

Field of Dreams 2020

Long-term Vision and Medium-term Business Plans

March 2009

Osaka Gas Co., Ltd.

1. Field of Dreams: where it stands

Corporate Creed: Service First

Management Objectives: creating value for all stakeholders

Customers

Shareholders

Society

Employees

Osaka Gas Brand

Design Your Energy 夢ある明日を



Exploring new business frontiers for customers and for changing times to contribute to people's comfortable lifestyles and prosperity of businesses

Long-term Vision and Medium-Term Plans based on Value Creation Management

Field of Dreams 2020

Determination

Our intent for achieving sustainable growth

Osaka Gas in 2020

Shape of Osaka Gas to come in 2020

Action Plans

Medium-term plans to 2013 to achieve long-term vision

2. Long-term social and economic trends

- ◆ Greater commitment to global environmental protection
- ◆ Advances in environmental and energy saving technologies
- ◆ Environmental and security concerns heighten natural gas' role
- ◆ Rising energy prices and increasing market volatility
- ◆ Demographic changes and lower economic growth in Japan
- ◆ Globalization of business activities and economies
- ◆ Intensifying competition in energy market
- ◆ Rising social responsibilities of corporate enterprises

Osaka Gas Group is determined

...to achieve sustainable growth both at home and overseas in order to provide its customers with comfortable lifestyles friendly to the environment and solutions in their businesses.

We will continuously strive to explore our potentials utilizing our versatile and rich business foundations, human resources, and technical expertise, nurtured through natural gas and energy business over the past century.

(1) Evolution into global energy and environment business group

- ◆ further strengthen its core multi-energy business in home market
- ◆ seek growth of energy business along energy value chain at home and abroad
- ◆ contribute to customers' lives with comfort and business prosperity, and further, to reduce impacts on global environment through advanced energy solution and stable energy supply including renewables
- ◆ providing solutions in non-energy fields in and beyond our home market

(2) Implement management practices to become a corporate group of choice

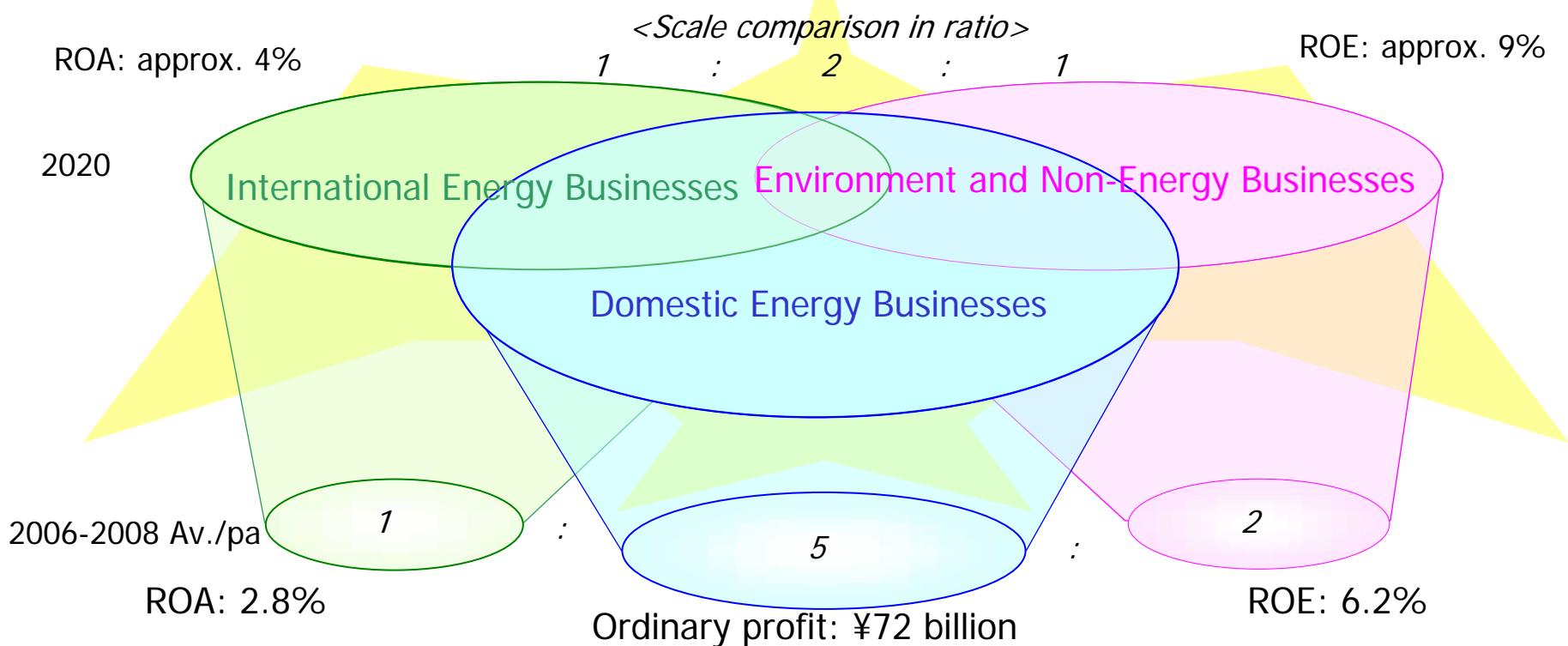
- ◆ providing high quality products and services while ensuring safety and through fair and transparent business practice, increasing value for all its stakeholders; customers, shareholders, society, and employees

Osaka Gas Group in 2020

Global Energy and Environment Businesses Group with solid foundations making progress in the fields of;

- Domestic energy businesses
- International energy businesses along energy value chain
- Environment and non-energy businesses

Global Energy and Environment Businesses Group (consolidated)



What we intend do to achieve our vision in 2020:
shape of Osaka Gas Group to come

1. Broadening business fields

2. Fortifying solid business foundations

1. Broadening business fields

(1) Enlarging breadth and depth of fields in existing and new businesses

International Energy Businesses

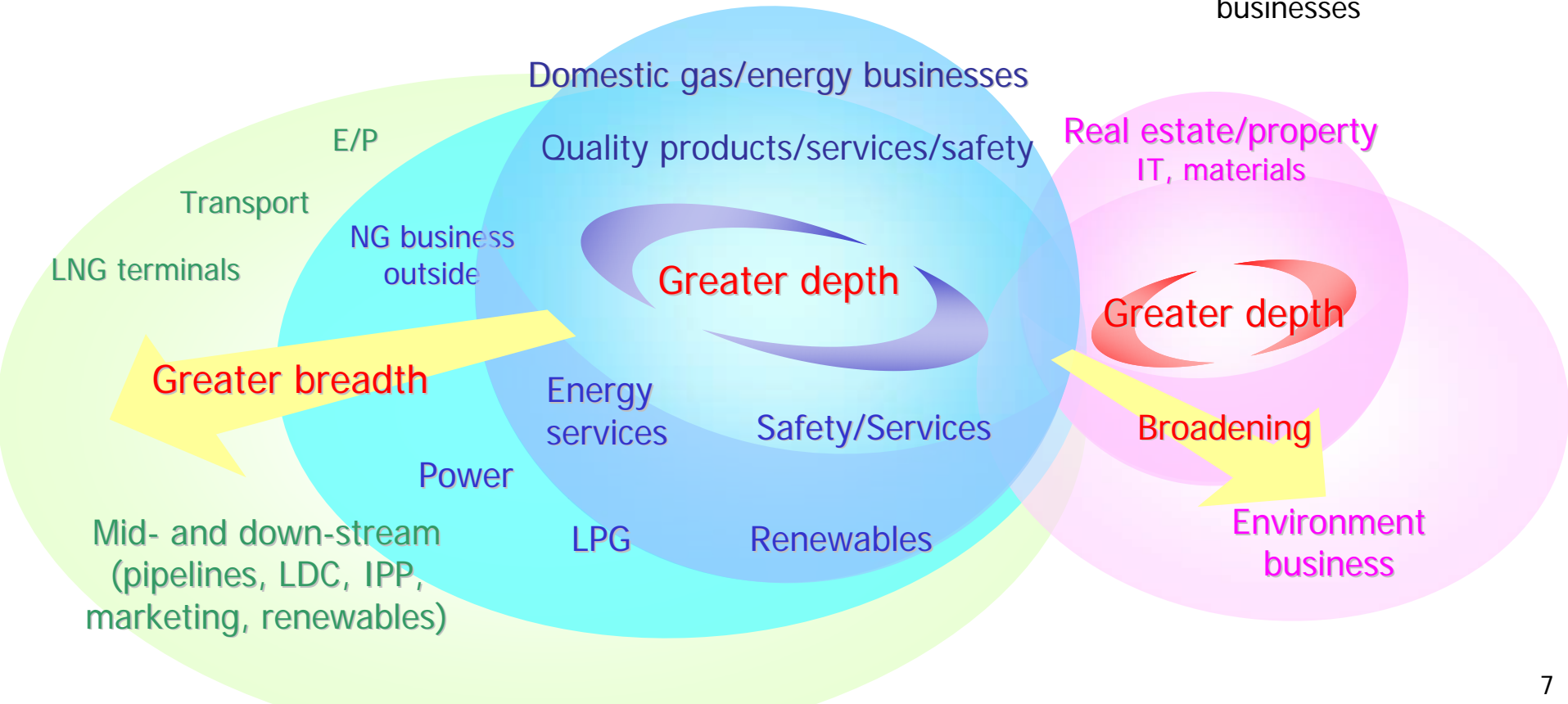
Domestic Energy Businesses

Environment and non-energy businesses

Expansion by using know-how and skills

Gas/energy business in Kansai Region with greater scale and scope

Greater scale and scope of strong environment/non-energy businesses



1. Broadening business fields

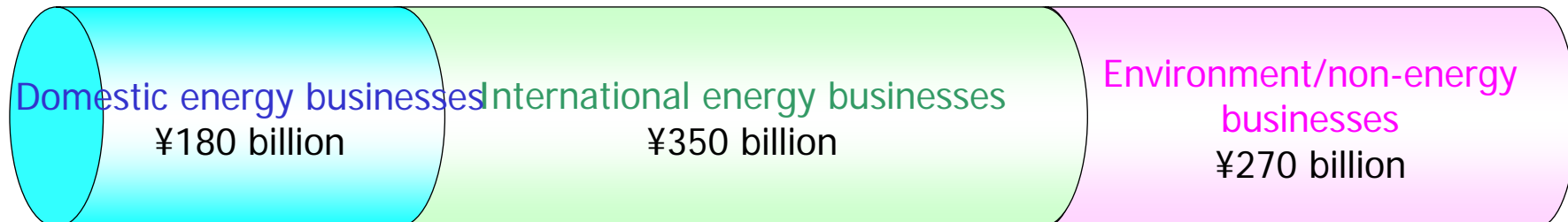
(2) ¥1.5 trillion investments for solidifying three business field

Total of **¥1.5 trillion** investment 2009 – 2020
[¥700 billion 2009 – 2013]

Upgrading existing businesses: ¥700 billion [¥300 billion]

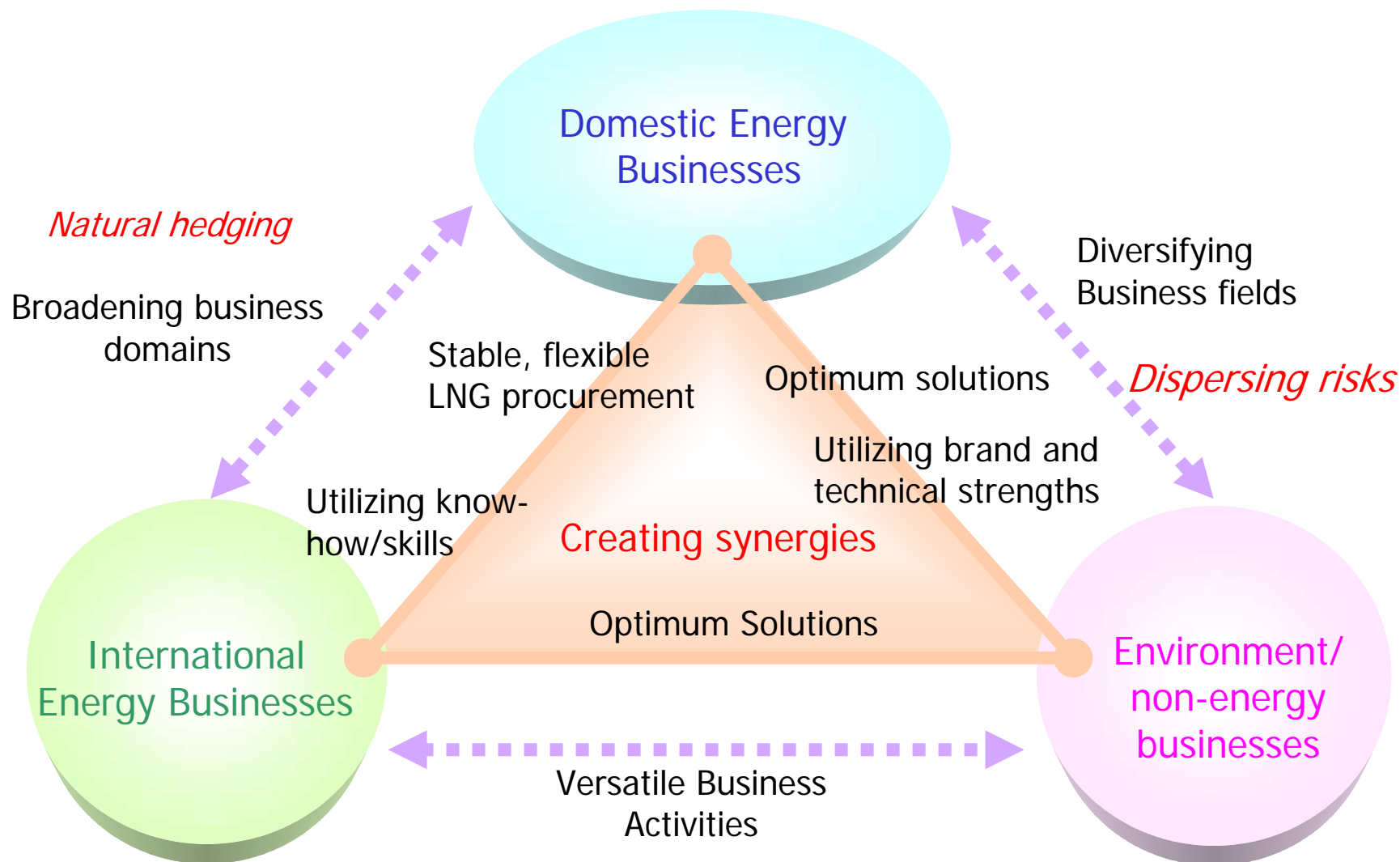


Investments for incubation and expansion: ¥800 billion [¥400 billion]



2. Fortifying solid business foundations

(3) Maximizing group potential by creating synergies and dispersing risks

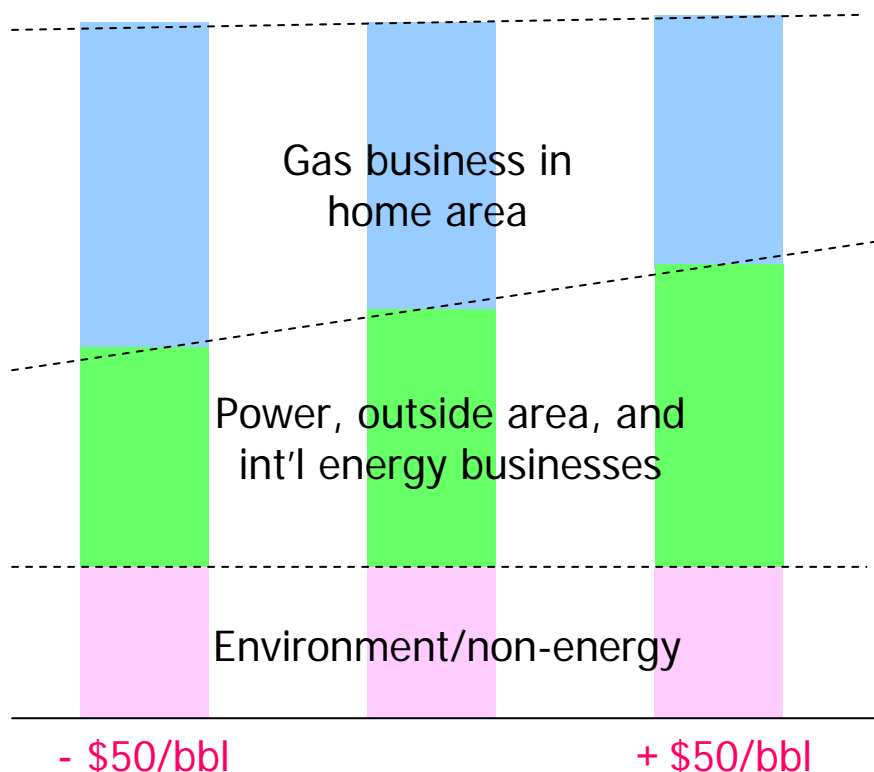


2. Fortifying solid business foundations

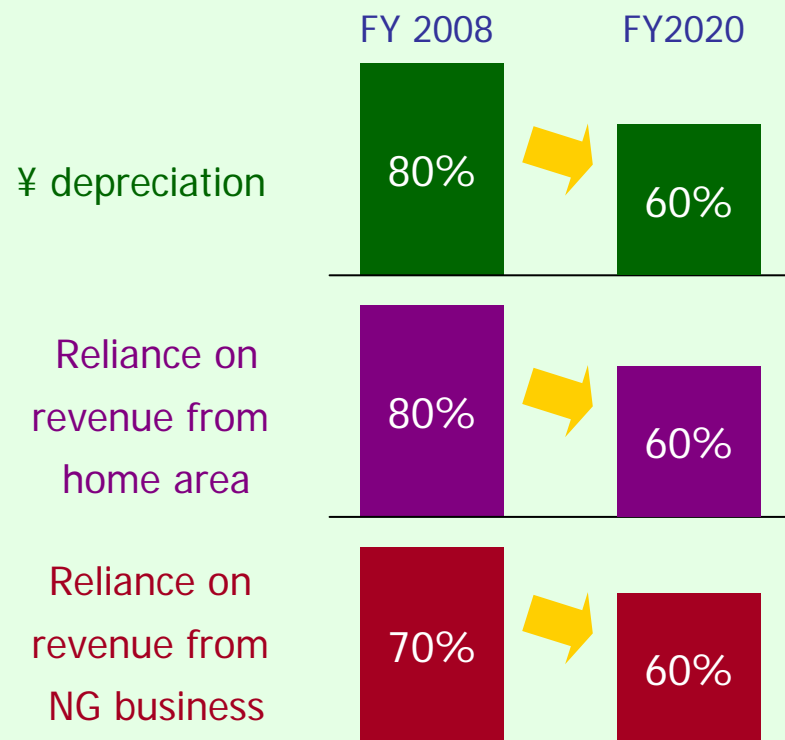
(2) Building solid business foundations resistant to external changes through optimizing business portfolio

Impact of oil price volatility on consolidated profit (excluding loss due to time lag)

Ensuring stable profits



Growth of optimized portfolio enhances resilience against risks



1. Directions of domestic energy businesses – (1) residential sector

Advanced energy systems and services contributing to customers' higher level of comfort friendly to the environment

Comfortable lifestyles with gas



Group-wide energy-solution services

Reducing environmental impacts



Providing energy-saving equipments

Improving level of services

Use of IT for reliable appliance servicing
 Services for improving safety levels



Advanced energy systems and services

Energy-saving, lower CO2 emission, and lower energy costs by home energy management system

Home security systems for safer homes and care for the aged

Total health, property management, energy system and facility management for the elderly

Remote diagnostic services for homes by IT

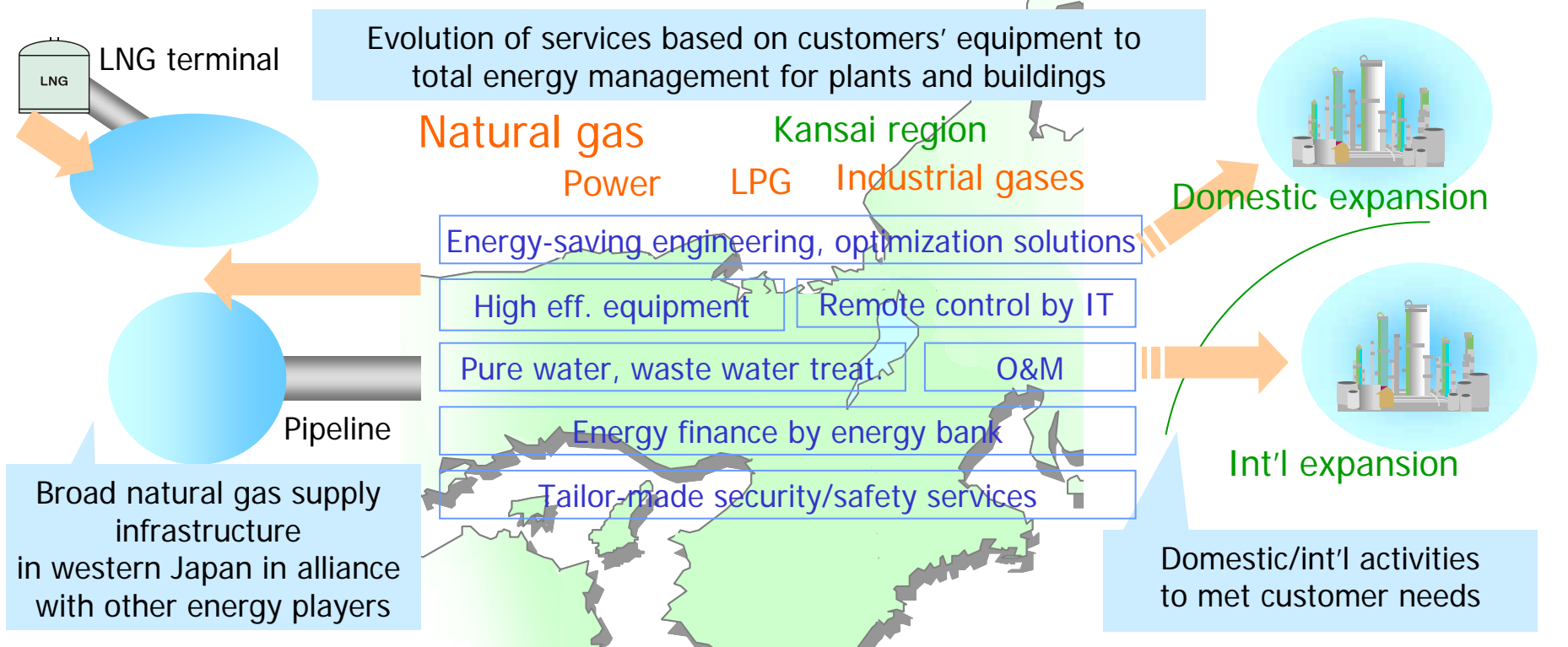
Comfortable lifestyles in households by mist and mist steam

(gas volume in billion m3)	2008	2013	2020
Residential gas sales	2.3	> 2.4	> 2.4
HS installations ('000)	70	> 400	> 850
Home cogen. and Cond. Boilers ('000)	200	> 500	> 1,000

Reduced CO2 emission in households by **3 million t-CO₂** (2009-2020)

1. Domestic energy services(2) commercial and industrial sectors

Explore growth opportunities as energy services provider through enhanced value of its services; evolution of business model based on energy-saving technologies to utility management, energy bank, and safety services



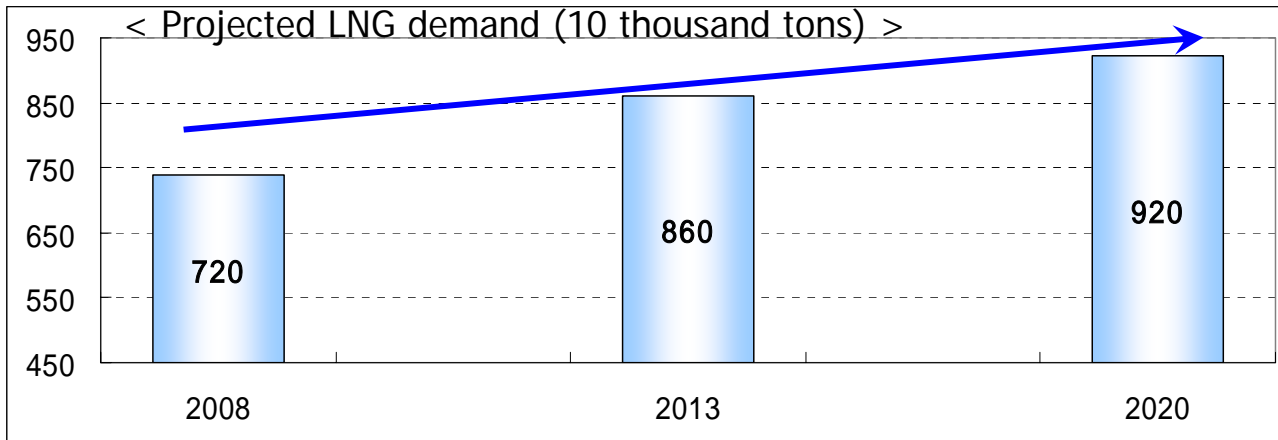
	2008	2013	2020
Gas sales volume (billion m3)	6.2	> 6.6	> 6.9
LNG sales ('000 tons)	400	> 900	> 1,200
Revenue from energy services	0	> 4	> 16 (¥billion)

CO2 emission reduced by **10 million t-CO₂** through enhanced use of NG and conservation (2009-2020)

1. Domestic energy businesses (3) stable natural gas supply

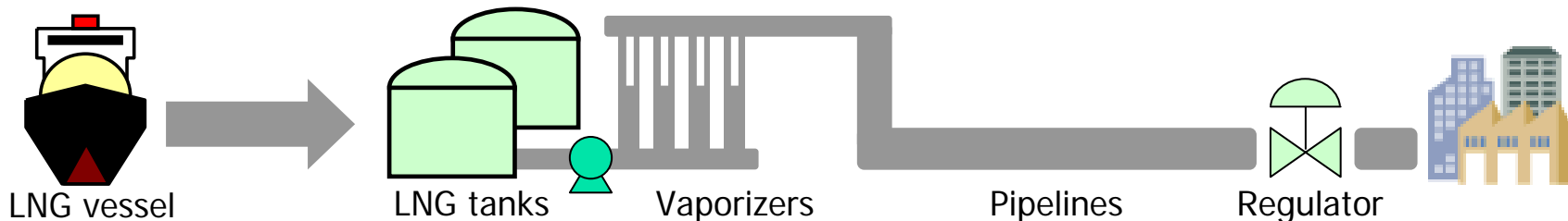
Purchasing price-competitive LNG and building LNG and natural gas supply infrastructure for stable supply of gas to customers

[LNG purchasing]
 Diversify sources
 Increased participation in projects with equity holding
 Flexible LNG purchasing through trading



[LNG receiving]
 Increased LNG handling capacity (storage tanks, tankers)
 Refurbishment for increased reliability

[Gas supply infrastructure]
 Network expansions (Mie-Shiga and Himeji-Okayama) for broader and reliably supply



CAPEX for LNG facilities
 Total: ¥90 billion (¥30 billion in 5 yrs.)

CAPEX for pipelines
 Total: ¥300 billion (¥150 in 5 yrs.)

1. Domestic energy businesses (4) ensuring higher level of safety

Enhancing higher safety levels in gas supply and of gas appliances through proactive measures

Major activities

<Maintenance CAPEX + expenses> Accumulated total: ¥500 billion (¥200 billion in 5 yrs.)

Gray-cast iron

Complete advance replacement

Repair ductile and thread-joint pipes

Prioritized work in congested areas

Maintenance of welded steel pipes

Complete target routes

Work on zinc-coated and asphalt-coated pipes

Completed repair work

Complete major work by 2015

Dramatic improvement in safety levels

New techniques

[Advanced Live Joint Sealing Process]

Repair joints in live condition

[Broad pipeline protection technique]

Adding materials to gas in pipe to control leakage

Major actions at customers

<Total expenses for customer safety> Accumulated total: ¥70 bil. (¥30 bil. in 5 yrs.)

Promotion of safer gas appliances

Complete replacement of compact gas water heater without safety devices

Free installation of CO sensors at commercial/industrial customers

Complete installation by end of FY2009

Penetration of alarms

Gas leak alarms 50% ('08) > 55% ('20)

Fire alarms 190 thousands ('08) > 1 million ('20)

Full implementation of safety inspection

Improving quality through data analysis

Inspection of old gas appliances

Preventing accidents by aging of appliances

Development and penetration of appliances with safety features

High safety and functional appliances for removing accident risks

2. Power business

Building power business at home and abroad as a second core business after natural gas. Further development of power business through new capacity development and restructuring of generation portfolio

Domestic

1,100MW



Semboku Power Plant



430MW

IPP (Torishima, Nakayama, Nakayama-Nagoya)



20MW

Wind farms (Hayama, Hirogawa)



Dengen Cogen. (*)

80MW



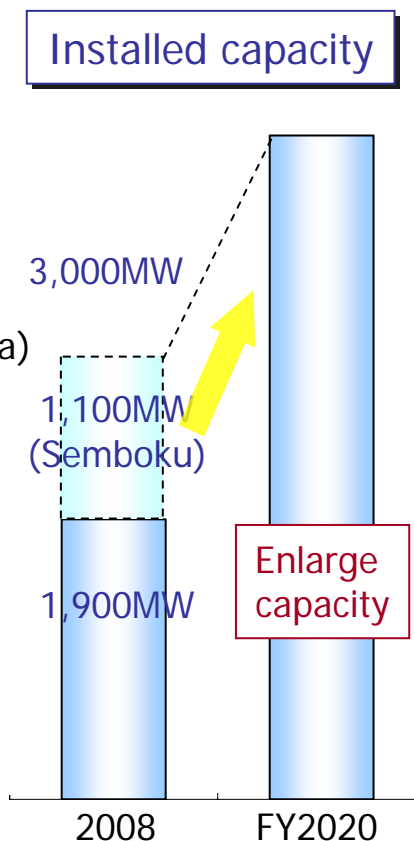
Himeji power facility, etc.

70MW

New capacity

Renewable capacity, enrich portfolio

Installed capacity



Overseas

Tenaska Gateway (USA)

340MW



Osaka Gas Power America (8 assets-portfolio)

Amorebieta (Spain)

380MW



520MW

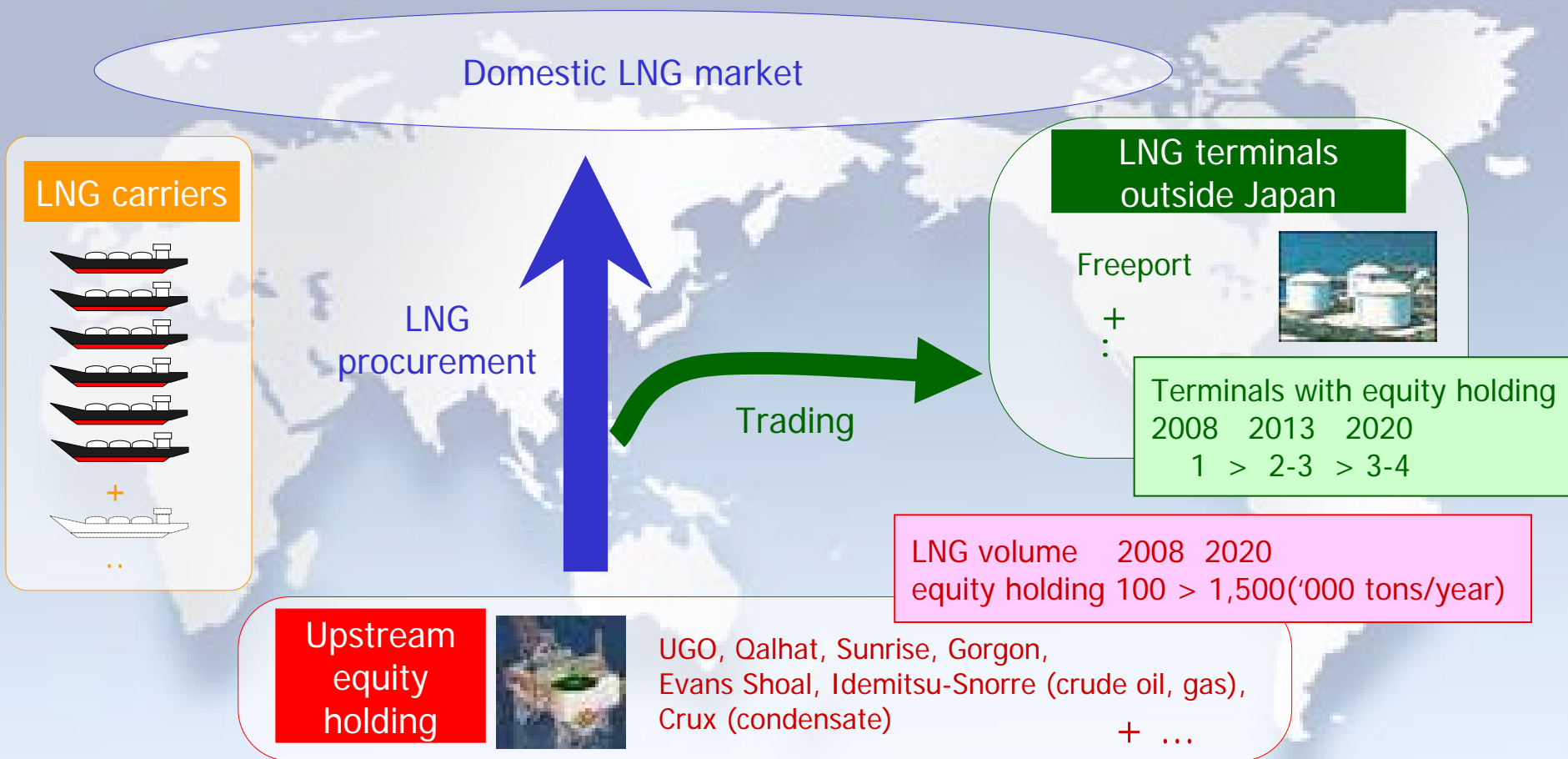
Acquisition of new IPP and renewable power assets

* Power export scheme using customer's excess capacity

3. International energy businesses (1) Upstream, energy trading

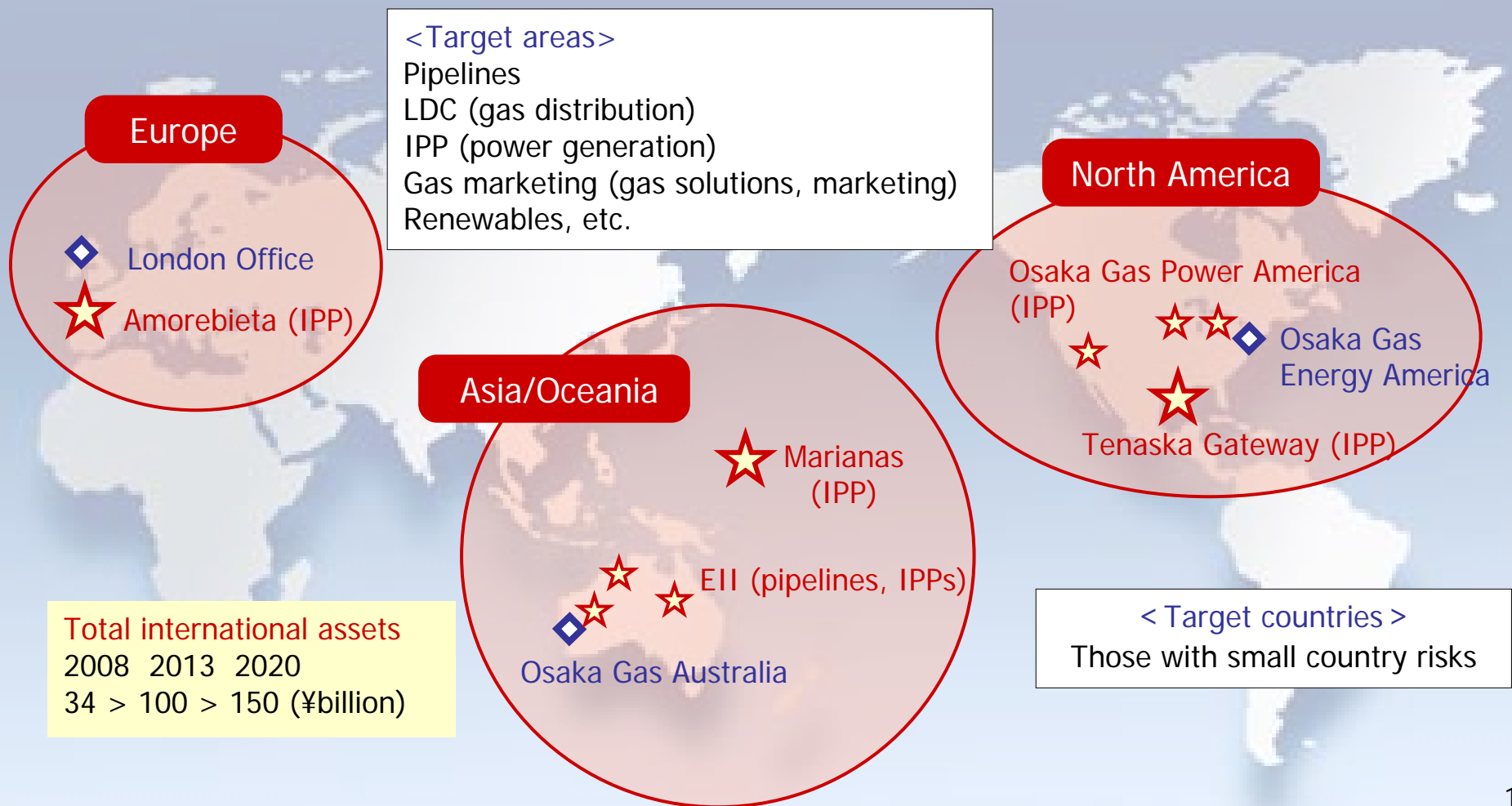
Equity participation up to about 15% of LNG supply and seek LNG trading opportunities through equity-lifting (*)

*ownership of LNG as per equity holding for own off-take and marketing



3. International energy businesses (2) Mid- and down-stream

Seeking global opportunities for achieving stable revenue flow using human resources and know-how of the group



4. Environment and non-energy businesses

Broadening existing businesses in property development, IT, and advanced materials fields
 Developing new businesses in environment-related fields utilizing own technologies

Property/real estate

Develop into first-class Property business

 Urbanex



IT

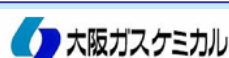
Broaden business domains in its strong services

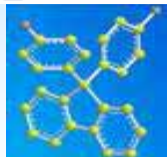
 株式会社 オーシス総研
 Osaka Gas Information System Research Institute Co., Ltd.



Advanced materials

Develop materials business For advanced and environment-related materials

 大阪ガスケミカル



Life services, outsourcing business

Businesses to improve brand value and management efficiency of Osaka Gas Group



New businesses in Environment-related fields

Business development through strategic investments

Photovoltaic



Biomass



Coal seam gas enrichment



[Energy-saving]

Ecomicell Measurement



[Engineering]
 Gas liquefaction



PC tank



Battery cell regeneration



Cryogenics



Osaka Gas

Revenues from 2008 2013 2020
 Env.-related/non-energy 190 > 240 > 350 (¥billion)

1. Technological Development and Strategic Use of IT

In order to “broaden business fields” and “fortify solid business foundations” promoting technological development and utilizing IT

Key Technological Developments

[Residential appliances]

- Enhance performance of fuel cells
- Advanced home energy management systems
- Mist / steam generation technology for enhanced product value



Offshore natural gas field liquefaction plant



[Stable supply, safety]

- Supply of substitute natural gas from coals
- New construction methods for greater safety
- Resource development engineering

[For a low-carbon society]

- Utilization of photovoltaic power, solar heat, and biomass
- Hydrogen production

[Advanced business]

- Advanced fine materials, electrode materials [Advanced materials]
- Deepen “model base development” [Information]

[Commercial/industrial appliances]

- More efficient A/Cs, cogeneration systems, and boilers
- Advanced commercial-use kitchen systems
- Energy management

Prompt, efficient technological development through **open innovation**

Key IT Applications

[Closer ties with customers]

- My Page
Online communications with customers
- Eneflex Service
Real-time equipment monitoring, automatic energy saving operations

[Productivity enhancement]

- Service science
Enhance productivity and create new services through analysis and behavior improvement based on ergonomics and environmental psychology, etc.
- Develop IT tools and office environment
Change working styles

Service science



2. Streamlining the Group Organizational Structure

Reengineering the Group structure to make ours a lean and mean organization while pursuing higher productivity

[Domestic energy businesses]

- Develop a framework for promoting energy services
- Review maintenance / operation framework for the domestic power business
- Realign framework for the LPG business

FY2008	FY2013	FY2020
12,700	> 12,600	> 12,500 (persons)

[International energy businesses]

- Strengthen framework for the international energy businesses

FY2008	FY2013	FY2020
80	> 430	> 1,200 (persons)

[Environment and non-energy businesses]

- Strengthen framework for the environment businesses

FY2008	FY2013	FY2020
6,600	> 7,300	> 9,300 (persons)

[Group Head Office]

- Strengthen investment risk management and assessment functions
- Strengthen the Group's administrative function

Long-term management goals for the Osaka Gas Group

(1) Broadening business fields

Establish the three core businesses of “domestic energy businesses,” “international energy businesses,” and “environment and non-energy businesses” by proactively making growth-oriented investments.

Our goal is to match the earnings of the gas business in home area to those of other businesses by around FY2013.

(2) Contribution to the environment

Actively reduce stress on the global environment through the spread of eco-friendly natural gas; provision of efficient equipment, systems (fuel cells, cogeneration systems, etc.), and energy-saving programs; and development of renewable energy.

(3) Enhancement of corporate and business quality

Fulfill a high level of CSR as an excellent company which renders services to people’s lifestyles, businesses, and communities, while more than meeting growing social expectations (level of commitment, disclosure)

Long-term management goals for the Osaka Gas Group

(4) Increased corporate value

1. Improve asset and capital efficiency

Make constant efforts to increase our profit margins with the long term goal of approx. 4% ROA and 9% ROE on a consolidated basis.

FY2013 goal: approx. 3.5% ROA and 8% ROE on a consolidated basis

* ROA = Net income divided by total assets
 ROE = Net income divided by shareholders' equity

2. Return to shareholders

While maintaining stable dividend payment, decisions will be made by taking everything into account, including current performance, future management plans, other means to reward shareholders, etc.

Target payout ratio: 30% or more on a consolidated basis (within the bounds of Osaka Gas's [parent] distributable surplus, excluding short-term earnings change factors).

(We may repurchase our own shares flexibly when we believe that our financial condition and cash flow situation allow us to do so after making investments in the future growth of the business.)

Quantitative risk management

Aggressively invest in businesses within the permissible quantity of risk so as to maximize returns

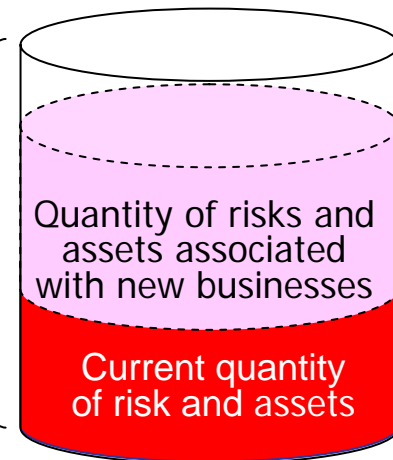
3. Maintain financial soundness

We will conduct quantitative risk management, while seeking to maintain a "shareholder's equity ratio of 40% or over" and a "ratio of interest-bearing debt to equity of approximately 1" over the mid- and long-term.

Permissible quantity of risk for the entire Group

Quantity of risks and assets associated with new businesses

Current quantity of risk and assets



Field of Dreams

Osaka Gas: A corporate group making dreams come true for individuals

Global business fields that expand indefinitely

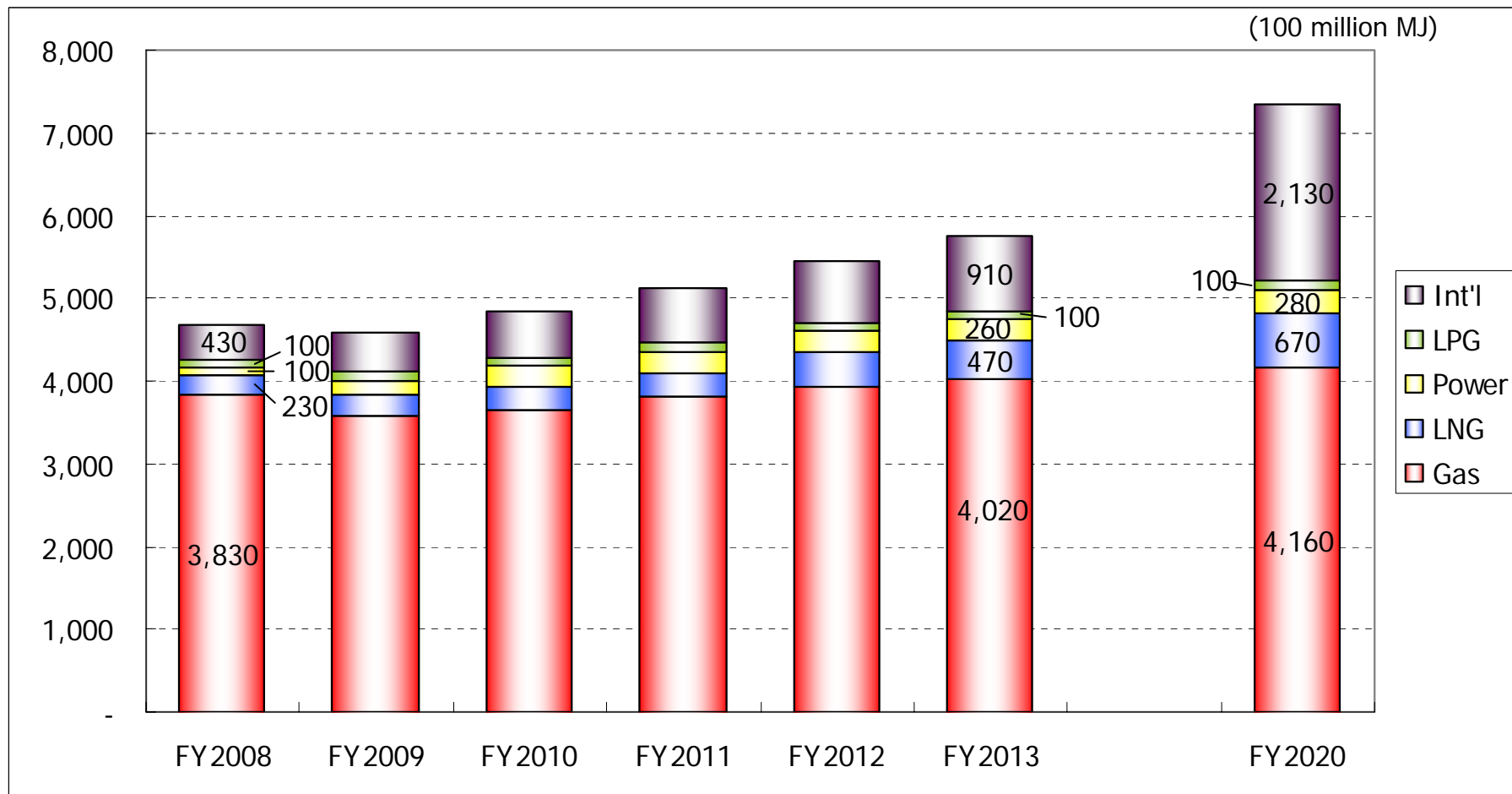
Contribute to the global environment

We will constantly explore new business fields to continue moving ahead while growing together with our employees.

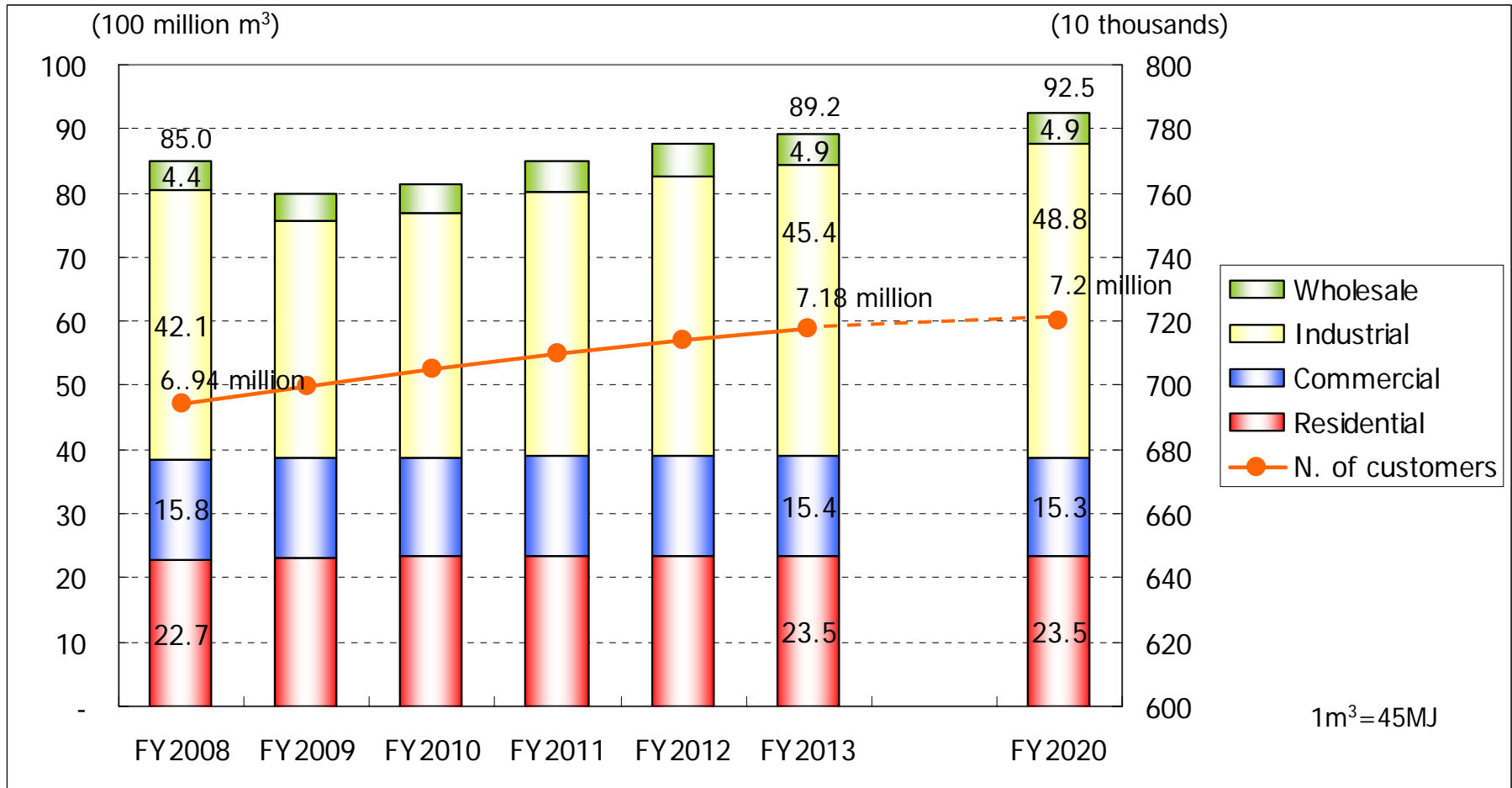
Offer comfortable lifestyle and business solutions

<Reference>

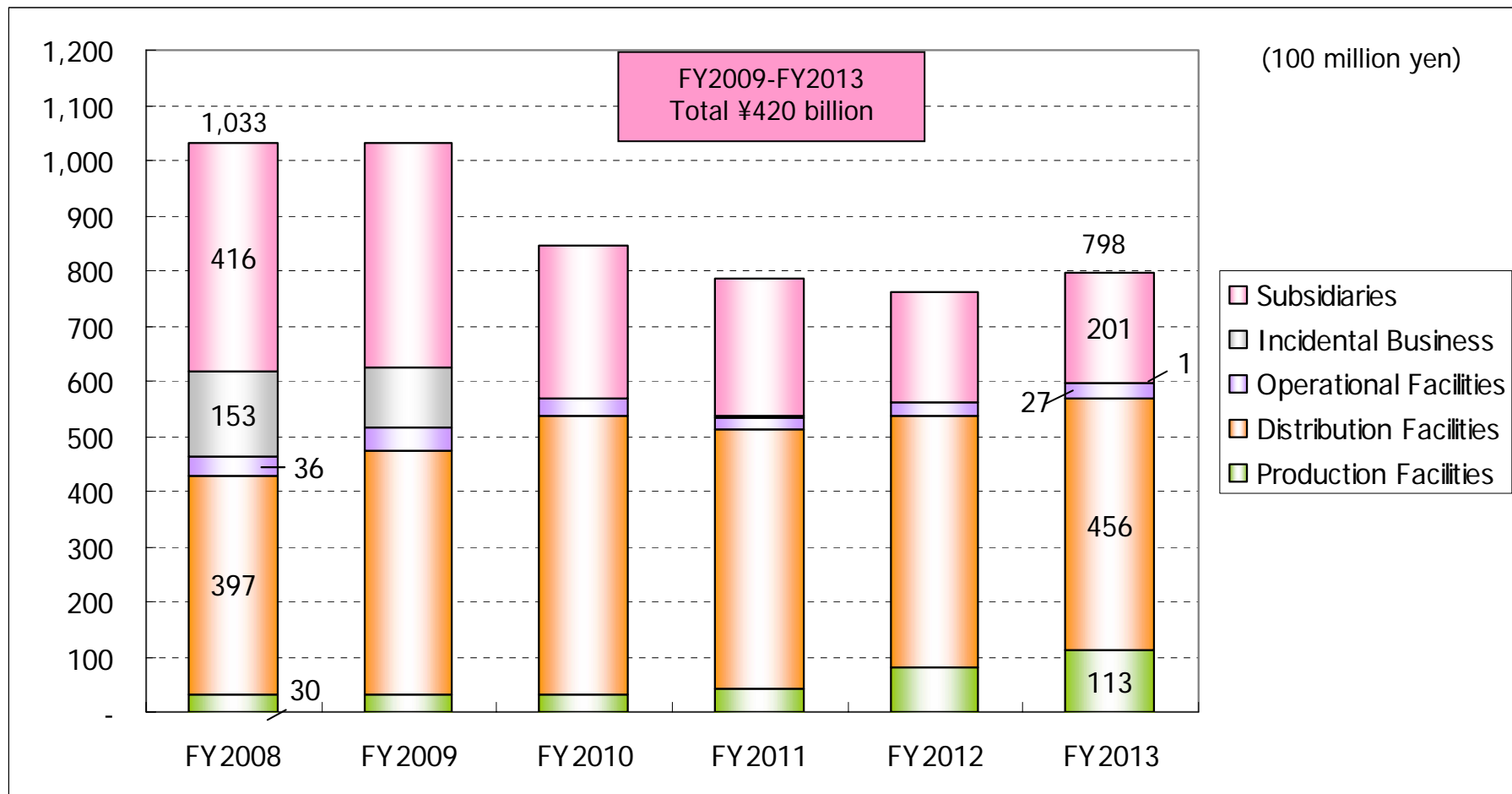
1. Forecast of Energy Transaction Volume



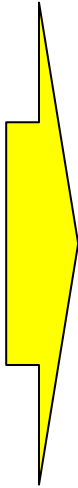
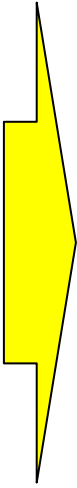
2. Forecast of Gas Sales Volume and No. of Customers (Non-consolidated)



3. Capital Expenditure (FY2009 – FY2013)

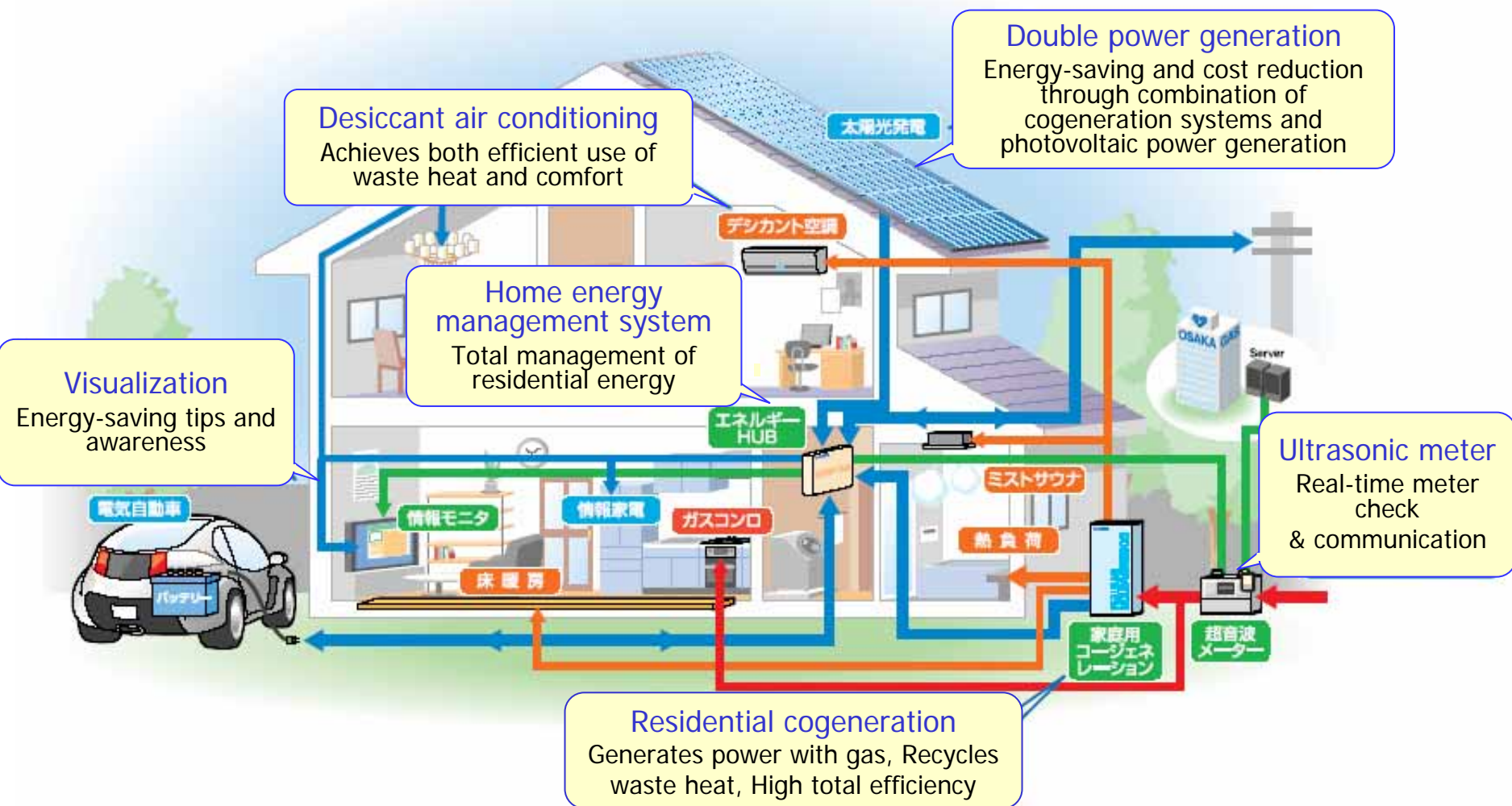


4. Total Operating Revenues and Assets

Units: yen		FY2008/E		FY2013/E		FY2020/E
	Domestic energy businesses	1,320 billion		1,490 billion		1,630 billion
	International energy businesses	10 billion		70 billion		220 billion
	Environment and non-energy businesses	195 billion		240 billion		350 billion
	Consolidated adjustment etc.	-190 billion		-200 billion		-200 billion
Consolidated operating revenues		1,335 billion		1,600 billion		2,000 billion
Consolidated total assets		1,600 billion		1,850 billion		2,100 billion

*The above figures are based on an oil price assumption of \$100/bb and a forex assumption of ¥100/US\$ (reference values).

5. Technological Developments – (1) Residential Energy Supply Systems of the Future



- Efficient power / heat supply through "cogeneration + photovoltaic power generation + storage batteries"
- A home energy management system achieves optimal energy combinations for energy-saving and reduction of CO₂ and costs.
- Automated gas meter check and security services via ultrasonic meter's communication function

5. Technological Development – (2) Urban Energy Supply System of the Future

Supporting “compact cities” and multiple use of land in metropolitan areas
(Efficient use of urban waste heat, incorporating energy facilities into urban development projects)

Support revitalization of housing complexes (“New Towns”)
(Networking energy facilities of housing complexes)

Incorporate biogas generating facilities into urban infrastructure (heat source)

Combined district heating/ cooling systems

Introducing natural energy

Sewage-treatment plants
Waste disposal plants

Biogas

City gas supply / Energy management



Apartment houses

Cogeneration

Office buildings

Hotels

Thermal energy
Electric energy

- Double power generation
- Fuel cells
- Neighborhood cogeneration
- Super long life housing

Apartment houses

Cogeneration

Stores

GHP

Thermal energy

City gas supply / Energy management



Detached houses

Electric energy

Cogeneration systems / emergency generators

Hospitals

Form a heat / electricity energy network through combination with renewable energy technologies such as cogeneration, photovoltaic generation, wind power, and biomass. Through the integrated application of the network, achieve optimal energy management friendly to the environment of the entire city, and then spread this area-wide service to other areas.

5. Technological Development – (3) Product Development

<Residential appliances>

[Improving performance of ENE-FARM]

- Reduce delivery prices for full-scale spread
- Enhance durability for lower maintenance costs

[Launch highly efficient and advanced Solid Oxide Fuel Cells (SOFCs)]

- Lower costs and increase durability for commercial launch
- Increase efficiency and reduce sizes for greater diffusion in the condo / small business markets

[Utilize steam generation technology]

- Offer value-added through unique use of gas-generated steam (ovens, dishwashers, rice cookers, heaters, steam guns, etc.)

<Commercial / industrial appliances>

[Higher efficiency A/Cs, cogeneration systems, and boilers]

- "Super high efficiency GHP" with a built-in freezer which directs an engine's waste heat to supercool refrigerants (jointly developed by three gas companies)

- "High efficiency gas engines" using Homogeneous Charge Compression Ignition (HCCI) technology (jointly developed by four gas companies)

- Pursuing energy-saving performance: energy saving gas boilers, etc.

[Advanced commercial kitchens]

- Expand the *Suzuchu* lines
- Improve functionality of gas ranges (design, cooking performance, etc.)

5. Technological Development

(4) Stable Supply and Safety, Low-carbon Society, Advanced Business

<Stable supply, safety>

[Supply substitute natural gas (SNG)]

- Technology to produce SNG from low grade coals, etc. as a risk hedge against short supply or rising prices of LNG

[Resource development engineering]

- Enhance liquefaction technology through participation in the Sunrise PJ, and improve engineering capabilities for the "coalbed methane gas field" and the "offshore natural gas field liquefaction plant"

[New construction methods]

- Raise safety level via the advanced live joint seal method (reinforcing the inside of pipeline joints)

[Battery-operated alarms, ultrasonic meters]

- Raise level of safety and services by introducing a battery-operated alarm with an energy-saving sensor and a compact ultrasonic meter capable of instantly measuring flow rate

Ultrasonic meter



<Contribute to a low-carbon society>

[Strategic use of photovoltaic power generation, solar thermal conversion, and biomass]

- Incorporate these technologies into energy systems, start up new businesses

[Produce synthetic gases through the A-ATG process]

- Make efficient use of associated gases combusted for disposal when producing crude oils

[Concentration of coal mine methane]

- Collect / concentrate coal mine methane discharged into the atmosphere when digging coals and put it to efficient use

[Hydrogen production]

- Using catalyst technology, produce hydrogen out of city gas with a compact facility (HYSERVE system)



Hydrogen production

<Advanced business>

[Osaka Gas Chemicals]

- Advanced fine materials for LCD / lens markets (better workability, etc.)
- Electrode materials technology which reduces storage battery costs

[Osaka Gas Information System Research Institute]

- Promote "100-year architecture," which optimally integrates "model base development (system visualization technology)" with system reuse technology

Thank You!

Disclaimer

Certain statements contained herein are forward looking statements, strategy and plans, which reflect our judgment based on information at the time of publication. Actual results may differ materially from those discussed in such statements. Among those factors that could cause actual results to differ materially are: the economic trend in Japan, sharp fluctuations in exchange rate and oil prices and extraordinary weather conditions.