Management Reference Materials

November 2012

The Okinawa Electric Power Company, Inc.

Contents

■ Main contents

■ Q&A contents

Characteristics of the Business Base

Advantage

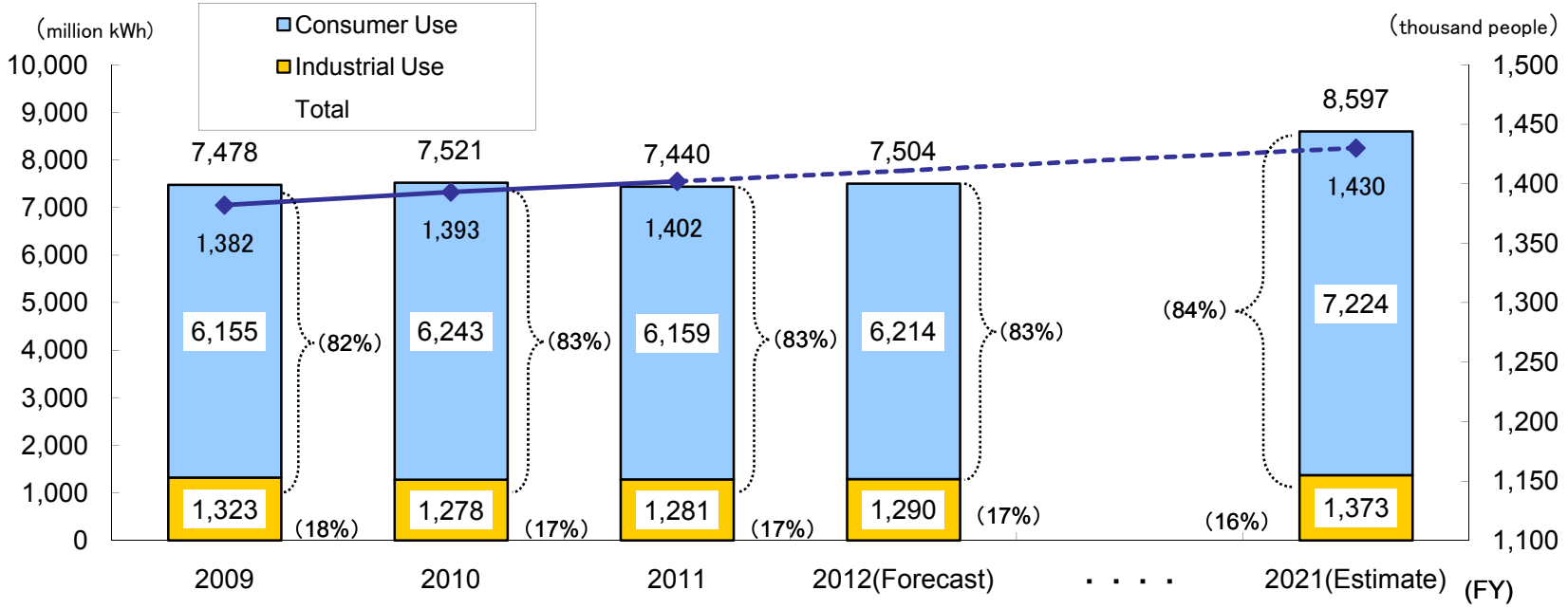
		Reference page
Demand for Electric Power	◆ Increasing demand as population increasing ◆ As the proportion of energy for consumer use is high, the effects of business fluctuations are low	2
Competition	◆ Severance from competition among electric power companies on account of its isolated system ◆ No competition with PPS (Power Producers and Suppliers) ◆ The advance of private power generation operations is limited (Prevention of demand withdrawals through Progressive Energy Corp , a subsidiary of OEPC.)	3

Disadvantage

		Reference page
Electric Power Generation Facilities	◆ Due to having an isolated system, it is necessary to have a high margin of power generation reserves ◆ Electrical power source composition reliant only on fossil fuels	4～7
Fuel	◆ As fossil fuels are the only fuels used, high commodity prices exert a great influence	8～10
Remote Islands	◆ With remote islands where cost efficiency is low, the Remote Islands Company constantly records losses	11～12
The Environment	◆ Dependent on fossil fuels with a high environmental burden	13

Demand for Electric Power

Stable growth is forecasted for demand for electric power, centering on increased demand for consumer use accompanying population increases.



Okinawa (%)

Annual Average Growth Rate		2000-2010	2010-2021
Demand for Electric Power	Consumer use	1.3(1.3)	1.3(1.4)
	Industrial use	1.0(1.0)	0.7(0.7)
Total		1.3(1.3)	1.2(1.3)

Note : Figures in brackets are post temperature correction.

Nationwide (Excluding Okinawa)

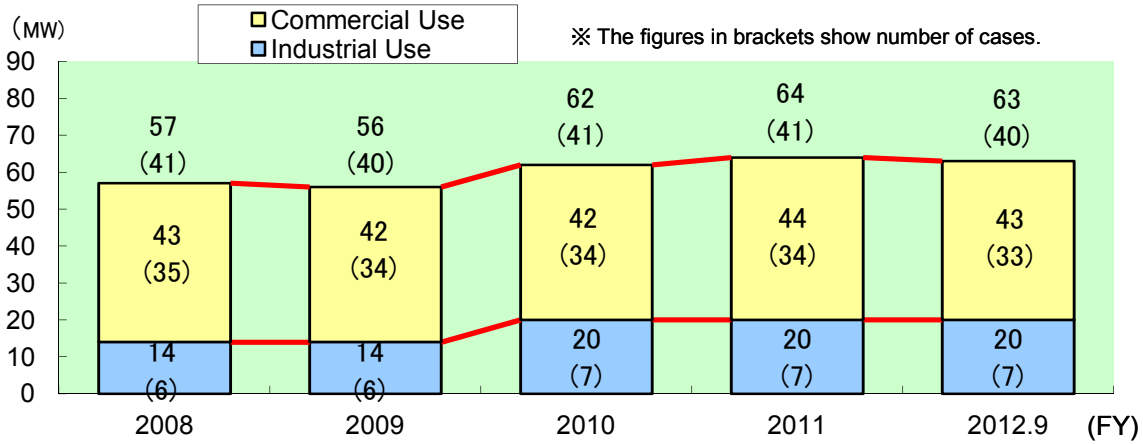
Annual Average Growth Rate		2000-2010
Demand for Electric Power	Consumer use	1.4(1.3)
	Industrial use	0.4(0.4)
Total		1.0(0.9)

Source: Japan Electric Power Survey Committee
(Growth rates were calculated from loads for distribution)
Note: Figures in brackets are post temperature correction.

Competition with Private Power Generation Operations

- The proportion of private power generation in Okinawa is 3%
- Progressive Energy Corp's share of private power generation in commercial use sectors is 53% (As of September 30, 2012)

Trend in the Permitted Output of Private Power Generators



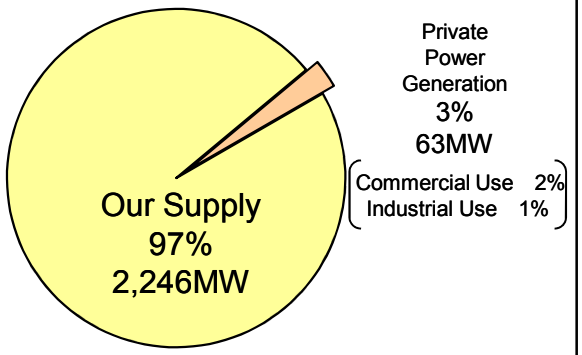
- Trend in independent power generation (output and number of facilities)

	FY 2009	FY 2010	FY 2011	FY 2012.9
Switch to power purchase	-1MW (-2Cases)	-1MW (-2Cases)	-1MW (-1Case)	-2MW (-2Cases)
Switch to independent power generation	α (1Case)	7MW (3Cases)	3MW (1Case)	1MW (1Case)
Total	-1MW (-1Case)	6MW (1Case)	2MW (0Case)	-1MW (-1Case)

* Totalizing only continuously used power generators interconnected to the company's power grid.
* Excluding wind power, solar power and the company's facilities.

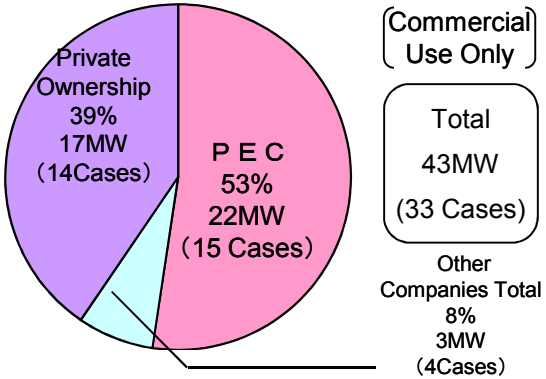
Status of market penetration by private power generators

Proportion of private power generation in Okinawa



* Figures for OEPC supply include Electric Power Development Co, Ltd.

Proportion of PEC's share of private power generation in Okinawa



*PEC: Progressive Energy Corp.

Power Generation Facilities (Reserve Capacity)

Generation Reserve Capacity

（Thousand kW、%）

	2011 【Result】	2012 【Result】	2016	2021
Peak Load	1,341	1,373	1,507	1,608
Supply Capacity	2,086	2,081	2,078	2,039
Reserve Capacity	745	708	571	431
Reserve Margin(%)	55.6	51.6	37.9	26.8

Note : Maximum electric power in FY2011 and FY2012 were generated in July.

- A high generation reserve margin is necessary for such reasons as the inability to exchange power with other electric power companies because of OEPC's isolated system and the responsibility to provide stable supply as a public utility.
- The power supply reserve is achieved by securing the equivalent reserve capacity of the largest single generator so that it is possible to provide stable supply even if the largest unit breaks down.

Although there are factors encouraging increased facility investment associated with the growth of electric power demand, OEPC is making efforts to suppress the level of facility investment and promote load leveling and the like, aiming at efficient facility formation.

Power Generation Facilities (Power Supply Composition)

Power Supply Composition

■ Power supply is dependent on oil and coal because of the difficulty of introducing hydro or nuclear power generation due to factors including geographic and topographical characteristics and constraints on the scale of demand.

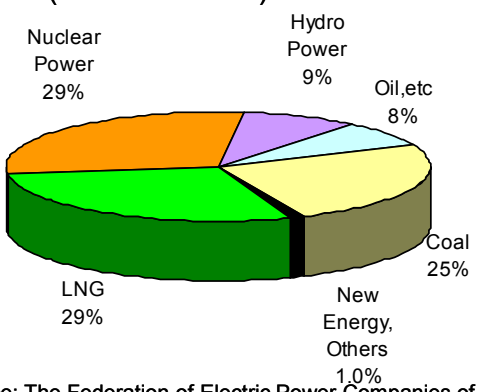
■ Introducing LNG thermal power stations to diversify power supply sources

Improving security for the stable supply of electric power

Electric Power Composition Ratio (Generating End)

Totals for the 10 Major Electric Power Companies

(FY2010Results)



(Source: The Federation of Electric Power Companies of Japan

Okinawa Electric Power Company

(FY2011:Results)

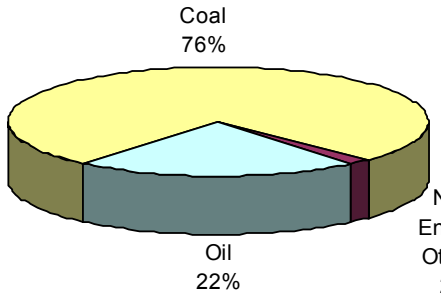
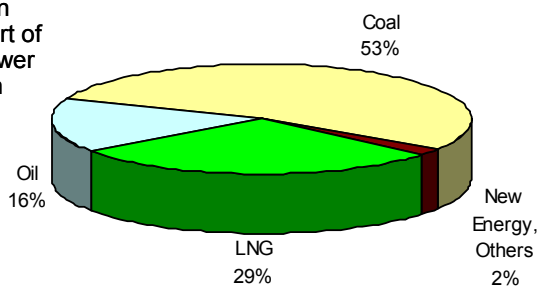


Image of Situation Following the Start of LNG Thermal Power Station Operation

(FY2021)



* Both pie charts include energy supplied by other companies.

Power Generation Facilities (Yoshinoura LNG Thermal Power Plant)

Construction Purpose

Response towards steady demand increases
Environmental measures → Avoidance of large environment costs
Fuel diversification → Improvement of energy security
Search for new business opportunities making efficient use of LNG

Okinawa Prefecture

【Site for Power plant construction】

Investment Plan

Power generation facilities, Generators No.1 & 2 (251,000 kW each)
2 LNG terminals (140,000 kl each)
Including other expenses, the operation is on the scale of 100 billion yen
The forecast investment peak is from FY2010 – FY2012

Construction Schedule

2003-2007	2007 -2012	Nov. 2012	May 2013
Environmental assessment, etc., investigation of various procedural matters, facility specifications, etc.	Construction work	Start of operations at Generator No.1	Start of operations at Generator No.2

Major events in 2012
- **Start of acceptance of LNG**
- **Start of comprehensive test run**

Power Generation Facilities (Yoshinoura LNG Thermal Power Plant)

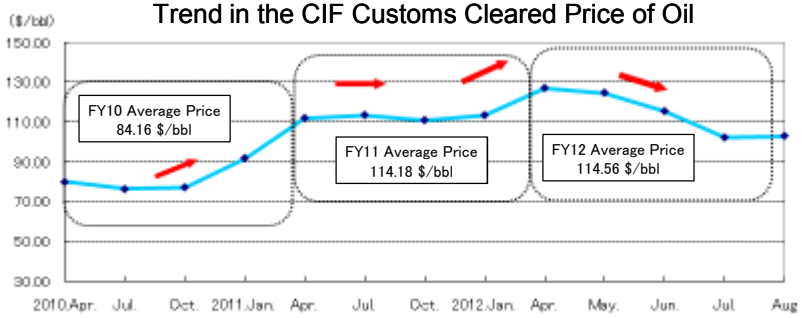
In the face of rising demand for funds following construction of the Yoshinoura Thermal Power Plant and increase in depreciation after start-up of the power plant, we will introduce finance leasing targeting LNG terminal facilities to lighten and level out the initial financing and cost burdens.
The introduction of finance leasing has enabled depreciation virtually using the straight-line method throughout the lease period. This will enable us to lighten depreciation burden by up to around 2.5 billion yen.

Item	Detail
Target facilities	LNG terminal facilities
Value of facilities	About 30 billion yen
Ratio of remaining value	50%
Lease period	12 years
Contract start date	November 30, 2012

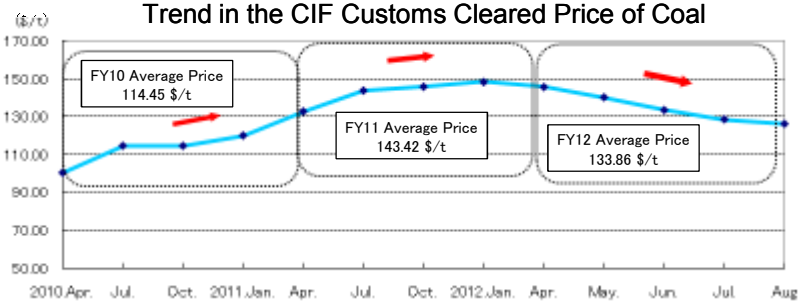
Fuel

- **Great effects are exerted on the company by movements in fuel prices.**
- **The price of fuel is on a downward trend due to the effects of concerns about slowdown in the global economy, triggered by the debt issue in Europe, but the outlook is uncertain.**

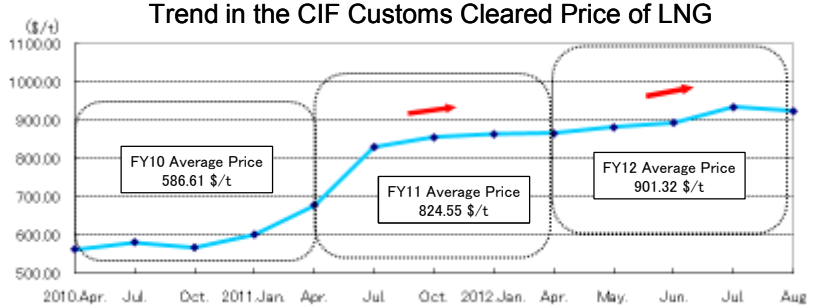
Trend in the CIF Customs Cleared Price of Oil



Trend in the CIF Customs Cleared Price of Coal



Trend in the CIF Customs Cleared Price of LNG



Diversification of fuel oil suppliers through regular purchase

Procurement that considers heavy oil market condition (Spot purchase)

Stable procurement through long-term LNG supply contracts

Initiatives of the company (fuel)

Long-term contracts on coal and transport ships

Dispersion of ports of shipment and shift to short-distance sources

Efficient use of the' Shinryo-maru' and COA(contract of affreightment)

Expansion of the introduction of sub-bituminous coal, which has a low environmental burden

Achieving stable fuel supply and pursuing cost reductions

Activities this term

< Fuel Oil >
- Diversification of fuel oil suppliers through regular purchase
- Reduction of fuel costs via utilization of spot market

< Coal >
- Achieving stable coal supply and fuel costs reduction via long term contracts for coal and transport vessels
- Secure stable supply and reduced fuel costs by dispersing embarkation port and shifting to closely-located supply sources.
- Reduce transportation cost by utilizing “Shinryomaru”, a specialized carrier for low transportation cost, and competitive COA (Contract of Affreightment).
- Life expansion of ash processing facilities and the reduction of fuel costs by increasing the use of sub-bituminous coal which has lower ash, lower sulfur and lower environmental load than bituminous coal.

< LNG >
- Stable procurement through long-term LNG supply contracts.

The Fuel Cost Adjustment System

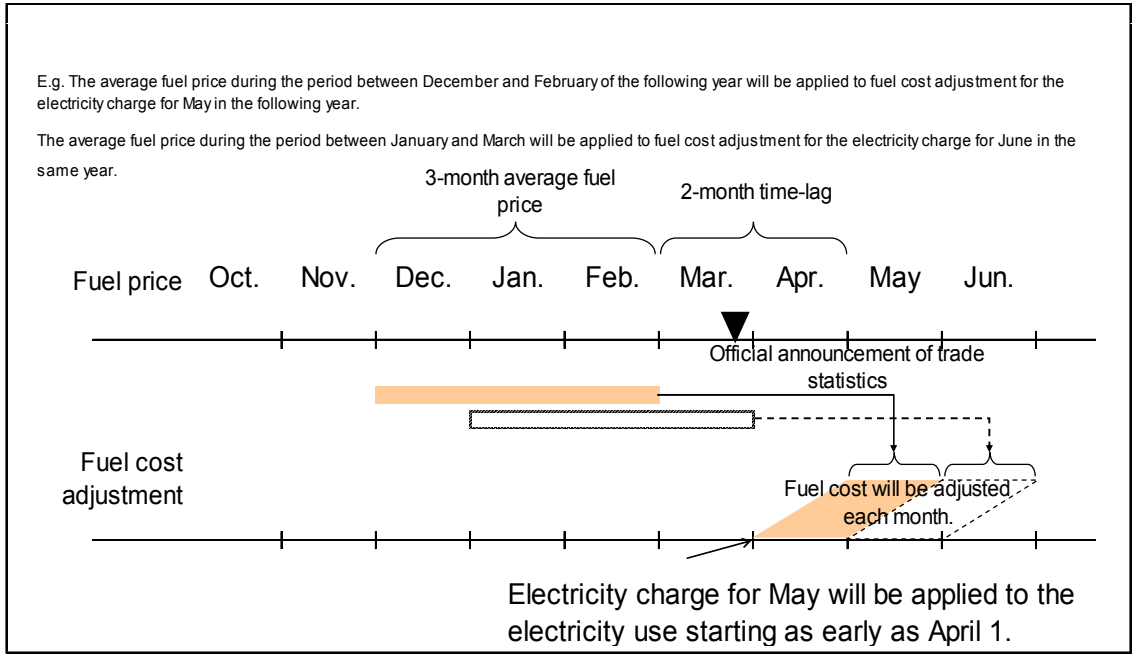
Summary of the System

The fuel cost adjustment system was introduced for the purpose of clarifying the “internal factors” such as the results of efforts to promote management efficiency at electric power companies and reflecting “external factors” onto electricity rates such as exchange rates and oil and coal and LNG prices that alter the economic situation.

Range of fuel cost adjustment

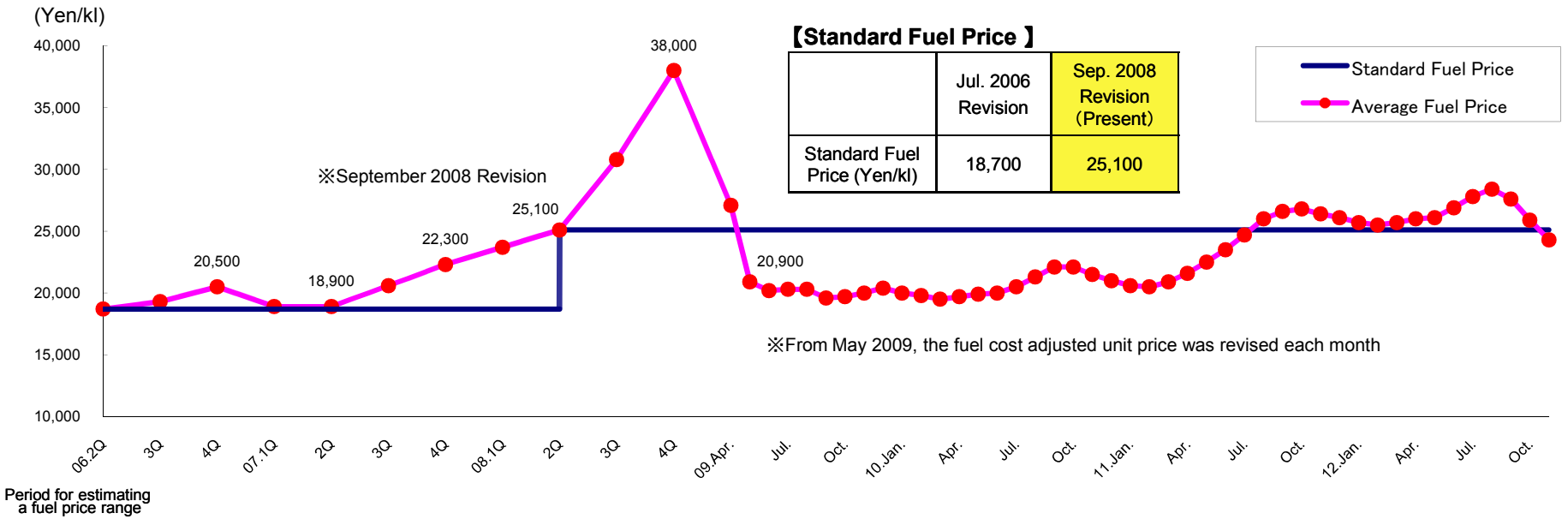
- We will calculate the average fuel price based on the prices of crude oil, coal and LNG on the trade statistics during the period between five months and three months prior to the fuel cost adjustment, and electricity charge will be automatically adjusted each month by comparing the above price with the standard fuel price at the time of electricity rate revision.
- The maximum level of fuel cost adjustment will be 50% .
- There will be no lower adjustment limit.

Conceptual drawing of the fuel cost adjustment system



Trend of Average Fuel Price and Standard Fuel Price

■Trend of Average Fuel Price and Standard Fuel Price（Since July 2006）



Period for applying the Fuel cost adjustment system	11.Dec.	12.Jan.	12.Feb.	12.Mar.	12.Apr.	12.May.	12.Jun.	12.Jul.	12.Aug.	12.Sep.	12.Oct.	12.Nov.
Period for estimating a fuel price range	11.Jul. ～ 11.Sep.	11.Aug. ～ 11.Oct.	11.Sep. ～ 11.Nov.	11.Oct. ～ 11.Dec.	11.Nov. ～ 12.Jan.	11.Dec. ～ 12.Feb.	12.Jan. ～ 12.Mar.	12.Feb. ～ 12.Apr.	12.Mar. ～ 12.May.	12.Apr. ～ 12.Jun.	12.May. ～ 12.Jul.	12.Jun. ～ 12.Aug.
Average Fuel Price（yen/kl）	26,100	25,700	25,500	25,700	26,000	26,100	26,900	27,800	28,400	27,600	25,900	24,300
Average Crude Oil Price（yen/kl）	55,678	54,452	53,399	54,205	54,720	55,743	57,802	61,362	63,598	62,326	57,233	53,051
Average Coal Price(yen/t)	11,219	11,108	11,210	11,225	11,350	11,252	11,452	11,542	11,606	11,184	10,694	10,227

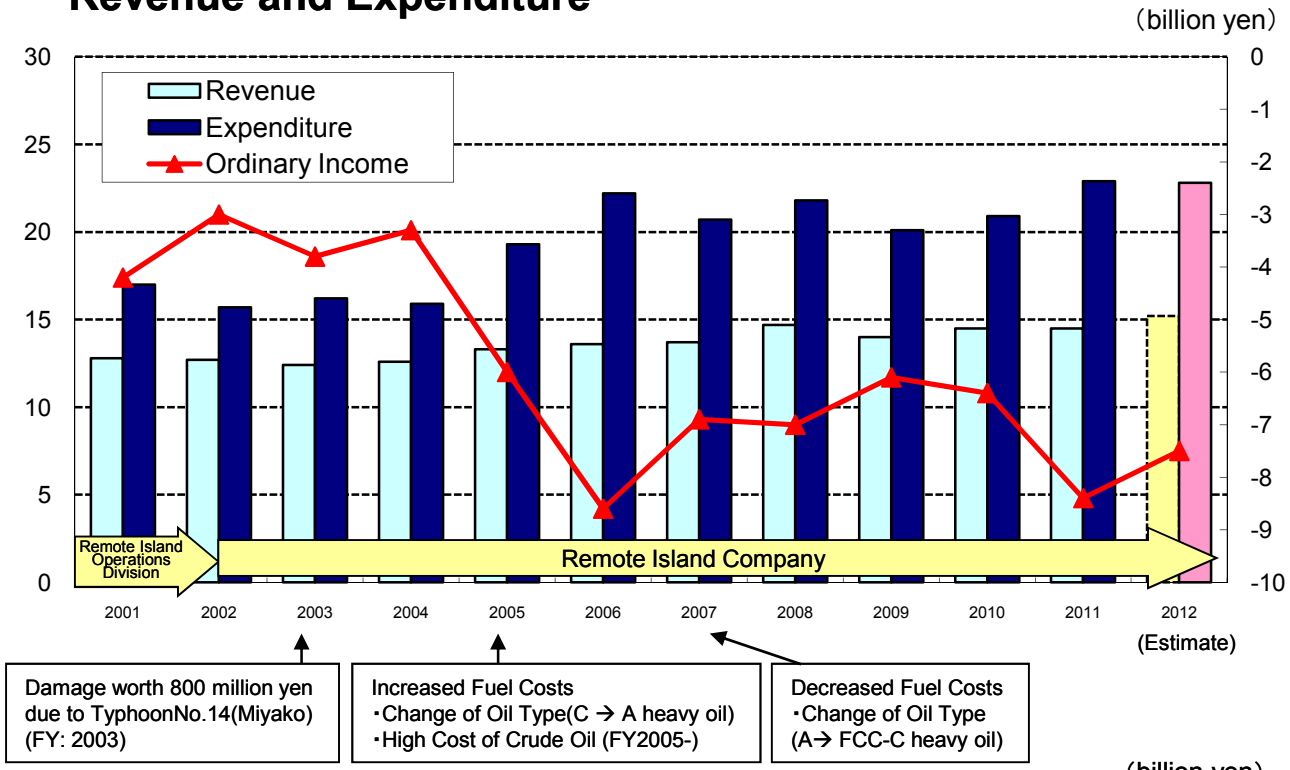
【Method of calculating Average Fuel Price】

Average Fuel Price ＝ A×α＋B×β A : Average crude oil price per kiloliter in each quarter B : Average coal price per ton in each quarter

※ α and β are coefficients in Provisions of supply to calculate the average fuel price. (Reference α:0.2410 、β:1.1282 Provisions of supply Sep. 2008 effective)

Improvement of Remote Island Income and Expenditure〔1/2〕

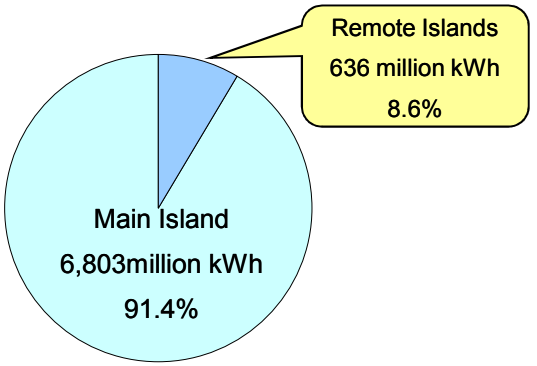
Movements in Remote Island Revenue and Expenditure



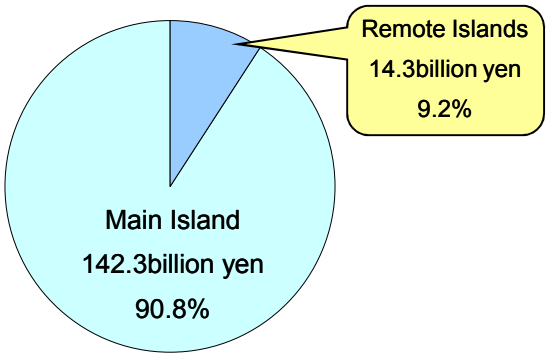
(billion yen)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 (Estimate)
Revenue	12.8	12.7	12.4	12.6	13.3	13.6	13.7	14.7	14.0	14.5	14.5	15.2
Expenditure	17.0	15.7	16.2	15.9	19.3	22.2	20.7	21.8	20.1	20.9	22.9	22.8
Ordinary Income	-4.2	-3.0	-3.8	-3.3	-6.0	-8.6	-6.9	-7.0	-6.1	-6.4	-8.4	-7.5

Electricity Sales（FY2011）
（Total : 7,440million kWh）



Residential,Commercial and Industrial Use Charges(FY2011)
(Total : 156.7 billion yen)



Remote island business occupies slightly less than one-tenth of electricity sales and residential, commercial and industrial use charges.

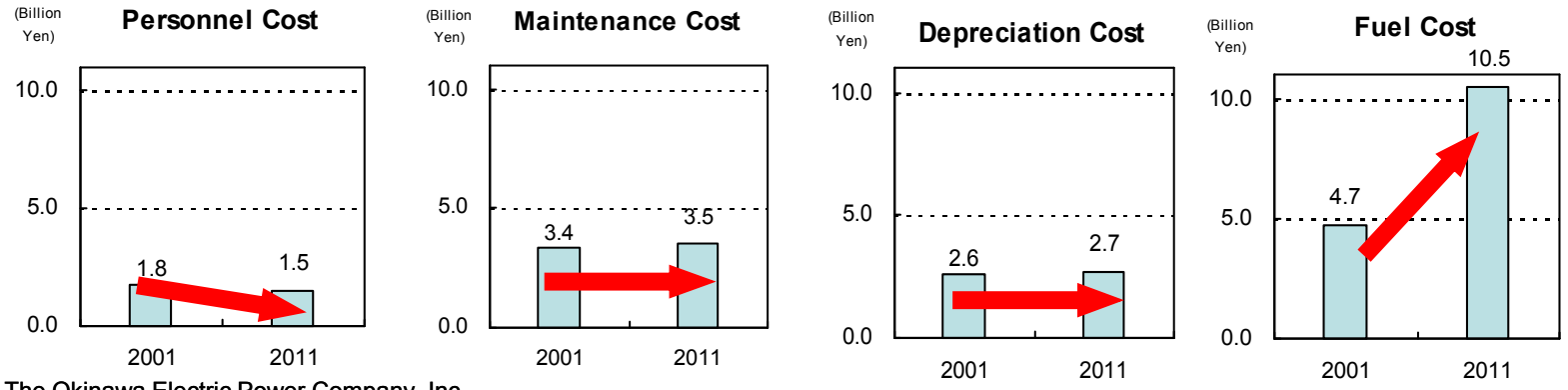
Improvement of Remote Island Income and Expenditure〔2/2〕

- The region has a high cost structure because of such reasons as having small islands scattered about a vast sea area and the narrow scale of the economy.

- In order to construct a system enabling fast implementation of measures to improve inequalities in income and expenditure, a Remote Island Operations Division was launched in FY2001 and from FY2002, this was converted into the Remote Island Company.
  - Establishing remote control system for power generation plants in Miyako and Ishigaki.
  - Revising the procedures for regular inspections on electric power supply facilities.
  - Purchasing other companies' idle facilities and moving idle facilities of own company.
  - Switching from A heavy oil to FCC-C heavy oil.
- Fuel costs are greatly increasing due to the recently soaring price of crude oil.

We work out new measures to stabilize supply and improve the balance of revenue and expenditure while pushing ahead with ongoing various measures

- Reducing fuel consumption by introducing New energy (Retractable wind-power generators, etc.).
- Effective utilization of waste oil. etc.



Addressing the global warming issues

■ Introducing hydro or nuclear power is difficult in Okinawa Prefecture due to reasons including the region's geological and geographic characteristics and constraints on the scale of demand

→ **Dependency on fossil fuels (oil, coal, etc.)**

Company Efforts

- Introduction of LNG thermal power, which creates low CO_2 emissions (Yoshinoura Thermal Power Station)
- Promotion of the introduction of new energy such as wind and solar power
- Promotion of multi-fuel operation with biomass energy
- Operation of small hydro power generation facilities
- Efficient operation of thermal power plants
- Equity participation in carbon funds taking advantage of the Kyoto Mechanism
- Investment for CCS survey research
- Promoting introduction of electric vehicles for business-use (introducing 100 electric vehicles by FY2020)
- Promoting energy saving on the demand side (by offering EcoCute services, etc.)

（cf.） CO_2 emission coefficient for 2010 （after reflecting CO_2 credits） : 0.692kg - CO_2 /kWh
（before reflecting CO_2 credits）: 0.935kg - CO_2 /kWh
CO_2 emission coefficient for 2011 （after reflecting CO_2 credits） : 0.692kg - CO_2 /kWh
（before reflecting CO_2 credits）: 0.932kg - CO_2 /kWh

Q & A

Q1.What is the Current State of the Okinawa Prefectural Economy and What is the Future Forecast?

1 Okinawa's Economy

◎The current state of affairs

The economic conditions in Okinawa Prefecture for 1st Half of FY2012 improved over the same period a year earlier and were on the upward trend on the whole against the backdrop of robust consumer spending with tourist-related industry remaining firm although there was an influence of typhoons, as well as recovery of construction-related industry.

◎Prospects

The economy in Okinawa is expected to remain on a gradual expansionary trend centering on consumer spending and tourist-related industry. In addition, implementation of various measures based on lump-sum subsidies for development of Okinawa and the New Okinawa Promotion Plan will boost the economic recovery trend.

Trends in Main Economic Indicators (Rates of Growth)

Indicators	FY2011			FY2012
	1st Half	2nd Half	Total	1st Half
Sales by large-scale retailers	0.8	3.4	2.1	0.4
No. of new car sold	-25.2	32.3	-2.6	36.5
Wholesale shipments of household appliance	-4.3	-24.7	-14.7	-15.7
New residential construction starts	14.8	0.2	7.5	9.7
Value of public works contracts	-6.6	-19.8	-13.6	14.6
No. of Inbound tourists	-11.1	6.3	-3.1	8.9
Total unemployment rate	7.3	6.9	7.1	7.0
Value of corporate failures	93.5	44.4	75.4	-67.0

Note 1: The figures for 'Sales by large-scale retailers' are calculated from the values given in preliminary figures for August 2012 on an all-store base.
Note 2: The figures quoted here for 'Sales of household appliance' are estimates.
Note 3: The figures for 'Total unemployment rates' are raw data.
Source: Okinawa General Bureau, Okinawa Prefecture, Ryugin Research Institute, and others.

Q1.What is the Current State of the Okinawa Prefectural Economy and What is the Future Forecast?

2 Annual Average Growth Rate of GDP

- The average annual growth rate of GDP in Okinawa was about 1.2%, which is higher than the average growth rate nationwide of about 0.7%, for the period of the Okinawa Promotion Plan (from FY2002 to FY2011) on the strength of the measures implemented based on the plan (ended at the end of FY2011).
- Through the implementation of various measures based on the Okinawa 21st Century Vision Basic Plan, a new promotion plan, the economy of Okinawa prefecture is expected to grow solidly.

Annual Average Growth Rate of GDP

	FY2002	FY2011	Annual Average Growth Rate FY2002-Y2011
Prefectural GDP	3,657.5 billion yen	4,081.0 billion yen	Approx. 1.2%
National GDP	479,870.8 billion yen	511,545.9 billion yen	Approx. 0.7%

Sources: Okinawa prefecture
Economic and Social Research Institute, Cabinet Office
Figures for FY2011 are estimates.

"The Okinawa 21st Century Vision Basic Plan," a new Okinawa promotional plan

"The Okinawa 21st Century Vision Basic Plan," a new promotional plan, was formulated in May 2012 under the initiative of Okinawa Prefecture to replace the Okinawa Promotional Plan which expired as of the end of FY2011.

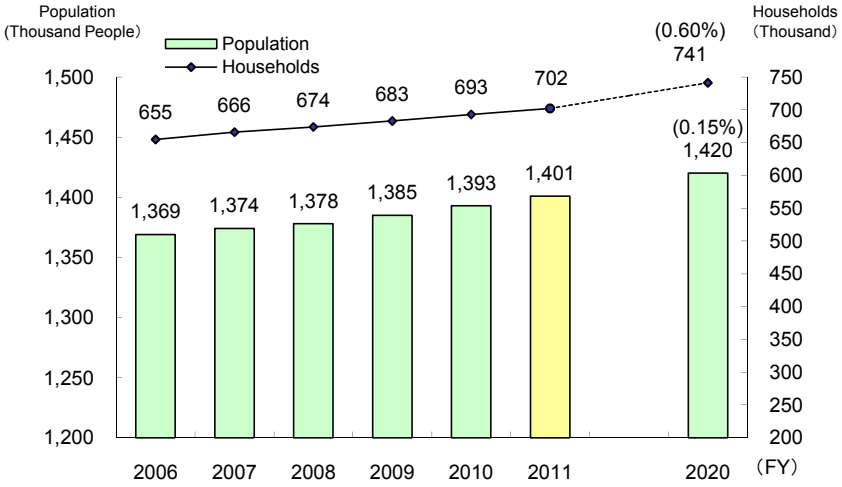
Through the implementation of various measures that are developed based on the Okinawa 21st Century Vision Basic Plan to take advantage of regional characteristics of Okinawa Prefecture, gross production in Okinawa in FY2020 is estimated to increase about 1.4 times compared with that in FY2010 to 5,100 billion yen.

Q1.What is the Current State of the Okinawa Prefectural Economy and What is the Future Forecast?

3 Population and Household Growth in Excess of Nationwide Growth

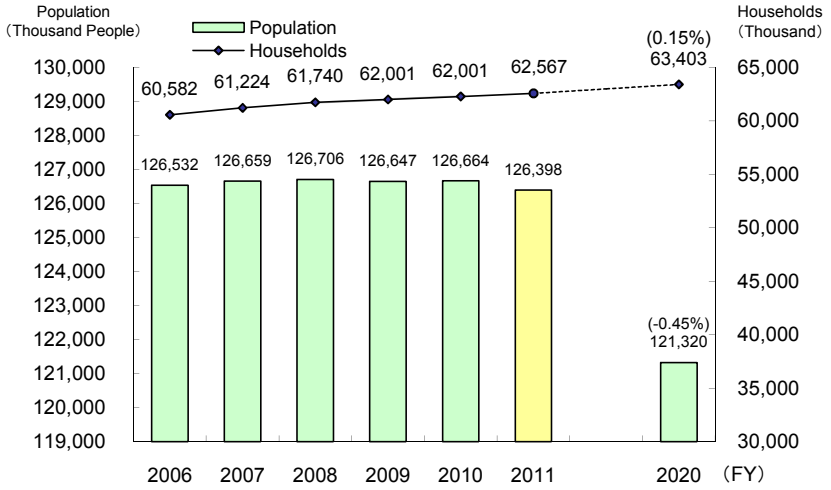
- While nationwide (excluding Okinawa) is expected to decrease by 0.45% annually on average from FY 2011 to FY 2020, the population in Okinawa is expected to increase by 0.15%.
- Okinawa is expected to reach its population peak between 2025 and 2030.

Growth of Population and Households in Okinawa



Source: National Census, Ministry of Internal Affairs and Communications, Japan Electric Power Survey Committee
Note: For 2020, the rate in parentheses is the average annual growth rate for FY 2010-2020

Growth of Population and Households Nationally (Excluding Okinawa)



Source: National Census, Ministry of Internal Affairs and Communications, Japan Electric Power Survey Committee
Note: For 2020, the rate in parentheses is the average annual growth rate for FY 2010-2020

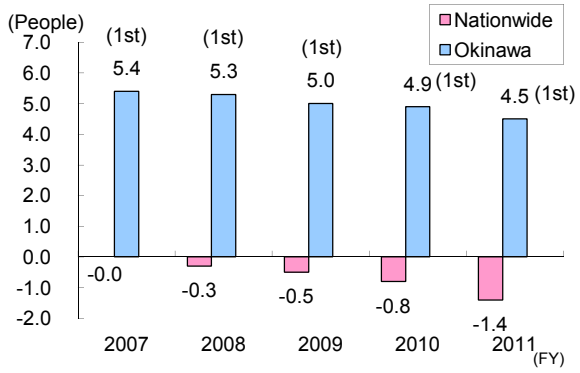
Thanks to the stability growth of household numbers in association with the increasing population, residential demand increases are expected.

Q1.What is the Current State of the Okinawa Prefectural Economy and What is the Future Forecast?

4 Okinawa Prefecture Demographics

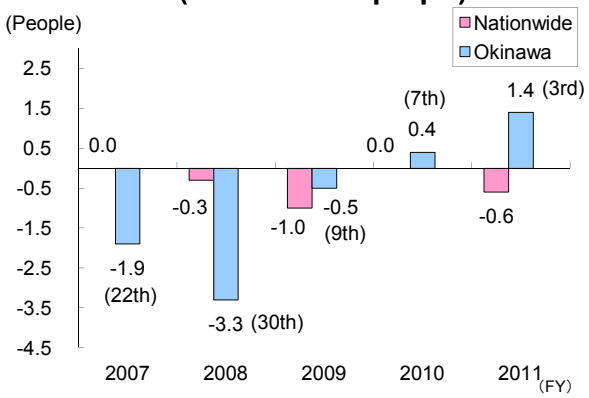
- The population in Okinawa Prefecture is on a favorable trend, with the number of natural population growth per 1,000 people being 4.5 persons, which is the highest nationwide, and the number of social population growth per 1,000 people being 1.4 persons, which is the third highest nationwide.
- Consequently, growth of population in the prefecture significantly exceeds the national average of -2.0 person, with 5.9 persons per 1,000 people.

Trend in the Natural Increase of population (Per Thousand people)



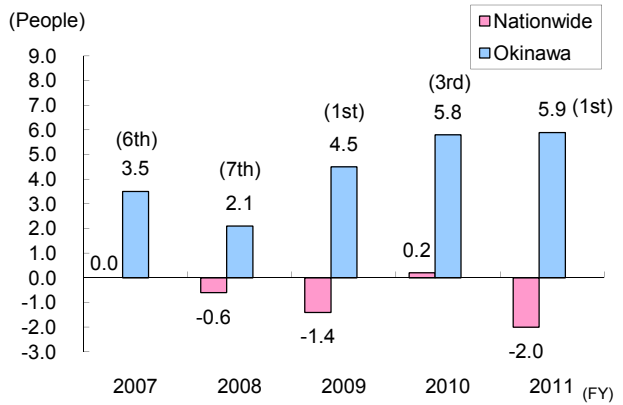
Source: Bureau of Statistics, Ministry of Internal Affairs and Communications
Note: Natural increase of population = Births – Deaths
The figures in brackets in the chart show Okinawa Prefecture's national ranking.

Trend in the Social Increase of population (Per Thousand people)



Source: Bureau of Statistics, Ministry of Internal Affairs and Communications
Note: Social increase of population = Incoming population – Outgoing population
The figures in brackets in the chart show Okinawa Prefecture's national ranking.

Trend in the Increase of population (Per Thousand people)

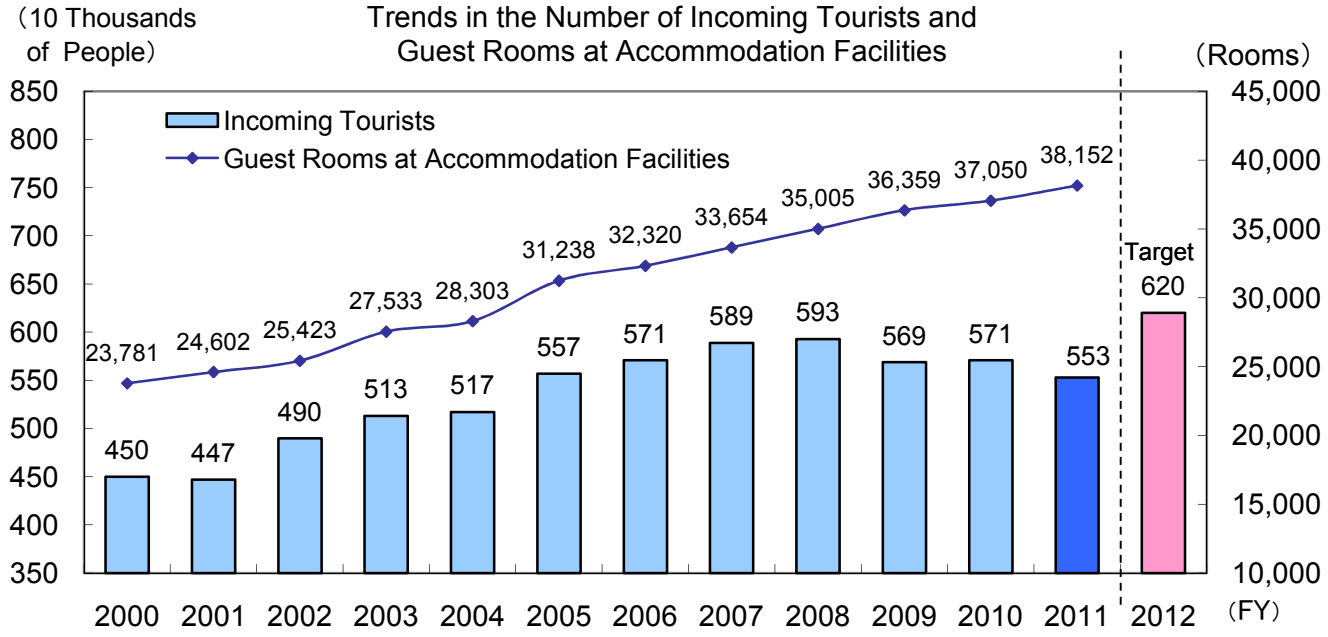


Source: Bureau of Statistics, Ministry of Internal Affairs and Communications
Note: Population increase = natural increase in population + increase/decrease of population in the society
The figures in brackets in the chart show Okinawa Prefecture's national ranking.

Q1.What is the Current State of the Okinawa Prefectural Economy and What is the Future Forecast?

5 Trends in the Number of Incoming Tourists and Guest Rooms at Accommodation Facilities

■ FY2011Result for incoming tourists: 5.53million people(-3.1% in the previous year's figure)
※The target figures for 2012 are 6.2 million incoming tourists



Source: Okinawa Prefecture
•The survey of guest rooms at accommodation facilities changed from a biennial to an annual basis from 2003.

【Reference】

① FY2011 Results

・Incoming Tourists 5.53million

(Including Tourists from foreign countries 0.3million)

・—3.1% growth rate (YoY)

In the latter half of FY2011, the number of tourists grew due to increases in group tours and sports events, etc. and the number of foreign tourists also rose as a result of issuance of multiple entry visa, increase in the number of flights and start of service on new route. However, the incoming tourists were down by 3.1% Year-on-Year on a full-year basis due to the impact of the Great East Japan Earthquake.

②FY2012

Visit Okinawa Plan

・Incoming Tourists 6.20million

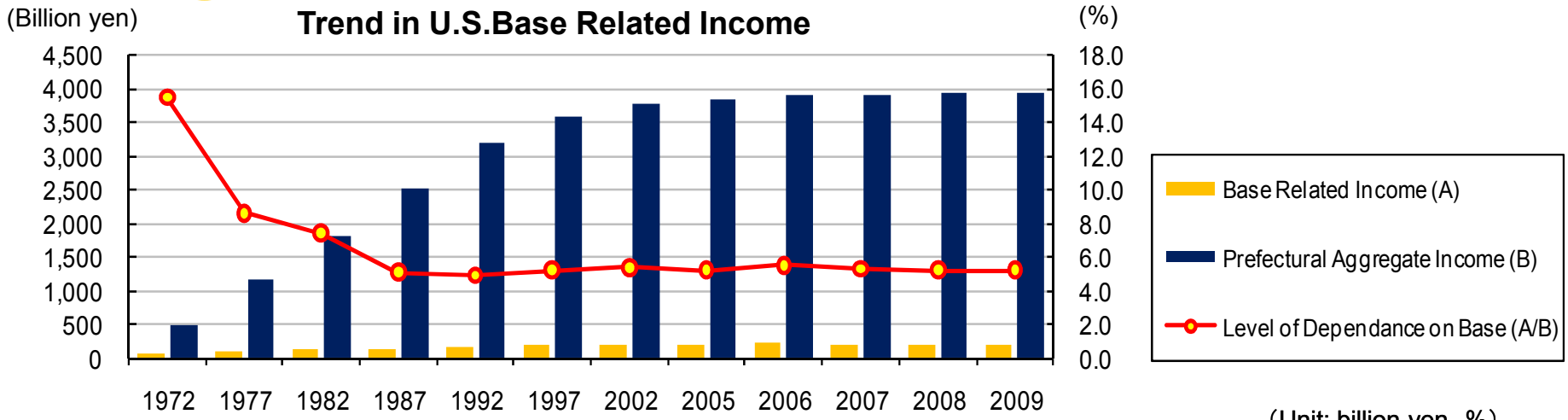
(Including Tourists from foreign countries 0.45million)

・Tourist Income 470.0billion Yen

With the number of tourism related facilities (hotels, etc.) increasing in association with increased numbers of incoming tourists, increases are forecast for demand for commercial use electricity.

Q1.What is the Current State of the Okinawa Prefectural Economy and What is the Future Forecast?

6 Trend in U.S. Base Related Income



(Unit: billion yen、%)

	1972	1977	1982	1987	1992	1997	2002	2005	2006	2007	2008	2009
Base Related Income (Charges for Land Occupied by US Armed Forces) (A)	77.7	100.6	134.6	128.2	156.3	184.0	203.1	201.0	215.4	206.9	204.5	205.8
Prefectural Aggregate Income (B)	501.3	1,163.1	1,822.6	2516.5	3,192.9	3,570.0	3,767.2	3,852.8	3,893.7	3,923.9	3,930.9	3,937.6
Level of Dependence on Bases (A/B)	15.5	8.6	7.4	5.1	4.9	5.2	5.4	5.2	5.5	5.3	5.2	5.2

- U.S. Base related income has become an income source that supports the Okinawa economy.
- However, the level of dependence on the bases has been falling year on year as the prefectural economy expands, and it had fallen to 5.2% in FY2009 from the 15.5% share at the time Okinawa was returned to Japan (1972).

Source: Okinawa Prefecture

Reference : Main Economic Indicators

Trends in Main Economic Indicators (Year-on-Year Comparison)

(Unit : %)

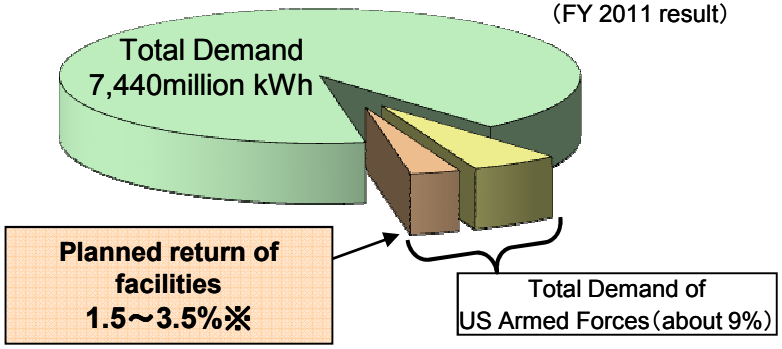
Indicators	FY2011													FY2012						
	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	total	Apr.	May	Jun.	Jul.	Aug.	Sep.	1st Half
Sales by large-scale retailers	-1.5	-3.7	3.9	4.3	0.8	1.0	4.6	0.7	3.6	3.4	2.5	4.7	2.1	4.7	4.9	-2.7	-5.2	0.6	-	0.4
No.of new car sold	-55.8	-33.7	-14.0	-18.9	-25.8	-6.6	11.9	13.7	32.0	23.7	43.7	56.7	-2.6	86.3	72.6	53.2	32.1	5.3	2.7	36.5
Sale of household appliance (Wholesale base)	-1,4	-5.4	9.5	1.7	-16.8	-15.8	-16.9	-39.5	-33.8	-12.8	-15.4	-17.6	-14.7	-10.6	-5.6	-26.8	-20.7	-18.3	-5.0	-15.7
New residential construction starts	145.6	-26.6	24.6	-20.2	-0.3	3.4	12.7	-5.5	5.6	22.0	-34.7	17.7	7.5	-37.0	102.8	-17.1	45.6	14.5	29.3	9.7
Value of public works contracts	16.7	2.2	-53.7	26.6	8.0	-7.2	-17.4	8.6	0.2	-13.7	-41.3	-31.9	-13.6	-33.7	47.4	33.7	27.8	16.6	10.2	14.6
No.of Inbound tourists	-22.2	-18.2	-8.2	-7.9	-6.7	-5.9	3.2	2.3	6.3	-0.3	2.9	23.5	-3.1	28.3	14.2	8.6	10.0	2.4	-2.1	8.9
Total unemployment rate	6.9	7.8	7.6	7.3	7.4	6.6	6.2	6.6	7.1	7.5	7.2	6.8	7.1	8.9	8.3	6.6	5.5	6.3	6.6	7.0
Value of corporate failures	210.1	1226.3	4.6	1001.6	963.5	-27.7	-56.9	-50.8	154.4	50.2	-70.0	253.5	75.4	3.6	-42.1	-78.5	-73.0	-39.6	-84.2	-67.0

Note 1: The figures for 'Sales by large-scale retailers' are calculated from the values given in preliminary figures for August 2012 on an all-store base.
Note 2: The figures quoted here for 'Sales of household appliance' are estimates.
Note 3: The figures for 'Total unemployment rates' are raw data.
Source: Okinawa General Bureau, Okinawa Prefecture, Ryugin Research Institute, and others.

Q2. What is the Current State of U.S. Military Bases ?

【Proportion of Demand Taken Up By U.S. Armed Forces 】

(FY 2011 result)



※Range in figures due to planned return of facilities includes partial return.

【Summary of U.S. Armed Forces in Okinawa】 (As of Mar. 2011)

No. of Facilities		34
Area		232km²
Personnel*	On Base	36,250
	Off Base	14,844
	Total	51,094

* The figures for personnel are as of the end of March 2011.
Reference: No. of army employees: 8,862 *As of the end of December 2011

- Source:
Japan Ministry of Defense
Military Base Affairs Division, Executive Office of the Governor, Okinawa Prefecture
Labor Management Organization for USFJ Employees

<Ratio of demand from US military forces in Japan>

- The US military forces accounted for about 9% of the total electricity demand and about 7% of revenue in the actual results for FY2011.

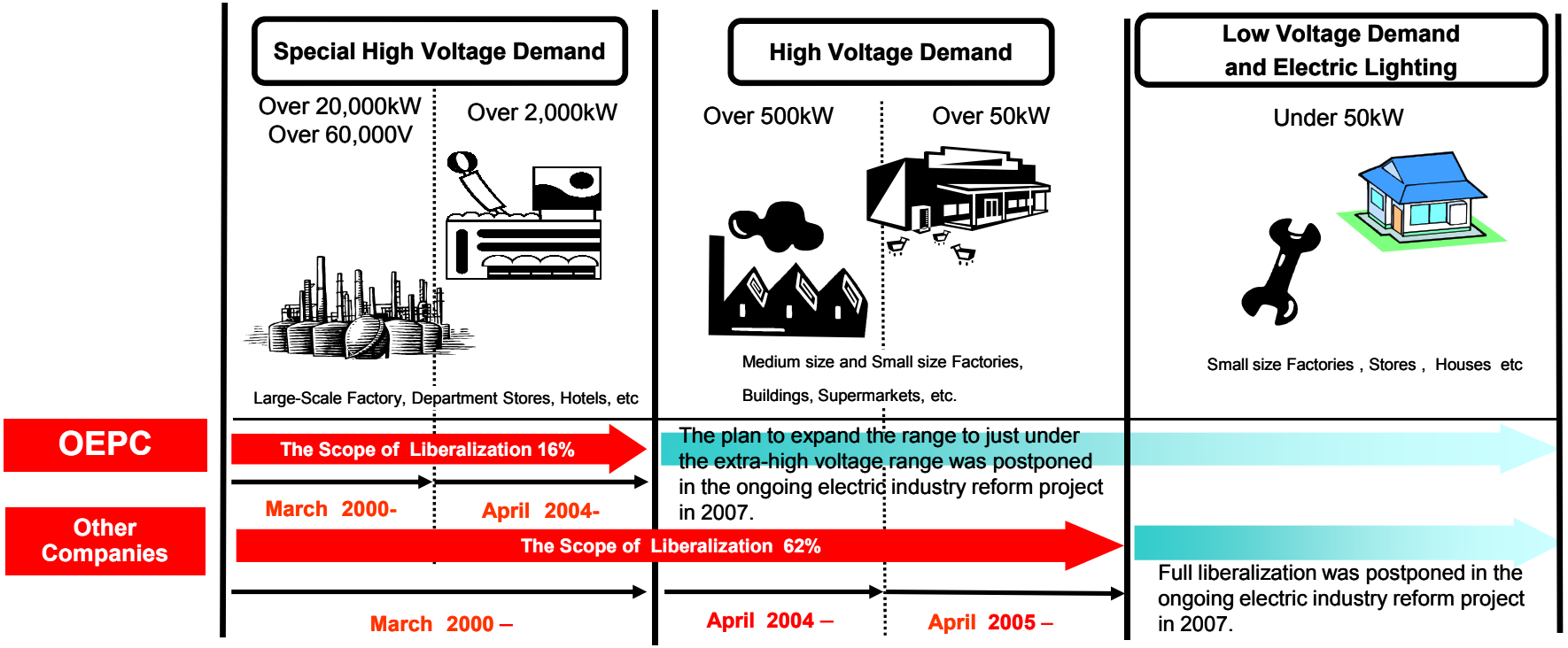
<The circumstances of realignment of the US military forces in Japan>

- On May 1, 2006, the Security Consultative Committee agreed on the US military forces realignment plan and clarified the facilities to be returned to Okinawa.
- After the change of government in September 2009, two or more relocation plans for Marine Corps Air Station Futenma were studied. However, a US-Japan joint statement was released to confirm relocation to Henoko. However, neither Okinawa prefectural government nor Nago City local government agreed with this plan, and the outlook remains uncertain.
- On April 27, 2012, the Japanese and US governments released a joint statement on review of realignment plan for the US military forces in Japan. In this statement, the governments agreed on overseas relocation of the US Marines in Okinawa and accompanying return of five military facilities and the military zone south of the Kadena Air Base, taking a new approach of delinking relocation of Air Station Futenma.

If the US military facilities are returned, demand is expected to decrease temporarily. However, demand will subsequently increase on the strength of revitalization of the local economy following redevelopment of the US military facilities site.

Q3. What are the Effects of Liberalization of Electric Power and What is the Future Forecast for Liberalization?

Retail Market Compared to other electricity companies, this will be a more cautious step in the liberalization process



* Ratio to electric power sales (FY2011 results)

*At present, Expert Committee on the Electricity Power Systems Reform under the Coordination Subcommittee of the Advisory Committee for Natural Resources and Energy is studying the ideal form of the electric power industry including the possibility of the full liberalization of retail sale of electric power.

Q4. What are the Special Tax Measures?

Currently Applied Special Tax Measures

1. Alleviation of Fixed Property Tax

Basic Law: Supplementary Provisions of the Local Tax Law (Article 15.6)

Details: Alleviation to 2/3 of the Standard Tax Rate

Period: April 1, 1982 – March 31, 2015

(Extended for 3 years from April 1, 2012)

2. Exemption from the Oil and Coal Tax

Basic Law: Special Measures Law for the Promotion of Okinawa (Article 65.2), Special Taxation Measures Law (Article 90.4.3.1)

Details: ① Exemption from the Oil and Coal Tax for coal

② Exemption from the Oil and Coal Tax for LNG

Period: ① October 1, 2003 –March 31, 2015

(Extended for 3 years from April 1, 2012)

② April 1, 2012 –March 31, 2015

(Newly added starting on April 1, 2012)

※ Alleviation of Business Tax was abolished on May 15,2007

Details : Standard Tax Rate: 1.1%

(Standard Tax Rate for Electric Utilities: 1.3%)

Period : December 31, 1971 – May 14, 2007

Need for Special treatment

- Special treatment is necessary for industrial development and improving the living standards of people in Okinawa Prefecture given that there has been no changes to the conditions of remote islands such as bearing of deficit arising from structural disadvantage.

Revision of the Act on the Special Measures for the Promotion and Development of Okinawa

- The Act on the Special Measures for the Promotion and Development of Okinawa was revised in March 2012, and the revised law came into effect on April 1, 2012.
- In addition to the extension of the applicable period of special tax measures applied to the Company up until now (property tax relief measures, exemption of petroleum and coal tax relating to coal), the Company has become exempted from petroleum and coal tax relating to LNG.

Value of Tax Alleviation Due to the Special Measures

- The value of the alleviation measures in FY2011 was about 2.2 billion yen.
- The value of the alleviation measures for FY2012 is expected to be 2.6 billion yen.

The amount of reduction based on the special measures is being returned to customers through electricity charge.

Q5. What is the Current State of the Promotion of All-Electric Houses?

1. Sales target for FY2012 ⇒ All-Electric Houses 4,900 (16.35 million kWh)

2. Approach for the promotion and diffusion.

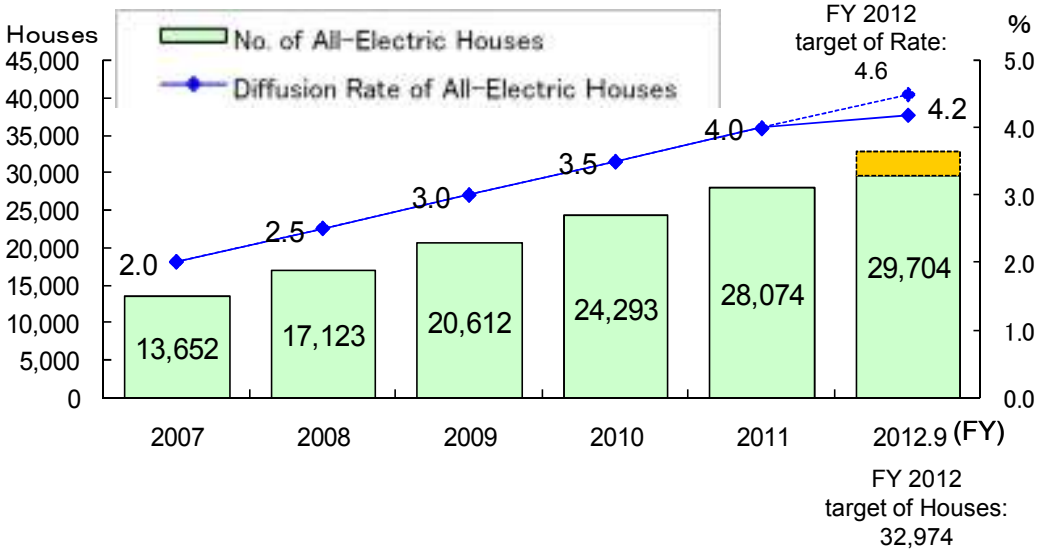
① Launching of effective promotion activities to facilitate penetration of all electrification housing brand.

② Proactive activities to promote penetration of ecocute (CO2 refrigerant heat pump water heater).

③ Expansion of sales activity in cooperation with sub-users.

④ Strengthening of sales activity to collective housing and existing homes.

⑤ Promotion of sales activities for electrification based on widespread use of solar power



【Reference】

Adoption rate（results for FY2011 ）
All-electric adoption rate in newly built houses
(included multi-family dwellings etc.) = 18.6%

All-electric adoption rate in newly built houses = 61.9%

Q6.What is the Current State of the New Demand Creation Through the Promotion of Commercial Electrification Equipment ?

1. Sales target (in total of three years from FY2010 to FY2012): 30 million kWh

* Electrification system (electric air-conditioning system including heat storage, electrified kitchen and electrified water heater)

2. Approach for the promotion and diffusion.

① Implementation of electrification proposal activities suitable for the power usage of customers.
② Promotion of heat pump equipment (air-conditioning and water heaters)
③ Expansion of sales activity in cooperation with sub-users.

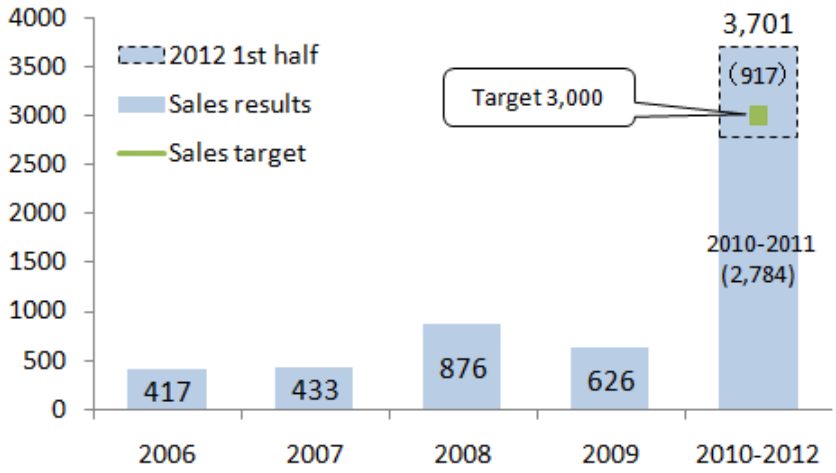
➢ **Sales target (in total of three years from FY2010 to FY2012): 30 million kWh**

The demand for commercial electrification equipment

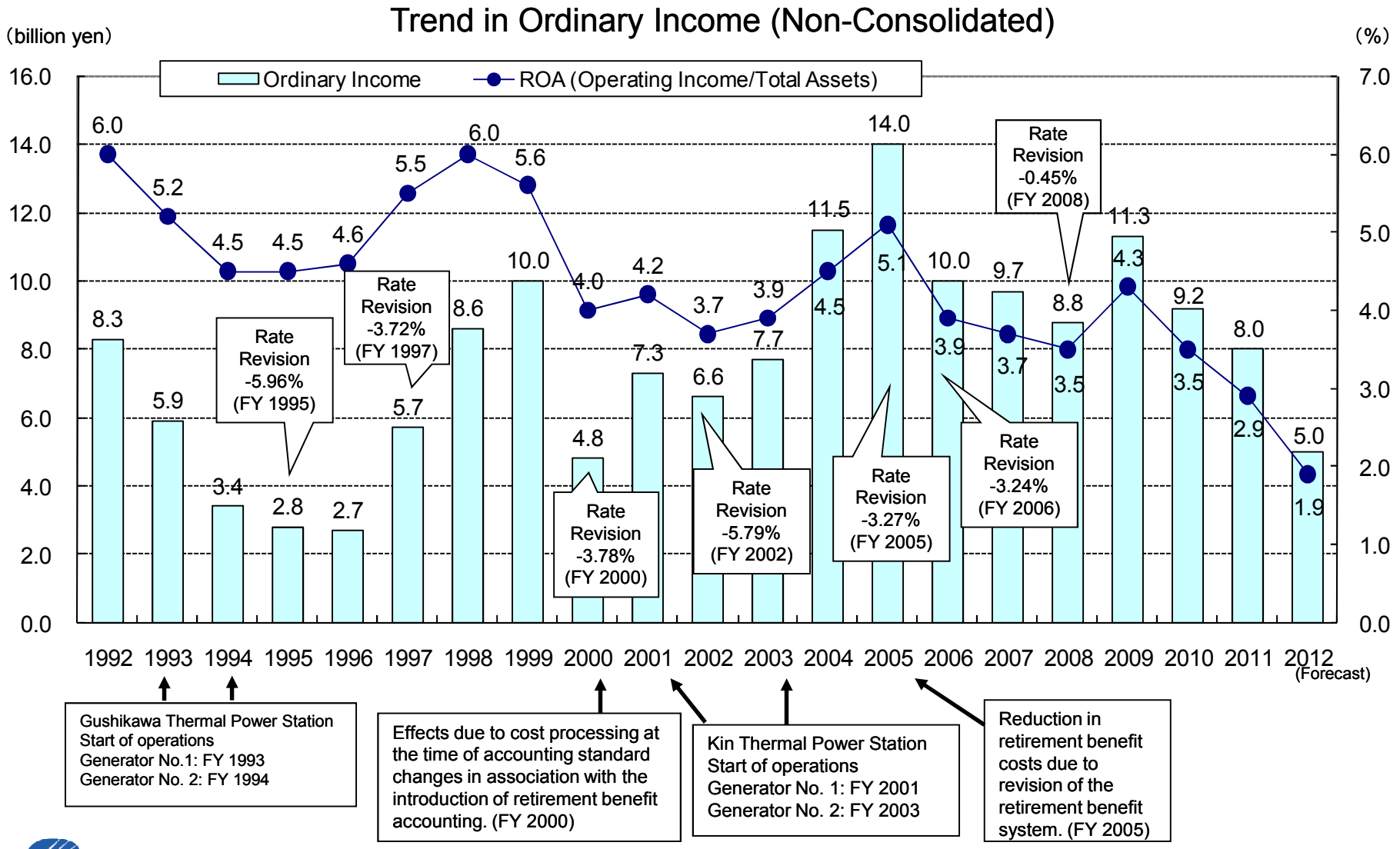
10Thousands of kWh

	2006	2007	2008	2009	2010-2012		
					2010	2011	2012 1st Half
Commercial Electrification Equipment (Cumulative)	417	433	876	626	3,000 (Target)		
					1,429	1,355	917

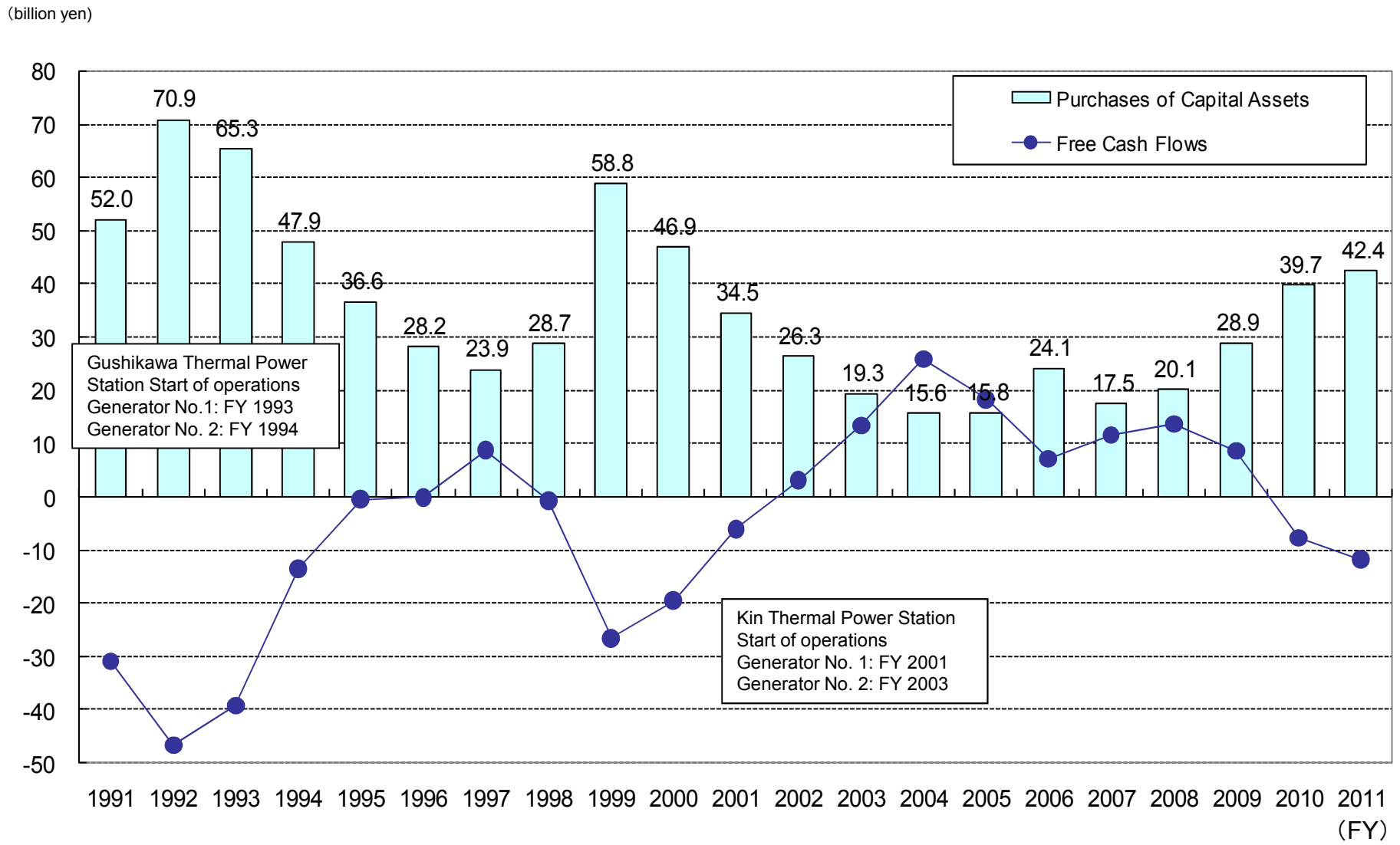
(10Thousands of kWh)



Q7.What is the Past Trend of Ordinary Income and What is the Forecast for this Fiscal Year ?



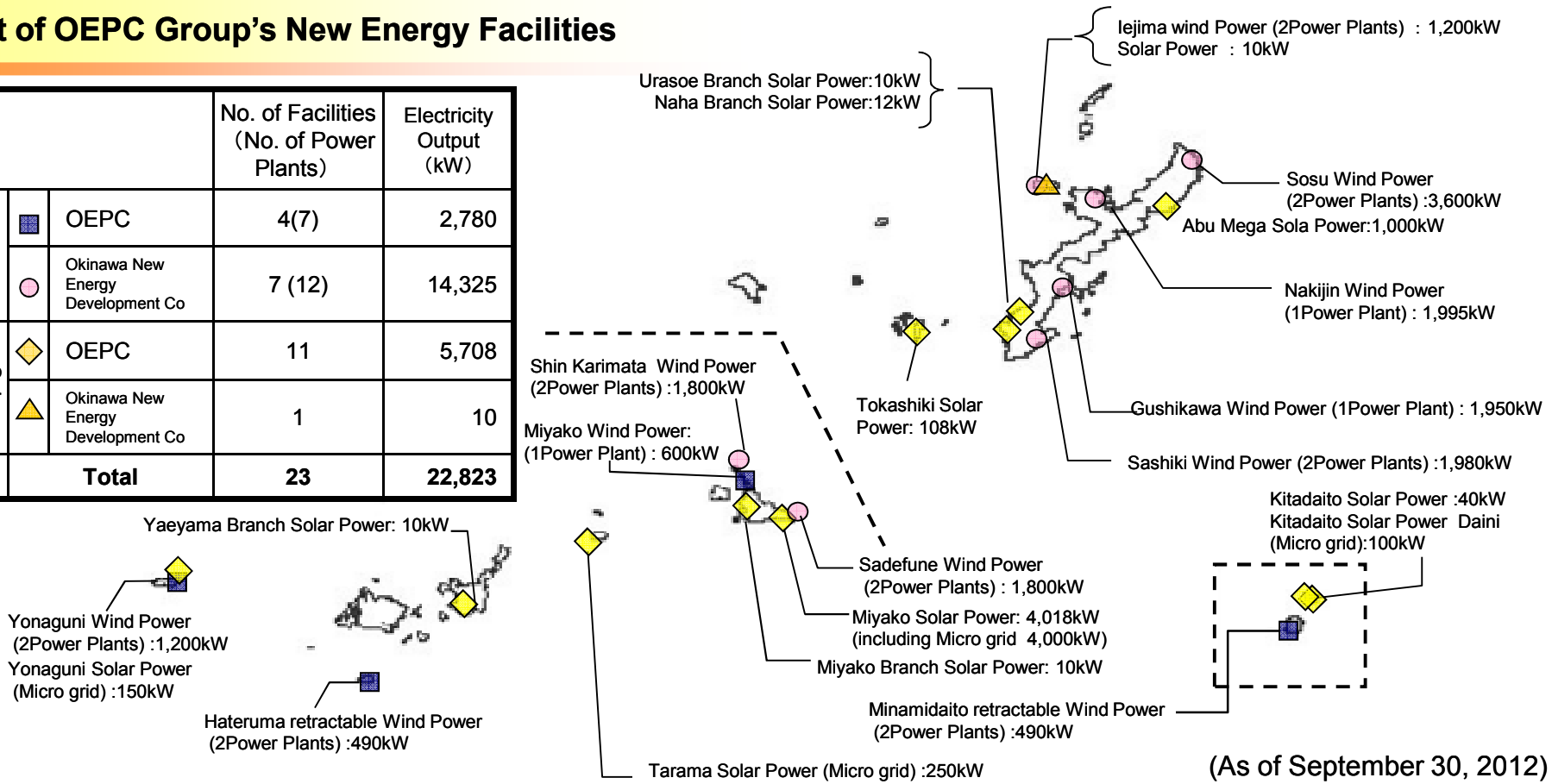
Q8.What are the trends of the Capital Expenditure and Free Cash Flows?



Q9.What is the Status of Wind and Solar Power Electricity Generation Facilities?

List of OEPC Group's New Energy Facilities

			No. of Facilities (No. of Power Plants)	Electricity Output (kW)
Wind Power	■	OEPC	4(7)	2,780
	○	Okinawa New Energy Development Co	7 (12)	14,325
Solar Power	◆	OEPC	11	5,708
	▲	Okinawa New Energy Development Co	1	10
		Total	**23**	**22,823**



(As of September 30, 2012)

- OEPC Group has new energy facilities with total output of 22,823kW (wind power: 17,105 kW, solar power: 5,718 kW)
- Introducing Plan of New Energy Facilities.
  - ✓ Ogimi wind power plant (2,000 kW class × 2, start in FY2013)
  - ✓ Aguni retractable wind power (245kW, start in FY2013)

Q10.What is a retractable wind-power generator?

■ Overview of retractable wind-power generator

Place	Hateruma/Minamidaito Island(2 Plants each)
Manufacturer/country of manufacture	Vergnet/France
Rated power output	245kW
Wind speed for power rating/start-up/stoppage	13m/s, 4m/s, 20m/s
Number of blade	Two
Diameter of blade	32m
Height of hub	38m

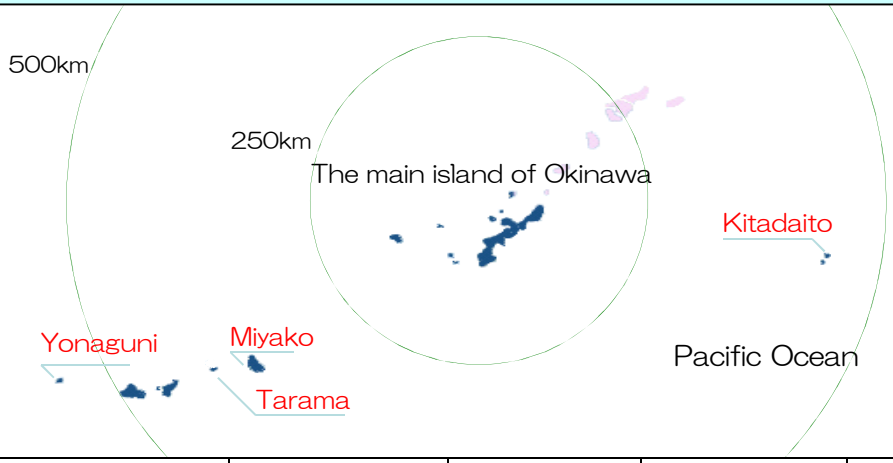
■ Advantages

- Wind-power generator can be folded nearly 90 degrees so that damages by big wind in typhoon can be avoided by folding it.
- Large-size cranes are not needed to construct the wind-power generator to enable construction in hilly areas.
- Wind-power generator is retractable, making it possible to perform maintenance on the ground.
- Wind-power generator is supported by wires.

Q11.What is the New Energy verification studies for the Remote Island Independent System?

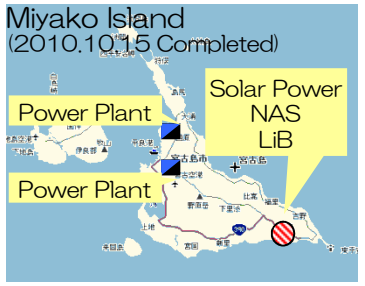
Purpose

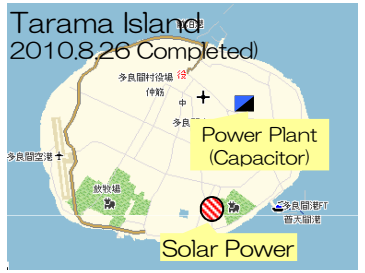
- Grasping the impact on the actual system of introducing large–scale photovoltaic power generation to four remote islands with systems different in size.
- Analyzing the operating data of photovoltaic power generation systems and capacitor to verify the system stabilization method for remote island independent systems.

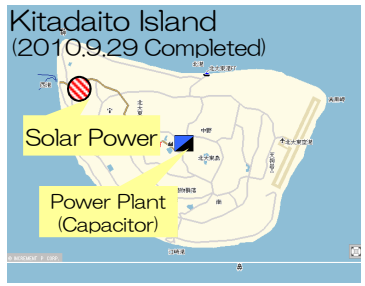


Place	Miyako Island	Tarama Island	Yonaguni Island	Kitadaito Island
Maximum demand for electricity	About 50,000kW	About1,160kW	About 2,160kW	About 860kW
Existing internal-combustion power	74,000kW	1,360kW	2,910kW	1,540kW
Existing new energy facilities	Solar Power18kW Wind Power 4,200kW	—	Wind Power 1,200kW	Solar Power 40kW
Newly-established solar power generation facilities	4,000kW	250kW	150kW	100kW
Newly-established capacitor	NAS 4,000kW LiB 100kW	250kW	150kW	100kW
Introduction ratio of solar power	8%※1	22%	7%	12%※2
Facilities utilization rate※3	About 5%	About 12%	About 11%	About 13%

*1:The ratio in Miyako Island is 8% including electricity generated by existing photovoltaic power generation systems of 18kW.
*2:The ratio in Kitadaito Island is 16% including electricity generated by existing photovoltaic power generation systems of 40kW.
*3:The actual utilization factor for transmission end facilities for FY2011. The reasons why the actual value fell below the expected value (about 12%) include weather and the fact that the relevant experimental study facilities only partially operated the photovoltaic power generating system due to test operation (e.g., Of 4MW of photovoltaic power generating capacity, power generating system for only 1MW was operated.)







Q12.How do Current Electricity Rates Compare to Rates at Other Companies?

While the detailed comparison of electricity rates is not available due to limited amount of reported data, the following is the comparison of electricity rates for the main supply contracts.

Model Unit Rates for All Companies

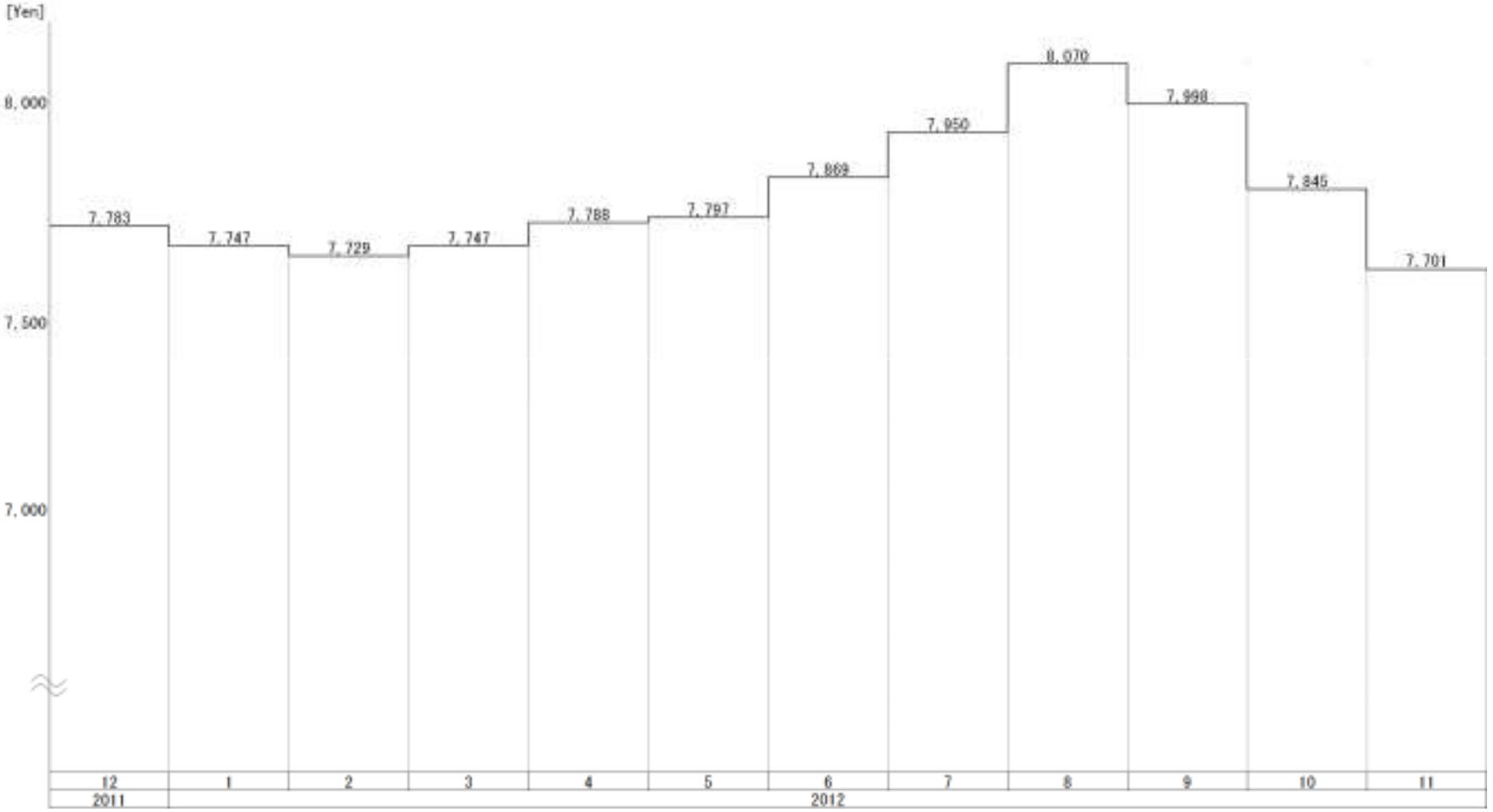
（As of November 2012, including fuel cost adjustments, consumption taxes, Renewable Energy Power Promotion Surcharge, and PV Surcharge ）　（ Unit: yen/kWh）

	OEPC	Co. A	Co. B	Co. C	Co. D	Co. E	Co. F	Co. G	Co. H	Co. I
Metered Residential Model Basic Unit 300	25.67 ⑨	24.78 ⑧	23.96 ⑤	25.74 ⑩	24.09 ⑥	21.84 ①	22.73 ③	24.13 ⑦	22.77 ④	22.20 ②
Commercial Use Electricity（High Voltage） Model Basic Unit 250（Power Factor 100%）	21.14 ⑨	18.27 ⑤	18.80 ⑥	22.00 ⑩	18.97 ⑦	16.15 ①	17.76 ④	19.07 ⑧	17.11 ②	17.50 ③
High-voltage Power A Model Basic Unit 250（Power Factor 100%）	18.93 ⑨	17.18 ④	17.25 ⑥	20.43 ⑩	18.47 ⑧	15.48 ①	16.96 ②	17.93 ⑦	17.22 ⑤	17.03 ③

Note: The circled numbers indicate price level rankings (higher numbers indicate more expensive rates).

Q13. Recent changes in standard household electricity charges

○ Recent changes in standard household electric charges



※ 300kWh/Month ※ Renewable Energy Power Promotion Surcharge and PV Surcharge is included in electricity charges

Q14. What is the Excess Electricity Purchasing Scheme for photovoltaic power ?

The Excess Electricity Purchasing Scheme for photovoltaic power was launched on November 1, 2009, based on the Japanese state law to cover the cost of introducing solar photovoltaic power generation facilities by the entire nation and promote the introduction of solar photovoltaic generation with the aim of reducing CO_2 emissions domestically.
This program is designed to be “an all-participating system," in which all customers assume the cost incurred for the purchase as photovoltaic generation surcharge (PV surcharge) according to their electricity usages.
As for the photovoltaic power generating facilities, from which surplus electricity was purchased based on the surplus electricity purchase system, we will apply the feed-in tariff system of renewable energies, which was enforced in July 2012. We will continue to purchase electricity under the same conditions.

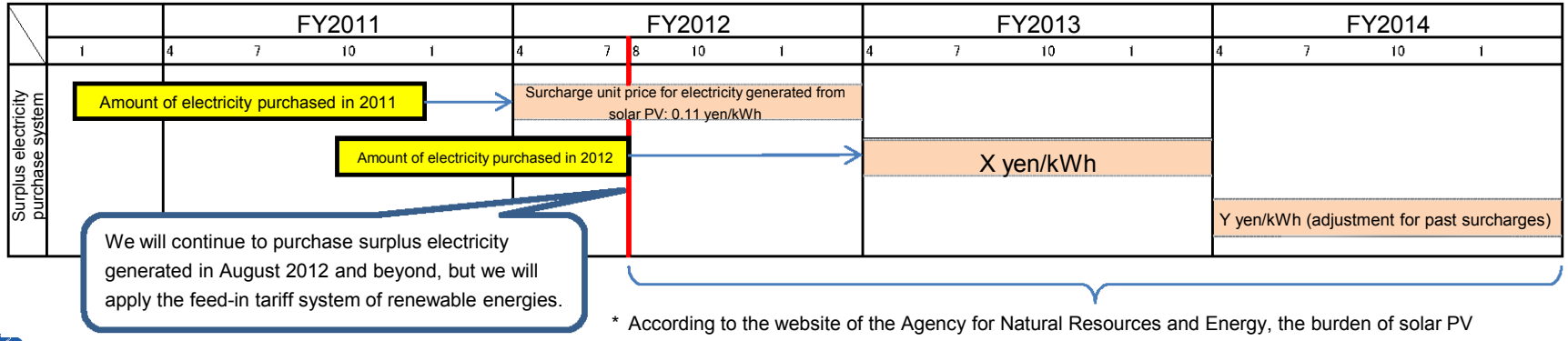
■ Unit Price of PV Surcharge (include consumption tax)

The solar power generation incentive rebate rate (PV surcharge) applied in FY2012 is as shown in the table below.

Unit Price of PV Surcharge
0 .11yen/kWh

※In the case of volume-based supply, the aforementioned unit price is applied uniformly, regardless of supply voltage. In the case of flat-rate supply, unit price is also calculated in the same way as the case of volume-based supply.

■ Image of burden of photovoltaic power promotion surcharges rate

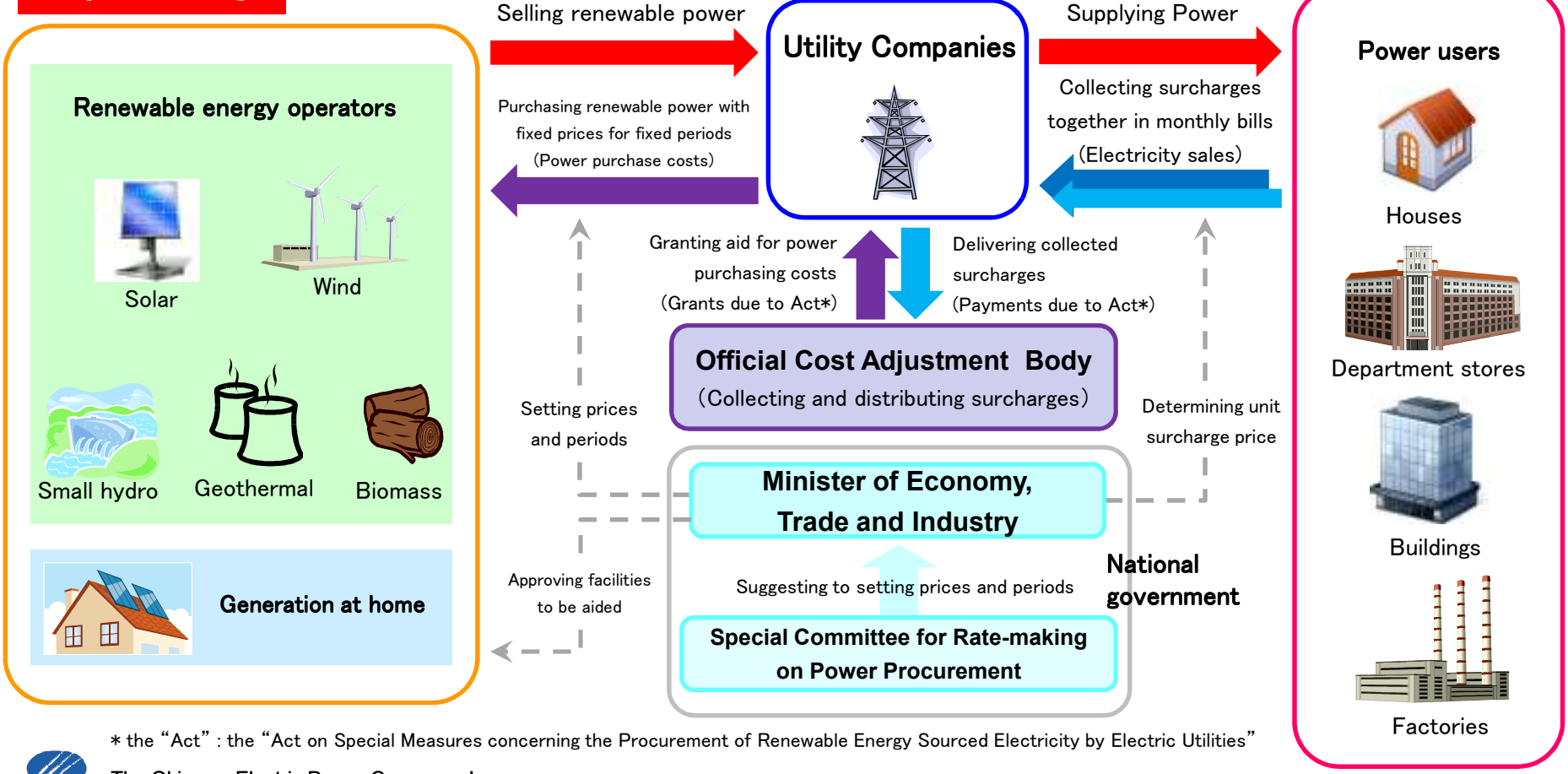


* According to the website of the Agency for Natural Resources and Energy, the burden of solar PV surcharge will be expected to continue until around March 2015.

Q15. What is the feed-in tariff system of renewable energies?

- The feed-in tariff system of renewable energies was enforced in July 2012
- In this scheme, electric utilities are obliged to purchase electricity generated from renewable energy sources at a fixed price for a specified period set by the government, and purchase cost of electricity will be paid by electricity customers as surcharge together with electricity charge.

● System image



* the "Act" : the "Act on Special Measures concerning the Procurement of Renewable Energy Sourced Electricity by Electric Utilities"

Q16. What are the CO_2 Emission Volumes by Fuel Type?

LNG (Liquefied Natural Gas) produces less carbon dioxide, a major cause of global warming, than coal or oil.

Chart: Comparison of CO_2 Emission Volumes by Fuel Type

Fuel Type	CO_2 Emission Volume Per Unit Heat Value [g-CO_2/MJ] *1	vs.Coal	vs.Oil *3	CO_2 Emission Volume Per kWh [kg-CO_2/kWh] *2	vs.Coal	vs.Oil *3
Coal	90.6	1.00	1.27	0.84	1.00	1.24
C Heavy Oil	71.5	0.79	1.00	0.68	0.81	1.00
LNG	49.5	0.55	0.69	0.35	0.42	0.51

*1 The values from the Law Concerning the Promotion of the Measures to Cope with Global Warming were used as the CO_2 emission factors to calculate g-CO_2/MJ.
*2 Thermal Efficiency at Generation End of 39%, 38% and 51% were assumed for coal, oil and LNG respectively in calculations.
*3 Oil comparisons were based on type C heavy oil.

Q17. What is the Current State of the Progress of Discussion in the Gas Supply Business ?

As The integrated energy company

The entry into the gas supply business with the introduction of LNG will contribute to expansion of the business domain of the Group through the entry into the thermal demand field. In addition, it will become a major turning point for operating the total energy business, which the Group positions at its core. Moreover, the Group will be able to make a contribution to the improvement of the energy environment in Okinawa prefecture by supplying LNG, which is superior energy from the environmental and safety viewpoints.

The first step

We are discussing wholesale supply of LNG to Okinawa Gas, the general gas utility in Okinawa prefecture. We agreed with the basic matters such as the supply scheme and the supply amount, and are considering the details to prepare for the start of supply.

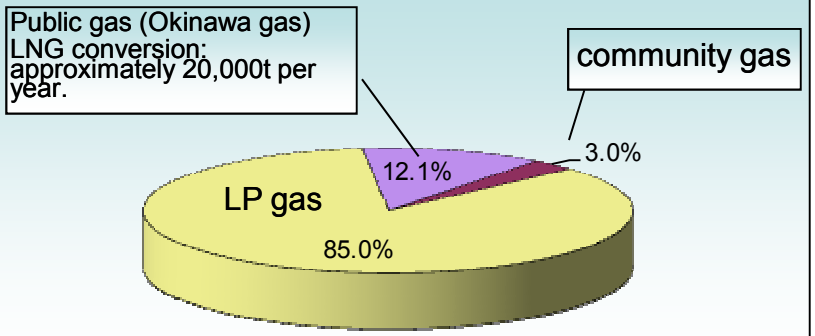
The second step

In addition to wholesale supply, we are studying the possibility of supply to users such as plants and hotels.

Perspective for the launch of business

The Company aims to launch gas supply business from 2015 after the launch of operation at the Yoshinoura power plant, in consideration of the LNG fuel supply situation and the stable operation at the Yoshinoura thermal plant.

Current status of the gas business in Okinawa (Conversion of heat consumed in FY2011)



Source：Agency for Natural Resources and Energy website, Japan LP Gas Association website, Okinawa Gas

【Reference: Corporate profile of Okinawa Gas】

Date of foundation ：July 22, 1958.

Capital ： JPY 250,222,000

Sales ： JPY 6.8bn (2011)

Supply area : Most of Naha city, A part of Urasoe city, Tomishiro city, Haebaru town, Nishihara town, Nakagusuku village

No. of customers: General gas: approx.53,000 units
LP gas: approx.16,000units

Q18. What is the Current State of the Disaster Prevention Measures ?

We have ever been addressing the removal of causes of disasters and the improvement of disaster resistant environment on a day-to-day basis in order to prevent our power facilities from accidents and to recover the damages that occurred promptly. Based on the enormous damages caused by the Great East Japan Earthquake occurred on March 11, we need to enhance disaster contingency planning by recognizing the importance of our mission, “stable supply of electric power,” more than ever.
We are proceeding with practical and organizational revalidation in order to make disaster recovery complete assuming various situations as well as to aim at reviewing disaster contingency planning related to our facilities, etc. against large-scale disasters.

(1) Setting up of the Emergency Response Inspection Committee

In March 2011, we set up the Emergency Response Inspection Committee chaired by President, and established working groups which were organized for each relevant department as subordinate organization. We have had total of seven committee meetings so far to verify disaster countermeasures and recovery scenarios, as well as administrative support, for electric power systems from the viewpoint of business continuity, and we are implementing necessary measures.

(2) Construction of Yoshinoura Gas Turbine Generator

We have set up a recovery power source to get prepared for disasters on the west coast of main island of Okinawa. After reviewing our disaster countermeasures, we have reached a conclusion that we need to establish additional recovery power sources promptly.
We have made a decision that the optimal installation location is Yoshinoura Thermal Power Plant, which is located on the east coast of the main Okinawa Island and can be used to preserve LNG tanks. We are planning to construct the No.1 unit of Yoshinoura Gas Turbine Generator (tentative name).
Yoshinoura Gas Turbine Generator will enable us to contribute to enhancing environmental-friendliness through reduction of CO_2 emission unit by utilizing it as power source to respond to peak-hour demand, compared with heavy oil-burned thermal power plant.

(2)-1 The outline of Yoshinoura Gas Turbine Generator No.1 (tentative name)

[Power engine] Simple cycle gas turbine
[Location] Inside the Yoshinoura Thermal Power Plant
[Output power] 34,940kW
[Operation] Emergency power source and power source to respond to peak-hour demand
[Fuel] LNG, kerosene, etc.
[Start of operation] October 2014

(3) Reflecting to comprehensive disaster-preparedness drill for FY2012

We further recognized the need to enhance the ability to respond to disasters in the light of lessons learned from the Great East Japan Earthquake, we conducted a drill in which disaster scenarios are not provided beforehand, in addition to the field drill which we have carried out previously and drills in which the result of review in the Emergency Response Inspection Committee is reflected.

(4) Future schedule

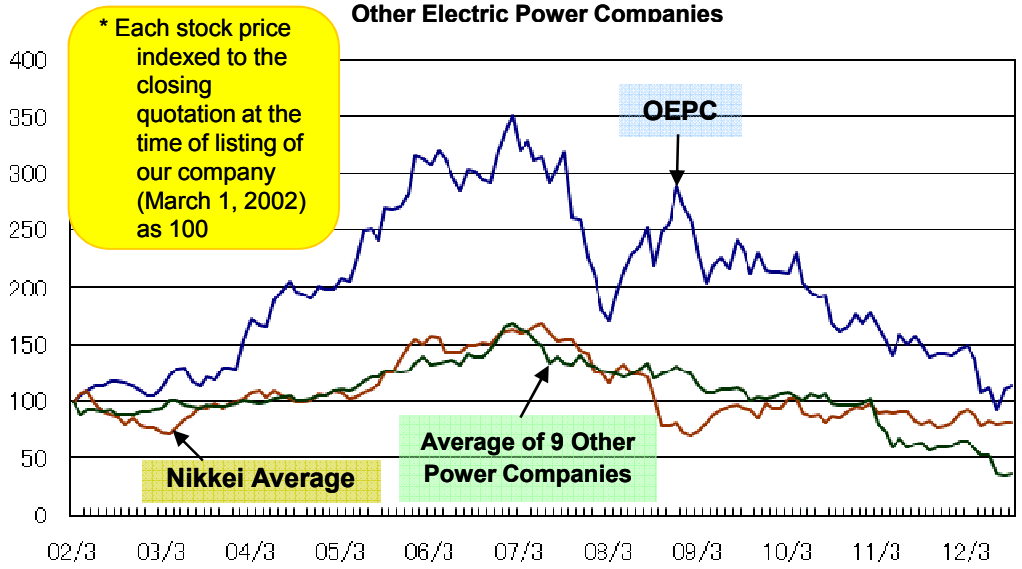
We will develop and closely examine a plan for facilities reinforcement measures in response to the assumption of damage in the existing hazard map of Okinawa Prefecture.

Change in Okinawa Electric Power's Stock Price

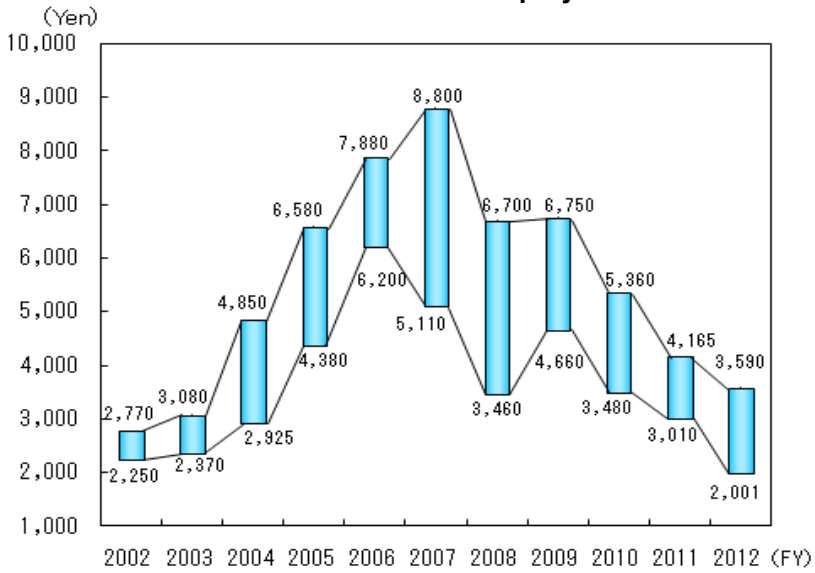
Change in Stock Price (January 4, 2011～September 30,2012)

	Okinawa Electric Power	Average of 9 Other Power Companies	Nikkei Average
Stock price on January 4, 2011	¥4,010	¥1,930	¥10,398
All-time high	¥4,140 as of March 1, 2011(+3.2%)	¥2,057 as of February 22, 2011(+6.6%)	¥10,858 as of February 21, 2011(+4.4%)
All-time low	¥2,020 as of July 30, 2012(-49.6%)	¥593 as of September 12, 2012(-69.3%)	¥8,160 as of November 25, 2011(-21.5%)
Latest stock price Closing quotation (September 28, 2012)	¥2,608(-35.0%)	¥725(-62.4%)	¥8,870(-14.7%)

Changes in the Stock Price of the Company, the Nikkei Stock Average and Average Stock Price of Other Electric Power Companies



Changes in the Highest and Lowest Prices of the Stock of the Company



Earnings Per Share and Payout Ratio

Earnings per Share and Payout Ratio (Non-consolidated)

FY		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Net Income	Million yen	4,430	5,594	7,591	9,163	6,398	6,590	3,635	7,293	6,872	5,050
Earnings per Share	Yen	286.52	363.37	494.77	571.05	402.25	376.84	207.89	417.26	393.36	289.08
Dividend per Share	Yen	60	60	60	60	60	60	60	60	60	60
Payout Ratio	%	20.9	16.5	12.1	10.5	14.9	15.9	28.9	14.4	15.3	20.8

Date	Issued number of shares of common stock	
1992.02.10	14,728,132	Listed
1995.11.20	14,875,413	Split 1 : 1.01
1999.05.25	15,172,921	Split 1 : 1.02
2005.05.20	15,931,567	Split 1 : 1.05
2007.04.01	17,524,723	Split 1 : 1.10

Reference

- http://www.okiden.co.jp/english/index.html (The Okinawa Electric Power Company Incorporated)
- http://www.pref.okinawa.jp/english/index.html (Okinawa Prefecture)
- http://www.fepc.or.jp/english/index.html (The Federation of Electric Power Companies of Japan)
- http://criepi.denken.or.jp/en/ (Central Research Institute of Electric Power Industry)

This document includes statements concerning future results. Such statements are based on calculations and predictions and are neither definite nor guaranteed. Please be aware that future results may change in accordance with changes in assumptions related to the management environment and the like.

【Enquiries regarding this document】
Finance Section, Accounting & Finance Department
Okinawa Electric Power Company, Inc.

TEL： +81-98-877-2341　FAX： +81-98-879-1317
Email：ir@okiden.co.jp