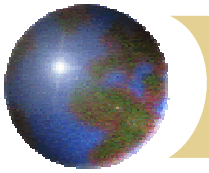


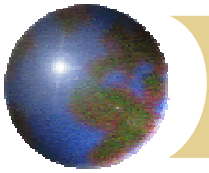
Investor Presentation Meeting

Osaka Gas Co., Ltd.

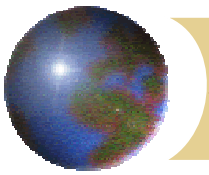


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3. Mid-term gas sales plan P.14-
4. Cash flow management and SVA P.23-
5. Deregulation and convergence of electricity and gas P.31-
 - Deregulation P.32-
 - Competition in the gas business P.35-
6. Reference material P.38-



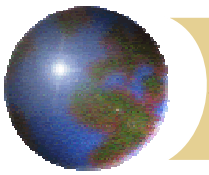
1. “2010 Vision” Medium Term Management Plan



“2010 Vision”

Medium Term Management Plan

- In October 1999, Osaka Gas adopted a long-term management policy called the “2010 Vision” which had ‘value creation management’ at its core. In January 2000, we decided to implement a medium-term management plan (the Gate Plan) from year ending March 2001 to y/e March 03.
- The main aim is to increase corporate value, through enhanced value to customers, shareholders and society at large.
- We divided our business into 9 core units in energy and non-energy. Each company is autonomous and self-driven, but acts within the overall strategic framework of the group.
- The goal of the energy business is to establish a natural gas value chain and a one-stop service for energy.
 - Value Chain: continued expansion into upstream and generation business and increased profitability at each stage.
 - One Stop Service: meeting the needs of customers with several kinds of energy including by gas, electricity or LPG.



Value creation management

☀ **Shareholder value: (targets for consolidated results year ending March 03)**

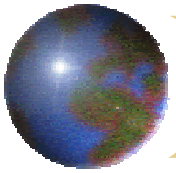
- ☒ Income before tax > ¥75 billion, Net Income > ¥40 billion
- ☒ ROE over 9.0%, ROA 3.5% achieved in y/e March 02- almost 1 year ahead of plan
- ☒ Free cash flow > ¥38 billion, a large increase on the previous year

☀ **Customer value (examples):**

- ☒ Over 95% of calls to our customer call center to be answered within 10 seconds (before March 03)
- ☒ Next day equipment repair completion rate of 85% (before March 03)
- ☒ Customer death rate from gas accidents to be reduced to zero (by March 2011)

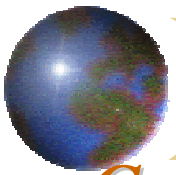
☀ **Value to society (examples):**

- ☒ CO2 emissions per cubic meter of gas reduced to 10% below 1997 level
- ☒ Annual contribution of 0.5-1.0% of pre tax profit to corporate citizenship activities
- ☒ To set internal standards and raise awareness of disclosure and compliance, and strengthen the quality of information disclosed.

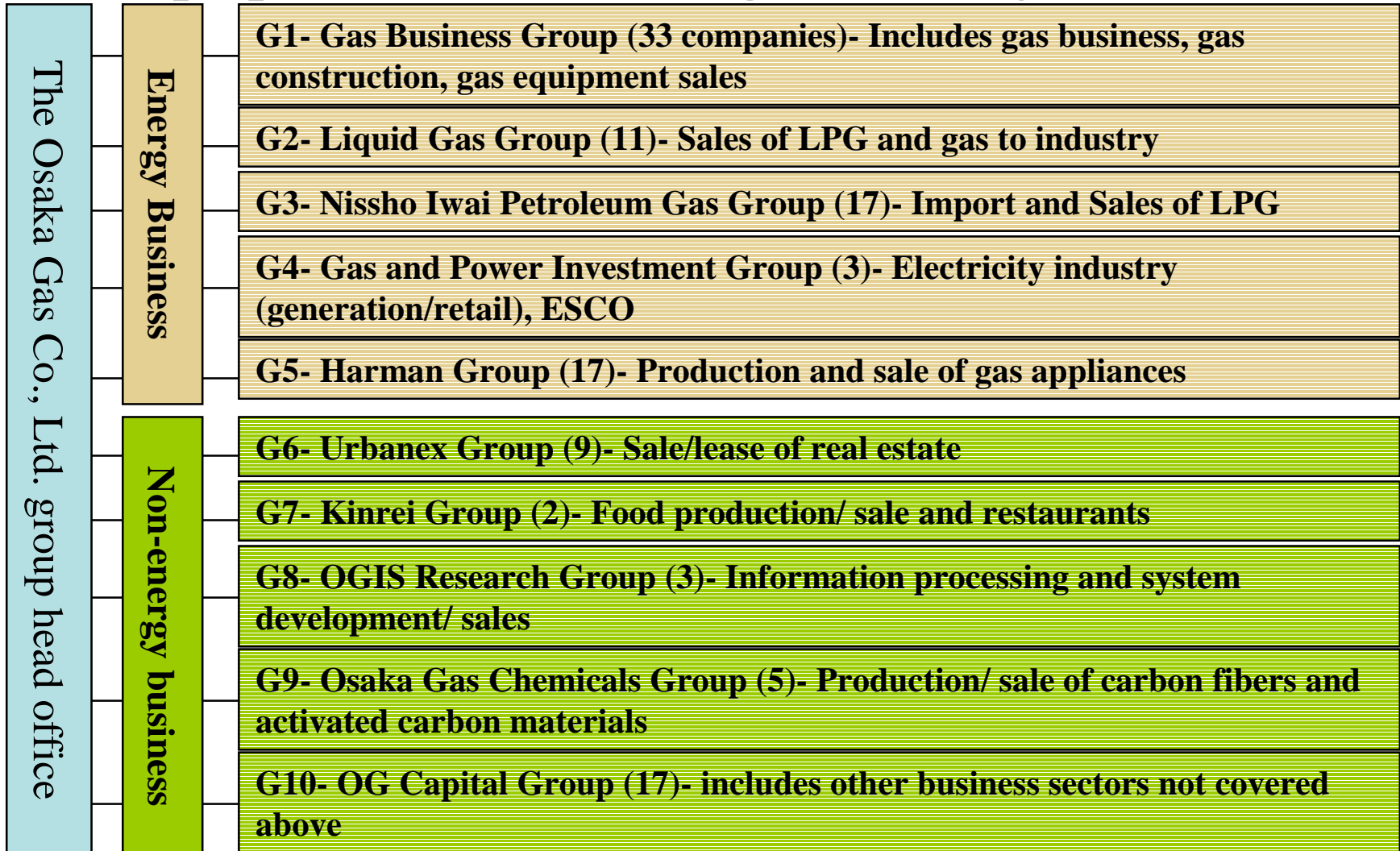


Our approach to the energy business

- Setting up a complete natural gas value chain and a one-stop service
- Making overseas investment judgments based on business risk/
exchange risk/ country risk
- Results of new investment in energy business (year ending March 2001)
 - Profit from the acquisition of overseas off-shore gas fields in Australia's Northern Territory
 - Ownership of LNG tanker, "Jamal", commissioned in September 2000
 - Capital participation in the Nissho Iwai Petroleum Gas Group
 - Bid for the Guandong LNG project
 - Start of an electrical retailing business, "Ennet"

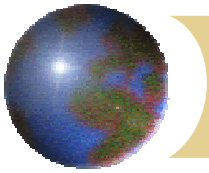


Group operations: Outline of the G10 system

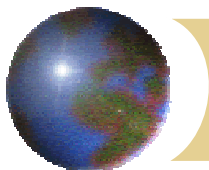


(Excluding OG&G3, year end March 00.)

Gross sales 314 billion yen, Pre tax income 11, Net income 4, ROE 3.2%, ROA 0.8%



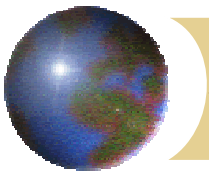
2. Financial forecasts



Summary of financial forecasts (consolidated results)

Number of subsidiaries: FY00-03 25 companies, FY01/E- 35, FY02/E- 42 Units: ¥1 billion, \$/bbl and yen/\$

	FY00/R	FY01	FY02	FY03	FY01/E	FY02/E
Gross sales	849	928	920	950	955	1,000
Operating income	63	60	70	80	62	75
Pre tax income	46	57	65	75-	57	72
Net income	27	32	35	40-	32	43
ROA	2.3%	2.4%	2.7%	3.5%-	2.6%	3.2%
ROE	6.8%	7.7%	8.2%	9.0%-	7.1%	8.7%
SVA	-	-	-	-	4	11
FCF	19	4	31	38	34	45
Capex	106	126	100	99	96	110
Depreciation	81	95	93	91	95	90
Crude oil price (\$/bbl)	20.9	22.0	22.0	22.0	29.0	28.0
Rate of exchange (yen/\$)	111.6	103.0	103.0	103.0	108.6	118.0

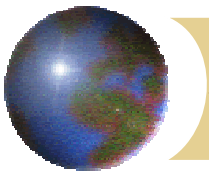


Strengths of Osaka Gas Co., Ltd.

- ◆ Plan to keep stable growth of gas sales in the future
- ◆ Consistent cost cutting management
- ◆ Judged best Japanese utility (non-consolidated in FY2000)

%	OG	TG	TEPCO	KEPCO
ROE	6.71	5.37	5.72	3.86
ROA	2.44	1.55	0.65	0.62
Shareholders equity ratio	38.05	29.68	12.24	16.67

- ◆ Our strengths in energy competition
 - ◆ Sales strength- We understand the current needs of our customers and can offer the most suitable tailor-made energy packages
 - ◆ Technical strength- We ensure speed and high technical standards through our integrated system of guaranteeing and maintaining equipment from our manufacturers



Tariff policy

Details of tariff revisions

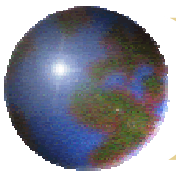
- 02/99 Osaka Gas reduced tariffs by 3.61% on average
- 12/99 Tokyo Gas Co., Ltd. reduced tariffs by 2.00% on average
- 10/00 Kansai Electric Power reduced tariffs by 4.20% on average
- 02/01 Tokyo Gas Co., Ltd. reduced tariffs by 3.02% on average

Our evaluation of current tariff levels

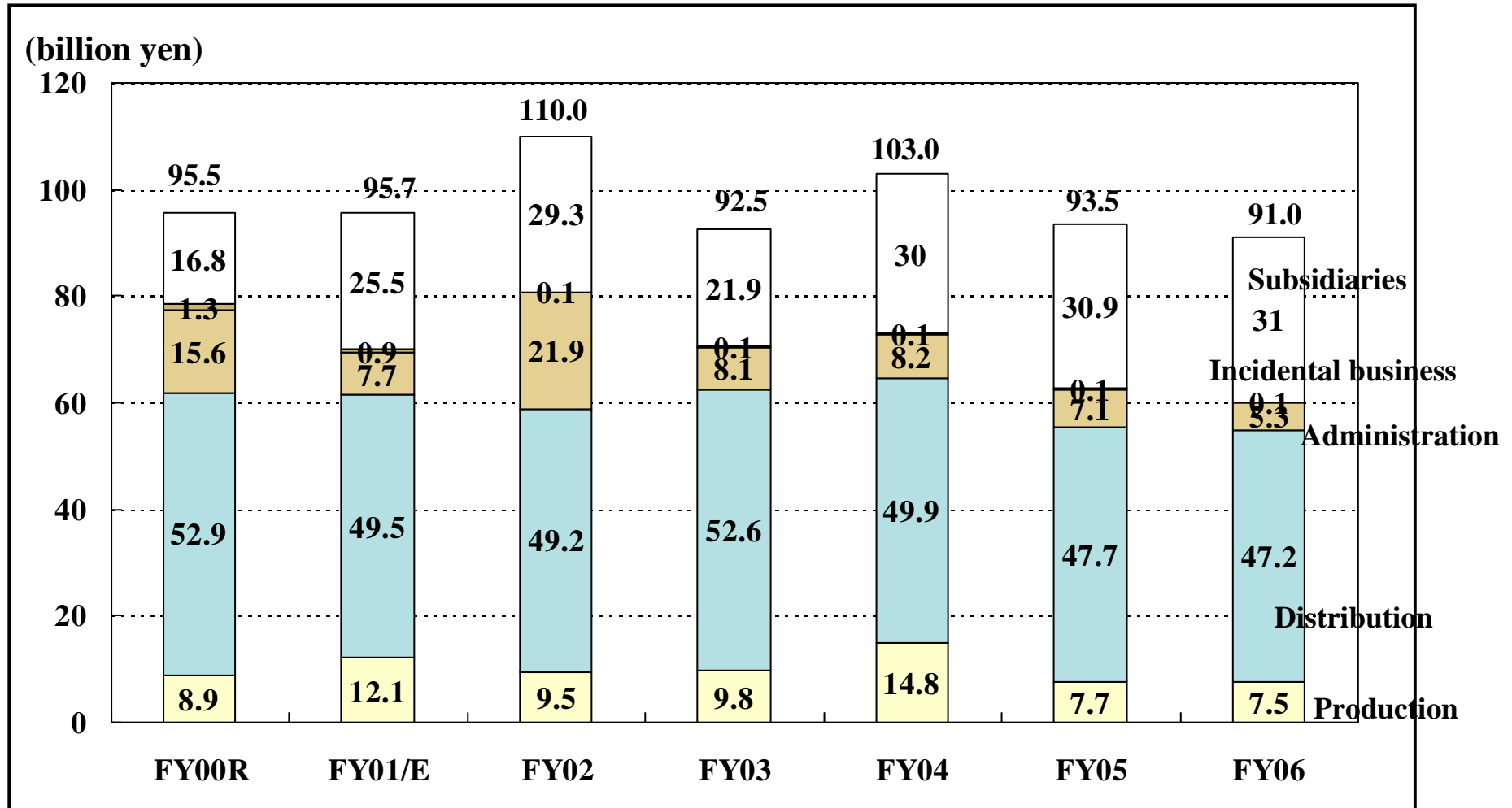
- Influence of tariffs is slight in the areas of switch to all-electric households and industrial use
- Leading to an intensification of competition in air conditioning / cogeneration business for commercial use

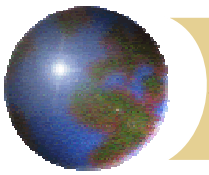
Our thinking on future tariff revision, and its influence on income and expenditure

- We will examine the situation once our goals for the year ending March 03 have been achieved
- We have not incorporated future tariff revisions in our current financial estimates (A 1% decrease in tariff is equivalent to a sales decrease of around ¥6 billion a year.)



Capital expenditure forecasts





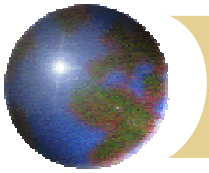
Cost cutting

● Reduction of employee costs

- Due to natural wastage (recruitment policy and retirement) we plan to reduce the number of employees from 9,569 to 8,750 or under in 2002 and to 8,000 by March 2007
- We plan to introduce an MBO (Management by Objectives) pay system and reduce employment costs per head

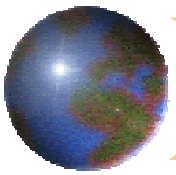
● Capital Expenditure reductions

- Review of manufacturing time and methods for facilities, developing R&D and rationalization of purchasing policies
- Investment in plant and equipment 1999-2010: total, from ¥323 billion to ¥258 billion (20% decrease)
- Investment in trunk pipelines 1998-2003: total, from ¥104 billion to ¥83 billion (20% decrease)
- Cost reductions in unit costs of pipes
 - Non-excavation method of construction
 - Shallow pipe-laying

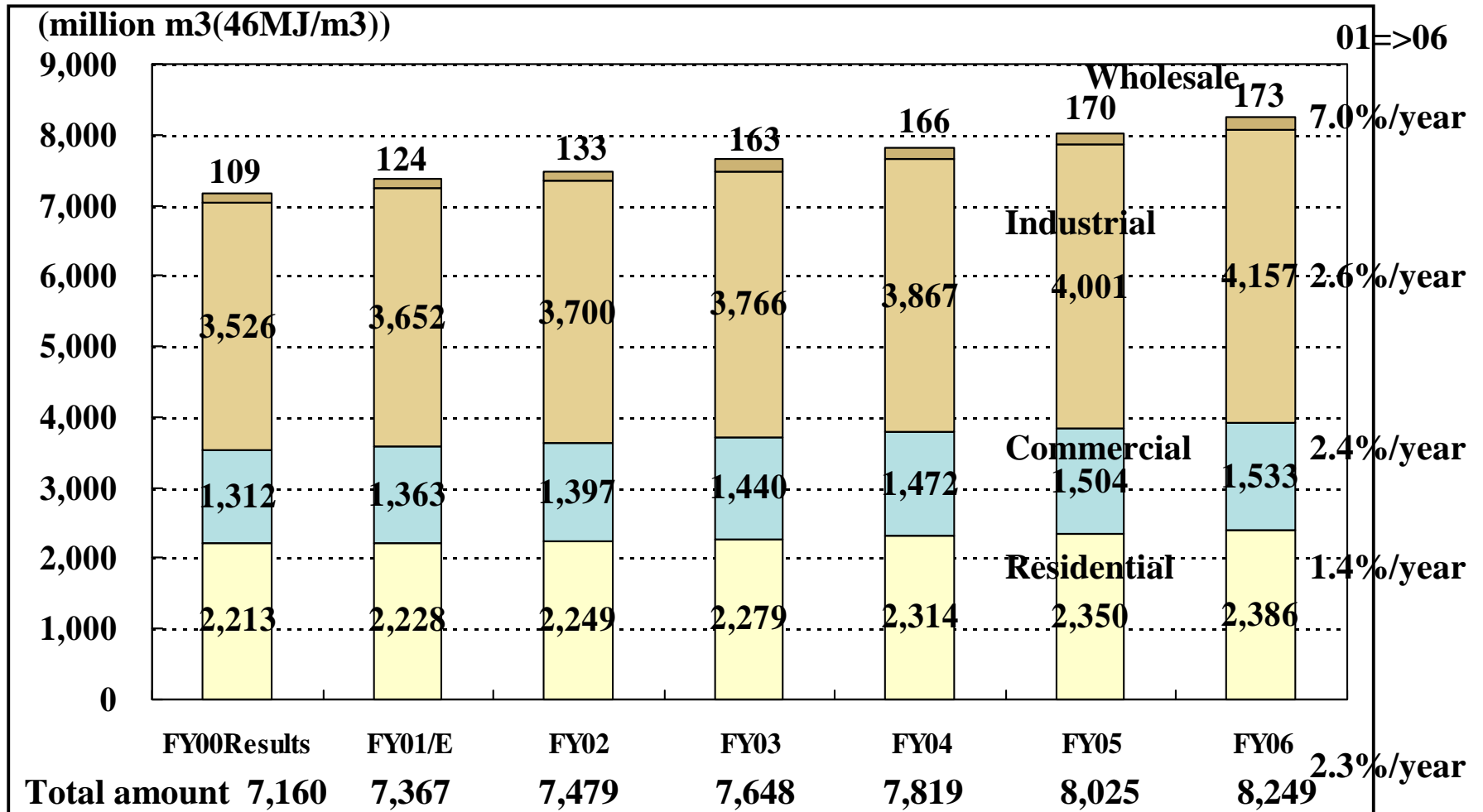


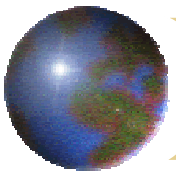
3. Mid-term gas sales plan

- ⊕ Stable increase of natural gas demand
- ⊕ Residential sales: Growth of floor heating units sales
- ⊕ Commercial sales: Growth of air conditioning demand
- ⊕ Industrial sales: Expanding cogeneration sales



Forecasts of gas sales by use



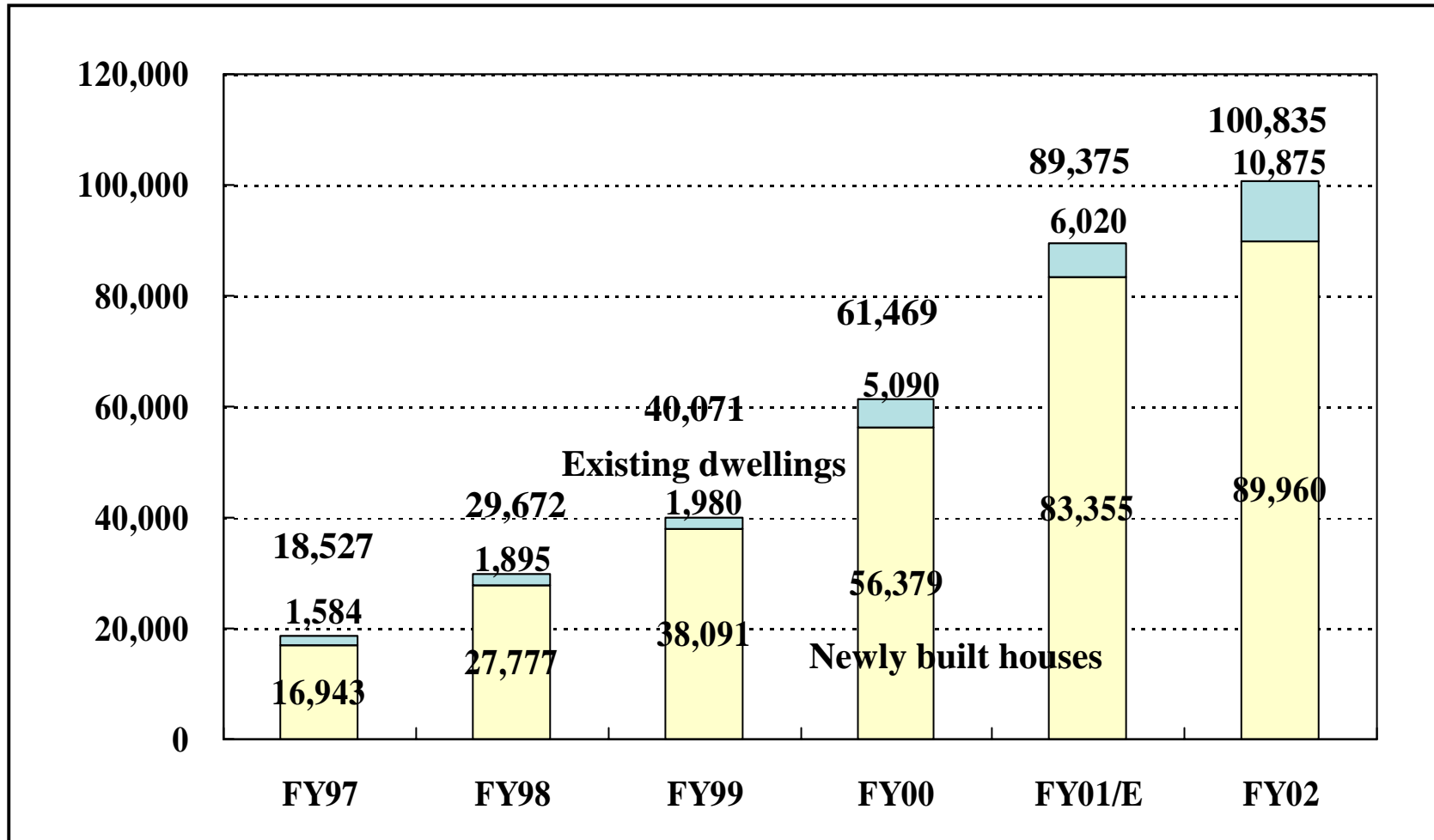


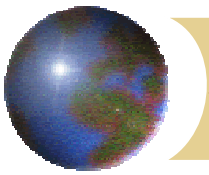
Gas floor heating sales

Newly built houses: number of contracts

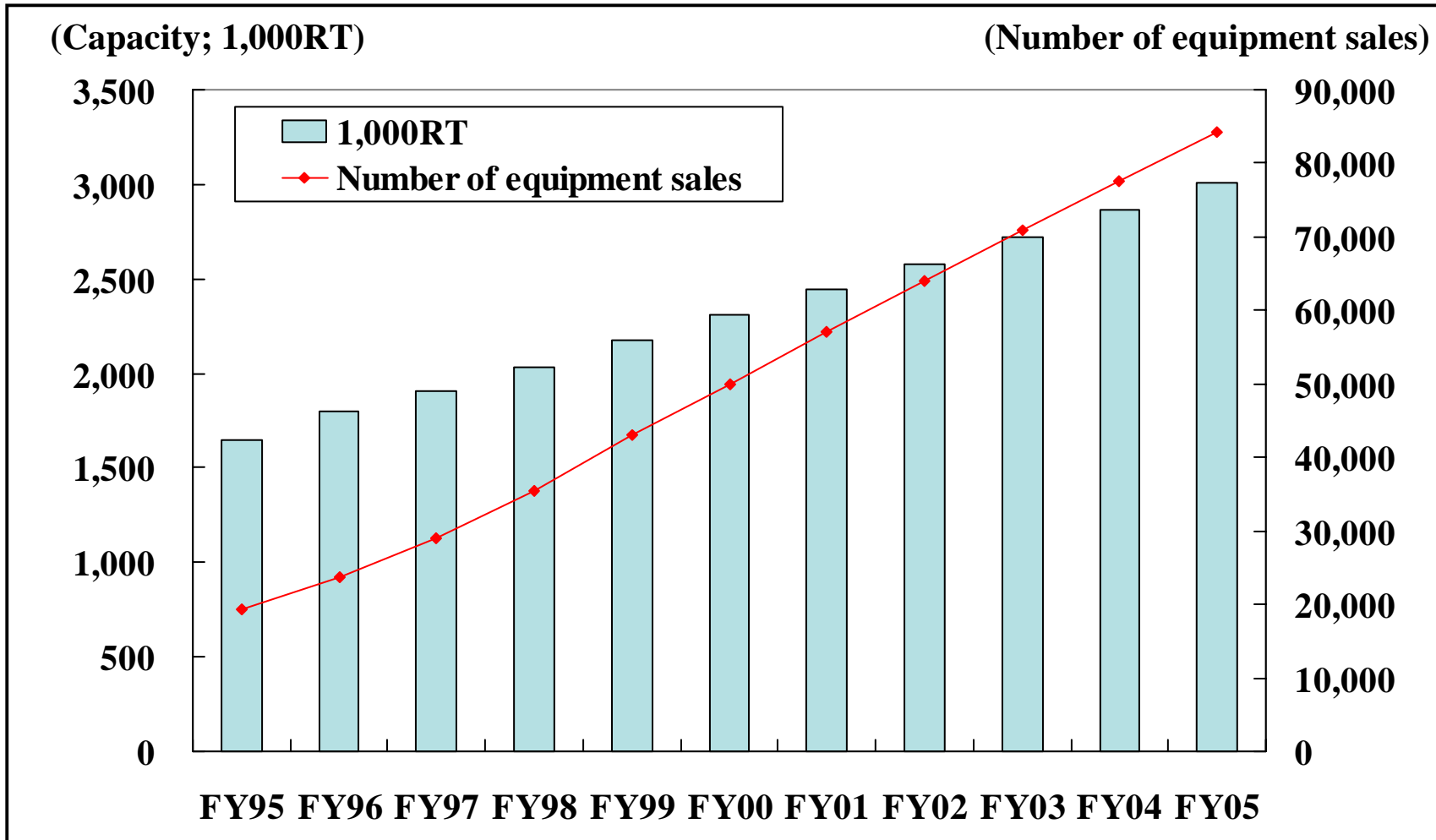
Existing dwellings: number of shipments

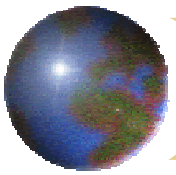
Units: number of control units





Gas air conditioning (cooling) capacity and GHP equipment sales

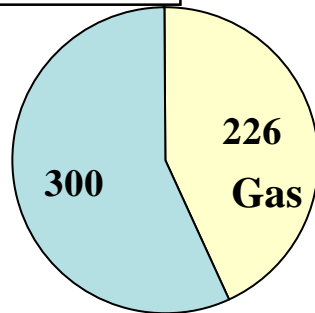




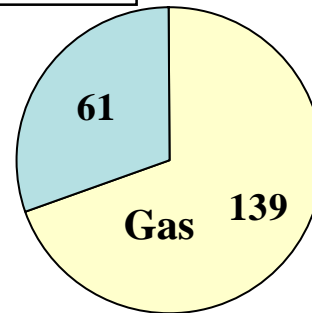
Gas air conditioning shares (number of establishments 1995-99)

By floor area- the larger the area, the greater the share

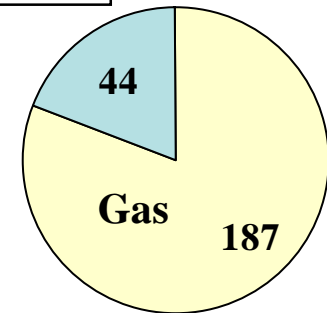
1,500-3,000m²



5,000-8,000m²

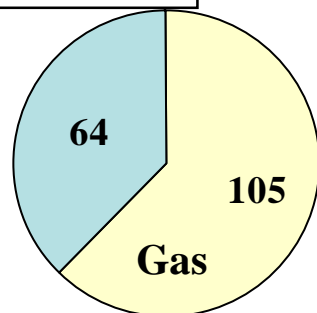


10,000m²-

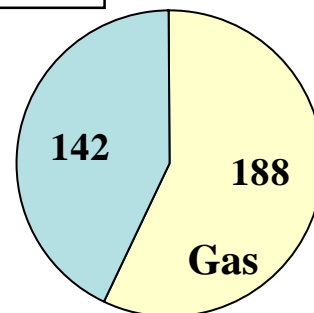


By type of building- examples:

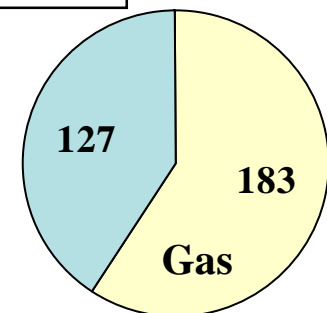
Government office

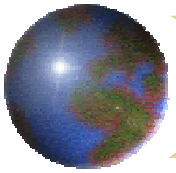


Hospital

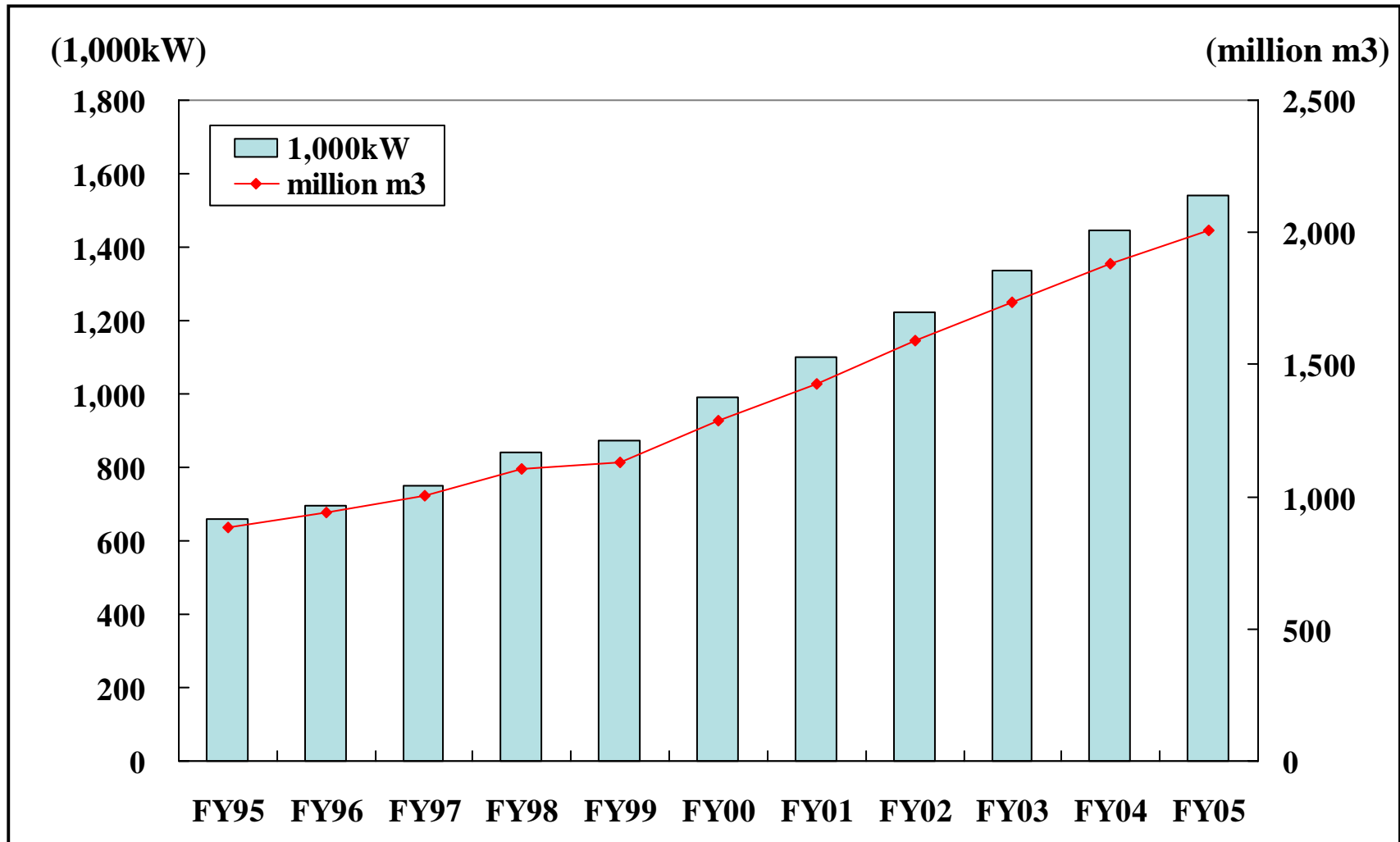


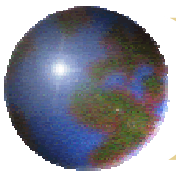
School





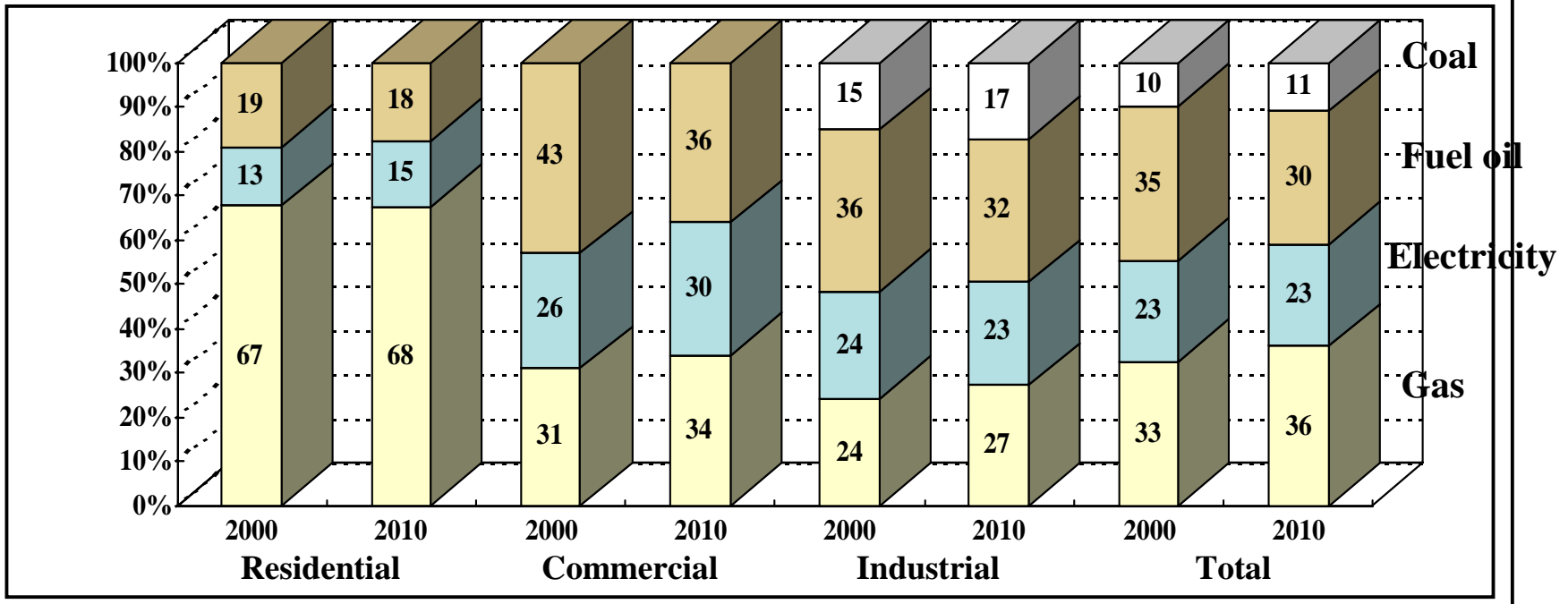
Cogeneration sales forecasts

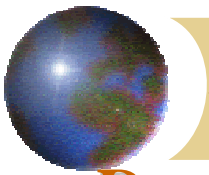




Long-term energy share forecasts

- We expect natural gas usage to increase because:
 - The government has declared natural gas a primary energy source for Japan
 - Natural gas is an important plank of the environmental strategy to reduce costs of emissions





Development of new applications: fuel cells for residential use

Development goals

	500W	1kW
Generation efficiency ratio	Over 35%	Over 35%
Heating efficiency ratio	Over 30%	Over 35%
Longevity	10 years	10 years
Target price	¥550,000	¥600,000

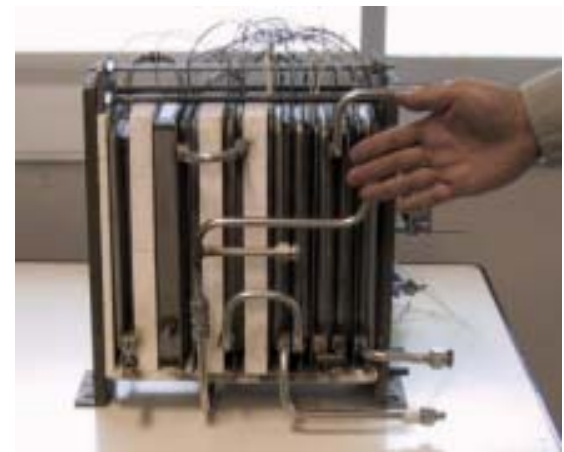


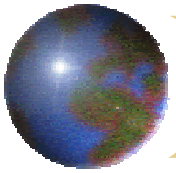
Osaka Gas's technological strength: high-performance desulfurization catalyst (global standard)

Expected date of commercialization: 2005

Impact on our gas sales per installation

- In the case of 1kW PEFCs for homes with a floor area of over 150m², an increase from around 800m³ per year to 1,600-1,800m³ per year





Other new applications: new technology

● **9.8kW micro cogeneration**

- In 1999 sales to 81 establishments including restaurants, nursing homes etc

● **Gas micro engines**

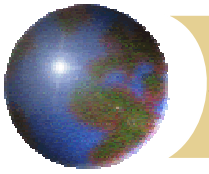
- Developing 1kW units. Due for commercialization by 2002

● **Hydrogen gas supply plant**

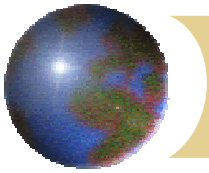
- Participating in a national project to develop hydrogen manufacturing system for hydrogen vehicles, by 2004

● **Carbon nanotubes**

- Developing nanotubes which increase the strength and absorption of hydrogen gas, based on our carbon fiber technology
- Working on hydrogen storage for fuel cell vehicles

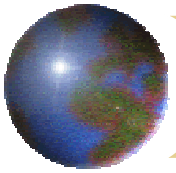


4. Cash flow management and SVA



Strategy to increase future free cash flow

- ❊ In general, we shall use free cash flow in a way that brings the best results for improving shareholder value
 - ❑ The way to spend free cash flow
 - ❑ Keep the rate of investment return higher than capital costs
- ❊ Measures to strengthen the financial position of the whole group
 - ❑ Focus investment on high growth areas
 - ❑ Set group-wide investment standards
 - ❑ Use for debt capacity



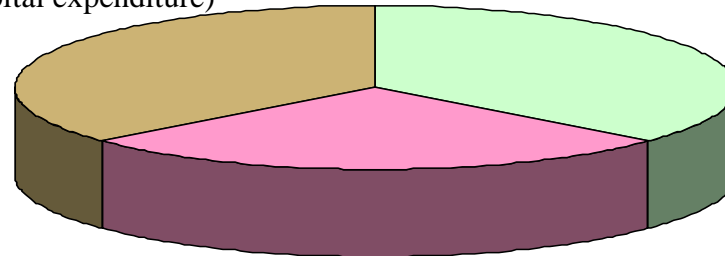
Distribution of free cash flow

- Focus investment on high growth areas in the medium term (year ended March 02-04)

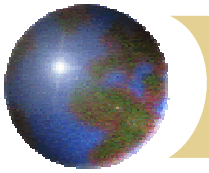
About ¥50 billion/year

New investment 35%
(Excluding ordinary capital expenditure)

35% to cover lowering tariffs etc



Dividends 30%



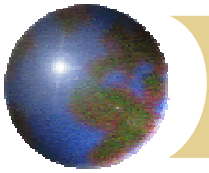
Setting group-wide investment standards

✚ **Background and aims**

1. Maximize shareholder value (creation of shareholder premium)
2. Optimum resource allocation to all business fields (selectivity and centralization)
3. Improve efficiency of gas business investment (more competitive in energy field)
4. Increase in M&A activity and overseas Joint Ventures

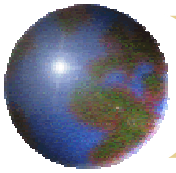
✚ **New standards**

1. Awareness of costs of capital/business risk (including investor expectations)
2. Cash flow base
3. Introduction of PDC cycle
4. Setting yearly unit gross investment targets (micro) and profit targets (macro)



Framework for standards

- ❖ **Individual investment standard (NPV)**
 1. Setting a hurdle rate (WACC) which considers risk in each business
 2. Investment: NPV to be positive within 10 years
 3. Setting a yearly unit gross investment framework
 4. Applicable from November '00
- ❖ **Profit standards for OG business units (SVA; Shareholders' Value Added)**
 1. $SVA = NOPAT - (\text{interest bearing debt on book value} + \text{book value capital}) \times WACC$
 2. **By March 2003 all divisions from G2-G10 aim to have $SVA > 0$**
 3. After a trial period in 2001, the standards will be introduced from year end March 03.

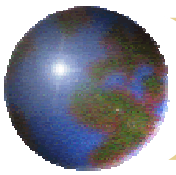


Investment plans

- ⊕ Debt leverage
 - ⊠ Possibility to leverage interest bearing debt from ¥520 billion in y/e March 01 by ¥80 billion to ¥600 billion
- ⊕ Free cash flow
 - ⊠ Investment of ¥20 billion
- ⊕ These measures will allow us to make new investments of around ¥40 billion per year from y/e March 02 to 04

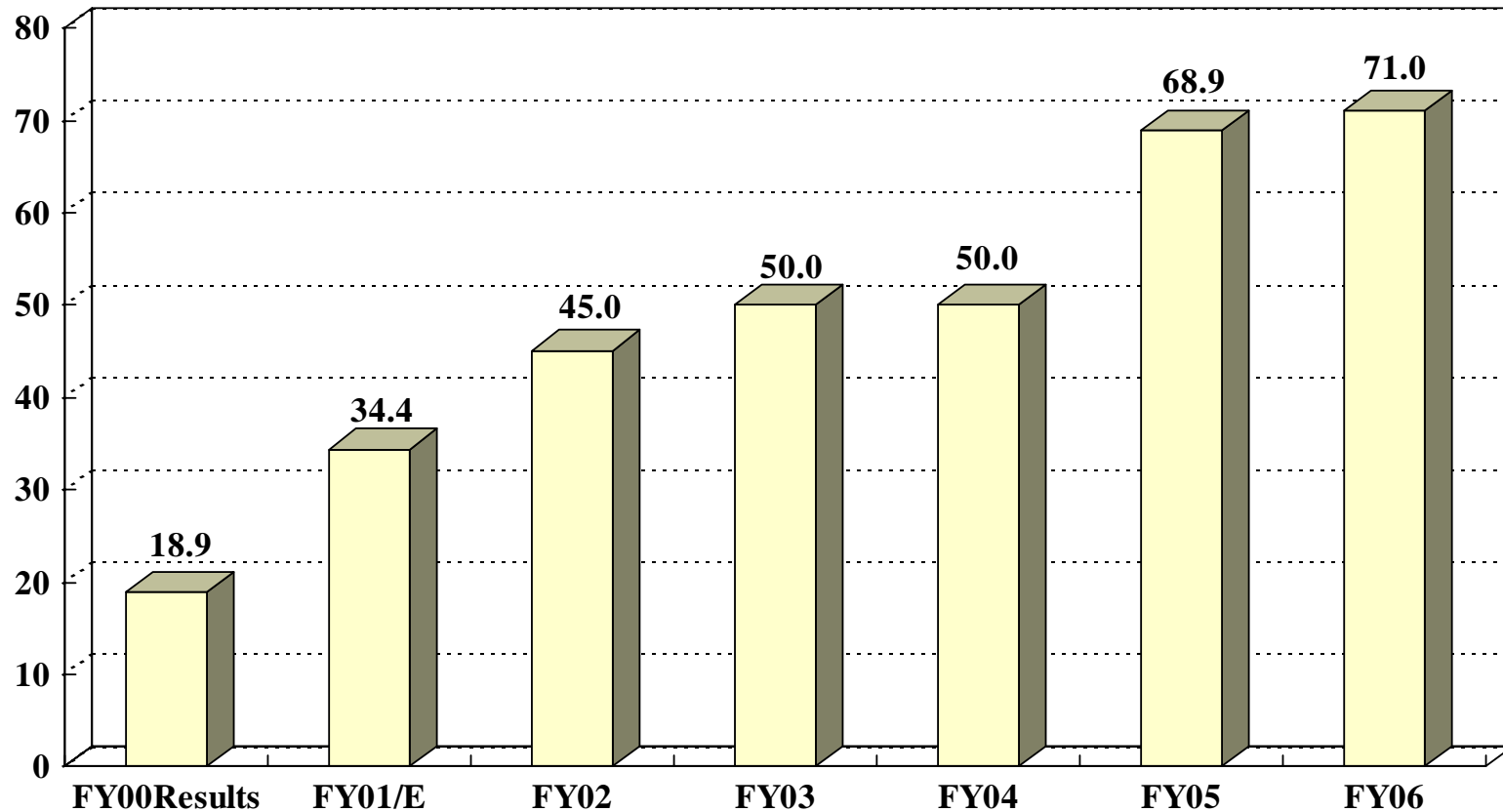
Main investments in 2000

- Acquisition of rights in offshore gas field in Australia's Northern Territory
- Acquisition of Nissho Iwai Petroleum Gas Corporation Group
- Investment in "Ennet"



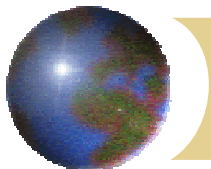
Forecasts for consolidated free cash flow

(billion yen)



Premises: 28\$/bbl, 118 yen/\$

Subsidiaries: FY00- 25 companies, FY01- 35, FY02- 42

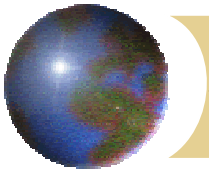


Main factors behind the increase in free cash flow

(billion yen)	FY00/R	FY01/E	FY02	FY03	FY04	FY05	FY06
Free cash flow	18.9	34.4	45.0	50.0	50.0	68.9	71.0

FCF increase/decrease compared with previous year	+15.5	+10.6	+5.0	0	+18.9	+2.1
Breakdown						
1. Influence of increase in gas sales	+5.1	+6.2	+8.4	+7.9	+7.7	+8.8
2. Increase/decrease in depreciation	+14.4(*)	-4.9	-0.6	+3.2	+2.6	-1.5
3. Increase/decrease in capital expenditure (offset accounted in incidental facilities)	+3.0	+4.3	-7.5	+10.5	-9.5	-2.5

* Included accelerated depreciation 5.7 billion yen of Senboku #18 tank

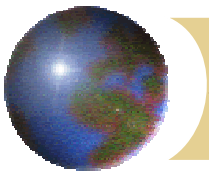


5. Deregulation and convergence of electricity and gas

5-1. Deregulation

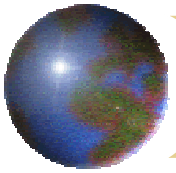
5-2. Competition in the gas business

5-3. Competition in the electricity business



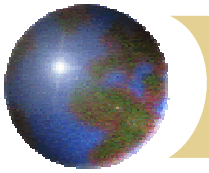
Liberalisation of electricity and gas markets

		Phase 1 (1995-)	Phase 2 (1999-)	Phase 3: forecasts (2002-)
Supply Regulations	Gas	Liberalization of market Threshold: 2 million m3	Liberalization of market Threshold: 1 million m3	Further liberalization Equal footing of third party access to transmission lines Account dividing of network business Ease third party access to LNG terminals
	Electricity	Introduction of IPP, Restricted Power Distribution Business	Liberalization of sales to users of 2,000kW & 20,000 volts	
Transmission	Gas/Electricity	Allowing third party access to transmission lines	Establishing connection rules	
Tariffs	Gas/Electricity	Introduction of yardstick formula and fuel cost adjustment system	Ease the regulations on rate-setting, choice of tariffs	



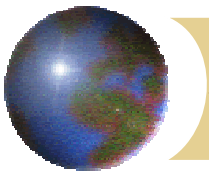
Present direction of deregulation

- Research Committee investigating basic gas market problems on organization including the Ministry of Economy, Trade and Industry (METI) and industry leaders
- Starting in January 2001, investigations leading to a third phase of deregulation in 2003
- Key points concerning the 10 year plan for market regulation:
 - Methods of import, storage, gasification, pipeline transport, wholesale and retail in the gas chain
 - Integrated approach to security of supply, consumer protection and a competitive environment
 - Ways of guaranteeing security, etc



Our thoughts on deregulation

- ❖ On the premises that a plus-sum competitive market has been created in the wake of the increased use of natural gas, and that conditions of fair competition with other energy sources are well established, Osaka Gas presents the following scenario:
 - ❖ Phased liberalization of markets other than the residential market (commercial and industrial markets)
 - ❖ The scope of use of pipelines expands due to participation of new players in the markets
 - ❖ The use of LNG terminals is determined through negotiations between parties concerned
 - ❖ The management form will not be specified institutionally, but left to the discretion of the utility
 - ❖ Further transparency of access fee by account dividing between network (pipeline distribution) business and others
 - ❖ Simultaneous system reformation in both electricity business and gas business



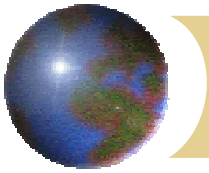
LNG supply costs/terminal costs, compared with electricity companies

Supply costs

- ⊕ Both electricity and gas companies mainly purchase supplies via long term contracts, so there is no major cost difference
- ⊕ Our own cost cutting strategy
 - ⊞ Individual purchase (Oman)
 - ⊞ Lower costs thanks to our tanker
 - ⊞ Re-sale of LNG

Terminal costs

- ⊕ We use the same processes of transportation, storage and gasification
- ⊕ Our costs are already low thanks to our completed pipeline structure; our depreciation is proceeding well
- ⊕ Our facilities can cope with higher sales in the future, as KEPCO's new terminal will create excess capacity



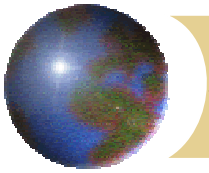
Gas transport costs, developing demand

✦ Gas transport costs

- Supply connection fees are the same
- But, for connections electricity companies have to bear additional costs (equipment for odorization and stabilization are included)

✦ Developing demand

Strengths of gas companies	<ul style="list-style-type: none">✦ Technological strength in maintenance of cogeneration equipment✦ Ability to meet customers' overall needs
Strengths of electricity companies	Strong purchasing power in supplies



Our entry strategy into electricity markets

1. **IPP**

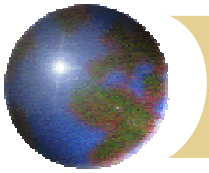
- Torishima IPP plant 150,000 kW (starts from April 2002)

2. **Electricity retailing (Ennet)**

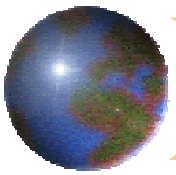
- From April 2001, starting 9 or 10 business, supplying 24,000 kW
- We aim to supply 10% of the total electricity contracts awarded by KEPCO and TEPCO, i.e. 10% of 11 million kW and 24 million kW respectively (= 3.5 million)

3. **Onsite generation of electricity**

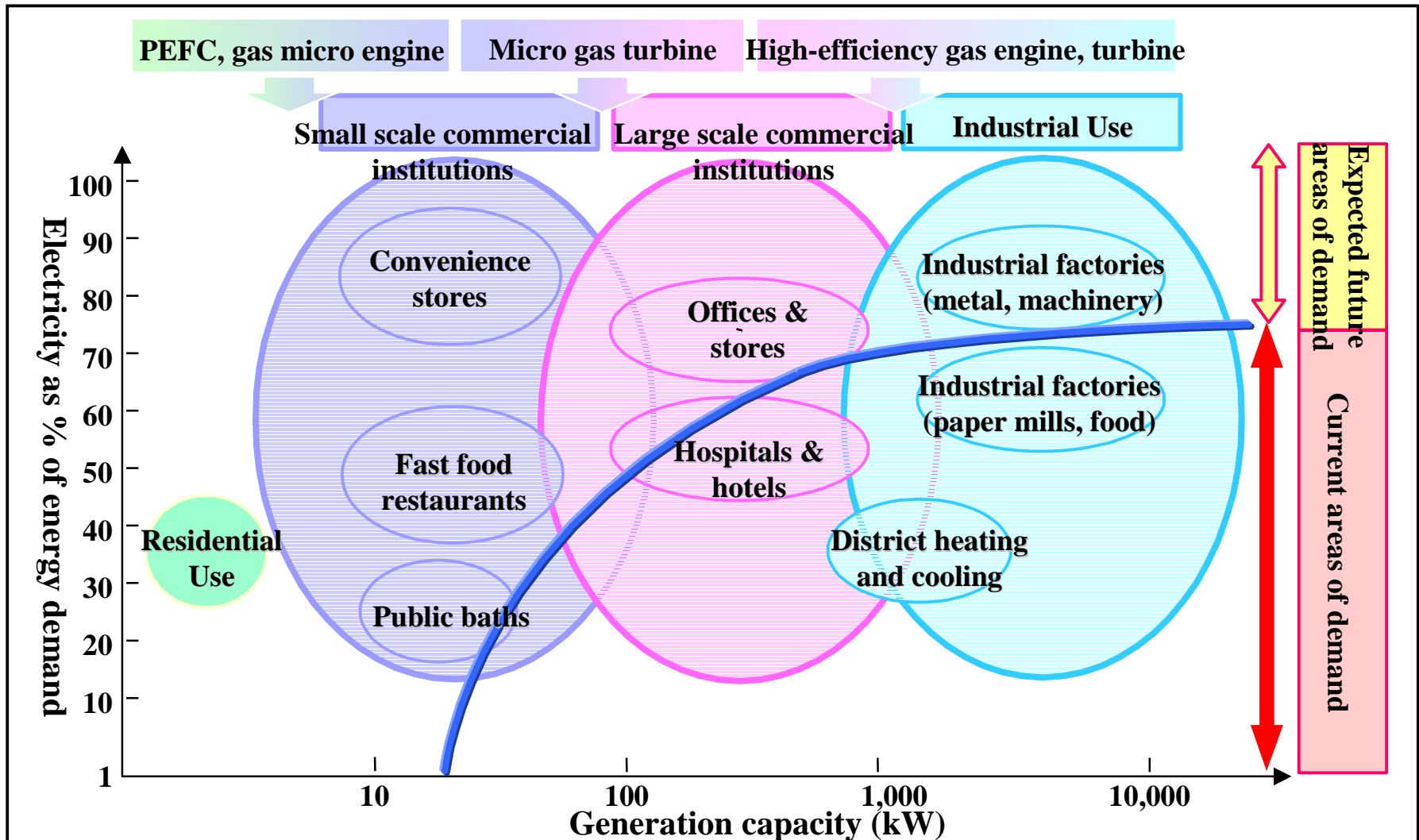
- Promotion of in-house generation + ESCO
 - From January 2001, onsite generation of 9,000 kW at Mycal, Ibaraki
 - From April 2002, at Osaka mothers & children health center
- Building up a network of existing cogeneration customers (666 cases, 1 million kW)

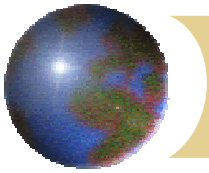


6. Reference material



Areas of demand for gas cogeneration and new technology





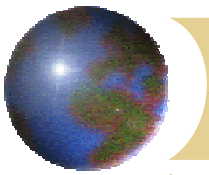
Case studies in the industrial market

⊕ **Gas engines for steel pipes:**

- ⊕ In the past: used for steam and hot water in factories
- ⊕ Now: in addition to the above, in washing steel pipes we recycle waste hydrochloric acid
- ⊕ Using steam from gas engines, we recycle waste hydrochloric acid
- ⊕ Not only do we supply engines, but we also solve the corrosion problem that goes with the use of hydrochloric acid

⊕ **Burner systems for chain production:**

- ⊕ Because we offer 50% energy saving, we are competitive with fuel oil
- ⊕ We can further reduce costs by offering improvements to furnaces and cooling systems



Share buy-backs

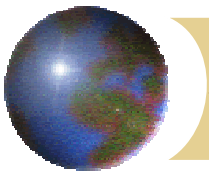
Thinking on share buy-backs

- This is one way of rewarding our financial position
- We did and will select from a number of methods of shareholder return, including increase dividends, building up internal reserves, new investment etc, and use buy-backs if the situation on the capital market seems suitable

Results to date

- In the past 2 years we have had 3 share buy-backs.
- Our board has authorized a further 151 million shares.

Period	Shares bought back	Value of purchases	Price per share
99.2-3	27.7 million	10 billion yen	361 yen per share
00.2-4	38.6 million	9.6 billion yen	248
00.11-12	32.3 million	10 billion yen	310



Hydrogen saving technology using carbon nanotubes (compared with other 3 methods)

In the case we achieve to success to save hydrogen with 10wt%

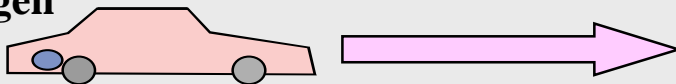
1. Compared with hydrogen saved compound metal

CNTs tank



Tank weight : 100-180kg 500km

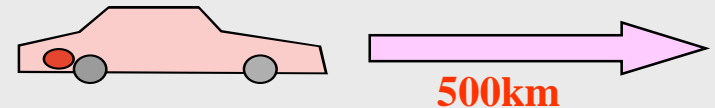
Compound metal tank when saved 5kg hydrogen



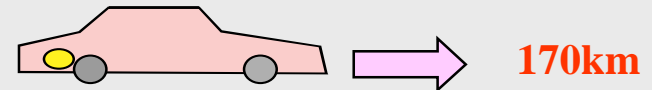
Tank weight : 300kg 500km

2. Compared with hydrogen compression method **

CNTs tank



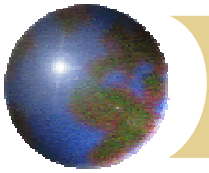
Compressed hydrogen tank



** Presuming the same capacity of tanks and same level of pressure
(I.e. if CNTs tanks save 5kg hydrogen)

3. Liquefied hydrogen method has problems about high liquefaction cost and vaporization of liquefied hydrogen

(Reference) 5kg hydrogen allows fuel cell vehicles to run about 500km



E-business

✚ **E-cube net dot com**

- ✚ A JV with Mitsubishi Trading Company, established in 1999
- ✚ Internet EC/EDI

✚ **Home portal**

- ✚ A specialist Internet site catering for the home DIY/refurbishment market, starts from 2001. This was the first such portal in Japan.

✚ **Recipe site which generates business**

✚ **Local information offered on mobile phones**

- ✚ Information on local restaurants and events based on an information sheet published by our group company L-net, available via mobile phones (i-mode)