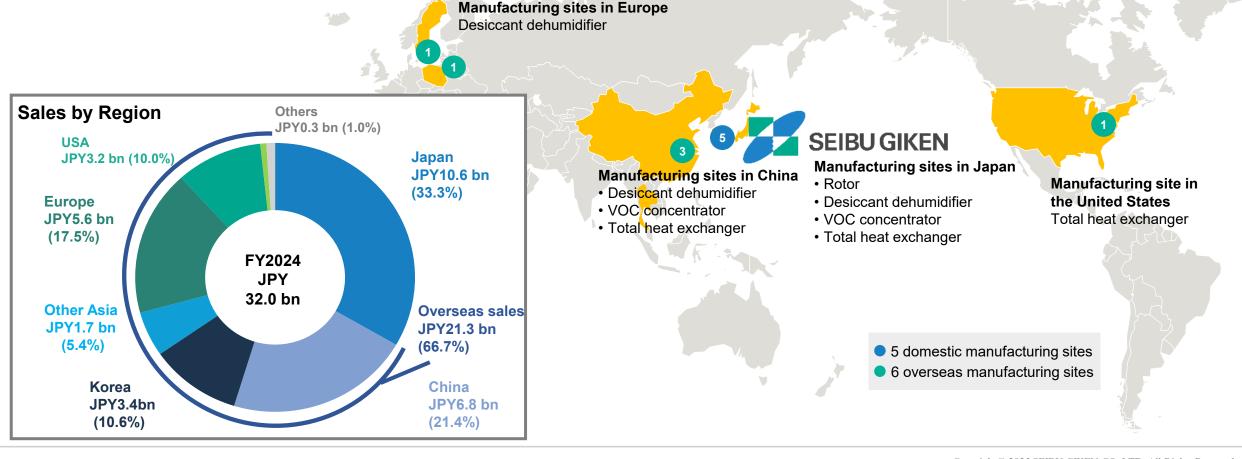
Maintenance



Develop rotor, manufacture module products, and sell to equipment manufacturers. Capable of maintaining and replacing to our rotors even if a rotor from another company is in use.

## Our Strengths 3. Global Network

- Rotor, the heart of our products, produced only in Japan and assembled at various manufacturing sites around the world
- Supply high-quality, high-performance products globally while responding quickly and flexibly to the needs of customers around the world



## Our Strengths 4. Total Engineering

## Seibu Giken creates the entire air environment of a manufacturing plant.

Sales of total engineering

JPY 3.3 bn JPY 8.0 bn JPY 12.1 bn

#### Future

#### Product-out + Market-in

• Consulting on architectural design with priority on a plant's production lines

 Architectural design and construction work through alliances with partner companies

Already received some orders for these types of projects as construction management work for 2025 onward

#### Present

#### Focusing on solution proposals

- Design and construction work of plant air environment including dry rooms utilizing existing products
- Capable of creating an all-in-one, well-coordinated, and optimal air environment with our own products

#### Past

Order value per project

expanded business

scope

tends to increase due to

#### Product-out

- Selling dehumidifiers, VOC removal equipment and other machinery
- Product-out business

#### \*Construction Management (CM) work

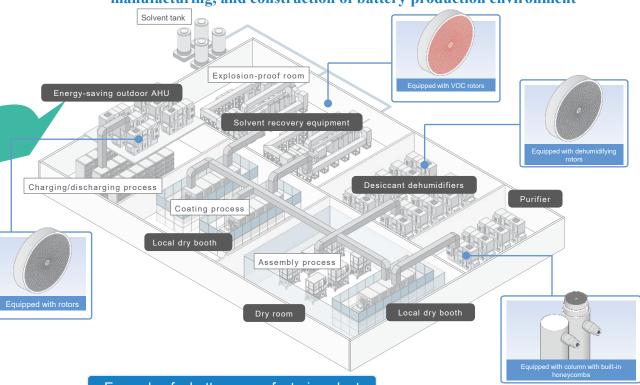
Refers to work in which, while maintaining technological neutrality, a construction manager acts in the contractee's interest at each step of the designing, ordering and construction process, performing all or a part of the management work such as design reviews and work order method reviews, process management, quality management, and cost management.

#### Lithium-ion battery manufacturing plant

Lithium metal burns intensely as it reacts with the moisture content in the air.

A dry environment where moisture in the air is reduced to extremely close to zero is essential for the manufacturing process.

Sole provider capable of offering total engineering covering consulting, design, manufacturing, and construction of battery production environment



Example of a battery manufacturing plant

Expand the scope of our business to cover design, equipment manufacturing, and construction work for production environments

## Our Value Proposition (Terms and description) (1)

Term	Description
Desiccant dehumidifier	An absorption dehumidifier utilizing a dehumidifier rotor. Capable of more efficiently dehumidifying even in environments with low temperatures or low moisture levels in the air, compared with a cooling type dehumidifier.
VOC Concentrator (exhaust gas removal)	Volatile organic compounds (VOCs) are absorbed onto a VOC concentration rotor to detoxify exhaust gas containing VOCs. By concentrating low-concentration and high-volume VOC-containing exhaust gas, detoxification facilities including combustion equipment can be downsized, contributing to ${\rm CO_2}$ reduction and cost reduction through energy-saving.
VOC recovery equipment (solvent recovery)	VOCs are absorbed onto a concentration rotor to detoxify exhaust gas containing VOCs and exhaust is cooled and condensed with VOCs recovered as liquid. The recovered liquid is highly stable, lowering the purification load for recycling. This circulating energy-saving system contributes to energy efficiency and CO2 reduction.
Dry room	Offering a dry work space with a desiccant dehumidifier and enclosure.  We offer integrated operation from the development and design of dehumidifiers to installation in rooms, thereby creating a highly efficient energy-saving system.
Mini enclosure (Dry booth)	Contributing to cost reduction resulting from space-saving by enclosing a limited area with production facilities, etc. In a dry booth (localized, high airtight enclosures and performing dehumidification), an environment meeting more demanding dehumidification requirements can be created within a dry room, etc.
Energy-saving outdoor AHU	An air conditioner that recovers the thermal energy of exhaust air with total heat exchange rotors and dehumidifies it with dehumidifying rotors, thereby enabling energy-saving outdoor air treatment.

## Our Value Proposition (Terms and description) (2)

Term	Description
Circulating Nitrogen Purifier	Efficiently creating an environment with low oxygen and low moisture concentration through the combination of a purifier and dehumidifier.
Clean room	Offering an ISO-compliant clean environment (we can accommodate up to Class 1) to achieve the target cleanliness even when the equipment is in operation.
CO <sub>2</sub> concentration and supply equipment	Contributing to increased harvests by concentrating $CO_2$ in the air and supplying it to plants through Direct Air Capture (DAC) technologies.
Total engineering	Total provision of all or part of the proposal, designing, manufacturing, construction and other processes of a system to create an optimal manufacturing environment.
Construction management	While maintaining technological neutrality, a construction manager acts in the contractee's interest at each step of the designing, ordering, and construction process, performing all or a part of the management work such as design reviews and work order method reviews, process management, quality management, and cost management.
Fan filter unit (FFU)	Equipment installed within the ceiling to supply clean air to maintain the cleanliness of a clean room
Air handling unit (AHU)	An air conditioner that takes in outside air and supplies air internally after adjusting the temperature, humidity, etc.