

Working alongside *next*

to build a smart society originating in Tohoku

# Highlights of Fiscal 2021

# Tohoku Electric Power Group's Medium-term Plan



# Looking to a new, post-pandemic era, we will accelerate efforts toward the creation of a smart society originating in Tohoku.

---

The business environment surrounding our Group has changed significantly due to intensified competition caused by the full-scale liberalization of the electricity retail market and changes in the power supply and demand structure arising from the spreading use of renewable energy. Furthermore, we are facing severer conditions as the spread of the COVID-19 has had a major impact on society and economic activities, leading to a decline in demand for electric power, and lower retail unit price and wholesale power market price. In order to survive in such a business environment, it is indispensable to make drastic efforts throughout our business to secure profits on the premise of the stable supply of electric power.

On the other hand, the COVID-19 pandemic has brought about major changes in our lifestyles, working styles and senses of values. Particularly, the trends of “digitalization,” “decentralization” and “de-carbonization” are expected to further accelerate in the forms of the establishment of remote working using digital technology, the dispersion of the risk of intense concentration of population in large cities, and the dissemination of renewable energy which is highly compatible with digitalization and decentralization. With respect to de-carbonization, in particular, momentum is growing toward achieving the target of carbon neutrality by 2050. In February 2021, the Tohoku Electric Power Group formulated The Tohoku Electric Power Group’s Medium- to Long-term Vision “Working alongside next,” with the aim of refining “the unique value that can be created and offered only by us” based in the six prefectures in Tohoku and Niigata Prefecture where the population is decreasing and various social challenges have become apparent. In the midst of drastic, rapid changes in society, we view the situation as a chance for transformation and strive to solve various social issues to help Tohoku lead the new, post-pandemic era in building a smart society.

Based on this awareness, we have set forth specific actions to take toward the early achievement of results in the Highlights of Fiscal 2021 Tohoku Electric Power Group’s Medium-term Plan, focusing on the acceleration of efforts to achieve “Working alongside next.”

The year 2021 marks the 10th anniversary of the Great East Japan Earthquake, and the 70th anniversary of the establishment of the Tohoku Electric Power Group. Toward achieving “Working alongside next,” we will work to open up a new era by unifying our strengths of the Group and returning to the purpose of our founding for the six prefectures of Tohoku and Niigata Prefecture, and tailoring it to suit the new era.

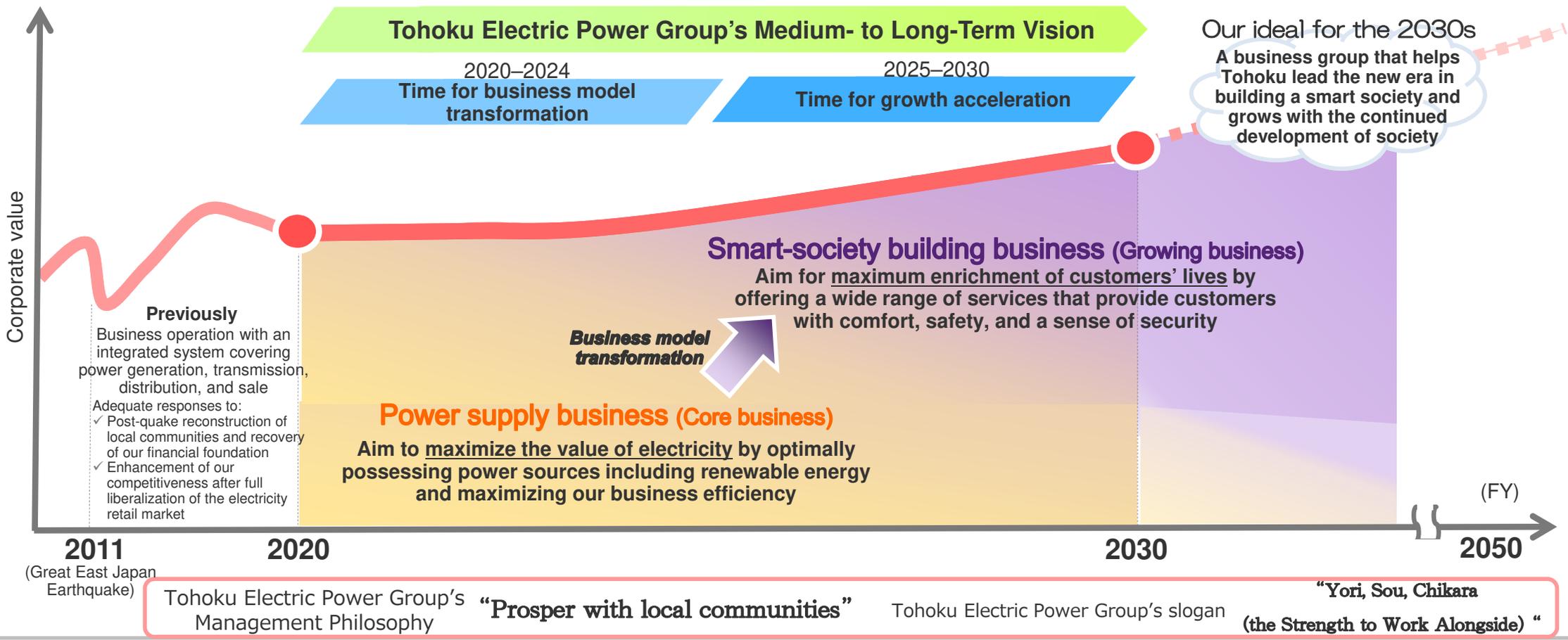
# Table of Contents

---

1. Overview of the Tohoku Electric Power Group's Medium- to Long-term Vision "Working alongside next" ... p3
2. Changes in Our Business Environment: New Post-Pandemic Era ... p4
3. Highlights of Fiscal 2021 Tohoku Electric Power Group's Medium-term Plan ... p5
  - Highlight 1. Change: Thorough enhancement of competitiveness through drastic reforms to our power supply business ... p7
  - Highlight 2. Challenge: Attempt to quickly achieve profitability with our smart society building business ... p13
  - Highlight 3. Create: Evolve our management base, which supports the creation of our corporate value ... p18
4. Initiatives to Achieve Financial Goals ... p23

# 1. The Tohoku Electric Power Group's Medium- to Long-term Vision "Working alongside next": Achieving our ideal

- The business environment surrounding our group is at a major turning point for society and the power supply and demand structure. We need to actively promote reforms and proactively meet challenges. Otherwise, it will be difficult for us to continue fulfilling our raison d'être and growing with society.
- Out of this strong sense of crisis, we **announced the Tohoku Electric Power Group Medium- to Long-term Vision "Working alongside next" in February 2020**. In the 2030s, we will aim to become **a business group that helps Tohoku lead the new era in building a smart society and that grows with the continued development of society**. We will **thoroughly enhance our competitiveness through structural reforms to our power supply business**, which is our core business, thereby securing stable profits. We will also **venture into the smart society building business and strategically devote our management resources** to this growing business, thereby **transforming our business model significantly**.
- We will particularly consider **the next five years (fiscal 2020–2024) as a period for business model transformation**. During these years, we will promote activities to achieve our ideal, accelerating our growth in fiscal 2025–2030.



# 2. Changes in Our Business Environment: New Post-Pandemic Era

- The COVID-19 pandemic is expected to **bring intensified changes in the business environment, such as a decline in demand for power**, and also significant impacts on the economy, society, people’s senses of value and livelihoods. This will lead to **the acceleration of changes in electric power supply and demand structure as a result of “digitalization,” “decentralization” and “de-carbonization”** which are recognized in **“Working alongside next.”** In addition, **social issues derived from a population decline will become more apparent.**
- Therefore, we must **shift our business model as soon as possible to meet the expectations of our customers in the new, post-pandemic era by further accelerating our efforts to achieve “Working alongside next.”**

Present

- Intensifying competition in the electricity retail market
- Changes in supply/demand structure due to the introduction of a large volume of renewable energy, etc.

Sluggish economic activities triggered by the COVID-19 pandemic  
 + (Decrease in demand for electric power)  
**Falling wholesale electricity transaction prices**

Environmental changes identified in the “Medium-to Long-term Vision”

**Accelerated changes due to the COVID-19 pandemic, etc.**

Key words for the post-pandemic era

## Basic awareness of the business environment

- Concerns that the severe situation of income and expenses will continue for a while
- The environmental changes identified in “Working alongside next” will accelerate at a higher pace than assumed.

Medium- to long-term business environment

- Depopulation
- Digitalization
- De-centralization
- De-carbonization

Worsening of local economy will uncover social challenges.  
 Widening regional disparity

Advancement of the digitalization of life and work amid the spread of remote working

The risk of intense concentration in a large city becomes apparent.  
 Decentralization of supply chain, etc.  
 Trend (of returning to Japan and decentralization)

Growing momentum toward achieving the target of carbon neutrality by 2050

- Contactless
- Remote
- Virtualization
- Automation

**We will work to shift our business model to meet the expectations of our customers and society in the new, post-pandemic era by overcoming the severe business environment as soon as possible and accelerating our efforts to achieve “Working alongside next.”**

*By creating the smart society for the new era originating in Tohoku, we will be able to obtain a comfortable, safe, secure living space.*

*We will offer new value of working alongside our customers.*



### 3. Highlights of Fiscal 2021 Tohoku Electric Power Group's Medium-term Plan

- In 2021, under the following **basic concept of business promotion**, we aim to **increase revenues through drastic structural reforms** and **achieve results with efforts for growth as soon as possible** by precisely capturing the changes in social structure and business structure in the post-pandemic era, with a focus on **the acceleration of efforts** toward the achievement of "Working alongside next."

#### Basic concept of business promotion

##### *Accelerating our efforts:*

*To overcome severe income/expense conditions and open up a new, post-pandemic era*

**As to the following four initiatives, each Tohoku Electric Power Group company will accelerate its efforts and improve corporate value by further promoting group management while fulfilling its respective roles based on the idea of being an equal partner.**

- ☑ Considering the post pandemic as an opportunity for change, we will accelerate the speed of a structural reform of the power supply business and lead to early achievement while thoroughly strengthening electric power sales and digging deeper into cost reductions to secure profits for a while.
- ☑ While doing our utmost to restart the nuclear power plants with safety as the first priority, we will proactively provide information for local residents and carefully conduct activities to gain their understanding.
- ☑ In order to achieve digital transformation by combining the strengths cultivated in the real world with new digital technology, under the leadership of Tohoku Electric Power Frontier, the entire Tohoku Electric Power Group will aggressively take on and quickly achieve profitability with our smart society building business.
- ☑ We will continue to research the ideal for achieving carbon neutrality by 2050 and contributing to the reduction of CO<sub>2</sub> emissions on the customer side through not only the supply side, but also the smart society building business and more.

### 3. Highlights of Fiscal 2021 Tohoku Electric Power Group's Medium-term Plan

- Based on the basic concept of business promotion, we will conduct business under the three highlights: “Thorough enhancement of competitiveness through drastic reforms to our power supply business,” “Attempt to quickly achieve profitability with our smart society building business,” and “Evolve our management base, which supports the creation of our corporate value.”

#### Highlights

##### **Highlight 1. *Change*: Thorough enhancement of competitiveness through drastic reforms to our power supply business**

In the power supply business, we will flexibly operate business in accordance with the missions of each function while aggressively promoting structural reforms following the establishment of autonomous management of the transmission and distribution of power. Concurrently, we will endeavor to enhance competitiveness and maximize profits.

##### **Highlight 2. *Challenge*: Attempt to quickly achieve profitability with our smart society building business**

We will take on and achieve the challenge of maximizing the richness of customers' lives and increasing revenue by strengthening the business structure for proposing a smart society originating in Tohoku in a new era, enhancing the development of services and proposal and sales capabilities, solving social issues, and meeting post-pandemic customer needs.

##### **Highlight 3. *Create*: Evolve our management base, which supports the creation of our corporate value**

We will further promote Group management while placing importance on ESG and making efforts to enhance resilience and environmental management, creating corporate value and assuming the role of creating a smart society by practicing changes in the awareness and actions of each individual and new post-pandemic workstyles.

## Highlight 1. Change: *Thorough enhancement of competitiveness through drastic reforms to our power supply business*

- In our core power supply business, we will endeavor to thoroughly strengthen current power sales to secure sustainable profits and reduce costs.
- Given the change in the post-pandemic supply and demand structure, we will shift to a business model for the maximization of profits by enhancing competitiveness and stable operation of facilities based on the mission of each function of the power supply business.

### Power generation and wholesale

- Regarding power generation and wholesale, we will maximize profits by furthering cost reductions, conducting efficient and stable operation with a focus on maintaining and improving the functions of existing equipment, and strategic sales.

### Nuclear power generation

- ✓ Regarding Onagawa Nuclear Power Unit 2, we will do our utmost to restart operations quickly by the following measures: conducting construction work for safety measures to comply with the new regulations and standards and securing higher levels of safety, steadily implementing both tangible and intangible measures through the succession of technical skills required for operations by improving several kinds of education and training programs, exerting efforts for enhancing abilities to respond to new equipment, and promoting a shift in thinking from “examination and construction work” to “stable operation” of the power plant. At the same time, we will proactively provide local residents with information about our efforts and carefully conduct activities to gain their understanding.
- ✓ Regarding Higashidori Nuclear Power Unit 1, we will precisely respond to the conformity assessment for restarting while conducting construction work for safety measures.
- ✓ Regarding Onagawa Nuclear Power Unit 3, we will proceed with the consideration for the application for conformity assessment based on the conformity assessment of Onagawa Nuclear Power Unit 2 and other factors.
- ✓ Regarding Onagawa Nuclear Power Unit 1, we will continue to work on the decommissioning with safety as the first priority based on the decommissioning plan. Concurrently, we will endeavor to provide local residents with easy-to-understand information on the progress of decommissioning.



Onagawa Nuclear Power Station undergoing construction work for safety measures  
(Venting equipment for containment vessels with filters)



Training for emergencies  
(Checking contamination of vehicles)



Human resources development to support nuclear power stations  
(Simulator training)



Visiting local residents  
(Face-to-face visit in December 2019)

# Highlight 1. Change: Thorough enhancement of competitiveness through drastic reforms to our power supply business

## Power generation and wholesale

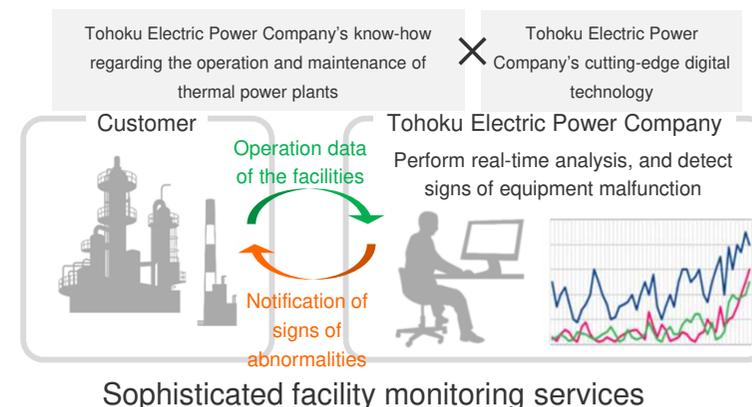
### Thermal Power Generation

- ✓ We will promote the development of Joetsu Thermal Power Unit 1 with the goal of achieving the world's highest level of thermal efficiency, thereby contributing to both the reduction of fuel consumption and CO<sub>2</sub> emissions, higher economic efficiency, and less environmental load. In addition, while taking into consideration the formulation of "The 6th Basic Energy Plan" by the Japanese Government, we will continue to study and implement the closure and **replacement of aged thermal power plants with low environmental and economic efficiency** to further strengthen the competitiveness of our power sources and respond to changes in supply and demand caused by the introduction of a large volume of renewable energy.
- ✓ At the same time, **regarding the operation system of the power plant, we will study efficiency improvement in greater depth** in anticipation of the suspension and abolition of power generation facilities.



Joetsu Thermal Power Unit 1 under construction (As of January 2021)

- ✓ In order to **improve the operational sophistication and efficiency of power plants**, we will work on **the development and introduction of an automated system for facility patrols using drones and AI technology** in addition to the operation of **systems for the early detection of abnormal signs and improvement of thermal efficiency using technologies such as big data analysis**. Furthermore, we will endeavor to **commercialize** the system for the early detection of abnormal signs **by the end of fiscal 2021 as the Advanced Facility Monitoring Service** for private home power generation equipment and customers in the manufacturing industry.



## Power generation and wholesale

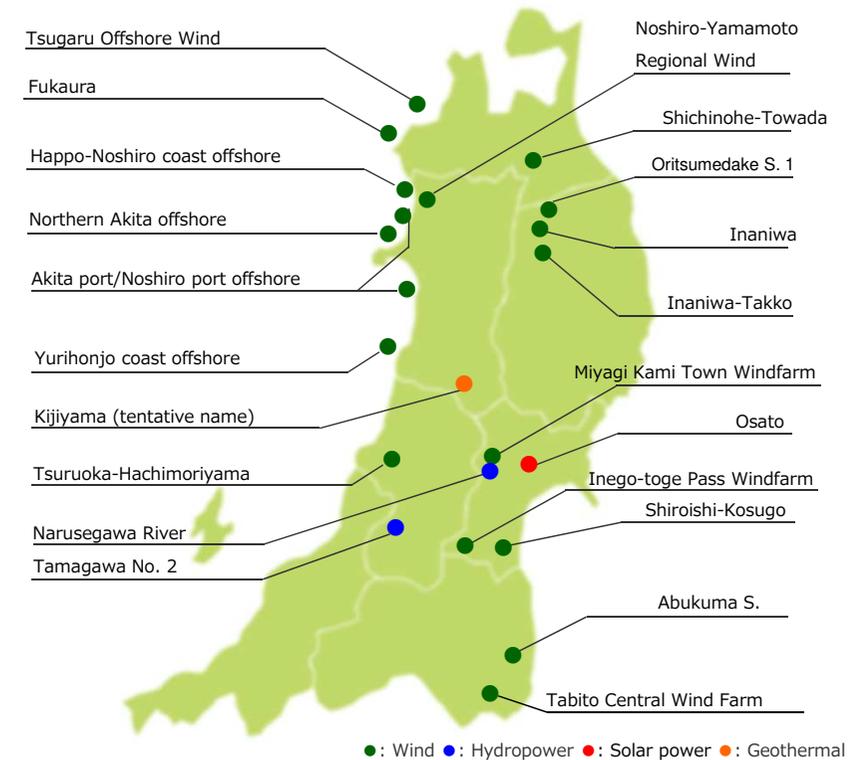
### Renewable energy

- ✓ Considering renewable energy as a power source that will play a part in our future power source portfolio, we aim to become a **responsible business entity dealing with renewable energy** in the six prefectures of Tohoku and Niigata Prefecture. Having **wind power generation at the core** and covering **hydroelectric, photovoltaic, geothermal, and biomass power generation**, we will utilize the know-how our group has acquired and work on new development and business projects. We will continue to preferentially devote our management resources to **aiming at the development of 2 million kW mainly in the six prefectures of Tohoku and Niigata Prefecture**, while focusing on research and development of new technologies and verification for our future.\*
- ✓ In **hydroelectric power generation**, we have developed and operated 227 power plants as our key power source since the establishment of the Company, and we will continue to use them while promoting fundamental renovation and repairs of aging facilities. Furthermore, the Tohoku Electric Power Group will unite its efforts to develop the Tamagawa No. 2 Plant (Yamagata Prefecture).
- ✓ Regarding **offshore wind power generation**, in accordance with the Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities, we will accelerate our efforts to designate business operators through open recruitment for projects in which we invest in the offshore areas of Noshiro City, Mitane Town, Oga City and Yurihonjo City, all of Akita Prefecture (north and south areas), since such areas were designated as “promotion areas.”
- ✓ In **geothermal power generation**, there is a large amount of development potential in the Tohoku area. We will make steady efforts to establish Kijiyama Geothermal power plant
- ✓ From the viewpoint of the overall life cycle of renewable energy, we will accelerate our studies to **establish a new company conducting the operation and maintenance (O&M\*) business**, while building a renewable energy business promotion structure of the Group as a whole.



Aerial view of development site of Tamagawa No. 2 Plant (As of August 2020)

\*O&M (Operation & Maintenance): Management of operation and maintenance of power generation facilities.



Major sites of the Group's renewable energy development and participation (including the sites under research for potential development)

(As of February 2021)

\*Total output share: approx. 450 MW when all 21 projects above are successfully transformed into a new business.

## Power generation and wholesale

### Fuel procurement

- ✓ In response to the COVID-19 pandemic, we will endeavor to secure a consistent, stable power supply by identifying risks in each business of fuel production, transportation and acceptance by power plants, implementing countermeasures, and reducing the risk of fuel supply disruption *through the diversification and decentralization of procurement sources*.
- ✓ We will **further our efforts to reduce fuel costs and secure fuel procurement flexibility** by diversifying procurement methods in response to changes in market structures in terms of fuel procurement.
- ✓ We will also proceed with the initiative to **optimize value chains from fuel procurement to power generation and wholesale** by **making the most of the trading function** of the market.



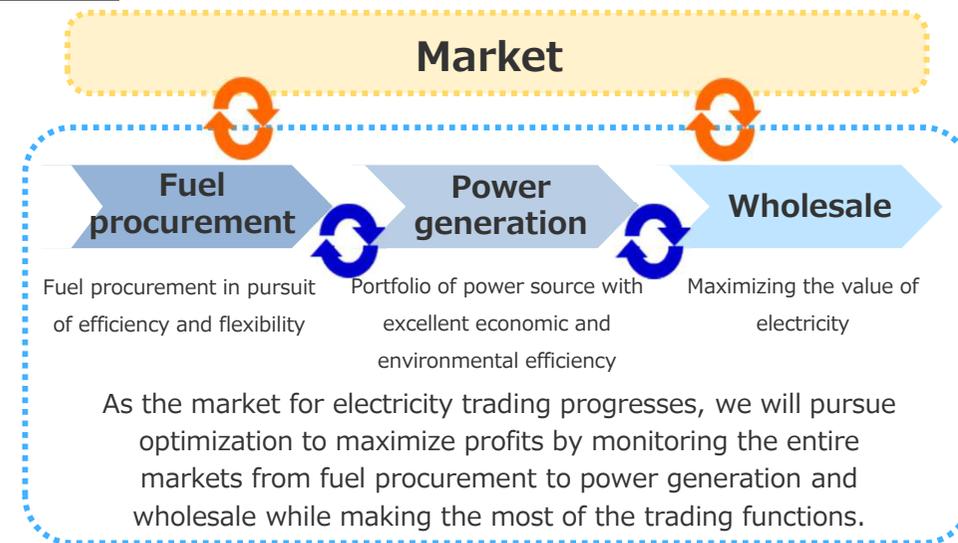
The coal carrier equipped with a hard sail wind power propulsion system known as “Wind Challenger” to start operations in fiscal 2022.

### Electricity wholesale

- ✓ We will promote **strategic sales utilizing a diversified portfolio of power sources** in order to maximize the value of generated electricity.
- ✓ Considering the marketization of electric power as a business opportunity, we will **study and promote services that contribute to the improvement of added value of electricity wholesale** while **making the most of the trading functions**.

### Overseas projects

- ✓ We will steadily work toward the commercial and stable operations of the Rantau Dedap geothermal power generation project in Indonesia and the Nghi Son 2 coal-fired power generation project in Vietnam, in which we are involved in financing and participating.
- ✓ We will fully apply the know-how and human networks we have acquired in our previous overseas power generation projects to our future efforts to develop renewable energy, participate in renewable energy projects, and build a smart society.



Initiatives for optimization of value chain from fuel procurement to power generation and wholesale.

# Highlight 1. Change: Thorough enhancement of competitiveness through drastic reforms to our power supply business

## Transmission and distribution



### Stable supply

- ✓ We will steadily implement capital investments necessary for stable supply, which include **maintenance of equipment functions and systematic upgrading of aging equipment**, while **efficiently maintaining and operating equipment**.
- ✓ In order to **continue fulfilling the mission of stable power supply in six prefectures of Tohoku and Niigata Prefecture** even in the face of environmental changes such as the intensification of natural disasters, we will **strengthen resilience** by promoting initiatives centering on the following measures.

Improvement of responsiveness to natural disasters through training



Swift check of damage situations utilizing drones



Strengthening cooperation with local governments and related organizations



Enhancement of information transmission to customers (Such as a push notification sent by a power outage information app)



Power outage app for smartphones

### Autonomous management and further improvement of efficiency

- ✓ As a general power transmission and distribution business operator, we will continue to conduct business operations in a way that ensures neutrality and fairness in compliance with laws, ordinances and guidelines.
- ✓ To reform the consignment charge system, we will implement both **countermeasures against aging equipment for power transmission and distribution, and thorough cost cutting by effective use of technology such as AI and IoT, as well as the unified specification and joint procurement of equipment**.
- ✓ We will **continue to promote procurement reform initiatives** including furthering measures associated with considering how to buy, what to buy, and what quantity to buy, as well as strengthening organizational capabilities and systems.
- ✓ As an **improvement activity** aimed at doubling productivity, we will pursue optimal business management systems such as **a drastic review of business processes** in line with promoting and thoroughly implementing the **“5S”** at the workplaces and **eliminating useless tasks** in business.

Unification of specification of facilities / Joint procurement



Overhead power line (ACSR/AC)



Gas circuit breaker (66・77kV)



Underground cable (6kVCVT)

### Initiatives for procurement reform

Further measures to strengthen competitiveness

Furthering measures associated with considering how to buy, what to buy, and what quantity to buy  
Utilizing supplier's knowledge, utilizing new technologies, etc.

Strengthening organizational capabilities and systems that enable sustainable efficiency

Establishment of a PDCA cycle, and improvement of textbooks  
Expansion of Procurement Academy

# Highlight 1. Change: Thorough enhancement of competitiveness through drastic reforms to our power supply business

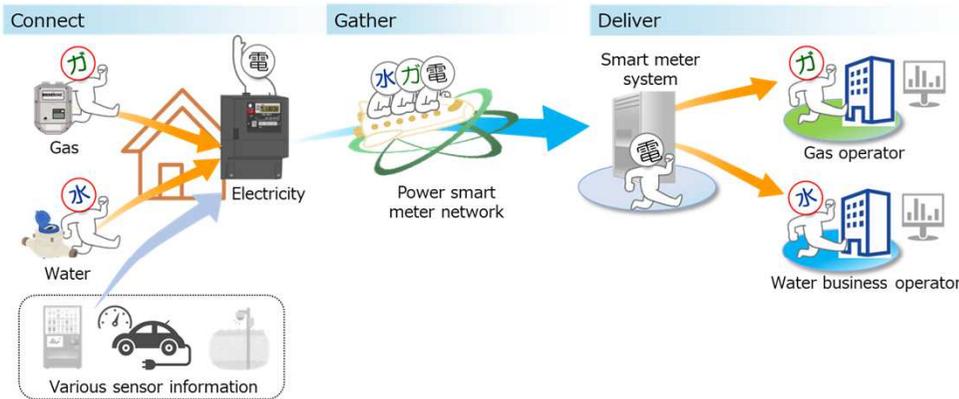
## Transmission and distribution



### Power network sophistication for building a smart society

- ✓ Based on our know-how, technology, and human resources, we will **study and implement services that help solve local issues** through the effective use of our properties, such as utility poles and pylons, and the verification of joint meter reading utilizing a smart meter, thus **earning new profits** while **leveraging our strengths of a network operator**.
- ✓ As the introduction of renewable energy progresses and the flow of electricity becomes bidirectional, we will endeavor to **ensure both power quality and rational facility formation while utilizing new technologies**.

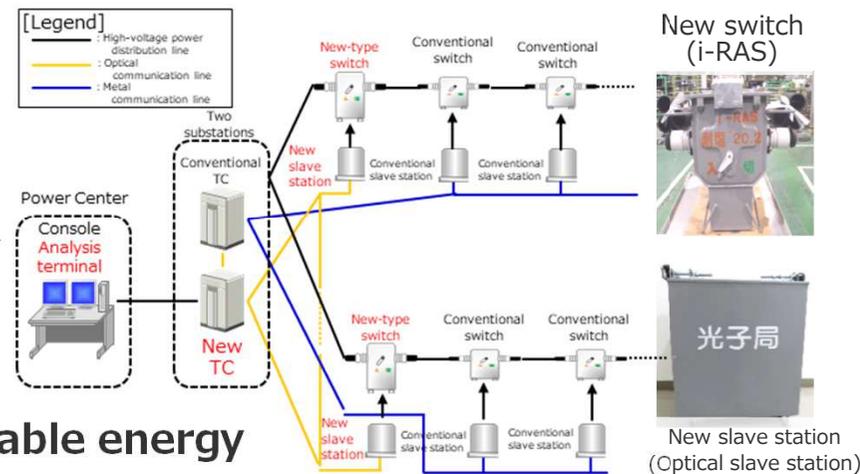
Shared electricity, gas and water meters using a smart meter telecommunications system (currently under feasibility testing)



### Shift to a next-generation power network

[Trial of automated distribution compatible with optical networks]

The first pole from the substation is used for the optical network (to create high-speed, large-capacity communication), and the power flow of distribution lines, which are becoming more and more complex due to the introduction of renewable energy and other factors, are measured in a short cycle.



Services using transmission and distribution facilities such as utility poles



### Response to further introduction of renewable energy

- ✓ In order to meet the social demand for shifting the main power source to renewable energy, we will **precisely respond to large-scale backbone system development** including the Cross-regional Network Development Plan between Tohoku and Tokyo and Proposal Recruitment Process for Power Connection in the Northern Tohoku Area in cooperation with the Organization for Cross-regional Coordination of Transmission Operators.
- ✓ We will promote the sophistication of renewable energy output prediction and estimation technology, and the study for grid stabilization using hydrogen energy.

## Highlight 2. Challenge: Attempt to quickly achieve profitability with our smart society building business

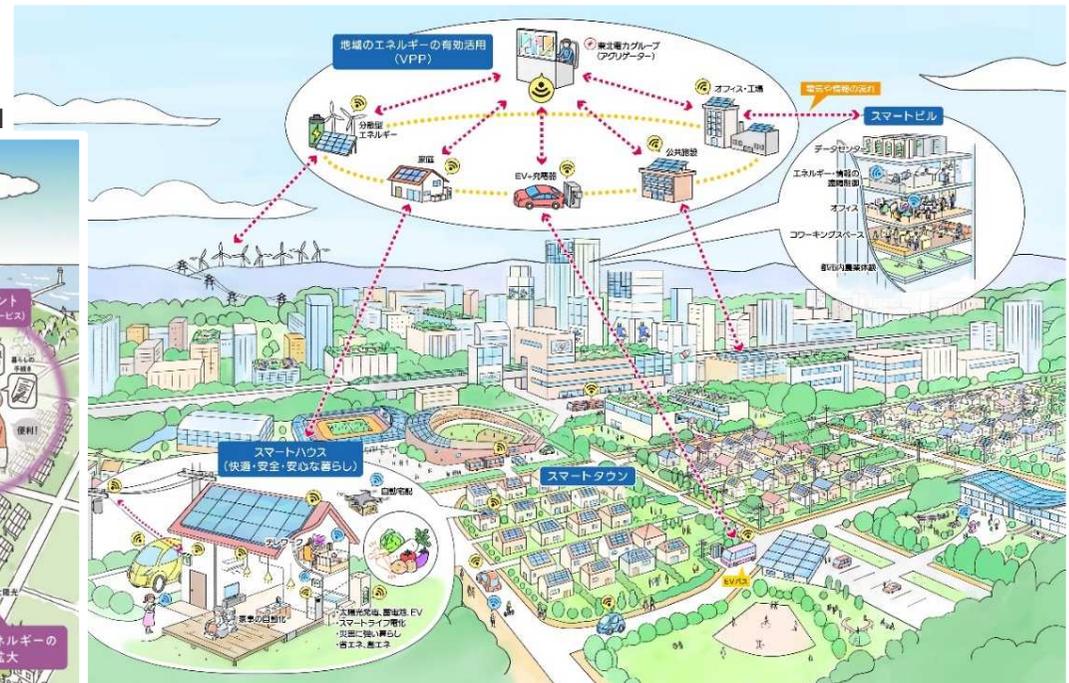
### smart society building business

- With our mission to offer services that enhance customers' comfort, safety and security from the perspective of power retail sales and help customers enrich their lives to the maximum, we will endeavor to quickly improve both customer satisfaction and environmental engagement, and strengthen profitability by expanding services that focus on customers' life stages and business needs, and providing energy and services in the form of a total package, through the use of next generation digital technology and innovation.

### Establishment of a new company leading the smart society building business

- ✓ We will plan to establish Tohoku Electric Power Frontier Co., Ltd. in April 2021 in order to drive the smart society building business and create new customer-oriented services.
- ✓ The new company will combine and offer various services that enhance comfort, safety and security of local residents, including the management of electricity and other energies, by using next generation digital technology and innovation.

[Currently envisioned smart society]  
Working alongside *next*  
to build a smart society originating in Tohoku



## Highlight 2. Challenge: Attempt to quickly achieve profitability with our smart society building business

### Enhancing services for household customers and improving profitability

- ✓ Under the “Yori, Sou, Chikara +ONE” brand, we will accelerate the expansion of life support services to capitalize on the post-pandemic needs of customers.
- ✓ Promote proposal of the electrification of an environmentally friendly, smart life
- ✓ Enhance customer satisfaction by proposing a special pricing plan and making “Yori, Sou eNet” more convenient to use.
- ✓ Work on the reduction of CO<sub>2</sub> emissions and environmental load through the Eco-living Project.

Tohoku Electric Power Company's total living support service

より、そう、ちから。



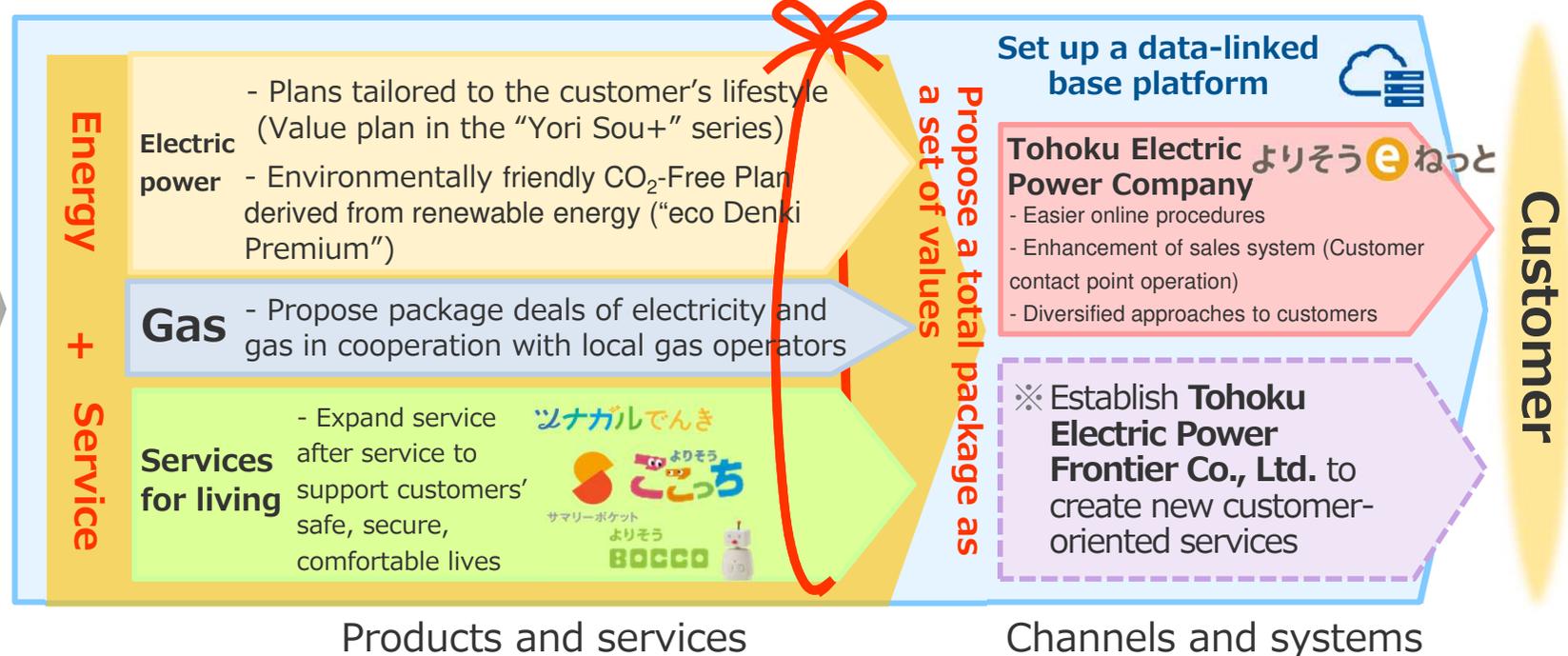
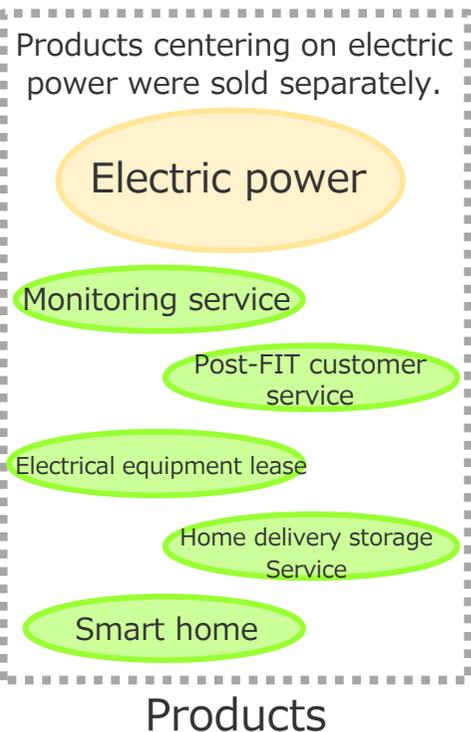
Promoting proposal of environmentally friendly living across the Company



- Proposal of CO<sub>2</sub>-Free Plan derived from renewable energy
- Shift to paperless notice of meter reading
- Support for introduction of heat pump equipment (Eco Replacement Campaign)

[Past]

[Future]



## Highlight 2. Challenge: Attempt to quickly achieve profitability with our smart society building business

### Smart society building business

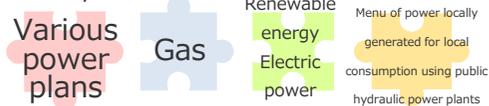


Strengthening capability of proposals for corporate customers and maximizing profits by expanding solutions.

- ✓ Develop proposals for optimal energy plans (electricity, gas, renewable energy) according to the status of customer usage and environmental needs.
- ✓ Enhance and proactively propose energy solution services that involve the customer's equipment, such as providing our proprietary energy management system exEMS, electrification centering on air conditioning and heat source equipment, and contracting of air conditioning equipment.
- ✓ Release and propose new business solution services such as ICT equipment introduction support services and BCP-related services that meet post-pandemic customer needs in collaboration with partners inside and outside the corporate group.

#### Energy

- Proposals of electricity and gas that suit the use by customers
- Proposals for renewable energy electricity plans that meets customer needs, etc.



#### Solution

- [Energy solution]**  
- Proposals that involve customer's equipment in addition to exEMS and electrification.
- [Business solutions]**  
- Enhancement of new services that meet customer needs



exEMS  
experience Energy Management Systems

Tailor-made proposals that suit customer needs

Combined proposals

Proactive proposals of effective combinations of various real and digital channels.

- Effective development and expansion of optimal proposition methods using digital technology
- Development of activities that make the most of the strengths of real (face-to-face) customer contact
- Promotion of proposals through collaboration among the group companies

Customer

### Increase in revenue from gas sales

- ✓ We will seek an increase wholesale supply by bringing out potential demand through sales activities in collaboration with city gas companies.
- ✓ We endeavor to acquire important customers in collaboration with group companies by proposing solutions such as contracting satellite equipment in addition to shifting from other fuels to gas.
- ✓ While promoting cooperation with city gas companies to increase the set sales of electricity and gas, we will proceed with studies on expanding the gas business in response to the full-scale liberalization of the gas retail market.



LNG shipping facility at New Sendai Thermal Power Plant

Kamei (Six prefectures of Tohoku)	Set plan of electricity and gas (since April 2017 to date)
Ishinomaki Gas (Miyagi Prefecture)	Business alliance for sale of electricity and gas (since January 2019 to date)
Nikaho Gas (Akita Prefecture)	Set plan of gas and electricity (since May 2020 to date)

Status of alliance with city gas operators (as of January 2021)

## Highlight 2. Challenge: Attempt to quickly achieve profitability with our smart society building business

### Smart society building business

#### Commercialization of Virtual Power Plants (VPP)

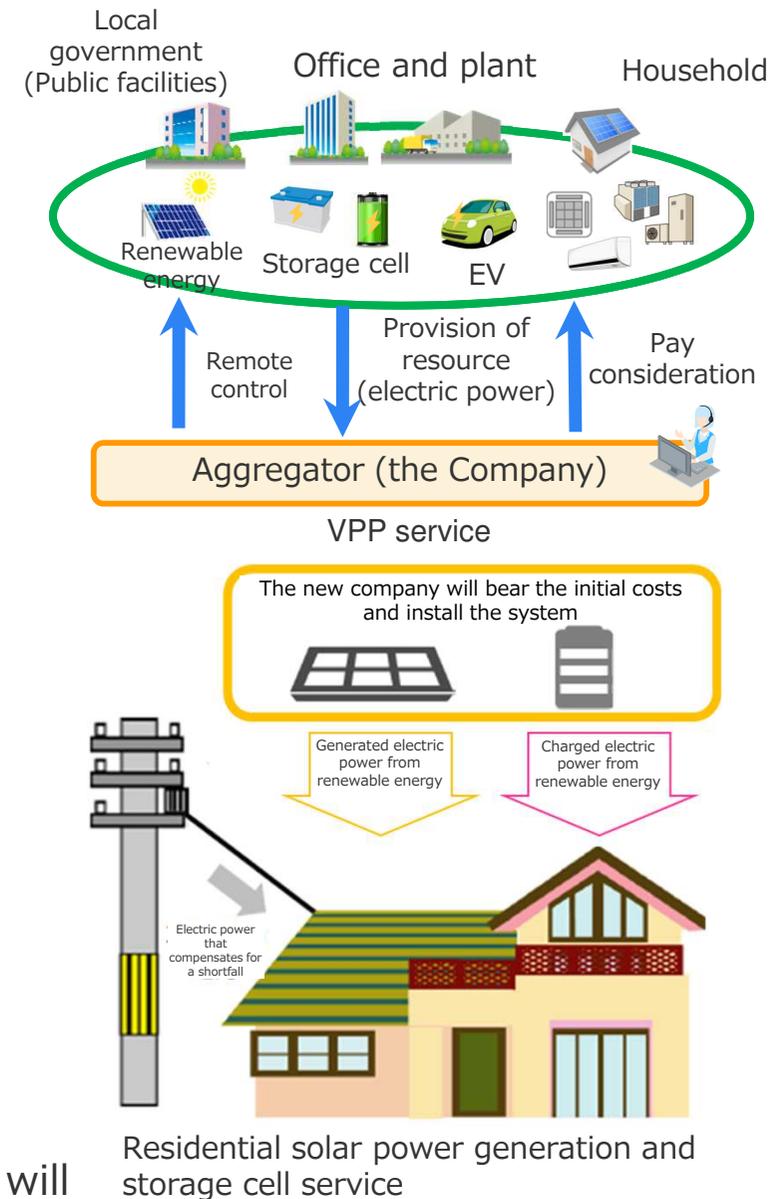
- ✓ By maximizing the use of existing energy resources in the region such as solar power generation facilities, storage cells and EVs, we will quickly commercialize VPP services that contribute to strengthening local disaster prevention and help customers save energy and costs. To that end, we will **launch some services including energy management by the end of fiscal 2021.**
- ✓ We will proceed with the study of new service development with Next Kraftwerke GmbH, the world's largest VPP operator, based on the verification conducted to date.

#### Establishment of a new company that will offer a solar power generation and storage cell service

- ✓ Tohoku Electric Power Company and Tokyu Power Supply Co., Ltd. will jointly establish **Tohoku Electric Power Solar E-Charge Co., Ltd.** that aims to provide energy services using solar power generation equipment and storage cells in April 2021.
- ✓ The new company will bear the initial costs and install solar power generation equipment and storage cells at customers' home for free of charge to allow customers to **easily use solar power that is kind to the environment and resilient against disaster.**
- ✓ This service will start in the Tohoku, Niigata, and Kanto areas by the end of the first half of fiscal 2021.

#### Commercialization of mobility services

- ✓ Taking into account changes in post-pandemic customer needs, we will **consider car-sharing and other services for EV use.**

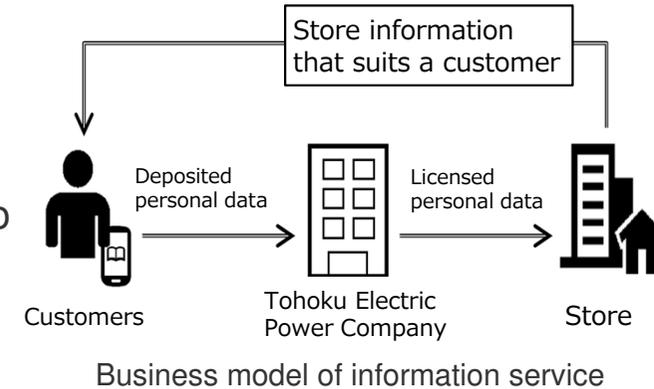


## Highlight 2. Challenge: Attempt to quickly achieve profitability with our smart society building business

### Smart society building business

#### Commercialization of information services that create added value by linking and utilizing various data

- ✓ By utilizing information centering on personal data entrusted to us by customers, we will **verify up to the first half of fiscal 2021** the **information service** aiming to create added value for the information providers including customers and stores. Subsequently, we will endeavor to set up a business model to **launch the business by the end of fiscal 2021**.



#### Promotion of services that contribute to solving local issues

- ✓ We will **participate in projects that contribute to solving issues of local governments and communities, such as** the Izumi Park Town 6th Residential Area East Construction Zone Development Project and other **regional smart city and town management projects**, providing value distinctive of the Tohoku Electric Power Group, and **contribute to converting the area into an economically and environmentally friendly town which is resistant to disasters**.
- ✓ We will **promote corporate relocation and industrial location** in order to lead post-pandemic social changes to the development of the six prefectures in Tohoku and Niigata Prefecture.



Izumi Park Town (Izumi-ku, Sendai City)

#### Acceleration of creation of new business by open innovation

- ✓ We will conduct **effective cooperation and collaboration with start-up companies toward the creation of a smart society originating in Tohoku** through investments in a venture capital funds Global Brain No. 7 Fund and Tohoku University Venture Partners No. 2 Investment Limited Partnership.
- ✓ We will **create new businesses and services** by utilizing the Business Idea Creation Working Group, which collects and evaluates business ideas related to the creation of a smart society from within the company.



At Ideathon, an internal contest for new ideas

# Highlight 3. Create: Evolve our management base, which supports the creation of our corporate value

## Environment

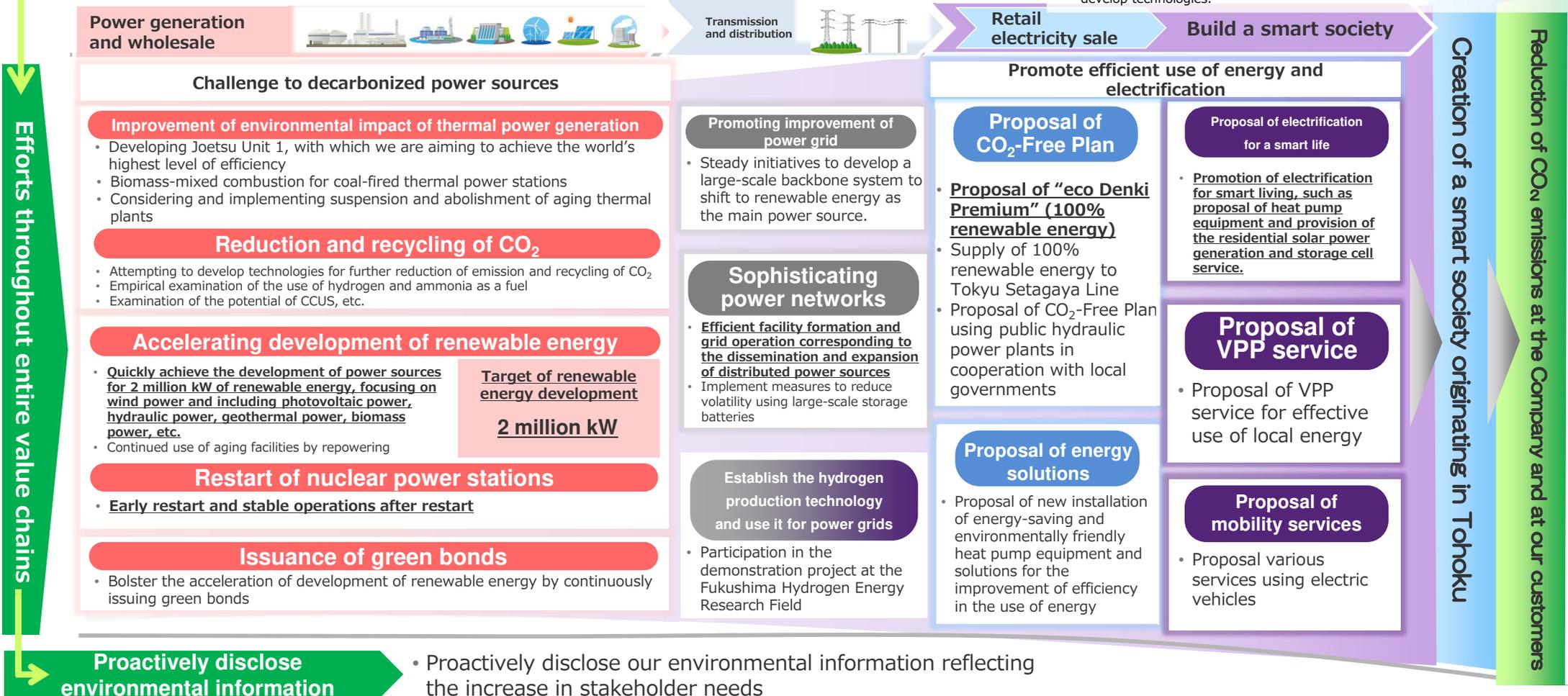
### Promotion of initiatives for low carbonization and de-carbonization

- ✓ We will proactively make efforts to engage with these issues throughout the value chain, and to contribute to the reduction of CO<sub>2</sub> emissions in the entire Tohoku and Niigata regions by creating a sustainable smart society.
- ✓ The Tohoku Electric Power Group will proactively meet challenges to become a carbon neutral group by 2050. To this end, we will announce priority areas and specific measures as early as possible and implement such measures.

#### De-carbonization initiatives during the FY 2021 Medium-term Plan period — Contribution to the reduction of CO<sub>2</sub> emissions throughout the entire value chain

##### Precise awareness and management of climate change risks

※ Developing innovative technologies require political and financial support. Considering such factors and economic rationality, the Group endeavors to develop technologies.



## Social

### Establishing a corporate culture that puts safety first

- ✓ We will work so that the Tohoku Electric Power Group's Safety and Security Policy will be incorporated in daily activities, and build **a corporate culture that prioritizes safety with zero occupational accidents** together with management and group companies.
- ✓ We will enhance the PDCA cycle to ensure safety while strengthening group-wide cooperation and sharing the status of safety initiatives and challenges.

### Strengthening of resilience

- ✓ Amid diversifying risks, we will improve our ability to cope with such risks as natural disasters and cyberattacks, and will **strengthen our resilience** through daily training so that we can prevent crises and minimize damage in times of crisis.
- ✓ In order to continue fulfilling the mission of stable power supply in the face of intensified natural disasters, we will improve responsiveness to natural disasters through training, swiftly check damage situations utilizing drones, strengthen cooperation with local governments and related organizations, and enhance information transmission to customers and others.
- ✓ Regarding cyber security, we will improve our monitoring function and incident response capabilities while strengthening cooperation with group companies by enhancing the monitoring system (SOC)\*<sup>1</sup> that detects and response to signs of cyberattacks, and the response system (SIRT)\*<sup>2</sup> in case damage should occur.

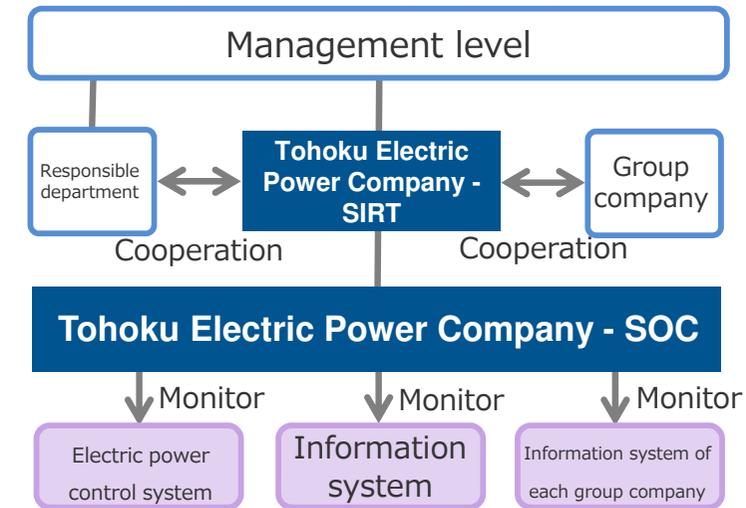
### Solving social issues in collaboration with local residents

- ✓ We will make efforts **to solve social issues and revitalize local communities together with local residents** based on the Tohoku and Niigata Revitalization Support Program and *Machizukuri Genkijuku* town revitalization project, thereby contributing to the creation of a smart society originating in Tohoku.

To continuously ensure safety and security, we have established the Tohoku Electric Power Group's Safety and Security Policy, in compliance with laws and rules, from the three viewpoints of notice, report and correct any violation, while always conducting PDCA activities.

1. Always prioritize safety in every action.
2. Have the courage to stop and check.
3. Make it a habit to ask repeatedly and raise questions.
4. Act with awareness of your role and responsibility.
5. Keep maintaining communication and sharing information in mind.

Tohoku Electric Power Group's Safety and Security Policy  
(Established on April 1, 2020)



The Tohoku Electric Power Group's cyber security system

\*1. SIRT: Security Incident Response Team

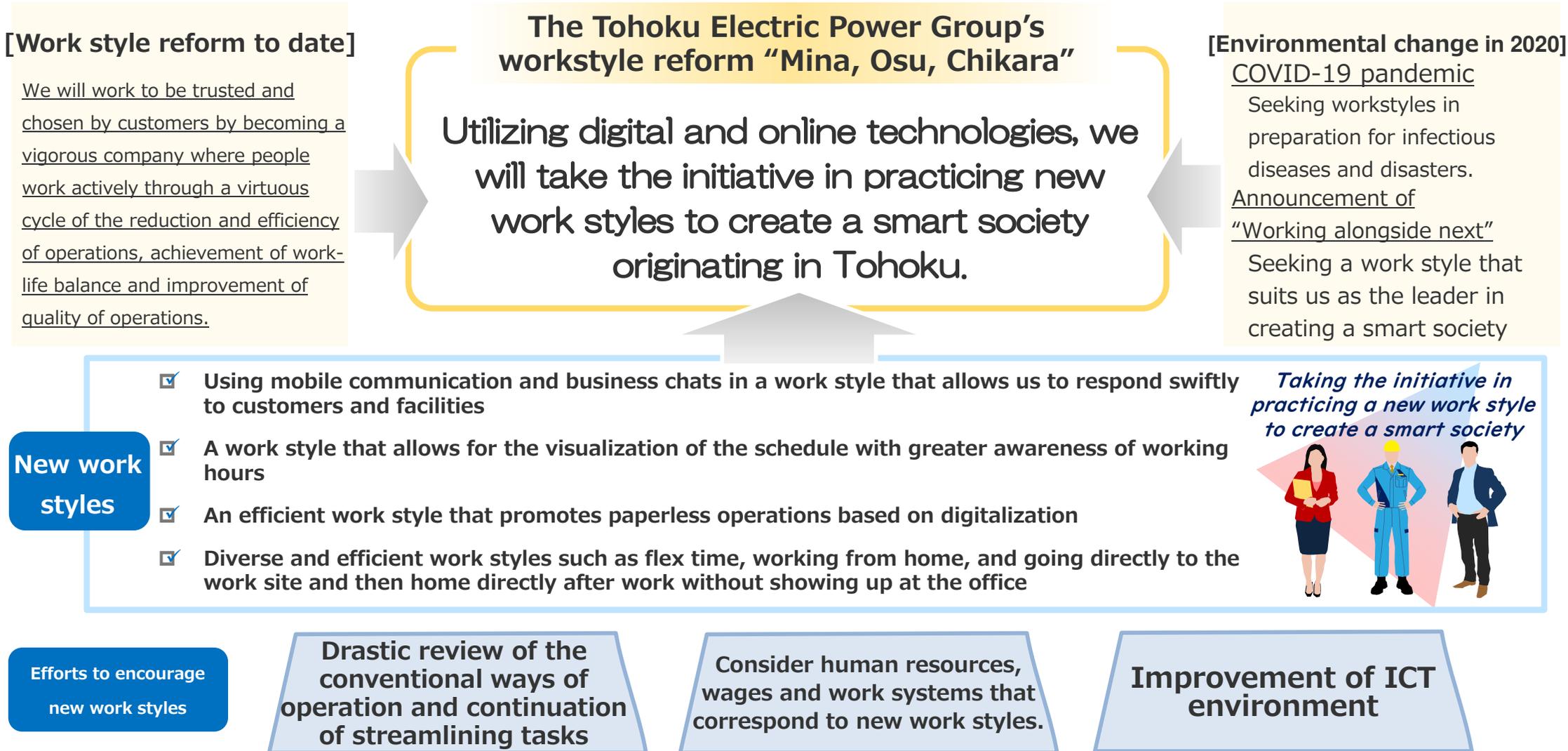
\*2. SOC: Security Operation Center

### Highlight 3. Create: Evolve our management base, which supports the creation of our corporate value

## Social

### Establishing new work styles and work style reforms in the post-pandemic era

- ✓ Each of us will practice workstyle reforms through the transformation of awareness and action and post-pandemic new work style to assume our own roles for the creation of a smart society.



## Social

### Promotion of diversity

- ✓ In order to enhance our response to diversifying customer needs and continue growing our company, we will **create a workplace where diverse human resources can demonstrate their abilities to the maximum**, regardless of gender, age, job responsibilities, or disabilities.
- ✓ We will support round-table discussions and the building of networks using ICT for employees with children, and promote support for the development and active promotion of female managers.
- ✓ We regard work-life balance as a problem for the entire organization, and set a goal of **80% or more for the regular paid leave acquisition rate**, and work to achieve this goal throughout the company.

### Promotion of good health

- ✓ Given the recognition as one of the 2020 Certified Health & Productivity Management Outstanding Organizations (Large Enterprise category), we will formulate the Basic Policy for Promoting Health to promote the physical and mental health of each employee, thereby making efforts to improve corporate value through **increasing the vitality of employees**.
- ✓ We will continue to thoroughly implement infection prevention measures against COVID-19, and endeavor to achieve **both a stable power supply and infection prevention measures**.

## Governance

### Embodying “Yori, Sou, Chikara (the Strength to Work Alongside)” through all employees of the Group companies.

- ✓ As a foundation for achieving our ideal, all employees of **the Tohoku Electric Power Group will understand the intention of the Group’s slogan “Yori, Sou, Chikara,” and work alongside customers and local communities on a daily basis.**

### Thorough implementation of compliance

- ✓ With the basic stance of notice, report, and correct any violation, and based on the Tohoku Electric Power Group Action Policies for Compliance with Business Ethics and Applicable Laws and Regulations, each group company will implement self-disciplined activities based on its own action plan as a member of the Group, thereby further **increasing the effectiveness of compliance of each employee.**



Promoting group-wide improvement of workplaces where everyone can work actively regardless of gender and age



Discussion with the Group companies aiming to develop “Yori, Sou, Chikara” in a unified effort by the Tohoku Electric Power Group.

## Governance

### Enhancement of corporate governance

- ✓ While fully taking into consideration the social trends and social demands associated with corporate governance, we will endeavor to **firmly establish a governance system** in anticipation of the spin-off of the power transmission and distribution division, **and further improve its effectiveness.**

### Picking out and developing human resources who support business model transformation

- ✓ While **picking out and developing diverse talents inside and outside the Tohoku Electric Power Group,** we will proceed with **allocating personnel who can make the growth business profitable** by promoting **initiatives for the improvement of productivity of our core business.**
- ✓ Tohoku Electric Power aims to develop leaders and specialists to promote the change in group size by **developing a new way of thinking towards taking on challenges, learning digital innovation technology and methods,** and promoting **the acceleration of personnel exchanges within the Tohoku Electric Power Group.**

### Response to business risks

- ✓ **Accurate risk control** through **integrated management of risks** in business development such as natural disaster risk, market risk, and climate change risk.

### Reconstruction of information systems as the business foundation

- ✓ Accelerating the expansion of business domains toward the creation of a smart society as well as the transformation of business models by **promoting the modernization of legacy information systems.**

### Further promoting group management

- ✓ **Under the equal partner concept,** we will further promote our Group management by **clarifying the roles of each group company,** including Tohoku Electric Power and Tohoku Electric Power Network, and **optimally allocating management resources (people, goods, money) on a group-wide basis.** Furthermore, we will work to improve the corporate value of the Tohoku Electric Power Group, as a whole, by demonstrating our comprehensive strengths to quickly achieve “Working alongside next.”
- ✓ Each company will work on the enhancement of competitiveness of the power supply business as well as early profitability with the smart society building business in line with its expected role and business area.

# 4. Initiatives to Achieve Financial Goals

## ■ Initiatives to Achieve Financial Goals

- ✓ In response to the intensifying competitive environment, the Tohoku Electric Power Group will proceed with structural reforms to its power supply business **while promoting a sales strategy that emphasizes cash generation and profits, and reduce costs on a scale of tens of billions yen in both variable and fixed costs, thereby steadily achieving the financial goals.**

### [Policy for Financial Goals (Consolidated cash income\*)]

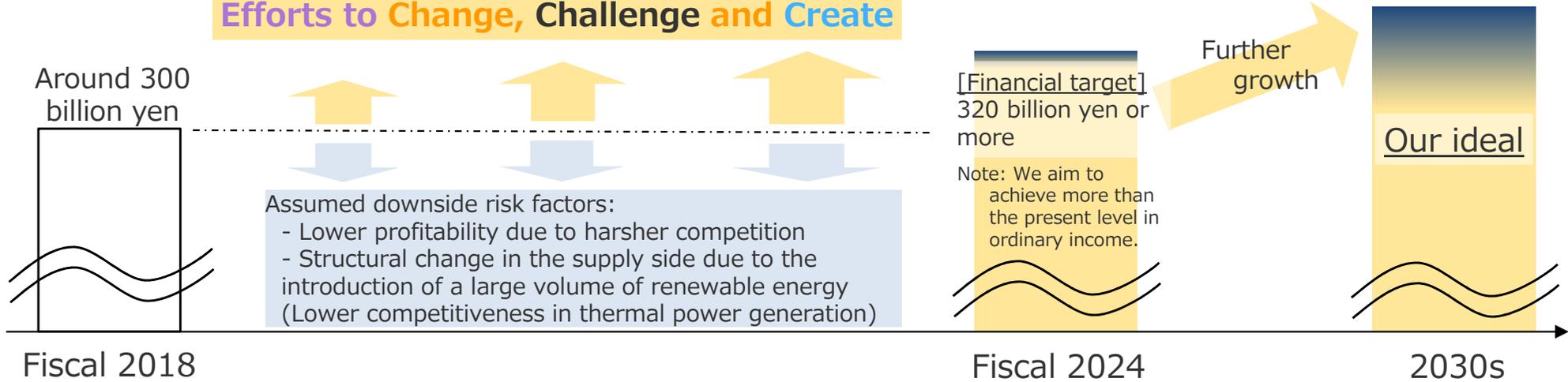
\*Consolidated cash income = operating income + depreciation + amortization of nuclear fuel + share of profit of entities accounted for using the equity method

- In order to achieve “Working alongside next,” we have adopted consolidated cash income as a financial goal with an indicator that is focused on cash generating capability with the aim of accelerating the input of resources for growth by preventing a decline in profits arising from changes in the present supply and demand and revenue and expenditure structures.
- Based on the cash level required to maintain a stable power supply, invest in new growth fields, and pay and distribute returns to various stakeholders, we have set 320 billion yen or more in fiscal 2024 as the minimum level to achieve.

### [Policy for Financial Discipline and Capital Efficiency]

Policy in “Working alongside next”	
<b>Financial soundness</b>	Since the capital (stock) damaged by the earthquake has recovered to a certain extent, we will continue to monitor the consolidated interest-bearing debt/cash profit ratio, which is an index that takes into account the debt repayment capacity (flow) in addition to consolidated equity-to-asset ratio that has been targeted to date.
<b>Capital efficiency</b>	Monitor the profitability of individual investment and capital efficiency of the entire corporate group, secure the profitability of the electric business, and early monetize growth businesses by shifting resources, thereby improving return on invested capital.

### Efforts to Change, Challenge and Create



In May 2021, the Tohoku Electric Power Group will mark our 70th anniversary. With great gratitude for the 70 years, we aim to help Tohoku lead the new era in building a smart society through more efforts than ever to work alongside our customers and local communities.

## Yori, Sou, Chikara (the Strength to Work Alongside)

The Tohoku Electric Power Group has the ability to work alongside its customers and be of help to them, which means we pay attention to each customer and propose comfortable ways of living that suite their lifestyles.

The Group has the ability to work alongside local communities, which means we keep growing with them based on our principles that have not changed since our founding.

With sincere gratitude and great ambition,  
we serve each customer and local community.  
We endeavor to serve you well.





**Tohoku Electric Power Group**

