



Financial Report for 1st Half of FY2016.3 (April 2015 – September 2015)

October 2015
Osaka Gas Co., Ltd.

I. Business Results for 1st Half of FY2016.3 and Forecasts for FY2016.3

Management information is available on Osaka Gas websites.

Financial reports, annual reports and road show materials can be accessed and downloaded at the following URL.

http://www.osakagas.co.jp/ir/index_e.html

Disclaimer

Certain statements contained herein are forward-looking statements, strategies and plans, which reflect our judgment based on the information so far available. Actual results may differ materially from those discussed in such statements. Among the factors that could cause actual results to differ materially are: economic trends in Japan, sharp fluctuations in exchange rates and crude oil prices, and extraordinary weather conditions.

Note regarding gas sales volume

All gas sales volumes are indicated based on the standard heating value at 45 MJ/m³.

Note regarding consolidated gas sales volume

The fiscal year of Nabari Kintetsu Gas, toyooka Energy, and Shingu Gas ends on December 31.

Note regarding the indication of quarter

"Quarter" refers to "quarterly cumulative period," unless otherwise noted.

Thank you very much for taking time to attend this briefing on our business result report.

I would also here like to express, on behalf of the Company, my gratitude for your continued cooperation and understanding in regard to the Company's businesses.

Osaka Gas celebrated 110th year in business on October 19, 2015. We would like to express our sincere gratitude to all stakeholders including our customers and shareholders for your long-standing support.

Now, I would like to present the results for the first half of the fiscal year ending March 2016, and the forecast for the full fiscal year.

Summary of the Results for 1st Half of FY2016.3 - I

Year-on-Year Comparison

■ Overview

Consolidated net sales	Decreased by 8.1% (¥56.1 billion) from the previous year to ¥641.4 billion due to the fall in sales unit price in the Gas Business and decreased gas sales volume, etc.
Consolidated ordinary income	Increased by 60.6% (¥35.0 billion) from the previous year to ¥92.9 billion due to increased income in the Gas Business that was caused by a reduction in materials costs due to a drop in LNG prices, etc.
Consolidated net income*	Increased by 38.9% (¥18.4 billion) from the previous year to ¥65.9 billion * Profit attributable to owners of parent

■ Gas Sales Volume (by class)

Residential	Decreased by 1.4% (11 million m ³) from the previous year to 774 million m ³ due to higher air and water temperatures in early spring leading to lower demand for heating and hot water, etc.
Commercial, public and medical	Decreased by 0.9% (6 million m ³) from the previous year to 723 million m ³ due to reduced capacity utilization of customers and lower air temperatures in summer leading to lower demand for air conditioning, etc.
Industrial	Decreased by 2.1% (43 million m ³) from the previous year to 2,017 million m ³ due to the fall in capacity utilization of customers

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OSAKA GAS
GROUP

The first half of the fiscal year ending March 2016 resulted in a decrease in net sales and an increase in income.

Consolidated net sales decreased by 8.1% or 56.1 billion yen from the previous year to 641.4 billion yen due to the fall in sales unit price in the Gas Business and decreased gas sales volume.

Consolidated ordinary income increased by 60.6% or 35.0 billion yen from the previous year to 92.9 billion yen due to increased income in the Gas Business that was caused by a reduction in materials costs due to a drop in LNG prices.

Consolidated net income for the quarter increased by 38.9% or 18.4 billion yen from the previous year to 65.9 billion yen.

Gas sales volume for residential use decreased by 1.4% from the previous year to 774 million m³ due to higher air and water temperatures in early spring leading to lower demand for heating and hot water.

Gas sales volume for commercial, public and medical uses decreased by 0.9% from the previous year to 723 million m³ due to reduced capacity utilization of customers and lower air temperatures in summer leading to lower demand for air conditioning.

Gas sales volume for industrial use decreased by 2.1% from the previous year to 2,017 million m³ due to the fall in capacity utilization of customers.

Summary of the Results for 1st Half of FY2016.3 - II

Comparison with Forecasts

■ Overview

Consolidated net sales	Although gas sales decreased, consolidated net sales exceeded the forecast by 0.2% (¥1.4 billion) to ¥641.4 billion due to increased sales of affiliated companies, etc.
Consolidated ordinary income	Increased by 9.4% (¥7.9 billion) from the forecast to ¥92.9 billion due to reduced costs in the Gas Business, etc.

■ Gas Sales Volume (by class)

Residential	Decreased by 1.6% (12 million m³) from the forecast to 774 million m³ due to higher air and water temperatures in early spring leading to lower demand for heating and hot water, etc.
Commercial, public and medical	Decreased by 1.0% (7 million m³) from the forecast to 723 million m³ due to lower than expected temperatures in summer leading to lower demand for air conditioning, etc.
Industrial	Decreased by 4.8% (102 million m³) from the forecast to 2,017 million m³ due to the fall in capacity utilization of customers, etc.

■ Others

Investments for expansion, greenfield and M&A	First half investments totaled 55.1 billion yen (37% of the annual budget), with a focus on overseas upstream, mid-stream and downstream projects, acquisitions in the Material Solutions Business, and investment in domestic power plants
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I will now explain the results in relation to the forecast announced in April.

Although gas sales decreased, consolidated net sales exceeded the forecast by 0.2%, or 1.4 billion yen, due to increased sales of affiliated companies.

Consolidated ordinary income exceeded the forecast by 9.4%, or 7.9 billion yen, due to reduced costs in the Gas Business.

Gas sales volume for residential use was 1.6% below the forecast, commercial, public and medical use were 1.0% below the forecast, and industrial use was 4.8% below the forecast; for largely the same reasons as those of Year-on-Year comparison.

Investments for expansion, greenfield and M&A, totaled 55.1 billion yen in the first half, which amounts to 37% of the annual budget, with a focus on overseas upstream, mid-stream and downstream projects, acquisitions in the Material Solutions Business, and investment in domestic power plants.

Gas Sales Volume Results for 1st Half of FY2016.3

45MJ/m ³	A. FY16.3 1 st Half	B. FY15.3 1 st Half	A-B	(A-B)/B	C. FY16.3 1H target	(A-C)/C
Number of meters installed (thousand)	7,215	7,158	+57	+0.8%	7,194	+0.3%
Installation of new meters (thousand)	46	45	+1	+2.1%	40	+15.2%
Monthly gas sales volume per household (m ³ /month)	21.8	22.2	-0.4	-2.0%	22.2	-1.8%
Residential use	774	785	-11	-1.4%	786	-1.6%
Commercial, public, and medical use	723	730	-6	-0.9%	731	-1.0%
Industrial use	2,017	2,060	-43	-2.1%	2,119	-4.8%
Non-residential total	2,740	2,790	-49	-1.8%	2,849	-3.8%
Wholesale	224	221	+3	+1.3%	242	-7.3%
(non-regulated)	2,332	2,384	-52	-2.2%	2,441	-4.5%
Non-consolidated gas sales volume total (million m ³)	3,738	3,795	-57	-1.5%	3,877	-3.6%
Consolidated gas sales volume total (million m ³)	3,756	3,812	-57	-1.5%	3,895	-3.6%

This table summarizes the gas sales volumes explained with the previous slide.

The gas sales volume on consolidated basis was 1.5% lower than the previous year and 3.6% below the forecast, with 3.756 billion m³.

Results for 1st Half of FY2016.3 - I

Figures in parentheses are ratios of consolidated results to non-consolidated results

Consolidated, billion yen	A. FY16.3 1 st Half	B. FY15.3 1 st Half	A-B	(A-B)/B	C. FY16.3 1H target	(A-C)/C
Net sales	(1.25) 641.4	(1.22) 697.6	-56.1	-8.1%	640.0	+0.2%
Operating income	(1.21) 94.0	(1.31) 53.8	+40.2	+74.7%	83.5	+12.7%
Ordinary income	(1.12) 92.9	(1.25) 57.8	+35.0	+60.6%	85.0	+9.4%
Net income	(1.09) 65.9 ^{※1}	(1.12) 47.5	+18.4	+38.9%	59.0	+11.8%
SVA ^{※2}	49.9	31.5	+18.4	+58.5%	43.4	+14.9%

		A. FY16.3 1 st Half	B. FY15.3 1 st Half	A-B	C. FY16.3 1H target	A-C
Profit/ loss on fuel cost adjustment system	billion yen	51.0	7.1	+43.9	53.0	-2.0
Crude oil price	\$/bbl	58.9 ^{※3}	109.5	-50.7	60.0	-1.2
Exchange rate	yen/\$	121.9	103.0	+18.9	120.0	+1.9
Number of subsidiaries		147	147	±0	---	---

*1 Profit attributable to owners of parent

*2 SVA (Shareholders' value added) = NOPAT – Invested capital × WACC

*3 Average of preliminary monthly data up to September.

This table summarizes the other results for the first half of the fiscal year ending March 2016.

Results for 1st Half of FY2016.3 – II

Consolidated, billion yen	A. FY16.3 1H end	FY15.3 1H end	B. Year end	A-B	Remarks
Total assets	1,849.9	1,677.5	1,862.2	-12.2	
Net worth	939.3	832.8	888.4	+50.8	Increase in retained earnings, etc.
Interest-bearing debt	593.6	568.3	633.9	-40.3	Decrease in current liabilities
Number of employees	21,486	21,395	20,982	+504	
Equity ratio	50.8%	49.6%	47.7%	+3.1%	
D/E ratio	0.63	0.68	0.71	-0.08	

	A. FY16.3 1H	B. FY15.3 1H	A-B	Remarks
Capital expenditure	51.4	55.8	-4.4	Decrease in investments to overseas upstream business
Depreciation	42.2	42.8	-0.6	
Free cash flow	130.5	36.8	+93.7	Decrease in inventories
ROA	3.6%	2.8%	+0.7%	
ROE	7.2%	5.8%	+1.4%	
EPS (yen)	31.7	22.8	+8.9	Increase in gross margin of gas sales
BPS (yen)	451.5	400.2	+51.2	Increase in fixed assets, etc.

FCF = CF from operating activities - (OP after tax + depreciation and other non-cash expenses) - capital expenditure

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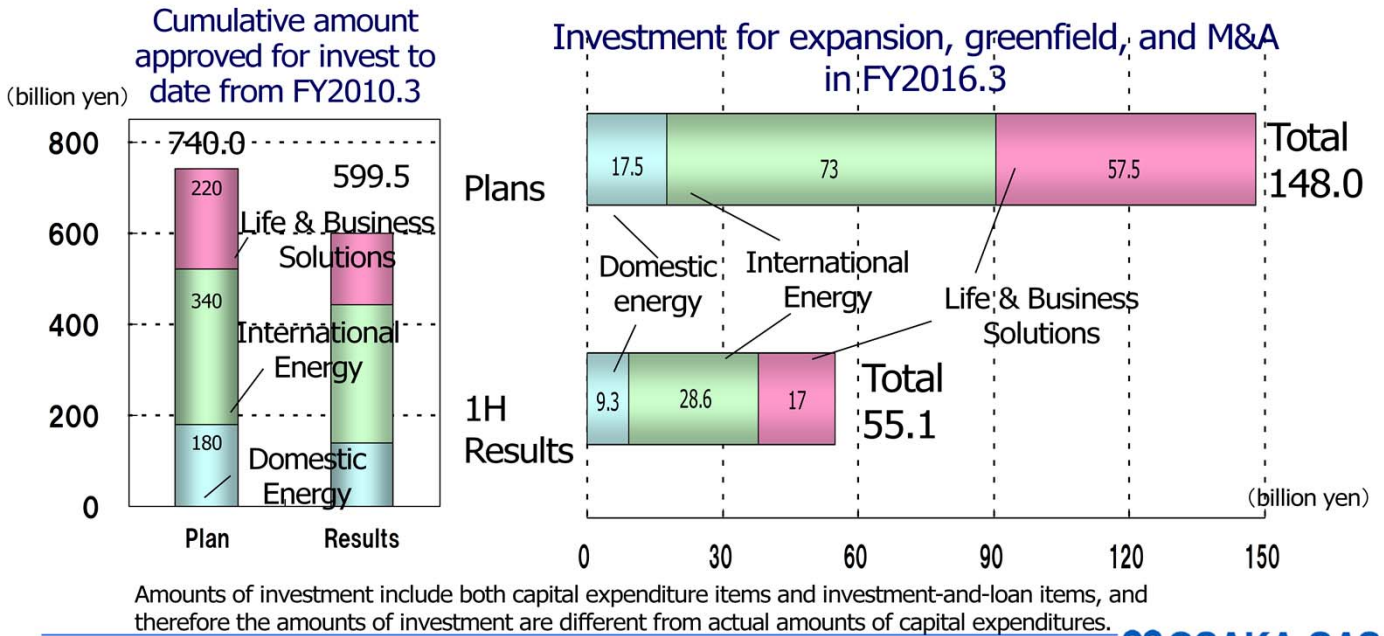
This slide shows the results of assets, liability, and primary financial indicators.

Capital expenditure decreased by 4.4 billion yen from the previous year to 51.4 billion yen due to the decrease in investment to overseas upstream business.

ROA and ROE increased up from the previous year to 3.6% and 7.2%, respectively.

Results of Investment for Expansion, Greenfield, and M&A in 1st Half of FY2016.3

- Total investment in 1st half of FY2016.3 were **¥55.1 billion**. Mainly for overseas upstream and downstream businesses, the M&A in advanced material businesses, power plant in domestic energy businesses.
- Cumulative amount approved for investment from FY2010.3 onwards are **¥599.5 billion**. (81% of the amount projected for the period between FY2010.3 and FY2017.3).



Let me now explain the progress of the investment plan for expansion, greenfield, and M&A.

Investments made in the first half of the fiscal year amount to 55.1 billion yen. We have so far allocated 599.5 billion yen of the budget in six and half years since the start of the mid-term and long-term management plan in 2009, which accounts for 81% of the plan.

We will further make investments for our future business growth.

Summary of Modifications to Forecasts for FY 2016.3

			A. Revised Forecasts	B. Initial Forecasts	A-B	Remarks
Assumed factors for 2 nd Half	Crude oil price	\$/bbl	55.0	70.0	-15.0	
	Exchange rate	yen/\$	125	120	+5	
Non-consolidated gas sales volume (45MJ/m ³)	Residential use		(1,394) 2,168	(1,416) 2,202	(-22) -34	Considering customer's action for energy saving
	Commercial, industrial, and other use		(3,065) 6,029	(3,134) 6,225	(-69) -195	Considering decrease in customers' facilities utilization
P/L (billion yen)	Consolidated net sales		1,358.5	1,368.5	-10.0	
	Gross margin of gas sales		375.0	354.0	+21.0	Increase in a time-lag profit
	Profit of other sales		27.1	25.5	+1.6	Increase in incidental profit
	Operating expenses, labor costs, and depreciation		303.1	305.5	-2.4	Decrease in operating expenses
	Profit of subsidiaries		39.5	39.5	±0.0	No change to initial forecasts
	Consolidated operating income		138.5	113.5	+25.0	
	Consolidated non-operating income / expenses		-8.5	-3.5	-5.0	Decrease in equity in earnings of affiliates
Consolidated ordinary income		130.0	110.0	+20.0		

Gas sales volume figures in parentheses in the upper row are figures for the 2nd half of FY2016.3

Let me now explain the modified forecasts for the fiscal year ending March 2016.

Considering forward price and the forecasts of thinktanks, the forecasts for the second half are based on our latest assumptions of the crude oil price and forex rate, which are 55 US dollars per barrel and 125 yen to the US dollar, respectively.

At residential customers, the forecast of gas sales volume was lowered by 34 million m³ from the previous forecasts due to consider customer's action for energy saving. And at commercial and industrial customers, the forecast was lowered by 195 million m³ from the previous forecast as the downward trend of the facility utilization is expected to continue throughout the rest of the fiscal year.

Consolidated ordinary income is expected to increase by 20 billion yen from previous forecasts, since gas sales gross margin would increase due to increase in time-lag profit and decrease in operating expenses although gas sales volumes are expected to drop.

Gas Sales Volume Forecasts for FY2016.3

45MJ/m ³	A. FY16.3 Forecasts	B. FY15.3 Results	A-B	(A-B)/B
Number of meters installed (thousand)	7,217	7,196	+22	+0.3%
Installation of new meters (thousand)	107	107	+0	+0.5%
Monthly gas sales volume per household (m ³ /month)	30.6	30.9	-0.4	-1.2%
Residential use	2,168	2,186	-18	-0.8%
Commercial, public, and medical use	1,436	1,465	-29	-2.0%
Industrial use	4,121	4,133	-13	-0.3%
Commercial and industrial use	5,557	5,599	-42	-0.7%
Wholesale	472	474	-1	-0.3%
(Non-regulated included)	(4,724)	(4,755)	(-31)	(-0.7%)
Non-consolidated gas sales volume (million m ³)	8,197	8,259	-61	-0.7%
Consolidated gas sales volume (million m ³)	8,230	8,290	-61	-0.7%

This slide shows the gas sales volume forecast for the fiscal year ending March 2016 in comparison with the previous year.

Forecasts for FY2016.3 - I

Figures in parentheses are ratios of consolidated results to non-consolidated results

Consolidated, billion yen	A. FY16.3 Forecasts	B. FY15.3 Results	A-B	(A-B)/B
Net sales	(1.29) 1,358.5	(1.22) 1,528.1	-169.6	-11.1%
Operating income	(1.40) 138.5	(1.31) 105.0	+33.4	+31.8%
Ordinary income	(1.25) 130.0	(1.23) 108.1	+21.8	+20.2%
Net income	(1.17) 87.5 ^{※1}	(1.09) 76.7	+10.7	+14.1%
SVA ^{※2}	54.5	42.9	+11.5	+27.0%

		A. FY16.3 Forecasts	B. FY15.3 Results	A-B
Profit/loss on fuel cost adjustment system	billion yen	64.5	12.3	+52.2
Crude oil price ^{※3}	\$/bbl	56.9	90.4	-33.4
Exchange rate	yen/\$	123.4	109.8	+13.7

*1 Profit attributable to owners of parent

*2 SVA (Shareholders' value added) = NOPAT – Invested capital × WACC

*3 For the period from October 2015 to March 2016, it is assumed that the crude oil price is 55 \$/bbl, and the exchange rate is ¥125/\$.

This slide shows the profit and loss forecasts for the whole year in comparison with the previous year.

Net sales are expected to be 1.3585 trillion yen, up 11.1%.

As for profits, operating income is expected to increase by 31.8% to 138.5 billion yen, and ordinary income to increase by 20.2% to 130.0 billion yen.

Forecasts for FY2016.3 - II

Consolidated, billion yen	A. FY16.3 end Forecasts	B. FY15.3 end Results	A-B
Total assets	1,878.0	1,862.2	+15.7
Net worth	950.5	888.4	+62.0
Interest-bearing debt	620.6	633.9	-13.3
Number of employees	21,901	20,982	+919
Equity ratio	50.6%	47.7%	+2.9%
D/E ratio	0.65	0.71	-0.06
	A. FY16.3 Forecasts	B. FY15.3 Results	A-B
Capital expenditure	125.3	119.3	+5.9
Depreciation	84.5	87.7	-3.2
Free cash flow	151.9	112.2	+39.7
ROA	4.7%	4.3%	+0.3%
ROE	9.5%	9.1%	+0.4%
EPS (yen)	42.1	36.9	+5.2
BPS (yen)	456.8	427.0	+29.8

FCF = CF from operating activities - (OP after tax + depreciation and other non-cash expenses) - capital expenditure

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Lastly, here is the summary of the forecasts for assets, liability, and primary financial indicators.

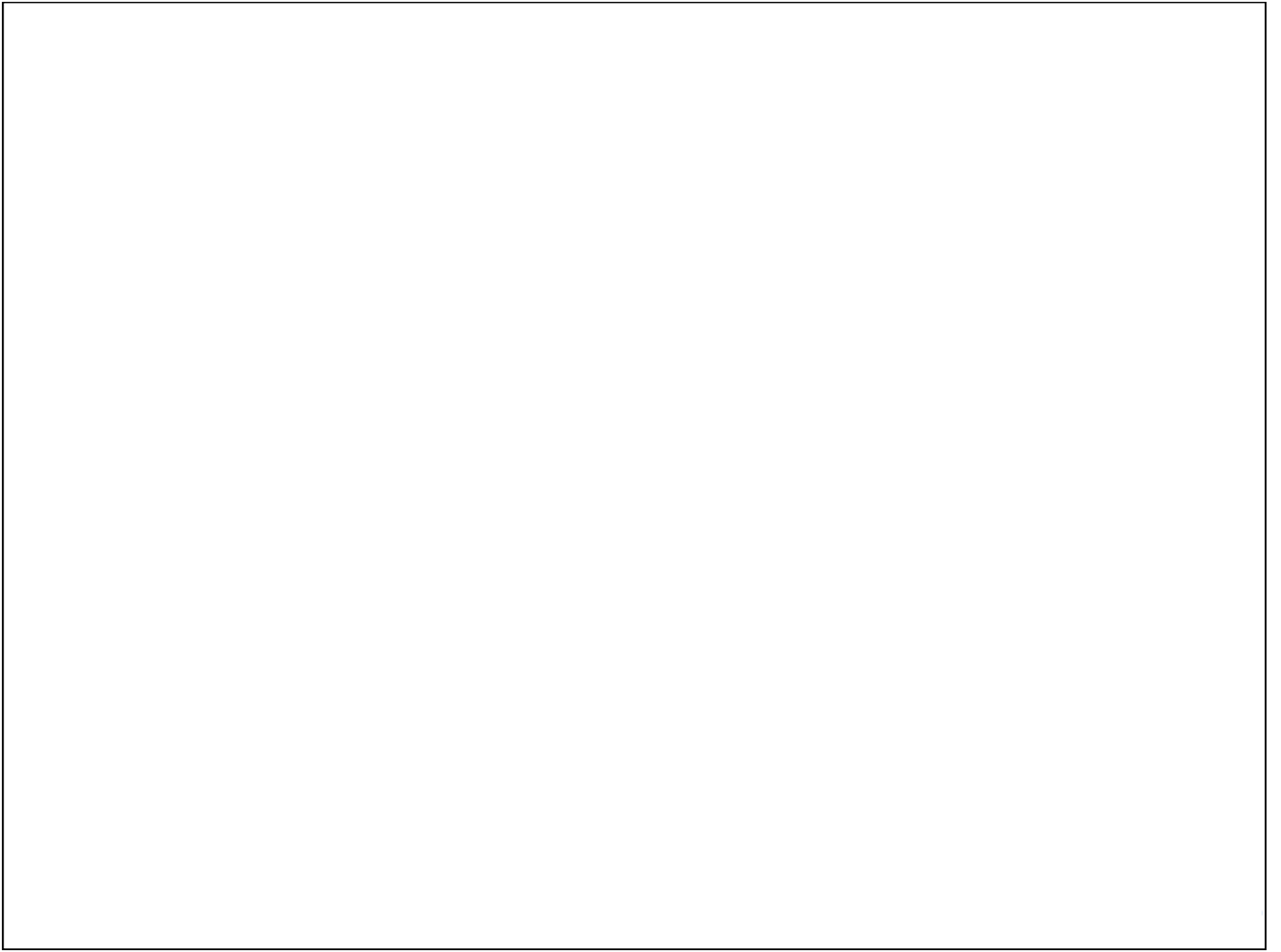
ROA and ROE for the entire year are expected to be 4.7% and 9.5%, respectively.

For the detailed gap analysis and breakdown by segment, please refer to the handouts.

In preparation for full liberalization of electricity market from April 2016, Osaka Gas filed an application to participate in the electricity retail business to the government and successfully finalized registration recently. By participating in electricity retail business, we will strive to evolve into a comprehensive energy business and to keep contributing to comfortable lives and business development of our customers. We appreciate your continued support.

This concludes my presentation.
Thank you for your kind attention.

II. Facts and Figures



Latest Topics I

■ Establishment of an Energy Service Joint Venture in Thailand with PTT

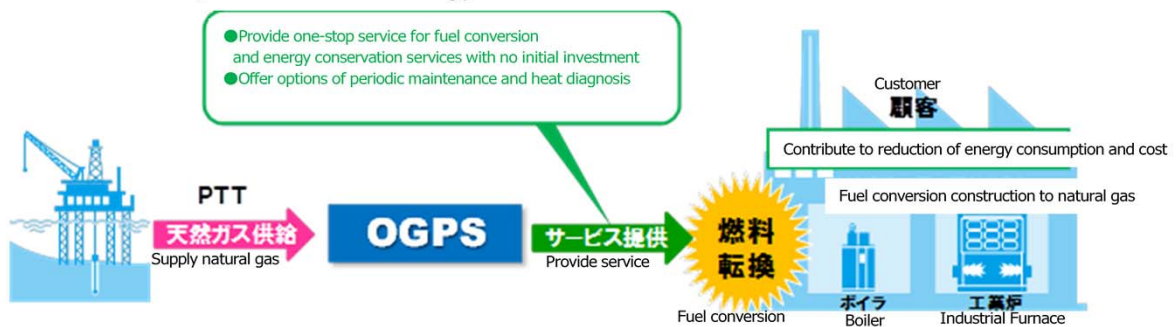
Company name	OGP Energy Solution Co., Ltd. (Planned)
Establishment date	November 2015
Stake	Osaka Gas (Thailand): 60%, PTT Retail Business*: 40%
Business description	Conducting fuel conversion energy services and energy-related operations for industrial customers in the Kingdom of Thailand



* Subsidiary of PTT Public Company Limited, which is involved with the entire natural gas supply line, from import through to retail, and is the largest corporate group in the Kingdom of Thailand (sales of approx. ¥9.5 trillion in FY 2014)

■ Business overview

This is a scheme to provide a one-stop service for natural gas sales contracts, facility design, equipment leasing and maintenance, which are all necessary when a customer is adopting a new fuel source, and to receive energy service fees in return.



Latest Topics II

■ Wind power plant construction (Inami, Hidaka-gun, Wakayama prefecture)

Gas and Power Co., Ltd.*1 made Inami Wind Power Generation Co., Ltd.*2 a subsidiary by acquiring newly issued shares

*1: 100% subsidiary of Osaka Gas Co., Ltd.

*2: 100% subsidiary of Mitsui Engineering & Shipbuilding Co., Ltd.

Hirogawa Myojin-yama Wind Power Plant
Yura Wind Power Plant

■ Power plant overview

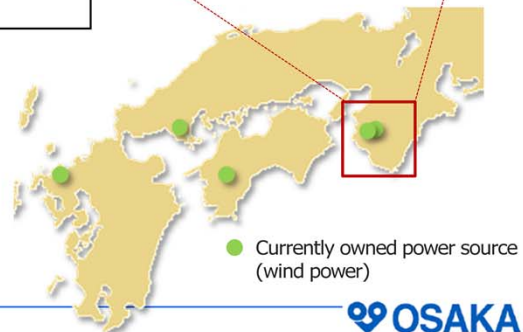
Company name	Inami Wind Power Generation Co., Ltd.
Establishment date	February 2015
Capital	¥495 million
Stake	Gas and Power Co., Ltd.: 95%, Mitsui Engineering & Shipbuilding Co., Ltd.: 5%
Generating capacity	26,000 kW (2,000 kW x 13 generators)
Commencement of operation	June 2018 (Planned)



■ Currently owned wind power plants

- Hayama Wind Farm Power Plant (Kochi prefecture)
- Hirogawa Myojin-yama Wind Power Plant (Wakayama prefecture)
- Yura Wind Power Plant (Wakayama prefecture)
- Hizen Wind Power Plant (Saga prefecture)
- Hirao Wind Power Plant (Yamaguchi prefecture)

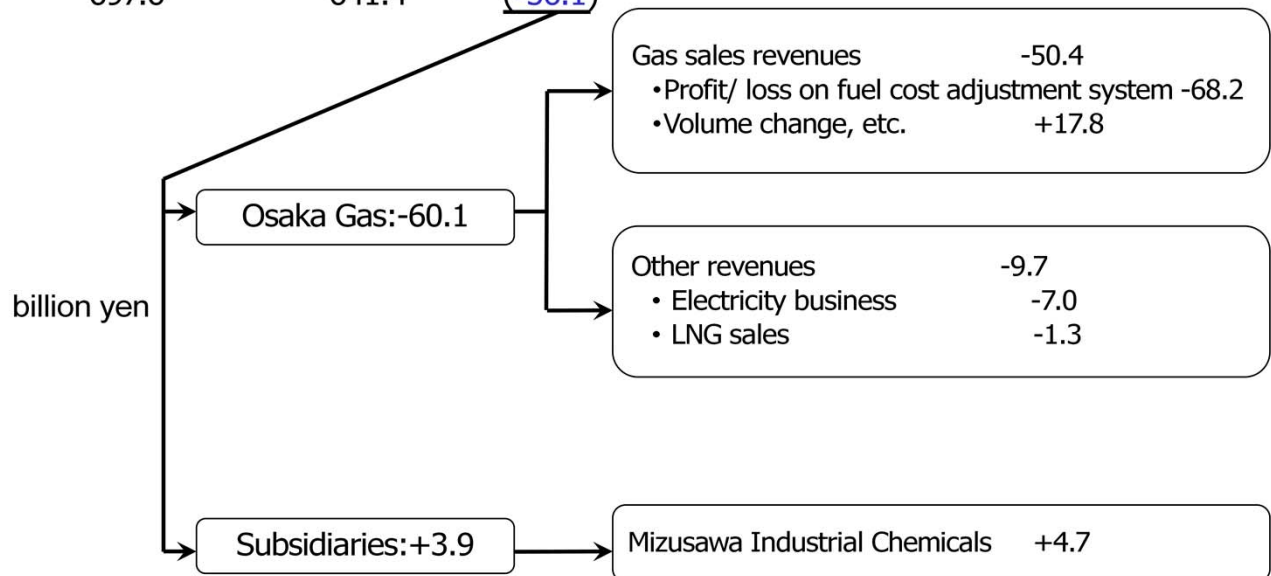
The Osaka Gas Group is working to reduce environmental impact through the Renewable Energy Business.



Sales Variance for 1st Half of FY2016.3 (Year-on-Year)

FY15.3 1st Half → FY16.3 1st Half (differences)

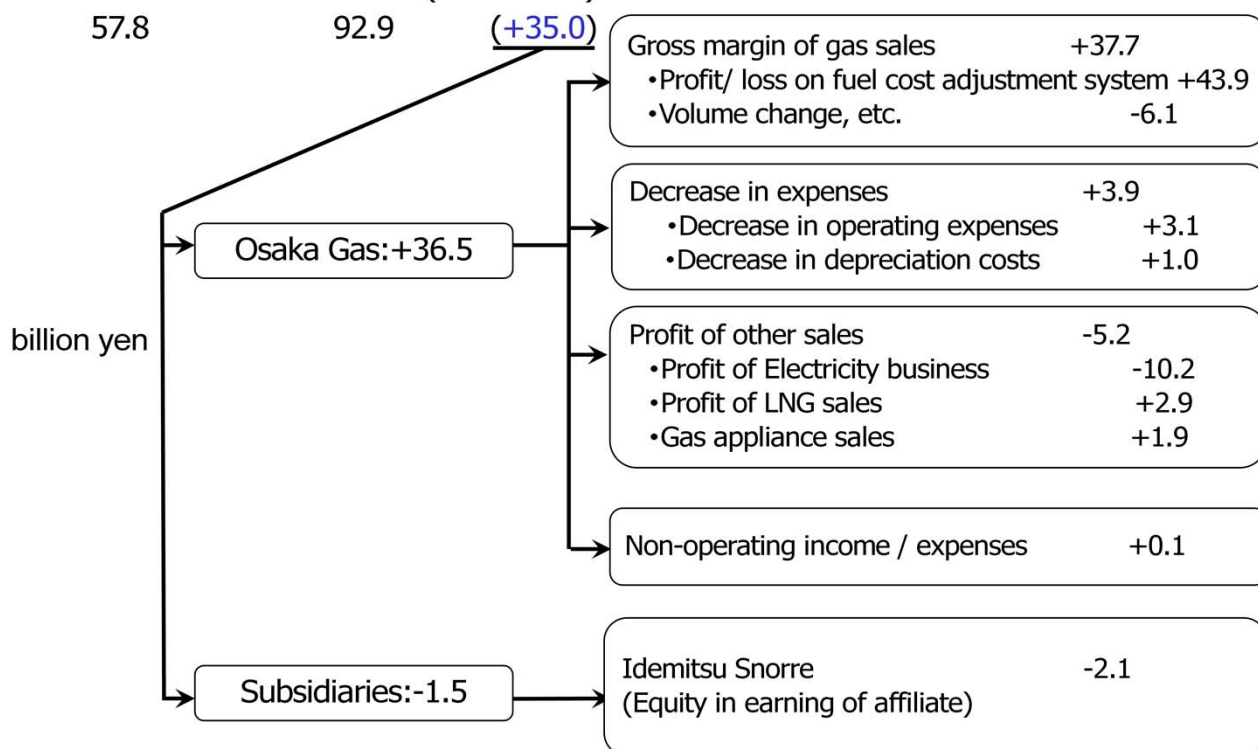
697.6 641.4 (-56.1)



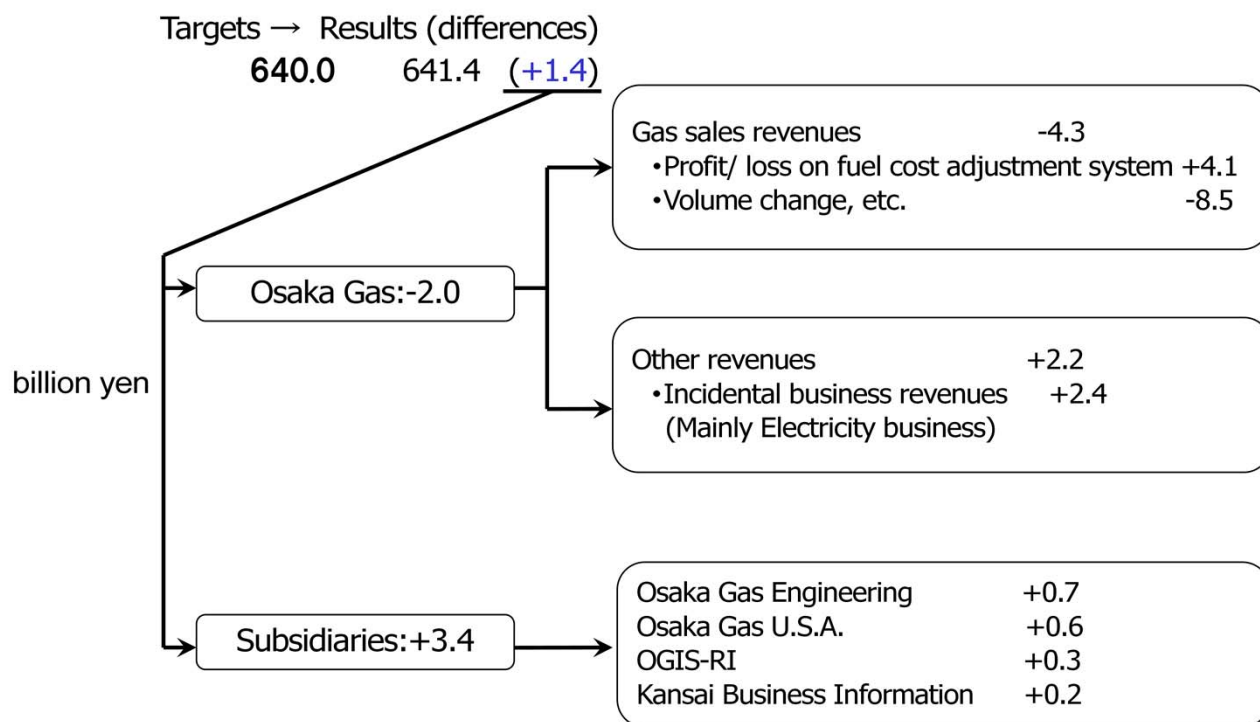
Ordinary Income Variance for 1st Half of FY2016.3 (Year-on-Year)

FY15.3 1st Half → FY16.3 1st Half (differences)

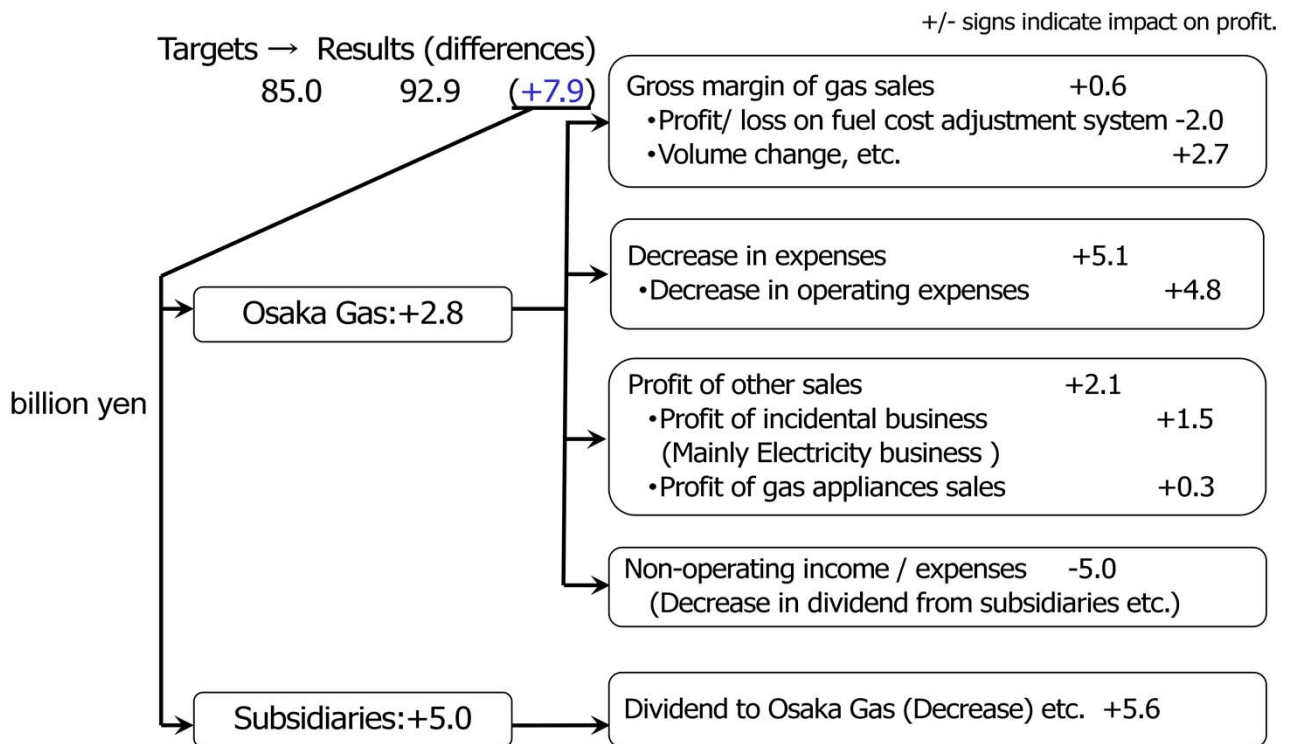
+/- signs indicate impact on profit.



Sales Variance for 1st Half of FY2016.3 (with targets)



Ordinary Income Variance for 1st Half of FY2016.3 (with targets)

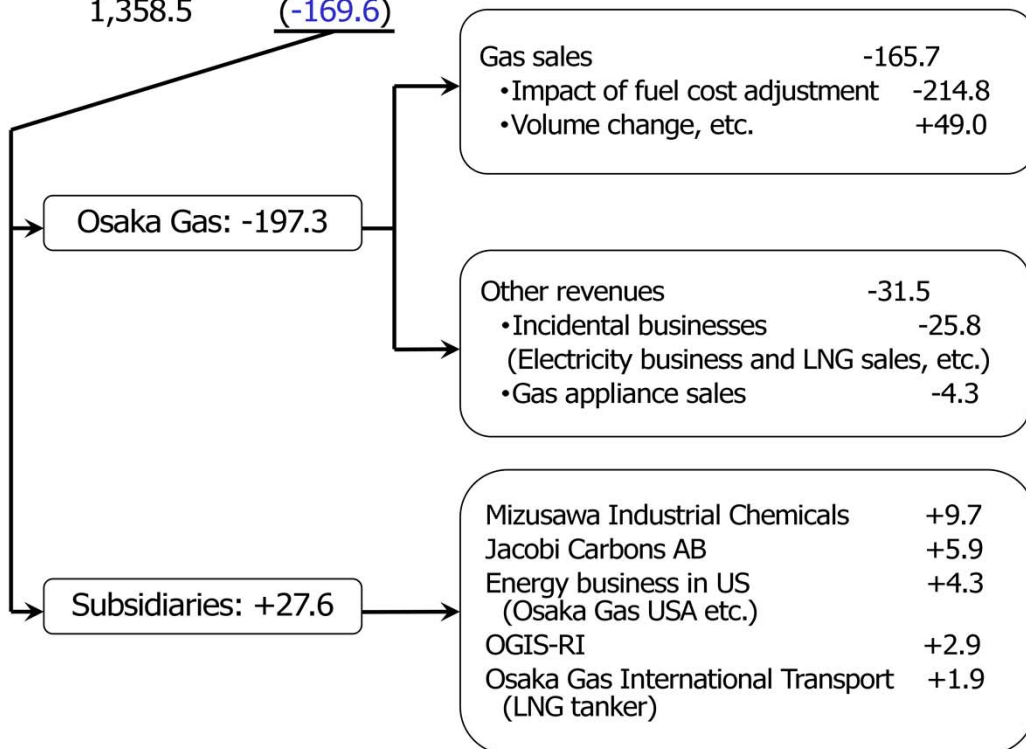


Sales variance for FY2016.3 (Year-on-Year)

FY15.3 results → FY16.3 forecasts (differences)

1,528.1 1,358.5 (-169.6)

(billion yen)



Ordinary income variance for FY2016.3 (Year-on-Year)

+/- signs indicate impact on profit.

FY15.3 results → FY16.3 forecasts (differences)

108.1

130.0

(+21.8)

(billion yen)

Osaka Gas: +15.7

Subsidiaries: +6.0

Gross margin of gas sales +31.7
 • Profit/loss on fuel cost adjustment system +52.2
 • Volume change, etc. -20.4

Increase in costs -0.7
 • Increase in operating expenses -0.6

Profit of other sales -12.2
 • Profit of incidental business (Mainly Electricity business) -16.1
 • Gas appliance sales profit +4.9

Non-operating income and expenses +3.0

Energy business in US +7.2
 (Mainly Freeport Project)

Results for FY2016.3 by Segment

billion yen	Net sales		Operating income + Equity in earnings of affiliates		Remarks
	FY16.3 1 st Half	FY15.3 1 st Half	FY16.3 1 st Half	FY15.3 1 st Half	
Gas	458.6	510.3	64.8	21.2	Net sales: Decrease in gas sales volume and gas sales unit price Profit: Increase in time-lag profit on fuel cost adjustment system
LPG, electricity, and other energy	103.8	119.4	16.9	25.7	Net sales / Profit: Mainly decrease in electricity business, etc. Profit of electricity business (*) FY15.3 1H: 20.2, FY16.3 1H: 10.0
International energy	10.7	6.5	3.6	4.9	Net sales: Increase in Energy business in US etc. Profit: Mainly decrease in upstream business due to drop the oil price
Life & Business Solutions	100.2	93.3	7.4	5.3	Net sales: Increase in Information technology and Material businesses, etc. Profit: Increase in Material businesses (Temporary expenses in previous year)
Adjustments	-32.1	-32.0	0.7	1.2	
Consolidated	641.4	697.6	93.7	58.6	

(*) Profit from electricity business represents operating income earned by Osaka Gas's related electricity business.

Forecasts for FY2016.3 by Segment

billion yen	Net sales		Operating income + Equity in earnings of affiliates		Remarks
	FY16.3 forecasts	FY15.3 results (*)	FY16.3 forecasts	FY15.3 results (*)	
Gas	963.9	1,136.9	85.0	50.2	Net sales: Decrease in gas sales volume and gas sales unit price Profit: Increase in time-lag profit on fuel cost adjustment system
LPG, electricity, and other energy	213.1	243.7	26.0	41.6	Net sales: Decrease in electricity and LNG sales business Profit: Mainly decrease in electricity business
International energy	20.3	13.7	4.5	1.2	Net sales / Profit: Increase in Energy business in US etc.
Life & Business Solutions	229.1	207.5	21.0	16.5	Net sales / Profit: Increase in Material businesses (Temporary expenses in previous year)
Adjustments	-67.9	-73.7	2.2	2.2	
Consolidated	1,358.5	1,528.1	138.7	112.0	

Residential Gas Sales

FY2016.3 1st Half Results

	YoY change	Remarks
Number of customers	+0.6%	
Influence of temperature	-1.4%	Average annual temperature: 23.2 degrees Celsius (Year-on-Year change: +0.2 degrees Celsius)
Others	-0.6%	Improved efficiency of gas appliance, impact of further energy conservation by customers etc.
Total	-1.4%	



FY2016.3 Forecasts

- Results in the 1st half fell below the targets by 12 million m³
- Sales for the 2nd half is expected to fall below the initial forecasts by 22 million m³
- Full-year result is expected to fall below the initial forecasts by 34 million m³, which is a decrease by 18 million m³ from the previous year to 2,168 million m³

Commercial, Public, and Medical Gas Sales

FY2016.3 1st Half Results

	YoY change	Remarks
Demand development	+2.9%	Marketing efforts to develop new demand for air conditioning
Influence of temperature, etc.	-0.3%	Decrease in demand for air conditioning due to cooler weather in summer
Individual factors	-1.4%	Decrease in capacity of customers' facilities due to special factors
Others	-2.1%	Improved efficiency of gas appliance, impact of further energy conservation by customers etc.
Total	-0.9%	

FY2016.3 Forecasts

- Results in the 1st half fell below the targets by 7 million m³
- Sales for the 2nd half is expected to fall below the initial forecasts by 3 million m³
- Full-year result is expected to fall below the initial forecasts by 10 million m³, which is a decrease of 29 million m³ from the previous year to 1,436 million m³

Industrial Gas Sales

FY2016.3 1st Half Results

	YoY change	Remarks
Demand development	+1.9%	Shift to gas from other fuels, etc.
Increase/decrease of operating rates	-2.0%	Decrease in capacity of customers' facilities
Individual factors	-0.4%	Decrease due to special factors
Others	-1.6%	
Total	-2.1%	

Breakdown by sector (45MJ, million m³)

	Volume	YoY change
Machinery	157	98.2%
Metal	474	94.1%
Glass	147	96.0%
Chemical	616	101.2%
Food	258	100.5%

FY2016.3 Forecasts



- Results in the 1st half fell below the targets by 102 million m³.
- Full-year result is expected to fall below the initial forecasts by 159 million m³, which is a decrease of 13 million m³ from the previous year to 4,121 million m³.

Monthly Gas Sales

Year-on-Year Change 2015/2014 (%)

	Apr.	May	Jun.	Jul.	Aug.	Sep.	1 st Half Total
Residential use	99.7	93.4	96.0	107.4	101.8	97.6	98.6
Commercial, public, and medical use	100.8	107.9	94.6	96.6	102.4	94.3	99.1
Industrial use	98.2	93.2	96.8	100.0	102.4	96.7	97.9
By sector							
Machinery	97.2	93.5	103.5	97.9	103.2	93.5	98.2
Metal	93.6	91.4	92.7	95.9	97.8	93.4	94.1
Glass	92.4	89.7	97.6	97.4	100.2	98.8	96.0
Chemical	100.9	93.6	101.1	103.8	106.5	101.6	101.2
Food	99.6	97.6	100.0	103.3	103.5	99.0	100.5
Wholesale	103.2	97.0	101.9	101.5	108.2	96.5	101.3
Total	99.4	95.6	96.6	100.5	102.7	96.2	98.5

Risk Factors for Annual Earnings Results Forecast

- **Atmospheric and water temperatures**
 - A 1 degree Celsius change in atmospheric and water temperatures will affect the residential gas sales volume: increase/decrease of approx. 5% in spring and autumn, approx. 6% in summer, and approx. 4% in winter.
- **Crude oil prices**
 - LNG prices are linked to crude oil prices. A +\$1/bbl change in crude oil prices will have an effect of approx. -1.2 billion yen on ordinary income since the 3rd quarter (Oct. thru. Mar.) of this fiscal year.
- **Foreign exchange rate**
 - LNG prices are affected by fluctuations in the US\$/JPY exchange rate. A +1 yen fluctuation in the US\$/JPY exchange rate will have an effect of approx. -0.8 billion yen on ordinary income since the 3rd quarter (Oct. thru. Mar.) of this fiscal year.
- **Materials costs**
 - Although the fuel cost adjustment system allows us to reflect changes in fuel costs in gas rates in the medium- and long-term, an increase in fuel costs is likely to affect the business results due to a time lag in reflecting cost fluctuations, and also depends on the composition of fuel suppliers.
- **Interest rate**
 - A 1% change in the interest rate will have an effect of approx. 500 million yen on annual consolidated non-operating expenses.