



TAIYO NIPPON SANSO
The Gas Professionals

Supplementary Materials for Consolidated Business Performance for the First Half of FYE2020

October 31, 2019
TAIYO NIPPON SANSO Corporation

Contents

- 1 . Business Performance for First Half of FYE2020
 - 1) Overview of business performance
 - 2) Business performance by segment

- 2 . Full-Year Forecasts for FYE2020
 - 1) Overview of forecasts for the full-year
 - 2) Forecasts by segment for the full-year

- 3 . Reference Materials
 - 1) Breakdown for revenue disclosure categories for each segment
 - 2) Statement of non-recurring profit and loss
 - 3) Condensed Consolidated Statements of Cash Flows
 - 4) Condensed Consolidated Statements of Financial Position
 - 5) Key performance indicators
 - 6) Sales mix by business
 - 7) TNSC's Gas Supply Structure



1-1. Overview of business performance

(Billions of yen)	FYE2019 Q2 results Margin	FYE2020 Q2 results Margin	YoY Change	FYE2020 Q2 Forecast Margin
Revenue	329.4	422.8	+93.4 +28.4%	435.0
Core operating income	28.1 8.5%	45.4 10.8%	+17.3 +61.6%	46.0 10.6%
Non-recurring profit and loss	0.8	1.2	+0.4	0.0
Operating income	28.9 8.8%	46.7 11.1%	+17.8 +61.4%	46.0 10.6%
Finance costs	-1.8	-5.9	-4.1	
Income before income taxes	27.0	40.8	+13.8	
Income tax expenses	-8.3	-12.1	+3.8	
Net income	18.7	28.7	+10.0	26.7
(Attribution of net income)				
Net income attributable to owners of the parent	17.6 5.4%	27.7 6.6%	+10.1 +56.9%	25.5 5.9%
Net income attributable to non-controlling interests	1.0	0.9	-0.1	

- Foreign currency translations (US\$→¥): FYE2019 Q2 rate: \$1=¥110.71 FYE2020 Q2 rate: \$1=¥108.67
(€→¥): FYE2020 Q2 rate: €1=¥120.91

- In FYE2019 Q2, European business acquisition-related expenses (advisory fees, etc.) of ¥1.3 billion had been recorded.



TAIYO NIPPON SANSO
The Gas Professionals

1-1. Overview of business performance

【Revenue】

(Billions of yen)	FYE2019 Q2 results	FYE2020 Q2 results	% Change
Gas Business in Japan	171.9	174.0	+1.2%
Gas Business in the U.S.	91.4	98.9	+8.2%
Gas Business in Europe	—	85.2	—
Gas Business in Asia and Oceania	52.3	51.5	-1.5%
Thermos Business	13.5	13.0	-3.8%
Revenue Total	329.4	422.8	+28.4%

【Operating income】

(Billions of yen)	FYE2019 Q2 results	FYE2020 Q2 results	% Change
Gas Business in Japan	12.7	12.3	-3.0%
Gas Business in the U.S.	6.8	11.7	+70.3%
Gas Business in Europe	—	13.2	—
Gas Business in Asia and Oceania	6.3	5.3	-15.4%
Thermos Business	4.5	4.1	-8.1%
Eliminations or Corporate*	-2.3	-1.3	—
Core operating income Total	28.1	45.4	+61.6%
Non-recurring profit and loss	0.8	1.2	—
Operating income Total	28.9	46.7	+61.4%

*Eliminations or Corporate : European business acquisition-related expenses (advisory fees, etc.) of ¥1.3 billion had been recorded for the first half of FYE2019.

1-2. Business Performance by Segment: Gas Business in Japan

(Billions of yen)				FYE2019 Q2 results	FYE2020 Q2 results	% Change
Revenue	Gases	Packaged	Air separation gases, other	7.2	7.3	+1.5%
			Packaged subtotal	7.2	7.3	+1.5%
		Bulk	Air separation gases	25.0	24.3	-2.6%
			Carbon dioxide	12.3	11.9	-3.6%
			Helium	2.1	2.1	-0.1%
			Other gases	5.0	5.0	-0.1%
		Bulk subtotal	44.6	43.5	-2.5%	
		On-site	Air separation gases	38.1	36.8	-3.4%
			Other gases	3.6	3.3	-7.9%
		On-site subtotal	41.7	40.2	-3.8%	
	LP gas	15.2	13.4	-12.0%		
	Specialty gases	12.7	12.7	+0.2%		
	Subtotal			121.7	117.3	-3.6%
	Equipment and installation, other	Gas-related and plant, other	29.6	36.9	+24.4%	
		Electronics-related	8.3	7.1	-14.9%	
		Welding and cutting-related	12.1	12.5	+3.3%	
		Subtotal	50.2	56.6	+12.7%	
Revenue Total				171.9	174.0	+1.2%
Segment income				12.7	12.3	-3.0%

Reasons for changes in revenue

- Bulk & On-site (Air separation gases): Revenue decreased primarily in the key industries of steel, non-ferrous metals and metal processing.
- Gas-related and plant, other (Medical): Contribution from acquisition of IMI Co., Ltd., a medical equipment sales company

Reason for change in segment income

- Higher costs due to rising fuel prices
- Bulk & On-site (Air separation gases): Lower earnings from decreased revenue
- Contribution from acquisition of IMI Co., Ltd, a medical equipment sales company
- Expenses: Higher costs due to personnel expenses, etc.



TAIYO NIPPON SANSO
The Gas Professionals

1-2. Business Performance by Segment: Gas Business in the U.S.

(Billions of yen)				FYE2019 Q2 results	FYE2020 Q2 results	% Change
Revenue	Gases	Packaged	Air separation gases, other	22.7	23.2	+2.3%
			Packaged subtotal	22.7	23.2	+2.3%
		Bulk	Air separation gases	17.9	18.6	+3.5%
			Carbon dioxide	12.3	12.8	+3.9%
			Helium	2.9	2.6	-8.8%
			Other gases	5.0	5.0	-1.0%
			Bulk subtotal	38.3	39.1	+2.1%
		On-site	Air separation gases	3.8	4.4	+14.0%
			Other gases	0.8	7.0	-
			On-site subtotal	4.7	11.4	+143.3%
	LP gas			1.7	1.5	-12.5%
	Specialty gases			3.4	3.2	-4.0%
	Subtotal			71.0	78.7	+10.9%
	Equipment and installation, other	Electronics-related		2.7	2.3	-15.4%
		Welding and cutting-related		17.7	17.9	+1.0%
		Subtotal		20.4	20.2	-1.2%
	Revenue Total				91.4	98.9
Segment income				6.8	11.7	+70.3%

*Impact of foreign currency translation: Negative impacts of ¥1.67 billion on revenue and ¥0.12 billion on segment income

Reasons for changes in revenue

- Bulk: Favorable shipments centered around air separation gases
- On-site: Start of operation of new projects, contribution from acquisition of HyCO business

Reason for change in segment income

- Industrial gas-related business was generally favorable, centered on air separation gases.
- Contribution from acquisition of HyCO business



TAIYO NIPPON SANSO
The Gas Professionals

1-2. Business Performance by Segment: Gas Business in Europe

(Billions of yen)				FYE2020 Q2 results
Revenue	Gases	Packaged	Air separation gases, other	16.3
			Packaged subtotal	16.3
		Bulk	Air separation gases	19.7
			Carbon dioxide	14.3
			Helium	4.1
			Other gases	5.7
			Bulk subtotal	44.0
		On-site	Air separation gases	11.4
			Other gases	1.8
			On-site subtotal	13.2
	Specialty gases			4.1
	Subtotal			77.8
	Equipment and installation, other	Gas-related and plant, other		5.8
Welding and cutting-related		1.5		
Subtotal		7.4		
Revenue Total				85.2
Segment income				13.2

- The European business acquired from Praxair, Inc. of the United States in December 2018 has been disclosed in this segment.
- The revenue increased 2.9% year on year from ¥82.8 billion as compared to the business performance of the Gas Business in Europe from April 1, 2018 to June 30, 2018, assuming the acquisition date of the European business acquired from U.S. company Praxair, Inc. was April 1, 2018.



TAIYO NIPPON SANSO
The Gas Professionals

1-2. Business Performance by Segment: Gas Business in Asia and Oceania

(Billions of yen)				FYE2019 Q2 results	FYE2020 Q2 results	% Change
Revenue	Gases	Packaged	Air separation gases, other	1.9	1.8	-6.7%
			Packaged subtotal	1.9	1.8	-6.7%
		Bulk	Air separation gases	9.3	8.4	-10.2%
			Carbon dioxide	0.8	0.8	-0.7%
			Helium	2.0	2.7	+38.4%
			Other gases	1.5	1.3	-9.6%
			Bulk subtotal	13.7	13.4	-2.5%
		On-site	Air separation gases	1.8	1.8	+1.1%
			On-site subtotal	1.8	1.8	+1.1%
		LP gas			7.8	7.9
	Specialty gases			14.2	13.1	-7.8%
	Subtotal			39.7	38.2	-3.8%
	Equipment and installation, other	Gas-related and plant, other		8.7	8.1	-7.3%
		Electronics-related		1.3	2.8	+110.9%
		Welding and cutting-related		2.5	2.3	-5.7%
		Subtotal		12.6	13.3	+5.5%
Revenue Total				52.3	51.5	-1.5%
Segment income				6.3	5.3	-15.4%

*Impact of foreign currency translation: Negative impacts of ¥2.15 billion on revenue and ¥0.32 billion on segment income

Reasons for changes in revenue

- Bulk (Air separation gases): Revenue in Asia decreased slightly.
- LP gas: Firm sales in Australia
- Specialty gases: Lower shipments of electronic materials gases
- Electronics-related equipment and installation: Revenue in Taiwan rose substantially.

Reason for change in segment income

- Profitability improved in the LP gas business in Australia.
- Earnings declined due to lower electronic materials gas revenue.



TAIYO NIPPON SANSO
The Gas Professionals

1-2. Business Performance by Segment: Thermos Business

(Billions of yen)		FYE2019 Q2 results	FYE2020 Q2 results	% Change
Revenue	Japan	11.3	11.4	+0.9%
	Overseas	2.2	1.6	-27.8%
	Revenue Total	13.5	13.0	-3.8%
Segment income		4.5	4.1	-8.1%

*Impact of foreign currency translation: Negative impacts of ¥0.14 billion on revenue and ¥0.05 billion on segment income

Reasons for changes in revenue

- Japan: Sales of vacuum insulated portable mugs were solid, while sales of sports-use vacuum bottles declined.
- Overseas: Shipment volume of overseas distributors decreased.

Reason for change in segment income

- Japan: Earnings decreased due to lower revenue from sports-use vacuum bottles.
- Overseas: Group companies accounted for by the equity method posted soft sales.



2-1. Full-Year Forecasts for FYE2020

(Billions of yen)	FYE2019 Results Margin	FYE2020 Forecast Margin	YoY Change % Change
Revenue	740.3	890.0	+149.7 +20.2%
Core operating income	65.8 8.9%	95.0 10.7%	+29.2 +44.3%
Non-recurring profit and loss	1.0	7.0	+6.0
Operating income	66.8 9.0%	102.0 11.5%	+35.2 +52.6%
Finance costs	-4.7	-15.5	-10.8
Income before income taxes	62.0	86.5	+24.5
Income tax expenses	-18.3	-27.0	+8.7
Net income	43.7	59.5	+15.8
(Attribution of net income)			
Net income attributable to owners of the parent	41.2 5.6%	57.0 6.4%	+15.8 +38.0%
Net income for the year attributable to non-controlling interests	2.4	2.5	+0.1

Assumed exchange rate for FYE2020: (US\$→¥): \$1=¥110, (EUR→¥): €1=¥120

In FYE2020, the Company plans to record non-recurring profit of ¥7.0 billion on the sale of its assets as part of efforts to improve asset efficiency.



TAIYO NIPPON SAN SO
The Gas Professionals

2-2. Full-Year Forecasts for FYE2020 by Segment

【Revenue】

(Billions of yen)	FYE2019 Results	FYE2020 Forecast (Announced Oct. 31)	% Change	FYE2020 Forecast (Announced May 13)
Gas Business in Japan	363.9	375.0	+3.0%	375.0
Gas Business in U.S.	187.3	207.0	+10.5%	201.0
Gas Business in Europe* ¹	55.1	168.0	+204.9%	173.0
Gas Business in Asia and Oceania	106.1	110.0	+3.6%	111.0
Thermos Business	27.8	30.0	+7.9%	30.0
Revenue Total	740.3	890.0	+20.2%	890.0

【Operating income】

(Billions of yen)	FYE2019 Results	FYE2020 Forecast (Announced Oct. 31)	% Change	FYE2020 Forecast (Announced May 13)
Gas Business in Japan	29.8	29.1	-2.4%	30.6
Gas Business in U.S.	15.6	22.0	+40.7%	19.0
Gas Business in Europe* ¹	6.5	25.5	+288.3%	26.5
Gas Business in Asia and Oceania	9.1	11.0	+20.2%	11.5
Thermos Business	9.1	9.4	+2.3%	9.4
Eliminations or Corporate* ²	-4.5	-2.0	-	-2.0
Core operating income Total	65.8	95.0	+44.3%	95.0
Non-recurring profit and loss	1.0	7.0	-	7.0
Operating income Total	66.8	102.0	+52.6%	102.0

*1 The FYE2019 results represent business performance for the four-month period from December 2018 to March 2019 of the European business acquired from U.S. company Praxair, Inc.

*2 In FYE2019 results, European business acquisition-related expenses (advisory fees, etc.) of ¥2.7 billion had been recorded in core operating income.

(Reference Materials)

Breakdown for revenue disclosure categories for each segment

The breakdown for revenue disclosure categories for each segment is listed in the below chart.

Revenue disclosure category	Breakdown
Gases	Industrial gases such as oxygen, nitrogen, and argon, LP gases, specialty gases
Packaged	Gas filling containers (cylinders) are delivered to the customer, and the gas is supplied according to method of use
Air separation gases, other	All gases including air separation gases (oxygen, nitrogen, argon that are created by separation from the atmosphere)
Bulk	A storage tank for liquified gas is installed within the customer's facility, and the gas is supplied according to method of use
Air separation gases	Oxygen, nitrogen, argon
Carbon dioxide	Carbon dioxide gas, dry ice
Helium	Helium gas
Other gases	Other gases such as hydrogen
On-site	A gas production facility is established in an area adjacent to the customer, and the gas is constantly supplied using a directly connected pipe
Air separation gases	Oxygen, nitrogen, argon
Other gases	Other gases such as hydrogen and carbon monoxide
LP gas	Propane gas, butane gas
Specialty gases	Gases for electronic materials that are used in the manufacture of semiconductors or LCD panels, standard gas, high-purity gas
Equipment and installation, other	Ancillary equipment for gas usage, refining equipment to raise gas purity level, construction for equipment installation, and other equipment
Gas-related and plant, other	Gas-related supply facilities and gas abatement equipment, air separation units, and other equipment
Electronics-related	Construction for equipment and pipe installation toward electronics, refining equipment for removing impurities, and other equipment
Welding and cutting-related	Equipment, apparatuses, welding rods and other items (hard goods) used in metal processing including gas welding and cutting

Non-recurring Income and Expense Items

(Billions of yen)	FYE2019 Q2 results	FYE2020 Q2 results	YoY change
Core operating income	28.1	45.4	+17.3
Non-recurring profit and loss	0.8	1.2	+0.4
Operating income	28.9	46.7	+17.8

【Non-recurring Income and Expense Items】

FYE2019 Q2 results		FYE2020 Q2 results	
Item	Amount (Billions of yen)	Item	Amount (Billions of yen)
Gain on sales of domestic land	0.9	Gain on sales of domestic land, etc.	2.1
Other	-0.1	Restructuring-related expenses for the alfi business (Thermos)	-0.5
		Impairment loss associated with the sale of an affiliated company	-0.3
Total	0.8	Total	1.2

Condensed Consolidated Statements of Cash Flows

(Billions of yen)		FYE2019 Q2 results	FYE2020 Q2 results	YoY change
	Income before income taxes	27.0	40.8	+13.8
	Depreciation and amortization	22.9	41.5	+18.6
	Changes in working capital	-3.3	-3.5	-0.2
	Others	-6.7	-8.2	-1.5
(1) Cash flows from operating activities		39.8	70.5	+30.7
	Capital expenditures	-34.3	-36.5	-2.2
	Investments and loans	-5.1	-0.2	+4.9
	Others (asset sales, etc.)	4.4	3.5	-0.9
(2) Cash flows from investing activities		-34.9	-33.2	+1.7
Free cash flow (1+2)		4.8	37.2	+32.4
Net interest-bearing liabilities		293.0	936.0	+643.0
Adjusted net D/E ratio		-	1.56	-

- Net interest-bearing liabilities: interest-bearing liabilities - cash and cash equivalents
- Adjusted net D/E ratio: $(\text{Net interest-bearing debt} - \text{equity-type debt}^{*1}) / (\text{equity attributable to owners of parent} + \text{equity-type debt}^{*1})$
 *1 Equity-type debt: the amount of debt procured by Hybrid finance*2 that has been recognized as equity credit by rating agencies (50% of the procured amount).
 *2 Hybrid finance: A form of debt financing that has features resembling equity, such as voluntary deferral of interest, extremely long-term redemption periods and subordination during liquidation or bankruptcy procedures.

Condensed Consolidated Statements of Financial Position

(Billions of yen)	FYE2019 Results	FYE2020 Q2 results	YoY Change		FYE2019 Results	FYE2020 Q2 results	YoY Change
Cash and cash equivalents	59.6	69.3	+9.7	Interest-bearing liabilities	1,005.4	1,005.3	-0.1
Trade receivables	197.9	178.0	-19.9	Trade payables	105.9	91.8	-14.1
Inventories	66.2	70.9	+4.7	Others	223.7	208.9	-14.8
Others	23.2	23.6	+0.4	Total liabilities	1,335.1	1,306.2	-28.9
Total current assets	347.1	341.9	-5.2	Share capital and capital surplus, etc	429.5	456.0	+26.5
Property, plant and equipment*	639.3	650.5	+11.2	Other components of equity	-22.9	-60.2	-37.3
Goodwill	437.7	419.1	-18.6	Equity attributable to owners of parent	406.6	395.8	-10.8
Intangible assets	253.8	237.3	-16.5	Non-controlling interests	29.2	30.1	+0.9
Others	92.9	83.1	-9.8	Total equity	435.8	425.9	-9.9
Total non-current assets	1,423.8	1,390.2	-33.6	Total liabilities and equity	1,771.0	1,732.1	-38.9
Total assets	1,771.0	1,732.1	-38.9				

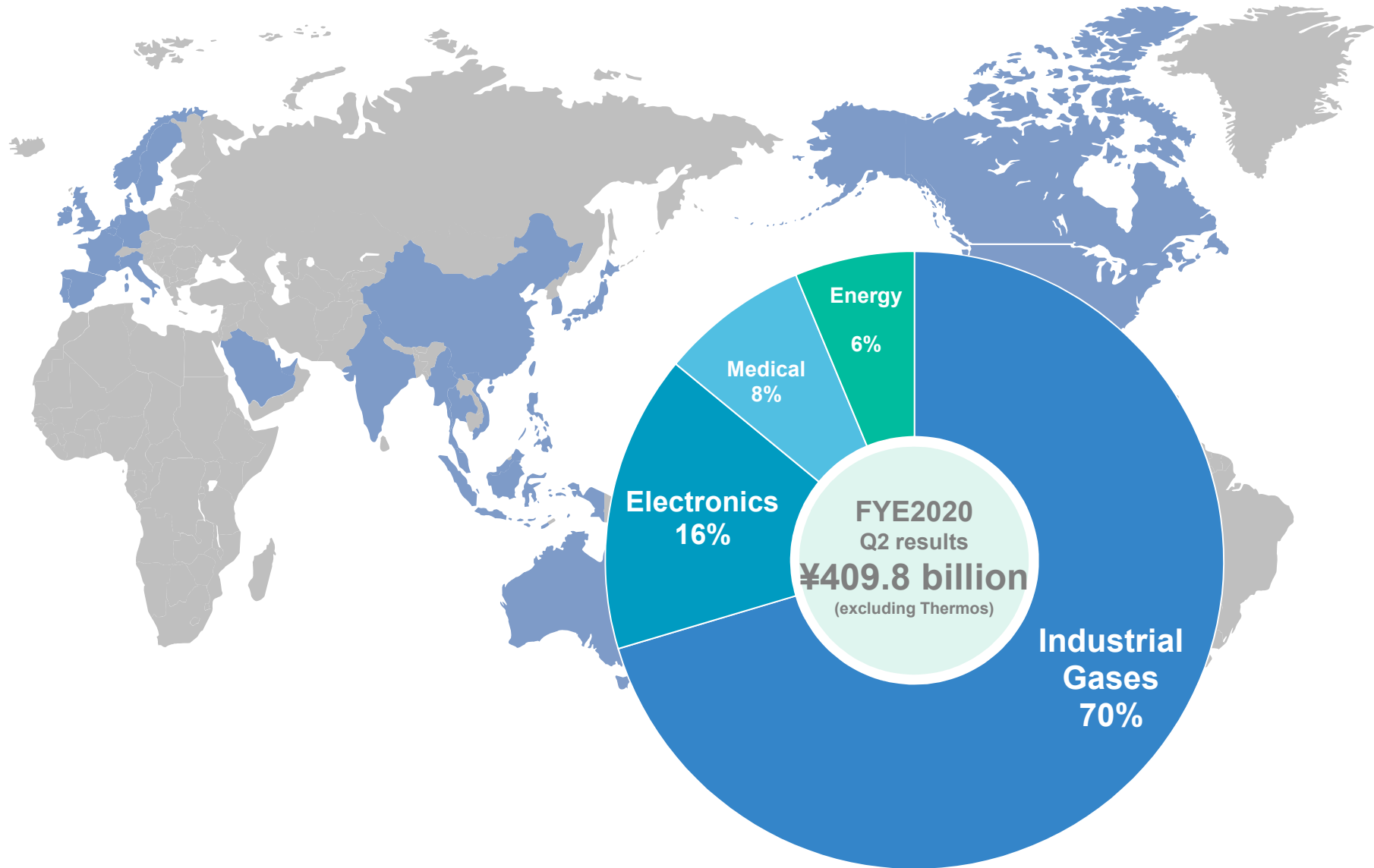
* As a result of the application of IFRS 16, the carrying amount of the TNSC Group's lease-related assets increased by ¥34.1 billion and lease liabilities simultaneously increased by ¥34.6 billion on the day starting the application of IFRS 16.

Key Performance Indicators (Consolidated)

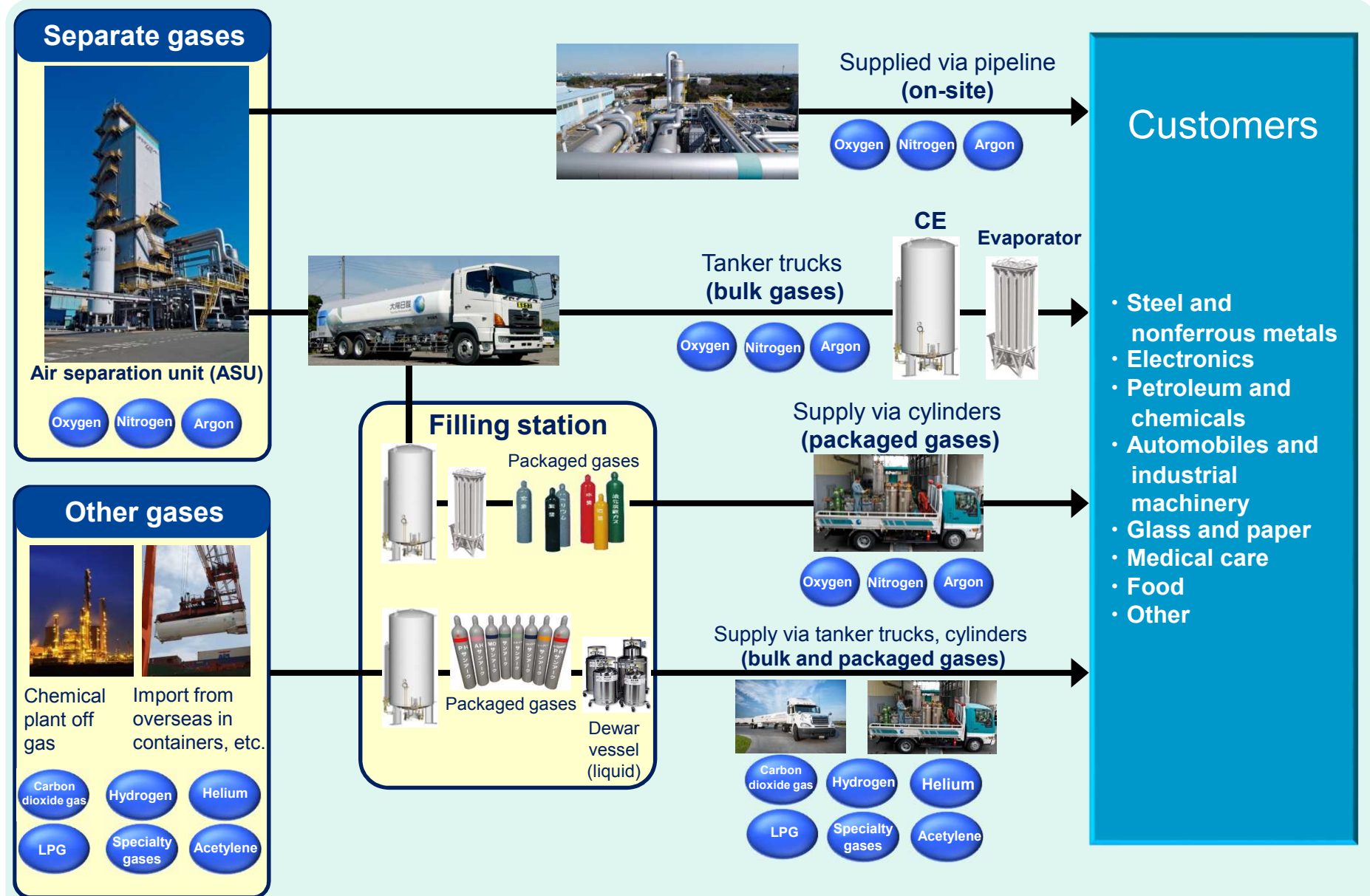
	FYE2019 Q2 results	FYE2020 Q2 results	FYE2019 Results	FYE2020 Forecast
Basic earnings per share (Yen)	40.85	64.10	95.42	131.71
Overseas sales ratio	44.4%	56.1%	47.9%	55.0%
ROE	—	—	10.4%	13.5%
ROCE	—	—	6.2%	6.7%
Annual dividends per share (Yen)	—	—	25	28
Dividend payout ratio	—	—	26.2%	21.3%
Capital expenditures (fund basis)(Millions of yen)	34,301	36,500	74,152	99,800
Investments and loans* (Millions of yen)	5,114	291	691,126	—
Depreciation and amortization (Millions of yen)	22,923	41,515	56,111	86,000
Balance of interest-bearing liabilities (Millions of yen)	343,549	1,005,398	1,005,402	1,000,400
Net interest-bearing liabilities (Millions of yen)	293,093	936,022	945,782	940,800

* Investment and loans shown above represent investment and loans under cash flows from investing activities (purchase of investment securities, purchase of shares of subsidiaries, and payments for acquisition of businesses).

Sales mix by business



TNSC's Gas Supply Structure



Disclaimer

- These materials are not intended for purposes of disclosure for securities transactions, and it is impossible to guarantee that the information contained in this presentation is accurate and complete.
- This presentation and report contain forward-looking statements (estimates and forecasts) regarding the future plans, strategies, activities and performance of Taiyo Nippon Sanso Corporation. Forward-looking statements reflect management's assumptions and beliefs based on information available as of the time of writing. Actual results reflect a variety of risk and uncertainties. These risks and uncertainties include, but are not limited to, changes in general economic and specific market conditions, currency exchange rate fluctuations, tax systems, and regulations.
- Accordingly, actual results may differ from forecasts issued at this time. With this in mind, please refrain from relying solely on these materials when making investment decisions.