

# Corporate Groups Providing Japan's Best Energy Services: Ultimately Ask the Kyuden Group for Energy!

(Important points in the Kyushu Electric Power Group Medium-term Management Policy and the Outline of the FY2015 Management Plan)

## ● Introduction

Up to now, we have continued to support the lives and economic activities of customers in the Kyushu region and grow together with the regional community by **delivering low-priced, high-quality energy in a stable manner**.

Recently, we formulated our medium-term management policy (FY2013 to FY2015) in April 2013 amidst the severe financial situation and supply-demand relations caused by suspension of operation of all our nuclear power stations, we have worked to achieve greater managerial efficiency, resume operation of the power stations, take measures to cope with such supply-demand relations, and gain greater public confidence.

On the other hand, looking at the external business environment, we are going to enter a **period of intense competition** in the years to come as **the full liberalization of the retail market due to the electric power system reforms is scheduled for 2016**.

Amidst this competitive environment, in order to achieve **our mission to "Enlighten Our Future"** and continue to be trusted and chosen by customers as an energy supplier, we need to accelerate our reforms on a group-wide basis. We therefore recently formulated the new **Kyushu Electric Power Group Medium-term Management Policy**, which covers the five years from FY2015 to FY2019.

This policy consists of a **vision of what we position we should be in 2030** and the **three main strategies** to attain the vision. It also shows the **priority measures we should take during the five-year period (from FY2015 to FY2019)**.

In addition, based on this policy, specific action plans are summarized in the **Outline of the Management Plan**.

We aim to achieve sustained growth and provide all stakeholders with enhanced value by pushing forward with these initiatives on a group-wide basis.

We ask all stakeholders to give their continued support and cooperation to our Group.

### Kyushu Electric Power's mission

**Make a brighter future for generations to come.**

"Comfortable and environmentally friendly"  
May such days be inherited by our children in future generations.

That is the intention of our heart.

We will continue to take the following 4 approaches, so that our intentions can be accomplished.

1. Provide energy that is friendly to the earth without fail or trouble
2. Maintaining the understanding of our customers
3. Thinking and acting with Kyushu, looking ahead to Asia and the world
4. Finding answers through discussions and taking action

## ● Kyushu Electric Power Group Medium-term Management Policy

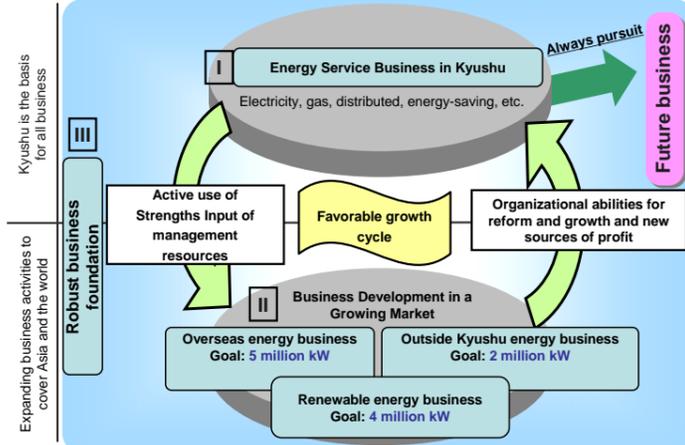
### Vision for 2030

Corporate Groups Providing Japan's Best Energy Services:  
Ultimately Ask the Kyuden Group for Energy!

### Three pillars of strategy

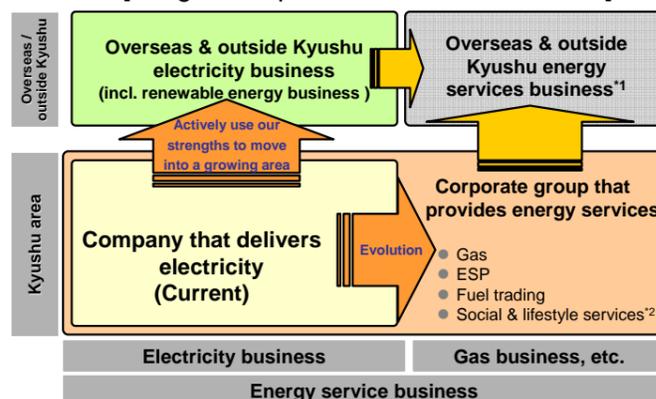
- I. Grow into a corporate group that provides energy services in the Kyushu region where it operates as a company that delivers electricity and grows together with the local community and society by meeting the diverse needs of customers
- II. Make the most of Kyuden Group strengths to achieve sustained growth through overseas energy, outside-Kyushu energy, and renewable energy businesses
- III. Reinforce the organizational strength required for strategy implementation to establish a robust business foundation

### [Direction of Future Strategy]



[Reference: Current generating power, etc.]  
Overseas power generation (equity ownership in power output): 1.5 million kW  
Renewable energy: 1.5 million kW

### [Image of Expansion of Business Areas]



\*1: In overseas and outside-Kyushu markets, for the immediate future, we will focus on the electricity business where we can display our strength in high-level maintenance and operation technology but will also enter energy service business starting from services that we can provide.

\*2: Relationships with energy service business and projected synergistic effects will be taken into consideration.

## ● Outline of the FY2015 Management Plan

### Pillar of strategy I

Meeting the diverse energy needs of customers in the Kyushu region

### (1) Gaining more Kyuden fans through provision of diverse energy services

- We will not only make optimal system proposals for energy supply equipment that customers use but also provide **one-stop** services in which we undertake design, construction, operation, and maintenance on behalf of customers. (This energy service business is designed for corporate clients.)
- We are considering making customers' power consumption visible at our website's "Energy-saving, Comfortable Life" page starting from April 2016. Data on power consumption will be obtainable every 30 minutes through **smart meters**, which have been installed since November 2009. (This service is designed for ordinary households.)
- In addition to the wholesaling of **gas supplies** in the past, we will **enter the gas retail business in earnest** as part of our energy services as the retail market is fully liberalized. In order to meet customer needs through the optimal energy services, we will consider gas retail business systems and other requirements we should meet to enter the business.
- In order to continue to be trusted and chosen by customers as an energy supplier even after the full liberalization of the electricity retail market, we will work to **improve our services** mainly by pushing business reforms based on the **opinions of customers**.

### (2) Enhancing the competitiveness of power sources and fuel procurement abilities

- In order to secure competitive and stable power sources with the full liberalization of the retail market in mind, we will work to develop **System No. 3 x 4 for the Shin-Oita Power Station** and a **Unit 2 for the Matsuura Power Station**.
- Firmly determined **not to cause accidents like the one that occurred at the Fukushima Daiichi Nuclear Power Station**, we will **continue our independent initiatives** to ensure further safety of **nuclear power generation**.
- In terms of fuel procurement, we will step up our efforts to address the entire fuel value chain such as introduction of **fuel trading** and promotion of **investments to acquire upstream interests**, thus ensuring more flexible fuel procurement and enhancing competitiveness.



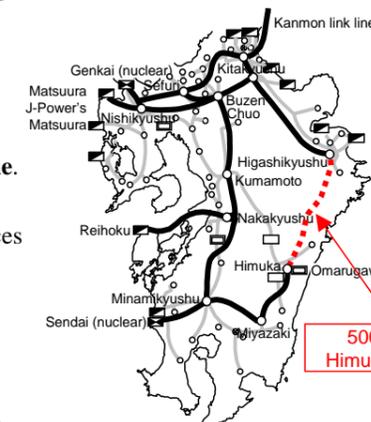
Conceptual drawing of the Matsuura Power Station Unit 2 at its completion

[Outline of the Matsuura Power Station Unit 2 plan]

Location	Matsuura City, Nagasaki Prefecture
Generating power	1 million kW
Power generation method	Pulverized coal-burning ultra-super critical (USC) thermal power generation
Fuel	Coal
Start of operation	June 2020

### (3) Improving and making effective use of power transmission and distribution networks

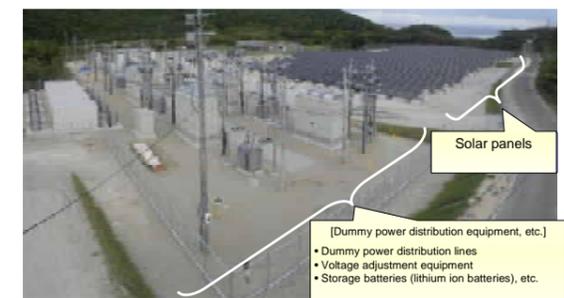
- We are working to construct mission-critical systems so that power supply is not cut off to wide areas even during replacement of old equipment scheduled for the future. Currently, we are building a **500,000-volt Himuka trunk line**.
- In the future, in order to ensure stable power supply, we will continue to take measures to connect renewable energy sources smoothly. As part of these initiatives, we will carry out a government-subsidized **test project to improve the supply-demand balance for large-capacity electricity storage systems**.
- In order to ensure that high-quality power is supplied in a reliable manner even if sunlight and other types of renewable energy whose output is unstable comes into wide use, we will conduct tests on both the supplier and user sides, obtain data that meet the conditions of our equipment and the characteristics of local markets, and examine such data, thus solving issues to be addressed in **building smart grids** in the future.
- In order to improve customer service and achieve operational sophistication, we aim to introduce **about eight million smart meters** for all customers in Kyushu by FY2023 (About 830,000 units had been installed by the end of FY2014).



[Construction of the 500,000-volt Himuka trunk line]

Length	About 124 km
Number of steel towers	291
Start of construction	November 2014
Start of operation	June 2019

[Legend]  
 — : 500,000-volt transmission line  
 — : 220,000-volt transmission line  
 ■ : 500,000-volt Himuka trunk line being built in this project



Smart grid test grounds (Satsumasendai City)

## Pillar of strategy II

Developing in growth markets to make the most of the Kyuden Group strengths

### (1) Strengthening the overseas electricity business [2030 goal for equity ownership in electricity output: 5 million kW (3.5 million kW more than the current level)]

- We will make the most of the technology and know-how we have accumulated in Japan and abroad to develop overseas electricity business focusing on **IPP projects** mainly in **Asia**, whose market has high growth potential.
- We will make effective use of the geothermal power generation technology we have gained through geothermal development in Japan to steadily implement the **Sarulla geothermal IPP project** in Indonesia where construction work is currently under way (generating power: 320,000 kW [three systems]; the generators will start operation in 2016 or thereafter as soon as they are online).
- Along with IPP projects, we will actively provide **consulting services in overseas** markets as an important pillar of our overseas electricity business.



Location of the Sarulla geothermal IPP project in Indonesia



View from a production test site

### (2) Developing electricity business outside Kyushu [2030 goal for external power source development: 2 million kW (2 million kW more than the current level)]

- In addition to power transmission from inside Kyushu, we will work to develop power sources outside the region mainly through **alliances** with other companies.
- We recently agreed with **Idemitsu Kosan Co., Ltd.** and **Tokyo Gas Co., Ltd.** to form an **alliance** to consider developing coal-burning thermal power stations jointly. To that end, the three companies established the **Chiba-Sodegaura Energy Co., Ltd.** on May 1 of this year. Taking into consideration the impending full liberalization of the electricity retail market, the three partner companies will make the best use of the strength of their respective value chains and other assets to achieve safer, lower-priced, and more stable power supply, thus meeting the demands and expectations of society as energy companies. They will also aim at making the utmost effort to take appropriate environmental measures and contribute to local economies.

[Outline of the power station plan]

Planned site	3-1, Nakasode, Sodegaura-shi, Chiba-ken (The site is owned by Idemitsu Kosan)
Power generation method	Ultra-super critical (USC) power generation
Scale of power generation	Maximum: 2 million kW (1 million kW x two units)
Fuel	Coal (Burning a mixture of biomass and coal is also under consideration)
Start of operation	Scheduled for the mid-2020s

### (3) Expanding renewable energy business [2030 development goal: 4 million kW (2.5 million kW more than the current level\*)]

\* Breakdown: +800,000 kW for geothermal power; +200,000 kW for hydroelectric power; +1.1 million kW for wind power, and +400,000 kW for other in Japan and abroad

- We will actively develop the **renewable energy business**, a globally growing market in Japan and abroad while taking into account possibilities for its stable supply and its environmental performance. We will make the most of the technology and know-how we have accumulated in Japan and abroad in the past to focus on **geothermal/hydroelectric** power generation. But we will also work on **ocean wind power** generation which has growth potential while taking into account the advancement of technological development.
- In July 2014, we founded **Kyuden Mirai Energy K.K.**, a new company that develops renewable energy sources in general to meet a wide range of needs of local communities through a **single channel**. As a responsible business operator in the local community where it operates, Kyuden Mirai Energy is working with us to implement power generation projects making the most of integrated technology and know-how that cover all processes from investigations and planning for various renewable energy sources construction to operation and maintenance and to provide customers with related services.
- We have constructed the **Sugawara Binary Cycle Power Station** (5,000 kW) making effective use of the geothermal wells owned by Kokonoe Town of Oita Prefecture and aim at starting its operation in June 2015. This is Japan's first geothermal power development project that involves collaboration between a local government and a private enterprise (Kyuden Mirai Energy).
- In order to develop new geothermal power stations, we plan to dig wells to assess the geothermal resources available in the northern part of Mt. Hiji in Oita Prefecture.
- Kyuden Mirai Energy is working with other companies to study and test **ocean wind power** generation, a project outsourced by the New Energy and Industrial Technology Development Organization (NEDO).



A scene from a well production test at the Sugawara Binary Cycle Power Station



Ocean wind power generation (illustration)  
Source: Website of the New Energy and Industrial Technology Development Organization (NEDO)

## Pillar of strategy III

Establishing a robust business foundation

### (1) Developing innovative human resources who take on new challenges

- Through initiatives aimed at **promoting active communication, cultivating a sense of unity in the workplace**, and so forth, we will create an awareness of the need to take on new challenges and develop innovative human resources who will lead business improvements and reforms.

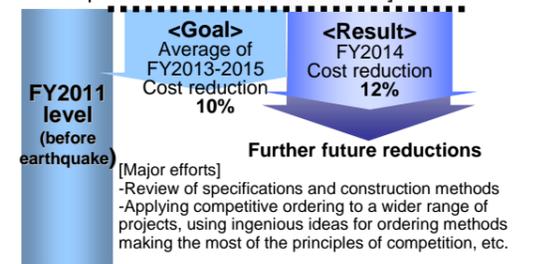
### (2) Creating organizations that respond swiftly to changes

- With the full liberalization of the electricity retail market and other factors in mind, we will work to establish systems to enhance competitiveness and give shape to group management functions as we shift from a company focusing on the electrical power business to a corporate **group that provides energy services**.

### (3) Bolstering the financial foundation of the Kyuden Group as a whole and enhancing its competitive power

- The Kyuden Group will make united, all-out efforts to achieve **greater efficiency** in all its business activities and enhance its competitiveness, thus improving its profitability and reconstructing its financial foundation.
- We will make effective use of the **Procurement Reform Promotion Committee's** external knowledge to promote material/equipment procurement reforms, create a greater cost awareness of the need for continuous cost reductions, and step up cost management.
- From the perspective of reducing fuel consumption, we are striving to improve thermal efficiency at thermal power stations by **replacing** existing equipment with **high-efficiency equipment**.

[Goal for reduction in material/equipment procurement costs and results]



### (4) Pursuing safety and security

- We will basically give top priority to **safety and security** in all our business activities.
- We have established internal systems so that if a **multiple disaster** that involves both a natural one (such as earthquakes and tsunami) and a nuclear one occurs, a natural disaster response headquarters and a nuclear one will be combined to form a comprehensive center for integrated action. In the future, mainly through company-wide drills, we will examine the effectiveness of our multiple disaster response system, division of roles, and other aspects of preparedness and make necessary improvements. Thus we will enhance our abilities to respond to such disasters.
- We are keenly aware that there is no end to efforts to ensure the safety of nuclear power and will strive to step up **risk management** under the top managers' strong leadership. We will also promote **face-to-face** communication with local residents and reflect their opinions on Kyuden initiatives to pursue safety and security.

### (5) Ensuring thorough CSR management

- We will grasp the opinions and requests of customers, local communities, and society as a whole about our efforts for corporate social responsibility (CSR) more firmly than ever before and promote initiatives for responding to them. At the same time, we will step up our efforts to implement the **management cycle** to convey the results of such initiatives to the wide spectrum of society through CSR reports, websites, and other media.
- In order to become an eco-friendly corporate group, we will give priority to environmental protection programs such as the burning of fields in the **Kuju Bogatsuru wetlands** in Oita Prefecture.
- We will push **compliance management** through initiatives for raising the awareness of employees, including training based on group discussions, and those for reducing legal risks, including creation of manuals aimed at spreading legal knowledge.
- Considering opportunities for **communication** with customers as important, we will strive to reflect their opinions collected on various occasions and through various points of contact on business administration at Kyuden and **communication information** in a swift, easy-to-understand way.
- We will work on collaborative activities with local residents on a group-wide scale. One example is **Korabora Q-den**, a **volunteer activity** aimed at solving local problems in cooperation with NPOs and other groups.



Logotype for Korabora Q-den



A scene from the burning of a field



Kuju Bogatsuru wetlands and Mt. Hiji (Oita)



[Korabora Q-den] Project to build terraces at the courtyard of the Aya junior high school (Miyazaki)



[Korabora Q-den] Environmental protection activities at Niji-no-Matsubara (Saga)