

# Medium-term Management Plan 2020

The Medium-term Management Plan 2020 was created to cover the period from FY2017 to FY2020 in line with the direction provided by the Group's Long-term Management Vision 2030.

We aim to supply comprehensive energy and services in the domestic energy business, and hope to continue being our customers' number one choice for energy. We also plan to strengthen our international energy business and Life & Business Solutions, and we aim to achieve our earnings targets by improving profitability.

Domestic Energy Business	<p><b>Solutions for Residential Customers</b></p> <p>(Figures are targets for FY2020)</p>	<p><b>[ Contact with customers ]</b> (Osaka Gas Group, alliance, Web, ICT, etc.)</p> <ul style="list-style-type: none"> <li>Solve customers' problems through Osaka Gas service chain partners and offer customers optimal solutions</li> <li>Increase number of subscribers to the members-only website "My Osaka Gas"</li> </ul> <p><b>1.3 million members</b></p> <ul style="list-style-type: none"> <li>Offer optimal solutions using ICT through the Contact Center</li> </ul>	<p><b>[ Equipment ]</b></p> <ul style="list-style-type: none"> <li>Accelerate ENE-FARM product development and dissemination</li> </ul> <p><b>Total sales of 200,000 units</b></p> <ul style="list-style-type: none"> <li>Backfeed surplus electricity of ENE-FARM type S to the grid and use it for the electric power business</li> <li>Expand advanced and energy-saving renovation</li> <li>Expand sales of value-added equipment to increase equipment sales revenue</li> <li>Make gas equipment IoT-compatible<sup>*1</sup> for remote monitoring, failure prevention, and customized services</li> </ul> <p><small>*1 Internet of Things</small></p>	<p><b>[ Services and prices ]</b></p> <ul style="list-style-type: none"> <li>Offer reasonable prices for gas and electricity as a package</li> <li>Expand Sumikata Service (home service) offerings and increase revenue</li> <li>Further raise the quality of security and maintenance and provide services that go beyond customers' expectations</li> </ul> <p><b>On-time completion rate: 88%<sup>*2</sup></b></p> <p><b>Overall satisfaction: 94%<sup>*3</sup></b></p> <p><small>*2 Percentage of completion of repairs on the day desired by customers</small></p> <p><small>*3 Combined total of "Good" and "Very Good" questionnaire responses</small></p>
	<p><b>Solutions for Commercial and Industrial Customers</b></p> <p>(Figures are targets for FY2020)</p>	<p><b>[ Contact with customers ]</b> (Osaka Gas Group, alliance, Web, ICT, etc.)</p> <ul style="list-style-type: none"> <li>The Osaka Gas Group works with alliance partners to build customer relationships</li> <li>Expansion of subscribers to the "HelloOGI" members-only website</li> </ul> <p><b>50,000 members</b></p> <ul style="list-style-type: none"> <li>Respond to customers through the contact center based on their individual situations</li> </ul>	<p><b>[ Equipment ]</b></p> <ul style="list-style-type: none"> <li>Propose large-scale cogeneration systems for electricity/heat sharing and surplus electricity backfeeding</li> <li>Develop high-efficiency, low-cost gas air conditioning systems</li> <li>Offer Eneflex Premium, an energy-saving support service for air conditioning</li> <li>Offer fuel cells (SOFC) for industrial use in combination with electricity supply as a package</li> </ul>	<p><b>[ Services and prices ]</b></p> <ul style="list-style-type: none"> <li>Expand pricing options to meet customers' needs (gas, electricity)</li> <li>Expand service options as a utility agent</li> </ul> <p><b>[ Expansion of service area ]</b></p> <ul style="list-style-type: none"> <li>Utilize the technologies developed in the Kansai region for fuel conversion to natural gas and the adoption of cogeneration, etc., and offer comprehensive proposals for energy and services</li> </ul>
	<p><b>Establishment of Competitive Power Supply Portfolio</b></p>	<p><b>[ Directions of electric power procurement ]</b></p> <ul style="list-style-type: none"> <li>Develop our own high-efficiency, competitive thermal power generation capabilities</li> <li>Expand renewable energy power sources                             <ul style="list-style-type: none"> <li>Promote biomass, wind, and solar power projects</li> </ul> </li> <li>Procure power with a balance of competitiveness, environmental friendliness, and flexibility                             <ul style="list-style-type: none"> <li>Flexibly use external power sources based on market price forecasts and supply/demand fluctuations</li> </ul> </li> </ul>		
	<p><b>Development of Pipeline Network Operator Business</b></p>	<p><b>Ensuring security and safety that supports our gas business</b></p>		
	<p><b>[ Enhance security and disaster prevention level ]</b></p> <ul style="list-style-type: none"> <li>Enhance security level and pursue zero accidents                             <ul style="list-style-type: none"> <li>Improve emergency response standards</li> <li>Continue operations with zero serious accidents</li> </ul> </li> <li>Advance disaster response                             <ul style="list-style-type: none"> <li>Subdivide supply outage areas</li> <li>Improve operations for pipe recovery from disaster</li> </ul> </li> </ul>	<p><b>[ Build facilities based on long-term plan ]</b></p> <ul style="list-style-type: none"> <li>Develop high-voltage main line networks                             <ul style="list-style-type: none"> <li>Develop the Himeji East-West link pipe</li> <li>Study the possibility of developing an Amagasaki-Seishin Line</li> </ul> </li> <li>Achieve safety improvement targets                             <ul style="list-style-type: none"> <li>Complete the replacement of gray cast iron pipes by FY2024</li> <li>Increase the rate of earthquake-resistant pipes to 90% by FY2025</li> </ul> </li> </ul>	<p><b>[ Expand city gas ]</b></p> <ul style="list-style-type: none"> <li>Promote collaboration with marketers and pipeline network development                             <ul style="list-style-type: none"> <li>Improve convenience of "wheeling service"</li> </ul> </li> <li>Promote supply stability</li> <li>Ensure neutrality and transparency</li> </ul>	

## Target Business Indexes

		Plan for FY2017	Plan for FY2020
Profitability index	ROA	2.3%	3.5%
	ROE	4.5%	7.0%
	EBITDA*1	157 billion yen	200 billion yen
Shareholder returns	Payout ratio	30% or higher*2	
Financial soundness index	D/E ratio	Approximately 0.7	
	Capital adequacy ratio	Around 50%	

\*1 EBITDA = operating income + depreciation cost + amortization of goodwill + equity in earnings/losses of affiliates

\*2 Excluding short-term fluctuation factors

## Investment Plan

## Growth Investment and M&amp;A (FY2017-FY2020)

(Unit: billion yen)



## Quality Improvement Investment (FY2017-FY2020)

(Unit: billion yen)



## International Energy Business

## Upstream, Midstream and Downstream Businesses

## [ North America ]

- Complete Freeport LNG Terminal (operation start in FY2018)
- Acquire new IPP projects and participate in the business with a sense of ownership
- Participate in gas businesses through which our know-how can be effectively utilized
- Acquire new upstream interests, mainly projects in production or in development/expansion phase

## [ Southeast Asia ]

- Participate in new LNG terminal and IPP projects, promote expansion of retail business (fuel conversion, energy services, etc.)
- Further promote personnel shift by opening the Philippines Office and other measures

## [ Asia and the Pacific ]

- Expand LNG procurement and sales mainly in Asia and the Pacific

## [ Australia ]

- Successfully execute Gorgon and Ichthys Projects
- Acquire new upstream interests, mainly projects in production or in development/expansion phase

## [ Europe ]

- Utilize existing assets and expand businesses to energy services, etc.

## Life &amp; Business Solutions

## Real Estate

## [ Leasing business ]

- Establish a structure for investment in new offices in the Tokyo area

## [ Building management ]

- Enhance business by proposing services for energy savings, facility construction, etc.

## [ Kyoto Research Park ]

- Invite new tenants and develop a new building

## Materials

## [ Activated carbon ]

- Expand the global value chain through collaboration between Osaka Gas Chemicals and Jacobi

## [ Preservatives ]

- Introduce anti-virus coating agent, etc., in addition to xyladecor

## [ Fine materials ]

- Apply fluorene to multiple purposes in addition to optical lens resin

## IT

- Create Group synergy and expand earnings by introducing new technologies (use of AI\* at call centers, detection of signs of abnormality using IoT, etc.)

\* Artificial Intelligence

- Expand earnings from outside the Group mainly in the segments of finance, manufacturing and energy

## New Business Fields, Other

- Enhance the life services business in response to changes in the market environment, such as 24-hour fitness gyms operated by OG Sports (FITBASE 24)

- Seek new M&A opportunities and reorganize/reinforce existing affiliated companies in domestic and international energy businesses, LBS, and peripheral fields
- Set up New Business Development Dept. in July 2017