



# 2030 Long-term Management Vision and 2020 Medium-term Management Plan

March 2017

**Osaka Gas Co., Ltd.**



## 2030 Long-term Management Vision

Steps toward the achievement of our 2030 Corporate goals

## 2020 Medium-term Management Plan

Individual business strategy, Management index

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## Business domain and direction of business activities toward fiscal 2030

We will take dramatic changes in the future of energy (including the full deregulation of energy markets) as opportunities to use three approaches to overcome all obstacles.



- An innovative energy & service company soaring from this era to the next -

- |  |  |
|--|--|
| ● Going beyond customers' expectations | Always try to provide services that go beyond customer expectations                        |
| ● Going beyond business borders        | Expanding business into areas that contribute to social, regional and customer development |
| ● Going beyond company borders         | Actively promoting alliances and M&A, and broadly expanding business in Japan and overseas |

# Osaka Gas Group's principles will remain unchanged in 2030

Based on its management philosophy, consisting of “corporate motto,” “Osaka Gas Group’s Goal” and “Osaka Gas Group’s Declaration,” the Group vows to concretize “three guide principles” toward fiscal 2030.

## Corporate motto

### Service First <sup>\*1</sup>

## Osaka Gas Group's Goal

**To be a corporate group that helps peoples' ways of life  
and businesses to evolve**

## Osaka Gas Group's Declaration

Osaka Gas Group works to create four types of value

**Value for  
Customers**

**Value for  
Society**

**Value for  
Shareholders**

**Value for  
Employees**

**We will continue to develop and  
deliver high quality service to our  
customers in the Kansai region**

- Expansion of business development area
- Our business and services will grow to make full use of our strengths

**Remain a professional group  
that is always innovating and  
constantly trying new things**

- A high level of security and a stable & secure supply of products & services
- Innovative products & technology development, engineering

**To continue to acquire the  
confidence of our investors,  
partners, community, and  
employees**

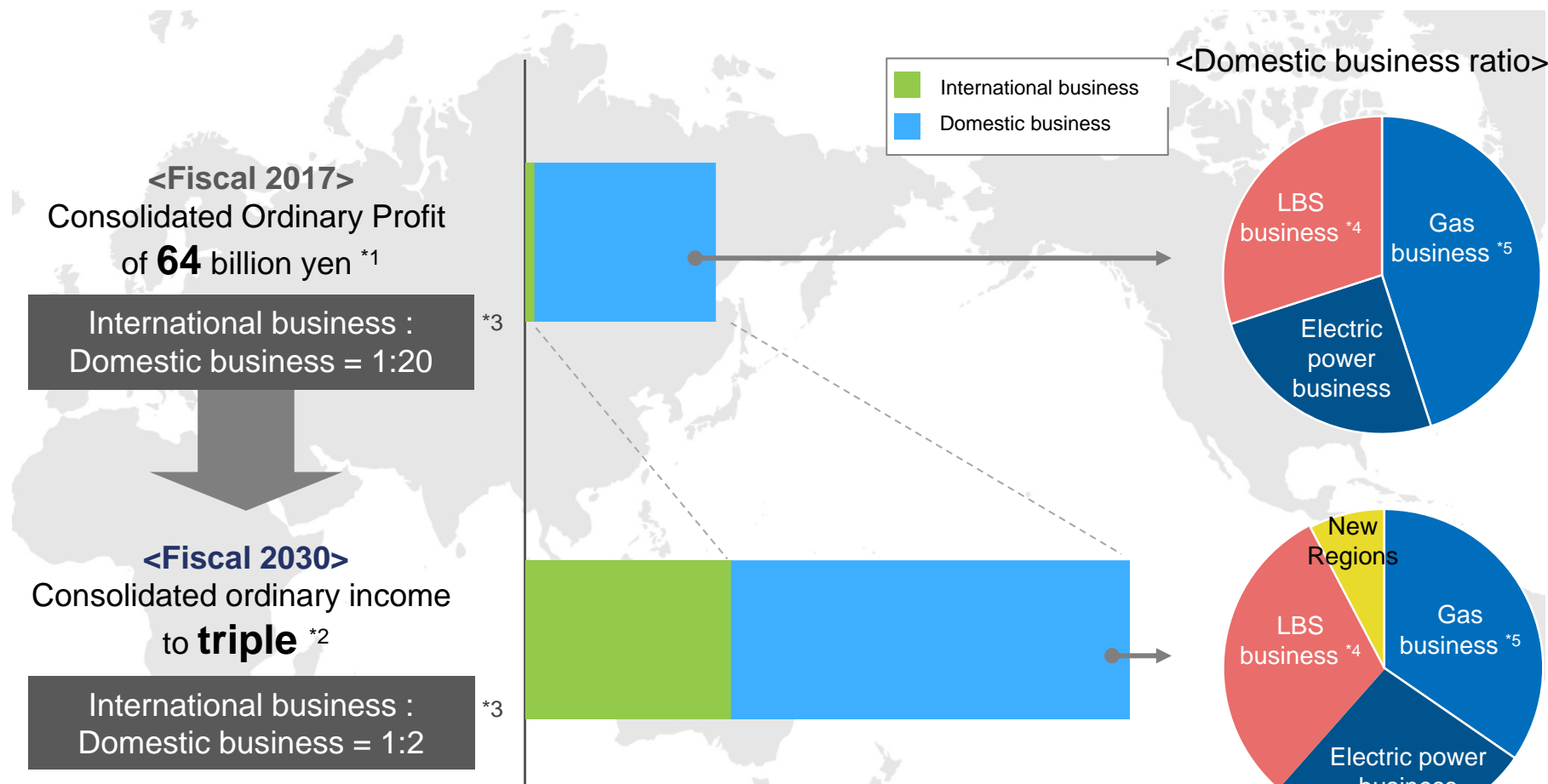
- Reinforce competitiveness by promoting efficient management
- Management that takes global ESG<sup>\*2</sup> standards into account
- An organization & workplaces where all group employees can work happily and remain healthy

\*1: Osaka Gas Group's Management Philosophy: <http://www.osakagas.co.jp/company/about/brand/index.html>

\*2: ESG (Environment, Society, Governance)

# 2030 Corporate Goal

The Osaka Gas Group will embark on the challenging task of tripling its consolidated ordinary income in fiscal 2030 compared with fiscal 2017 by expanding overseas operations as well as domestic operations.



\*1: Crude oil price \$ 55 / barrel, exchange rate 115 yen / dollar premise

\*2: Crude oil price \$ 70 / barrel, exchange rate 115 yen / dollar premise

\*3: On the basis of consolidated ordinary income

\*4: Life & Business Solutions

\*5: Gas business income includes the sale of LNG and equipment

## Support Osaka Gas Groups' three business pillars

Domestic energy  
business

International energy  
business

Life & Business Solutions  
(LBS)

The three pillars will be realigned into nine business sectors. By strengthening each sector, the Group will establish a solid portfolio that can respond to various environmental changes toward fiscal 2030.

Developing our domestic  
energy business in a new era

1

Gas manufacturing /  
sales \*

\* Includes LNG sales and equipment / service sales, etc.

2

Supplying gas

3

Electric power  
generation / sales

Accelerate our international  
energy business  
development

4

Overseas upstream  
and trading

5

Overseas middle and  
downstream

9

New regions - others

Expansion and development  
of new LBS business areas

6

Urban development

7

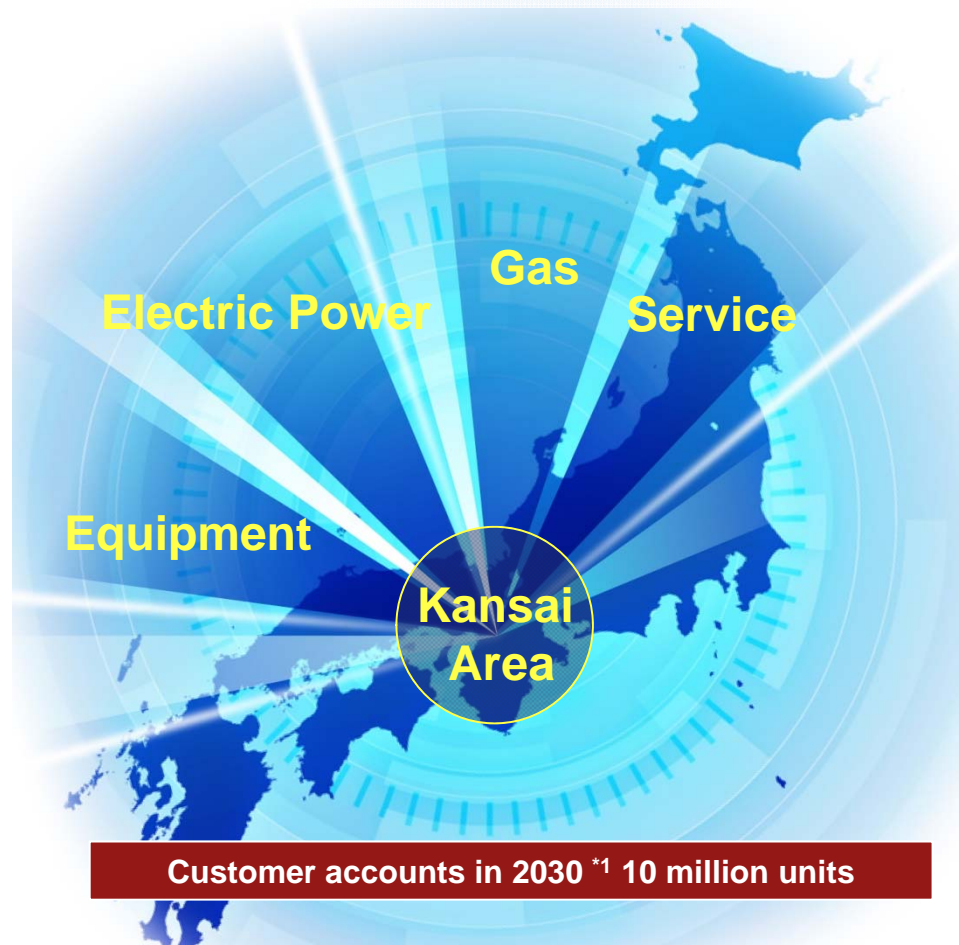
Materials

8

Information

We will strive to achieve sustainable growth by going beyond our current business - corporate framework and our customers' expectations, with activities like extending our energy-related services and expanding beyond the Kansai region.

### Comprehensive proposals for energy & services



#### Going beyond customers' expectations and business borders

Comprehensive proposals for energy & services

- Expand electric power and LPG businesses in addition to our city gas supply business
- Provide comfortable daily lives by our living support service
- Provide maintenance, administration, procurement of energies to customers as a bulk as a utility supply agent \*2

#### Going beyond company borders

- We will continue to develop and deliver high quality service to wider region of which we cultured in the Kansai region.
- Promote new businesses (M&A etc.) in the energy related fields

\*1: Total number of contracts for city gas, electric power, LPG, Ene farm, Sumikata service, utility supply agent etc.

\*2: Registered trademarks of OGCTS Co., Ltd. and Osaka Gas Co., Ltd. We provide facilities related to utilities (gas, electricity, water, etc.) and offer them to customers on a bulk basis.



## Steps toward the achievement of our 2030 Corporate goals

### Expanding our domestic and international energy business (gas & electric power)

Expanding volume of natural gas (including LNG) handled both domestically and overseas due to retail, energy services, trading etc.

Build a competitive power portfolio including procurement from market and other companies.

#### Gas (including LNG) sales & trading business

#### Power generation & electricity sales

Expansion of retail sales  
and energy supply services

Expansion of power  
generation

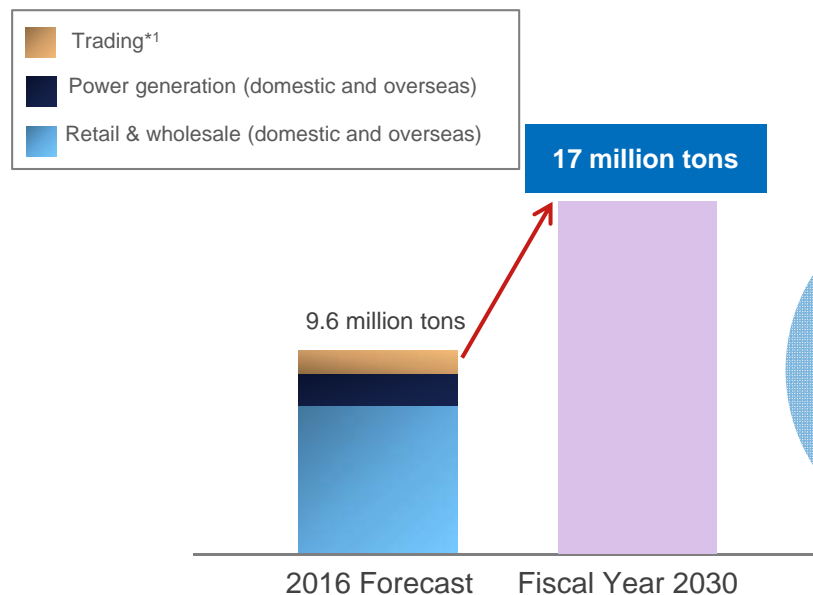
Expansion of  
trade

Expansion of scale of  
power we supply ourselves

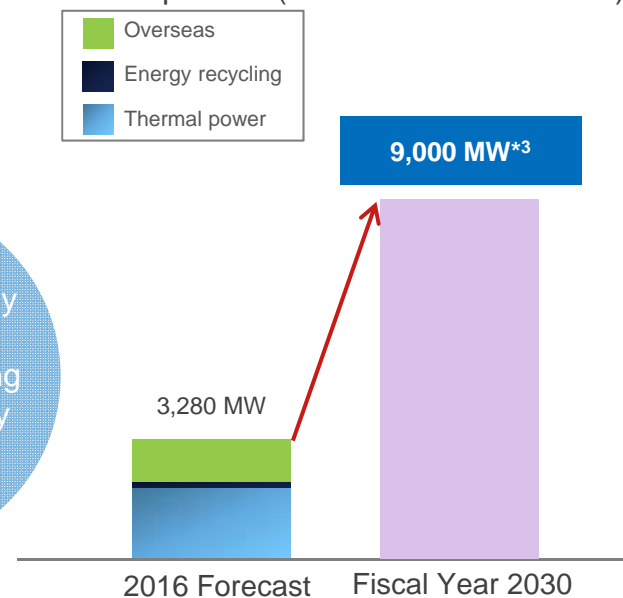
Expansion  
renewable energy

Expansion of procurement from  
sources outside our group \*2

<Scale of our natural gas business>



<Power portfolio(domestic and overseas)>



Creating a cost-competitive energy supply and absolutely ensuring high level security and stability

\*1 Including sales of LNG to domestic and international energy businesses and handling of LNG bases abroad

\*2 Including negawatto power deal

\*3 Consideration will be taken regarding company procurements in the current market, depending on the state of the country at that time



## Accelerate our international energy business development

Focusing on the priority areas of North America, Asia, and Oceania we will promote business expansion (upstream, middle and downstream) by maximizing the know-how we cultivated here in Japan, and thus we will proceed overseas, building on our existing business foundation.

Strengthen each business area to strengthen the profit bases of our international energy business

### Upstream · trading business

Gas field / oil field  
development  
project

LNG trading  
business

### Middle & downstream business

IPP business

LNG terminal  
business

LDC business \*2

Retail business &  
energy service

### Domestic business know-how



natural gas  
power plant



LNG  
terminal



Fuel  
conversion



Fleet operation

### International business base at present



USA: Freeport LNG  
base (under  
construction) \*3



USA: St. Charles  
IPP



City-OG Gas  
Energy Services



OSAKA GAS  
THAILAND

### Our business development policy

- ① **Concentrated management resources**, concentrated business zones, **priority areas** within each zone
- ② Speed up business development **by collaborating with other companies and executing M & A**
- ③ **Increase business involvement and improve our business promotion skills** (in terms of promoting talented employees, building a speedy decision-making system, etc.)

\* 1: Independent Power Producer

\* 2: Local Distribution Company

\* 3: Freeport LNG Development, provided by L.P. (complete projection drawing)

<Urban development business>



Our corporate group aims to be active in a variety of areas such as leasing, sales and maintenance, **not only in the Kansai region but also, through business expansion, in the Tokyo metropolitan region.**

- We will accelerated the growth of our leasing business, thanks to new office investments in the metropolitan area (**value of leased assets: about twice that currently held**)
- Condominium development business: Entering the Tokyo metropolitan region
- Secure our position **as the top class company in building maintenance in the Kansai region**

<Materials business>



**The main battlefield is overseas, and we have a top-level position in this niche market.** We intend for our functional materials manufacturer group to continue contributing heavily to industry, human life essentials and the environment.

- **Expand business to about 10 to 20 projects** with sales of 10 billion yen (Currently we have 5 projects ongoing)
- Scale up to attain the 30th place among listed Japanese chemical manufacturers (Current status 80<sup>th</sup>)

<Information business>



We aim as a corporate group, to uses **our advanced ICT innovation** to provide new sources of value to our customers and grow sustainably with them.

- Expand business scale by expansion of value-added proposal business.
- We can provide more high quality services: **IoT<sup>\*1</sup>, Big Data Analysis, and Utilization of AI<sup>\*2</sup>** to Osaka Gas Group customers (both business and household) by cooperation of our group companies.

New Regions

We will promote new energy business **development in the surrounding area and intend to build new business pillars in the domestic energy field.**

- Construction of **business with ordinary income of more than 10 billion** yen, such as cryogenic temperature / industrial gas · building maintenance · ESCO · water treatment · life service · equipment sales · remodeling

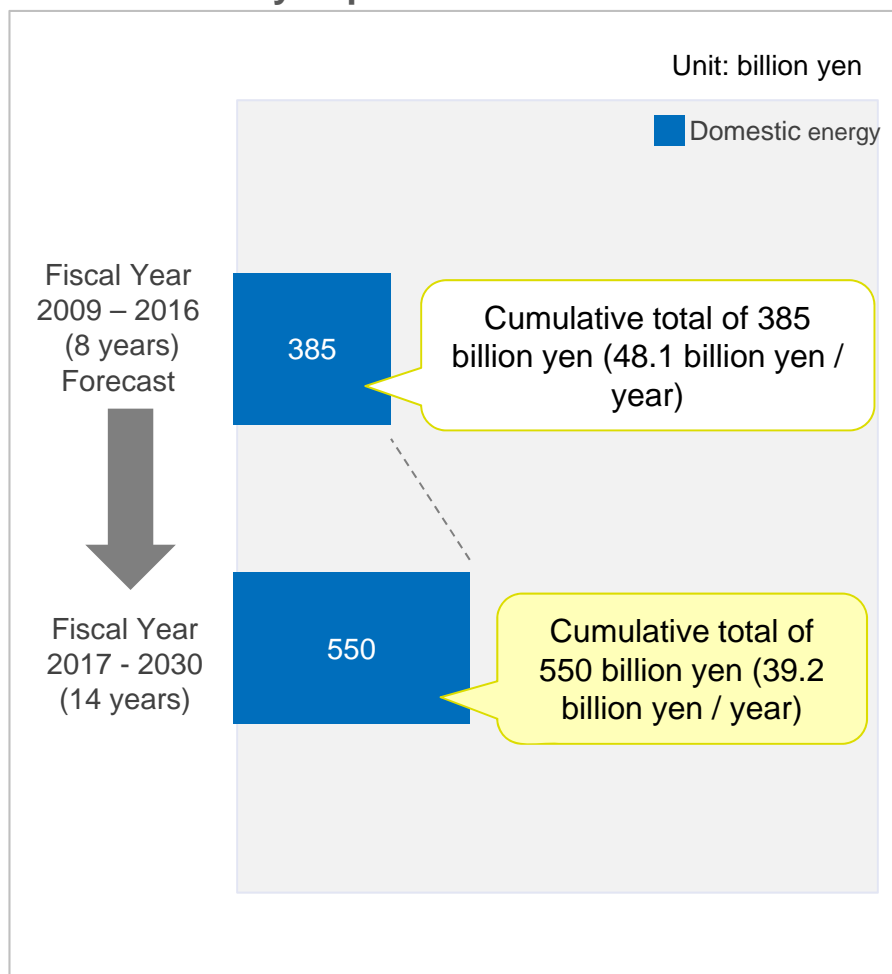
\*1: Internet of Things

\*2: Artificial Intelligence

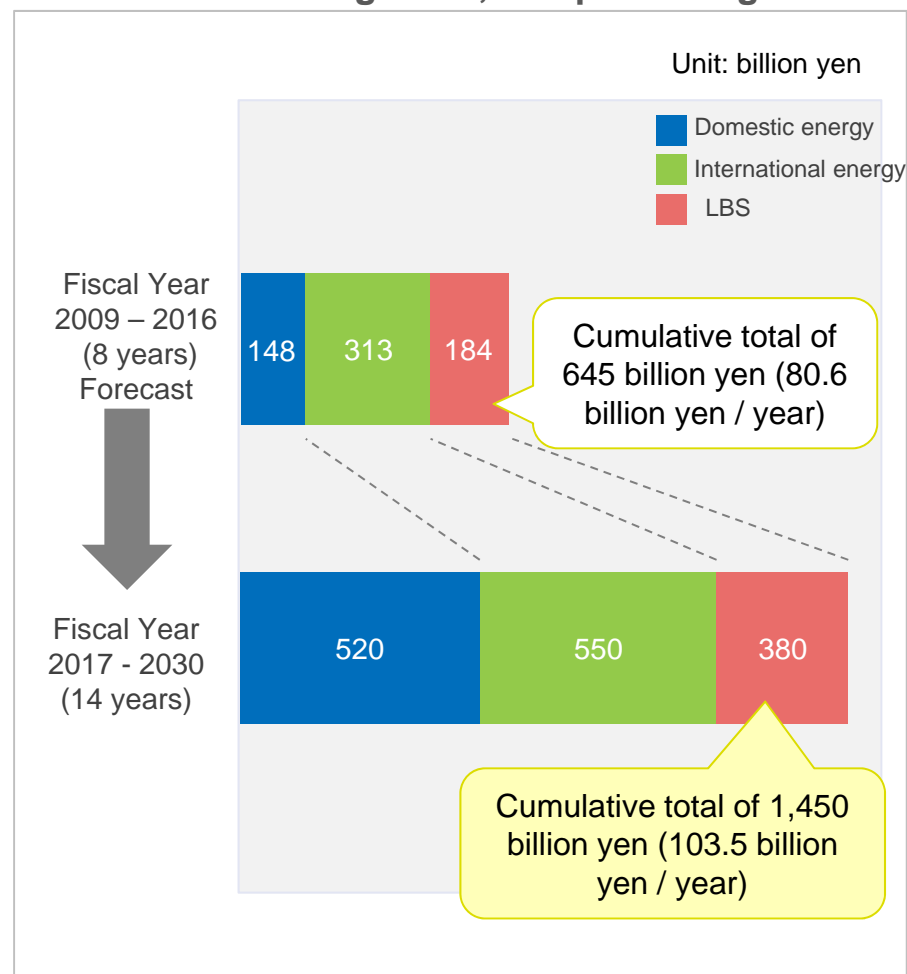
## Growth investments & promoting M&A

In order to achieve our Corporate goals, by FY2030 we will put a cumulative total of 2 trillion yen into quality improvement investment , growth investments and M&A.

### Quality improvement investment



### Investments for growth, and promoting M&A



## Innovations that exceed our customers' expectations

We will continue to offer products and services that exceed our customers' expectations by incorporating the latest technologies, such as ICT <sup>\*1</sup>, our utilization capacity, engineering prowess, IoT and other technologies and the development capabilities that we have accumulated over the years.

<sup>\*1</sup>: Information and Communication Technology

### ICT

- Providing new services by converting equipment and equipment to IoT
- AI utilization - Provide added value by big data analysis (failure prediction, energy saving advice etc.)
- Provide power aggregation service (VPP <sup>\*2</sup>, local energy production and consumption, etc.)



<sup>\*2</sup>: Virtual Power Plant

### Engineering

- Overseas development of LNG terminal construction and engineering operations
- Improve infrastructure security
- Develop measures to combat global warming and take steps toward a low carbon society (using hydrogen, biogas, etc.)



### Product & technology development

- Highly efficient small ene farms
- Technologies compatible with ZEH / ZEB <sup>\*3</sup>
- Innovative energy-saving technology
- Cutting edge materials such as biomass plastic



<sup>\*3</sup>: Net Zero Energy Houses/Buildings

2017

Our products and services going beyond customers' expectations

2030

As a corporate group that conducts business globally, we intend to intensify our CSR efforts and meet global standards while taking ESG into account.

**Environment: Environmentally-aware management**

- Introduce highly efficient energy equipment ([fuel cells](#), [cogeneration techniques](#), etc.) to customers and provide energy services
- Conversion to clean-energy natural gas, Introduce [energy saving technology](#)
- Develop and introduce state-of-the-art thermal power plants and [renewable energy](#) sources (biomass · wind power · solar, etc.)

**Contribute to reducing total CO<sub>2</sub> emissions by 70 million tons between FY 2017-2030**

\* Including customer contributions and overseas reduction contributions (corresponding to about 2% of the national reduction target)

- Promote environmental management by taking account of the circulation of resources, biodiversity and the safety of chemical substances etc.



Solar power generation



Cogeneration



Fuel cell

**Social: Community consideration by management**

- Activities in accordance with international norms, such as the Global Compact
- The promotion of activities throughout the entire value chain, such as efforts related to human rights
- Collaboration within the community (social planning activities, local communication activities, town planning, etc.)

**Governance: Enhance governance**

- Promote dialogues with stakeholders
- Disclosure of ESG information based on global standards
- Sound business style
- Information security countermeasures
- Diversity of employees and executives



## Steps toward the achievement of our 2030 Corporate goals

Work methods that contribute to improving productivity. Reform and promotion of the ways we develop people's skills and abilities.

To keep its operations sound, the Osaka Gas Group will endeavor to change its employees' mindset on working and to promote their work reform. It will also strive to improve business conditions surrounding them to realize the goal.

### Continuing the Osaka Gas Group **on a healthy path**

Attracting talented people with diverse values to build a workplace where employees can have a sense of pride, and productive, creative ways of working.

#### Conscious changes

✓ **Oneself**

By taking ownership, being aware of needs for self-improvement and being self-motivated we will strengthen the Osaka Gas Group of the future!

✓ **Promptness**

Rather than slowing down and aiming for perfection, increase speed but work wisely and efficiently!

✓ **Flexibility**

Always be ready to incorporate new perspectives through exchanges with others and transform one's thinking into competition and cooperation!

✓ **Go beyond the boundaries**

Don't be bound by existing constraints; think beyond the boundaries and pursue growth through accepting new challenges!

#### A highly productive, creative way of working

- **Developing human skills that can play an active global role**
- **Shifting people to highly creative work, make work more efficient by the use of ICT, etc.**
- **Improve the quality of people's work immediately by sharing advanced know-how**
- **Foster a culture that recognizes diversity and create an attractive workplace that draws people to it.**

#### Improving work environment

##### **Collaboration**

Promote the value of cooperation among diverse individuals and companies

##### **Diversity**

Provide fair opportunities regardless of nationality, age, gender, or residential area

##### **Flexibility**

Establish an environment and organization where people can work without being bound by place or time

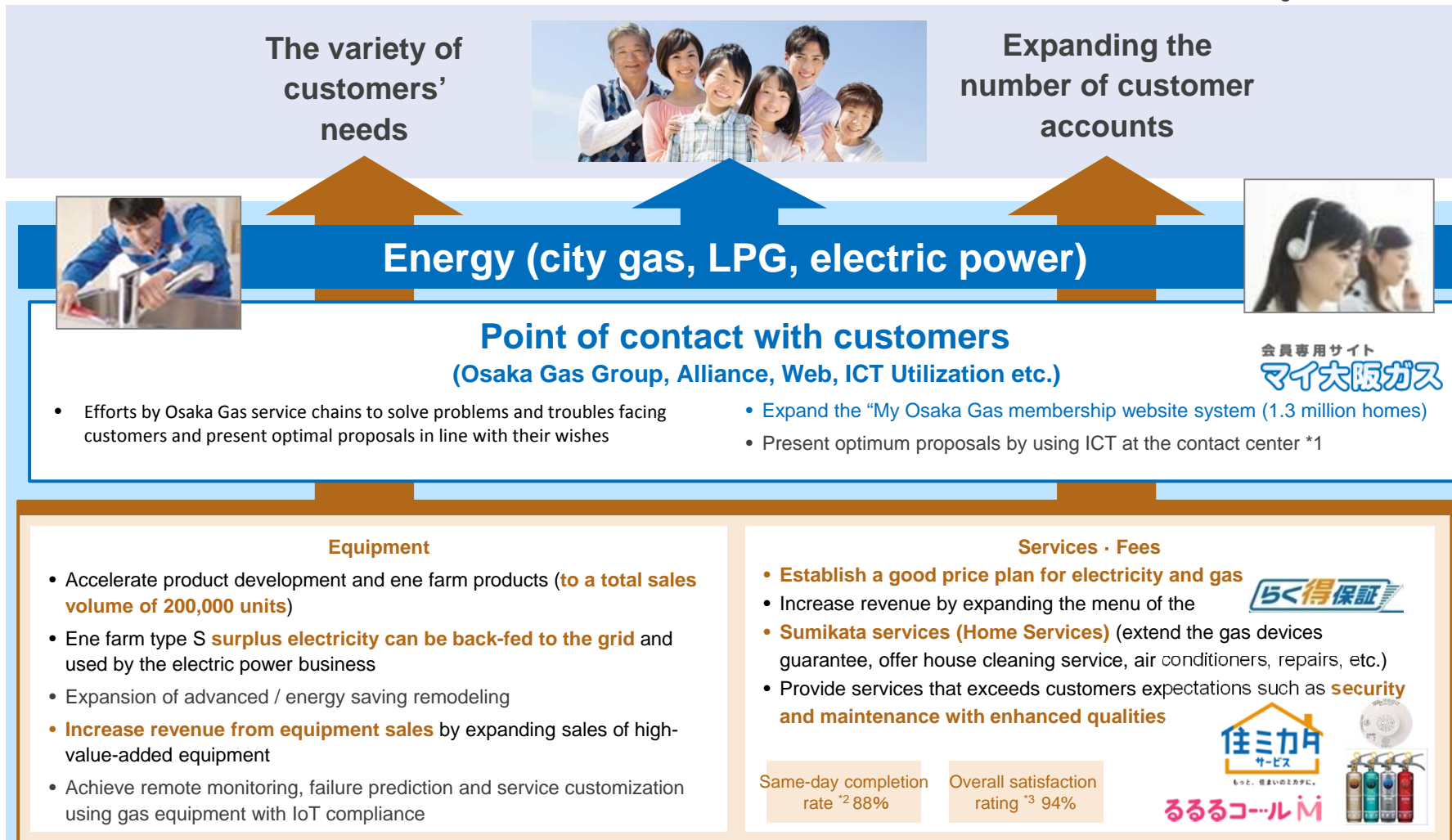


**Initiatives in the Medium-term Management Plan  
for 2020 that help achieve the Long-Term  
Management Vision for 2030**



We will work to continue to be selected by customers to meet their various energy needs, such as for city gas, electricity, LPG, etc. by thoroughly responding to our highly-valued customers at points of contact such as by expanding our products, services and maintenance.

\* Numerical values are targets for fiscal 2020



\* 1: Department that specializes in handling inquiries from customers by telephone, fax, e-mail, chat and over the web

\* 2: Percentage rate of repair completed on the day of the visit

\* 3: Total of how many "good" and "very good" ratings were given in a questionnaire

We intend to continue to be selected by our customers by offering comprehensive electricity and gas services that meet diverse customers' needs.

\* Numerical values are targets for fiscal 2020



\* 1: Simple measurement of various kinds of data (temperature / humidity, water use, etc.) \* 2: monitoring and automatic control of the equipment's operating conditions

Build a system that responds flexibly to supply and demand fluctuations by combining markets and other company's power supplies while promoting the development of new power sources, such as LNG, coal fired power and renewable energy

### Directions in electricity procurement

- The development of our own competitive, highly efficient thermal power
- Expansion of renewable energy power supplies
  - Promoting biomass, wind power and solar projects
- Procurement that balances competitiveness, environmental friendliness and flexibility
  - Flexible choice of external power sources according to market price forecasts and supply

#### Himeji natural gas power generation

Considering the new establishment of Idemitsu Kosan and LNG-fired power plant (1,000 to 1,800 MW)

#### Fukushima Gas power generation

New LNG-power plant with Mitsui & Co. Ltd., Mitsubishi Gas Chemical Company, Hokkaido Electric Power Company (1,180 MW)

#### Nakayama Nagoya joint power generation

Coal-fired power generation is being installed at a biomass mixed-rate of 30% (110 MW)

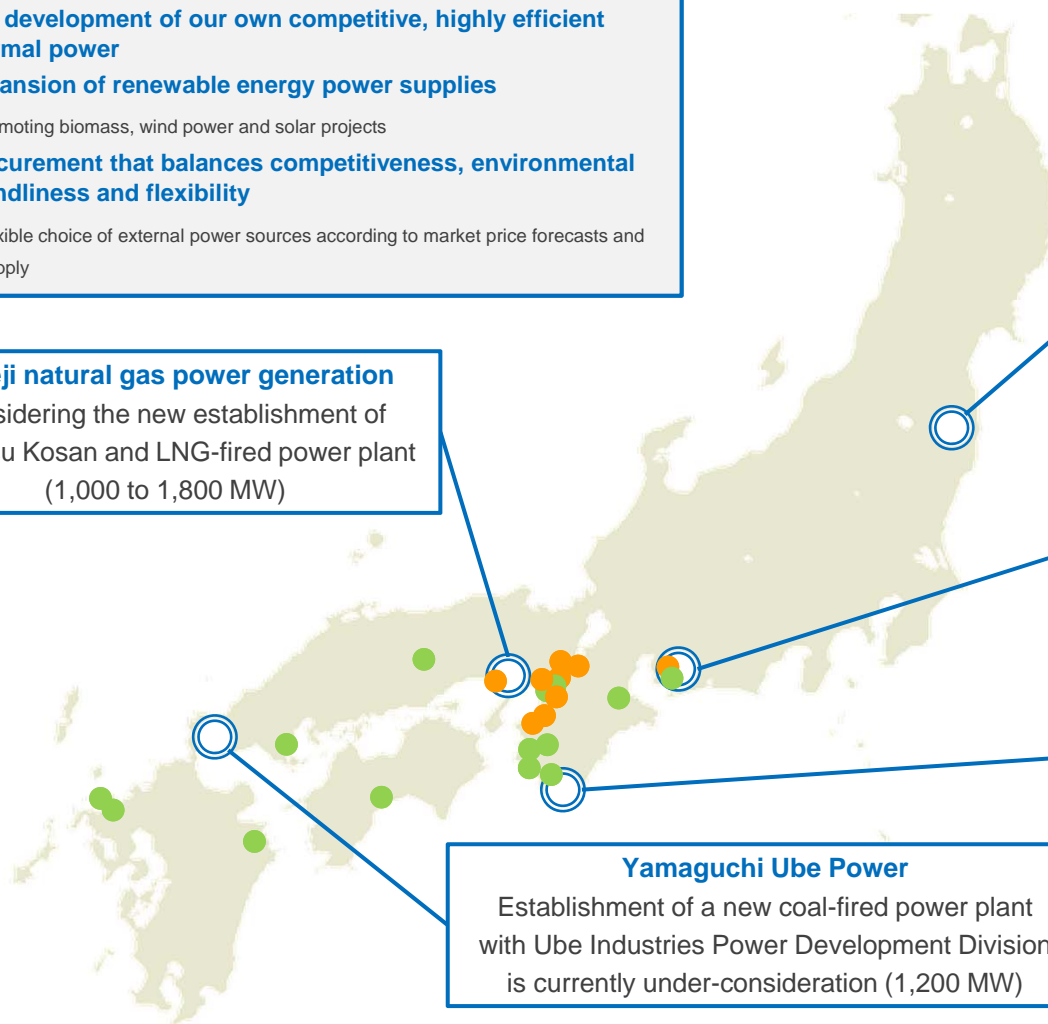
#### Inami wind power generation

Wind power plant under construction (26 MW)

#### Yamaguchi Ube Power

Establishment of a new coal-fired power plant with Ube Industries Power Development Division is currently under-consideration (1,200 MW)

- Major current thermal power generation source
- Major current regeneration power generation source



\* Listed only the cases announced by the press release

## Deployment of as a gas pipeline operating company

As a gas pipeline operating company, while continuing to provide safety, we aim to expand the popularization of city gas. Therefore, we will improve the duct network by cooperating with marketers while ensuring business neutrality and transparency.

## Support the gas business by providing security and safety

### Improve safety and disaster prevention standards

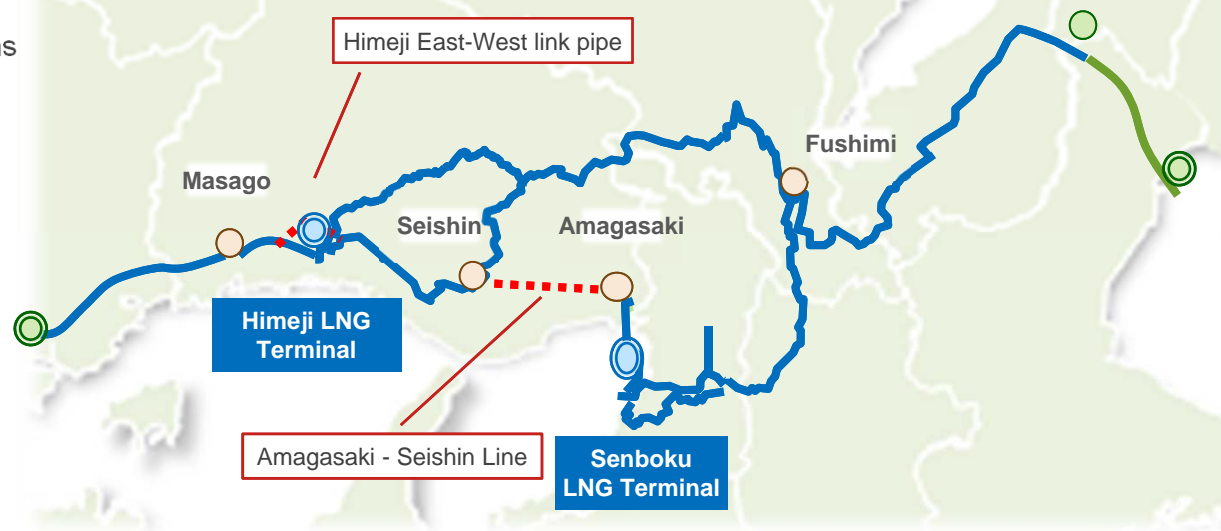
- **Improve security levels and pursue the goal of zero accidents**
  - Improve our emergency response level
  - Continue reducing serious accidents to zero
- **Advancing disaster response**
  - Segmentation of supply depot areas
  - Improve our disaster recovery operations

### Expand the popularization of city gas

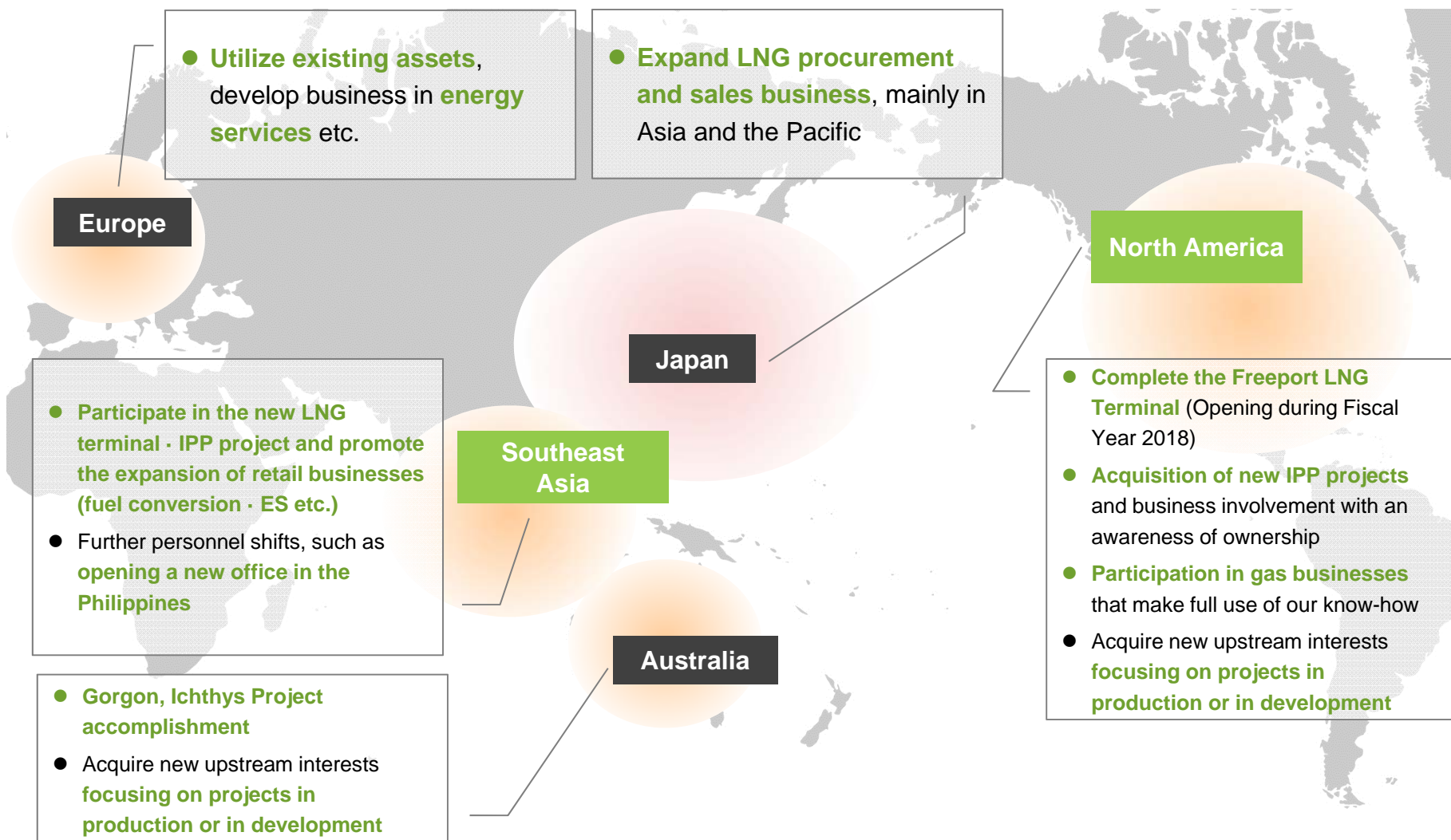
- **Collaborating with marketers - Maintaining the pipeline network**
  - Improve the convenience of transportation service
  - Promote stable supplies
  - Ensure neutrality and transparency

### Formation of facilities based on long-term plans

- **Maintenance of high-voltage line networks**
  - Maintenance of the Himeji East-West link pipe
  - Review the Amagasaki - Seishin Line
- **Achieving our safety advancement goals**
  - Eradication of gray cast iron pipes (FY 2024)
  - Earthquake resistance rate of 90% by end of year 2025






In addition to launching and completing projects, we will work to expand our business scale, focusing on businesses that can benefit from existing assets and know-how in areas where economic growth is expected.





Through organic growth and growth investments, we will establish the LBS business as an area that is aligned with the energy field, and we will also actively engage in M & A in new regions.

<p>&lt;Urban development business&gt;</p> 	<p>Leasing Business: Establish an organization for new office investment in the Tokyo metropolitan region</p> <p>Building management: Strengthen business by proposing services such as energy conservation and facility construction</p> <p>Kyoto Research Park: Attract key new tenants and aim to develop a new building</p>	<p>【Net Sales】 (Simple Total)</p> <p>FY2016 Forecasts: 44.1 billion yen</p> <p>▼</p> <p><b>FY 2020 Assumption : 52 billion yen</b></p>
<p>&lt;Materials business&gt;</p> 	<p>Activated carbon: OG Chemical and Jacobi to collaborate and expand the global value chain</p> <p>Preservatives: In addition to xyladecor, a recently developed anti-virus / coating agent</p> <p>Fine materials: In addition to optical lens resin, fluorene will be developed for various purposes</p>	<p>【Net Sales】 (Simple Total)</p> <p>FY2016 Forecasts: 71.3 billion yen</p> <p>▼</p> <p><b>FY 2020 Assumption : 90 billion yen</b></p>
<p>&lt;Information business&gt;</p> 	<ul style="list-style-type: none"> <li>Introduce new technology (AI for call centers, detection and prediction or abnormalities using IoT, etc.) Creation of group synergies · Expansion of profits</li> <li>Expansion of non-group earnings centering on finance, manufacturing and energy sectors</li> </ul>	<p>【Net Sales】 (Simple Total)</p> <p>FY2016 Forecasts : 66.1 billion yen</p> <p>▼</p> <p><b>FY 2020 Assumption : 70 billion yen</b></p>
<p><b>New regions · others</b></p>	<ul style="list-style-type: none"> <li>Strengthen our life-style service business by responding to changes in the market environment, such as the opening of a 24-hour fitness gym (FITBASE 24) by OG Sports</li> <li>Promote reorganization and strengthening of new company M&amp;A and existing companies in domestic and international energy businesses, LBS businesses and peripheral fields</li> </ul> <p><b>New Business Development Department established in FY2017</b></p>	<p>【Examination of projects in new areas】</p> <p><b>Water treatment, Building maintenance, Industrial gas, Life-style service etc.</b></p>

**Management index of the medium-term management plan for 2020**

We will continue to work to improve profitability by strengthening our international energy and LBS businesses. On the other hand, because the uncertainty of domestic energy business is increasing we must maintain great financial soundness.

T		Plan for Fiscal 2017	Plan for Fiscal 2020
Profitability index	ROA	2.3%	3.5%
	ROE	4.5%	7.0%
	EBITDA <sup>*1</sup>	157 billion yen	200 billion yen
Shareholder returns	Payout ratio	30% or higher <sup>*2</sup>	
Financial soundness index	D / E ratio	Approximately 0.7	
	Shareholder's equity ratio	Approximately 50%	

\* 1: EBITDA = Operating income + Depreciation cost + Amortization of goodwill + Equity in earnings/ losses of affiliated companies

\* 2: Excluding short-term profit fluctuation factors



# Fiscal year of 2017 income and budget plan

A decline due to a decrease caused by the complete freeing of the city gas business and an decrease in profit from automatic increases, although covered by earnings growth due to the acquisition of more power customers, we estimate to reduce the whole consolidated ordinary income to 64 billion yen, less than the 29 billion yen that was the prospect for the previous year.

Premise: Crude oil price (JCC) 55 dollars / barrel, exchange rate 115 yen / dollars

	Consolidated			Non-Consolidated		
	Forecasts for Fiscal 2016 (billion yen)	Plan for Fiscal 2017 (billion yen)	Rate of change (%)	Forecasts for Fiscal 2016 (billions yen)	Plan for Fiscal 2017 (billions yen)	Rate of change (%)
Net sales	1,159.5	1,344.5	+16.0%	886.5	1,053.5	+18.8%
Operating income	95.5	66.5	-30.4%	55.5	28.0	-49.5%
Ordinary income	93.0	64.0	-31.2%	69.5	35.0	-49.6%
Net income	64.5	42.5	-34.1%	54.0	27.0	-50.0%

ROA	3.5%	2.3%	---	---	---	---
ROE	7.0%	4.5%	---	---	---	---
EBITDA	185.0	157.0	-15.1%	---	---	---

	Non-Consolidated		
	Forecasts for Fiscal 2016 (billion m <sup>3</sup> )	Plan for Fiscal 2017 (billion m <sup>3</sup> )	Rate of change (%)
Sales volume	8.52	8.12	-4.7%

Sensitivity of ordinary income due to fluctuations in crude oil prices and exchange rates

Crude oil price 1 dollar / barrel	0.99 billion yen
Exchange rate 1 yen / dollar	0.96 billion yen



#### **Disclaimer**

This document contains forward-looking statements, plans, strategies and other forward-looking statements, which are based on the judgment of the Group from currently available information.

Please be aware that the actual results may differ materially from these forecasts due to various important factors.

Important factors that may affect the actual results include trends in the Japanese economy, rapid fluctuations in exchange rates and crude oil prices, and unusual weather conditions.

Reference materials

Items	Target levels
<b>(1) Expansions of business areas - Expansions of service</b>	<ul style="list-style-type: none"> <li>Domestic energy: sell and manufacture city gas / gas supply / sell and generate power / new areas, international energy: overseas upstream · trading / overseas middle and downstream, LBS: Urban development / materials / information / new areas · etc.” In addition to achieving growth in an area, we will establish a robust business structure to protect against business risks such as oil price fluctuations.</li> <li>Osaka Gas Group will provide high quality services such as electricity supply, LPG supply, living environment support and business support, as well as a city gas supply, and profits will be extended.</li> <li>We will promote further business development in broad domestic regions and overseas strategic areas.</li> </ul>
<b>(2) Providing security and safety as an innovative energy group professional</b>	<ul style="list-style-type: none"> <li>We will make prompt use of the world's technological progress, continue to commercialize our proprietary developed technology and take on new initiatives, and will continue to provide safe, secure and high-quality services on an ongoing basis.</li> </ul>
<b>(3) Gaining confidence by improving corporate and business quality</b>	<ul style="list-style-type: none"> <li>We exercise high-quality management through business activities that result in our continually being chosen by our customers, business activities that take compliance into account, and sustainable business activities that take the global environment into consideration.</li> </ul>
<b>(4) Increasing corporate value</b>	
① Improved asset and capital efficiency	<ul style="list-style-type: none"> <li>EBITDA *1, ROA, ROE with the goal of continuously improving the profit ratio</li> </ul>
② Shareholder returns	<ul style="list-style-type: none"> <li>While taking as the basis the continued provision of stable dividends, we will make decisions based on comprehensive consideration of other profit sharing measures, including the purchase of treasury stock, based on business results and future management plans.</li> <li>The payout ratio is within the range of Osaka Gas' individual surplus distributable amount, with the goal of a consolidated dividend payout ratio of 30% or more, excluding short-term profit fluctuation factors.</li> </ul>
③ Maintaining financial soundness	<ul style="list-style-type: none"> <li>In addition to maintaining quantitative risk volume management, we maintain a capital adequacy ratio of about 50% and D (interest-bearing liabilities) / E (equity capital) ratio of approximately 0.7 in the medium to long term.</li> </ul>

\* 1: EBITDA = Operating income + Depreciation expenses + Amortization of goodwill + Equity in earnings of affiliated companies

# Osaka Gas Group's long-term business goals Concrete goals

Long-Term Business Goals		Forecasts for Fiscal 2016	Medium-term Business Plan for Fiscal 2020	Long-term Management Vision for Fiscal 2030
Expansion of business areas	Power supply capacity <sup>*2</sup>	3,280 MW	→	9,000 MW
	Number of customer accounts	Approximately 8 million homes	→	10 million homes or more
	Natural gas business scale	9.6 million tons	→	17.0 million tons
Quality improvement	Customer satisfaction at each contact point	93%	94%	95%
Security ・ Safety	Security and safety regarding gas pipeline and the manufacturing and power generation business	Continue reducing serious accidents to zero		
Environment ・ CSR	CO2 emission reduction amount <sup>*3</sup>	-	Approximately 7 million tons	Approximately 70 million tons
Investments	Investments for growth	-	520 billion yen	1,450 billion yen

\*1: Depending on the country's institutional design conditions, etc. and considering shifts in the market ・ procurement from other companies

\*2: Cumulative reductions from 2017 to 2020 and cumulative reductions from fiscal 2017 to 2030 (compared with FY 2016)

\*3: Cumulative total investment from Fiscal 2017

# Assumed investment scale of medium-term 2020 management plan

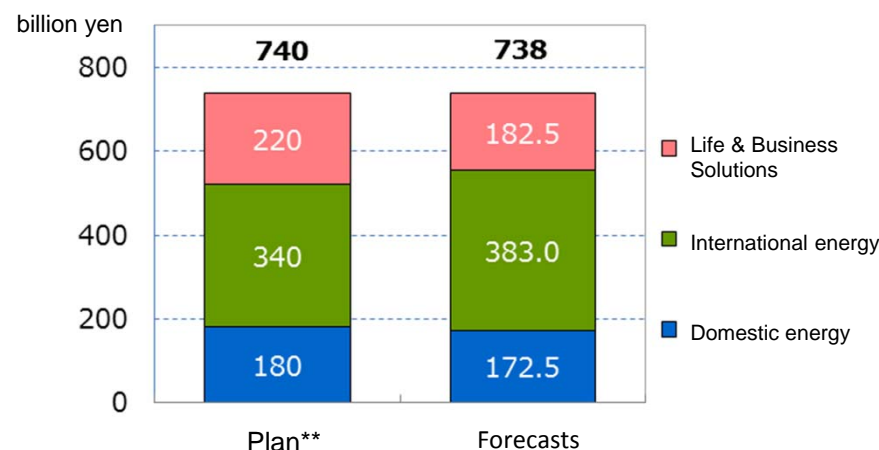
		Plan for Fiscal 2017	Cumulative total for Fiscal 2017 – 2020
Growth investment ・ M&A	Domestic energy	25	200
	International energy	71	214
	LBS	26	106
	Total	122	520
Quality improvement investment		46	180
Total amount of investment		168	700

(Unit: billion yen)

## Review of current long-term vision (FOD) \* during the period (2009-2016)

We will start full-scale operation of electric power, international energy and LBS businesses to establish earnings outside our Kansai regions gas business, to prepare for intensifying competition, promote diversification of profit sources by strengthening peripheral services and strengthening cost competitiveness.

### 10.3 -17.3 Period (8 years) Progress of our investment plan (cumulative decision-making base)



\*\* Current mid-term management vision "Catalyze Our Dreams"

### Cost reductions / Staff efficiency improvements (individuals)

	2009 Achievements	2013 Achievements	2016 Forecasts
Expenses (billion yen)	186.6	180.9	170.1
Number of employees (Including temporary employees)	6,924	6,735	6,044

### Achievements in the FOD period

#### Domestic energy business

- Active involvement in the power supply construction plan (including regenerating power that utilized FIT) and entry into the retail power business
- Himeji - Okayama Gas Pipeline, Mie - Shiga Gas Pipeline etc. Steady supply by promoting the trunk line pipeline · Promotion of demand development
- Steady promotion of earthquake and tsunami countermeasures in the supply and manufacturing
- Development and sales of Ene farm type S (52% of the world's highest level of power generation)
- Development and strengthening of peripheral services other than gas and electricity (Sumikata Services etc.)
- Expansion of wholesale business and promotion of wide area deployment in industrial fields by ESP business etc.



Ene farm type S

\* Current long-term management vision "Field of Dreams 2020"



## Achievements in the FOD period

### International energy business

- Internalization of LNG transportation costs by expansion of the LNG fleet and
- Participation in upstream projects such as the Gorgon & Ichthys project
- Participation in the Freeport LNG project
- Participation of mid-downstream projects: St. Charles IPP, Erogasmet Spa. etc.
- Development of retail gas and energy service businesses in Singapore and Thailand



USA: St. Charles IPP

### Life & Business Solutions

#### <Materials business>

- Expand our business scale by promoting M&A, such as the acquisition of Jacobi Carbons



#### <Urban development business>

- Expansion of leasing business profits through real estate investment
- Expansion of condominium business and building maintenance business by improving product strength and service levels

#### <Information business>

- Expansion of development projects that make full use of our strengths in such fields as energy, finance and manufacturing




#### <Others>

- Select and concentrate existing business, incubate new fields, such as observation business, the UK water supply business

# (Appendix) Osaka Gas' IPP investments in PJM

## Core projects of Osaka Gas' US IPP business

\* CPV: Competitive Power Ventures (Main Office: Silver Spring, Maryland, US)

	Fairview Project	Shore Project	St. Charles Project
Output	1050MW	725 MW	725MW
Technology	GE 7HA.02 2×1 CCGT	GE 7FA.05 2×1 CCGT	GE 7FA.05 2×1 CCGT
Efficiency	59%	56%	56%
Location	Pennsylvania (PJM)	New Jersey (PJM)	Maryland (PJM)
PJ Status	Development (NTP: March 2017/ COD: March 2020)	Operating (COD: Jan 2016)	Operating (COD: Feb 2017)
Current Ownership	<div> <div>CPV 70%</div> <div>Others 30%</div> </div>	<div> <div>CPV 58%</div> <div>Others 42%</div> </div>	<div> <div>OG 25%</div> <div>CPV 25%</div> <div>25%</div> <div>25%</div> </div> <p>Toyota Tsusho Marubeni</p>
OG stake	50% acquisition from CPV	20% acquisition from CPV	Acquired 25% from Marubeni
New Ownership	<div> <div>OG 50%</div> <div>CPV 20%</div> <div>Others 30%</div> </div>	<div> <div>OG 20%</div> <div>CPV 38%</div> <div>Others 42%</div> </div>	
Plant Location & Pictures	 <p>Fairview PJ Image</p>	 <p>Shore PJ</p>	<p>&lt;Project location map&gt;</p> 

\* Currently, OG is finalizing the necessary documents with CPV for its acquisition of Fairview/Shore projects.