

Financial Results Briefing for the Six Months Ended September 30, 2022



Kanto Denka Kogyo Co., Ltd.

(Tokyo Stock Exchange Prime Market, Securities Code: 4047)

November 22, 2022

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I | Overview of Financial Results for the Six Months Ended September 30, 2022

Key Earnings Data

- **Record highs were registered for net sales and each profit indicator for Q2.**
- **Sales remained strong. In the Fine Chemicals Division, sales volume was up, with sales increasing significantly as hikes in raw material and fuel prices were passed on to product prices. The Fundamental Chemicals Division also benefited from price revisions.**
- **Regarding costs, prices of raw materials and fuels such as lithium compounds, electricity, tungsten and anhydrous hydrofluoric acid increased.**
- **Although fluorochemicals for semiconductors were unaffected by changes in the market environment in Q2, it is important to monitor developments closely.**

Statement of Income

(Billions of yen)

	H1 FY2021	H1 FY2022	Difference	% change
Net sales	28.2	37.3	9.1	32.3
Operating profit	4.4	6.5	2.1	48.9
Ordinary profit	4.3	7.3	2.9	67.6
Profit before income taxes	4.3	7.1	2.8	65.0
Profit attributable to owners of parent	3.0	5.1	2.1	71.2
Basic earnings per share (yen)	52.8	90.4	37.6	

Balance Sheet

(Billions of yen)

	FY2021	H1 FY2022	Difference	% change
Assets	109.9	114.9	5.0	4.6
Cash and deposits	26.7	18.5	-8.2	-30.7
Trade receivables	18.0	20.2	2.2	12.2
Inventories	13.1	17.7	4.5	34.9
Non-current assets (tangible + intangible)	38.9	44.8	5.8	15.1
Liabilities	49.9	49.3	-0.6	-1.4
Interest-bearing debt	30.9	29.0	-1.8	-6.1
Trade payables	8.9	10.0	1.1	12.8
Income taxes payable	2.6	2.1	-0.4	-16.9
Net assets	59.9	65.6	5.7	9.6
Equity ratio (%)	53.0%	55.7%	2.7%	

Fundamental Chemicals Division

	H1 FY2021	H1 FY2022	(Billions of yen) Difference
Net sales	3.7	4.1	0.3
Operating profit (loss)	(0.08)	0.08	0.16

Net sales

- **Caustic soda:** Sales increased due to effects from price revisions, despite lower sales volumes
- **Hydrochloric acid:** Sales increased due to effects from price revisions, despite lower sales volumes
- **Trichloroethylene:** Sales increased due to effects from price revisions, despite lower sales volumes
- **Perchloroethylene:** Sales increased due to effects from price revisions, despite lower sales volumes

Operating profit (loss)

- **There was a turnaround to profitability on the back of price revisions, despite rising raw material and fuel prices.**

Fine Chemicals Division

(Billions of yen)

	H1 FY2021	H1 FY2022	Difference
Net sales	21.9	30.3	8.3
Operating profit	3.9	6.0	2.0

Net sales

- **Nitrogen trifluoride:** Sales increased due to higher sales volumes and effects from price revisions
- **Tungsten hexafluoride:** Sales increased due to higher sales volumes
- **Hexafluoro-1,3-butadiene:** Sales increased due to higher sales volumes
- **Lithium hexafluorophosphate:** Sales increased due to higher sales volumes and effects from price revisions

Operating profit

- **Profit increased on the back of higher sales despite rising raw material and fuel prices**

Ferrochemicals, Commercial Business, Facilities Divisions

(Including consolidation adjustments)

(Billions of yen)

	H1 FY2021	H1 FY2022	Difference
Net sales	2.4	2.8	0.3
Operating profit	0.5	0.4	-0.0

Ferrochemicals

Sales and profit were up due to increased sales of carriers

Commercial Business

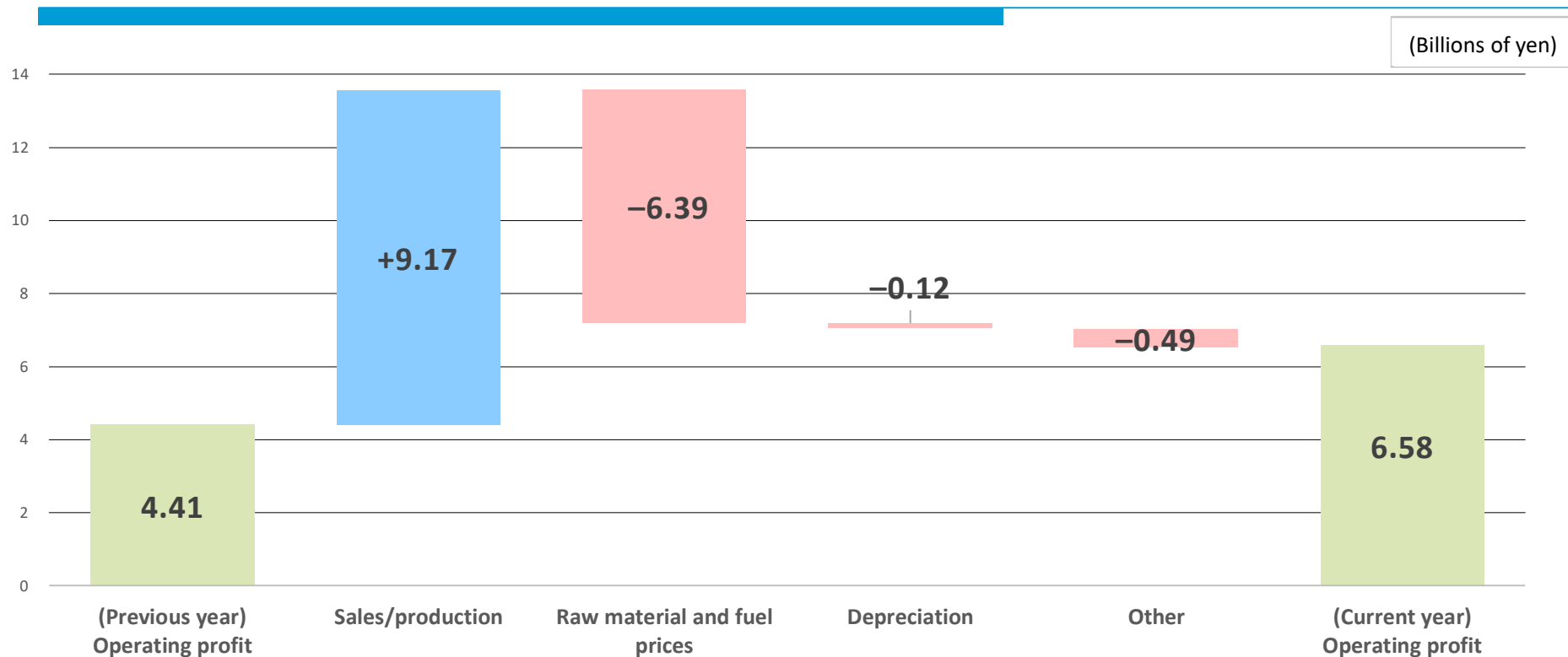
Unchanged year on year

Facilities

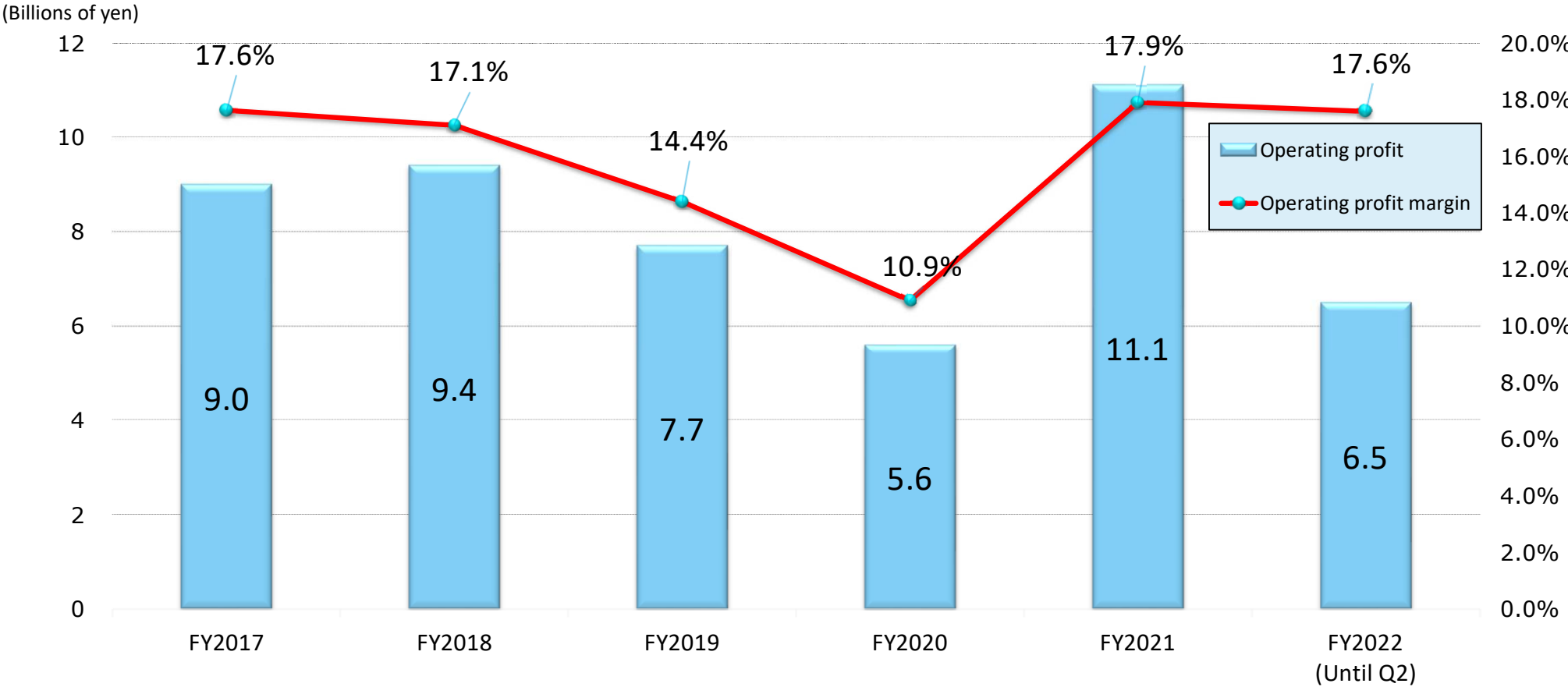
Sales and profit were up due to more contract work at Jobi Engineering, a consolidated subsidiary

Consolidated Operating Profit: Difference Analysis

(H1 FY2021 vs. H1 FY2022)

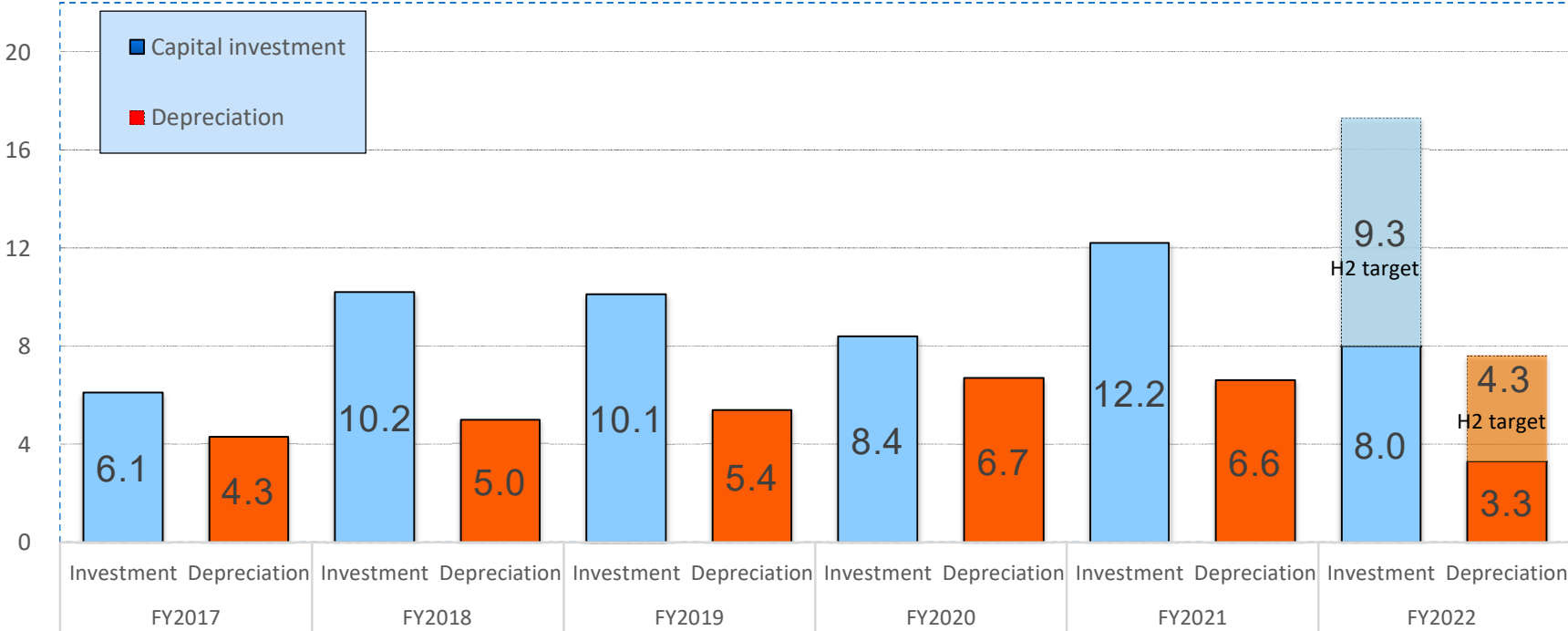


Operating Profit and Operating Profit Margin Over Time (Consolidated)



Capital Investment and Depreciation Over Time (Consolidated)

(Billions of yen)



The Kanto Denka Group (Consolidated Subsidiaries)

(Billions of yen)

	Capital	Share of investment (%)	Net sales: H1 FY2022	Year-on-year change	Major business lines
Kanden Kosan Co., Ltd.	¥10 mil.	100.0	4.9	1.1	Sale of chemical products, maintenance of containers, insurance agency services
Jobi Engineering Co., Ltd.	¥120 mil.	49.4	3.1	0.9	Manufacture, processing, and repair of chemical industry equipment
Morishita Bengara Kogyo Co., Ltd.	¥27 mil.	100.0	0.3	-0.0	Manufacture and sale of iron oxide
Kanto Denka Korea Co., Ltd.	300 mil. won	100.0	7.0	0.9	Sale of fluorine products
Taiwan Kanto Denka Co., Ltd.	7 mil. NT dollars	100.0	3.3	1.0	Sale of fluorine products
Kanto Denka Fine Products Korea Co., Ltd.	42.0 bil. won	100.0	1.4	0.3	Manufacture and sale of fluorine products
Xuancheng KDK Technology Co., Ltd.	50 mil. dollars	98.3	—	—	Manufacture and sale of fluorine products
Total			20.3	4.3	

Business Segments

Name		Products and services
Fundamental Chemicals	Inorganic products	Caustic soda, hydrochloric acid, sodium hypochlorite, aluminum chloride, etc.
	Organic products	Trichloroethylene, perchloroethylene, vinylidene chloride, cyclohexanol, etc.
Fine Chemicals	Fluorine products	Sulfur hexafluoride, carbon tetrafluoride, trifluoromethane, hexafluoroethane, nitrogen trifluoride, hexafluoro-1,3-butadiene, octafluorobutane, tungsten hexafluoride, silicon tetrafluoride, chlorine trifluoride, octafluorocyclobutane, monofluoromethane, carbonyl sulfide, iodine pentafluoride, lithium hexafluorophosphate, lithium tetrafluoroborate, etc.
Ferrochemicals	Ferrochemical products	Carriers, magnetite, pigments, iron oxide, etc.
Commercial Business	Kanden Kosan Co., Ltd.	Sale of chemical products, maintenance of containers, insurance agency services, etc.
Facilities	Jobi Engineering Co., Ltd.	Factory plant construction, plant facility maintenance work, etc.

|| Business Outlook and Future Trends

Performance Forecast By Segment (Consolidated)

(Billions of yen)

	Net sales			Operating profit		
	FY2021 (results)	FY2022 (initial forecast)	FY2022 (revised forecast)	FY2021 (results)	FY2022 (initial forecast)	FY2022 (revised forecast)
Fundamental Chemicals	7.9	8.1	8.9	-0.0	0.1	0.3
Fine Chemicals	49.0	61.9	67.5	10.0	9.7	11.0
Other*	5.3	6.0	5.9	1.1	1.1	1.0
Total	62.2	76.0	82.3	11.1	10.9	12.3
Capital investment	12.2	15.8	17.4	Assumption for Performance Forecast USD/JPY Rate: ¥130 *"Other" includes the Ferrochemicals, Commercial Business, Facilities Divisions, and consolidation adjustments.		
Depreciation	6.6	8.8	7.7			
R&D expenses	1.4	1.4	1.2			

Performance Forecast By Segment (Consolidated): H1 Forecast vs. Results

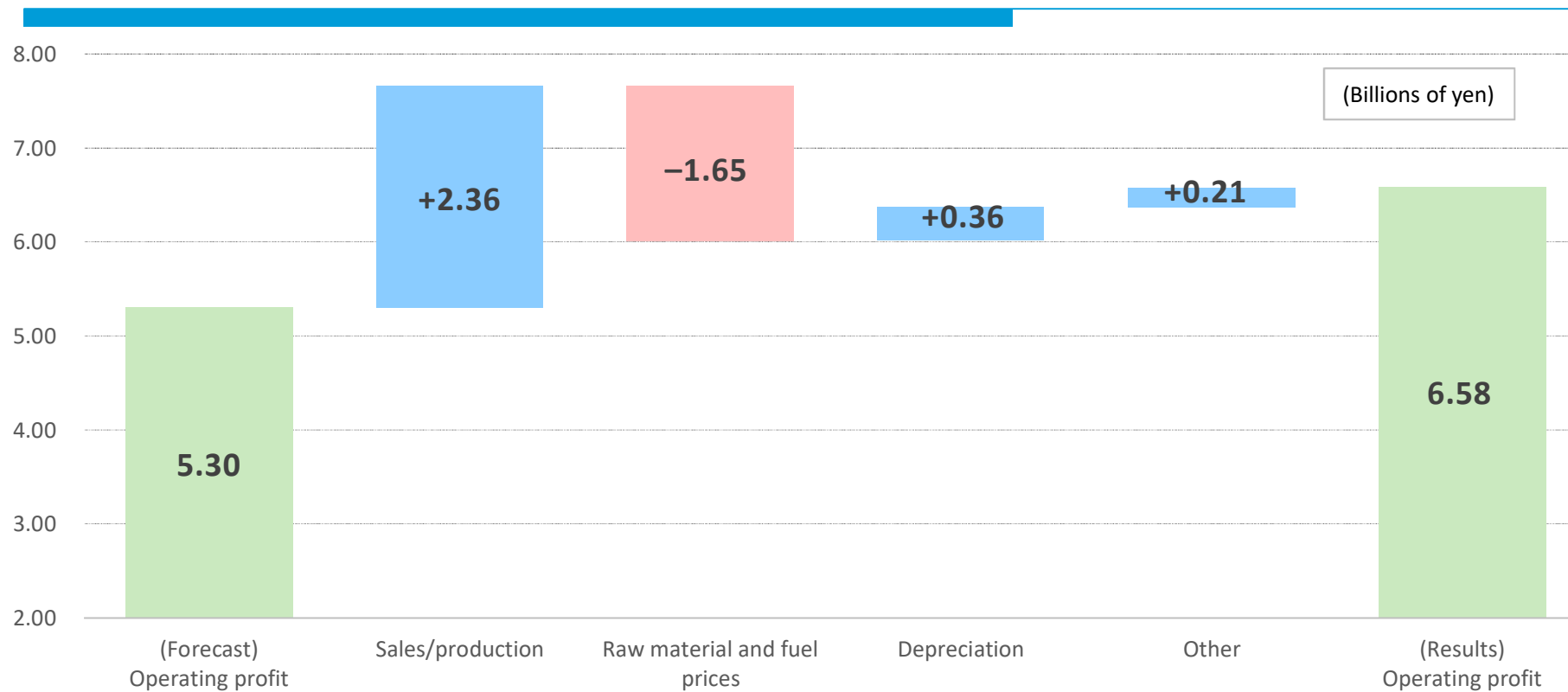
(Billions of yen)

	Net sales			Operating profit		
	H1 (forecast)	H1 (results)	Difference	H1 (forecast)	H1 (results)	Difference
Fundamental Chemicals	4.1	4.1	0.0	0.0	0.0	0.0
Fine Chemicals	29.0	30.3	1.3	4.6	6.0	1.4
Other*	3.1	2.8	-0.2	0.7	0.4	-0.2
Total	36.2	37.3	1.1	5.3	6.5	1.2

*"Other" includes the Ferrochemicals, Commercial Business, Facilities Divisions, and consolidation adjustments.

Consolidated Operating Profit: Difference Analysis

(H1 Initial Forecast vs. H1 Results)



Performance Forecast By Segment (Consolidated): H1 vs. H2

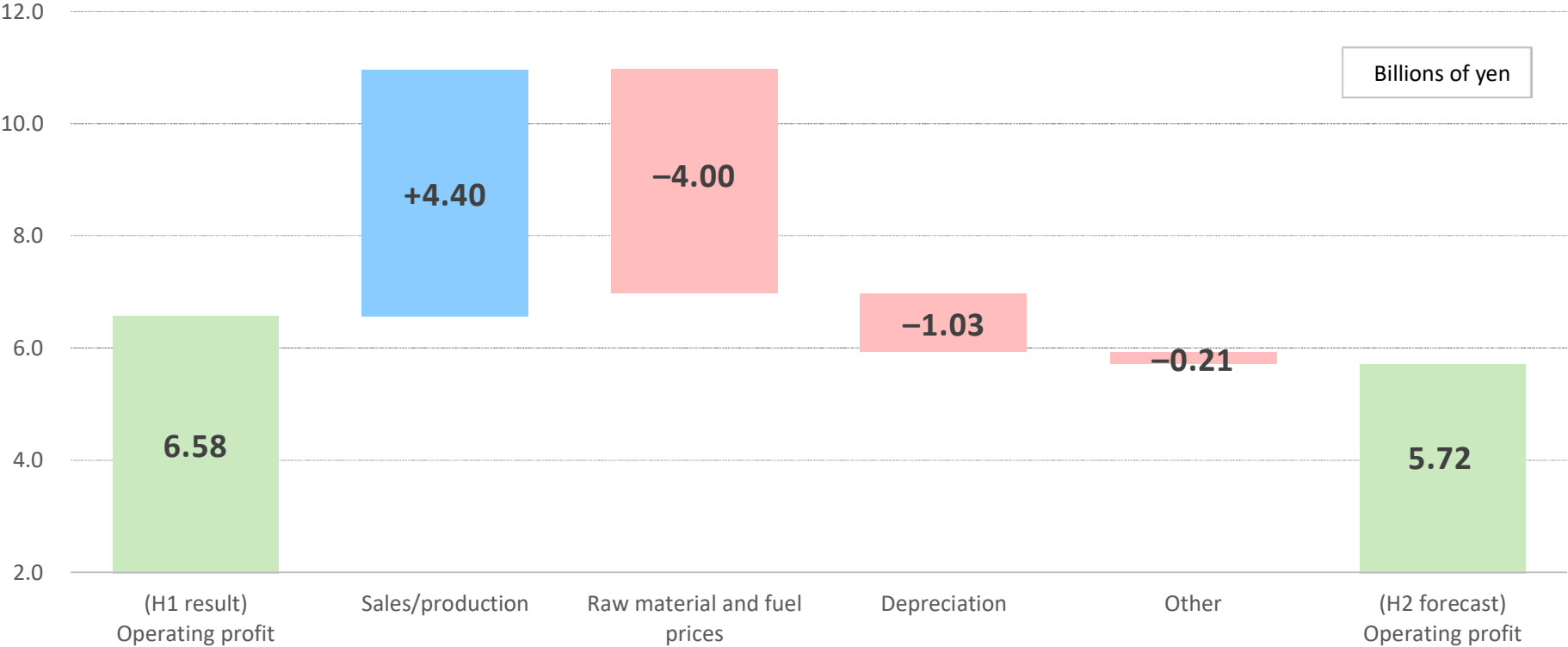
(Billions of yen)

	Net sales			Operating profit		
	H1 (results)	H2 (forecast)	Difference	H1 (results)	H2 (forecast)	Difference
Fundamental Chemicals	4.1	4.7	0.6	0.0	0.2	0.1
Fine Chemicals	30.3	37.1	6.8	6.0	4.9	-1.0
Other*	2.8	3.0	0.1	0.4	0.5	0.0
Total	37.3	44.9	7.6	6.5	5.7	-0.8
Capital investment	8.0	9.3	1.2			
Depreciation	3.3	4.3	1.0			
R&D expenses	0.6	0.6	0.0			

*"Other" includes the Ferrochemicals, Commercial Business, Facilities Divisions, and consolidation adjustments.

Consolidated Operating Profit: Difference Analysis

(H1 Result vs. H2 Forecast)



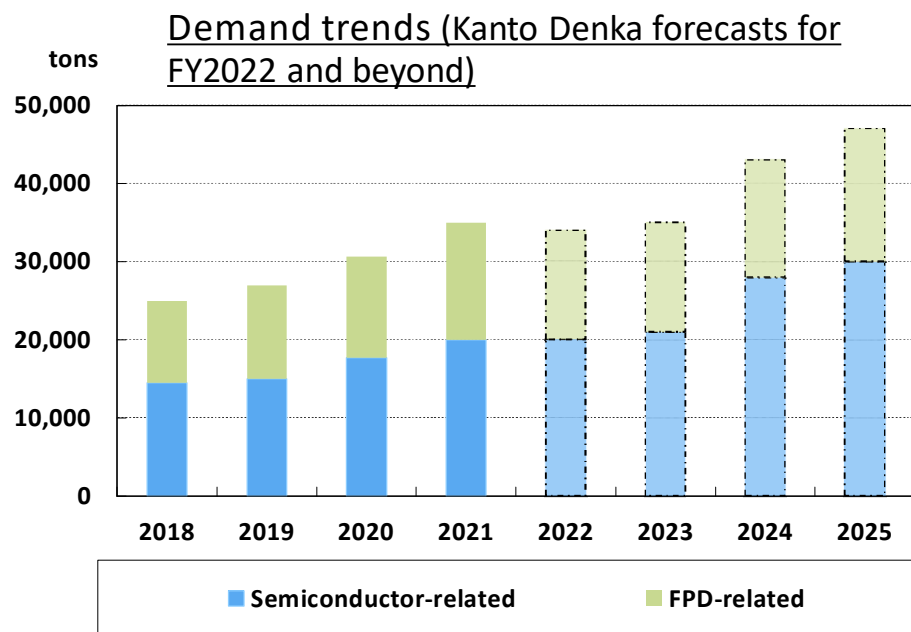
Topics (Status of Major Capital Investments)

Investment	Details	Remarks
Hexafluoro-1,3-butadiene (C ₄ F ₆)	260t/yr ⇒ 400t/yr	<ul style="list-style-type: none"> • Facilities were completed in April 2022 and shipments are scheduled to begin in H1 of the fiscal year • Additional investment under consideration
Carbonyl sulfide (COS)	80t/yr ⇒ 150t/yr	<ul style="list-style-type: none"> • Facilities were completed in June 2022 and test operations are currently underway • Production capacity (Japan: 40t/yr, South Korea: 110t/yr)
Lithium hexafluorophosphate (LiPF ₆)	5,400t/yr ⇒ 10,000t/yr	<ul style="list-style-type: none"> • Scheduled for completion around fall 2023
Xuancheng KDK Technology Co., Ltd.	Phase I construction: Ammonium fluoride Phase II construction: WF ₆ , C ₄ F ₆ , CF ₄	<ul style="list-style-type: none"> • Phase I construction: Scheduled for completion in March 2023 • Phase II construction: Scheduled for completion by the end of 2023

III | Supplementary Materials

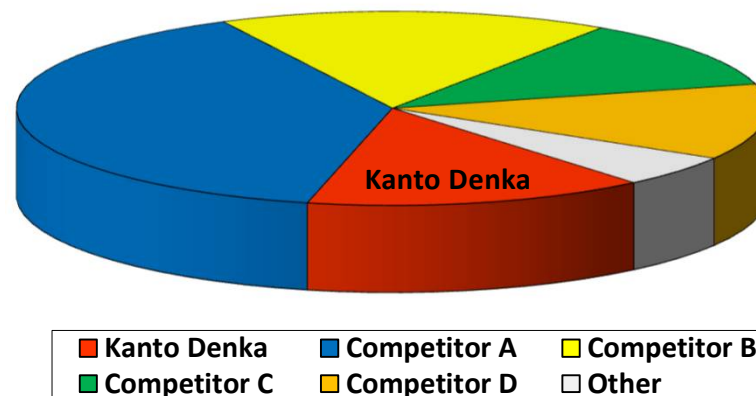
– Outlook for Major Products – Nitrogen Trifluoride (NF₃)

- Chamber cleaning gas for plasma CVD equipment for semiconductor and FPD manufacturing
- Production capacity: 3,700t/year



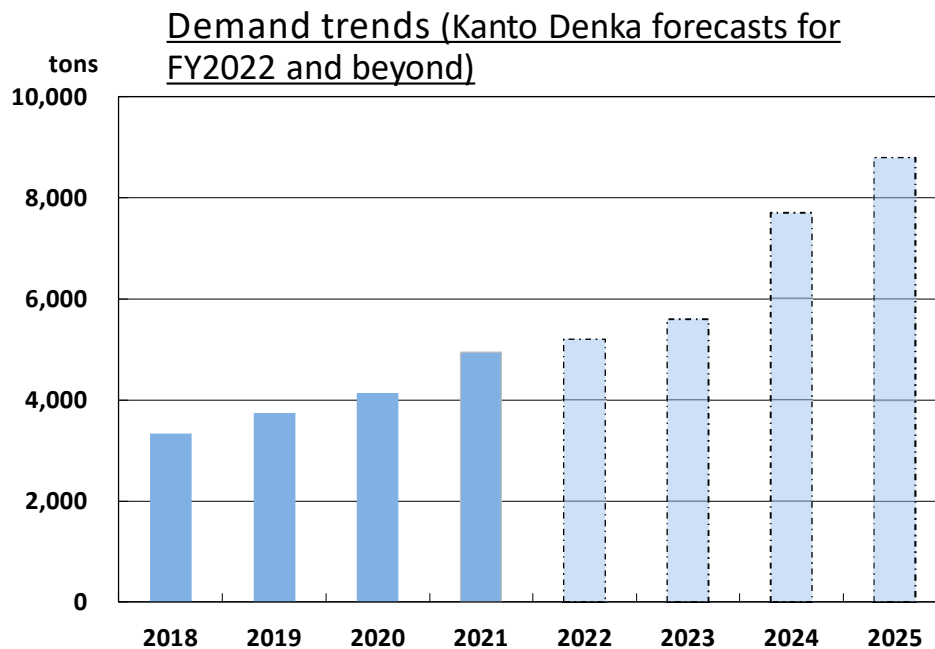
Forecasted market share

- Kanto Denka holds over 10% of market share
- Kanto Denka holds around a 20% share in the market for leading semiconductor manufacturers



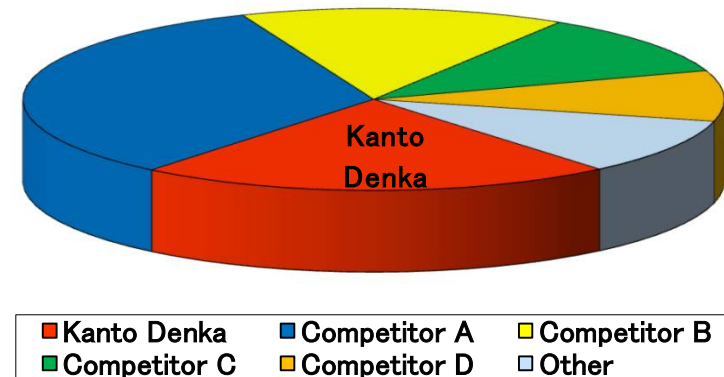
– Outlook for Major Products – Tungsten Hexafluoride (WF₆)

- Wiring material gas for semiconductors
- Production capacity: 720t/year (Nov. 2016) ➔ 910t/year (Aug. 2018) ➔ 1,400t/year (Oct. 2019)



Forecasted market share

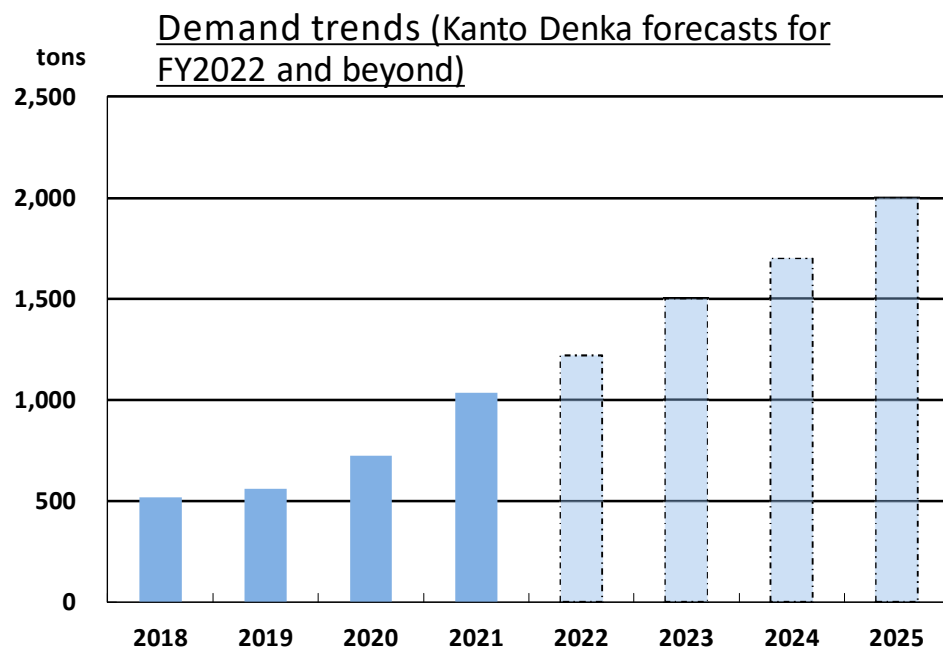
- Kanto Denka holds nearly 30% of market share



– Outlook for Major Products – Hexafluoro-1,3-butadiene (C₄F₆)

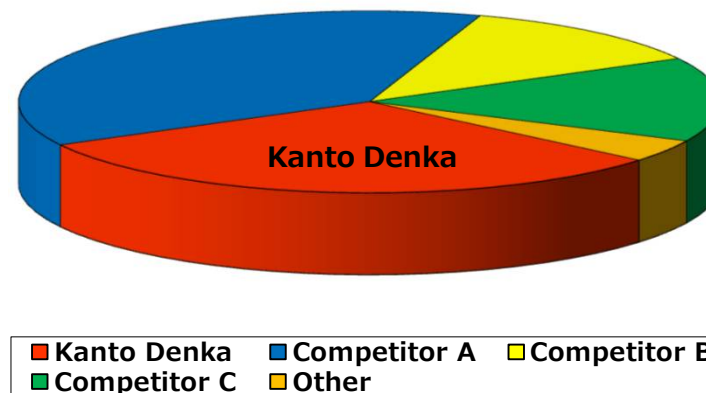
■ Etching gas for semiconductors

■ Production capacity: 125t/year ➔ 160t/year (Dec. 2018) ➔ 260t/year (Dec. 2019) ➔ 400t/year (Apr. 2022)



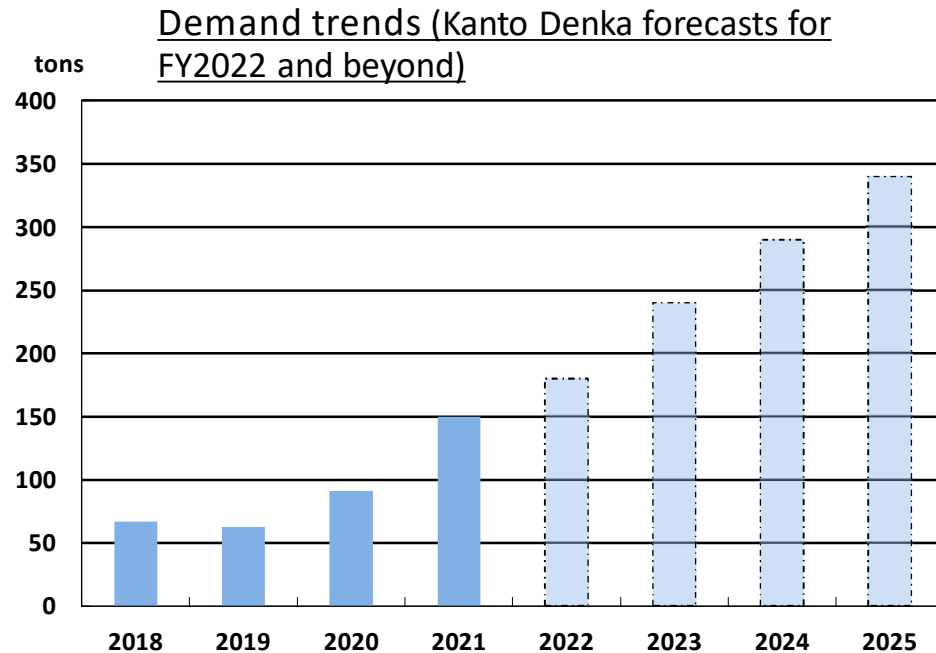
Forecasted market share

- Kanto Denka holds around 30% of market share
- Steady demand alongside progress in the multilayering of 3D-NAND



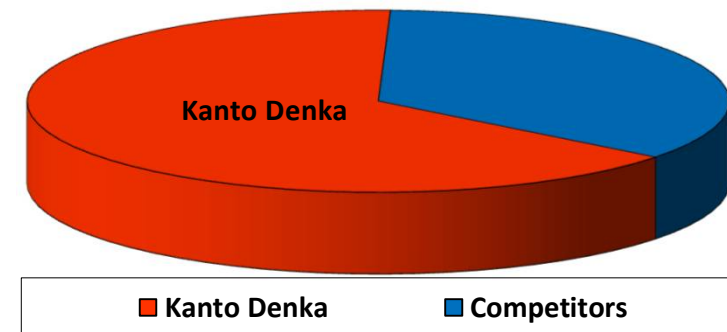
– Outlook for Major Products – Carbonyl Sulfide (COS)

- Etching gas for semiconductors
- Production capacity: 40t/year ➔ 80t/year (Oct. 2019) ➔ 150t/year (Jun. 2022)



Forecasted market share

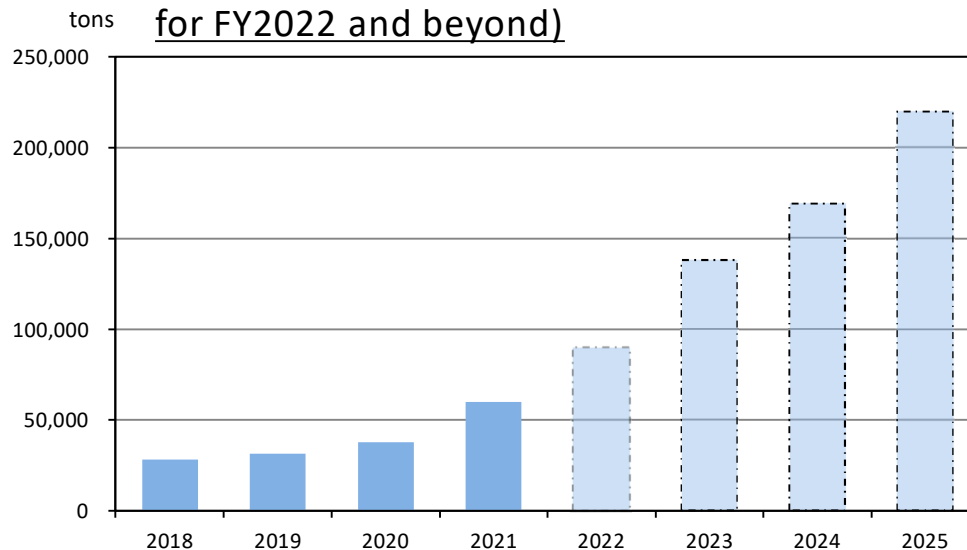
- Kanto Denka holds 60% or more of market share
- Steady demand alongside progress in the multilayering of 3D-NAND



– Outlook for Major Products – Lithium Hexafluorophosphate (LiPF₆)

- Electrolyte materials for lithium-ion secondary batteries
- Demand reaches full-scale pace for EVs and other in-vehicle applications
- Production capacity: 5,400t/year ➔ 10,000t/year (Planned for 2023)

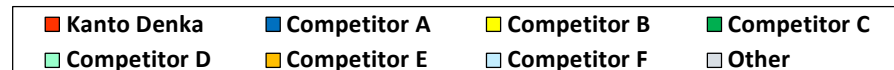
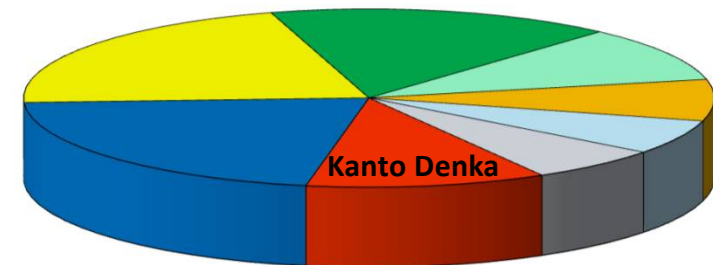
Demand trends (Kanto Denka forecasts for FY2022 and beyond)



Forecasted market share

In the automotive battery market, Kanto Denka commands 70% share in Japan, 40% in the United States and 10% in Europe.

It is essential to have **high-quality LiPF₆** amid tough requirements for automotive application in terms of battery properties and safety, etc.



– Overseas Production Sites – Kanto Denka Fine Products Korea Co., Ltd.

□ Location

Cheonan City, South Chungcheong Province, Republic of Korea

□ Business Lines

Manufacture and sale of fluorochemicals for semiconductors and FPDs

□ Production Items

- Carbonyl sulfide (COS)
- Carbon tetrafluoride (CF₄)
- Chlorine trifluoride (ClF₃)



– Overseas Production Sites – Xuancheng KDK Technology Co., Ltd.

□ Location

Xuancheng City, Anhui Province, People's Republic of China

□ Business Lines

Manufacture and sale of fluorochemicals for semiconductors and FPDs

□ Production Items

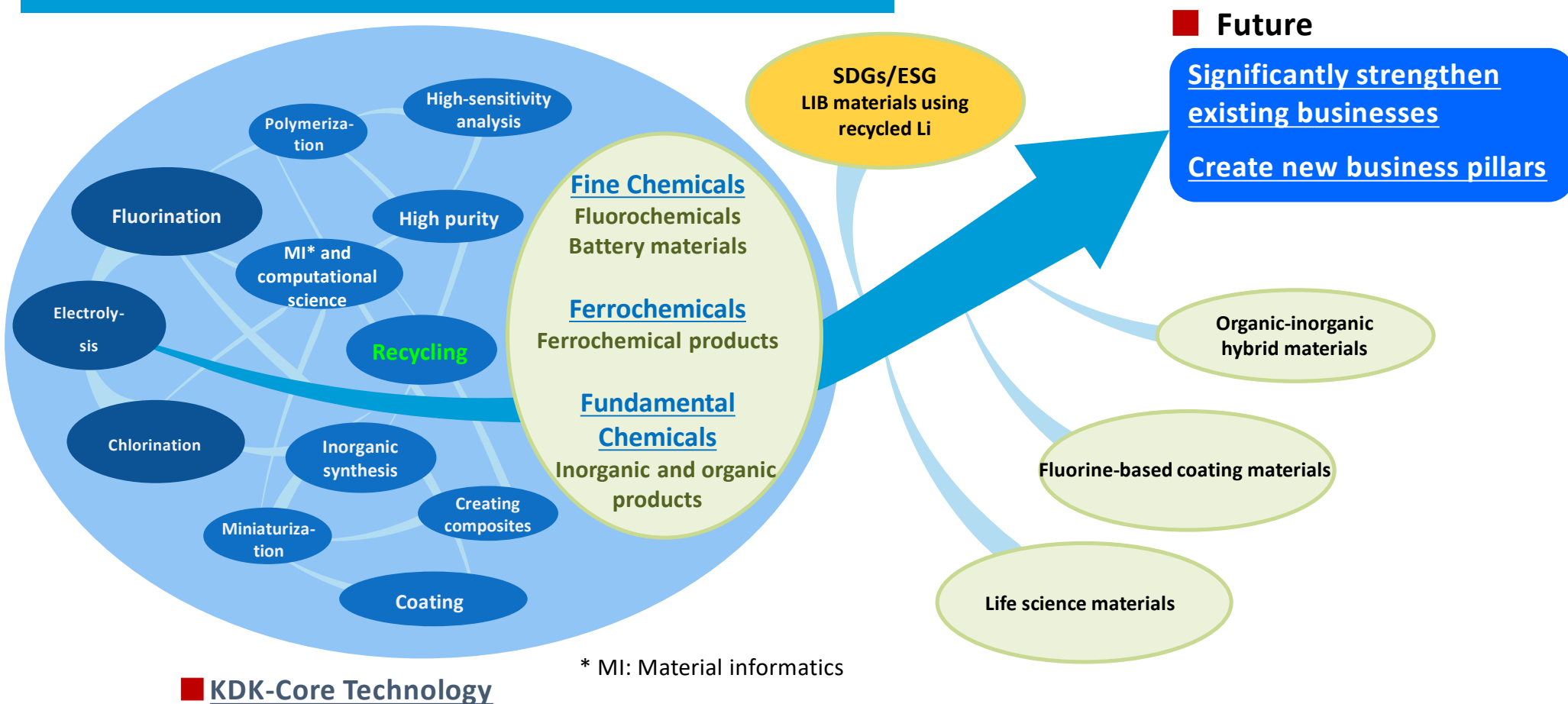
Phase I construction: Ammonium fluoride

Phase II construction:

- Tungsten hexafluoride (WF_6)
- Carbon tetrafluoride (CF_4)
- Hexafluoro-1,3-butadiene (C_4F_6)



Kanto Denka's Technology and Business Direction



Notes

- This document does not constitute disclosure material as defined by the Financial Instruments and Exchange Act and other laws and regulations, and therefore the Company does not guarantee its accuracy or completeness.
- Performance forecasts in this document were created based on information available as of the date of this document's publishing, and actual results may differ versus forecasted figures due to a variety of factors arising in the future.