

**FY2017 2Q Financial Results  
ended Sep. 30, 2017**



**October 27, 2017**

---

# **1. FY2017 2Q Consolidated Financial Results**

## **ended Sep. 30, 2017**

---



# FY2017 2Q Consolidated Financial Results (Apr. 1, 2017 – Sep. 30, 2017) <vs. FY2016 2Q>



## Highlights: Sales Up, Profit Up

(+ - , +/- indicate impact on profit, billion yen)

<b>Net sales</b>	+82.6 :	+ City gas (+45.1: Increase in unit price due to resource cost adjustment +45.6, decrease in sales volume -2.0, etc.) + Electric power (+34.1: Increase in electricity retail sales volume, increase in unit sales price ) + Overseas (+7.5: Increase in sales from upstream projects, etc.)
<b>Operating expenses</b>	-74.6 :	- City gas (-46.1: Increase in unit price arising from economic framework assumptions, etc. -63.0, decrease in sales volume +3.2, decrease in fixed costs due to actuarial differences, etc.) - Electric power (-29.5: Increase in electricity retail sales volume, increase in fuel costs due to increase in unit price, etc.)
<b>Operating profit</b>	+8.0 :	+ Electric power (+4.6: Increase in gross margin due to increase in retail sales volume) + Overseas (+1.8: Increase in profit from upstream projects, etc.)
<b>Extraordinary profit/loss</b>	+0.3 :	+ FY2017 2Q 3.2: Gain on sale of non-current assets    FY2016 2Q 2.9: Gain on sale of investment securities

	FY2017 2Q	FY2016 2Q	Change	%	
Gas sales volume (million m <sup>3</sup> , 45MJ)	7,136	7,210	-74	-1.0%	
Electricity sales volume (million kWh)	7,007	6,172	+835	+13.5%	
(Breakdown)	Retail sales (million kWh, receiving end)	1,834	685	+1,149	+167.7%
	Other sales (million kWh)	5,173	5,487	-314	-5.7%
Net sales	790.3	707.7	+82.6	+11.7%	
Operating expenses	746.1	671.5	+74.6	+11.1%	
Operating profit	44.2	36.2	+8.0	+22.1%	
Segment profit (operating profit + equity income of subsidiaries)	44.4	37.0	+7.4	+19.9%	
Ordinary profit <sup>(1)</sup>	42.6	34.3	+8.3	+23.9%	
Extraordinary income/loss	3.2	2.9	+0.3	—	
Profit attributable to owners of parent	31.9	26.4	+5.5	+20.6%	
<i>Temperature effect<sup>(2)</sup></i>	-1.7	-4.3	+2.6	—	
<i>Sliding time lag effect (city gas, LNG sales)<sup>(3)</sup></i>	-12.4	8.8	-21.2	—	
<i>Amortization of actuarial differences<sup>(4)</sup></i>	3.8	-12.0	+15.8	—	
<i>Adjusted ordinary profit<sup>(1)-(2)+(3)+(4)</sup></i>	52.9	41.8	+11.1	+26.6%	

Economic framework	Exchange rate (¥/\$)	Crude oil price (\$/bbl)	Avg. air temp. (°C)
FY2017 2Q	111.04	51.37	21.2
FY2016 2Q	105.25(+5.79)	43.78(+7.59)	21.5(-0.3)

Pension assets	Investment yield (costs deducted)	Year-end assets (billion yen)
FY2017 2Q cumulative total	1.64%	278.0

Figures in parentheses ( ) indicate year-on-year increase/decrease.

Expected annual rate of return: 2%

# FY2017 2Q Consolidated Gas / Electricity Sales Volume <vs. FY2016 2Q>

## Gas sales volume :

**-74 mil.m<sup>3</sup> (-1.0%)**

[including temperature effect +47mil.m<sup>3</sup>, +0.7%]

■ **Residential** + 36mil.m<sup>3</sup>(+ 2.8%)

- Temperature effect + 34 mil.m<sup>3</sup>
- Number of days -9 mil.m<sup>3</sup>
- Number of customers +13 mil.m<sup>3</sup>
- Others -2 mil.m<sup>3</sup>

■ **Commercial** + 11mil.m<sup>3</sup>(+0.8%)

- Temperature effect + 10 mil.m<sup>3</sup>
- Number of days - 6 mil.m<sup>3</sup>
- Number of customers +7 mil.m<sup>3</sup>
- Others ±0 mil.m<sup>3</sup>

■ **Industrial** + 16 mil.m<sup>3</sup> (+0.4%)

- Industrial + 12 mil.m<sup>3</sup>
- Power generation + 3 mil.m<sup>3</sup>

■ **Wholesale** -137 mil.m<sup>3</sup> (-13.2%)

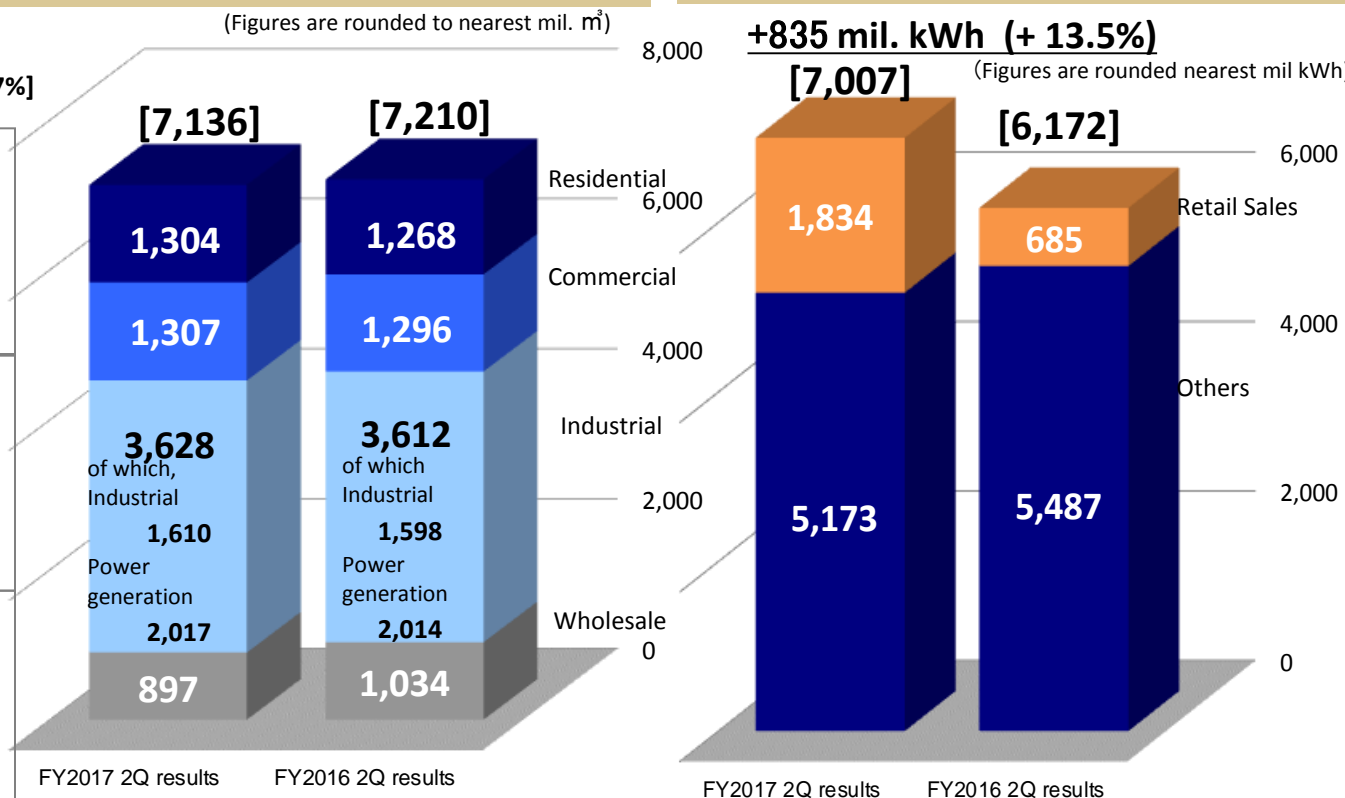
- Temperature effect +3 mil.m<sup>3</sup>
- Others - 140 mil.m<sup>3</sup>

Decrease in the number of wholesale customers, etc.

## Electricity sales volume :

**+835 mil. kWh (+ 13.5%)**

(Figures are rounded nearest mil kWh)



## Number of customers(Gas), LNG sales volume, Average temperature

	FY2017 2Q Results	FY2016 2Q Results	Change
Gas: Number of customers(meters) (10 thousands, meter)	1,158.4	1,144.8	+13.6 (+1.2%)
LNG sales volume (thousands t)	541	515	+26 (+5.2)
Average temperature (°C)	21.2	21.5	-0.3

## ■ Gas sales volume (Vision Basis)

(Unit: million m<sup>3</sup>)

	FY2017 2Q Results	FY2016 2Q Results	Change
Gas sales volume (financial accounting basis)	7,136	7,210	-74
			-1.0%
Gas volume used in-house under tolling arrangement	1,012	989	+23
			+2.4%
LNG sales volume (m <sup>3</sup> basis)	677	643	+34
			+5.2%
Total	8,825	8,842	-17
			-0.2%

# FY2017 2Q Results : Sales and Operating Profit/Loss by Business Segments <vs. FY2016 2Q >



(unit : billion yen)

	Net Sales				Segment Profit (Operating profit + Equity income/loss of subsidiary)			
	FY2017 2Q Results	FY2016 2Q Results	Change	%	FY2017 2Q Results	FY2016 2Q Results	Change	%
City Gas	507.3	462.2	45.1	9.8	42.5	43.5	-1.0	-2.2
Electric Power	99.0	64.9	34.1	52.5	6.7	2.1	4.6	212.1
Overseas business	20.5	13.0	7.5	57.5	2.6	1.4	1.2	88.7
Energy-related	211.8	205.9	5.9	2.9	5.9	7.1	-1.2	-16.6
(Engineering Solutions)	52.3	49.0	3.3	6.6	1.5	1.7	-0.2	-11.8
(LNG sales)	51.7	45.8	5.9	12.9	0.6	4.5	-3.9	-85.7
Real estate	20.7	20.2	0.5	2.5	4.2	4.3	-0.1	-0.5
Others	41.7	38.9	2.8	7.2	1.3	0.7	0.6	79.6
Adjustment	-110.9	-97.5	-13.4	—	-19.0	22.2	3.2	—
Consolidated	790.3	707.7	82.6	11.7	44.4	37.0	7.4	19.9

- Notes:
- Net sales by business segments include internal transactions.
  - “Energy-related” includes businesses in engineering solutions, liquefied petroleum gas, industrial gas, LNG sales, gas appliances sales, gas pipe installation and construction etc.
  - “Others” includes businesses in shipping, information processing service, credit and leasing, etc.
  - The “Adjustment” to operating profit is primarily companywide expenses not allocated to individual segments.

# FY2017 2Q Results: Ordinary Profit Analysis <vs. FY2016 2Q>

**FY2017**  
(2Q results)

**¥42.6bn**

**Change**  
**+¥8.3bn**  
**(+23.9%)**

**FY2016**  
(2Q results)

**¥34.3bn**

**Segment profit**  
**+¥7.4bn**  
**(+19.9%)**

**Non-operating profit/loss**  
**+¥0.9bn**  
*\*excluding equity income of subsidiaries*

**City gas**  
**-¥1.0bn**  
**(-2.2%)**

**Electric power**  
**+¥4.6bn**  
**(+212.1%)**

**Overseas**  
**+¥1.2bn**  
**(+88.7%)**

**Energy-related**  
**-¥1.2bn**  
**(-16.6%)**

**Real estate**  
**-¥0.1bn**  
**(-0.5%)**

**Others**  
**+¥0.6bn**  
**(+79.6%)**

**Consolidated adjustment, etc.**  
**+¥3.2bn**

- Decrease in gross margin: -¥13.3bn (change in sales volume +1.2 (incl. change due to temp. effect +2.6), sliding time lag effect -17.4)
- Net sales +¥45.1bn: Change in sales volume -2.0, sliding time lag effect +45.6
- Resource costs, etc. -¥58.4bn: Change in sales volume +3.2, sliding time lag effect -63.0 (exchange rate -10.8, crude oil price -54.4), decrease in inter company adjustment cost +1.4
- Decrease in fixed costs: +¥12.4bn (actuarial differences, etc. +12.7, decrease in depreciation +2.0, increase in inter company adjustment cost -1.4, etc.)

- Increase in gross margin due to increase in retail sales volume

- Increase in profit from upstream projects (commencement of Gorgon LNG sales)
- Decrease in equity in net income of affiliates -0.6: Decrease in operation due to unscheduled power plant shutdowns, etc.

- LNG sales -¥3.9bn: Decrease in profit due to sliding time lag effect -3.8
- Appliances +¥2.1bn:
  - Decrease in expenses due to decrease in provision for maintenance expenses
  - Increase in profit from appliances, etc.

- Shipping +0.8: Increase in profit due to increase in number of carriers

- Decrease in amortization of actuarial differences +3.3 etc.

- Increase in dividend income +0.8
- Foreign exchange profit/loss +0.4(+0.3←-0.1)

\*+/- indicate contributions to profit.

---

## 2. FY2017 Full Year Forecast

---



# FY2017 Forecast (Apr. 1, 2017 – Mar. 31, 2018) <vs. Previous Forecast (Released July 28)>



**Highlights: Sales Down, Profit Up on Previous Forecast (Released July 28)** (+, -, +/- indicate impact on profit, billion yen)

- The economic framework reflects final figures for 2Q and assumes an exchange rate of ¥115.0 to the dollar and crude oil price of \$55/bbl from 3Q onward per the original forecast.
- Gas sales volume reflects changes in 2Q results and is as per the previous forecast from 3Q onward.

<b>Net sales</b>	-13.0	-	City gas (-14.8: Decrease in unit price due to resource cost adjustment, etc.)
		+	Electric power (+2.6: Increase in retail sales volume, etc.)
<b>Operating expenses</b>	+17.0	+	City gas (+17.2: Decrease in unit price arising from economic framework assumptions, decrease in depreciation, etc.)
		-	Electric power (-3.5: Increase in retail sales expenses, etc.)
<b>Operating profit</b>	+4.0	+	City gas (+2.4: Decrease in depreciation, etc.)
		+	Other (+1.4: Shipping +0.7, etc.)
		-	Electric power (-0.9: Increase in retail sales expenses, etc.)

(billion yen)

	Current Forecast	Initial Forecast (Jul. 28)	Change	%	FY2016 Results	Change	%
Gas sales volume (million m <sup>3</sup> , 45 MJ)	15,347	15,326	+21	+0.1%	15,720	-373	-2.4%
Electricity sales volume (million kWh)	14,824	14,615	+209	+1.4%	12,654	+2,170	+17.1%
Net sales	1,795.0	1,808.0	-13.0	-0.7%	1,587.0	+208.0	+13.1%
Operating expenses	1,707.0	1,724.0	-17.0	-1.0%	1,528.7	+178.3	+11.7%
Operating profit	88.0	84.0	+4.0	+4.8%	58.3	+29.7	+50.8%
Segment profit (operating profit + equity income/loss of subsidiary)	89.1	86.3	+2.8	+3.2%	61.9	+27.2	+43.8%
Ordinary profit <sup>(1)</sup>	83.0	80.0	+3.0	+3.8%	55.6	+27.4	+49.0%
Extraordinary income/loss	3.4	3.2	+0.2	—	13.3	-9.9	—
Profit attributable to owners of parent	63.0	61.0	+2.0	+3.3%	53.1	+9.9	+18.6%
Temperature effect <sup>(2)</sup>	-1.7	-1.7	0.0	—	-7.4	+5.7	—
Sliding time lag effect (city gas, LNG sales) <sup>(3)</sup>	-28.8	-28.8	0.0	—	-19.9	-8.9	—
Amortization of actuarial differences <sup>(4)</sup>	7.7	7.7	0.0	—	-24.0	+31.7	—
Adjusted ordinary profit <sup>(1)-(2)+(3)+(4)</sup>	105.8	102.8	+3.0	+2.9%	106.9	-1.1	-1.0%

Economic framework	Exchange rate (¥/\$)	Crude oil price (\$/bbl)	Avg. air temp. (°C)
Current forecast*	113.02	53.19	16.0
Previous forecast	114.02(-1.00)	54.59(-1.40)	16.0(±0.0)
FY2016 result	108.38(+4.64)	47.51(+5.68)	16.3(-0.3)

Pension assets	Investment yield (costs deducted)	Discount rate		Year-end assets (billion yen)
		Annuity portion	Lump-sum portion	
FY2016	1.57%	0.389%	0.055%	277.0
FY2015	2.92%	0.236%	0.000%	281.0
FY2014	5.57%	0.829%	0.358%	281.0

\*3Q~: ¥115.00/\$、\$55.00/bbl

Figures in parentheses indicate change from current forecast.

# FY2017 Full Year Forecast ; Consolidated Gas Sales Volume / Electricity Sales Volume

## Consolidated Gas Sales Volume

VS. Previous Forecast(July 28)

**+21 mil m<sup>3</sup> (+0.1%)**

[Including temperature effect +3mil. m<sup>3</sup>,+0.0%]

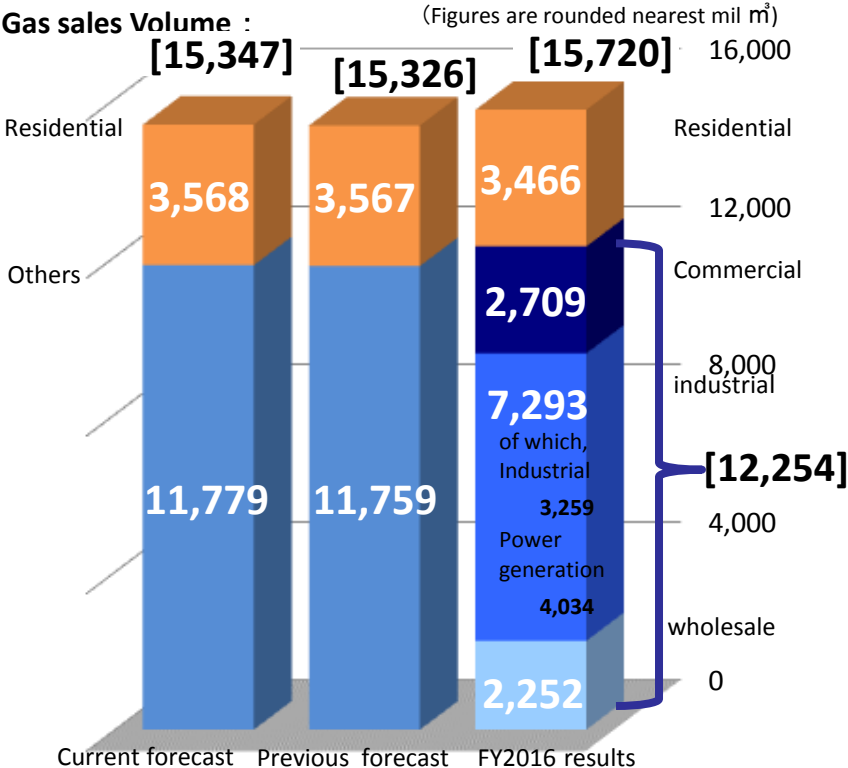
- Residential +1mil. m<sup>3</sup>(+0.0%)
- Others +20 mil. m<sup>3</sup>(+0.2%)

VS. FY2016 Results

**-373 mil m<sup>3</sup> (-2.4%)**

[Including temperature effect +98mil. m<sup>3</sup>,+0.6%]

- Residential +102 mil. m<sup>3</sup>(+2.9%)
- Others -475 mil. m<sup>3</sup> (-3.9%)

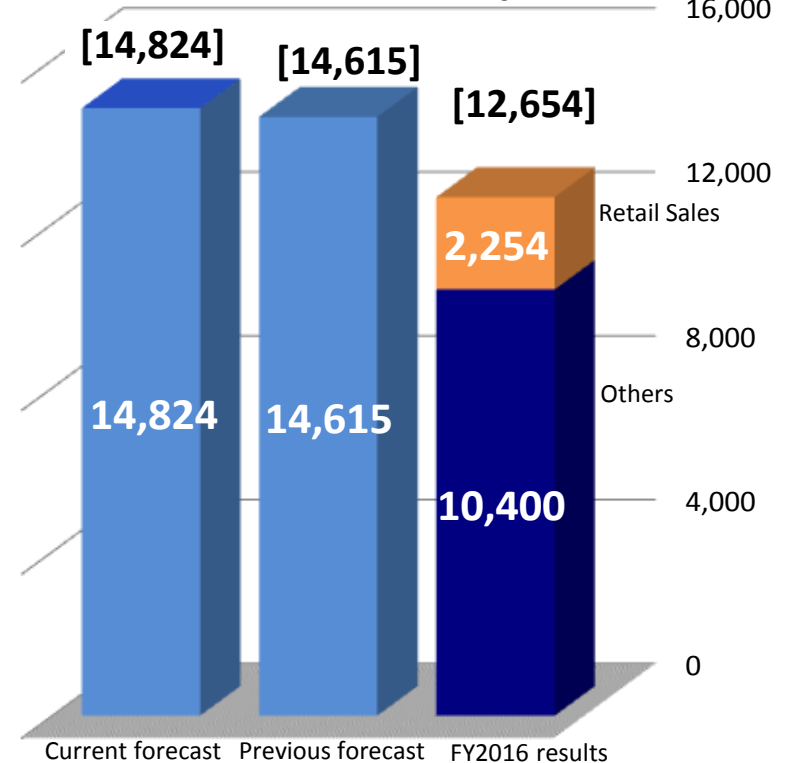


## Electricity Sales Volume

VS. Previous Forecast (July 28) **+209 mil. kWh (+1.4%)**

VS. FY2016 Results **+2,170 mil kWh (+17.1%)**

(Figures are rounded nearest mil kWh)



## Number of customers (Gas), LNG sales volume, Average temperature

	Current Forecast	Previous Forecast	Change
Gas: Number of customers (meters) (10 thousands)	1,166.8	1,166.8	±0.0 (±0.0%)
LNG sales volume (thousands t)	1,125	1,123	+2(+0.1%)
Average temperature (°C)	16.0	16.0	±0.0

● Gas Sales Volume (Vision Basis)

(Unit : mil. m<sup>3</sup>)

	FY2017 Current Forecast	FY2017 Previous Forecast	Change	FY2016 Results	Change
Gas Sales Volume (financial accounting basis)	15,347	15,326	+21	15,720	-373
			+0.1%		-2.4%
Gas volume used in-house under tolling agreement	2,056	2,025	+31	1,996	+60
			+1.6%		+3.0%
LNG sales (m <sup>3</sup> basis)	1,406	1,404	+2	1,337	+69
			+0.1%		+5.1%
Total	18,809	18,754	+55	19,053	-244
			+0.3%		-1.3%

# FY2017 Full Year Forecast : Sales and Profit/Loss by Business Segments

<vs. Previous Forecast>



(unit : billion yen)

	Net Sales				Segment Profit (Operating profit + Equity income/loss of subsidiary)			
	Current Forecast	Previous Forecast	Change	%	Current Forecast	Previous Forecast	Change	%
<b>City Gas</b>	1,136.0	1,150.8	-14.8	-1.3	95.3	92.9	2.4	2.6
<b>Electric Power</b>	216.2	213.6	2.6	1.2	9.2	10.1	-0.9	-9.0
<b>Overseas business</b>	43.4	44.5	-1.1	-2.5	5.5	6.5	-1.0	-15.4
<b>Energy-related</b>	502.6	505.5	-2.9	-0.6	8.3	7.4	0.9	12.2
<b>(Engineering solutions)</b>	121.6	122.1	-0.5	-0.4	4.0	3.6	0.4	12.3
<b>(LNG sales)</b>	122.8	125.9	-3.1	-2.5	0.5	0.5	0.0	0
<b>Real estate</b>	42.8	42.8	0.0	0.0	7.8	7.8	0.0	0
<b>Others</b>	95.0	94.0	1.0	1.1	3.8	2.4	1.4	58.3
<b>Adjustment</b>	-241.0	-243.2	2.2	—	-40.8	-40.8	0.0	—
<b>Total</b>	1,795.0	1,808.0	-13.0	-0.7	89.1	86.3	2.8	3.2

- Notes:
- Net sales by business segments include internal transactions.
  - “Energy-related” includes businesses in engineering solutions, liquefied petroleum gas, industrial gas, LNG sales, gas appliances sales, gas pipe installation and construction etc.
  - “Others” includes businesses in shipping, information processing service, credit and leasing, etc.
  - The “Adjustment” to operating profit is primarily companywide expenses not allocated to individual segments.

# FY2017 Forecast: Ordinary Profit Analysis <vs. FY2017 Previous Forecast>

(Unit: billion yen)

**FY2017  
(Current  
Forecast)**  
¥83.0bn

**Change**  
+¥3.0bn  
(+3.8%)

**FY2017  
(Previous  
Forecast)**  
¥80.0bn

**Segment  
profit**  
+¥2.8bn  
(+3.2%)

**Non-  
operating  
income/loss**  
+¥0.2bn  
\*excluding  
equity income  
of subsidiaries

**City gas**  
+¥2.4bn  
(+2.6%)

**Electric  
power**  
-¥0.9bn  
(-9.0%)

**Overseas**  
-¥1.0bn  
(-15.4%)

**Energy-  
related**  
+¥0.9bn  
(+12.2%)

**Real estate**  
±¥0.0bn  
(±0.0%)

**Others**  
+¥1.4bn  
(+58.3%)

**Consolidated  
adjustment,  
etc.**  
±¥0.0bn

- Increase in gross margin: +¥0.5bn (sliding time lag effect ±0.0, change in sales volume, etc. +0.5 (incl. temp. effect ±0.0))
  - Net sales -¥14.8bn: Sliding time lag effect -15.8, change in sales volume, etc. +1.0
  - Resource costs, etc. +¥15.3bn: Sliding time lag effect +15.8 (exchange rate +3.7, crude oil price +11.6), change in sales volume -0.5
- Decrease in fixed costs: +¥2.0bn (decrease in depreciation +2.0, etc.)

- Decrease in profit due to increase in retail sales expenses
- Increase in gross margin due to increase in retail sales volume

- Decrease in equity in net income of affiliates -1.2: Decrease in operation due to unscheduled power plant shutdowns, etc.

- LPG +¥0.5bn: Increase in unit sales price due to rise in contract price, etc.
- Engineering solutions +¥0.4bn: Decrease in fixed costs due to change in number of personnel, etc.

- Shipping +¥0.7bn: Deferred charge due to delayed entry into service of own vessels, etc.
- Information processing services +0.3: Increase in profit margin

\*+/- indicate contributions to profit.

# FY2017 Full Year Forecast : Sales and Profit/Loss by Business Segments

<vs. FY2016 Results>



(unit : billion yen)

	Net Sales				Segment Income (Operating profit + Equity income/loss of subsidiary)			
	Current Forecast	FY2016 Results	Change	%	Current Forecast	FY2016 Results	Change	%
<b>City Gas</b>	1,136.0	1,040.0	96.0	9.2	95.3	76.5	18.8	24.5
<b>Electric Power</b>	216.2	145.7	70.5	48.3	9.2	4.4	4.8	106.5
<b>Overseas business</b>	43.4	31.9	11.5	35.9	5.5	4.4	1.1	24.9
<b>Energy-related</b>	502.6	459.5	43.1	9.4	8.3	13.7	-5.4	-39.8
<b>(Engineering solutions)</b>	121.6	111.6	10.0	12.9	4.0	4.9	-0.9	-18.5
<b>(LNG sales)</b>	122.8	91.2	31.6	34.7	0.5	3.3	-2.8	-84.9
<b>Real estate</b>	42.8	41.4	1.4	3.4	7.8	7.8	0.0	-0.7
<b>Others</b>	95.0	89.0	6.0	6.6	3.8	3.2	0.6	18.5
<b>Adjustment</b>	-241.0	-220.7	-20.3	—	-40.8	-48.2	7.4	—
<b>Total</b>	1,795.0	1,587.0	208.0	13.1	89.1	61.9	27.2	43.8

- Notes:
- Net sales by business segments include internal transactions.
  - “Energy-related” includes businesses in engineering construction, appliances sales, gas pipe installation, construction, and LNG sales, liquefied petroleum gas and industrial gas, etc.
  - “Others” includes businesses in shipping, information processing service, credit and leasing, etc.
  - The “Adjustment” to operating profit is primarily companywide expenses not allocated to individual segments.

# FY2017 Forecast: Ordinary Profit Analysis <vs. FY2016 Results>

**FY2017**  
(Current Forecast)  
¥83.0bn

**Change**  
+¥27.4bn  
(+49.0%)

**FY2016**  
(Results)  
¥55.6bn

**Segment profit**  
+¥27.2bn  
(+43.8%)

**Non-operating income/loss**  
+¥0.2bn  
\*excluding equity income of subsidiaries

**City gas**  
+¥18.8bn  
(+24.5%)

**Electric power**  
+¥4.8bn  
(+106.5%)

**Overseas**  
+¥1.1bn  
(+24.9%)

**Energy-related**  
-¥5.4bn  
(-39.8%)

**Real estate**  
±¥0.0bn  
(-0.7%)

**Others**  
+¥0.6bn  
(+18.5%)

**Consolidated adjustment, etc.**  
+¥7.4bn

- Increase in gross margin: +¥0.1bn (sliding time lag effect -6.1, change in sales volume, etc. +6.2 (incl. temp. effect +5.7))
  - Net sales +¥96.0bn: Sliding time lag effect +109.4, change in sales volume, etc. -13.4
  - Resource costs, etc. -¥96.0bn: Sliding time lag effect -115.5 (exchange rate -20.5, crude oil price -81.1), change in sales volume +16.6, decrease in inter company adjustment cost +2.9
- Decrease in fixed costs: +¥18.7bn (decrease in actuarial differences, etc., increase in inter company adjustment cost -2.9, increase in costs arising from response to gas market liberalization, etc.)

- Increase in gross margin due to increase in retail sales volume
- Decrease in profit due to increase in retail sales expenses

- Increase in profit from upstream projects (commencement of Gorgon LNG sales)
- Decrease in equity in net income of affiliates -2.4: Decrease in operation due to unscheduled power plant shutdowns, etc.

- LNG sales -¥2.8bn: Sliding time lag effect -2.8
- Engineering solutions -¥0.9bn: Increase in fixed costs with increase in personnel, etc.
- Decrease in profit from appliances., etc.

- Shipping +¥1.4bn: Increase in profit due to increase in number of carriers

- Decrease in amortization of actuarial differences, etc.

\*+/- indicate contributions to profit.

# Key Indicators (Consolidated)

(unit: billion yen)

	FY2017 Forecast	FY2016 Results	FY2015 Results
Total assets (a)	2,341.0	2,230.2	2,251.5
Shareholders' equity (b)	1,130.0	1,101.4	1,100.2
Shareholders' equity ratio (b)/(a)	48.3%	49.4%	48.9%
Interest-bearing debt (c)	796.0	713.5	715.7
D/E ratio (c)/(b)	0.70	0.65	0.65
Profit attributable to owners of parents (d)	63.0	53.1	111.9
Depreciation (e)	166.0	164.3	145.1
Operating cash flow (d) + (e)	229.0	217.4	257.1
Capex	260.0	203.3	232.0
ROA: (d) / (a)	2.8%	2.4%	5.0%
ROE: (d) / (b)	5.6%	4.8%	10.3%
TEP	7.6	-6.2	67.6
WACC	2.9%	3.0%	3.4%
Total payout ratio	Approx. 60%	60.7%	60.1%

Note: Shareholders' equity = Net assets – minority interests  
 ROA = Net profit / Total assets (average of the amounts as of the end of the previous period and end of the current period)  
 ROE = Net profit / Shareholders' equity (average of the amounts as of the end of the previous period and end of the current period)  
 Balance sheet figures are as of the corresponding term-end  
 Operating cash flow = Net profit + Depreciation (including depreciation of long-term prepaid expenses)  
 Total payout ratio = [FY-N dividends + FY-(N+1) treasury stock purchased] / FY-N consolidated net profit

TEP (Tokyo Gas Economic Profit) : Profit after taxes and before interest payments – Cost of capital (invested capital × WACC)  
 Items for WACC calculation (FY2017 forecast)  
 • Cost of interest-bearing debt : forecast interest rate (1.11%, after tax)  
 • Cost rate for shareholders' equity  
   • Risk free rate : 10-year JGB yield 0.11%  
   • Market Risk premium : 5.5% β: 0.75



---

## 3. Reference Materials

---

## Impact of rising JCC by \$1/bbl

(Unit: billion yen)

		Impact on earnings		
		3Q	4Q	Full year
Period	3Q	-0.2	-1.3	-1.5
	4Q	—	-0.4	-0.4
	Full year	-0.2	-1.7	-1.9

## Impact of depreciation by ¥1/\$

(Unit: billion yen)

		Impact on earnings		
		3Q	4Q	Full year
Period	3Q	-0.7	+0.7	0.0
	4Q	—	-1.0	-1.0
	Full year	-0.7	0.3	-1.0

# Key Topics in FY2017 (Excerpted from Press Releases up to 27th Oct.)

Management Strategy	<ul style="list-style-type: none"> <li>• FY2017 initiatives by Tokyo Gas Group (Apr. 13)</li> <li>• Strategic alliance in LNG procurement between Kyushu Electric Power and Tokyo Gas (Apr. 12)</li> <li>• <u>The Tokyo Gas Group FY2018-2020 management plan "GPS2020" ( Oct. 5 )</u></li> </ul>
City gas	<ul style="list-style-type: none"> <li>• Total number of ENE-FARM residential fuel cells sold hits 80,000 (May 8)</li> <li>• Development of technology to improve the power generating efficiency of fuel cells : the first case of 65% equivalent efficiency with using a low output (5kW) fuel cell in the world (May 23)</li> <li>• 11 Companies Agree to Collaborate on Large-scale Construction of Hydrogen Stations : New Company to Be Considered for Supporting Strategic Construction and for Achieving Wider Use of FCVs and Independence of Hydrogen Station Business (May 19)</li> <li>• Application to alter registered particulars concerning gas retail business (May 29)</li> <li>• Offer of the service, "Total Energy Service Plan (Zuttomo) by Tokyo Gas Group in Tosai Gas and Higashinohon Gas supply areas (Jun. 27)</li> <li>• Discontinuation of feasibility study into the business of units 3 and 4 at Kawasaki Gas Power Plant (Jul. 14)</li> <li>• <u>Establishment of Prominet Power Co., Ltd. (Aug. 1)</u></li> <li>• <u>Total number of commercial ventilation alarms installed hits the half million mark (Aug. 9)</u></li> <li>• <u>Basic agreement on wholesale distribution of natural gas signed with Horikawa Sangyo Co., Ltd.: supply to residents in Suzunomiya Harigaya commenced (Sept. 19)</u></li> <li>• <u>Koga-Maoka trunk pipeline enters service (Oct. 18)</u></li> <li>• <u>Number of electricity contracts hits one million (Oct. 17)</u></li> </ul>
Electric power	<ul style="list-style-type: none"> <li>• <u>Basic agreement on wholesale distribution of natural gas signed with Horikawa Sangyo Co., Ltd.: supply to residents in Suzunomiya Harigaya commenced (Sept. 19)</u></li> <li>• <u>Koga-Maoka trunk pipeline enters service (Oct. 18)</u></li> <li>• <u>Number of electricity contracts hits one million (Oct. 17)</u></li> </ul>
Liquid gas	<ul style="list-style-type: none"> <li>• Launch of pilot IoT project utilizing a low power wide area (LPWA) network to streamline LPG distribution (Jun. 5)</li> </ul>
Overseas	<ul style="list-style-type: none"> <li>• Opening of Manila Office (Apr. 21)</li> <li>• Participation in a natural gas-fired power plant in Pennsylvania (Apr. 18)</li> <li>• Investment in natural gas development project in East Texas, U.S.A. (May 8)</li> <li>• <u>Investment and Strategic Alliance in Vietnam Natural Gas Distribution Business(Aug. 31)</u></li> <li>• <u>Joint investment in gas distribution company in Indonesia(Oct. 17)</u></li> </ul>
Living services	<ul style="list-style-type: none"> <li>• Launch of service to access information regarding home gas and electric appliances of customers by linking myTOKYOGAS and the smartphone app "TORISETSU" (Jul. 21)</li> <li>• <u>"Predicting Heat Shock service" developed jointly by Japan Weather Association and Tokyo Gas launched on the tenki.jp online weather site (Oct. 2)</u></li> </ul>
Engineering services	<ul style="list-style-type: none"> <li>• Opening of offices in Kyushu and Nagano (Apr. 3)*</li> <li>• Jointly feasibility study of LNG terminal business at Sumitomo Chemical's Ehime Works (May 31)*</li> <li>• Business of consulting for construction of LNG receiving terminal in Bangladesh (Jul. 27)*</li> <li>• <u>Launch of energy management service using Helionet Advance (Sept. 29)</u></li> <li>• <u>Development of "Optopass" planning software to optimize energy facility operation and launch of consulting service (Sept. 29)</u></li> </ul>
Urban development Services	<ul style="list-style-type: none"> <li>• District developed by the tentatively named TGMM Shibaura Project to be called "msb Tamachi": mixed-use complex with direct access to JR Tamachi Station to be developed by Tokyo Gas, Mitsui Fudosan, and Mitsubishi Estate (May 16)</li> <li>• <u>Commencement of work on Tamachi Station Tower N as part of the "msb Tamachi" development project (Aug. 23)</u></li> </ul>
Finance and shareholder returns	<ul style="list-style-type: none"> <li>• Announcement of issue of 42nd and 43rd domestic unsecured notes (Jun. 2)</li> <li>• Notification of resolution to acquire treasury shares (Apr. 28), notice of share buyback (May 23), notice of retirement of treasury stock (Jun. 29)</li> </ul>

Dates of press releases are shown in parentheses. \*Press releases issued by Tokyo Gas Engineering Solutions. Press releases issued after the 1Q results were announced (July 28) are underlined.



**< Cautionary Statement regarding Forward-looking Statements >**

**Statements made in this presentation with respect to Tokyo Gas's present plans, forecasts, strategies and beliefs, and other statements herein that are not expressions of historical fact are forward-looking statements about the future performance of the Company. As such, they are based on management's assumptions and opinions stemming from currently available information and therefore involve risks and uncertainties.**

**The Company's actual performance may greatly differ from these projections, due to these risks and uncertainties which include without limitation general economic conditions in Japan, crude oil prices, the weather, changes in the foreign exchange rate of the yen, rapid technological innovations and the Company's responses to the progress of deregulation.**

**TSE:9531**