



Toho Gas Group

FY2024 Business Plan



March 28, 2024

Introduction

Positioning FY2024 Business Plan

Priority measures

- Acceleration of carbon neutrality initiatives
- Enhancement of “Toho Gas Kurashi” services
- Growth of new businesses
- Ensuring a stable supply and expanding supply infrastructure
- Promotion of digital transformation (DX)
- Promotion of diversity and coexistence with local communities
- Enhancement of compliance

Reference material

Sales volume and investment

■About the Design of the Cover

The cover of the "Toho Gas Group FY2024 Business Plan" was designed by an employee of Toho Flower Co., Ltd.

Toho Flower Co., Ltd. is a company in the Toho Gas Group established in October 2019. It aims to encourage hiring and lasting employment for persons with disabilities.

Inspired by the "Toho Sakura Project", which aims to revitalize within the Toho Gas Group, this design represents the company's image of growth and new challenges with a steadily rising cherry blossom.



Introduction

We would like to express our deepest condolences to those who lost their lives in the 2024 Noto Peninsula Earthquake, and extend our heartfelt sympathies to all those affected by the disaster.

We received a warning based on the Antimonopoly Act from the Fair Trade Commission regarding our electricity and gas transactions. Accepting this warning solemnly and sincerely, our group will strive to ensure thorough compliance as a top priority in our business operations.

The environment surrounding our group is rapidly changing with increasing demand for carbon neutrality, prolonged Russia-Ukraine situation, Middle East conflict, soaring prices of equipment and materials, and labor shortages, leading to continued uncertainty. Amidst these circumstances, in FY2022 and FY2023, the first half of our medium-term management plan, we were able to steadily expand our energy customer base while maintaining stable supply, establish a framework to promote customer services, and prepare several options for the carbon-neutral era. In addition, we have been actively promoting various challenges across the entire group, unbound by conventional frameworks, to sow the seeds for growth. In FY2024, while flexibly adapting to environmental changes, we will accelerate the pursuit of our management goals and nurture the seeds of growth into significant achievements.

Toho Gas Co., Ltd.
Representative Director and President

増田信之

Nobuyuki Masuda

In the FY2022-2025 Medium-Term Management Plan, we have set the four main themes shown below and have implemented specific actions to achieve them. For FY2024, considering the current environmental changes, we have set seven priority measures to be pursued by the entire group.

Main themes and specific actions set in the Medium-Term Management Plan

Promote carbon neutrality

Reductions of carbon and decarbonization at customer locations
 Develop technologies to decarbonize gas itself
 Establish a foundation to expand the use of hydrogen
 Low-carbonize/decarbonize electricity

Evolve as an energy operator

Expand energy share
 Ensure constantly safe, secure, and stable supply
 Realize low-cost and stable procurement
 Expand energy-related business at home and overseas

Create diverse value

Expand services to enrich people's lives
 Expand services to support business
 Broaden business domains by utilizing our assets and expertise

Contribute to the SDGs

Strengthening initiatives for coexistence with local communities
 Response to ESG issues
 Promote job satisfaction and diversity at the plant

Key environmental changes at present

Push for carbon neutrality

Progress in the utilization of digital technologies, including generative AI

Diversification and sophistication of customer needs

Destabilization of international situations

Increasing awareness of disaster prevention

Permeation of ESG management

Priority measures for FY2024

Growth strategy

Acceleration of carbon neutrality initiatives

Growth of new businesses

Enhancement of "Toho Gas Kurashi" services

Ensuring a stable supply and expanding supply infrastructure

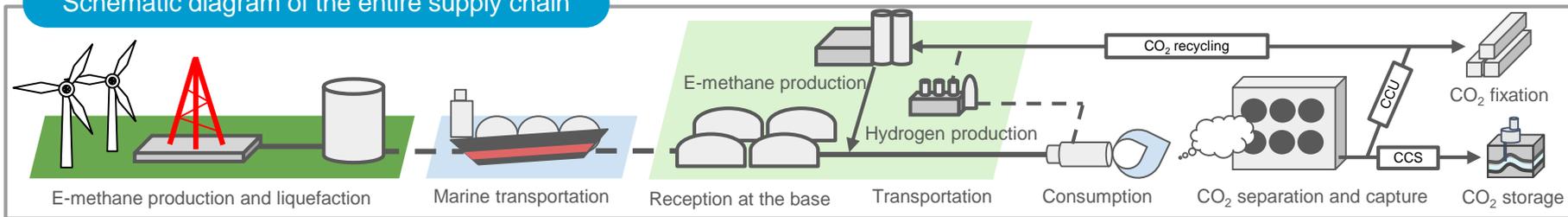
Promotion of digital transformation

Promotion of diversity and coexistence with local communities

Enhancement of compliance

Regarding e-methane,^{*1} which is expected to be a future city gas raw material, we will start its production using CO₂ derived from biogas and use it as a raw material for city gas in Japan. We will also promote activities overseas with the aim of starting its importation by 2030. We will also begin hydrogen production to build a hydrogen supply chain. Furthermore, we will establish a dedicated department (Carbon Neutrality Development Dept.) to promote the social implementation of e-methane and hydrogen, etc.

Schematic diagram of the entire supply chain



Overseas e-methane production

We will explore and consider joint projects with various domestic and overseas companies with the aim of starting the importation of e-methane by 2030.

Region	Project partner
North America	Tokyo Gas, Osaka Gas, Mitsubishi Corporation, Sempra Infrastructure
Australia	Santos
Multiple regions	Toyota Tsusho, Total Energies
Multiple regions	Tree Energy Solutions

Domestic e-methane production

We will begin the demonstration of e-methane production (methanation) in collaboration with Chita City, aiming to achieve the first domestic use of e-methane as a city gas raw material (scheduled to start operations in April).



Methanation demonstration facility (under construction)

CO₂ separation and capture

We will steadily conduct technological development for CO₂ separation and capture, including the utilization of unused cold energy from LNG and research on high-performance adsorbents.

CO₂ fixation/storage

We will conduct a project^{*2} to fix CO₂ emitted from factories and other sources into concrete. We will also promote business feasibility evaluations for CO₂ storage in order to establish a value chain including overseas.

Establishment of a hydrogen supply chain

We will commence hydrogen production at the Chita Midorihama Plant (scheduled to start operations in June). In addition, we will expand our burner lineup to meet growing demand.



Hydrogen production facility (under construction)



Hydrogen burner combustion test

*1: E-methane is a synthetic methane produced using non-fossil energy sources, such as green hydrogen.

*2: We are currently exploring the project jointly with Aisin and Taisei Corporation with business development support from Aichi Prefecture.

Acceleration of carbon neutrality initiatives

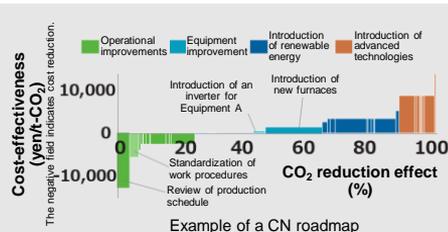
In our CN×P business, aimed at supporting customers' carbon neutrality (CN) initiatives, we will enhance consulting services and the proposal of CN tools for production sites. In addition, we are advancing the development of renewable power sources, including the biomass power plants in Yatsushiro (Kumamoto Prefecture) and Karatsu (Saga Prefecture), both of which are scheduled to start operation in FY2024. We aim to achieve a renewable power supply capacity of 180,000 kW by the end of FY2024.

Promotion of CN×P business

CN roadmap

We support customers in developing roadmaps to achieve their carbon neutrality goals.

Through meticulous on-site investigations, we will create highly effective plans.



GreenConnex

We will visualize, using a tool that allows for real-time monitoring of CO₂ emissions and production costs required for the production of a unit of a product.



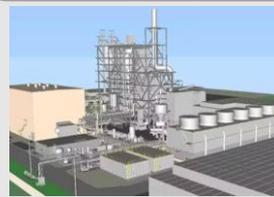
Reference user (Mitsuiya Industrial Co., Ltd.)

Establishment of Toho Gas Energy Engineering (April)

With the aim of supporting commercial customers' achievement of CN, we will establish a system that provides energy and engineering in an integrated manner to provide advanced and highly effective solutions.

Carbon-neutral electricity initiatives

Development of renewable power sources and the introduction of renewable power



Yatsushiro Biomass Power Plant
Scheduled operation: June 2024
Power output: 75,000 kW
(Our share: 28,000 kW)



Karatsu Biomass Power Plant
Scheduled operation: December 2024
Power output: 50,000 kW
(Our share: 17,000 kW)



Non-FIT solar power plants
Expanding power supply capacity through various methods, such as in-house development and procurement from other companies

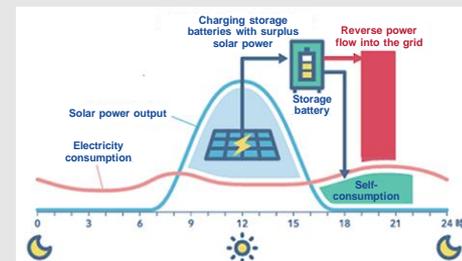
* The photo is for illustrative purposes only.

We aim to achieve a renewable power supply capacity of 180,000 kW (FY2024 plan).

Waketoku (demonstration in progress)

We are currently conducting a demonstration of "Waketoku," a reverse power flow VPP* service that contributes to the spread of solar power generation. This is the first service in Japan to purchase reverse flow electricity from home storage batteries.

* Abbreviation for "Virtual Power Plant"



Enhancement of “Toho Gas Kurashi” services

The Medium-Term Plan target of 3 million customers is expected to be achieved in FY2024. Through our new brand “Toho Gas Kurashi,” we will offer our customers a variety of services beyond energy, such as renovations and storage batteries, as their lifestyle partner, thereby contributing to their realization of a rich life.

The concept of “Toho Gas Kurashi”

Toho Gas Kurashi Shops explore and propose customers' ideal lifestyles regarding energy, housing, food, and health as their lifestyle partner.

We will continue strengthening our relationship with customers, developing products and services that reflect their daily inconveniences and "nice-to-have" needs.



Offering a one-stop solution for products and services that enrich life, right near customers

Examples of “Toho Gas Kurashi” products and services

Toho Gas Kurashi no Denchi

We offer a lifestyle with solar power generation and storage batteries at zero initial cost.*1

*1: If scaffolding installation or other special work is required, additional costs should be borne by the customer separately.



Renovation

From minor daily inconveniences to full-scale renovations, we cater to customers' desires for their ideal homes.

- ✓ “I want to convert my home into a duplex without rebuilding.”
- ✓ “I want to make my entire house barrier-free for the future.”
- ✓ “I want to renovate a used home.”

We have an annual record of over 5,000 renovation projects completed.*2

*2: Number of completed projects for kitchen, bathroom, toilet, floor heating, and other facility renovations (FY2022)

We won the Special Prize in the Nationwide Ideal Home Contest organized by RoomClip.

Toho Gas Hikari powered by USEN NETWORKS

This service provides our gas and electricity customers with comfortable internet services at affordable prices.



In terms of new domestic businesses, we will expand our salmon farming operations, using our group's assets. In the agricultural sector, we will enhance collaboration with TOWING Ltd. as part of our initiatives to foster partnerships with local startups and accelerate our ventures into new businesses. In our overseas operations, we will contribute to local decarbonization and low-carbon initiatives by expanding our business using the expertise of our group. Furthermore, in our real estate business, we will promote new development projects in addition to the utilization of existing real estate assets to enhance the attractiveness of the area.

Initiatives to strengthen new domestic businesses

Chita Cool Salmon

We will expand the operation of land-based aquaculture utilizing LNG cold energy at the Chita Midorihama Plant. Our goal is to achieve more than five times the production of FY2023 (approximately 12 tons).



Circular low-carbon agriculture

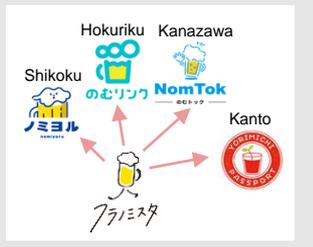
We will construct a production plant for high-performance biochar called "Soratan" in collaboration with TOWING Ltd., a startup originated from Nagoya University.



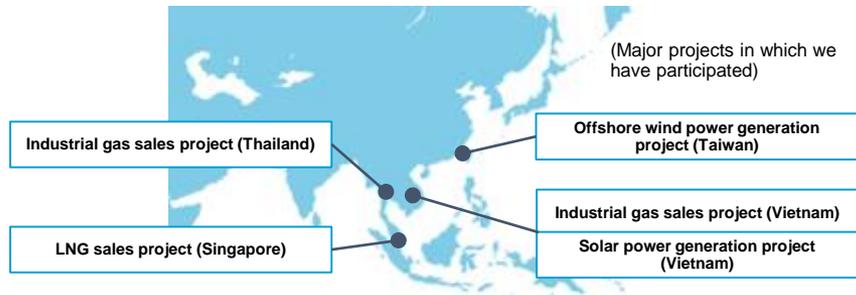
One drink subscription

We will enhance the OEM deployment of the one-drink subscription service offered under the "Furanomista" brand in this region.

We will expand our activities to support local restaurants nationwide.



Promotion of overseas energy projects



(Major projects in which we have participated)

We aim to expand our overseas operations of gas sales, LNG-related business, and renewable energy business, mainly in Asia, by leveraging our knowledge and expertise cultivated through our domestic energy business.

Strengthening real estate business

In April, we will rename Toho Real Estate Co., Ltd. to Toho Gas Real Estate Development Co., Ltd. and focus on expanding our real estate business, including new developments alongside the utilization of existing real estate assets.

In FY2024, we plan to develop and sell residential lots and detached houses in Ichinomiya City, using our existing real estate assets.



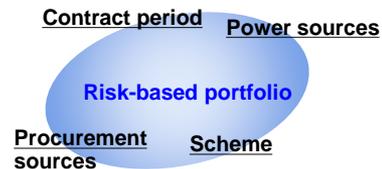
Ensuring a stable supply and expanding supply infrastructure

We will diversify risk in procuring LNG and electricity for a stable supply. In addition, we will develop the supply infrastructure to expand city gas usage and introduce new technologies for disaster prevention and safety measures against natural disasters, such as earthquakes.

Procurement risk management

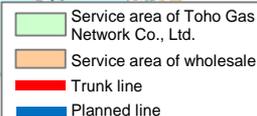
In LNG procurement, to ensure energy security, we will appropriately combine long-term contracts with short-term and spot purchases. In addition, we will expand procurement sources from the current four countries to five by adding Canada (scheduled for 2025) to diversify risks. Moreover, in case of emergencies, we are working with the national government and other companies to prevent supply disruptions.

Regarding electricity procurement, we are strengthening risk management against revenue and expense fluctuations by appropriately combining procurement from power generation companies and the wholesale market.



Expand supply infrastructure

We will expand our service area by developing demand mainly in the Gifu and Mie areas and enhancing our pipeline network as part of our supply infrastructure.



Disaster and safety preparedness

Enhancement of disaster response capability

<Hardware measures>

- Further improving the seismic reinforcement rate
- Reducing supply disruption areas by promoting the adoption of low-pressure shut-off systems

<Software measures>

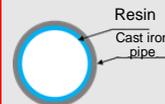
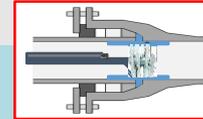
- Improving regional resilience by conducting disaster response drills with local authorities
- Establishing systems to provide/receive restoration support



<Support for the region impacted by the Noto Peninsula Earthquake>
On-site support, including pipeline restoration work by Toho Gas Techno Co., Ltd.

Promoting measures against aging facilities

We will utilize AI deterioration prediction and new construction methods to effectively and efficiently implement measures.



<Development of regenerative repair method>
A new method to renew the inner surface of aged pipes by reinforcing them with resin

Introduction of smart meters

We will fully introduce smart meters. We will gradually expand the utilization of their functions, such as remote meter reading using wireless communication and remote gas shutoff in response to customer reports of gas leaks or other issues, to improve work efficiency and ensure early safety.



Promotion of digital transformation (DX)

We will introduce AI, data analytics, and other cutting-edge technologies into various tasks, such as creating drawings, gas valve opening/closing, and equipment repairs to fundamentally improve the efficiency of our labor-intensive operations. Furthermore, we will establish a new organization (Digital Transformation Promotion Dept.) to accelerate our DX initiatives.

Utilization of advanced technologies

Automatic creation of 3D drawings



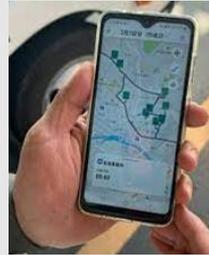
In collaboration with ANDPAD Inc., we have developed a technology to automatically create gas pipe drawings and have started on-site verification. We aim to put this technology into practical use by the end of FY2024.

Sophistication of fundamental operations (gas valve opening/closing, equipment repairs)

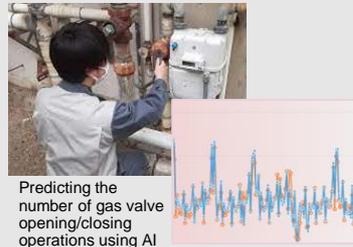
We can now predict the number of gas valve opening/closing operations using AI, thereby optimizing personnel allocation throughout the year.

In addition, we are developing a system to estimate the cause of equipment malfunctions based on symptoms, aiming to reduce the time required to complete repairs.

Optimization of LPG delivery routes



We use smart meters and AI to optimize cylinder delivery routes.



Improvement of operational efficiency

Promoting paperless processes

We will promote measures to shift to paperless processes, such as the introduction of an electronic approval system. Currently, we have achieved a reduction of approximately 30% in printing costs compared to FY2020. In FY2024, we aim to reduce the number of prints for pipeline field work, which still involves many paper documents, by 60% compared to FY2023.

Digitization of manuals

We are promoting the digitization of paper manuals to improve searchability, enhance flexibility in manual revision, and reduce printing costs.



Enhancement of call center operations

At our customer service center, we are gradually expanding the scope of web and automated voice guidance services in addition to telephone support by operators, thereby enhancing customer convenience. In addition, for our GHP maintenance service, we have introduced a system that allows supervisors to monitor calls in real-time, achieving a customer satisfaction rating of 98%.*

* Based on the results of customer survey conducted by our company in FY2023

Promotion of diversity and coexistence with local communities

Under the “Toho Gas Group Sustainability Policy,” we will implement diversity promotion measures, such as advancement by women and starting a day-care service for children with disabilities. In addition, through comprehensive partnership agreements with local governments, we aim to address regional issues and contribute to enhancing the attractiveness of the communities.

*Toho Gas Group
Sustainability Policy
(Excerpt)^{*1}*

The Toho Gas Group contributes to the realization of a sustainable society through the stable supply of environmentally friendly energy and the co-creation of new value.

Development together
with the community

Reduction of
environmental impact

Respect for human
rights

Healthy and safe workplace
environment

Legal compliance and fair
business activities

^{*1}: Please refer to our website for the full policy (<https://www.tohogas.co.jp/corporate/eco/sus/>).

Promotion of diversity

Promotion of advancement by women / Strengthening internal system

To further promote advancement by woman, we will work to expand the base by strengthening recruitment, support work-life balance, raise awareness, and promote understanding in the workplace and among managers.

In addition, we will establish the “D&I and Career Development Support Group” in April to promote the active work of senior employees and mid-career hires and strengthen career education for young employees.



Obtained “Platinum Kurumin Certification” in May 2023

Day-care service for children with disabilities

We will actively promote the consideration of starting a day-care service for children with disabilities,^{*2} which was proposed through an internal call for new business initiatives.

^{*2}: The day-care service for children with disabilities aims to provide support primarily to preschool children with disabilities at dedicated facilities.



Facility rendering

Promotion of coexistence with local communities

Comprehensive partnership agreements with local governments

In FY2023, we concluded comprehensive partnership agreements with Koda Town and Nagoya City (our 7th and 8th agreements with local governments). We will continue to collaborate with local governments to promote the resolution of local issues.



Agreement with Koda
Town
(October 2023)

Agreement with Nagoya
City
(February 2024)

minato AQULS

The ongoing second phase development aims to create local vibrancy, as well as to create a sustainable town that contributes to decarbonization and the resolution of local issues.

The live house-style hall “PORTBASE” is set to open in March 2025.



PORTBASE (facility rendering)

Enhancement of compliance

We received a warning based on the Antimonopoly Act from the Fair Trade Commission regarding our electricity and gas sales activities. In order to prevent the recurrence of similar incidents, we are committed to further legal compliance initiatives and will implement the following preventive measures.

We see this as a new starting point for our group and aim to foster a corporate culture that places the highest priority on compliance with laws and regulations.

Reform of corporate culture

Top message announcement	<ul style="list-style-type: none"> The president expressed deep regret for the violation of the Antimonopoly Act to all executives and employees, along with his determination to break away from legal violations and fundamentally reform our corporate culture.
Declaration of compliance with the Antimonopoly Act	<ul style="list-style-type: none"> The Board of Directors passed a resolution stating that we will not engage in or enforce any violations of the Antimonopoly Act in the future and will take appropriate measures to prevent such acts.
Submission of pledges	<ul style="list-style-type: none"> All executives and employees will submit a pledge to comply with the Antimonopoly Act after completing training on the law.
Establishment of an internal leniency system and strengthening of the internal reporting system	<ul style="list-style-type: none"> We will establish an "Internal Leniency System," which allows those involved in acts that violate the Antimonopoly Act to receive a reduction or exemption from internal disciplinary actions if they report the matter to the compliance consultation desk and cooperate with the investigation. Regarding the internal reporting system, we will further enhance the functionality of the consultation desk and ensure widespread awareness of whistleblower protection.
Avoidance of long-term tenure in the same position	<ul style="list-style-type: none"> To prevent inappropriate networking with competitors and to introduce a fresh perspective for checks, we will strive to minimize personnel staying in the same job position for extended periods.

Establishment and implementation of pre-approval and post-reporting system for contacts with competitors

Establishment and implementation of pre-approval and post-reporting system for contacts with competitors	<ul style="list-style-type: none"> All executives and employees are prohibited from contacting competitors for competitive business. Prior approval from the company is required for contacts with competitors for purposes other than competitive business. The details of such contacts must be reported to the company to ensure compliance with the Antimonopoly Act.
Contact monitoring	<ul style="list-style-type: none"> The Corporate Governance Promotion Department will conduct random monitoring of executives' and employees' emails to verify compliance with the Antimonopoly Act. External communications must be conducted using the email accounts or mobile phones provided by the company. The use of privately owned devices, such as mobile phones and PCs, is prohibited in principle. A column indicating the presence or absence of entertainment requests will be added to the pre-approval and post-reporting format for contacts with competitors, facilitating compliance checks with the Antimonopoly Act.

Enhancement of internal training on the Antimonopoly Act

Implementation of multitiered and targeted training on the Antimonopoly Act	<ul style="list-style-type: none"> Conducting training sessions multiple times per year for all employees, as well as management, supervisors of competitive departments, and staff, with practical content Establishing rules and guidelines that all executives and employees must follow when contacting competitors, and ensuring proper and rigorous implementation by the Corporate Governance Promotion Department
Enhancement of legal consultation regarding the Antimonopoly Act and other applicable laws	<ul style="list-style-type: none"> Making legal consultation (especially pre-legal checks) regarding the Antimonopoly Act and other applicable laws mandatory in principle, and establishing a system for this measure

Audit of compliance with preventive measures and verification of their effectiveness / Severe penalties for new violations

Enhancement of audit activities, including external audits conducted by third parties	<ul style="list-style-type: none"> In addition to external audits by third parties, we will conduct site audits by auditors and other internal audits, with a focus on compliance with the Antimonopoly Act, thereby strengthening the audit function to ensure compliance.
Regular verification of the effectiveness of preventive measures	<ul style="list-style-type: none"> Conducting regular verification of the effectiveness of preventive measures to continuously improve them
Severe penalties for new violations	<ul style="list-style-type: none"> Violations of the Antimonopoly Act and false reporting will be subject to severe penalties, including disciplinary actions, in accordance with the employment regulations. This has been fully informed to everyone within the company to ensure their awareness.

Reference material: Sales volume and investment

Number of customer accounts		FY2022 (actual)	FY2023 (estimated)	FY2024 (plan)	Medium-term management plan target
	Number of customers¹	2.92 million	2.99 million	3.06 million	Reach 3 million at an early stage

1 Total number of customer accounts of city gas, LPG, and electricity

Sales volume		FY2022 (actual)	FY2023 (estimated)	FY2024 (plan)	Medium-term management plan target (FY2025)
	City gas²	3.55 billion m ³	3.46 billion m ³	3.46 billion m ³	Maintain the same level as in 2021
	LPG	475 thousand tons	467 thousand tons	486 thousand tons	Approx. 10% increase
	Electricity	2.37 billion kWh	2.55 billion kWh	2.60 billion kWh	Approx. 10% increase each year

2 Includes LNG sales volume (Converted to the amount of city gas)

Investment		FY2022 (actual)	FY2023 (estimated)	FY2024 (plan)	Medium-term management plan target
	Core business³	38.1 billion yen	40.0 billion yen	37.0 billion yen	FY2022–2025 total 230 billion yen (Core : Strategic = 1 : 1)
	Strategic business⁴	22.0 billion yen	14.0 billion yen	31.0 billion yen	
	Total	60.1 billion yen	54.0 billion yen	68.0 billion yen	

3 Businesses that create cash flow as a long-term stable earnings base (e.g., city gas, LPG)
4 Businesses that drive medium- to long-term growth (e.g., electricity, energy services, living/business support)

Reference Information	Reference1 : Major breakdown of investment in FY2024 (plan)			Reference2 : Cumulative total of investment in Medium-term management plan target			
	Plan	Amount of investment	Major investment				
	Pipeline	23 billion yen	pipeline construction, etc.				
	Renewable power and CN initiatives	14 billion yen	renewable power supply and equipment for hydrogen production, etc.				
	overseas energy projects (except for renewable power)	6 billion yen	Canada and Asia, etc.				
	DX initiatives	5 billion yen	internal system, etc.				
Real estate business	3 billion yen	minato AQUUS (Second stage development), etc.					

Fiscal Year	Total Investment (billion yen)	Breakdown (billion yen)
FY2022	60.1	-
FY2023 (estimated)	114.1	-
FY2024 (plan)	182.1	Core business: 148.1, Strategic business: 34.0
FY2025 (Medium-term management plan target)	230.0	-

あしたがつてきに！



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.