

Toho Gas Group Business Plan for Year Ending March 31, 2020

March 29, 2019
Toho Gas Co., Ltd.

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Earning forecasts and other forward-looking statements in this document are management's current views and beliefs in accordance with data currently available, and are subject to a number of risks, uncertainties and other factors that may cause actual results to differ materially from those projected.

Introduction

- The energy industry has faced a drastic transitional period on the back of rapid progress in reduction of carbon emissions and digital technology that affects customers' lifestyles and the industrial structure in addition to the intensifying competition due to full liberalization of retail markets.
- Under these circumstances, the Group formulated in November 2018 the new Medium-term Management Plan for the FY2019 to 2021 (hereinafter, the "Medium-term Plan") toward the achievement of sustainable growth.
- In FY2019, the first year of the Medium-term Plan, we will take a step forward for future growth in the period of the Management Plan and beyond by developing concrete measures and realizing steady implementation of our strategies.

Overall perspective of the Medium-Term Management Plan (Target period: FY2019 – 2021)

Go with Energy—Go beyond Energy



In line with the efforts for further growth in the city gas business, the Medium-term Plan focuses on the development to become a total energy provider of new services together with city gas, LPG and electricity, while accelerating structural reforms for the future by enhancing the Group's businesses and developing new businesses.

1. Primary Measures

| Strategy 1 | Further Growth of the City Gas Business

- (1) Efforts to Support the Lives of People in the Region
- (2) Efforts to Support Businesses in the Region
- (3) Stable Energy Procurement at a Reasonable Price
- (4) Expansion of Natural Gas Service Areas and Secure Stable Supply and Safety



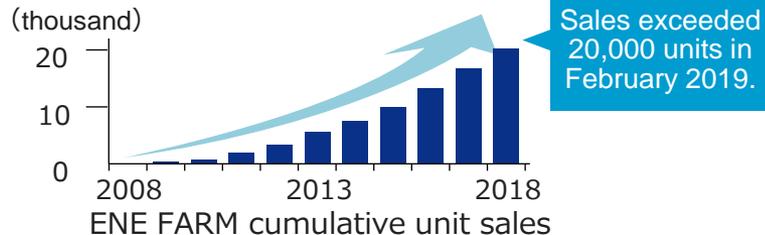
(1) Efforts to Support the Lives of People in the Region

- As a general partner of customers' daily lives, we will offer proposals for a comfortable and ecological life, provide a wide range of services tailored to the various lifestyles of customers, and enhance the strength of the Group as "the region's best security and service system."

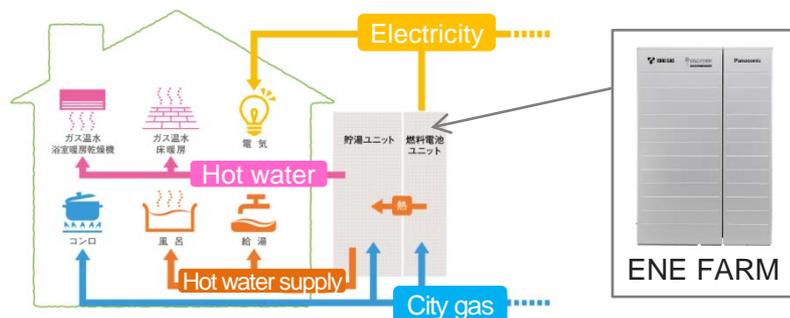
Propose comfortable and ecological life

- Promote measures such as expanding sales of ENE FARM for spread of smart house and zero-net-energy housing.
- On April 1, we started marketing ENE FARM equipped with a power generation continuation function in the event of power outage.

Spread of ENE FARM



Power is generated even in the event of a power outage



Provide a wide range of life support services

- Continue to expand our living-related service menu, including "Raku Raku Kurashi Support (a service aimed at making customers' lives comfortable)", "Raku Raku Maintenance (a gas equipment maintenance service)" and "Raku Raku Lease (a gas equipment lease service)."
- Expand our living-related businesses including housing renovation through concerted efforts of the Toho Gas Group and ENEDO service shops.

Expand living-related services

- In March 2019, the preferential treatment services for members of "Raku Raku Kurashi Support" was expanded. Further enhancement of services will be promoted going forward.

The region's best security and service system

- High quality services including a trouble-shooting maintenance and repair service offering on-site repair of gas equipment up to 9 p.m. and a Living Safety Inspection service is provided.

Fully implement "Living Safety Inspection service"

- Check gas equipment and plumbing fixtures at home free of charge. Support safe and comfortable lives.



(2) Efforts to Support Businesses in the Region

- Continue to support manufacturing and other businesses in the region by promoting the areal use of energy and fuel conversion to natural gas in order to spread and expand the use of city gas, and enhancing services including optimal energy solution services.

Promote fuel conversion

- Appeal for energy saving, CO₂ saving and cost saving by using city gas based on our combustion technology and know-how on the heat utilization.

Development of combustion technology

- Further improve efficiency in city gas burners, and promotion of technological development for expanding product lineup.



Small-capacity radiant tube burner

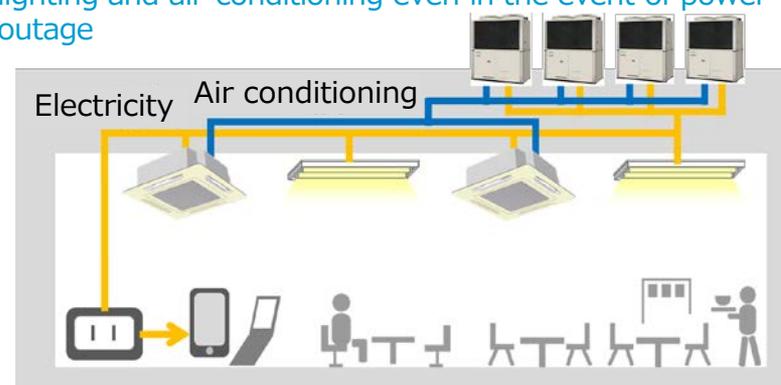
Promote the areal use of energy

- Promote measures for effective use of energy across the region to fit urban redevelopment, etc. by implementing systems centering on cogeneration systems including electric power, renewable energy, and storage batteries, etc.

Provide optimal energy solution services

- Realize optimum facility operations by utilizing remote monitoring systems, and offer proposals for solutions of preventive maintenance based on data analysis.
- Provide security inspection services and equipment lease with maintenance service.
- Build new services including power facilities, water treatment, etc.
- Promote proposals for highly effective cogeneration, gas air-conditioning facilities contributing to the business continuity plans of customers.

GHP (gas engine heat pump air-conditioners) with an autonomous power source which can continue to provide lighting and air-conditioning even in the event of power outage



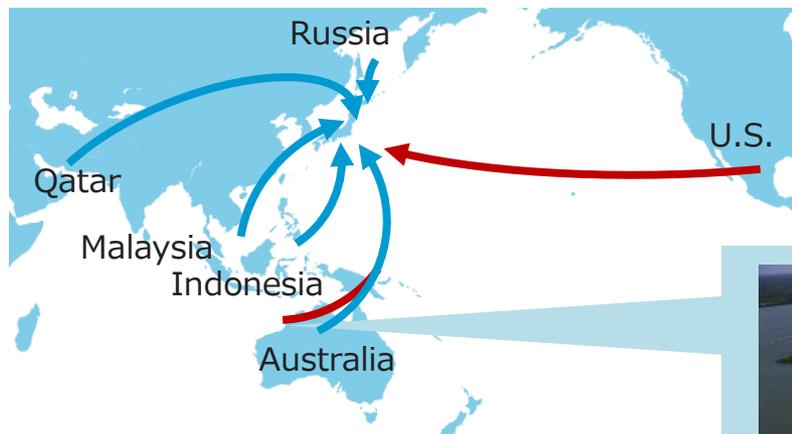
1. Primary Measures | Strategy 1 Further Growth of the City Gas Business |

(3) Stable Energy Procurement at a Reasonable Price

- Further diversify procurement including procurement from new areas to ensure stable LNG procurement at reasonable prices and work to improve flexibility in procurement systems, including LNG receiving facilities.

Diversification of LNG procurement

- Further diversify procurement areas, price indexes, and contract types.
- Begin LNG procurement from the Ichthys LNG Project in Australia and the Cameron Project in U.S.

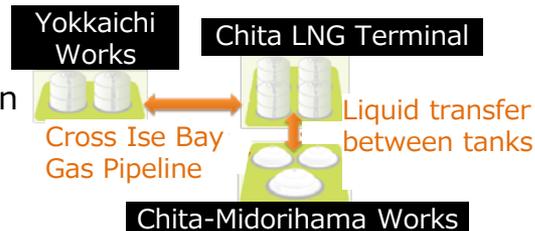


〈Procurement areas〉

5 countries → 6 countries

Flexible operation of LNG receiving bases

- Use of Cross Ise Bay Gas Pipeline and liquid transfer between tanks.
- Enhance cooperation of terminals through joint exercises of three terminals aiming at establishment of flexible and efficient operation of the terminals.



Ichthys LNG Project
(left: LNG shipping berth, right: overall view of the base)

(4) Expansion of Natural Gas Service Areas and Secure Stable Supply and Safety

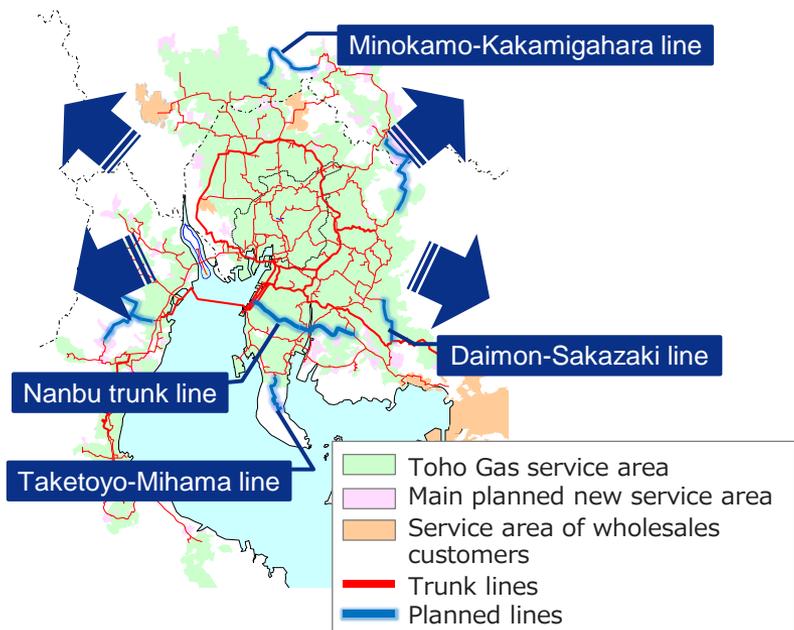
- Expand the gas pipeline network and LNG tank supply to wider areas in order to expand the use of natural gas, and steadily promote measures for securing safety and security as the basis for the gas business.

Expand city gas service areas

- Reinforce our city gas transportation network and extend gas pipelines.

Expand LNG tank supply to wider areas

- Cultivate demand in the three Tokai prefectures and surrounding area.

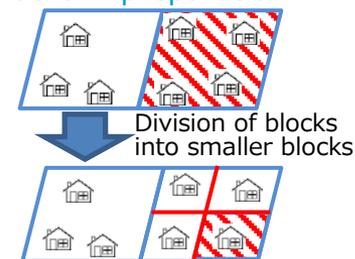


Advance security measures and disaster control measures

- Advance security measures including replacement of a very aging facility and improvement of an emergency security system in association with the expansion of gas supply areas.
- Promote disaster control measures in both tangible and intangible aspects such as improvement of gas supply shutoff blocks in preparation for earthquakes, conducting disaster prevention drills, etc.

Improvement of gas supply shutoff blocks in preparation for earthquakes

- Introduce low pressure gas supply shutoff blocks for the purpose of minimizing the impact of stopping gas supply.
- Establish remote shutoff blocks in preparation for tsunami disasters.



Joint training exercise with the Self-Defense Forces



Loading drill on a helicopter

Emergency drill to leave the pier



Leave the pier towing an LNG carrier

1. Primary Measures

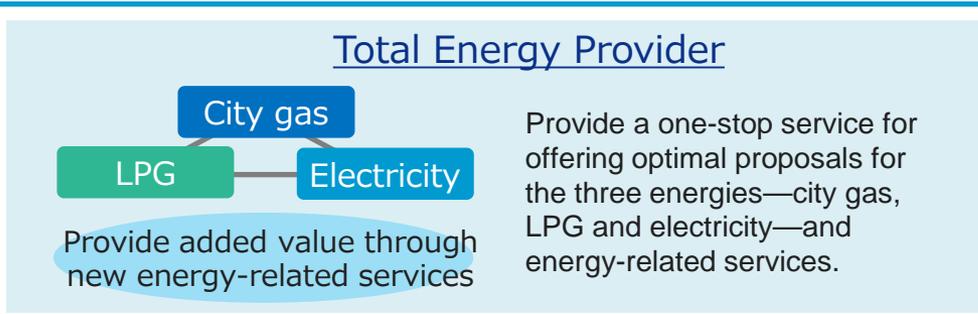
| Strategy 2 | Development into a Total Energy Provider

- (1) Provision of Added Value through New Services and Expansion of Points of Contact with Customers
- (2) Strengthening of the LPG Business
- (3) Expansion of the Electricity Business



(1) Provision of Added Value through New Services and Expansion of Points of Contact with Customers

- Work to provide added value through new services and further improve digital channels to become a total energy provider.



Provide added value through new services

- Establish a platform that provides services to support customers' daily lives.

Establish a life service platform

- ◆ Build a platform that provides a wide range of services including home security and monitoring of children to start them in the second half of FY2019.



Initiatives for energy resource aggregation

- ◆ Set up ENE FARM in all of the dwelling units of the condominium in a smart town "Minato AQUUS." Purchase surplus electric power from FY2020, and promote a mechanism for cooperation between the supply side and demand side of energy.
- ◆ Promote measures towards the realization of procurement of energy resources from individual homes, corporate customers, etc. and the sale of power, using a virtual power plant (VPP).

Improve digital channels

- Expand points of contact with customers using digital channels.

Use digital channels

- ◆ From April 2019, the transmission of information and inquiry response will be commenced using the LINE app.

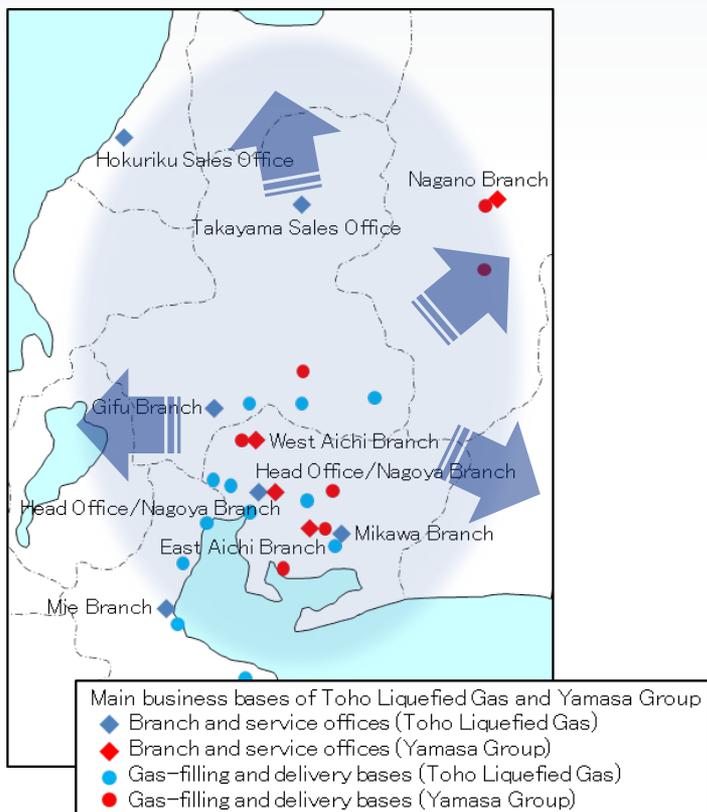


(2) Strengthening of the LPG Business

- Expand business activity areas from the core areas of the three Tokai prefectures to increase the number of customers and sales volume, and reinforce the business foundation.

Business deployment to wider areas

- Expand business activity areas to Hokuriku, Shiga, Shizuoka and Nagano.



Reinforce and expand business foundation

- Expand shipping facilities for LPG tank lorries, and strengthen delivery networks and widen involvement in distribution networks in cooperation with other companies.

Widen involvement in distribution networks

- Enhance involvement in the distribution networks by adding more exclusive LPG tank trucks with the aim of securing logistics capacity and reducing logistics cost.



Unified efforts with the Yamasa Group to expand demand

- In April 2019, Toho Gas Group will include the Yamasa Group, an LPG business operator in Aichi, Gifu and Nagano Prefectures, as a subsidiary.
- Promote further expansion of demand by using the business bases of both Toho Liquefied Gas Co., Ltd. and the Yamasa Group.

(3) Expansion of the Electricity Business

- Strengthen electricity sales measures and diversify procurement to ensure stable electricity procurement at reasonable prices.
- Increase the introduction of renewable energy to respond to the further reduction of carbon emissions.

Expansion of the electricity sales

- Expand services and sales channels to increase the number of customers.
- Develop measures in cooperation with other companies including joint sales campaigns with companies other than energy business operators.

Stable and flexible electricity procurement at reasonable prices

- Realize stable electricity procurement at reasonable prices by diversifying procurement and combining a plurality of power sources.

Enhance supply / demand management system

- ◆ Enhance management systems including system modification to respond to the increase in customers and diversified power sources.



Expand the introduction of renewable energy

- Expansion by setting up in-house power sources and investing in renewable energy funds, etc.

Secure renewable energy power sources

- ◆ In April 2019, the operation of a photovoltaic power plant will start in Taketoyo Town. (Right picture)



- ◆ Going forward, the consideration to build more mega solar power plants will be promoted.

Invest in renewable energy funds

- ◆ Obtain and accumulate operational know-how by investing in a plurality of funds that invest in renewable energy sources.

Purchase electricity generated by photovoltaic power systems after the FIT purchase period ends

- ◆ The service menu will be transmitted through our website opened in February towards the purchase which will start in November 2019.



1. Primary Measures

| Strategy 3 | Taking on New Scopes

- (1) Reinforcement and Development of Group Businesses
- (2) Development of New Businesses



(1) Reinforcement and Development of Group Businesses/

(2) Development of New Businesses (i)

- Steadily expand Group businesses, particularly focused on the four scopes—comprehensive utility service business, renovation business, outside sales of production and supply technologies, and the use of our owned properties.
- Actively engage in developing new businesses that can generate synergy effects with the energy business at home and abroad.

(1) Reinforcement and development of Group businesses

Strengthen comprehensive utility services business

- Provide a one-stop service ranging from design, construction and execution to maintenance and management of energy generation facilities including air-conditioning systems in school buildings, cogeneration, and hydrogen stations.

Efforts to introduce air-conditioning systems in school buildings

- ◆ In FY2019, set up gas air-conditioning systems in elementary and junior high schools in Okazaki, Toyota and Yokkaichi Cities following Ichinomiya City in FY2018.

Promote the expansion of outside sales of production and supply technologies

- Enhance sales of the stream method and the protective material for PE pipes for medium pressure which are our proprietary conduit technology, and BOG reliquefaction equipment which received the Energy Conservation Grand Prize.



BOG reliquefaction equipment

Strengthen outside sales functions

- ◆ Increase the staff of Toho Gas Engineering Co., Ltd. to improve engineering capability and expand outside sales opportunities.

Strengthen renovation business

- Respond to a wide range of customer needs as a general partner of customers' daily lives in the region.

Enhance product lineups

- ◆ Start sales of "harumi's kitchen*," our original kitchen equipment produced by Harumi Kurihara, a cooking expert, on April 22.



*Joint development with yutori no kukan and Toclas Corporation

harumi's kitchen

- ◆ Expand the service domain from the water-related including kitchen and bathroom to building extension and remodeling, and improvement of outer walls and roofs.

Approach to a broader customer base

- ◆ Expand sales to LPG customers.
- ◆ Cooperation with the Yamasa Group in the house renovation business.

Use of our owned properties

- Promote the use of our owned properties and old factory sites.

Develop rental apartment business

- ◆ Build rental apartments on the old industrial showroom site (Mizuho-ku, Nagoya City).
- ◆ To be completed by the end of FY2019.



Completion image

Start the 2nd phase of construction at "Minato AQULS,"

- ◆ Start the 2nd phase of construction at "Minato AQULS," the smart town opened in September 2018.
- ◆ Promote a town development which will lead to revitalization of communities including attracting Kidzania.



Areas of phase II development

(2) Development of New Businesses

Domestic / overseas energy

- Promote business development in cooperation with local governments and related companies in Japan toward the realization of local electricity business, etc. following the "Matsusaka Shin-denryoku," a power supply company.
- Promote entering into the use of energy and LNG terminal businesses, and other businesses we can make the utmost of technologies and know-how of conduits outside Japan.

New business scope

- Create new business that can generate synergy effects with the energy business.

Cooperation with startup companies

- ◆ Search for business opportunities through the participation in Japan Energy Challenge, a joint program with startup companies, and investments into venture capital funds, etc.

1. Primary Measures

| Reinforcing the Business Foundation of the Toho Gas Group |

- (1) Reinforcement and Use of Human Resources
- (2) Improvement of Efficiency
- (3) Reform of the Organizational Structure
- (4) Technological Development for the Future
- (5) Promotion of ESG Management



(1) Reinforcement and Use of Human Resources/

(2) Improvement of Efficiency

- Reinforce management base by strengthening human resources and drastically promoting efficiency. Implement structural reforms capable of responding flexibly to changes in the environment towards sustainable growth.
- Enhance ESG management and focus on technological development in new business domains to realize future growth.

(1) Reinforcement and Use of Human Resources

Employment and development of human resources

- Promote diversification of staff employment and smooth transfer of skills to young workers through on-the-job training, and personnel rotation throughout the whole Group.
- Develop human resources who boldly take on new challenges.

Human resources development through in-house recruitment system

- ◆ Implement in-house recruitment for mid-level and young workers in pursuit of new business ideas leading to commercialization.

Promote diversity

- Enhance measures for participation of diversified human resources including women and the aged.

Realization of a flexible workstyle

- Promote support for handling both a career and raising children/nursing care and use of home employment and mobile work to improve work-life balance.

(2) Improvement of Efficiency

Development and use of new technologies

- Promote higher efficiency by using digital technology, etc. in the repair of equipment and the site management of construction sites.

Utilization of technologies at sales and supply sites

- ◆ Verify the effects of improved efficiency by remotely checking and giving instructions at several sites using smart glasses and wearable cameras.



smart glasses



wearable cameras

Business process re-engineering

- Pursue fundamental improvement of efficiency in operations by reviewing business flows and implementing RPA across the entire Group, etc.

(3) Reform of the Organizational Structure

Strengthen competitiveness

- Review the structural systems from the perspectives of prompt and flexible responses to changes in the business environment, building streamlined and robust structures, and reinforcement of profitability.

Use of digital technology

- Integrate the Research & Development Division and Information Systems Dept. to establish the R&D / Digital Division towards the formulation of a digital technology utilization strategy and service development.
- Create the Innovation Promotion Dept. in the said Division.

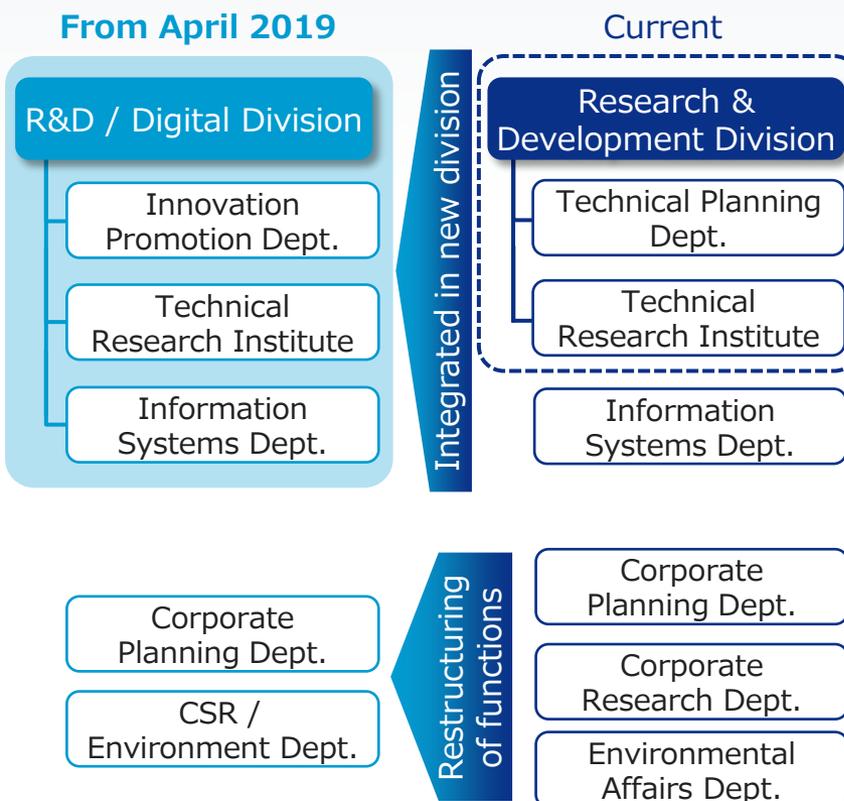
Enhance the planning and CSR-related functions

- Reorganize the planning and CSR-related functions towards the swift formulation of management strategy and the promotion of ESG management.

Actions toward legal separation of gas pipeline divisions

- Consider and make steady preparations for the legal separation of gas pipeline divisions which should be completed by FY2022, possibly by converting the said divisions into an in-house company in April 2020.

Organizational restructuring in April 2019



(4) Technological Development for the Future/

(5) Promotion of ESG Management

(4) Technological Development for the Future

Expansion of energy services through the use of digital technology

- Promote effective use of digital technologies mainly by the newly-established R&D / Digital Division towards the development of new services.

Demonstration of transactions using blockchain technologies

- ◆ In January 2019, we made investments in DIGITAL GRID Corporation, which holds blockchain technology.
- ◆ Started a demonstration test towards the realization of energy services using the said technology.

Initiatives for the future with our eyes set on a hydrogen-based society, etc.

- Building of hydrogen stations and develop technologies to use hydrogen.
- Develop new commercial products using our technologies.

Building of hydrogen stations

- ◆ Opened Centrair Hydrogen Station, our fourth commercial hydrogen station in March 2019.
- ◆ Participate in the project of supplying hydrogen produced by renewable energy at the Takahama Plant of Toyota Industries Corporation.



Develop hydrogen combustion technologies

- ◆ Develop technologies to use hydrogen as a fuel at factories, etc.

Develop thermal storage materials

- ◆ Conduct practical use and diversified use of the thermal storage materials produced by our proprietary technology.

Downsize the hot water tanks

Food warmer

Maintain a comfortable temperature in the building

(5) Promotion of ESG Management

Promotion of environmental and social activities

- Develop business activities that contribute to the SDGs
- Promote environmental and social activities mainly by the newly-established CSR / Environment Dept.

Forest Conservation Activities in Toho Gas Forest

- ◆ At Toho Gas Forest (Odai-cho, Mie Prefecture and Mitake-cho, Gifu Prefecture), Toho Gas Group employees and their families engage in forest conservation activities including tree planting and thinning with cooperation from the local community.



Develop "Crime prevention activities to protect children"

- ◆ Cooperate in child protection activities at approximately 200 bases including our sales offices and ENEDO service shops serving as a "Children's Refuge Center."
- ◆ Approximately 2,200 vehicles of the Group will patrol for disaster prevention to contribute to local safety and security.



Reinforce of corporate governance

- Strengthen internal controls through thoroughly implement risk management and compliance, etc.

Strengthen cyber security

- ◆ Implement risk assessment by the Cyber Security Committee across the Company, and conduct internal drills.

2. Numerical Plan

Energy Sales

Investment Plan



2. Numerical Plan Energy Sales

		unit	FY2018 (Estimated results)	FY2019 (Plan)	Change from the previous year	Rate of change	FY2021 (Medium-term management plan)
Natural Gas	Number of customers*1	thousand	2,487	2,509	+ 22	+ 0.9%	2,550
	Sales volume*2	billion m ³	3.94	4.05	+ 0.11	+ 2.7%	4.1

*1 Number of meters installed

*2 Including LNG

LPG	Number of customers*3	thousand	500	585*4	+ 85	+ 16.9%	590*4
	Sales volume	thousand tons	452	507*5	+ 55	+ 12.2%	535*5

*3 Including the number of customers based on commissioned business for delivery

*4 Including the 80 thousand customers of Yamasa Group

*5 Including the 45 thousand tons of Yamasa Group

Electricity	Number of customers	thousand	190	240	+ 50	+ 26.3%	300
	Sales volume	billion kWh	0.6	0.8	+ 0.2	+ 33.3%	1.0

2. Numerical Plan Investment Plan

	FY2018 (Estimated results)	FY2019 (Plan)	Major breakdown of FY2019	Cumulative total from FY2019-21 (Medium-term management plan)
Investment into the city gas business	25.9 billion yen	28 billion yen	<ul style="list-style-type: none"> - 23 billion yen for transportation service - 5 billion yen for others 	80 billion yen and over
Investment into growth businesses	11.7 billion yen	24 billion yen	LPG business, electricity business, smart town "Minato AQUUS" phase II development plan, new businesses, etc.	60 billion yen and over