

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

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TAIYO NIPPON SANSO Corporation

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1-1. Overview of business performance

(Billions of yen)	FYE2019 Q1 results Margin	FYE2020 Q1 results Margin	YoY Change	FYE2020 Forecast (Announced May 13) Margin
Revenue	158.6	210.3	+51.7 +32.6%	890.0
Core operating income	13.9	21.7	+7.8	95.0
Non-recurring profit and loss	0.8	-0.6	-1.4	7.0
Operating income	14.7 9.3%	21.0 10.0%	+6.3	102.0
Finance costs	-0.5	-2.8	-2.3	-15.5
Income before income taxes	14.2	18.2	+4.0	86.5
Income tax expenses	-4.0	-5.4	+1.4	-27.0
Net income	10.1	12.7	+2.6	59.5
(Attribution of net income)				
Net income attributable to owners of the parent	9.6 6.1%	12.2 5.8%	+2.6 +26.2%	57.0 6.4%
Net income attributable to non-controlling interests	0.4	0.5	+0.1	2.5

Impact of foreign currency translations (US\$→¥): FYE2019 Q1 rate: \$1=¥109.53 FYE2020 Q1 rate: \$1=¥109.67 (€→¥): FYE2020 Q1 rate: €1=¥122.87

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.



1-1. Overview of business performance

[Revenue]

(Billions of yen)	FYE2019 Q1 results	FYE2020 Q1 results	% Change
Gas Business in Japan	82.6	83.8	+1.4%
Gas Business in the U.S.	44.5	49.6	+11.6%
Gas Business in Europe	_	44.0	_
Gas Business in Asia and Oceania	25.1	26.1	+4.1%
Thermos Business	6.3	6.5	+4.1%
Revenue Total	158.6	210.3	+32.6%

FYE2020 Forecast (Announced May 13)
375.0
201.0
173.0
111.0
30.0
890.0

[Operating income]

(Billions of yen)	FYE2019 Q1 results	FYE2020 Q1 results	% Change
Gas Business in Japan	6.1	5.6	-7.6%
Gas Business in the U.S.	3.1	5.2	+69.7%
Gas Business in Europe	_	6.9	_
Gas Business in Asia and Oceania	3.3	2.6	-21.5%
Thermos Business	1.7	1.9	+12.6%
Eliminations or Corporate	-0.3	-0.6	_
Core operating income Total	13.9	21.7	+55.9%
Non-recurring profit and loss	0.8	-0.6	_
Operating income Total	14.7	21.0	+42.7%

FYE2020 Forecast (Announced May 13)
30.6
19.0
26.5
11.5
9.4
-2.0
95.0
7.0
102.0

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

(Billions of yen)	_	_		FYE2019 Q1 results	FYE2020 Q1 results	% Change
		Packaged	Air separation gases, other	3.6	3.6	+0.3%
		rackagea	Packaged subtotal	3.6	3.6	+0.3%
			Air separation gases	12.4	12.2	-2.0%
			Carbon dioxide	5.6	5.5	-2.4%
		Bulk	Helium	1.0	1.1	+6.8%
			Other gases	2.5	2.4	-1.2%
	Gases		Bulk subtotal	21.7	21.4	-1.6%
	On-s	On-site	Air separation gases	18.2	18.1	-0.5%
Revenue			Other gases	1.8	1.7	-3.9%
Revenue			On-site subtotal	20.0	19.9	-0.8%
			LP gas	7.8	7.7	-0.7%
			Specialty gases	6.3	6.3	-0.9%
			Subtotal	59.6	59.0	-1.0%
			Gas-related and plant, other	14.0	15.9	+13.9%
	Equipment an	d installation,	Electronics-related	3.2	2.9	-8.2%
	otl	ner	Welding and cutting-related	5.7	5.8	+0.7%
			Subtotal	22.9	24.7	+7.5%
	Revenue Total		82.6	83.8	+1.4%	
		Segment inc	come	6.1	5.6	-7.6%

Reasons for changes in revenue

- Bulk & On-site (Air separation gases): Decline centered on key industries for steel, transport equipment
- Equipment and installation, other (Medical) : Contribution from acquisition of IMI Co., Ltd.

Reason for change in segment income

- Higher costs due to rising fuel prices
- Contribution from acquisition of IMI Co., Ltd.
- Expenses: Higher costs due to personnel expenses etc.



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

(Billions of yen)				FYE2019 Q1 results	FYE2020 Q1 results	% Change
		Packaged	Air separation gases, other	11.0	12.1	+9.9%
		rackagea	Packaged subtotal	11.0	12.1	+9.9%
			Air separation gases	8.6	9.1	+5.1%
			Carbon dioxide	5.8	6.0	+3.7%
		Bulk	Helium	1.5	1.7	+14.6%
			Other gases	2.7	2.4	-8.8%
	Gases		Bulk subtotal	18.7	19.4	+3.4%
		On-site	Air separation gases	2.0	2.3	+14.2%
Revenue			Other gases	0.3	3.3	-
			On-site subtotal	2.3	5.6	+143.1%
			LP gas	0.4	0.3	-25.2%
			Specialty gases	1.6	1.7	+3.4%
			Subtotal	34.2	39.3	+14.7%
	Equipment an	d installation	Electronics-related	1.5	1.1	-24.1%
	equipment an		Welding and cutting-related	8.7	9.2	+5.9%
			Subtotal	10.2	10.3	+1.5%
		Rev	venue Total	44.5	49.6	+11.6%
		Segment inc	come	3.1	5.2	+69.7%

^{*}Impact of foreign currency translation: Positive impacts of ¥0.06 billion on revenue and ¥0.0 billion on segment income

Reasons for changes in revenue

- Bulk: Favorable shipments centered around air separation gases
- On-site: Start of operation at a new project, contribution from acquisition of HyCO business
- Welding and cutting-related: Favorable sales to the construction and energy industries

Reason for change in segment income

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



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

(Billions of yen)	_	_		FYE2020 Q1 results
		Packaged	Air separation gases, other	8.6
		rackagea	Packaged subtotal	8.6
			Air separation gases	10.1
			Carbon dioxide	7.0
		Bulk	Helium	2.0
	Gases		Other gases	3.1
			Bulk subtotal	22.3
_		On-site	Air separation gases	5.9
Revenue			Other gases	0.9
			On-site subtotal	6.8
			Specialty gases	2.1
	'		Subtotal	40.0
	Faccionnest	d installation	Gas-related and plant, other	3.0
	equipment an	d installation, er	Welding and cutting-related	0.9
	J		Subtotal	3.9
Revenue Total			44.0	
Segment income			6.9	

- The European business acquired from Praxair, Inc. of the United States in December 2018 has been disclosed in this segment.
- The revenue increased 3.5% year on year from ¥42.5 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.



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

(Billions of yen)				FYE2019 Q1 results	FYE2020 Q1 results	% Change
		Packaged	Air separation gases, other	0.9	0.9	-6.9%
		rackagea	Packaged subtotal	0.9	0.9	-6.9%
			Air separation gases	4.7	4.2	-9.5%
			Carbon dioxide	0.4	0.4	+6.6%
		Bulk	Helium	1.0	1.4	+41.9%
	Gases		Other gases	0.8	0.7	-16.9%
	Guscs		Bulk subtotal	6.9	6.8	-2.0%
		On-site	Air separation gases	0.8	0.8	+10.6%
Revenue		on sice	On-site subtotal	0.8	0.8	+10.6%
			LP gas	3.5	3.8	+8.8%
			Specialty gases	6.8	6.5	-4.3%
			Subtotal	19.2	19.0	-0.6%
			Gas-related and plant, other	3.8	4.0	+4.8%
	Equipment an	d installation,	Electronics-related	0.9	1.8	+101.8%
	otl	ner	Welding and cutting-related	1.1	1.1	+1.7%
			Subtotal	5.9	7.0	+19.3%
	Revenue Total		25.1	26.1	+4.1%	
		Segment inc	come	3.3	2.6	-21.5%

^{*}Impact of foreign currency translation: Revenue decreased by ¥0.77billion and segment income by ¥0.13 billion

Reasons for changes in revenue

- · Bulk: Sales in Southeast Asia were firm.
- · LP gas: Favorable sales in Australia.
- Specialty gases (Mainly electronic materials gases) :
 Decline in shipments of Taiwan
- Electronics-related equipment and installation : Revenue in Taiwan increased moderately

Reason for change in segment income

- Increased cost in transport of air separation gases in Australia
- Earnings declined due to lower electronic materials gas revenue in Taiwan



1-2. Business Performance by Segment: Thermos Business

(Billions of yen)		FYE2019 Q1 results	FYE2020 Q1 results	% Change
	Japan	5.3	5.6	+5.4%
Revenue	Overseas	0.9	0.9	-3.3%
	Revenue Total	6.3	6.5	+4.1%
Segment income		1.7	1.9	+12.6%

^{*}Impact of yen appreciation on currency translations Revenue decreased by ¥0.05 billion and segment income by ¥0.02 billion

Reasons for changes in revenue

• Japan: Sales centered on vacuum insulated portable mugs were firm

Reason for change in segment income

 Overseas: Increased earnings due to higher revenue in South Korea, earnings growth at group companies accounted for by the equity-method



2-1. Full-Year Forecasts for FYE2020

(Billions of yen)	FY E2019 Results ^{Margin}	FY E2020 Forecast ^{Margin}	YoY Change % Change
Revenue	740.3	890.0	+149.7
Core operating income	65.8	95.0	+29.2
Non-recurring profit and loss	1.0	7.0	+6.0
Operating income	66.8 9.0%	102.0 11.5%	+35.2
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 Net income for the year attributable to non-controlling interests	41.2 5.6% 2.4	57.0 6.4% 2.5	+15.8 +38.0% +0.1

Assumed exchange rate for FYE2020: (US\$→¥): \$1=¥110, (EUR→¥):€1=¥125

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.



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

[Revenue]

(Billions of yen)	FYE2019 Results	FYE2020 Forecast	% Change
Gas Business in Japan	363.9	375.0	+3.0%
Gas Business in U.S.	187.3	201.0	+7.3%
Gas Business in Europe ^{*1}	55.1	173.0	+214.0%
Gas Business in Asia and Oceania	106.1	111.0	+4.6%
Thermos Business	27.8	30.0	+7.9%
Revenue Total	740.3	890.0	+20.2%

[Operating income]

(Billions of yen)	FYE2019 Results	FYE2020 Forecast	% Change
Gas Business in Japan	29.8	30.6	+2.7%
Gas Business in U.S.	15.6	19.0	+21.5%
Gas Business in Europe ^{*1}	6.5	26.5	+303.5%
Gas Business in Asia and Oceania	9.1	11.5	+25.7%
Thermos Business	9.1	9.4	+2.3%
Eliminations or Corporate ^{*2}	-4.5	-2.0	_
Core operating income Total	65.8	95.0	+44.3%
Non-recurring profit and loss	1.0	7.0	_
Operating income Total	66.8	102.0	+52.6%

^{*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 the FYE2019 results, European business acquisition-related expenses (advisory fees, etc.) of ¥2.7 billion have 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	Revenue disclosure category		Breakdown			
Gases	Gases		Industrial gases such as oxygen, nitrogen, and argon, LP gases, specialty gases			
	- assuge a		Gas filling containers (cylinders) are delivered to the customer, and the gas is supplied according to method of use			
			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			
	Other gases On-site Air separation gases		Helium gas			
			Other gases such as hydrogen			
			A gas production facility is established in an area adjacent to the customer, and the gas is constantly supplied using a directly connected pipe			
			Oxygen, nitrogen, argon			
			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			
Equipme	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			
			Construction for equipment and pipe installation toward electronics, refining equipment for removing impurities, and other equipment			
			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 Q1 results	FYE2020 Q1 results	YoY change
Core operating income	13.9	21.7	+7.8
Non-recurring profit and loss	0.8	-0.6	-1.4
Operating income	14.7	21.0	+6.3

[Non-recurring Income and Expense Items]

FYE2019 Q1 results		FYE2020 Q1 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.	0.2	
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	-0.6	

Condensed Consolidated Statements of Cash Flows

(Billions	of yen)	FYE2019 Q1 results	FYE2020 Q1 results	YoY change
	Income before income taxes	14.2	18.2	+4.0
	Depreciation and amortization	11.2	20.5	+9.3
	Changes in working capital	-2.3	-1.9	+0.4
	Others	-7.0	-2.6	+4.4
(1) Cas	(1) Cash flows from operating activities		34.1	+18.1
	Capital expenditures	-17.8	-19.6	-1.8
	Investments and loans	-0.5	-0.2	+0.3
	Others (asset sales, etc.)	3.2	0.5	-2.7
(2) Cash flows from investing activities		-15.2	-19.4	-4.2
Free cash flow (1+2)		0.8	14.7	+13.9
Net	interest-bearing liabilities	286.1	960.0	+673.9
	Adjusted net D/E ratio	-	1.60	-

Net interest-bearing liabilities: interest-bearing liabilities - cash and cash equivalents*

^{*}Under IFRS, time deposits with maturities longer than three months are not included in cash and cash equivalents. However, these time deposits are reflected in the calculation of net interest-bearing liabilities disclosed by the Company.

Adjusted net D/E ratio: (Net interest-bearing debt – equity-type debt*1) / (equity attributable to owners of parent + 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 Q1 results	YoY Change		FYE2019 Results	FYE2020 Q1 results	YoY Change
Cash and cash equivalent	S	59.6	59.4	-0.2	Interest-bearing liabilities	1,005.4	1,023.8	+18.4
Trade receivables		197.9	186.2	-11.7	Trade payables	105.9	99.2	-6.7
Inventories		66.2	70.1	+3.9	Others	223.7	223.0	-0.7
Others		23.2	27.5	+4.3	Total liabilities	1,335.1	1,346.0	+10.9
Total current as	sets	347.1	343.4	-3.7	Share capital and capital surplus, etc	429.5	440.5	+11.0
Property, plant and equip	ment*	639.3	663.5	+24.2	Other components of equity	-22.9	-42.2	-19.3
Goodwill		437.7	431.3	-6.4	Equity attributable	.0.5.5		
Intangible assets		253.8	247.8	-6.0	to owners of parent	406.6	398.3	-8.3
Others		92.9	88.1	-4.8	Non-controlling interests	29.2	29.9	+0.7
Total non-current a	ssets	1,423.8	1,430.9	+7.1	Total equity	435.8	428.3	-7.5
Total assets		1,771.0	1,774.3	+3.3	Total liabilities and equity	1,771.0	1,774.3	+3.3

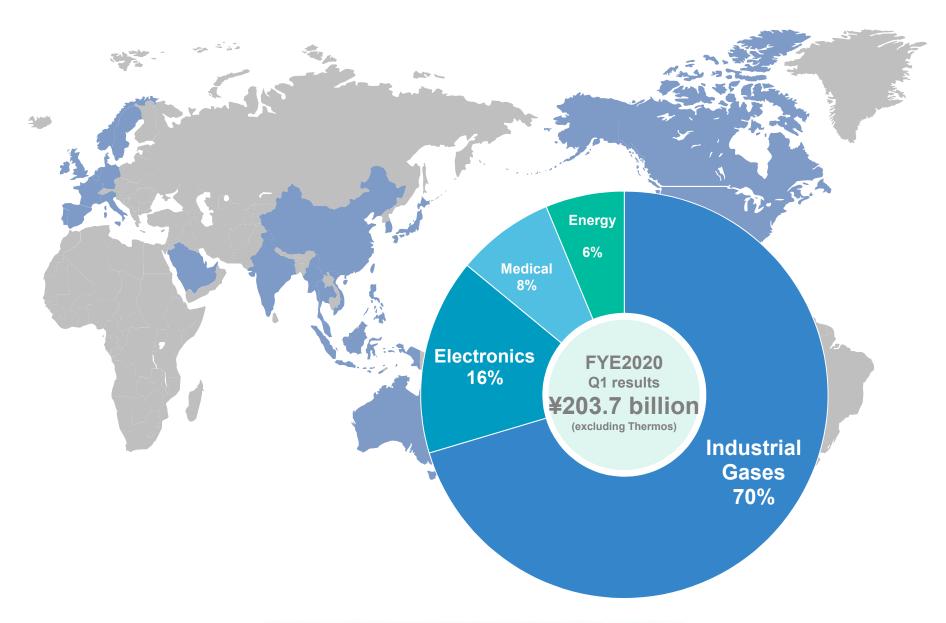
^{*} As a result of the application of IFRS 16, the carrying amount of the TNSC Group's lease-related assets increased by ¥34.1 billion and lease liabilities simultaneously increased by ¥34.6 billion on the day starting the application of IFRS 16.

Key Performance Indicators (Consolidated)

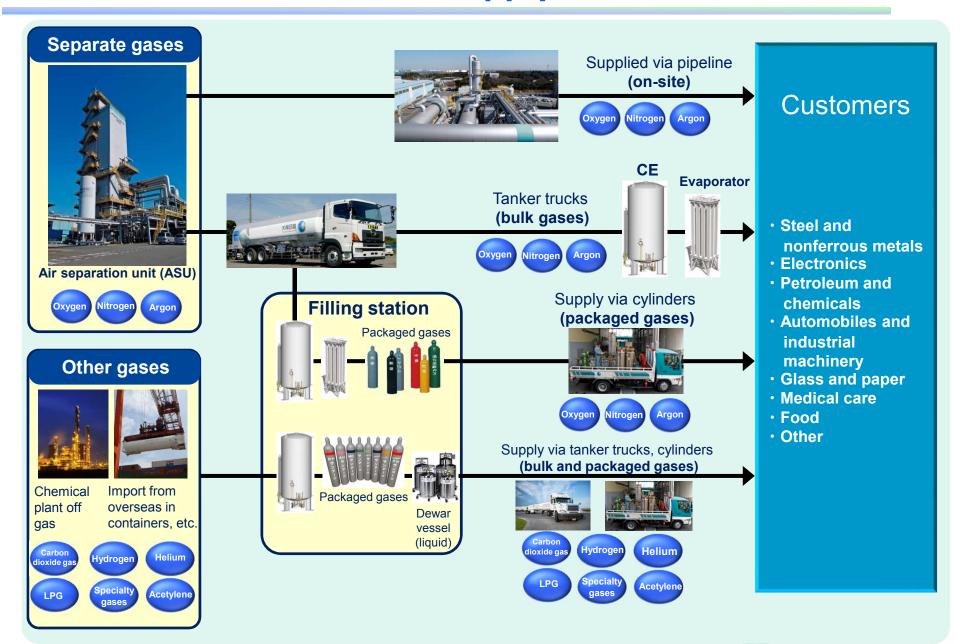
	FYE2019 Q1 results	FYE2020 Q1 results	FYE2019 Results	FYE2020 Forecast
Basic earnings per share (Yen)	22.38	28.24	95.42	131.71
Overseas sales ratio	44.5%	57.5%	47.9%	55.0%
ROE	-	-	10.4%	13.4%
ROCE	-	-	6.2%	6.6%
Annual dividends per share (Yen)	_	-	25	26
Dividend payout ratio	-	-	26.2%	19.7%
Capital expenditures (fund basis)(Millions of yen)	17,885	19,667	74,152	103,400
Investments and loans* (Millions of yen)	560	268	691,126	_
Depreciation and amortization (Millions of yen)	11,241	20,515	56,111	83,000
Balance of interest-bearing liabilities (Millions of yen)	337,562	1,023,805	1,005,402	983,700
Net interest-bearing liabilities (Millions of yen)	286,120	960,054	941,117	918,100

^{*} 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.
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