CHUBU
Electric Power

Fiscal 2020　Chubu Electric Power Group Initiatives to Address Management Challenges

—Toward Achievement of Our Management Vision—

Fiscal 2020 Initiatives to Address Management Challenges
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Introduction

The environment surrounding the energy business is changing dramatically, including the strong demands of customers and the community to create a low-carbon society, the rapid progress of digitalization, and the local production for local consumption and decentralization of renewable energy power sources. In terms of institutional aspects, Japan's energy industry has reached a historic turning point, with the legal unbundling of the power transmission and distribution business in April this year, as well as the creation and launch of new exchange markets with a view to ensuring stable supply and improving the non-fossil fuel ratio.

In April of this year, the Chubu Electric Power Group will **split off its power transmission and distribution business**. We will ensure neutrality and fairness, go further in the efforts we have been making to improve management efficiency, and strive more than ever before to stably supply energy at an affordable price. At the same time, we will split off our sales business and put into practice **a business model that separates power generation from sales**. With each of our businesses dealing with customers and society and developing independently, we are more certain to **deliver good-quality, environmentally friendly energy** that is essential for our daily lives and business **in a safer, more affordable and more stable manner**.

Building on this foundation, along with energy we will provide new services that exceed the expectations of our customers and society, while utilizing digital technology, through **the creation of community support infrastructure. Through these activities**, we will contribute to **the resolution of social issues, including the achievement of a low-carbon society,** which is an urgent issue worldwide.

In this "Chubu Electric Power Group Initiatives to Address Management Challenges," we have summarized specific actions under our new business structure aimed at achieving the Chubu Electric Power Group Management Vision and our Fiscal 2021 Management Goals.

We recognize that it is most important to promote compliance in order to finalize these achievements. We will continue efforts to **ensure compliance** and aim to be a corporate group that can be trusted by all stakeholders.

April 2020

President and Director
Chubu Electric Power Co., Inc. Hayashi Kingo

I Basic Policies

Chubu Electric Power Group's Vision

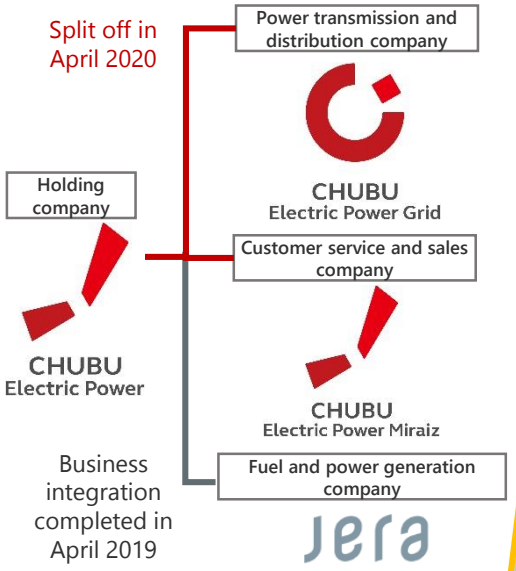
CHUBU Electric Power

➢ We will **achieve our income target, promote ESG-based management, and contribute to the SDGs** by each of our businesses carrying out initiatives independently under the new structure, aiming for **"stable energy supply and resilience," "achievement of a low-carbon society," and "creation and provision of new value."**

[New structure]

Split off the power transmission and distribution business, and transition to **a model that separates power generation from sales**

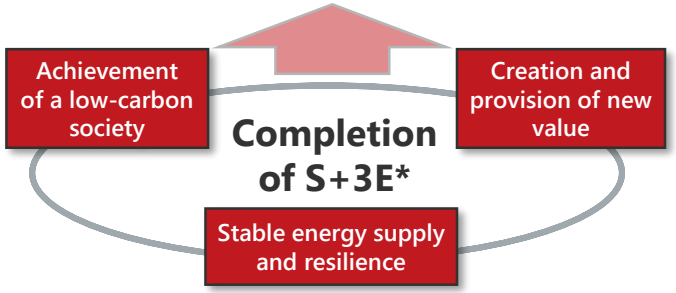
Achieve more stable and affordable energy supply



[Mission to be fulfilled and creation of new value]

Contribute to **sustainable development of society**

Evolve energy infrastructure into community support infrastructure



Changes in business structure

Low-carbon approaches | **Customer-centered** | **Digitalization**

[Priority Measures]

(1) Improving safety further at Hamaoka Nuclear Power Plant

(2) Stable power supply for a new age

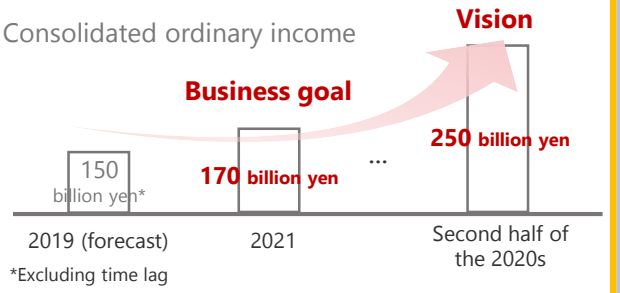
(3) Strengthening our business base and achieving sustainable growth

(4) Accelerate commercialization in new growth fields

*Pursuit of Energy security, Economic efficiency, and the Environment on a base of Safety

[Vision we aim to realize]

Achieve income target, promote ESG-based management, and **contribute to the SDGs**



E **Realize a low-carbon society / Practice environmental management**

S **Resolution of social issues / Utilization of human resources / Safety and health**

G **Strengthen corporate governance / Business continuity**

Toward a New Business Model through Splitting Off

- In order to promote independent operation of each business, in addition to the legal unbundling of the power transmission and distribution division, the sales division will also be split off and we will transition to a **"business model that separates power generation from sales."**
- With each business dealing with different markets and customers, and carrying out independent initiatives, **the stable supply of reasonably priced energy that we have provided so far will be even more reliable**. And, by **creating new value**, we will **maximize the value we provide to our customers and society**.

Holding company

CHUBU Electric Power

Group business management, renewable energy, nuclear energy, etc.

Split off in April 2020

Business integration completed in April 2019

Power transmission and distribution company

CHUBU Electric Power Grid

Safe, inexpensive, and stable delivery of good-quality electric power

Grid service according to customer needs and regional characteristics

Customer service and sales company

CHUBU Electric Power Miraiz

Electric power and gas energy services

Services for life and community challenges

Fuel and power generation company

Fifty-fifty joint venture with TEPCO Fuel and Power, Inc.

JERA

LNG value chain business leading to a clean energy economy

Large-scale renewable energy business

Value Provided to Customers through Splitting Off

Even after the split off, each business will continue to fulfill its role independently and responsibly so as to even more reliably ensure an environmentally friendly, safe, reasonably priced, and stable supply of energy.

JERA

High-efficiency and low-cost power generation
Provision of adjustment capability according to supply and demand

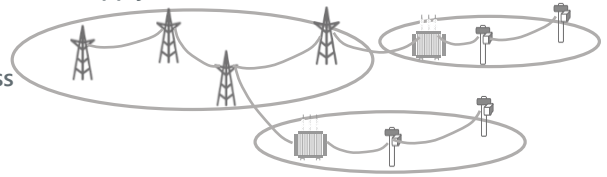
- Respond to supply and demand fluctuations with thermal power generation
- Large-scale business expansion beyond our traditional supply area
- Taking advantage of economies of scale to deliver energy more stably and inexpensively

CHUBU Electric Power Grid

Matching changing power demand and supply capacity

Stable construction, maintenance, and operation of a power transmission and distribution grid

- Procure adjustment capability for supply and demand fluctuations and reserve capacity against failure of power generators to ensure supply capacity in the Chubu area
- Construction, maintenance, and operation of a stable and inexpensive power transmission and distribution grid in response to changes in the supply and demand structure
- Ensuring neutrality and fairness

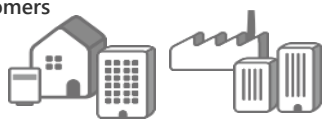


CHUBU Electric Power Miraiz

Delivering a variety of services along with energy

- Reliable procurement and securing of supply capacity according to the amount of electric power sold to customers
- Build an environmentally friendly, low-cost procurement portfolio with a wide range of energy procurement options

Customers



CHUBU Electric Power

Nuclear power generation

Renewable energy generation

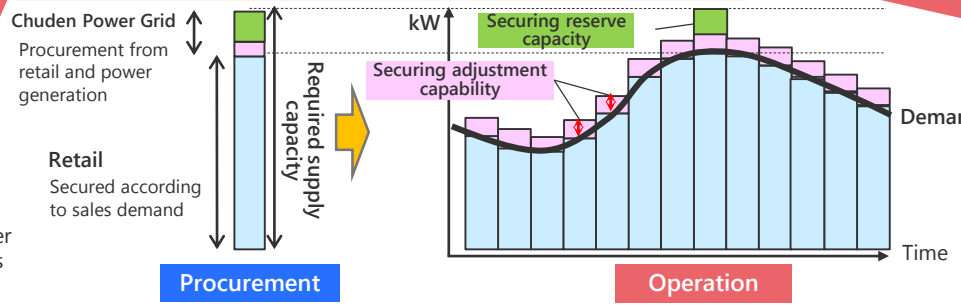
Wind power

Hydro power

Solar power

Other power generators

Market



Other retail operators

See slides 26 and 27 for details

CHUBU Electric Power

Priority measure (1): Improving safety further at Hamaoka Nuclear Power Plant

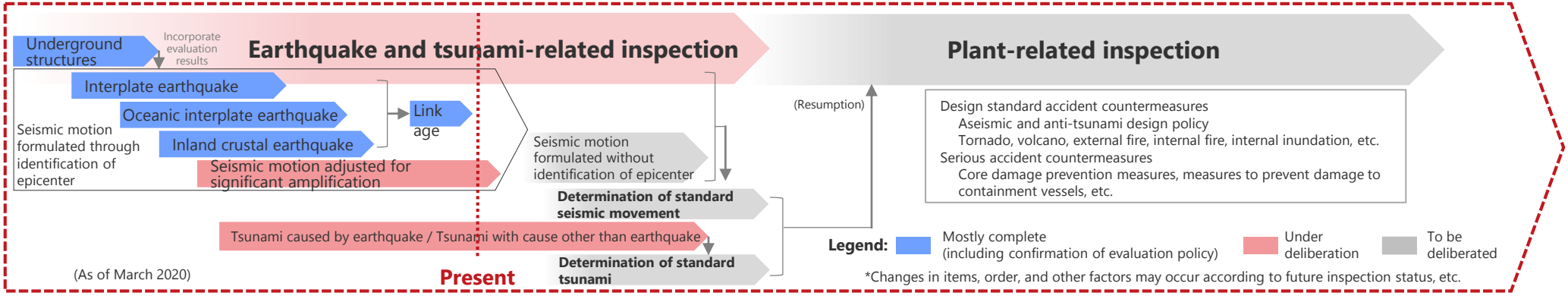
- Acting with the firm resolve never to repeat an accident similar to the one that occurred at Fukushima Daiichi Nuclear Power Station, we have strengthened measures to enhance the safety of facilities and equipment at Hamaoka Nuclear Power Plant. We are undergoing inspection of our conformity with new regulatory standards by the Nuclear Regulation Authority.
- **After general determination of the standard seismic movement and the standard tsunami, plant-related inspection proceeds, and the contents of safety improvement measures based on these will become explainable.**
- Our aim is **to be a power plant that earns still greater trust by the public at large**, and we will therefore pursue further enhancement of safety and strive to provide thorough explanations.

Conformity inspection application

- Inspection for **authorization of nuclear reactor establishment/change** (basic design of equipment) → Authorization
- Inspection for approval of construction plan (detailed design of equipment) → Approval
- Inspection for approval of change to operational safety program (operational management system, etc.) → Approval
- Construction for safety improvement → Completion

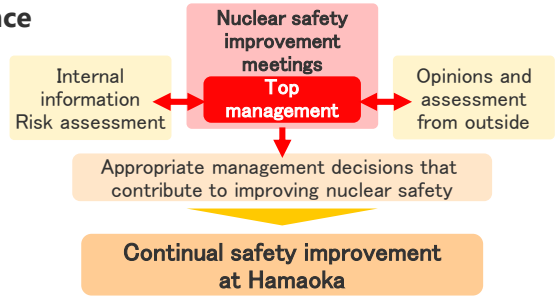
Restart operation

Main inspection items and status of progress of inspection **for authorization to change nuclear reactor installation (for further improvement of safety)**



Strengthen governance

We are building a framework to give top management a grasp of internal and external opinions and evaluations regarding risks so that they can make the appropriate management decisions.



Strengthen risk

Increase specialist emergency response teams

Strengthen risk communication

We will strive to enhance risk communication with local communities, including disseminating information on our safety improvement initiatives.

Visit dialogues

See slide 22 for details

CHUBU Electric Power

Priority Measure (2): Switching to a next-generation network

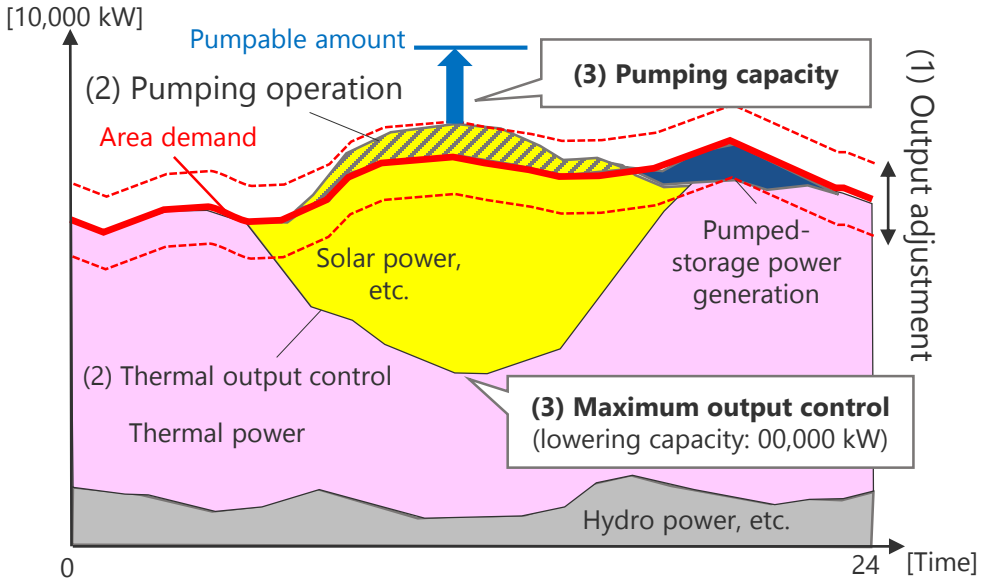
- Even as renewable energy is expanding, we are adjusting the output of thermal power generation facilities and pumped storage power plants connected to our power grid **to match demand and supply in the Chubu area and maintain the frequency**.
- In order to grasp and adjust the flow of electricity, which is complicated by the spread of decentralized power sources, especially the demand area power system, we will take steps to raise the level of grid operations by installing next-generation distribution facilities and utilizing ICT and so on. In these ways, we will **assure the quality of electric power and strive for a rational formation of facilities**. At the same time, we will continue to **respond to the growing sophistication of output control** of renewable energy generation facilities, etc.

Image of frequency adjustment

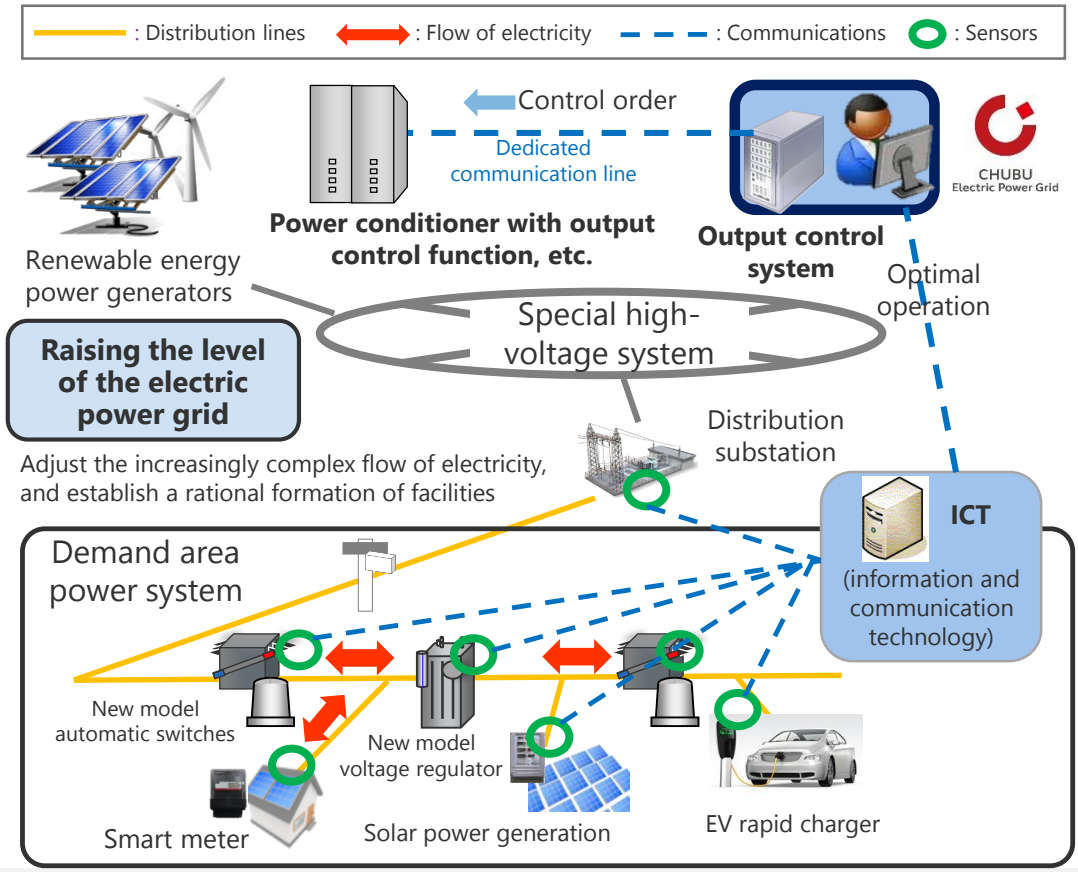
(1) Match supply and demand by adjusting the output of thermal power, etc. to area demand and output fluctuations from solar power and so on **(frequency maintenance)**

(2) As the ratio of solar power to area demand increases, the percentage of thermal output control and pumping operation increases

(3) After maximum output control of thermal power, output control of solar power, etc. is necessary when pumping capacity reaches the limit



Responding to expanding adoption of renewable energy (image of output control)



Priority measure (2): Toward strengthening resilience

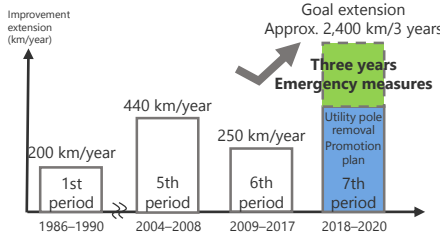
- Based on lessons learned from recent natural disasters, we are working to **strengthen the resilience** of our equipment and systems.
- As an infrastructure operator, we will also **maintain and raise our high level of security** against **cyber-attacks**, which pose a global threat.

Acceleration of utility pole removal

- Improvement is being carried out for a total of about 2,400 km nationwide. This includes **approx. 1,000 km of three-year emergency measures** for disaster prevention and mitigation, and enhancement of national resilience **in addition to around 1,400 km specified in the Utility Pole Removal Plan**.
- Working with national and local governments, local residents, and other line managers to achieve utility pole removal

- Prevention of urban disasters
- Contributing to the community from the viewpoint of improving the urban landscape

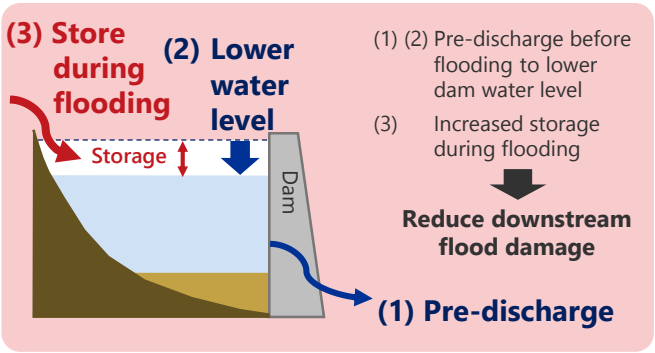
[Extension of utility pole removal nationwide (work start basis)]



(Our performance removing utility poles as of Mar. 31, 2019: **729 km**)

Use of hydroelectric dams for flood control

When flood damage is anticipated, we will consider and implement initiatives to increase storage in the event of a flood through **pre-discharge** in cooperation with national and local governments, and other water users.



(1) (2) Pre-discharge before flooding to lower dam water level

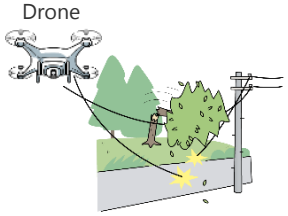
(3) Increased storage during flooding

Reduce downstream flood damage

Rapid recovery in the event of a disaster

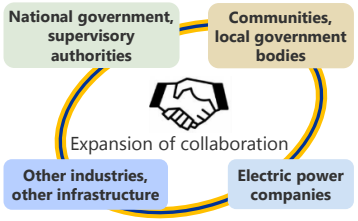
See slide 23 for details.

Rapid grasping of damage



Rapid recovery through the adoption of **drone patrols** in areas that are difficult to access

Cooperation with local governments



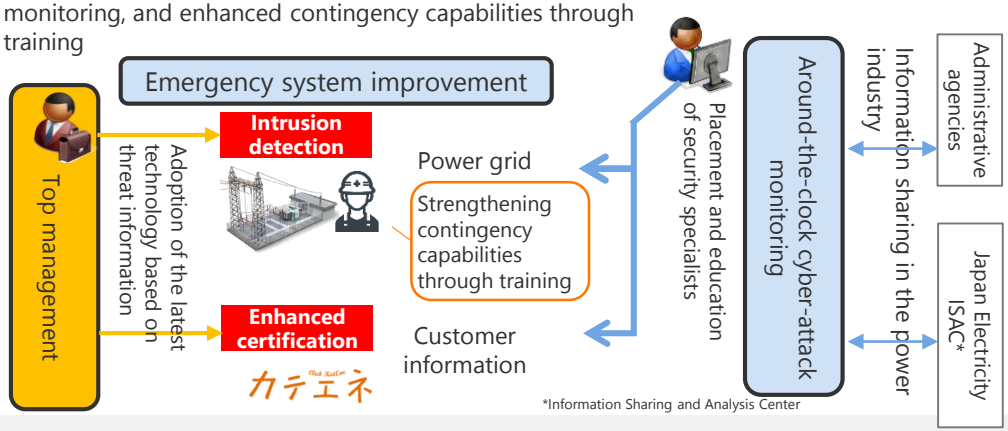
Disaster recovery in cooperation with local governments, the Japan Self-Defense Forces, etc.

Enhanced information dissemination

Push notifications of power outage information through various apps (dissemination of power outage and recovery status)

Strengthening cyber security

Proactive introduction of state-of-the-art technology, around-the-clock cyber-attack monitoring, and enhanced contingency capabilities through training



*Information Sharing and Analysis Center

See slides 21, 25, 29, and 30 for details.

CHUBU Electric Power

Priority measure (3): Achieving a low-carbon society

➢ In all aspects of the energy value chain, we will promote initiatives to **realize a low-carbon society, including expanding renewable energy and promoting electrification**.

JERA

Fade-out low-efficiency thermal power by introducing state-of-the-art thermal power (high efficiency and low environmental impact)

Taketoyo Thermal Power Station Unit 5
(coal-fired power, expected to go online in 2021)
Adoption of woody biomass fuel mixed-combustion to reduce CO_2 emissions

CO_2 emission reduction effect (compared with coal-fired)
900,000 t-CO2/year

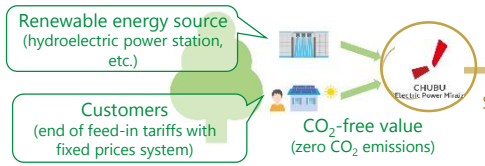
Total thermal efficiency FY2018
50.11%
Top level in Japan

Total thermal efficiency of Chubu Electric Power's thermal power generation facilities in fiscal 2018 (Transferred to JERA Co., Inc. in April 2019)

Miraiz

Aiming for a low-carbon society with our customers

Provision of a CO_2-free menu

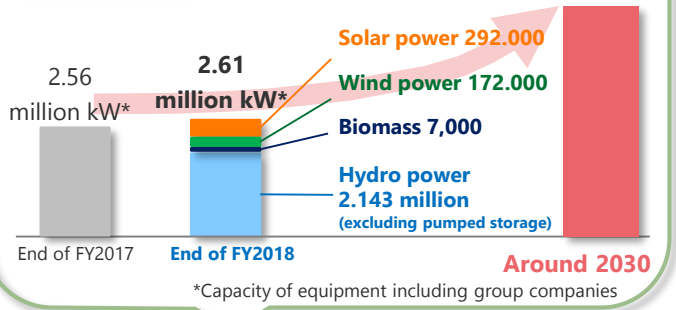


In-house solar power consumption service (for companies)

We rent roofs of stores, factories, and other buildings and provide installation and operation services for solar power facilities at Chubu Electric Power Miraiz's expense.

Renewable energy

Development of 2 million kW or more to approximately double the facility's capacity



*Capacity of equipment including group companies

Nuclear power

Promotion of measures to improve safety at Hamaoka Nuclear Power Plant

CO_2 emission reduction effect
(when all units are restarted)
Approx. 10 million t-CO_2/year

[Reference]
Our CO_2 emissions (2018 results)
54.07 million t-CO_2/year

Power grid

Construction and operation of equipment to support the expansion of renewable energy
Expansion of operating capacity of power lines
Utilization of available capacity, etc.

Reduction of power transmission and distribution loss and promotion of local production for local consumption

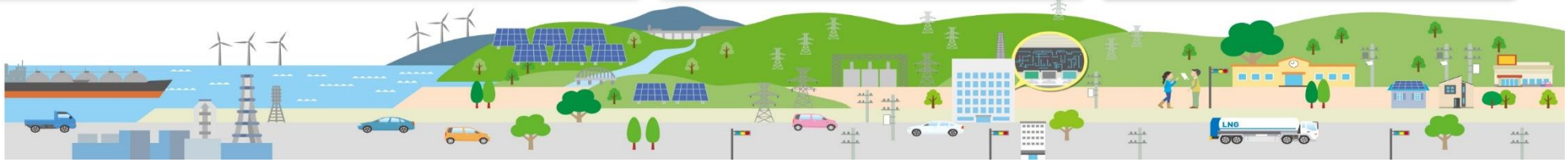
New businesses

EV environment improvement

Fleet EV Initiative
One-stop delivery ranging from the provision of large commercial vehicles to the maintenance and optimal operation of charging infrastructure

Demonstration of new mobility use
Demonstration with Iida City and Shinnan Koutsu Corporation
(1) **Introduction and operation of EV buses**
(2) **Energy management utilizing EV bus charging**
(3) **Improving the convenience of and creating demand for public buses**

Power generation | **Power transmission / distribution** | **Customer service and sales**



See slides 20, 28, and 30 for details.

CHUBU Electric Power

Priority measure (3): Creating synergy for growth

Overseas business — Active development of overseas business

Creation of synergy

Domestic business — Retail, power transmission and distribution, renewable energy business, etc.

Overseas business

- Business that supports local communities
- Business that contributes to the achievement of a low-carbon society

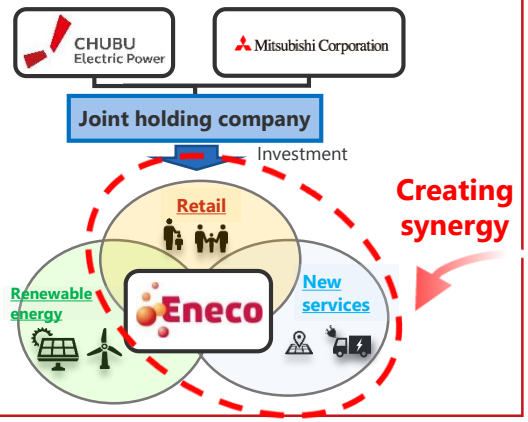
Increase income

SDGs
Contribute to the resolution of issues

Contributing to emerging countries through consulting business in Asia and Africa (power infrastructure development, etc.) and expanding business opportunities

Eneco

- **European general energy provider with a core in renewable energy and retail** (acquired in March 2020)
- Positioned as the platform in the European electric power business



Miraiz

Changing business models and providing new services

[From selling electricity and gas by measure to providing services that exceed customer expectations]

Electricity + Gas + Products and services → Products and services (including energy)

Sales in combination with electricity and gas — Sell a combination of services

[New services (for households)]

Community	Services for housing, mobility, food and more
Connected homes	Services for parenting, health care, lifestyle and so on
Energy management	Services such as "Korekara Denki"
Infrastructure	Watch-over services, etc.

Aim at a new pricing system (including flat-rate) that combines electricity, gas, and services

In cooperation across the Group and with other companies, provide services that exceed customer expectations

JERA

Utilizing the value chain to provide a stable supply of energy that is internationally competitive while contributing to higher corporate value of the Chubu Electric Power Group

Fuel business

Overseas power generation business

Upstream development Fuel procurement → Transport fuel trading → Receiving center storage → Domestic power generation Overseas power generation

Domestic thermal power generation business

Income and expenditure levels: Net income around 200 billion yen in fiscal 2025

Synergistic effect from integration
100 billion yen or more per year (within 5 years after integration)

See slide 29 for details.

CHUBU Electric Power

Priority measure (4): Creating community support infrastructure

- We are working to create and provide services utilizing advanced technologies, focusing on the key concepts of **"low-carbon," "customer-centered," and "digitalization."**
- **Along with energy services**, throughout the Chubu Electric Power Group we will provide new value that expands by being connected, according to the challenges of living, industry, and community, by combining on-grid data through power infrastructure and off-grid data through IoT terminals, with our first priority being the safe and secure utilization of data.

Services utilizing advanced technology

Community

- Parenting community **"COE LOG"**
- Information dissemination service **"Parenting Support App"**
- **"Kizuna Net,"** a security app to protect your life

Connected home

- IoT platform **"necolico"**
- Parenting support service **"Chubu Electric + Oh!"**
- **Medical use** of lifestyle data, etc. (Collaboration with venture companies)

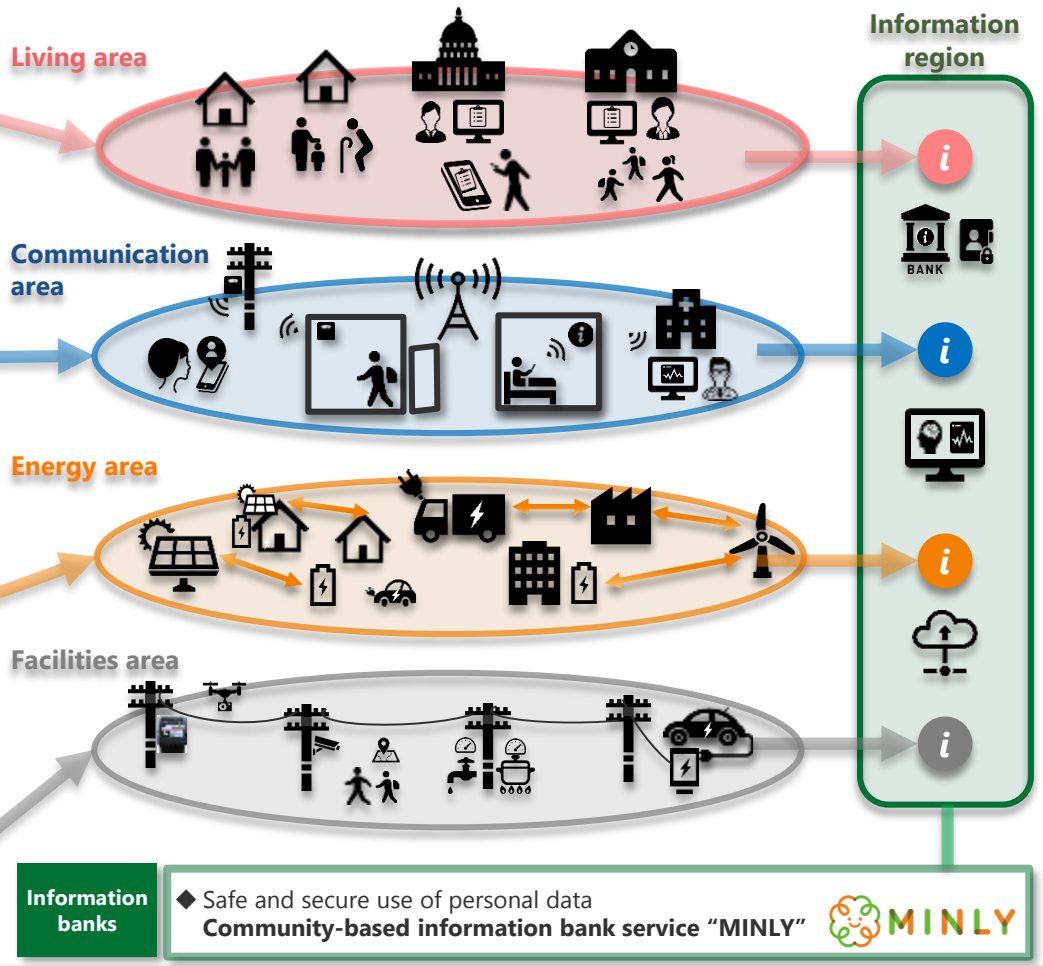
Energy management

- New participatory-type ways to use electricity **"Korekara denki" "CO-Ene"**
- Promoting electrification of large commercial vehicles **"Fleet EV Initiative"**

Infrastructure

- Safe, secure, and convenient infrastructure **"Mimamori-pole," "Dokonyan," "Automatic meter reading"**
- **Charging network** to support **next-generation mobility "e-Mobility Power"**

Community support infrastructure



Provided with energy services throughout the Chubu Electric Power Group

New value that expands by being connected

- Every day with peace of mind and convenience
- Community revitalization
- Creating attractive and comfortable cities
- Every day with lively vigor
- Better health and QOL*

*Quality of Life

- Utilization of low-carbon energy
- Economy and convenience
- Crime prevention and disaster prevention resilience
- Effective use of community infrastructure
- Experience new value using data
- Safe and secure data depositing

Management Base to Support Priority Measures
(Compliance, Cooperation with the Community, and so on)

CHUBU Electric Power

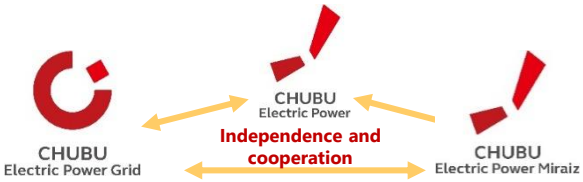
[Organization and culture] We will ensure the Group's **compliance** and **governance**, and we will continue to foster a sense of unity as a Group after the split off.

[Cooperation with the community] We value **partnerships** with the community and will **grow together with the community** by carefully explaining our business activities and working on social contribution activities.

[Human resources] With the **safety and health** of our employees as a top priority, we will develop **flexible work styles** and an environment where **diverse human resources** can play active roles.

Compliance

In line with the Chubu Electric Power Group Basic Compliance Policy, we promote compliance throughout the Group based on independence of and cooperation among operating companies.



In 2019, we established **the Chubu Electric Power Group Anti-Bribery and Anti-Corruption Policy**, which gives shape to principles of action for anti-bribery and anti-corruption. We will ensure compliance by regularly checking the situation and fulfilling our accountability based on the results.

Fostering a sense of Group unity

Making efforts across the Group even after the split off, including sports activities and improvement activities

CHUDEN RUNNING FESTA 2019

Improvement activities

Carefully explaining our business activities

Exchanging opinions with people in the Hamaoka area

Explaining facilities to local junior high school students (Nansei Substation)

Social contribution activities

Ensuring local safety and security

Free security inspection for the local community

Environmental conservation

Coastal clean-up (Miho Masaki Coast)

Educating the next generation

On-demand classes

Cultural and sports activities

Rugby Club coaching high school students

Flexible work styles and diverse human resources playing active role

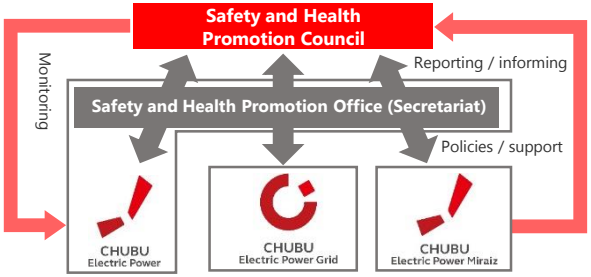
Telecommuting

Female supervisors step-up training

Goal (Fiscal 2020)
Number of female managers: more than double from fiscal 2014

Safety and health

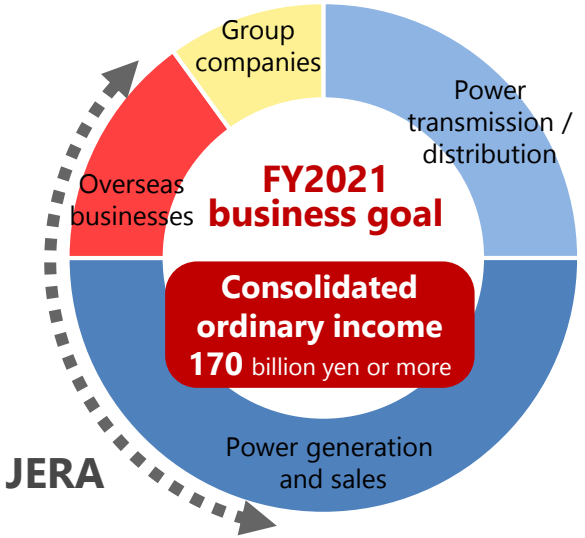
Based on the Chubu Electric Power Group Basic Safety Policy, we foster a safety culture and promote health-enhancing activities centering on a **Safety and Health Promotion Council** led by the president.



Business Goal (Consolidated Ordinary Income)

- Intensifying sales competition and changes in the market environment are anticipated to have a very severe influence on the bottom line. Nevertheless, **we are aiming to achieve our business goal and management vision** through the implementation of a model that separates power generation from sales.

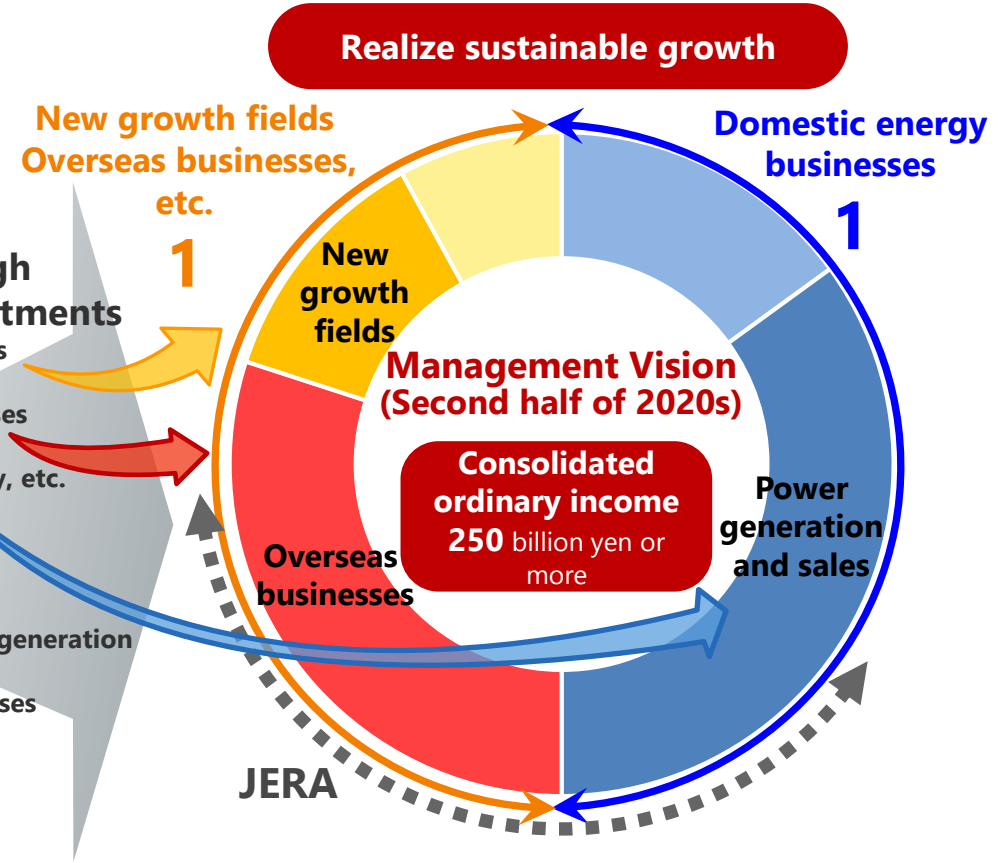
Strengthen business base for growth



Implementation of a model that separates power generation from sales

- **Growth through strategic investments**
  - New growth fields
  - Overseas businesses
  - Renewable energy, etc.
- **JERA's growth**
  - Domestic power generation synergy
  - Overseas businesses

Realize sustainable growth



JERA net income (50% equity method affiliate)
Fiscal 2021: About 110 billion yen
Second half of the 2020s: About 200 billion yen

Basic Conceptual Approach to Investment and Capital Policy

Necessary investment in electric power safety and stable supply

- We will quickly and steadily implement measures to further increase safety at our facilities, including the Hamaoka Nuclear Power Plant.
- We will also keep steadily investing in equipment needed for stable supply while continuing to streamline.
- When making investments, we will thoroughly ensure efficiency.

Strategic investment in growth fields

- In order to make sustainable growth a certainty into the future, we will conduct appropriate risk management and, on that basis, engage in strategic investment for business growth and development.

Strategic investment amount	**[5-year total from fiscal 2019 to fiscal 2023] 400 billion yen or more** **(Overseas business: About 200 billion yen; renewable energy, new growth, etc.: Each about 100 billion yen)**

Efficiency indicator (ROE)

- We envision a 7% or higher ROE level when we achieve the fiscal 2021 business goal.
- For the medium- to long-term ROE level, we will aim for a level that exceeds the cost of capital while closely monitoring the necessary shareholders' equity ratio and other such factors.

Shareholder return policy

- Chubu Electric Power will continue to invest in plants and equipment for a safe and stable supply of electricity as well as in growth sectors to maintain sustainable growth and increase our corporate value.
- Providing strong shareholder returns is an important mission for our Group. We will **continue to pursue stable dividends**, and consider our profit growth. **Our target consolidated payout ratio is over 30%**.

Deepening ESG Management and Contributing to the SDGs

- We will strive to achieve sustainable growth and improve corporate value through **the practice of S+3E** and **the creation of community support infrastructure.**
- We will also **contribute to solve SDG issues by deepening our ESG management.**

Realize Sustainable Growth and Enhance Corporate Value

Important ESG issues

Realize a low-carbon society / Practice environmental management

E

- **Increase the safety of nuclear power and promote its use**
- **Construction and operation of efficient power transmission and distribution facilities (reduction of power transmission and distribution loss, promotion of local production for local consumption)**
- **Develop renewable energy power sources**
- **Promote electrification**
- **Practice environmental management**

Main SDG contributed to

Resolution of social issues / Utilization of human resources / Safety and health

S

- **Resolve social issues caused by community weakening (community support infrastructure)**
- **Communication with the community**
- **Pursue customer satisfaction**
- **Ensure occupational safety**
- **Promote health management**
- **Secure and develop global and strategic human resources**
- **Diversification of human resources**

Main SDG contributed to

Strengthen corporate governance / Business continuity

G

- **Ensure area supply capacity and electric power quality**
- **Strengthen large-scale disaster preparedness**
- **Information and cyber security measures**
- **Thorough compliance and anti-corruption**
- **Governance and risk management**
- **Timely and appropriate disclosure of information**

Main SDG contributed to

Ⅱ Specific Initiatives in Each Business Area

Miraiz (Customer Service & Sales)

Provide services that continue to be chosen by customers

CHUBU Electric Power

➢ In order to continue to be chosen by customers, we aim to become a **"comprehensive service company for daily life and business"** that helps to solve the issues faced by our customers and society by providing **customer-centered** services that support "people's lives, industry, and the community," in addition to stable and reasonably priced energy.

Expand sales as a comprehensive service company for people's lives and business

<Sales of electric power>

124.2 billion kWh ▶ ▶ **130 billion kWh**

Fiscal 2019 (Estimated results) — Management Vision (Second half of 2020s)

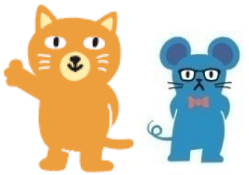
Gas applications in Chubu region
Over **300,000** accounts

<Sales of gas and LNG>

1 million t ▶ ▶ **3 million t**

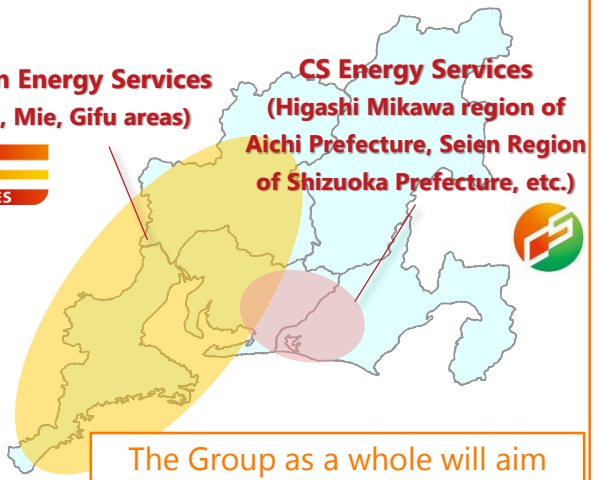
Fiscal 2019 (Estimated results) — Management Vision (Second half of 2020s)

Main initiatives



- **Provide new services through business model transformation**
- **Sales of renewable energy offerings**
- **Strengthen sales channels to increase points of contact with customers**
  - ▶ Sales agent **Chuden Energy Services**
    - Provides IoT and other services in addition to electric power and gas, and operates electric power and gas service outlets
  - ▶ Sales company **CS Energy Services**
    - Gas and electric power sales business oriented to corporate clients as joint investment with Sala Energy Co., Ltd.
- **Competitive and flexible energy procurement**
- **Expand sales in the Tokyo metropolitan area, acting mainly through CD Energy Direct***

*Sales of electric power, gas, and services in the Tokyo metropolitan area as a joint investment with Osaka Gas Co., Ltd.



The Group as a whole will aim for **30 billion kWh** in electrical energy sales (second half of 2020s)

Miraiz (Customer Service & Sales)

Provide services that continue to be chosen by customers

➢ We will **enhance our services** and move from the sale of existing electricity and gas to **new forms of energy sales (service creation)**.

Electricity + Gas + Products / services

Sales in combination with electricity and gas

Products / services (including energy)

Sell bundled services that address customer needs

(Households) Sales through One-to-One marketing using digital technology

(Businesses) Customer-focused sales using IT

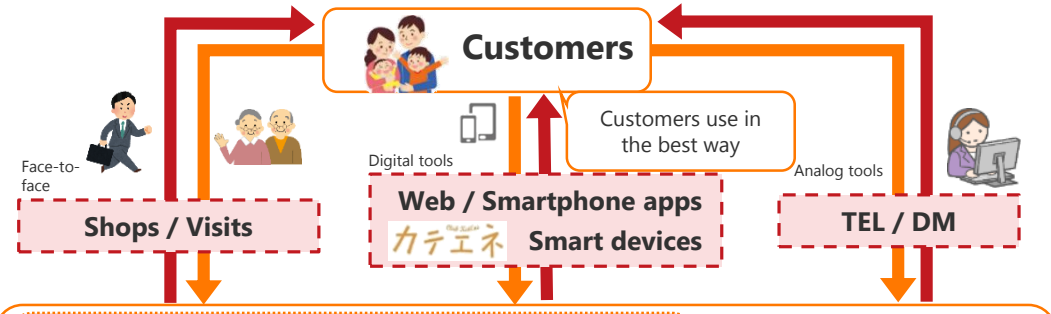
Aim for a new form of service charge system, including a flat-rate system that encompasses services

In the Chubu area, we aim to acquire **100,000 accounts** by the end of fiscal 2020 through the sale of services in a set with electricity or gas.

From selling electricity and gas by measure to providing services that exceed customer expectations

[For households]

Sales through One-to-One marketing using digital technology



- **Community** — Services for housing, mobility, food and more
- **Connected homes** — Services for parenting, health care, lifestyle and so on
- **Energy management** — Services such as "Korekara Denki"
- **Infrastructure** — Watch-over services, etc.

Aim at a new pricing system (including flat-rate) that combines electricity, gas, and services

In cooperation across the Group and with other companies, provide services that exceed our customers' expectations

[For businesses]

Customer-focused sales using IT

"Marutto" Chuden

➢ **We go beyond the conventional energy field and meet various business issues with tailor-made services**

- **Provide electricity and gas**
- **Optimum energy operation Manufacturing assistance**
  - Energy solutions
  - Integrated development solutions
- **Help business operations**
  - Collaborative consulting
  - Sales support services, etc.
- **Help improve corporate value**
  - Carbon-lowering services

Prepare offerings that provide services in packages

Providing **"Marutto" Chuden** to more customers

Sales using IT

Data infrastructure

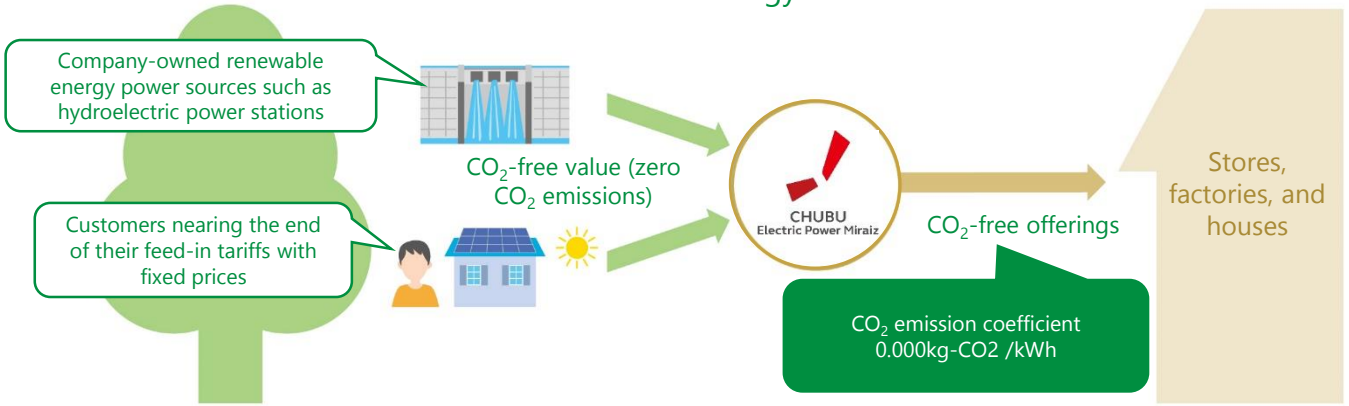
Miraiz (Customer Service & Sales)

Provide services that continue to be chosen by customers

➢ In order to achieve a low-carbon society, we will **work in cooperation with our customers and provide new services focused on their needs**. These include offerings such as CO2-free offerings and an in-house solar power consumption service.

Provide CO_2-free offerings

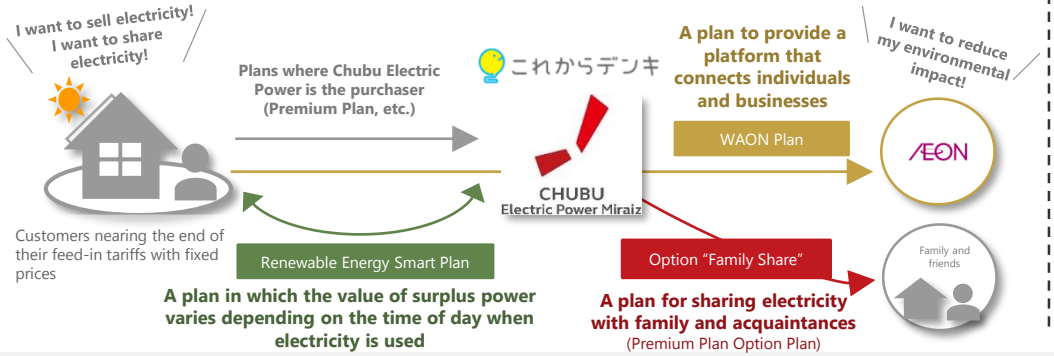
▫ We provide CO_2-free (zero CO_2 emissions*) electricity derived from renewable energy.



* Customers can calculate their CO_2 emissions with a CO_2 emissions coefficient of zero under the "GHG Emissions Accounting, Reporting, and Disclosure System" of the Act on Promotion of Global Warming Countermeasures.

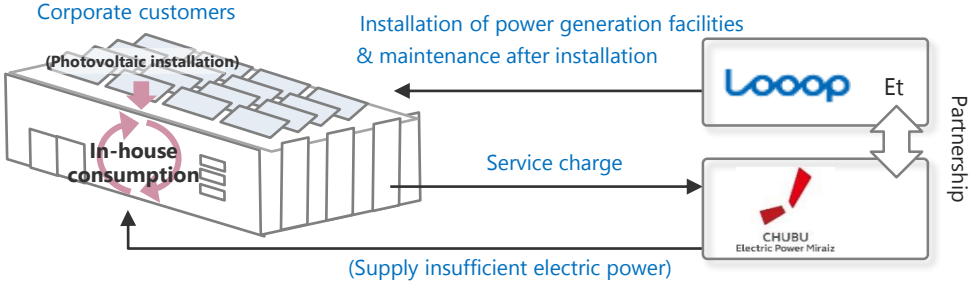
(For households) New services utilizing renewable energy

▫ We provide participatory customer services that will become new forms of transaction utilizing environmentally friendly renewable energy.



(For companies) In-house solar power consumption service

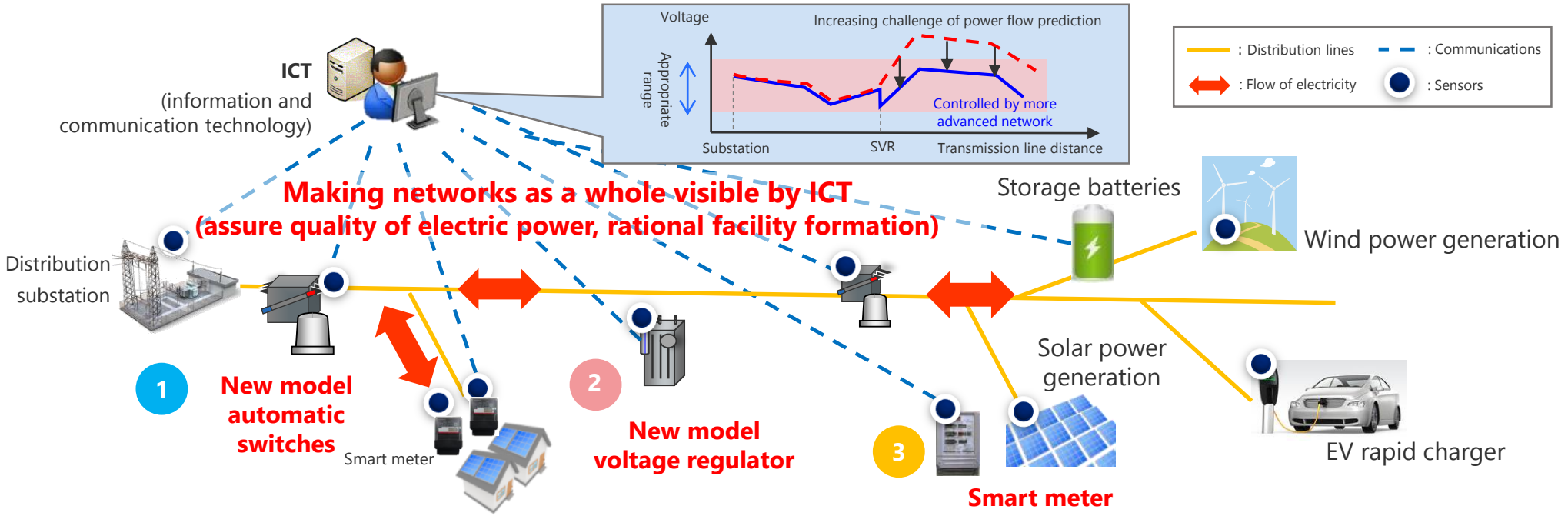
▫ We rent roofs of stores, factories, and other buildings and provide installation and operation services for solar power facilities at Chubu Electric Power Miraiz's expense.



Power Grid (Power Transmission/Distribution)

Switching to a next-generation network

- **The flow of electricity (direction and quantity) has changed significantly** from the conventional one-way flow of electricity to customers from large-scale power plants connected to bulk power systems due to such reasons as increasing decentralized power sources such as renewable energy.
- In order to adjust the flow of electricity to account for various fluctuations caused by expanding adoption of renewable energy, we will take steps to raise the level of grid operations by installing next-generation distribution facilities and utilizing ICT and so on. In these ways, we will **assure the quality of electric power** and strive for **a rational formation of facilities**.



1 **New model automatic switches**
Acquire current, voltage, and power factor information

- **Optimize upgrade timing** by facility operational history management
- **Prompt power transmission when facility malfunctions occur**

2 **New model voltage controller** capable of high-speed control

- **Maintain appropriate voltage** even when renewable energy increases

3 **Smart meter** capable of acquiring power outage information at each demand location

- Provide new services
- **More advanced power outage management**

Power Grid (Power Transmission/Distribution)

Strengthening resilience

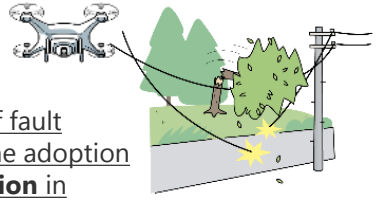
CHUBU Electric Power

➢ In light of recent natural disasters, we will strengthen our resilience by establishing and steadily implementing action plans to improve our response to major disasters through the principal issues of systems for **recovery of facilities, disseminating information to customers, and collaborating with local government bodies, etc**.

Systems for recovery of facilities

[Expanded use of digital technology]

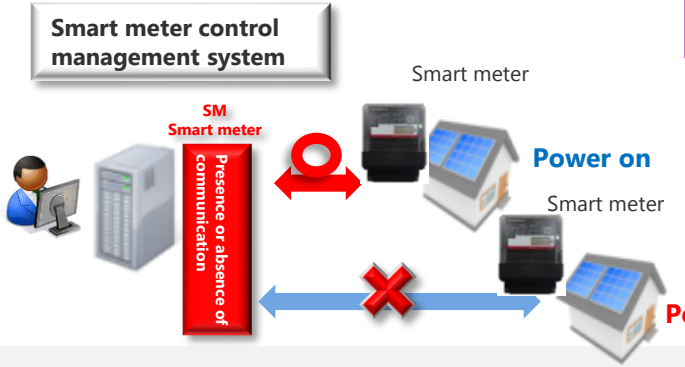
Drone



Rapid recovery of fault points through the adoption of **drone inspection** in areas that are difficult to access

[Using smart meters to grasp the status of power outages]

Check the possibility of a low-voltage power outage by smart meter communication status



Disseminate information to customers

[Information dissemination via push notifications]

Development of a power outage app

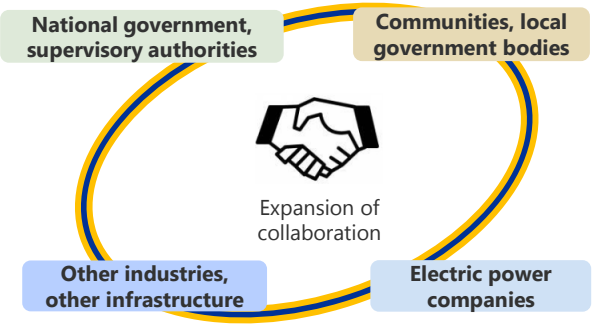
Power outage notification service

Consult via chat

Provide power outage information

Collaborate with local government bodies, etc.

[Strengthening community and social resilience]



Trimming and culling of trees in collaboration with Ground Self-Defense Force

Power Grid (Power Transmission/Distribution)
Aiming for low-cost wheeling charges

CHUBU Electric Power

- In March 2019, we announced the **Procurement Reform Roadmap** to work on reducing the cost of electric power networks through the reform of equipment procurement (standardizing equipment specifications and innovating procurement methods).
- We aim to reduce costs by developing procurement strategies that combine various ordering measures, such as **standardized equipment specifications**, order measures to improve manufacturers' manufacturing efficiency (multi-year contracts, early orders), and **joint procurement with other power utilities.**
- We are also further improving efficiency through **collaboration with other companies.**

■ Progress of Procurement Reform Roadmap

Target items		Status of standardized equipment specifications	Specific initiatives and measures (examples)
	**Overhead power lines** ACSR/AC (Approx. 200 million yen*)	Standardize ACSR lines into ACSR/AC across the Group (adjustment completed)	• Development of new business partners to strengthen the competitive environment (one company has been developed) • Early orders to improve manufacturing efficiency by leveling-out manufacturers' production
	**Gas circuit-breakers** 66kV・77kV (Approx. 300 million yen*)	Standardize each company's individual specifications (adjustment completed)	• Joint procurement with other power utilities • Development of new business partners to strengthen the competitive environment (continuously developing)
	**Underground cables** 6kVCVT (Approx. 800 million yen*)	Standardize each company's individual specifications (adjustment completed)	• Joint procurement with other power utilities • Early orders to improve manufacturing efficiency by leveling-out manufacturers' production

*Annual procurement scale

■ Further efficiency through collaboration between the power transmission and distribution divisions

- Reduction of adjustment capability costs by mutual exploitation **(wide-area supply and demand adjustment)** of the adjustment capability possessed by each electric power company

(Started in March 2020
Expected to expand from Chubu, Hokuriku, and Kansai to all nine companies sequentially)

- Three neighboring companies (Chubu, Hokuriku, and Kansai) are considering the optimization of equipment in areas where power lines from hydroelectric power plants, etc. are mixed.

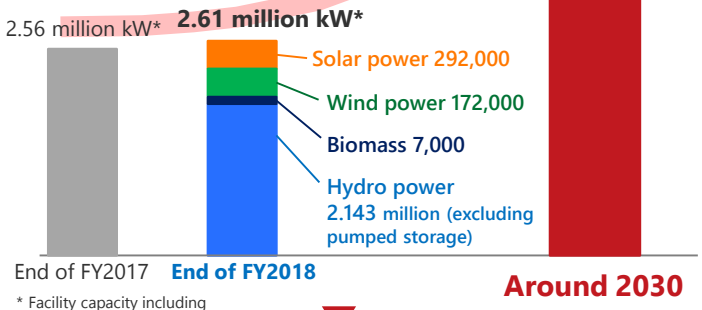
Renewable Energy

Improving energy self-sufficiency and achieving a low-carbon society

- With regard to renewable energy, the whole Group is working together **with the goal of developing 2 million kW or more by around 2030**.
- We will actively pursue the development and expansion of ownership of hydro power, biomass, on-land wind power, and solar power in the medium term, and offshore wind power and geothermal power in the long term, not only in supply areas but also throughout the whole country. In this way, we will aim to **improve energy self-sufficiency in Japan and achieve a low-carbon society**.

Facility capacity

Development of 2 million kW or more to approximately double the facility capacity



* Facility capacity including group companies

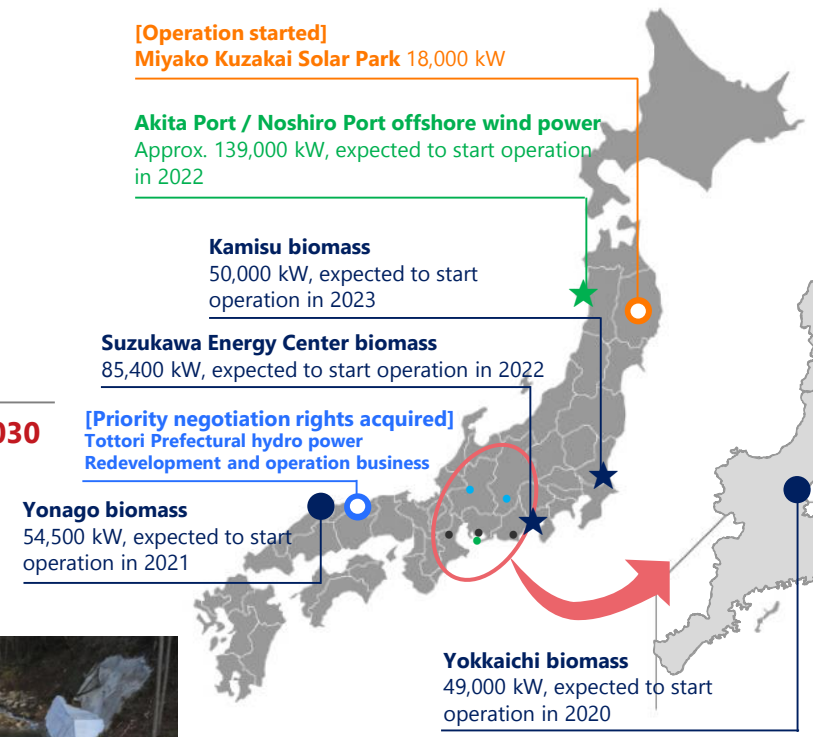
▼

CO_2 reduction effective 3 million tons per year

Miyako Kuzakai Solar Park

Seinaiji Hydro Power Plant (under construction)

Main recent development sites



[Operation started]
Miyako Kuzakai Solar Park 18,000 kW

Akita Port / Noshiro Port offshore wind power
Approx. 139,000 kW, expected to start operation in 2022

Kamisu biomass
50,000 kW, expected to start operation in 2023

Suzukawa Energy Center biomass
85,400 kW, expected to start operation in 2022

[Priority negotiation rights acquired]
Tottori Prefectural hydro power Redevelopment and operation business

Yonago biomass
54,500 kW, expected to start operation in 2021

Yokkaichi biomass
49,000 kW, expected to start operation in 2020

Uchigatani hydro power
720 kW, expected to start operation in 2025

Seinaiji hydro power
5,600 kW, expected to start operation in 2022

Status in FY2019
- ★ Development decided
- ● Under construction
- ○ Other

Gamagoori biomass
50,000 kW, expected to start operation in 2023

Omaezaki Port biomass
74,950 kW, expected to start operation in 2023

[Preparing for construction] Atsumi on-land wind power
7,400 kW, expected to start operation in 2021

In addition to the above, we will pursue initiatives in collaboration with various companies.
- **Development and popularization of domestic renewable energy power sources by participating in investment funds**
- **Implementation and support for the model of local production for local consumption and other such activities at the regional level**

Nuclear Power

Support inspection of conformity with new regulatory standards

- Acting with the firm resolve never to repeat an accident similar to the one that occurred at Fukushima Daiichi Nuclear Power Station, we have strengthened measures to enhance the safety of facilities and equipment at Hamaoka Nuclear Power Plant. We are undergoing inspection of our conformity with new regulatory standards by the Nuclear Regulation Authority.
- **After general determination of the standard seismic movement and the standard tsunami, plant-related inspection proceeds, and the contents of safety improvement measures based on these will become explainable.**
- Our aim is to be **a power plant that earns still greater trust** by the public at large, and we will therefore pursue further enhancement of safety and strive to provide thorough explanations.

Conformity inspection application

Inspection for **authorization of nuclear reactor establishment/change** (basic design of equipment)
Earthquake- and tsunami-related inspection → **Plant-related inspection** → Authorization

Inspection for approval of construction plan (detailed design of equipment) → Approval

Inspection for approval of change to operational safety program (operational management system, etc.) → Approval

Construction for safety improvement → Completion

Restart operation

Main inspection items and status of progress of inspection for **authorization to change nuclear reactor installation (for further improvement of safety)**

Present

Earthquake and tsunami-related inspection

- Underground structures — Incorporate evaluation results
- Interplate earthquake
- Oceanic interplate earthquake
- Inland crustal earthquake
- Linkage
- Seismic motion formulated through identification of epicenter
- Seismic motion adjusted for significant amplification
- Seismic motion formulated without identification of epicenter
- Site vicinity geology
- On-site geology
- Tsunami caused by earthquake
- Tsunami with cause other than earthquake
- **Determination of standard seismic movement**
- **Determination of standard tsunami**

(Resumption)

Plant-related inspection

Design standard accident countermeasures
- Aseismic and anti-tsunami design policy
- Tornado, volcano, external fire, internal fire, internal inundation, etc.

Serious accident countermeasures
- Core damage prevention measures, measures to prevent damage to containment vessels, etc.

Legend:
- Mostly complete (including confirmation of evaluation policy)
- Under deliberation
- To be deliberated

(As of March 2020)

* Changes in items, order, and other factors may occur according to future inspection status, etc.

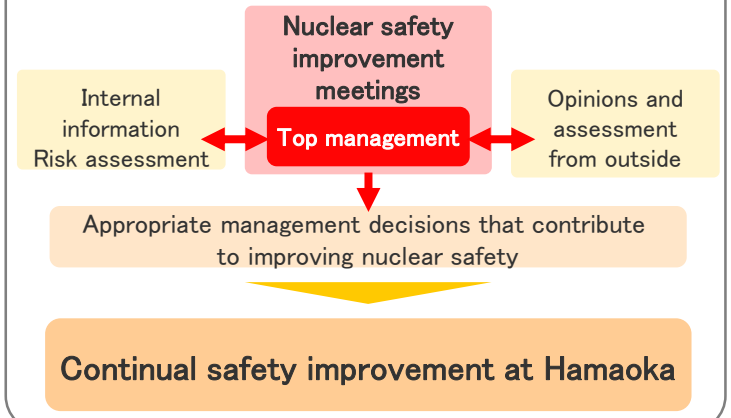
Nuclear Power

Aiming for a safer, more reliable power plant

- With top management taking responsibility, we are building systems to **strengthen governance**, **risk management**, and **risk communication in nuclear power**.
- In addition to equipment measures, we are strengthening on-site response capabilities to make equipment function effectively in times of emergency as well as strengthening collaboration with national and local government bodies for readiness against disaster. Along with these measures to **strengthen risk management**, we are pressing ahead with independent safety improvements, such as **expansion of equipment condition-based maintenance** and **improvement of technical capabilities** required for this purpose, in order to **support the new inspection system** being introduced in fiscal 2020 that stresses independent safety.
- We will strive to **enhance risk communication with local communities**, including **disseminating information on these safety improvement initiatives**, and aim to operate a power plant that can be trusted by society.

Strengthen governance

We are building a framework to give top management a grasp of internal and external opinions and evaluations regarding risks so that they can make the appropriate management decisions.



Strengthen risk management


Increase specialist emergency response teams


Third-party reviews and evaluations

Collaboration drill with Omaezaki Coast Guard Station, Omaezaki City, and Omaezaki City Fire Department


Collaboration with TEPCO HD and Hokuriku Electric Power
(Operation training and technical exchange)

Strengthen risk communication


Meetings for exchange of views with local residents


Visit dialogues

	2018	2019	2020	2021 onward (Fiscal year)
Independent safety improvement measures	(1) **Improvements due to variety of information** (strengthen arrangements for improvement by making use of things noticed on-site)		▼ April 2020: Introduction of new regulatory system	
	(2) **Improve in-house technological capabilities** (further understanding of facility design requirements, management standards, etc.)		Continue measures (1) (2) (3)	
	(3) **Utilize risk information** (utilize in plant status evaluation, decision-making processes)		Thoroughgoing implementation of voluntary security activities (support inspection system for national government surveillance and evaluation of overall activities)	

For details, please see the **Hamaoka Nuclear Power Station's** website

Overseas Business

Active development of overseas business

- We will actively engage in business in Europe, North America, and Southeast Asia to **increase our income** and **contribute to the achievement of the SDGs**.
- We will position Eneco as a platform in the European electric power business to expand growth areas such as renewable energy, retail, and new services.

Domestic businesses

Creating synergy

Fusing and evolving business models and technology from different countries

Overseas businesses

- **Businesses supporting local communities** through public infrastructure services
- **Businesses contributing to the achievement of a low-carbon society**

Increase income

Contribute to the achievement of the SDGs

■ Main overseas projects

[UK]
Submarine power transmission business
Submarine power transmission business for offshore wind power plants

[Netherlands]
Renewable energy, retail, and new services
General energy business provided through Eneco

[Germany]
Submarine power transmission business
Submarine power transmission business for offshore wind power plants

[Myanmar]
Project for **construction of power transmission facilities and substations** in Yangon and local cities
*Consulting

[Philippines]
Power distribution and retail business
Power distribution and retail business in New Clark City

[Singapore]
Project investment, incubation, and human resources development business
Establishment of Greenway Grid Global Pte. Ltd. (GGG)

[Mozambique]
Power distribution loss improvement project
*Consulting

[Sri Lanka]
Capacity improvement project to achieve an electric power sector master plan
*Consulting

Contributing to SDGs achievement
Consulting in Asia and Africa
■ Contributing to emerging countries through consulting business in Asia and Africa (power infrastructure development, etc.) and expanding business opportunities

Consulting to improve power distribution losses in Mozambique

Eneco
■ **European general energy provider with a core in renewable energy generation and retail** (acquired in March 2020)
■ Positioned as the platform in the European electric power business

CHUBU Electric Power
Mitsubishi Corporation
Joint holding company
Investment

Business Development

Initiatives to achieve community support infrastructure

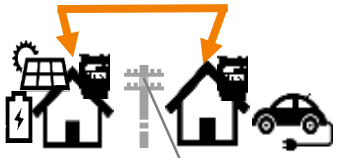
- In order to realize community support infrastructure, we have been working to create and provide new services utilizing our electric power and information and communication networks.
- Taking the **information banking certification** in February 2020 as an opportunity, we will give **concrete form to customer-centered services** that connect people with people and people with society and that open up people's potential and the future, with our first priority being the safe and secure utilization of data. **We will provide these services together with our energy services.**

Energy management

Consideration of the environment and economy (renewable energy and power storage)

"Korekara denki" "CO-Ene"
Proposing new participatory-type ways to use electricity

"Fleet EV Initiative"
One-stop provision of a series of services related to the adoption of electric vehicles, and promoting electrification of large commercial vehicles



Community support

Creating attractive and comfortable cities

"COE LOG"
Media to expand the circle of people who think about and practice child-rearing supported by the community

"Kizuna Net," a security app to protect your life

"Parenting Support App," an information dissemination service

Infrastructure development

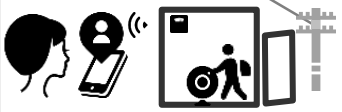
Supporting safety and security (disaster prevention and crime prevention)

"Mimamori-pole," "Dokonyan," "Automatic meter reading"
Safe, secure, and convenient infrastructure utilization services

"e-Mobility Power"
Develop a charging network to support next-generation mobility
Creating a service that allows anyone to charge electric vehicles at a reasonable price, anytime, anywhere

Connected homes and healthcare

Every day with lively vigor



"Joint research with Keio University Hospital"
Development of systems for monitoring at-home patients and using data from home in the medical field

"Chubu Electric + Oh!"
Parenting support service for those who are concerned or worried about their children who are staying home alone

Information banks

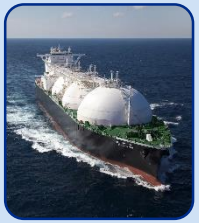
Secure data-depositing and experiences of new value using data

"MINLY"
Launching Japan's first community-oriented information banking service to operate with **"Information Bank" certification** in Toyota City, Aichi Prefecture
Using the mechanism of the information bank to distribute personal data safely and securely to establishments in the local community in order to boost consumer convenience while achieving community revitalization

JERA

Using the value chain to improve corporate value

- The completion of the integration of the domestic thermal power businesses of Chubu Electric Power and TEPCO Fuel and Power, Inc. into JERA in April 2019 completed a sequential value chain from upstream fuel and procurement through to wholesale electricity and gas sales.
- We will utilize the value chain to **provide a stable supply of energy that is internationally competitive** while **contributing to the improvement of the Group's corporate value.**



Fuel business

✓ Launch global LNG trading business connecting Europe, the USA, and Asia

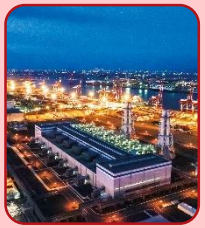
✓ New LNG procurement from the West Coast of North America and African regions, contributing to the development of an appropriate LNG procurement portfolio, etc.

Overseas power generation business

✓ Pursue optimal asset structure
- Sell Canadian gas IPP and invest in Bangladesh IPP business

✓ Expand income base by investing in growth areas
- Participate in offshore wind power generation in Taiwan

Upstream development Fuel procurement → **Transport Fuel trading** → **Receiving center Storage** → **Domestic power generation Overseas power generation**



Domestic power generation business

✓ Conduct business activities for creating synergistic effects
- Increase efficiency of thermal O&M and deepen cost reduction measures such as those for procurement of materials and equipment
- Early realization of income growth, such as with expanded wholesale electricity and gas sales

Income and expenditure levels: Net income around 200 billion yen in fiscal 2025

Synergistic effect from integration
100 billion yen or more per year (within 5 years after integration)

Provide a stable supply of internationally competitive energy and increase the corporate value of the Chubu Electric Power Group