

Management Reference Materials

November 2023



The Okinawa Electric Power Company, Inc.

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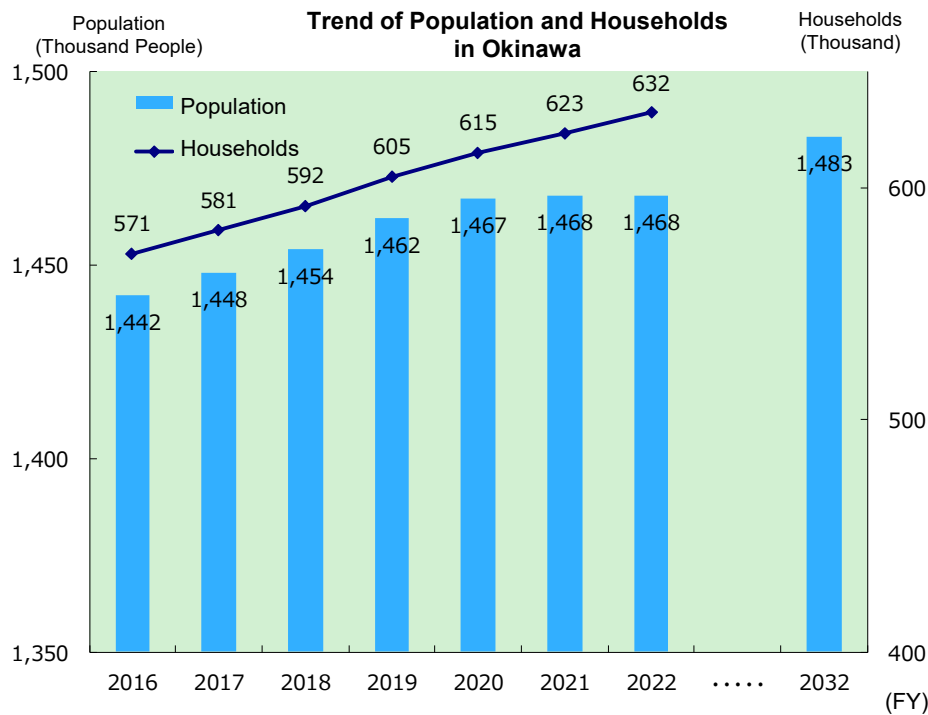
Characteristics of the Business Bases

Item	Overview	Reference Page
Demand for Energy	<ul style="list-style-type: none"> ◆ Increasing demand for energy due to population growth. ◆ As the proportion of energy for consumer use is high, effects of economic fluctuations are low for demand for Electric power. ◆ Potential demand due to large-scale urban development projects 	2~8
Competition	<ul style="list-style-type: none"> ◆ OEPC is outside the framework of wide-area power interchange because it has an isolated system. ◆ OEPC has voluntarily released power of 10,000kW supplied by J-Power. ◆ Competition is advancing due to the entry of energy suppliers. ◆ Biomass power plant by power producer and supplier has started operation. 	9
Power Generation Facilities	<ul style="list-style-type: none"> ◆ A high reserve supply capacity is required due to an isolated system. ◆ Reliant on fossil fuels only due to difficulties to develop nuclear or hydraulic power generation. ◆ Coal-fired thermal power generation is indispensable not only for stable supply but also for maintaining electricity rates. 	10~12
Remote Islands	<ul style="list-style-type: none"> ◆ OEPC supplies power to 11 isolated systems including those in the main island. ◆ The region has a high cost structure because it has small islands and also because the scale of the economy is small. This leads to constant loss recording. 	13
Global Warming Countermeasures	<ul style="list-style-type: none"> ◆ Currently, possible measures are limited due to reasons including the region's geographic characteristics and constraints on the scale of demand. ◆ The introduction of renewable energies contributes to reducing fuel consumption and cost on remote islands, where fuel unit price is high. ◆ Since the systems of Okinawa area are small and independent, the limit of connection volume is likely to occur when using renewable energies. 	14~21

Okinawa Prefecture Demographics (1/2)

- The population of Okinawa had been on an increasing trend, however decreased by 145 (0.01%) compared to the previous year in FY2022, the first decline since its return to Japan.
- The number of households has been on the rise, and was higher than in the previous year in FY2022.

* According to the National Institute of Population and Social Security Research, "Regional Population Projections for Japan: 2015–2045 (2018)

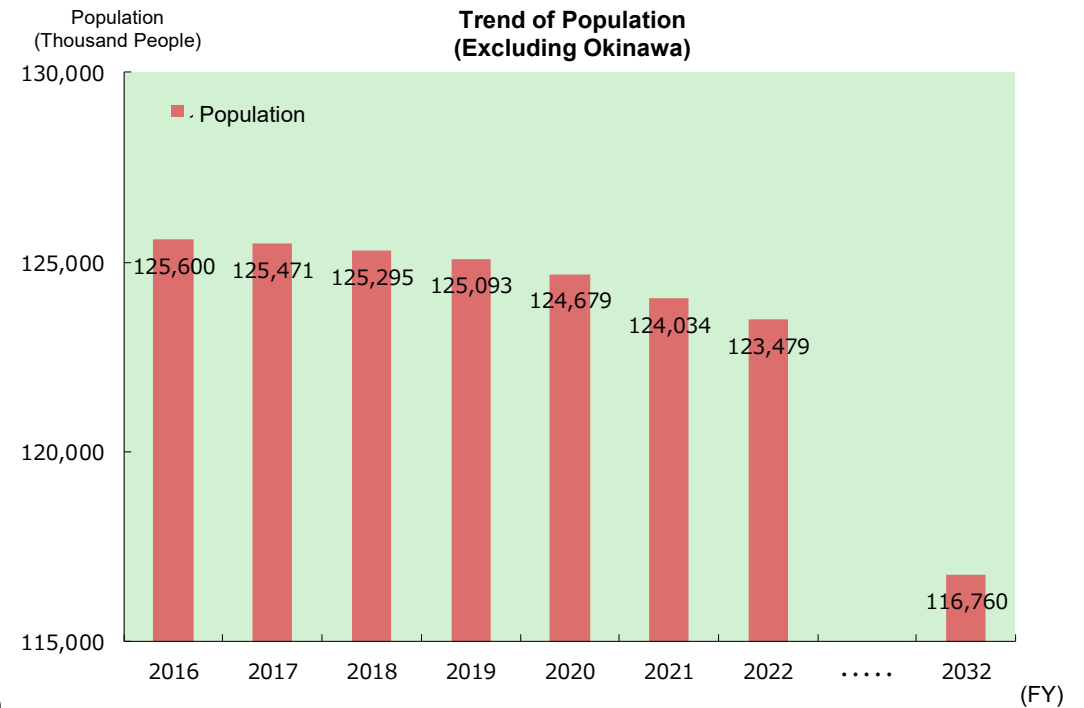


Source:

Population: The actual figures are based on the data provided by the Ministry of Internal Affairs and Communications (MIC).

The figures for FY2032 are based on estimated data provided by the Organization for Cross-regional Coordination of Transmission Operators, JAPAN (OCCTO).

No. of households: The figures are based on the data provided by the Okinawa Prefecture Government.



Source: The actual figures are based on the data provided by MIC.

The figures for FY2032 are based on estimated data provided by OCCTO.

Okinawa Prefecture Demographics (2/2)

- The total fertility rate of Okinawa Prefecture in FY2022 was 1.70, the highest among all prefectures in Japan (nationwide:1.26)
- The number of the population of Okinawa in FY2022 decreased by 0.1 persons per 1,000 people, the first decline since its return to Japan. (nationwide: -4.4)

Okinawa Prefecture Demographics

(People)

		2018	2019	2020	2021	2022
The total fertility rate (Per Thousand people)	Nationwide	1.42	1.36	1.34	1.30	1.26
	Okinawa	1.89	1.82	1.86	1.80	1.70
	Ranking	(1)	(1)	(1)	(1)	(1)
The Increase of population (Per Thousand people)	Nationwide	-2.1	-2.2	-3.2	-5.1	-4.4
	Okinawa	3.1	3.9	4.1	0.7	-0.1
	Ranking	(2)	(2)	(1)	(1)	(2)
The Natural Increase of population (Per Thousand people)	Nationwide	-3.4	-3.8	-4.0	-4.8	-5.8
	Okinawa	2.6	2.0	1.9	0.9	-0.5
	Ranking	(1)	(1)	(1)	(1)	(1)
The Social Increase of population (Per Thousand people)	Nationwide	1.3	1.7	0.3	-0.3	1.4
	Okinawa	0.5	1.9	1.2	-0.2	0.4
	Ranking	(11)	(8)	(7)	(11)	(17)

Source: "Vital Statistics" by Ministry of Health, Labour and Welfare

"Population Estimates" by Statistics Bureau, Ministry of Internal Affairs and Communications

The figures in brackets in the chart show Okinawa Prefecture's national ranking

Number of incoming tourists (1/4)

- In FY2022, the number of Incoming tourists was 6.77 million, higher than the previous year.
- [Incoming tourists]
FY2022 : 6,770 thousand people (Growth rate of +106.9% year-on-year)
FY2023 : 【First half results】4,200 thousand people (Growth rate of +40.0% year-on-year)
- Domestic tourists have recovered to almost pre-COVID levels partly thanks to nationwide travel support by the State and the number of accommodation rooms is also on the rise. The number of foreign tourists is also projected to increase due to the resumption of the operations of overseas flights and cruise ships, and a further recovery in travel demand is hoped for.
(FY2019 first half comparison: Domestic tourists 98.3%、 Foreign tourists 32.8%)



Number of incoming tourists (2/4)

- In the first half of FY2023, Hotel occupancy rate and the number of incoming tourists to the region exceeded that of the previous year due in many parts to the reclassification of COVID-19 as a Class 5 infectious disease and demand boosted by nationwide travel support as well as the resumption of the operations of flight routes and of international cruise ship port calls.

[Incoming tourists] FY2023 Apr-Sep : 4,200 thousand people (Growth rate of +40.0% year-on-year)

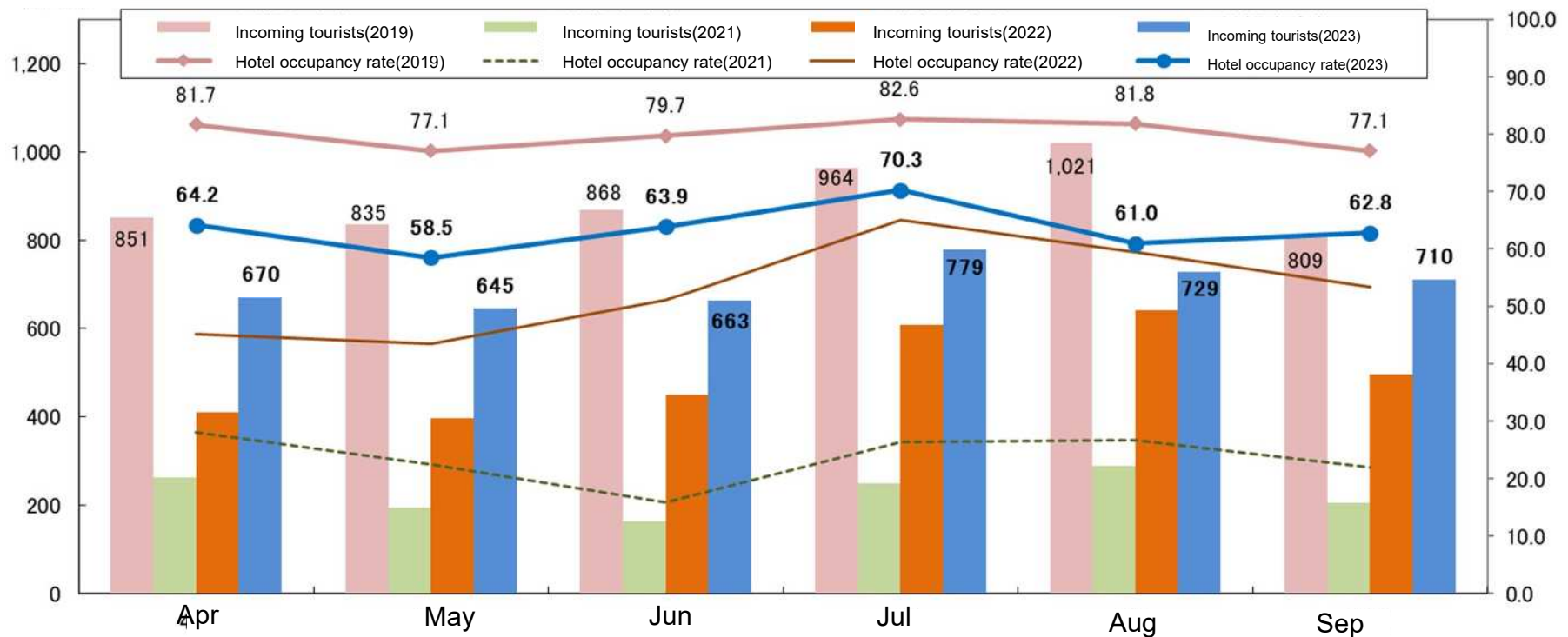
※ FY2019 first half comparison 78.4%

(Domestic tourists 98.3%、 Foreign tourists 32.8%)

[Hotel occupancy rate] FY2023 Apr-Sep : 63.5%(Compared to year-on-year +10.5%)

Trend of the number of incoming tourist and Hotel occupancy rate

(Thousand people)

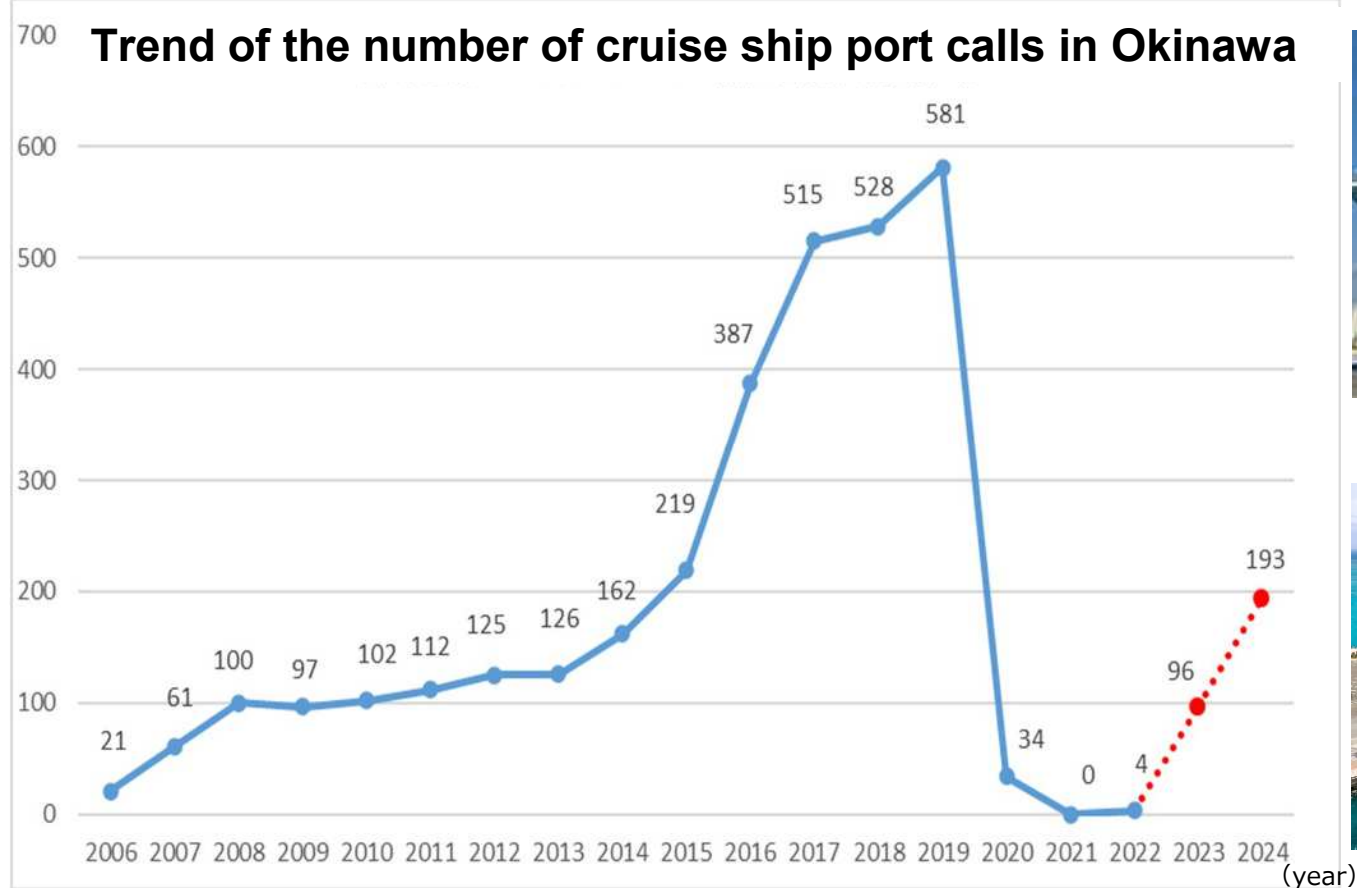


Source: "Summary Statistics on Incoming Tourists to Okinawa" published by Okinawa Prefectural Government,
 "Overview of economic and financial developments in Okinawa" published by Bank of Japan

Number of incoming tourists (3/4)

- The number of cruise ship port calls in Okinawa Prefecture had increased year after year, reaching a record 581 calls in 2019. However, the number has dropped to zero since February 2020 due to the spread of COVID-19 infections. Domestic cruise vessels started to be allowed to resume port calls in June 2022, and the port was also reopened to international cruise ships in March 2023. The number of cruise ship port calls in Okinawa Prefecture is expected to stay on a recovery path as restrictions on movement due to COVID-19 was lifted.

(Number of times)



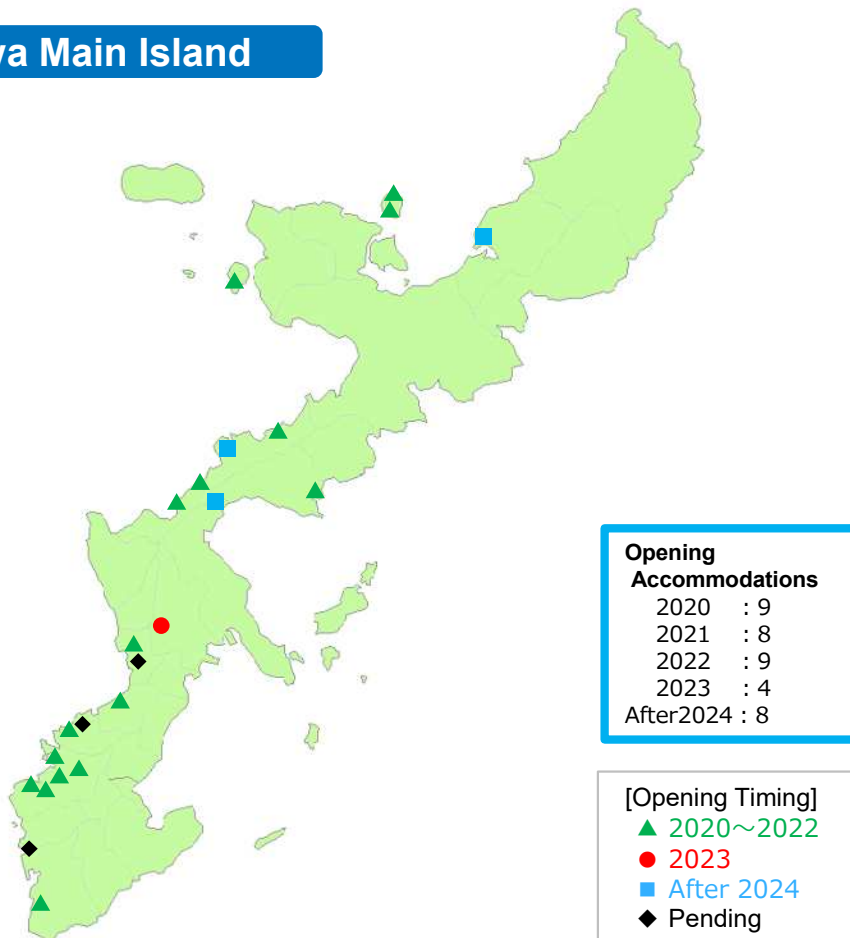
※ Source: "2023 OKINAWA Cruise Report" published by Okinawa General Bureau, Cabinet Office(2006-2022).

"The number of cruise ship port calls in Okinawa" published by Naha Port Authority(2023-2024)※Compiled by OEPC a graph based on the schedule of cruise ship port calls.

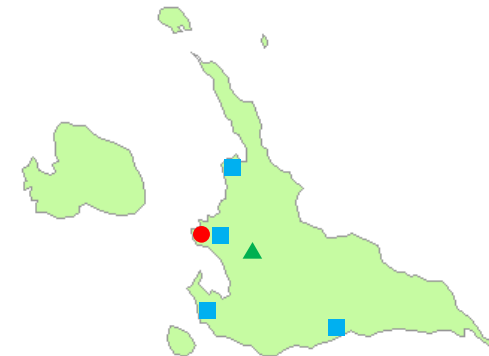
- Going forward, multiple accommodation facilities are planned to open.

Major Plans for Opening Accommodations

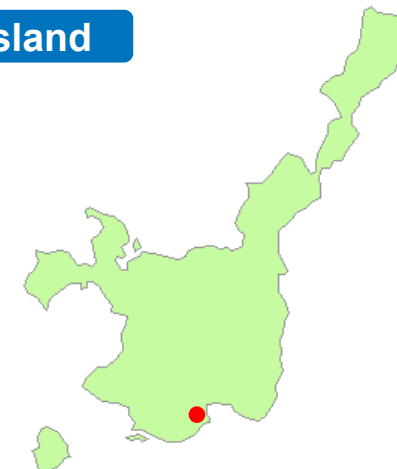
Okinawa Main Island



Miyako Island

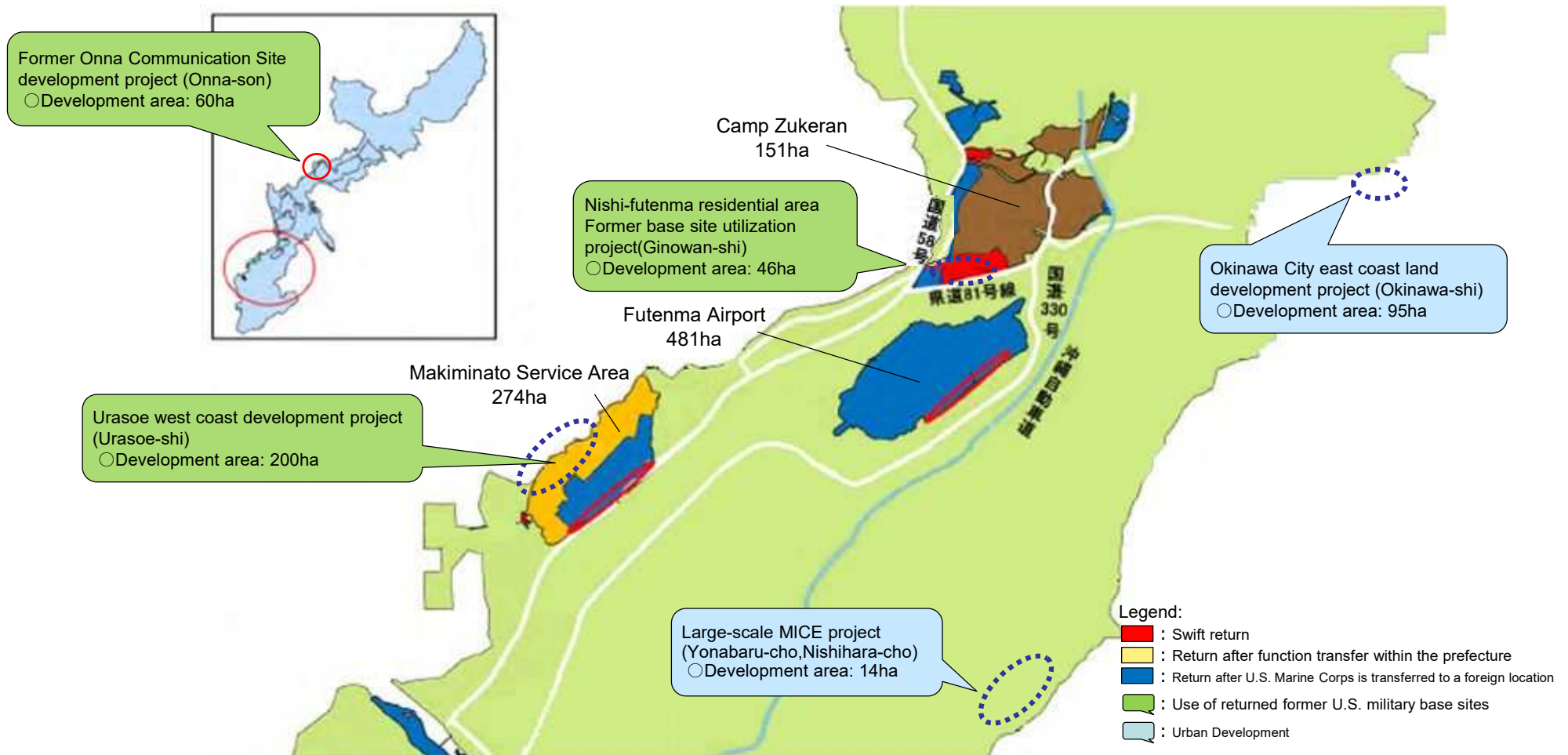


Ishigaki Island



Urban Development of the Returned former U.S. military base sites and Others

- By actively engaging in urban development projects including the returned U.S. military bases and supplying energy in the entire area, the Company will achieve the continued expansion of energy sales.



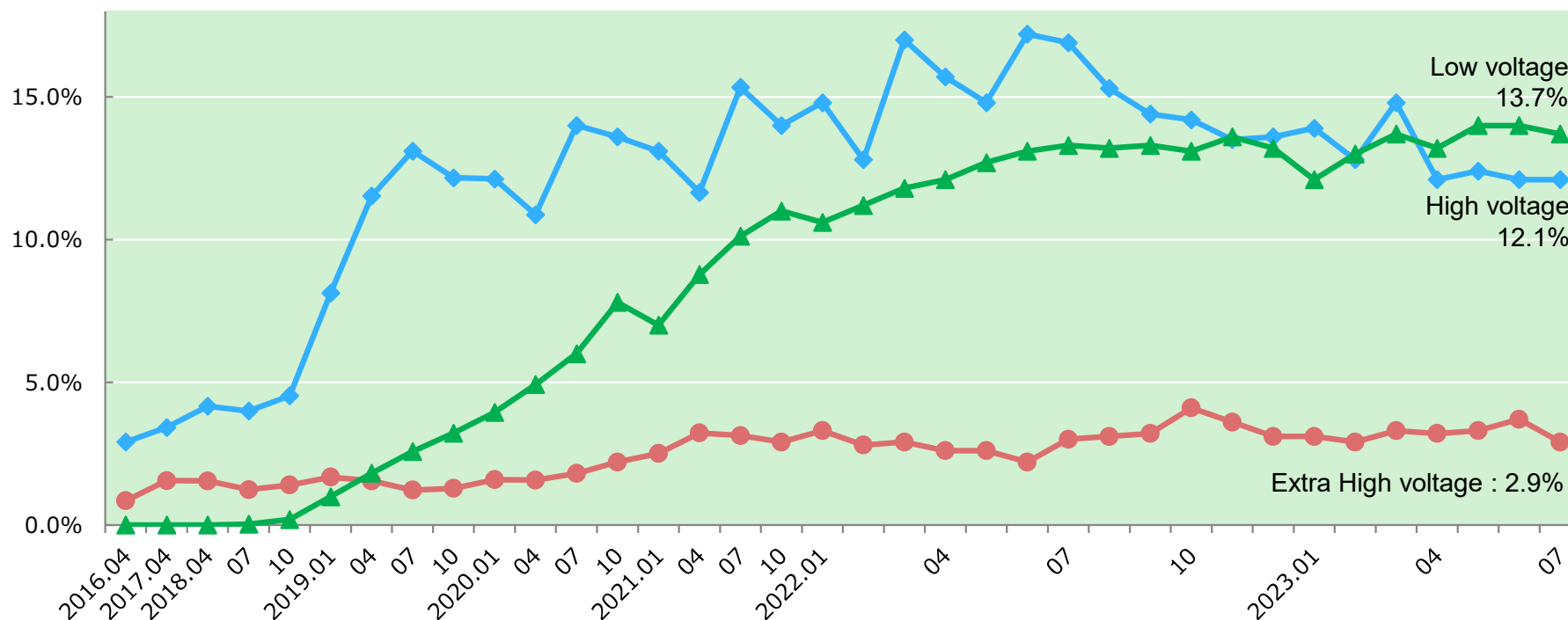
* Source: The material of the Okinawa Revitalization Council Chair and Specialized Committee Meeting (third session) presented on the Cabinet Office website, and Survey of Consideration of Ripple Economic Effects from Utilization of Former U.S. Forces Sites posted on the Okinawa Prefectural Government website

Full liberalization of the Electricity Market

- As a voluntary initiative to develop the competitive environment in the Okinawa area, which has an independent system, the Company is cutting out part of J-POWER's Ishikawa Coal Thermal Power Station, and offering routinely backing up and the wholesale electricity menu for supply-demand adjustment.
- Liberalization is in progress also in the Okinawa area, PPS's* share in the electricity sales volume reached 11.2% in the total of all voltages (as of July 2023).
- In July 2021, a biomass power plant by PPS will start of operation , and further competition will develop.

* new suppliers, officially called power producer and suppliers

Trend of PPS's Share in Electricity Sales Volume (By voltage)



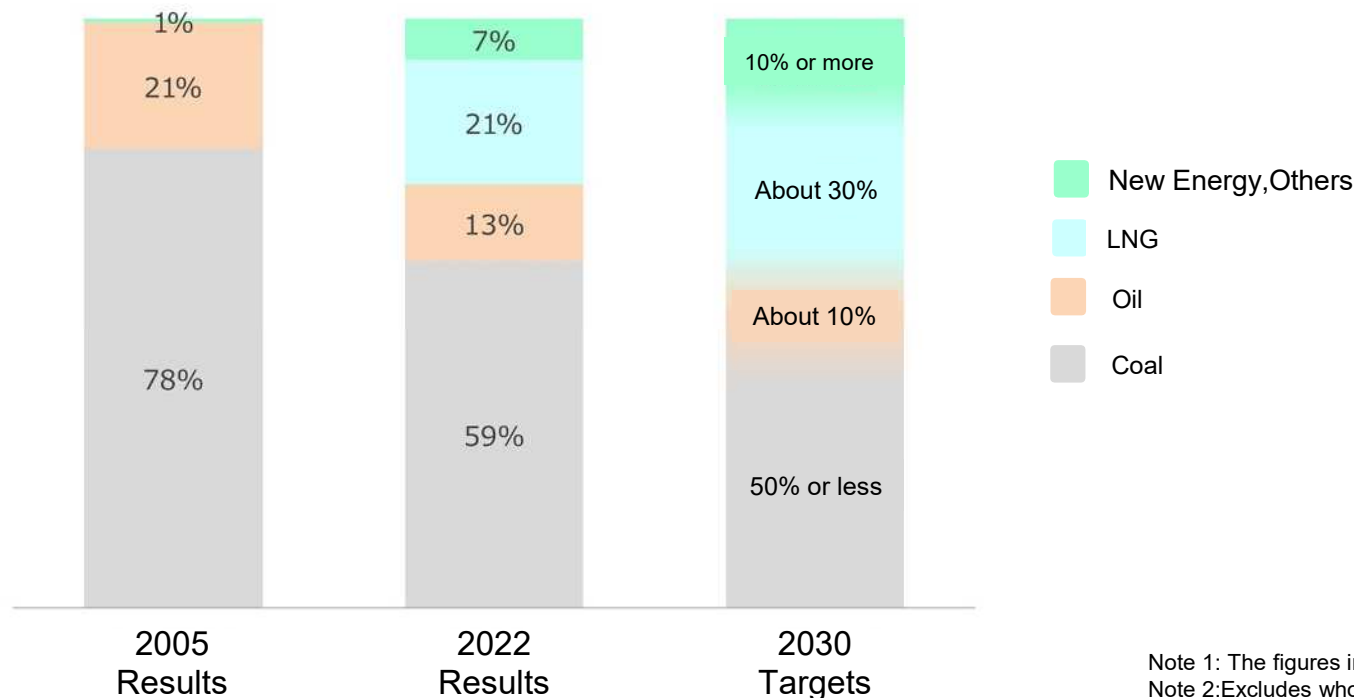
Source : "Electricity Trading Report".

Power Generation Facilities (Power Supply Composition)

- The composition of electric power source is highly reliant on fossil fuel, as developing nuclear or hydroelectric power generation is difficult in Okinawa due to the reasons of geographic condition and the small scale of demand. Accordingly, fossil fuels; petroleum, coal and LNG, are the only source for the composition.
- Through the operation start (from 2012) of the Yoshinoura Thermal Power Plant whose energy source is LNG, the first of its kind in the Company, the Company has secured long-term supply capacity and effective tools for enhancing energy security and global warming preventive measures.

- To realize the Company's FY2030 ambitious target of "a 30% reduction of CO2 emissions (compared to FY2005)," the Company will steadily push forward with "Making renewable energy the mainstream" and "Reduction of CO2 emissions from thermal power sources."

Power Supply Composition Ratio(kW)



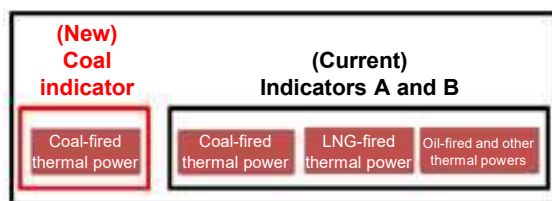
Response to the Fade-out of Inefficient Coal-fired Thermal Power Generation

- For Okinawa, where thermal power generation has to be the mainstay, coal-fired thermal power generation is indispensable for stable supply, etc. On the other hand, it is necessary to respond appropriately in light of the direction of the national government, such as the 2050 Carbon Neutral Declaration.

< The policy package for the Fade-out of Inefficient Coal-Fired Thermal Power Generation >

① Regulatory measures (Energy Saving Act)

New thermal power indicator (Conceptual diagram)



Target level: Power generation efficiency of 43%

- * Corrective measures for calculation of power generation efficiency
 - ✓ Correction of biomass co-firing, etc.
 - ✓ Correction of ammonia/hydrogen co-firing
 - ✓ Correction of reduction in power generation efficiency due to adjusting operation

② Guidance by the capacity market

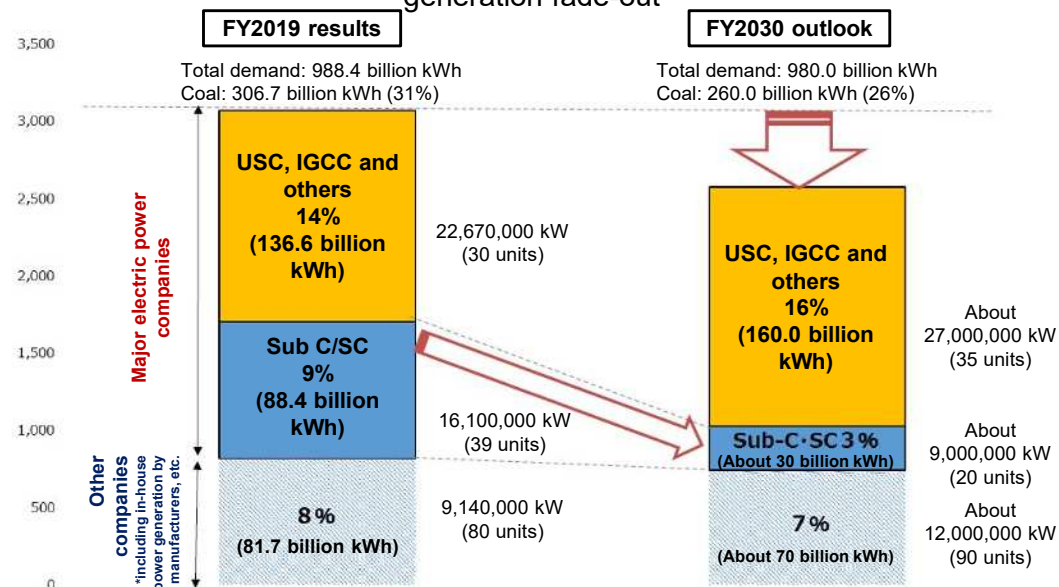
⇒ Not applicable to Okinawa

- * "As coal-fired thermal power generation plays a role in supporting local employment, the local economy, and the stable supply of electric power, it is important to continue making efforts while listening to the opinions of relevant parties, in light of concerns expressed about the impact of its suspension and abolition."

Source: Interim Report of Coal-fired Power Study WG (April 23, 2021)

③ Fade-out plan (Annual submission)

(Diagram) Outlook of the inefficient coal-fired thermal power generation fade-out



*Estimation are based on transmission end power generation.

*The remaining SCs and Sub-Cs in FY2030 will be important facilities for stable supply and local employment, for which it is also necessary to take measures such as reduction of the operating rate and co-firing.

<Reference: Coal-fired thermal power stations owned by the Company>

Power station/unit		Maximum output	Power generation system	Start of operation
Gushikawa Thermal Power Plant	No. 1 Unit	156,000 kW	Sub-C	1994.3
	No. 2 Unit	156,000 kW		1995.3
Kin Thermal Power Plant	No. 1 Unit	220,000 kW		2002.2
	No. 2 Unit	220,000 kW		2003.5

Demand - Supply balance

- A high generation reserve margin is necessary because of OEPC's isolated system and the responsibility to provide stable supply as a public utility.
- The reserve capacity exceeding of the largest unit is secured so that it is possible to provide stable supply even if the largest unit breaks down.



- We would ensure long-term and stable supply.

Demand-supply balance of maximum electric power (August)

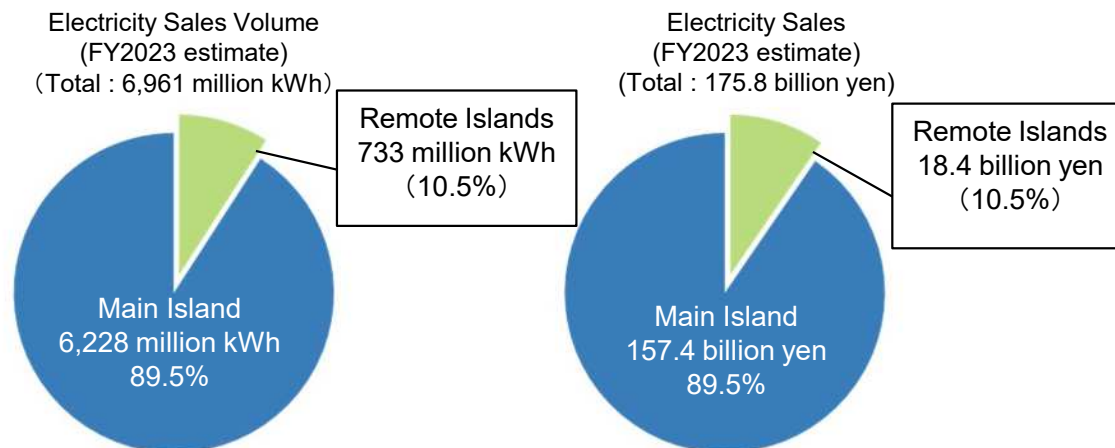
(Unit : Thousand kW, %)

		2022 (Reference)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Demand-supply balance	Supply capacity	2,212	2,049	2,196	2,206	2,112	2,263	2,265	2,262	2,145	2,263	2,265
	Peak load	1,629	1,611	1,620	1,629	1,639	1,649	1,658	1,668	1,678	1,689	1,699
	Reserve supply capacity	583	438	576	577	473	614	607	594	467	574	566
	Reserve supply rate	35.8%	27.2%	35.5%	35.4%	28.8%	37.3%	36.6%	35.6%	27.8%	34.0%	33.3%

Note: Based on FY2023 Supply Plan Notification. (general transmission / distribution business)

Remote Islands (Efforts to Improve Income and Expenditure)

- 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.
- Remote island business occupies about 10% of electricity sales and residential, commercial and industrial use charges.



(Efforts to improve remote island income and expenditure)

- Reducing fuel consumption by introducing renewable energies (Tilttable wind power generators, etc.)
- Effective utilization of waste oil
- Reducing the fuel consumption rate by introducing high-efficiency units

Comprehensive Collaborative Agreements with municipalities, private companies, etc.

- Starting with the national government's 2050 Carbon Neutral Declaration, Okinawa Prefecture and local governments in the prefecture have announced similar declarations.
- The Company also announced its roadmap in December 2020, implementing various measures to achieve net zero CO2 emissions in 2050 in terms of both making renewable energy a main power source and reducing CO2 emissions from thermal power plants.
- The Company's initiatives are primarily on the supply side, but it also needs to take initiatives for carbon neutral in coordination with the demand side such as households, industries and transportation sectors.
- To date, the company has concluded collaborative agreements with Okinawa Prefecture, local governments, universities, and companies in the prefecture.
- Through the Comprehensive Collaborative Agreements with the local community, we will work towards the realization of sustainable urban development and a local decarbonized society in Okinawa Prefecture through closer collaboration and cooperation between industry, academia, and government than ever before.

〔Comprehensive Collaborative Agreements concluded: 11〕

Governmental bodies	Okinawa Prefecture	Concluded on December 22, 2020
	Urasoe City	Concluded on April 20, 2021
	Okinawa City	Concluded on July 19, 2021
	Uruma City	Concluded on December 6, 2021
	Nago City	Concluded on April 8, 2022
University	University of the Ryukyus	Concluded on July 14, 2021
Companies	RYUSEKI	Concluded on July 5, 2021
	Bank of Okinawa	Concluded on September 10, 2021
	Takushinkai	Concluded on February 7, 2022
	Okinawa Kaiho Bank	Concluded on March 11, 2022
	Bank of Ryukyu	Concluded on June 6, 2022

〔Expected Effects of the Collaborative Agreements〕

By concluding the Comprehensive Collaborative Agreements to introduce PV-TPO (photovoltaic third-party ownership model), which is one of the measures for mainstreaming of renewable energy, provide an electricity charge menu with the value of CO2 free, conduct joint research and projects to create new technologies that will contribute to solving decarbonization issues, and promote beach cleaning, environmental education and other initiatives.

Introduction status of renewable energy Facilities

- The OEPC Group has introduced various forms of renewable energy such as wind power, solar power, biomass, and small hydroelectric power, maintaining and operating facilities for 33,765 kW in total.

【 OEPC 】

(As of September 30, 2023)

	Name	No. of Units	Output	Remark
Wind Power	Ogimi Wind Power	2	4,000 kW	
	Yonaguni Wind Power	1	600 kW	
	Aguni Tilttable Wind Power	1	245 kW	
	Minamidaito Tilttable Wind Power	2	490 kW	
	Tarama Tilttable Wind Power	2	490 kW	
	Hateruma Tilttable Wind Power	2	490 kW	
	subtotal (6)	10	6,315 kW	
Solar Power	Abu Mega Solar Power	—	1,000 kW	
	Kitadaito Daini Solar Power	—	100 kW	*1
	Miyako Mega Solar Power	—	4,000 kW	*1,5
	Tarama Solar Power	—	250 kW	*1
	Yaeyama Branch Solar Power	—	10 kW	
	Hateruma Solar Power	—	10 kW	
	Yonaguni Solar Power	—	150 kW	*1
	subtotal (7)	—	5,520 kW	

Others	Mix combustion of coal and wood biomass (at Gushikawa Thermal Power Plant)	2	—	*2
	Mix combustion of coal and wood biomass (at Kin Thermal Power Plant)	2	—	*3
	Miyako Small Hydroelectric Power	1	65 kW	
	subtotal (3)	5	65 kW	

【 Group company 】

(As of September 30, 2023)

	Name	No. of Units	Output	Remark
Wind Power	Sosu Wind Power	2	3,600 kW	
	Nakijin Wind Power	1	1,995 kW	
	Sashiki Wind Power	2	1,980 kW	
	Iejima wind Power	2	1,200 kW	
	Iejima Daini wind Power	2	1,490 kW	
	Karimata Wind Power	2	1,800 kW	
	Sadefune Wind Power	2	1,800 kW	
	subtotal (7)	13	13,865 kW	
Solar Power	Iejima Solar Power	—	10 kW	
	Tokashiki Solar Power	—	198 kW	
	Nago Mega Solar Power No.1	—	1,990 kW	
	Nago Mega Solar Power No.2	—	1,200 kW	
	Itoman Mega Solar Power	—	1,500 kW	
	KarE-roof(PV-TPO) business	—	3,102 kW	*4
	subtotal (5) *4	—	8,000 kW	

Total : 33,765 kW

*1 Micro grid (a combination of system stabilizing technologies such as storage batteries)

*2 Mix combustion of coal and wood biomass (The total output of the Gushikawa Thermal Power Plant is 312 thousand kW).

*3 Mix combustion of coal and wood biomass (The total output of the Kin Thermal Power Plant is 440 thousand kW).

*4 Not included in total, subtotal.

*5 All solar panels are taken off in order to ensure safety as part of the facility was damaged by a typhoon.

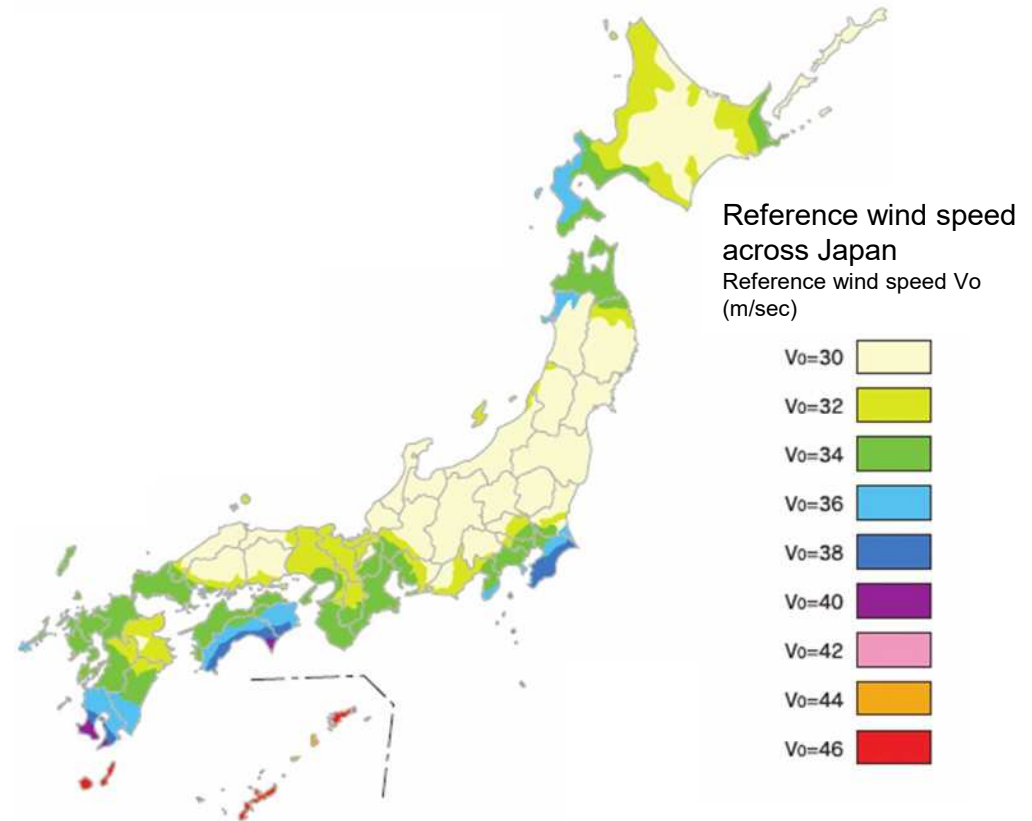
1 Wind power generation

- Wind power generation has tended to move toward larger scale for the purpose of reduce costs through economies of scale, the capacity of the mainstream in recent years is 3,000 to 4,000 kW.
- Examination criteria tightened for construction of wind power generation facilities more than 500kW in Japan (2016).
- “Extreme wind speed”*, which is the construction standards in Okinawa, is or more “90 m/s “equivalent.
- At present, we have not been able to identify any wind turbine manufacturers around the world is producing wind power generation facilities more than 500kW that meet these standards. As a result, it is practically impossible to introduce new ones.
- The Company is considering measures to expand the introduction of wind power generation.

* Extreme wind speed
Extreme mean wind speed that may be experienced in the next 50 years

Extreme wind speed (90 m/s)
= Reference wind speed (46 m/s) $\times a \times b \times c$

a: Coefficient corresponding to the terrain
b: Coefficient corresponding to the hub height, etc.
c: Coefficient corresponding to the maximum instantaneous wind speed



[Design reference wind speed distribution]

*Image of "Building Standards Act Notice No.1454" categories

Source: Japan Exterior Industry Association website

2 Solar power generation

- The amount of solar PV generation interconnection in the Okinawa area has increased rapidly since the implementation of the feed-in tariff scheme (FIT scheme) in July 2012.
- With the revision of the "Regulation for Enforcement of the Act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electricity Utilities", all solar power generation and wind power generation facilities connected after April 1, 2021 will be subject to unrestricted and uncompensated output control.

[Connection of renewable energies (As of September 30, 2023)]

(MW)

		Amount already connected	Connection application amount	Total
Main island of Okinawa		381	24	405
Remort island	Miyako	34	3	38
	Ishigaki	22	3	25
	Kume	3	1	3

*The figures may not exactly match the figures because of rounding.

3 Supply and demand situation

- Due to the expansion of the introduction of renewable energy, the Company controlled its output on Sunday, January 1, 2023 for the first time in its history to maintain the demand-supply balance.
- The Company conducted output control of renewable energies (solar and wind) three times during FY2022. The Company conducted output control of renewable energies (solar and wind) three times as of the end of September during FY2023.
- Output control for FY2023 is expected to account for 0.14% of all facilities (solar and wind). When converted to the number of times, an annual 16 controls are likely to take place.

Supply and demand situation
(Conceptual diagram)
<Sunday, January 1, 2023>

② Supply capacity in the area (Before Renewable Energy Output Control) 692,000 kW

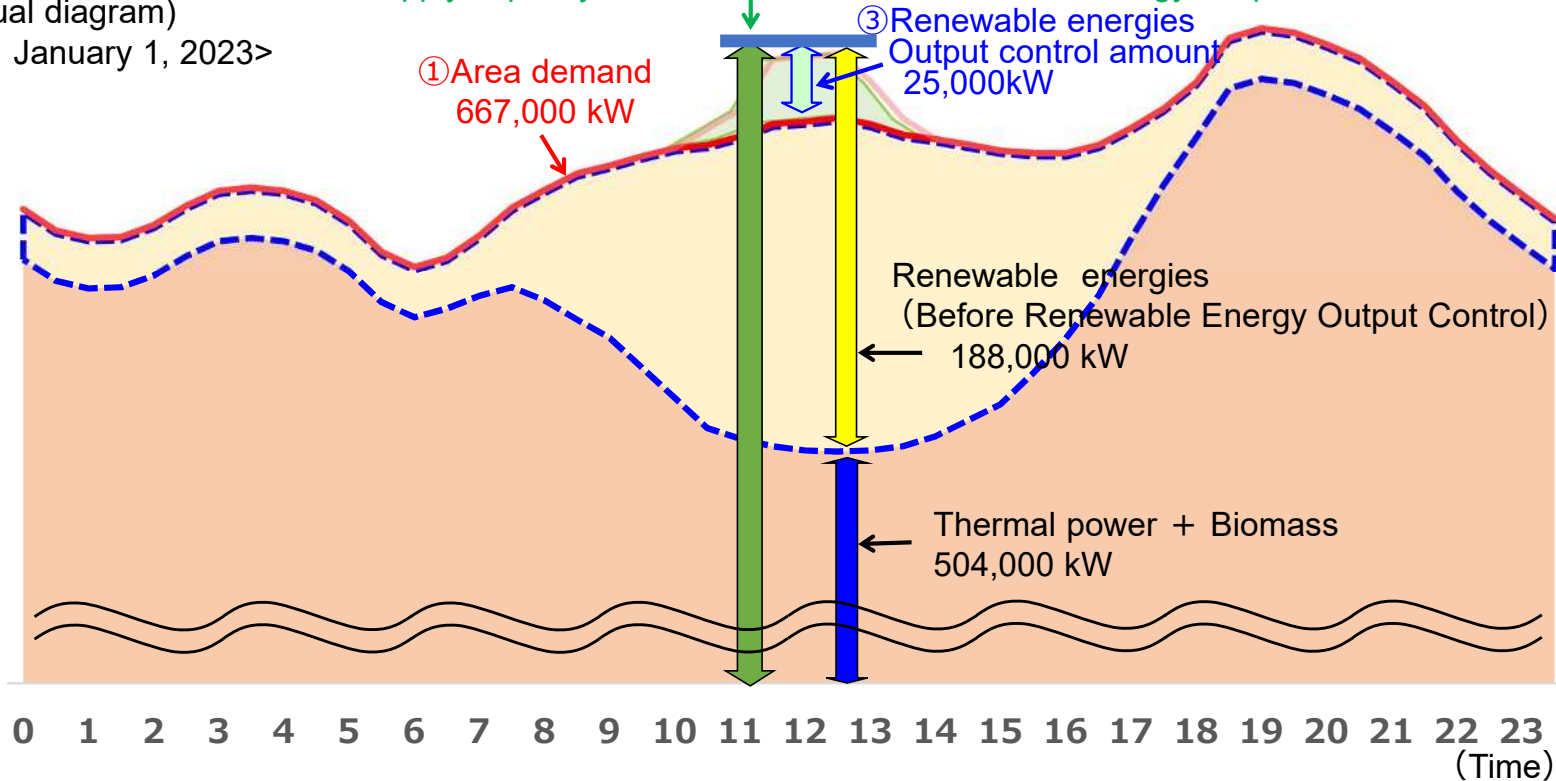
③ Renewable energies
Output control amount
25,000kW

①Area demand
667,000 kW

Renewable energies
(Before Renewable Energy Output Control)

188,000 kW

Thermal power + Biomass
504,000 kW



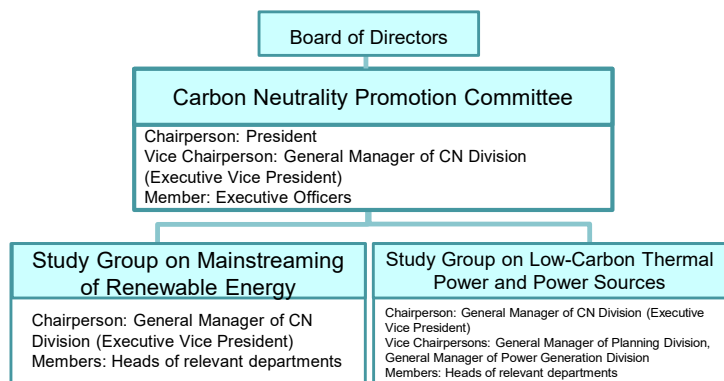
Efforts to base on TCFD Recommendations (1/3)

- In September 2019, Expressing to support the Recommendations adopted by the Task Force on Climate-related Financial Disclosures (TCFD).
- Besides establishing governance, we referred to multiple climate scenarios to identify potential impacts of climate change on our business.
- In order to make steady progress toward carbon neutrality as well, the Company will utilize the framework of the TCFD recommendations and make efforts to expand and reinforce information disclosure.

[Governance]

- Recognizing that responding to climate change is an important management issue, regularly hold the Carbon Neutrality Promotion Committee, chaired by the president, to discuss various measures and issues, and to improve and enhance initiatives.
- The results of deliberations by the "Carbon Neutrality Promotion Committee" and important issues related to climate change, if any, will be reported to the Board of Directors as appropriate.

<Carbon neutrality promotion system>



■ Main matters to be reported to the Board of Directors (FY2022)

- Reporting on progress in 2050 Net-Zero CO₂ Emissions Roadmap
- Formulation of Just Transition in the Okinawa Area
- Revision of FY2030 CO₂ reduction target
- Reporting on information disclosure based on TCFD (implementation of relative qualitative assessment)

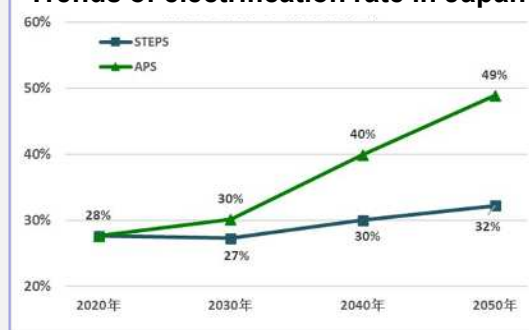
[Climate Change Risks and Opportunities]

The Company sorted out risks and opportunities in the transition to a decarbonized society by mainly referring to the World Energy Outlook 2022 by the International Energy Agency (IEA).

2°C/1.5°C scenario

In the 2°C (APS) scenario, whereas growth in demand for electricity can be expected to rise to a certain degree due to society further moving to decarbonization, it is possible for costs to rise as a result of stricter governmental policy and laws and regulations. Furthermore, in the 1.5°C scenario (NZE), there is a possibility that such a trend will become more noticeable.

Trends of electrification rate in Japan

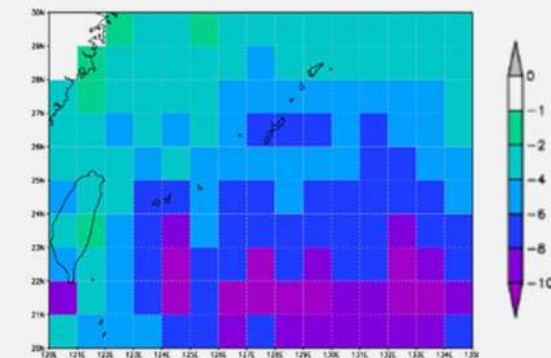


Source: Prepared by our company, referring to IEA World Energy Outlook 2021

Refer to RCP8.5 of the IPCC (Intergovernmental Panel on Climate Change) and summarize physical risks and opportunities such as extreme weather events.

4°C scenario

As a result of sorting out future changes around Okinawa Prefecture just before and after 2050 in the RCP 8.5 scenario from existing documents and data, it can be conceived that the number of typhoons passing the waters around Okinawa, especially its southern part, will decrease in the future. On the other hand, the frequency of the passing of "strong" typhoons with high maximum wind velocity can be thought to increase.



Changes in the number of typhoons passing through the sea around Okinawa around 2050
 (Difference calculated by deducting current climate from future one) [typhoons/10 years]

Efforts to base on TCFD Recommendations (2/3)

- The Company will respond appropriately to the risks and opportunities that future climate change will bring to its business activities and strive to enhance its corporate value.
- By referring to the 1.5°C scenario along with the 2°C scenario, the Company has grasped the impacts on its business activities and assessed quantitative financial impacts in part in its Integrated Report 2023.

[Strategy] Sorting out risks and opportunities related to climate change

Risks				Timing of emergence		Degree of impact	Overview of risks (Financial impacts)
				Short to medium term	Long term		
Transition risks	Policy/Laws and regulations Transition to decarbonization policies Growing demands for CO ₂ emission reduction	1	Decline in the competitiveness of coal power plants (changes to the role of thermal power plants)			High	Costs for handling the policy-based abolition of inefficient coal power plants. There are concerns about increases in investment costs and depreciation costs related to replacing power plants; the incurring of costs for retiring existing facilities and a rise in fuel costs coupled with the phase-out of coal power plants.
		2	Introduction of carbon pricing			High	If carbon pricing is introduced, costs are assumed to increase greatly. (On the other hand, by reducing CO ₂ emissions through various initiatives against climate change, a financial impact of 16 billion yen* or so can be lessened.) <small>* Provisionally calculated, based on carbon price assumptions for 2030 in the IEA's "WEO2022" (NZE: US\$140/t-CO₂ and APS: US\$135/t - CO)</small>
		3	Impact of fuel supply decrease on fossil fuel costs			High	It is feared that a mounting need for carbon neutrality will make investments in developing the upstream stages of fossil fuels stagnate and the price will surge due to supply shortages and others.
		4	Impact of the shift from coal to LNG on fuel costs (further utilization of LNG)			Medium	In shifting from coal to LNG, financial impacts by fluctuations in fuel costs are assumed.
	Technology Progress in low carbon and decarbonization technologies	5	Increase in the cost of stabilizing systems (expansion of renewable energy adoption by technological advance)			Medium	It is assumed that the cost of capital investment, such as storage batteries for measures for stabilizing systems, coincided by the adoption of renewable energy, will increase.
	Market/Service Change in customer preferences	6	Competition with other companies due to changes in customer preferences (mounting environmental awareness)			Low to Medium	Concern over the inability to expand sales due to competition with other companies related to environment-friendly products
	Reputation Change in corporate image	7	Decline in society's evaluation in connection with response to climate change (CO ₂ emissions)			Low to Medium	The situation that necessitates reliance on fossil fuel due to the structural disadvantages of the Okinawa area will give a negative impression, which leads to a decline in stakeholders' evaluation.
Physical risk	Urgency Intensification of extreme weather	8	Damage due to ever-intensifying typhoons (Increase in restoration costs)			Low to Medium	In the waters around Okinawa, the number of passing typhoons will decrease. However, the probability of the occurrence of large-scale equipment damage or accidents is likely to go up as the ratio of strong typhoons rises. Potential impact of 1 billion yen <small>Most recent maximum damage (FY2018)</small>
	Chronic Change of climate patterns	9	Impact of changes of weather patterns on business operations, etc. (Revenue and expenditure will be destabilized.)			Low to Medium	The possibility that increases in hot days and extreme rainfall, and a rise in extreme water levels will impact business

* The timing of emergence is set as "Short-to medium term: Up to 2030" and "Long term: up to 2050."

* Degree of impact is set as "High: The impact that is strong enough to suspend or significantly contract or expand business," (Medium: The impact that affects part of business" and "Low: Minor impact"

* Descriptions on this table consist of what was sorted out from events and the degree of impact that are conceivable to the Company out of a great number of uncertain factors, and are not intended to indicate the future outlook.

Efforts to base on TCFD Recommendations (3/3)

Opportunities				Timing of emergence		Degree of impact	Overview of opportunities (Financial impacts)
				Short to medium term	Long term		
Opportunities	Products and Service/Market	1	Utilization of decarbonized power sources (the rollout of services that contribute to an expansion in the introduction of renewable energy sources such as distributed power sources)			Low to Medium	Efforts such as for zero emissions as countermeasures against climate change will accelerate, the adoption of renewable energy in small-scale systems that the Company Group has cultivated will expand, and such efforts will be applied to businesses that utilize the knowledge of system stabilization technology. Consequently, revenue is expected to grow.
		2	Expansion of the utilization of LNG outside the electricity business			Low to Medium	With the transition to a low-carbon and decarbonized society, market needs for natural gas, which emits less CO ₂ than other fossil fuels, are expected to grow, and the gas business is projected to grow in revenue.
		3	Progress in electrification including EVs (changes to the electricity demand structure by climate change)			Low to Medium	Increase in electricity demand due to progress in electrification including EVs
		4	Rise in customer needs for environmentally friendly menus			Low to Medium	The need for energy-saving oriented ZEH housing will rise, and the popularization of residences that use electricity only as the energy source (All electrification) and KarE-roof (a service for free installation of equipment for solar power generation) is expected.
	Resilience	5	Energy security accumulated by many years of dealing with typhoons			Low to Medium	The strengthening of resilience against natural disasters through preventive measures, such as "wear-resistant electric wires" and "low-wind-pressure electric wires," and quick response to restoration will lead to the enhancement of corporate value.

* The timing of emergence is set as "Short-to medium term: Up to 2030" and "Long term: up to 2050."
 * Degree of impact is set as "High: The impact that is strong enough to suspend or significantly contract or expand business," (Medium: The impact that affects part of business" and "Low: Minor impact"
 * Descriptions on this table consist of what was sorted out from events and the degree of impact that are conceivable to the Company out of a great number of uncertain factors, and are not intended to indicate the future outlook.

[Indicators and Targets]

The Company announced "The Okinawa Electric Power Company's Initiative for Zero Emissions ~ 2050 Net Zero CO₂ Emissions~" in December 2020. Following the roadmap with an eye on the next thirty years, the Company will advance the implementation of measures based on the two pillars of "Making renewable energy the mainstream" and "Reduction of CO₂ emissions from thermal power sources."

The Company has set as the ambitious target "Reduction of 30% in FY2030 (compared to FY2005)," advanced from the previous target (reduction of 26%), and will speed up "Just Transition in the Okinawa Area" through making the maximum effort including a set of measures for carbon neutrality, cited in its roadmap.

Make renewable energy the mainstream.

■ Introduce renewable energy in FY 2030.
plus 100,000 kW

Reduce CO₂ emissions from thermal power sources.

■ Reduce CO₂ emissions by **30%** in FY 2030 compared to FY2005.

The descriptions are the Company's efforts for "Indicators and Targets" and "Risks" and "Opportunities"

■ Company efforts ■

- Introduce KarE-roof.
- Adopt large wind power.
- Utilize and upgrade the system stabilization technology.
- Build up a "renewable energy microgrid."

to name a few.

- Reduce CO₂ emissions through increasing LNG consumption.
- Consider the adoption of CO₂-free fuels and offset technology.
- Utilize regional biomass.
- Study the introduction of the latest technology.

to name a few.



Q & A



Q1. Topics of Okinawa's Economy

1 Current Status and Future Forecast of Okinawa's Economy

■ The current state

The economy in the prefecture is on an expansionary trend due to a stronger recovery in personal consumption as a result of increased demand associated with the recovery of human flow, as well as strong tourism-related activity.

Trends in Main Economic Indicators of Okinawa Prefecture

(Unit: %, X)

Indicators	FY2022													FY2023						
	Apr.	May	Jun	Jul	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	FY	Apr.	May	Jun	Jul	Aug.	Sep.	1st half
Sales by large-scale retailers	4.8	2.1	10.2	9.1	12.9	6.0	5.8	6.5	8.7	11.4	9.5	11.0	8.2	11.0	11.5	6.7	10.4	11.4	11.3	10.4
No. of new car sold	9.9	-30.8	4.7	7.6	-7.0	31.9	21.7	11.4	26.0	32.8	45.9	18.6	13.8	23.7	69.8	36.3	1.9	3.2	19.5	21.7
No. of incoming tourists	55.8	103.3	175.3	142.7	122.3	141.4	110.9	67.1	49.9	137.0	233.6	84.3	106.9	63.8	62.6	47.9	28.1	13.7	43.5	40.0
Value of public works contracts	-41.5	-51.1	132.5	-40.6	12.0	-45.5	11.1	-22.1	-37.6	-58.6	141.8	54.9	1.3	6.4	2.8	-55.0	68.0	-32.3	150.2	13.0
New residential Construction starts	7.3	12.2	-2.0	-18.9	25.4	-2.1	-27.8	-11.9	10.3	41.4	21.2	-10.9	1.7	-25.2	-8.0	62.6	26.4	4.6	21.1	11.0
Total unemployment rate	2.8	2.8	2.8	3.9	3.4	3.1	2.5	3.1	3.5	2.8	3.6	4.1	3.2	3.8	3.5	3.1	2.8	4.2	3.4	3.5
Job Opening Ratio	0.92	0.94	0.98	0.99	1.02	1.04	1.07	1.10	1.10	1.13	1.12	1.14	1.04	1.18	1.20	1.20	1.20	1.19	1.20	1.14

Note 1: The figures for 'Sales by large-scale retailers' are calculated on an all-store base. The values in September 2023 are preliminary figures.

Note 2: The figures for 'Total unemployment rates' are raw data, whereas The figures for 'Job Opening Ratio' are a seasonally adjusted value for the current month.

(The values for the fiscal year are both raw data which use the number of job openings by prefecture received nationwide.)

Source: Okinawa General Bureau, Okinawa Prefecture, Ryugin Research Institute, and others.

■ Prospect

As for the outlook of the economy in the prefecture, the expansion is expected to continue due to a recovery in personal consumption and continued high travel demand.

Q1. Topics of Okinawa's Economy

2 Economic Growth of Okinawa Prefecture under the Okinawa Promotion Plan

- As a result of the implementation of various measures based on the Basic Plan of Okinawa 21st Century Vision (FY2012 to FY2021), the gross prefectural product of Okinawa Prefecture was growing faster than the national average, however has been affected by COVID-19 since FY2020.
(Average annual growth rate from FY2012 to FY2019: 0.9% nationwide and 1.8% for Okinawa)
- In the future, the Okinawa economy is expected to grow further through recovery from the impact of COVID-19 and the implementation of various measures based on the New Basic Plan for Okinawa 21st Century Vision that started in FY2022.

Prefectural GDP and National GDP

(billion yen)

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Prefectural GDP	1.4% 4,364.9	0.0% 4,366.5	0.8% 4,399.4	-6.0% 4,136.6	2.3% 4,230.1	7.1% 4,532.4
National GDP	1.8% 553,173.5	0.2% 554,533.8	-0.8% 550,097.7	-4.1% 527,686.3	2.7% 541,754.0	1.4% 549,231.9

Sources: "Prefectural Accounts for FY2020", "Prefectural economic outlook for FY2023" and Cabinet Office "List of Statistical Tables" (Second Preliminary Data for the April-to-June 2023 period)

Note : Prefectural GDP's for FY2021 and FY2022 are estimates. Figures in the upper row are growth rates on a Y to Y basis.

New Basic Plan for Okinawa New 21st Century Vision

The New Basic Plan for Okinawa 21st Century Vision includes 36 basic measures, including the "creation of sustainable tourist destinations and the transformation of tourism in Okinawa," "upgrading and increasing the value of the information and communications related industries," and the "creation of international logistics bases and the accumulation of airport and seaside industries."

The gross prefectural product (nominal) is projected to be 5,721 billion yen in FY2031 from 4,110.4 billion yen in FY2020.

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

Outline of the U.S. military Forces in Okinawa

No. of Facilities	33
Area	186,662km ²

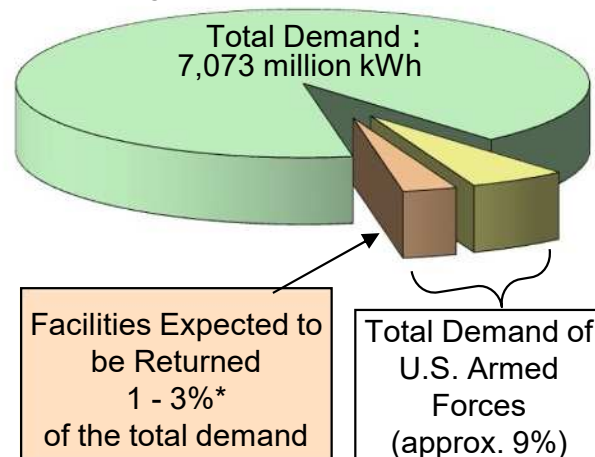
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No. of employees working for the U.S. Armed Forces in Okinawa: 8,919

*As of the end of March 2022.

Sources : Japan Ministry of Defense “US Forces and SDF Bases in Okinawa October 2023”, Military Base Affairs Division, Executive Office of the Governor, Okinawa Prefecture

The U.S. Armed Forces' share of total electricity demand (FY2022)



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

Principal electricity supply destination facilities *1

Name	Location *2	Area
Camp Gonsalves [US Marine Corps]	Kunigamison, Higashison	36,590km ²
Okuma Rest Center [US Air Forces]	Kunigamison	546km ²
Iejima Auxiliary Air Base [US Marine Corps]	Ieson	8,015km ²
Yaedake Communication Site [US Air Forces]	Motobucho, Nago-shi	37km ²
Camp Schwab [US Marine Corps]	Nago-shi, Ginozason	20,626km ²
Camp Hansen [US Marine Corps]	Nago-shi, Ginozason, Onnason, Kincho	48,728km ²
Kadena Ammunitions Storage Area [shared use]	Onnason, Uruma-shi, Okinawa-shi, Kadenacho, Yomitanson	26,276km ²
Camp Courtney [US Marine Corps]	Uruma-shi	1,339km ²
Camp Mc Tureous [shared use]	Uruma-shi	379km ²
Camp Shields [shared use]	Okinawa-shi	700km ²
Torii Station [US Army]	Yomitanson	1,895km ²
Kadena Airbase [US Air Forces]	Okinawa-shi, Kadenacho, Chatancho, Naha-shi	19,856km ²
White Beach Naval Facility [shared use]	Uruma-shi	1,568km ²
Camp Kuwae [US Marine Corps]	Chatancho	675km ²
Camp Zukeran [US Marine Corps]	Uruma-shi, Okinawa-shi, Kitanakagusukuson, Chatancho, Ginowan-shi	5,342km ²
Futenma Airport [US Marine Corps]	Ginowan-shi	4,758km ²
Makiminato Service Areas [US Marine Corps]	Urasoe-shi	2,675km ²
Naha port facilities [US Army]	Naha-shi	559km ²

*1 Professional use and large-demand customers

*2 Areas where facilities exist on a cross-area basis

*3 Facilities south of Kadenacho are scheduled to be returned (Partial return applies to Camp Zukeran)

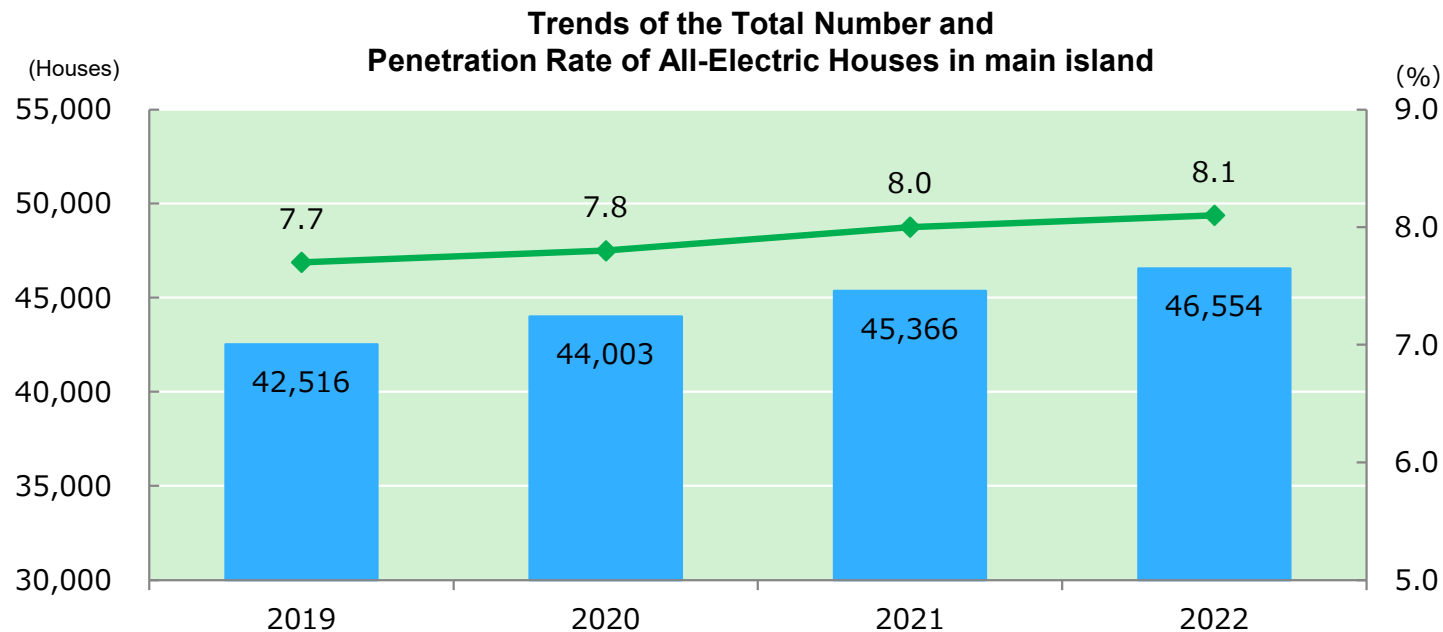
Q3. What is the Current State of Promotion of Electrification?

■ Approach for sales promotion in the corporate sector

1. Acquire from other heat sources through electrification proposals.
2. Collaborate with sub-users such as manufacturers, design offices, and energy management companies.
3. Utilization of public subsidy system, etc.

■ Approach for the promotion and growth in the household sector

1. Consider and implement more effective promotional activities for advancing electrification (e.g. All electrification and Half electrification, etc.)
2. Strengthening of electrification proposal activities in cooperation with external partners.
3. Promotion of electrification utilizing "Rikka Denka Lease" , "KarE-roof" Service (PV-TPO), etc.
4. Maintenance and expansion of market share through prevention of defection and recovery marketing.
5. Acquisition of members by expanding the services of the member site "OEPC more - E."



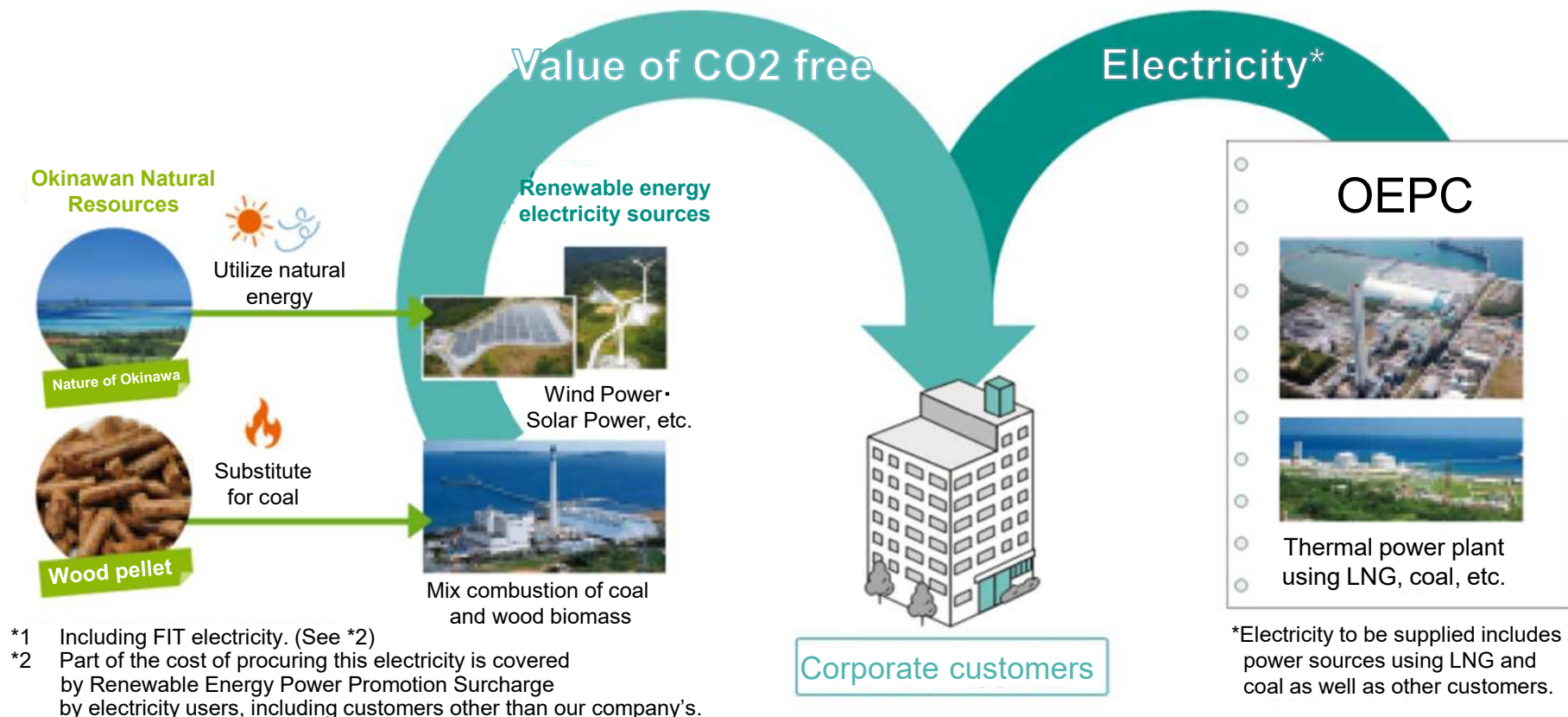
Q4. What is the enrichment of electricity rate menus?

Uchina CO₂ free menu

- Deploying an electricity rate menu with the value of CO₂ free derived from renewable energy electricity sources.
- We will work with our customers to realize a decarbonized society in Okinawa Prefecture as a whole by using only resources in the prefecture.

Utilization of resources produced in Okinawa Prefecture by non-fossil certificate

「Local production for local consumption CO₂ free menu」



Q5. What are the efforts to fuel cost reduction? (1/3)

■ Efforts toward stable procurement of fuels and reduction of fuel costs.

Making Ishikawa Thermal Power Plant the base of distributing fuel oil to remote islands

Stable procurement through long-term coal purchase contracts and diversification of procurement sources

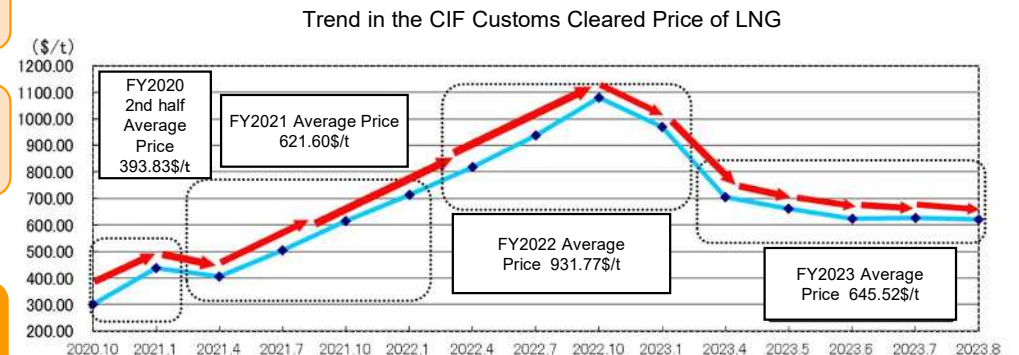
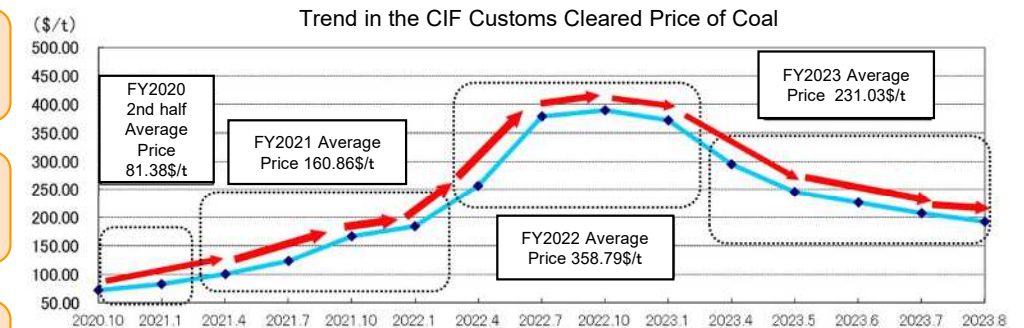
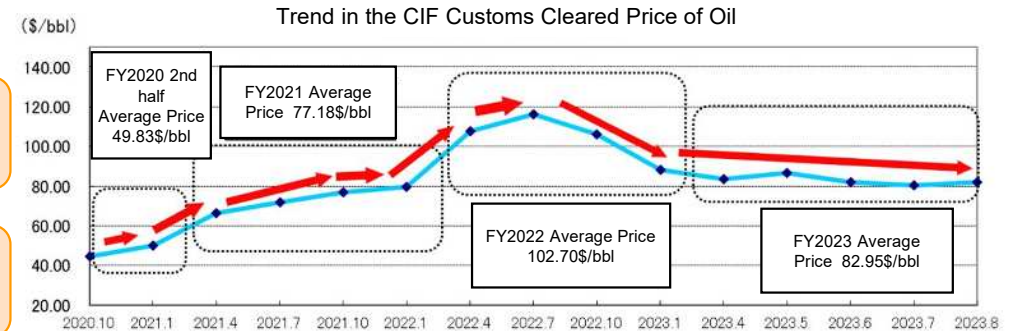
Continued use of sub-bituminous coals that are low in not only prices but also transport costs

Reduction of fuel costs through measures including purchasing coal on the spot market

Stable procurement through long-term LNG purchase contracts

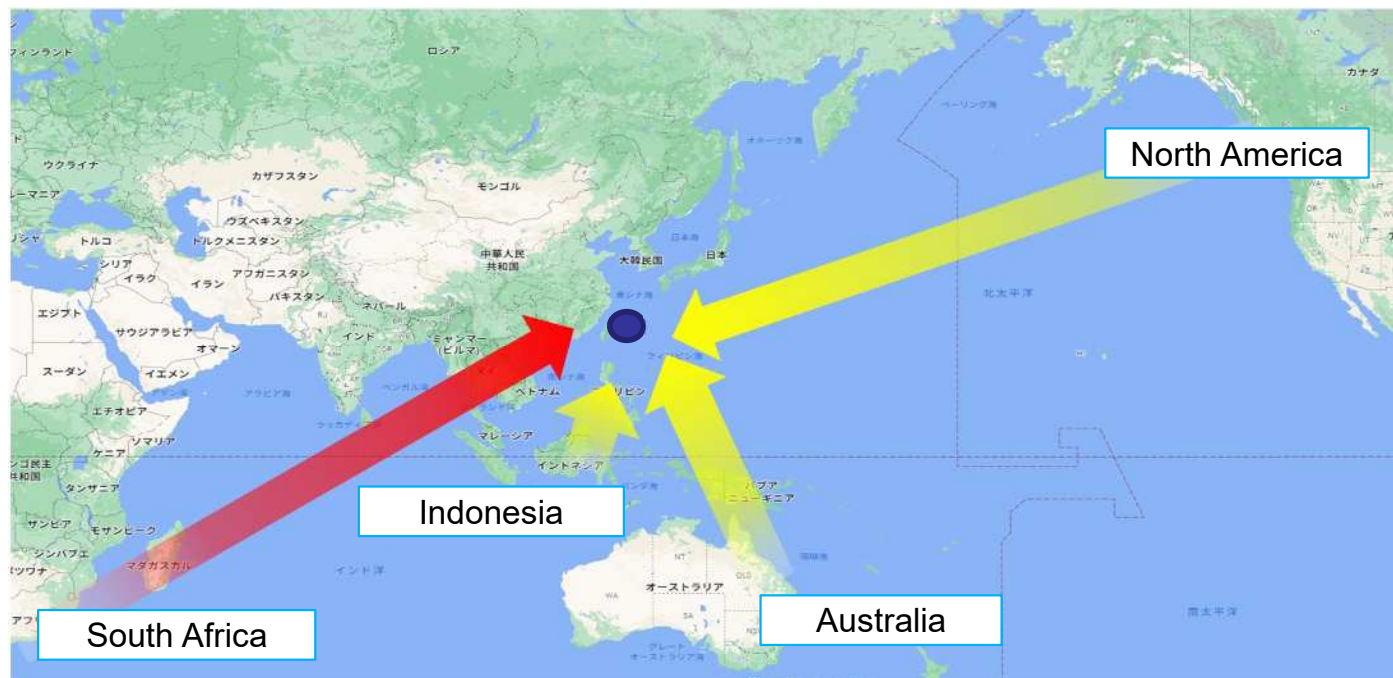
Efficient operation of coal-fired plants and LNG-fired plants by reducing consumption of fuel oil.

Achieving stable fuel supply and pursuing cost reductions



Q5. What are the efforts to fuel cost reduction? (2/3)

- As efforts to reduce fuel costs, the Company is engaged in stable supply through long-term contracts for coal and the diversification of procurement sources; the continued use of sub-bituminous coal, which is low-priced including transportation costs; and the reduction of fuel costs through buying coal in the spot market.
- As efforts to disperse and diversify procurement sources, the Company has started procuring coal from South Africa in addition to Australia, Indonesia and North America, which are the Company's traditional sources.
- Such efforts will make possible highly expeditious and flexible procurement by utilizing stock yards in countries closer to Japan.



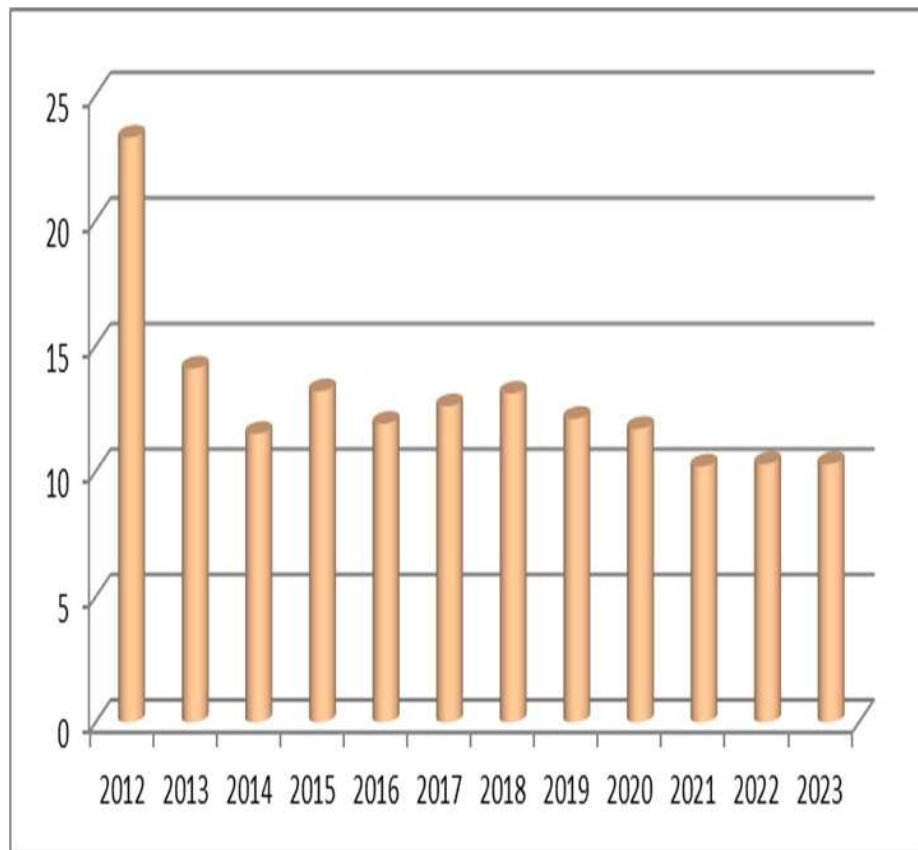
Q5. What are the efforts to fuel cost reduction? (3/3)

■ Efficient operation of coal-fired plants and LNG-fired plants by reducing consumption of fuel oil.

○ Reduction of oil consumption by shifting AFC* that oil-fired plants took charge of to LNG-fired plants.

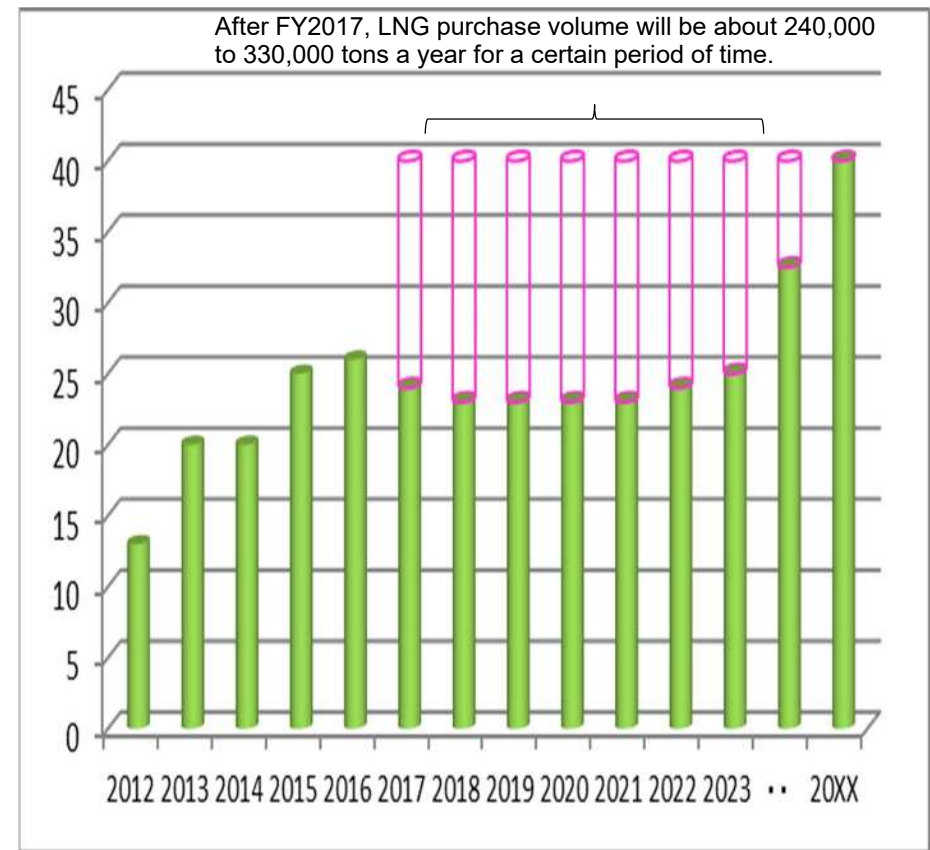
* AFC=Automatic Frequency Control

(10,000 kl) **Trend in Fuel Oil Consumption by Main Island**



(FY)

(10,000 t) **Trend in LNG Purchase Volumes**



(FY)

Q6. The Fuel Cost Adjustment System

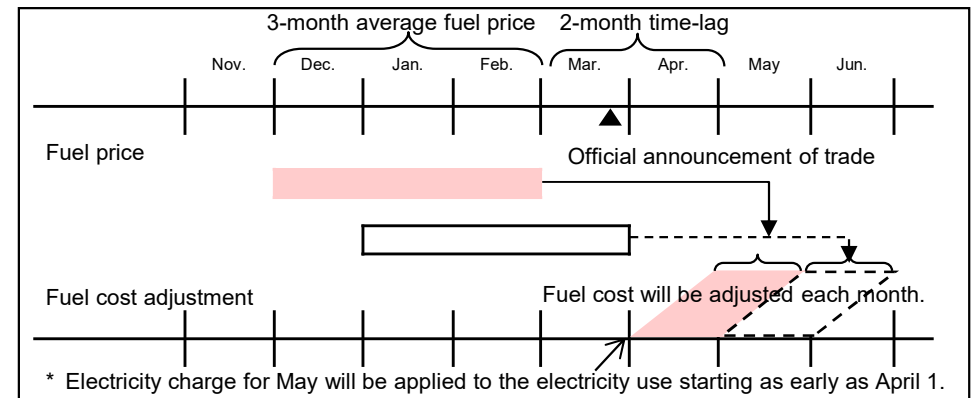
- The fuel cost adjustment system was introduced for the purpose of clarifying the “internal factors” such as the results of efforts to promote management efficiency at electric power companies and reflecting “external factors” onto electricity rates such as exchange rates and oil and coal and LNG prices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

[Range of fuel cost adjustment]

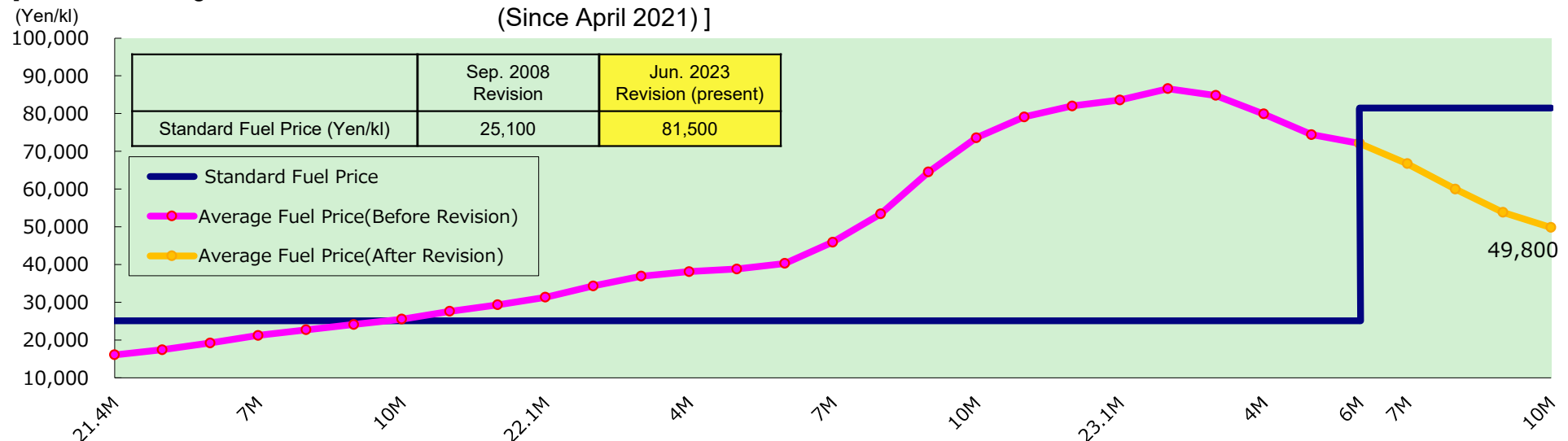
- We will calculate the average fuel price based on the prices of crude oil, coal and LNG on the trade statistics during the period between five months and three months prior to the fuel cost adjustment, and electricity charge will be automatically adjusted each month by comparing the above price with 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.
- The average fuel cost adjustment price for October 2023 was 49,800 yen (the upper limit on plus adjustment was 122,300 yen).
- There is no upper limit on plus adjustments for the all free rate menus after April 2023.

[Conceptual drawing of the fuel cost adjustment system]

E.g. The average fuel price during the period between December and February of the following year will be applied to fuel cost adjustment for the electricity charge for May in the following year.
The average fuel price during the period between January and March will be applied to fuel cost adjustment for the electricity charge for June in the same year.



[Trend of Average Fuel Price and Standard Fuel Price (Since April 2021)]



Q7. The measure to mitigate sharp fluctuations in electricity rates

- The Company offers rate discounts based on the amount of electricity consumed through the State's nationwide measure to mitigate sharp fluctuations in electricity rates and Okinawa Prefecture's emergency countermeasure against surging electricity rates in Okinawa.

■ Rate discounts based on the measure to mitigate sharp fluctuations in electricity rates [applicable to the use from January 2023]

- The Company has discounted the rates from the portion used in January 2023 (to be charged in February), based on the amount of electricity consumed through the State's nationwide measure to mitigate sharp fluctuations in electricity rates and Okinawa Prefecture's emergency countermeasure against surging electricity rates in Okinawa. The discount support was initially announced to apply up to the portion used in September 2023 (to be charged in October), but has been extended. Accordingly, the Company will continue the rate discount of 5.0 yen for low-voltage supply and 3.0 yen* for high-voltage supply from the portion used in October 2023 (to be charged in November).

*The unit prices are applicable from the portion used in September 2023 (to be charged in October 2023) to the portion used in December 2023 (to be charged in January 2024).

[Details of rate discounts]

1. Eligible customers

Customers who receive and use electricity through low or high voltage supply.

2. Overview of discounts

Discount of the following unit price per kWh (including tax) from the fuel cost adjustment unit price calculated based on specified retail supply contracts, etc.

		Portion in February	Portion in March	Portion in April	Portion in May	Portion in June	Portion in July	Portion in August	Portion in September	Portion in October	Portion in November	Portion in December	Portion in January
Low voltage	The State	-7.0								-3.5			
	Okinawa									-1.5			
	Total	-7.0*								-5.0*			
High voltage	The State	-3.5								-1.8			
	Okinawa									-1.2			
	Total	-3.5								-3.0			

* As a result of this measure, in the low-voltage supply model case of the Company (260 kWh/month of electric power consumption), the monthly discount amount, which includes discounts from the nationwide measure to mitigate sharp fluctuations in electricity rates and the emergency countermeasure against surging electricity rates in Okinawa, is as follows for each discount unit price.

- 7.0 yen [The portion used in January (to be charged in February) to the portion used in May (to be charged in June)]: -1,820 yen
- 10.0 yen [The portion used in June (to be charged in July) to the portion used in August (to be charged in September)]: -2,600 yen
- 5.0 yen [The portion used in September (to be charged in October) to the portion used in December (to be charged in January 2024)]: -1,300 yen

Q8. Status of Transitional Measures for Retail Charges

- With the elimination of regional monopolies due to the complete liberalization of entry into the electricity retail sector, rate regulations will become unnecessary in principle.
- On the other hand, it has been decided with the liberalization that rate regulations will be abolished after a transitional period so as not to interfere with the stable supply of electricity or cause confusion among consumers.
- Currently, only the Okinawa area still has transitional treatment fees in the high-voltage area, whose treatment is under consideration by the central government.

	OEPC		< Reference > Nine electric power companies in the mainland	
	Retail department	Transmission and distribution department	Retail company	Transmission and distribution company
Extra-high voltage ⇒ Large factories, large shopping centers, etc.	Free rate 【20%】 (18%) ⇒ Upper limit abolished from April 2023.	Last resort supply rate	Free rate	Last resort supply rate
High voltage ⇒ Supermarkets, office buildings, etc.	Transitional treatment fee *Regulated rate 【11%】 (15%) Upper limit on fuel cost adjustment exists (Upper limit on fuel cost adjustment is set by a national scheme)	Free rate 【24%】 (21%) ⇒ Upper limit abolished from April 2023.	Free rate	Last resort supply rate
Low voltage ⇒ For household use, small stores, etc.	Transitional treatment fee *Regulated rate 【29%】 (31%) Upper limit on fuel cost adjustment exists (Upper limit on fuel cost adjustment is set by a national scheme)	Free rate 【16%】 (15%) ⇒ Upper limit abolished from April 2023.	Transitional treatment fee (Regulated rate)	Free rate

- The percentage of retail electricity sales to total electricity sales in FY2022 is shown in [], and the percentage when remote islands are included is shown in ().
- Areas for which transitional measures have been lifted may receive last resort supply from the general electricity transmission and distribution utility.

Q9. What is the approval that it's possible to engage in electricity transmission and distribution on concurrent?

- After April 2020 when the amended Electricity Business Act comes into effect, the general electricity transmission and distribution utilities must not engage in electricity retail or electricity generation on concurrent business. (Restrictions on Concurrent Business)
- As an exception to the restriction on Concurrent Business, OEPC became the “the approved general electricity transmission and distribution utility” which can operate power retail business and power generation business, and this means that OEPC can continue maintaining the integrated system for power transmission and distribution.
- On the other hand, OEPC implemented the organizational revision to respond conduct regulations aimed at ensuring neutrality of the transmission/distribution sector.

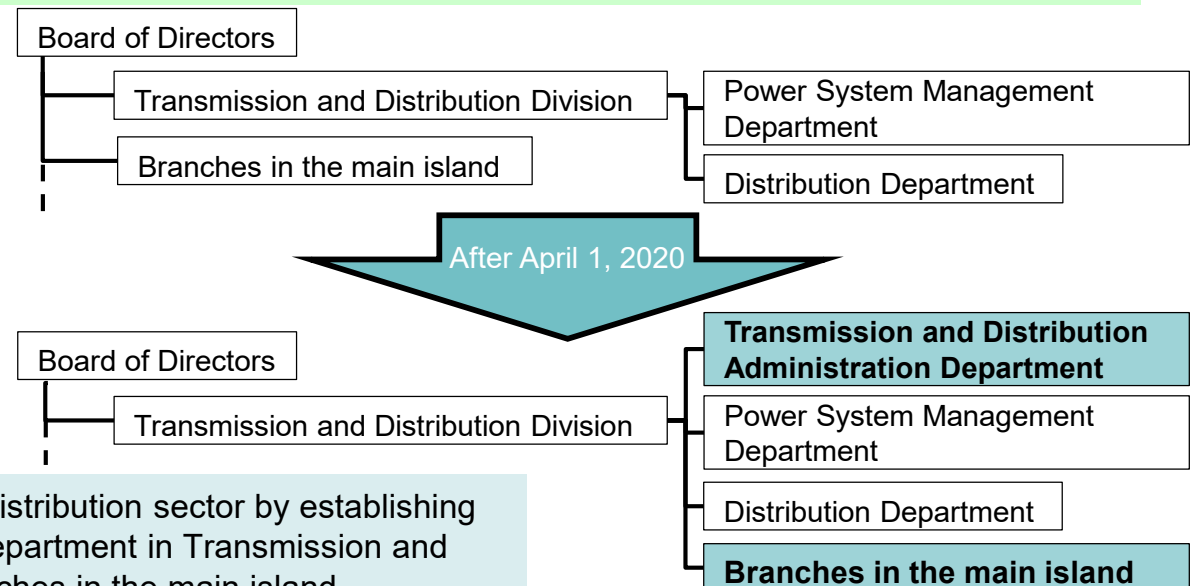
Reasons for exceptions to Restriction on Concurrent Business

- ✓ There is a particularly high need for flexible power supply operation because OEPC's power grid is small-scale power system and independent from the mainland.
- ✓ There is a particularly high need for the transmission and distribution, retail and power generation divisions to work together in disaster response.

Conduct regulations

- ✓ Prohibition of use/provision of information for other purposes
- ✓ Prohibition of discriminatory treatment
- ✓ Prohibition of competitive inhibition acts
- ✓ Establishment of appropriate information management system, etc.

Further ensuring neutrality of the transmission/distribution sector by establishing Transmission and Distribution Administration Department in Transmission and Distribution Division, and transferring each branches in the main island.



* The organization chart is as of revision on April 1, 2020.
As of September 2023, the main island branch offices are placed under the Distribution Department, and the Site Acquisition and Management Department and Remote Islands Energy Services Department have been transferred to the Transmission and Distribution Division.

Q10. What are the Special Tax Measures?

- OEPC has received "Preferential Measure for Standard Taxable Values Relating to Fixed Property Tax" and "Exemption from the Oil and Coal Tax Relating to Specific Coal, etc. (Coal and LNG) Used for Power Generation in Okinawa" based on the Special Measures Law for the Promotion of Okinawa.
- We consider that special taxation measures are necessary for promoting business in Okinawa Prefecture and improving the lives of Okinawa residents on the grounds that disadvantages inherent in Okinawa's electricity business have remained unchanged. For example, there are many small and isolated systems and Okinawa is dependent on thermal power.
- The amount of tax exemption based on the special taxation measures is deducted from the cost of electricity charge.

Currently Applied Special Tax Measures

	Preferential Measure for Standard Taxable Values Relating to Fixed Property Tax	Exemption from the Oil and Coal Tax Relating to Specific Coal, etc. (Coal and LNG) Used for Power Generation in Okinawa
Details	Alleviation to 2/3 of Standard Taxable Values	(1) Exemption from the Oil and Coal Tax for coal (2) Exemption from the Oil and Coal Tax for LNG
Period	April 1, 1982 - March 31, 2024 * Extended for 2 years from April 1, 2022	(1) October 1, 2003 – March 31, 2024 * Extended for 2 years from April 1, 2022 (2) April 1, 2012 – March 31, 2024 * Extended for 2 years from April 1, 2022
Basic Law	Supplementary Provisions of the Local Tax Law (Article 15.5)	Special Measures Law for the Promotion of Okinawa (Article 64) Special Taxation Measures Law (Article 90.4.3.1)

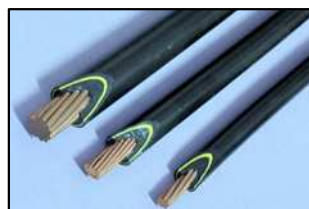
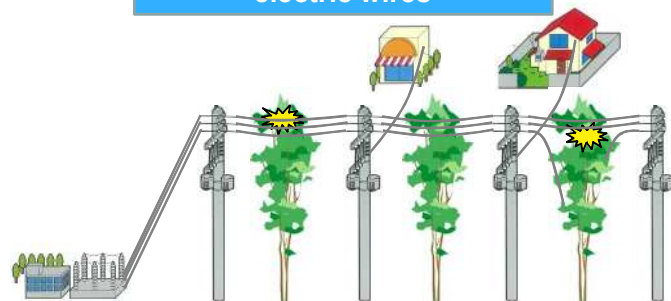
Value of Tax Alleviation Due to the Special Measures

■ FY2021 : about 3.4 billion yen. ■ FY2022 : about 3.5 billion yen. ■ FY2023(forecast) : about 3.3 billion yen.

Q11. What are the efforts to typhoon measures?

- Since many typhoons approach Okinawa every year, the we are taking basic measures by thoroughly inspection patrol electricity transmission/distribution facilities and regularly cutting trees, and is also taking various other precautionary measures.
- After the Electric Power Resilience WG compiled the verification results concerning the power failure restoration and others, we have implemented new measures, such as maximizing the number of patrol personnel in the distribution division to quickly grasp the damage situation.

Replace to abrasion-resistant electric wires



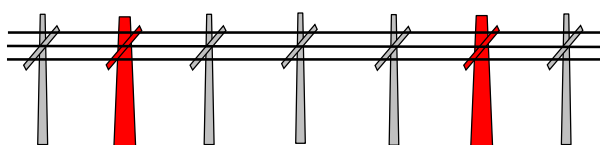
Abrasion-resistant electric wires

Abrasion-resistant electric wires resist to damage from trees contacting them and prevent disconnection caused by abrasion.

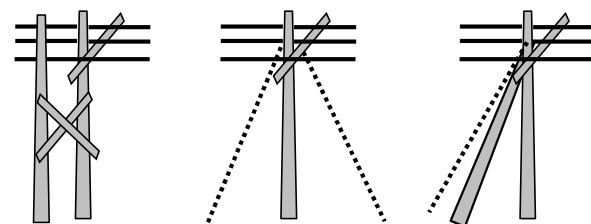
Design standard for transmission towers

Regarding the transmission tower, the Ministerial Ordinance on Technical Standards for Electric Facilities (Ministry of Economy, Trade and Industry) stipulates that the larger load should be taken into account by comparing the wind pressure load at the reference wind speed of 40 m/sec with that at the base wind speed for each region. Our company has designed the transmission tower taking into account the maximum wind speed at the time of past typhoons, and the larger load by comparing the wind pressure load at the wind speed of 60 m/sec with that at the base wind speed for each region.

The measures to prevent the continuous collapse of utility poles



Utility poles to reinforce



Strengthened utility pole

Reinforcing wire

Reinforcing wire / pole

It's possible to prevent the continuous collapse of utility poles by reinforcing utility poles.

Maximizing the number of patrol personnel in power distribution department

We get the most out of the personnel in power distribution department and construction companies as patrol personnel in order to quickly grasp damages after pass typhoons. In addition, we utilize the personnel other than power distribution department as drivers.

Use of electric wires to reduce wind pressure



Electric wire that reduces wind pressure

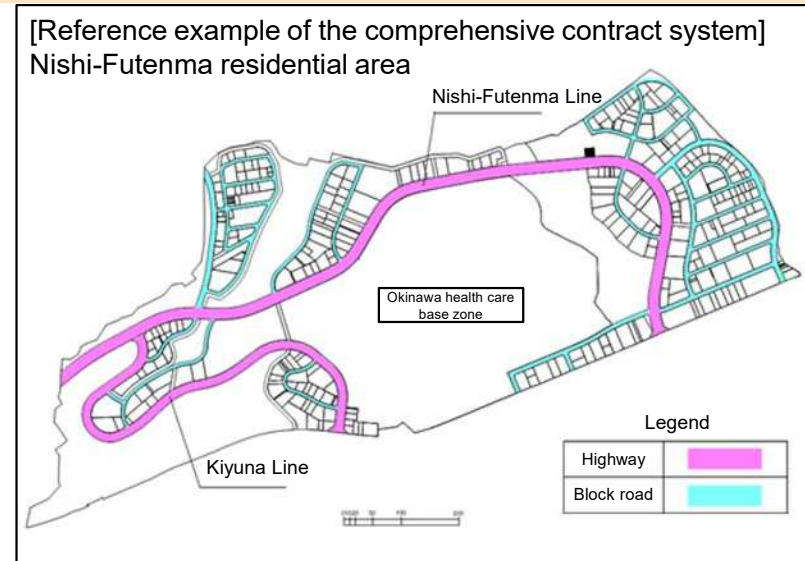
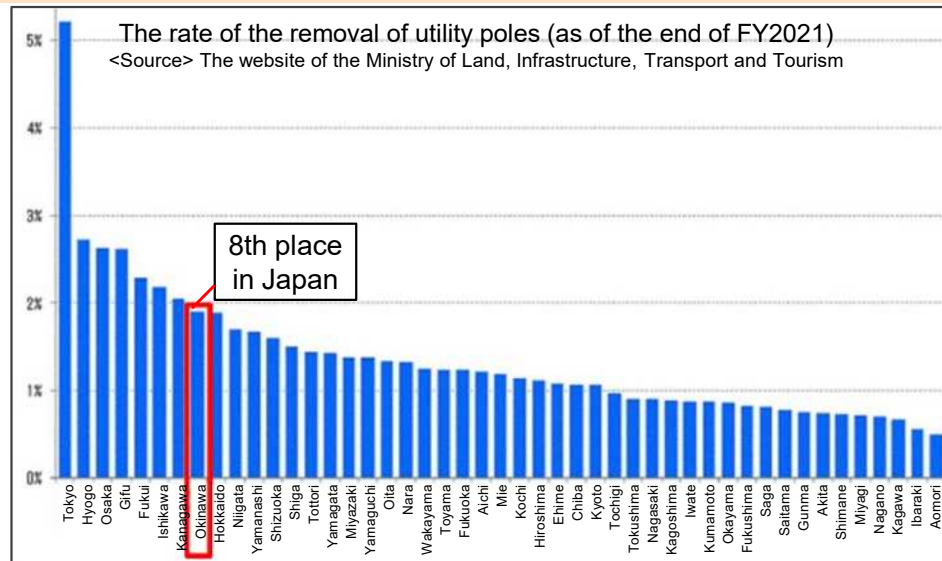
Reduce the wind pressure load by providing grooves on the surface of the electric wire.

Public relations activities

We are making an effort to prevent the spread of damage by disseminating typhoon measures at home on TVCM, Radio, SNS before the typhoon approaches. Moreover, we also disseminate information using the website and SNS among others on power outages, the state of restoration works, and restoration prospects.

Q12: The removal of utility poles

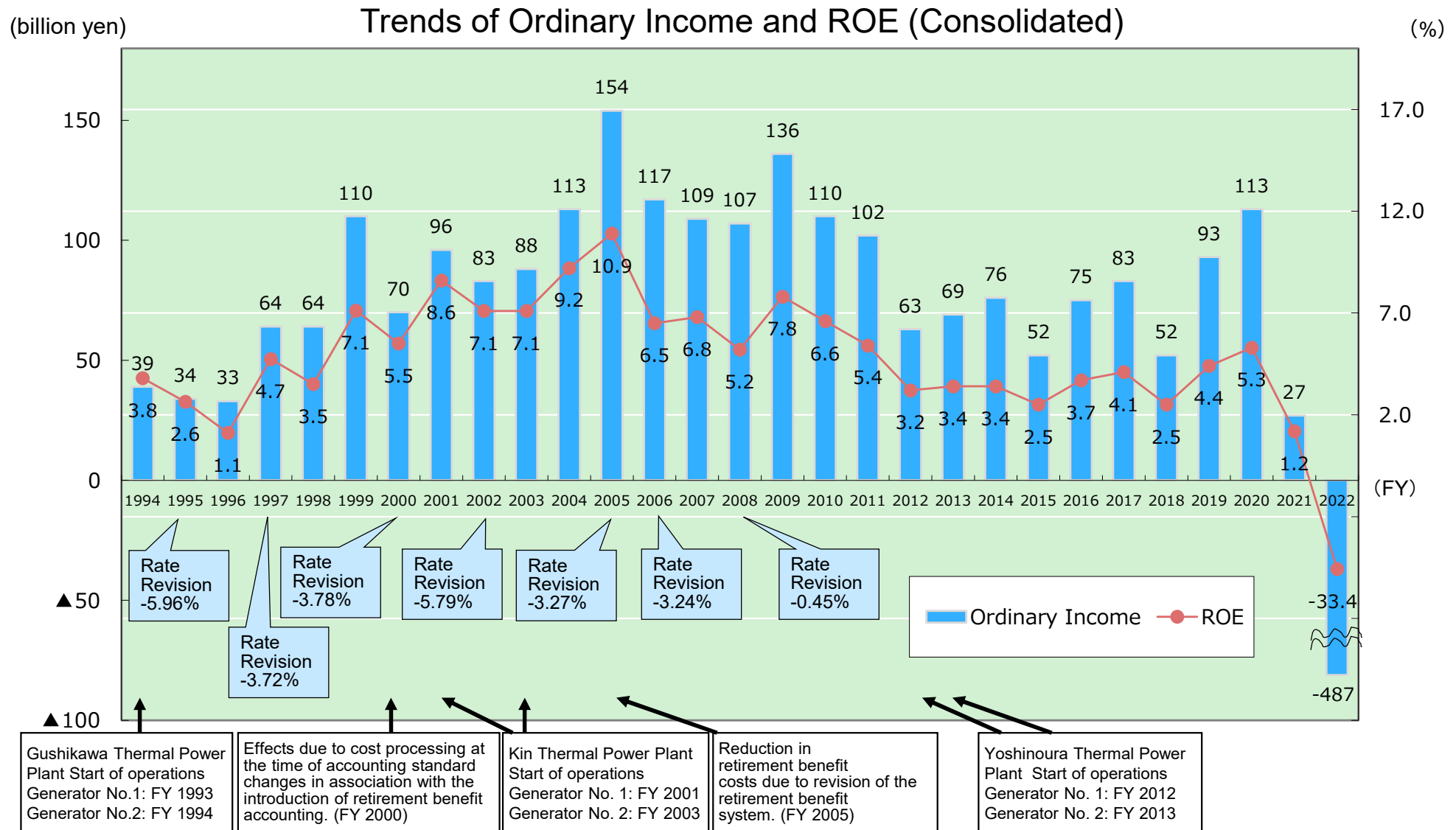
- The Company is advancing the removal of utility poles with the aim of enhancing disaster-prevention functions, ensuring safe and comfortable spaces for pedestrians and realizing pleasant urban landscapes.
- Based on the plan for the promotion of the removal of utility poles, the Company discussed at the “Council for Construction of Pole-Free System in Okinawa Block.” Along the roots agreed for construction of utility pole-free systems, the Company is promoting the plan in cooperation with parties concerned such as road administrators.
- As of the end of March 2023, the distance of approximately 123 km is free of utility poles, and in the future, an additional distance of about 189 km will be without utility poles.
- By obtaining comprehensive contracts for consulting, design and construction on behalf of road administrators, the OKIDEN Group is driving the effort to expand revenue on a groupwide basis while contributing to considerably shortening the period of construction of common-use cable tunnels.
- With the removal of utility poles in remote islands also attracting attention, the Company has the policy of establishing the OKIDEN Group’s system and actively cooperating with the effort.



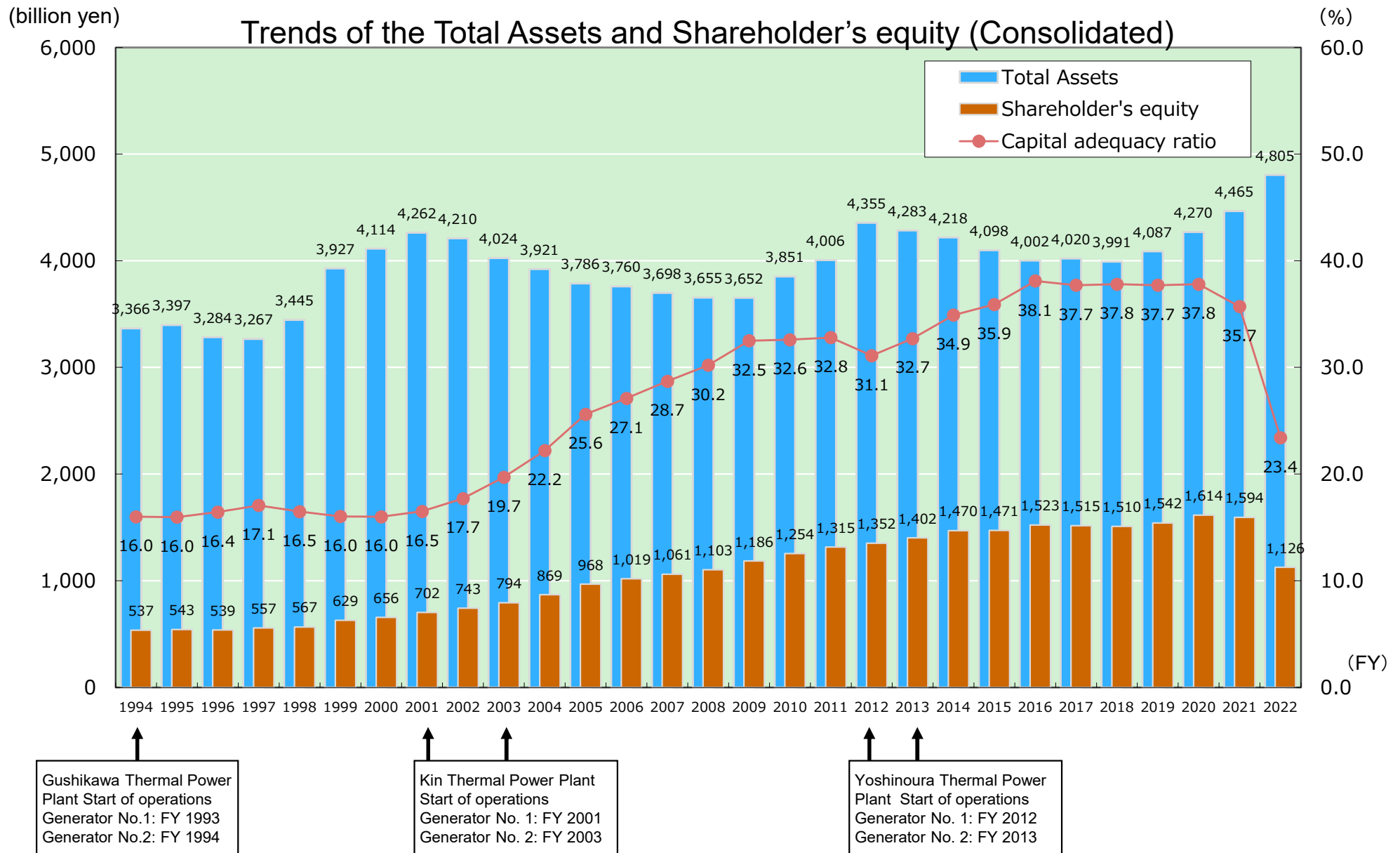
[Case example] The removal of utility poles in locations where there is no pedestrian road and no ground equipment can be installed on the road (Taketomicho, Taketomi Island)



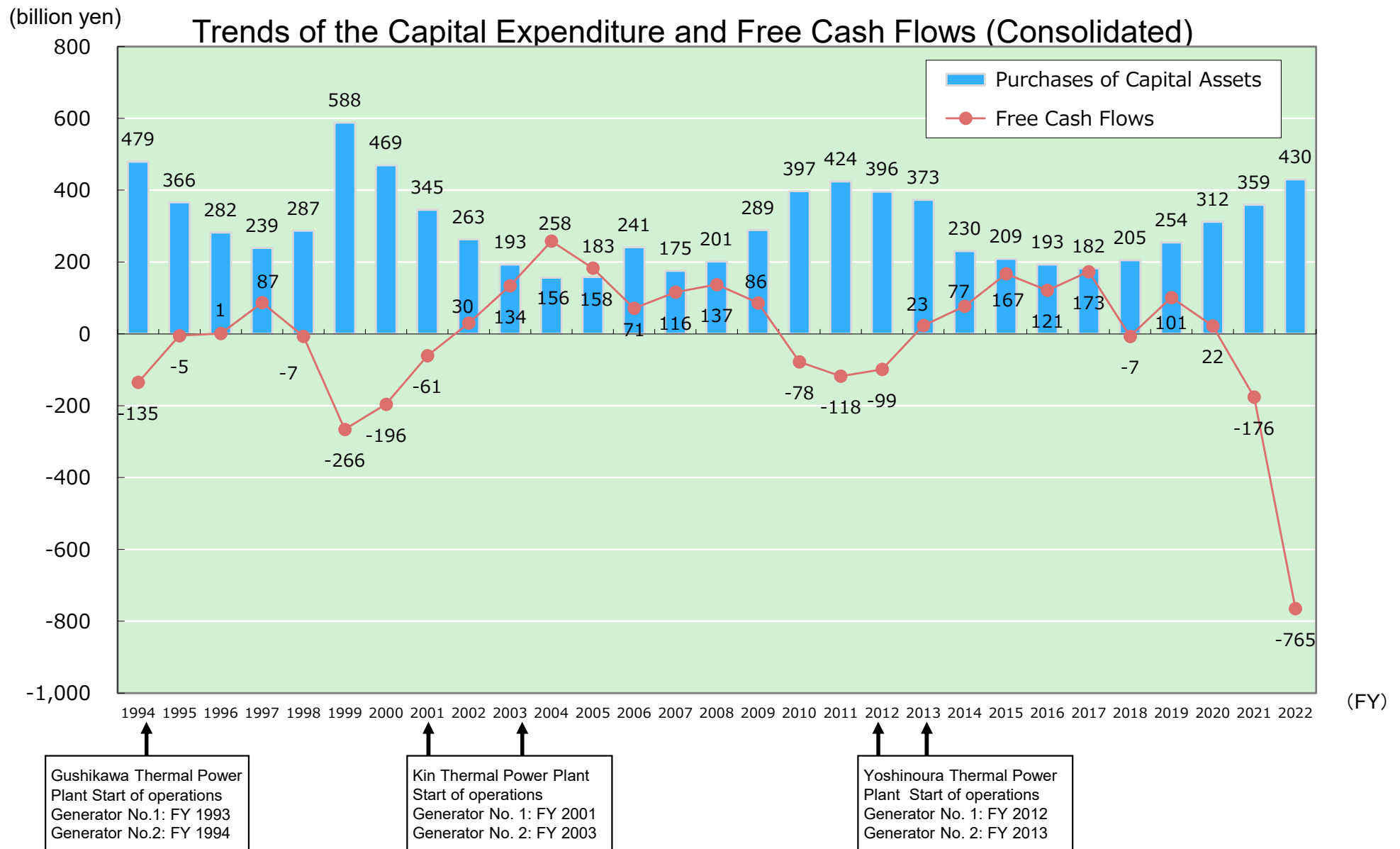
Reference 1: Trends of Ordinary Income and ROE



Reference 2: Trends of the Total Assets and Shareholder's equity



Reference 3: Trends of the Capital Expenditure and Free Cash Flows



* Based on "Income and Expenditure Statement (Non-consolidated)" on and before 1998, and "Statement of Cash Flow (Consolidated)" on and after 1999, respectively.

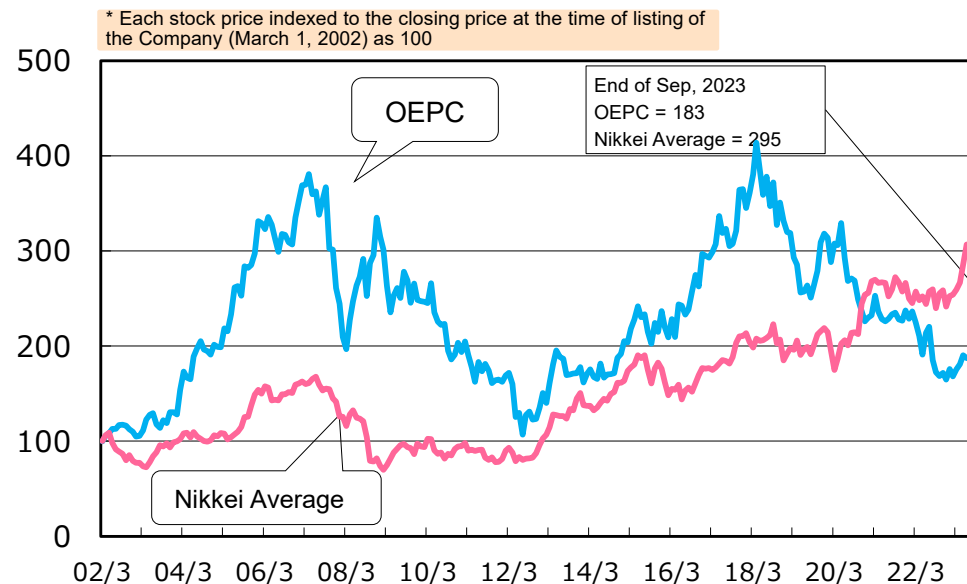
Reference 4: Change in Okinawa Electric Power's Stock Price

Recent stock price changes: from January 4, 2023 to September 29, 2023

	Okinawa Electric Power Company, Inc.	Nikkei Average
Stock price as of January 4, 2023 (closing price)	1,021 yen	25,717 yen
All-time high (closing price)	1,258 yen (+23.2%) as of Sep.15, 2023	33,753 yen (+31.2%) as of Jul. 3, 2023
All-time low (closing price)	1,006 yen (-1.5%) as of Mar. 2, 2023	25,717 yen (-) as of Jan. 4, 2023
Stock price as of September 29, 2023 (closing price)	1,124 yen (+10.1%)	31,858 yen (+23.9%)

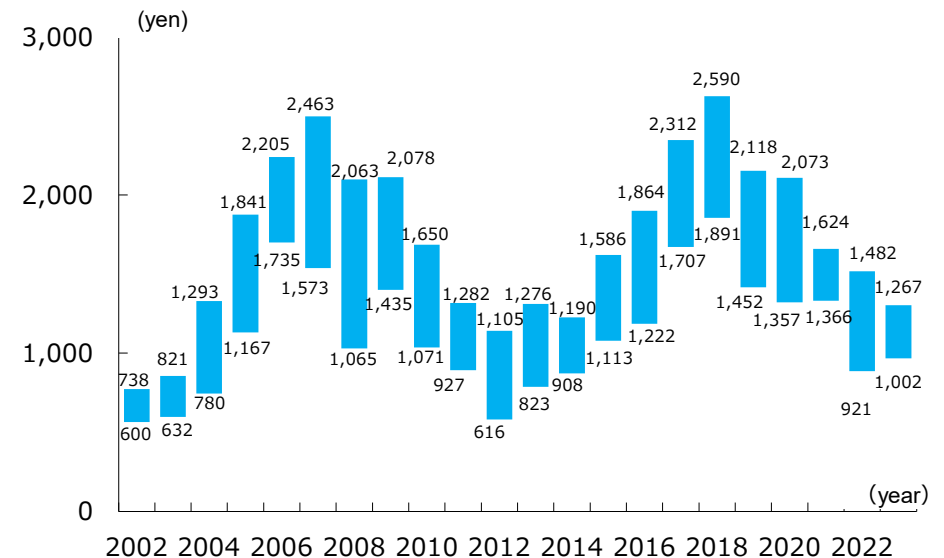
(Note) Figures in bracket indicate percentage change in the stock price from its closing price on January 4, 2023.

Changes in the Stock Price of the Company and the Nikkei Stock Average (month-end closing price)



(Note) The stock split was implemented seven times in the indicated period (Record date :End of March 2005, End of March 2007, End of May 2015 ,End of May 2016, End of May 2017, End of May 2018 and End of May 2020), and adjustment has been made for the figures before the end of May 2020.

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



Reference 5: Earnings Per Share and Payout Ratio

Earnings per Share and Payout Ratio

	FY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net income ^{*1}	Million yen	4,731	4,943	3,647	5,517	6,273	3,751	6,705	8,341	1,959	-45,457
Earnings per Share ^{*1}	yen	270.80	282.99	139.22	140.41	147.00	72.38	129.39	153.29	36.05	-836.98
(Post-adjustment after stock split) ^{*2}		(83.36)	(87.12)	(64.29)	(97.25)	(112.00)	(68.94)	(123.22)			
Dividend per Share	yen	60	60	60	60	60	60	60	60	60	0
(Post-adjustment after stock split) ^{*2}		(18)	(18)	(28)	(42)	(46)	(57)	(57)			
Payout Ratio ^{*1}	%	22.2	21.2	43.1	42.7	40.8	82.9	46.4	39.1	166.4	—
Dividend Yield	%	1.72	1.38	1.98	2.27	1.96	3.18	3.03	3.87	4.35	0
Price Book-value Ratio ^{*1}	x	0.44	0.52	0.54	0.68	0.84	0.65	0.67	0.52	0.47	0.52
Price Earning Ratio ^{*1}	x	12.9	15.4	21.8	18.8	20.8	26.0	15.3	10.1	38.2	-1.3

*1 Net Income, EPS, Payout Ratio, PBR, PER are on a consolidated basis

*2 Shown in the brackets are numbers adjusted for the effects of past stock splits.

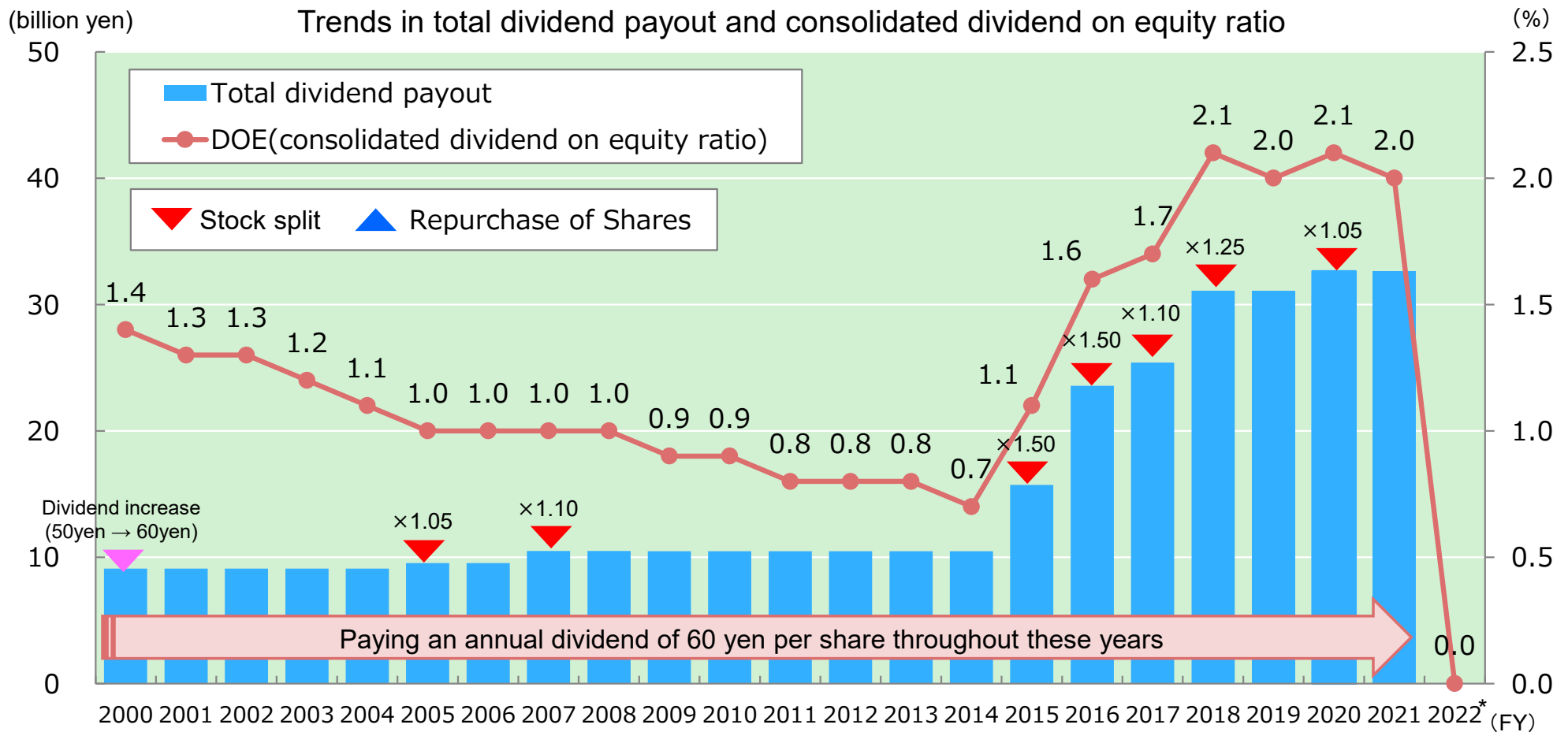
Dividends for the year ended March 2023 (FY2022)

- For the fiscal year ending March 2024, the Company plans to pay an interim dividend of 5 yen per share and a term-end dividend of 5 yen per share (an annual 10 yen per share).


(For details, please refer to "Effective Utilization of Management Results: Shareholder Return Policy" on p.15 of the "Management Overview.")

Reference 6: Policy for Returning Profits to Shareholders

- Our basic policy for profit distribution is to “distribute stable and continuous dividends,” and we will make efforts to maintain “a consolidated dividend on equity ratio (DOE) of over 2.0%”.



*Due to the extremely difficult income/expense situation, we decided not to suspend the interim and year-end dividend payments for FY2022.



Statements regarding future performance included in this document is based on calculations and predictions, and contain potential risks and uncertainties.

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】

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