

# **Management Topics**

\* Excerpt from "Management Overview" and "Management Reference Materials".

# November 2021



The Okinawa Electric Power Company, Inc.

## Financial Results for FY2021 2Q YTD (Year-on-Year Comparison)

(Unit: million yen, X)

	Co	onsolidated (	A)	Non	-consolidated	(A) / (B)		
	FY2020 2Q YTD (Results)	FY2021 2Q YTD (Results)	Rate of Change	FY2020 2Q YTD (Results)	FY2021 2Q YTD (Results)	Rate of Change	FY2020 2Q YTD (Results)	FY2021 2Q YTD (Results)
Sales	104,496	87,782	-	100,124	84,258	_	1.04	1.04
Operating income	10,924	5,155	-52.8	10,490	4,545	-56.7	1.04	1.13
Ordinary income	10,724	5,074	-52.7	10,372	4,672	-55.0	1.03	1.09
Net income	8,251 <sup>1</sup>	3,847 <sup>1</sup>	-53.4	8,115	3,761	-53.7	1.02	1.02

\*1 Net income attributable to owners of parent.

<sup>\*2</sup> Since the Company applies the "Accounting Standard for Revenue Recognition" (ASBJ Statement No. 29) from the beginning of FY 2021, Sales for FY2021 2Q YTD are based on amounts after the application of this accounting standard. As a result, the rate of change to Sales is not stated.

## [Revenue]

- Decrease in Electricity sales (Renewable Energy Power Promotion Surcharge) and Grant under Act on Purchase of Renewable Energy Sourced Electricity due to the application of the "Accounting Standard for Revenue Recognition" in Electric business.
- Increase in Sold power to other suppliers in Electric business.

## [Expenditure]

- Decrease in Levy under Act on Purchase of Renewable Energy Sourced Electricity and Purchased power costs due to the application of the "Accounting Standard for Revenue Recognition" in Electric business.
- Increase in Fuel costs in Electric business.

## **Annual Outlook Summary FY2021**

(Unit: million yen, X)

		Consolio	dated(A)			Non-conso	(A) / (B)			
		FY2021 (Forecasts)			E) (0000	FY2021 (	Forecasts)		E)/0000	51/0004
	FY2020 (Results)	Announced in Jul. 2021 (I)	Announced in Oct. 2021 (II)	Change (II) - (I)	(Results)	Announced in Jul. 2021 (I)	Announced in Oct. 2021 (II)	Change (II) - (I)	FY2020 (Results)	FY2021 (Forecasts)
Sales	190,520	168,500	174,600	+6,100	180,638	159,200	165,200	+6,000	1.05	1.06
Operating income	12,619	6,800	6,000	-800	10,097	5,100	4,100	-1,000	1.25	1.46
Ordinary income	11,335	6,500	5,700	-800	8,939	5,000	4,000	-1,000	1.27	1.43
Net income	8,341	4,700*	4,200 <sup>*</sup>	-500	6,953	4,000	3,300	-700	1.20	1.27

\* Net income attributable to owners of parent.

## [ Comparison with previous forecasts (Jul.2021) ]

## [Revenue]

- Increase in Electricity sales volume and income from the Fuel cost adjustment system in Electric business.
- Increase in Sold power to other suppliers in Electric business.

## [Expenditure]

Increase in Fuel costs and Purchased power costs in Electric business.

The impact due to spread of the novel coronavirus has been considered in this forecast. (Electricity sales volume : -124 million kWh)

## **Current Status and Future Forecast of Okinawa's Economy**

## ■ The current state

1

There are staying to be more difficult in the prefectural economy by the impacts of the novel coronavirus.

Tudiesteus							FY2020	)						FY2021						
Indicators	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	-16.1	-6.9	2.5	-2.7	-8.1	-11.8	0.8	0.8	-0.3	-1.4	-0.6	2.5	-3.5	15.1	8.9	-9.2	2.0	-1.4	2.9	3.1
No. of new car sold	-39.3	-54.0	-32.7	-18.7	-14.9	-11.4	23.1	3.3	-0.2	4.9	-15.6	1.0	-16.0	-9.5	30.4	-11.7	-9.1	-10.5	-38.7	-11.6
No. of incoming tourists	-90.9	-94.7	-83.4	-71.2	-80.1	-71.9	-59.9	-52.3	-56.8	-80.2	-79.9	-24.5	-72.7	239.7	343.6	13.0	-9.7	42.1	-10.0	40.2
Value of public works contracts	37.2	-9.5	44.5	-14.1	0.3	0.7	0.7	-12.0	-21.9	7.9	5.8	-4.5	-0.1	21.3	47.3	-27.9	-0.3	17.2	64.3	17.7
New residential Construction starts	-2.1	44.1	-44.2	-36.9	-41.0	-63.4	-20.9	-23.7	-35.4	19.1	-15.0	-33.2	-27.4	-19.1	-27.0	-0.8	0.6	-34.9	18.8	-13.4
Total unemployment rate	3.4	3.4	3.6	3.2	3.5	3.7	4.0	3.0	3.4	3.6	3.7	4.4	3.6	3.7	3.6	4.0	4.3	3.7	3.6	3.8
Job Opening Ratio	1.03	0.87	0.81	0.78	0.76	0.74	0.74	0.75	0.74	0.77	0.75	0.76	0.79	0.78	0.83	0.88	0.84	0.79	0.80	0.76

### Trends in Main Economic Indicators of Okinawa Prefecture

(Unit: %, X)

Note 1: The figures for 'Sales by large-scale retailers' are calculated on an all-store base. The values in September 2021 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

Although the situation will remain severe, the prefectural economy is expected to pick up gradually as the impact of the novel coronavirus eases.

## Number of incoming tourists (2/3)

Although the number of incoming tourists in the first half of FY2021 exceeded that of the previous year, the situation remains difficult compared to that before the spread of the novel coronavirus.

### [Incoming tourists]

FY 2021 April to September : 1,360 thousand people (Growth rate of 40.2% year-on-year) % Growth rate of -74.5% vs FY2019



Source: "Tourism Guidebook" and "Summary Statistics on Incoming Tourists to Okinawa" published by Okinawa Prefectural Government

## **Electric Energy** Demand (Results) (1/2)



(Million kWh,%)

#### Monthly Area demand at Transmission End (Preliminary report)

	Apr	May	Jun	Jul	Aug	Sep	1st Half		
FY2021	563	715	753	862	855	831	4,579		
FY2020	532	628	800	892	886	771	4,508		
Rate of Change	+5.9	+13.8	-5.8	-3.4	-3.5	+7.8	+1.6		

Average temperature

(°C) Aug Sep Apr May Jun Jul Half FY2021 21.7 25.8 27.1 28.8 28.7 28.8 26.8 19.8 24.8 28.1 29.3 29.4 27.7 26.5 FY2020 Climatological 29.1 24.2 27.2 29.0 27.9 26.5 21.5 Normals

\* Climatological Normals is observed data from 1991 to 2020.

## **Electric Energy Demand (Results) (2/2)**

Electricity Sale	s Volume	(Unit: million kWh_%)					
	FY2020 2Q YTD (Results)	FY2021 2Q YTD (Results)	Change	Rate of Change			
Lighting	1,656	1,579	-77	-4.6			
Power	2,243	2,244	+1	+0.1			
Total	3,899	3,823	-76	-1.9			

Power Generated and Received

		FY2020	2Q YTD	FY2021	2Q YTD			
		Electricity generated Com- position ratio Electricity generated		Electricity generated	Com- position ratio	Change	Rate of change	
	Coal	1,756	42.2%	1,785	43.2%	+29	+1.7%	
õ	Oil	584	14.1%	601	14.6%	+17	+2.9%	
PC	LNG	852	20.5%	902	21.8%	+50	+5.9%	
	Total	3,192	76.8%	3,288	79.6%	+96	+3.0%	
Oth	ner	964	23.2%	841	20.4%	-123	-12.8%	
	Total	4,156	100.0%	4,129	100.0%	-27	-0.6%	

(Unit: million kWh)

## <Lighting>

The demand for Lighting decreased compared with Year-on-Year due to the impact of customer switching to other suppliers and the lower temperature in summer compared with previous year.

### <Power >

The demand for Power remained almost unchanged from the previous year due to weakened impact of the novel coronavirus, despite the impact of customer switching to other suppliers and the lower temperature.

## <Power Generated and Received>

- Power generated and received was 4,129 million kWh, down 0.6%.\*
- Electricity generated of OEPC's Coal-fired thermal power was up 1.7%.\*
- Electricity generated of OEPC's Oil-fired thermal power was up 2.9%.\*
- Electricity generated of OEPC's LNG-fired thermal power was up 5.9%.\*

\*Comparison with the same period of the previous year.

 $(I \text{ lnit} \cdot \text{million } k \text{ Wh} \ \%)$ 

## Electricity sales volume (FY2021 Outlook)

	FY2020 Results	FY2021 Forecasts	YoY Rate of Change		
Lighting	2,983	2,882	-3.4		
Power	4,154	4,119	-0.8		
Total	7,137	7,001	-1.9		

## Electricity sales volume (Long-term Outlook)

				(Unit	t:million kWh, %)
	FY2009 Results	FY2019 Results	FY2030 Forecasts	2009-2019 Annual average growth rate	2019-2030 Annual average growth rate
Lighting	2,916	2,946	2,743	0.1 ( 0.1*)	-0.6 (-0.5*)
Power	4,562	4,370	3,941	-0.4 (-0.5*)	-0.9 (-0.7*)
Total	7,478	7,316	6,683	-0.2 (-0.3*)	-0.8 (-0.7*)

\* Adjusted for the influence of temperature and leap year.

### (Lighting)

Demand is expected to be lower year-on-year.

- ✓ Impact of customers switching to other suppliers.
- Reactionary decrease due to high temperature compared with normal year.
- (YoY growth:-3.4%)

### (Power)

Demand is expected to be lower year-on-year.

- ✓ Impact of customers switching to other suppliers.
- ✓ Reactionary decrease due to high temperature compared with normal year.
- ✓ Reactionary increase due to weakened impact of the novel coronavirus compared with previous year. (Factor for increase) (YoY growth:-0.8%)

### (Total)

As explained above, the total electricity sales volume is expected to be 7,001 million kWh, short of the previous year. (YoY growth:-1.9%)

### (Lighting)

Demand is expected to decrease.

- Impact of customers switching to other suppliers.
- ✓ Increased demand resulting from growth in the number of population and households. (Factor for increase) (Annual average growth:-0.5%\*)

### (Power)

Demand is expected to decrease.

- ✓ Impact of customers switching to other suppliers.
- On the Assumption that the novel coronavirus infection converges, increase in commercial and accommodation facilities and food manufacturers due to growth in the number of population and tourists. (Factor for increase)
   (Annual average growth:-0.7%\*)

(Total)

As explained above, the total electricity sales volume is expected to be 6,683 million kWh. (Annual average growth:-0.7%\*)

## **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 10.6% in the total of all voltages (as of July 2021).
- 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

## Mid-Term Management Plan (2019-2021)

### What we aim to be

The OEPC Group Vision sets out our vision for the future, pledging to "design and propose new value through services to support both corporate and individual customers" through our core business as a total energy supplier and to "become a unified business group that grows and develops hand-in-hand with the community."



\*2. Exclude the amount of wholesale supplies provided to former general gas utilities \*3. Sales other than electricity business \*1. Cumulative total from FY2016

## **Initiatives to Achieve Mid-Term Management Targets**

■ We will implement "expand group's revenue", "thorough cost reduction and operational efficiency improvement", and "further strengthening the stable supply of energies" for realizing "what we aim to be" and achieving mid-term management objectives.

### Expanding the top line

#### Measures to expand electricity sales and prevent switching to others

- ✓ Promotion of all-electrification and halfelectrification
- ✓ Introducing the member site and point services
- ✓ Strengthen marketing to customers who have switched
- ✓ <u>Strengthening value-added services for</u> <u>corporations</u>

## Measures to expand gas supply and ESP businesses

- ✓ Developing energy supply areas
- ✓ <u>Development of demand along the route by</u> <u>laying gas pipelines</u>
- ✓ Bundled sales of electricity and gas

#### Initiatives for growth sectors

- ✓ <u>Deployment of renewable energy business</u> outside the region
- ✓ Promotion of initiatives for the real estate sector

### Expanded use of LNG

- Introduction of dual fuel engine in remote island
- ✓ <u>Construction of Makiminato Gas engine</u> <u>Power Plant</u>
- ✓ Developing LNG bunkering business

#### Utilization of distributed power sources

- <u>Acquisition of small-scale system microgrid</u> <u>technology</u>
- ✓ Developing post-FIT-related services
- ✓ Developing "KarE-roof" Service (PV-TPO)○

Aggressive efficiency improvement

#### Aggressive efficiency improvement

- ✓ <u>Reviewing facility patrols and inspection cycles</u>
- <u>Fundamentally reviewing branch and sales office</u> <u>operations</u> (substitution, consolidation, outsourcing and
  - abolition)
- ✓ Consideration about the medium- to long-term composition of power supply

#### Promoting digital transformation

- ✓ Development of healthcare business
- <u>Development of Mimamori (caring family monitor)</u>
   <u>Service</u>
- ✓ Use of digital technologies at power plants
- <u>Realizing work styles that do not choose place and means</u>
- Promoting digitization and automation of operations
- <u>Developing cyber security and system infrastructure</u>, utilizing data, and others

- \* Underline: Execution phase
- \* O:Measures that have made progress since May 2021

## Measures to expand electricity sales and prevent switching to others

Amid the ongoing shift away of demand due to the full liberalization of the retail electricity market, the Company will endeavor to increase sales of electricity and prevent switching to others in order to win out in the competition through the continued selection by customers.

#### ✓ Approach for the promotion and growth in the household sector

- Started of the member site "OEPC more E."
- Promotion of electrification (all-electrification and halfelectrification).
- Strengthening of electrification proposal activities in cooperation with external partners.
- Promotion of electrification utilizing "Rikka Denka Lease", etc.
- Maintenance and expansion of market share through prevention of defection and recovery marketing.
- ✓ Approach for sales promotion in the corporate sector
- Offering customers comprehensive proposals for electrification (air-conditioning systems, kitchens, and water heaters) appropriate for their power usage.
- Strengthening of cooperation with sub-users including manufacturers, contractors, design offices, etc.
- Utilization of public subsidy system, etc.

### ✓ Initiatives for diversifying retail electricity business

- Okinawa New Energy Development Company, Inc. obtained a retail license.
- The entire Group will work to expand customer choice and sales by providing flexible services that meet customer needs, such as the PV-TPO service provided by the company.

#### ✓ Deployment of "Uchina CO₂ free menu"

- Deploying an electricity rate menu with the value of CO<sub>2</sub> 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.



## Measures to expand gas supply and ESP businesses

The Company will promote the gas supply business and strengthen its efforts in the ESP business as a "Comprehensive energy service provider" to meet diversifying customer needs.

#### ✓ <u>Development of demand along the route by laying gas</u> <u>pipelines</u>

- Gas pipeline will be laid from the Yoshinoura Thermal Power Plant to the head office of the Okinawa Electric Power Company in Urasoe City through the Nishi-Futenma area, where heat demand is expected due to the development of the former military base sites.
- The Company will develop the pipeline network, and acquire demand in line with customer's change of fuels and urban development.

#### [Equipment specifications]

Pressure (high pressure specification), diameter (300 mm), conduit extension (about 14 km)



 We will develop the energy supply business for areas mainly from the energy center that will be built on the premises of the OEPC. For example, we are looking to supplying to buildings on the premises, and supplying to multipurpose building under construction nearby. (Scheduled supply launch date : Spring 2022)





\* Source: The material of the Okinawa Revitalization Council Chair and Specialized Committee Meeting (third session) presented on the Cabinet Office website

## **Utilization of distributed power sources (2/3)**

### ✓ Developing "KarE-roof" Service (PV-TPO)

- In April 2021, the Company started the "KarE-roof,"

   a service that supplies electricity by installing photovoltaic power generation facilities and storage batteries free of charge
   in ordinary houses (PV-TPO business).
- The PV-TPO business is one of the concrete measures for the realization of "Net zero CO<sub>2</sub> emission by 2050," which is one of the directions toward the realization of "Mainstreaming of renewable energy."



## **Utilization of distributed power sources (3/3)**

### Deployment of the "KarE-roof" business scheme for corporations

- The Company has started services for business establishments by applying the "KarE-roof" business scheme for residential houses.
- As the first case, the company decided to introduce this service to "Urasoe Municipal Minatogawa Junior High School". (It scheduled to start in 2021.)
- In order to meet the needs of municipalities and the private sector for decarbonization and contribution to SDGs, the group will work together to develop services.



# Initiatives for growth sectors (2/2)

We will strive to develop lifestyle support businesses that utilize cutting-edge technologies to realize a safe and secure society.

### ✓ Development of Mimamori (caring family monitor) Service

- We established "Okiden C plus C Corporation" to commercialize Mimamori Service which would utilize cutting-edge technology (May 2021).
- Installing wireless Wi-Fi devices incorporating AI detection functionality. Utilizing sensing technology that can analyze and evaluate the reflected Wi-Fi signals to understand people's indoor and sleeping respiratory activity.
- We concluded agreements with Okinawa City, Ginowan City, and Tomigusuku City on the "Joint Demonstration Test on Mimamori of the Elderly " (August 2021), and started demonstration tests on Mimamori Service for 24 hours a day and 365 days a year (October 2021).
- In the future, the Company will strive to resolve regional issues, including notification of children's returning home and looking-after-the-house (security) service during absence, as well as to expand the top line.



# **Net-Zero CO2** Emissions Roadmap

- In December 2020, we declared that we would achieve net zero CO2 emissions in 2050, and formulated a roadmap to serve as a long-term guideline.
- In July this year, we newly established the Carbon Neutrality Division and the Renewable Energy Business Group to strengthen the system.





Electrification

side(transportation, industry, business, household), implement necessary policies, and gain financial support.

<sup>\*\* 1</sup> Service in which PV and storage batteries are installed free of charge and the electricity generated is sold to customers. Both PV-TPO and large wind power are scheduled to be built and managed by our affiliated companies.

<sup>%2</sup> Virtual Power Plant (VPP) refers to the collective control and management of a number of small-scale renewable energy power plants, etc., to make them function as a single power plant.

<sup>#3</sup> Demand Response (DR), according to the Ministry of Economy, Trade and Industry (METI), is defined as "an act of changing the consumption pattern of electricity for consumers to curb their use of electricity in response to the setting of electricity prices or the payment of incentives when wholesale market prices rise or when grid reliability declines."

<sup>3/2</sup> We aim to Net-Zero CO2 Emissions by combining renewable energy power sources with thermal power sources that incorporate CO2-free fuels and CO2 offset technologies.

<sup>\*</sup>This requires the establishment of necessary technologies along with economic feasibility. We will earnestly work to achieve these conditions. Further, policy and financial support are necessary for the development and introduction of advanced technologies.

## Efforts to base on TCFD Recommendations (1/2)

- In September 2019, Expressing to support the Recommendations adopted by the Task Force on Climate-related Financial Disclosures(TCFD).
- Based on the TCFD recommendations, we have disclosed "Governance" and "Climate Change Risks and Opportunities" in the FY2021 Integrated Report.

### [Governance]

- Recognizing response to climate change as an important management issue, we established the "Carbon Neutrality Promotion Committee" chaired by the President in July 2021.
- 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>



## [Climate Change Risks and Opportunities]

Climate change risks and opportunities are summarized by referring to 2°C and 4°C rise cases as climate change scenarios.



Change Monitoring Report 2021" (March 2021)

## Efforts to base on TCFD Recommendations (2/2)

- Regarding the "Risks and opportunities related to climate change," classify individual items into short- to medium- or long-term manifestation timing and summarize them.
- Continue to enhance scenario analysis.

					Manifestation timing
	Classification	Nº	Contents	Category	Short- to medium-term
	Policies/laws and regulations	1	Expanding renewable energy and changing the role of thermal power plants (Decline in competitiveness of coal-fired thermal power generation $\Leftrightarrow$ Expansion of renewable energy)	Risk Opportunity	
	Transition to decarbonization policies Increasing demand for CO2 emission reduction	2	Introduction of carbon pricing, etc.	Risk	
Transition		3	Further use of LNG thermal power (Effect of conversion from coal to LNG on fuel cost ⇔ Expansion of LNG utilization in other than electricitybusiness)	Risk Opportunity	
	Technology Progress in low-carbon and decarbonization technologies	4	Reduction in the price of renewable energy facilities due to technological progress (Increase in system stabilization cost $rightarrow Reduction of renewable energy investment cost)$	Risk Opportunity	
	Market/services Changes in customer preferences	5	Advances in electrification and EVs	Opportunity	
		6	Changes in customer preferences (Increasing customer needs for environmentally conscious menus)	Opportunity	
	Reputation Changes in corporate image	7	Social evaluation of responses to climate change	Risk	
	Acute Intensification of abnormal weather	8	Damage due to intensification of typhoons (Increased recoverycosts ⇔ Long-accumulated energy security)	Risk Opportunity	
sics	Chronic Changes in weather patterns	9	Influence of rising seawater temperature (Lower thermal efficiency) and drought (Restriction of weter intake) on operations	Risk	
Phy		10	Influence of sea level rise (Decline in electricity demand due to loss of tourism resources)	Risk	
		11	Responding to the intensification of natural disasters (Supplychain destabilization)	Risk	

- Summary of risks and opportunities related to climate change -

\* Risks are shown in red, and opportunities in blue. For the manifestation timing, the short- to medium-term is until 2030, and the long-term until 2050.

\* The contents of this table summarize events that the Company can think of in the midst of many uncertainties, and do not indicate future outlook.

## Selecting the new market segment "Prime Market"

Selecting "Prime Market" for the new market segmentation of the Tokyo Stock Exchange scheduled for transition in April 2022.

