Value Creation Story

Medium-term Management Plan

Business Segments

Transmission and Distribution Business



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Overview

Kansai Transmission and Distribution, Inc. took over the general power transmission and distribution business of the Kansai Electric Power Co., Inc. in April 2020 to further ensure neutrality in the transmission and distribution business. Kansai Transmission and Distribution, Inc. is committed to providing affordable electricity in a stable manner while placing a premium on being fair and neutral. Its operations include managing power grids, and planning and constructing transmission, transformation, and distribution facilities.

As energy needs in society (decarbonization, greater resilience, etc.) become increasingly diversified, power transmission and distribution business takes on a greater role in meeting such needs. We will therefore develop nextgeneration grid networks to flexibly meet the diversified needs of grid users (distributed power sources, etc.), and provide proven, reliable grid services, thereby meeting the expectations of customers and society.

Medium-term Management Plan Targets

Ordinary income More than 50 billion yen on average More than 50 billion yen on so billion yen -45.1 billion yen 2021-2023 2025 2022 2021 result 2022 result ROA 0.58% -1.41%

Business environment

- The cost in striking a balance between demand and supply increased significantly in fiscal 2022 due in part to a surge in fuel prices.
- Financing is available for developing next-generation grid networks that contribute to decarbonization and greater resilience, with the new wheeling charge system in place in fiscal 2023. Follow-up adjustment, meanwhile, reduces risks associated with demand fluctuations and supply-demand balance. There is thus a growing need for the power transmission and distribution business to improve its sustainability.
- As power transmission and distribution operators are reviewed and compared with one another for their charging schemes, we must implement cost structure reforms to be an industry front-runner while reducing wheeling charges.

Opportunities

- Financing available and profits arising from greater efficiencies secured with the new wheeling charge system in place
- Diversified customer energy needs and transactions
- Progress in electrification, driven by decarbonization
- Expansion of energy-related business at home and abroad

Risks

- Power transmission and distribution operators reviewed and compared with one another, with the new wheeling charge system in place
- Rising fuel prices and tightening supply-demand balance
- Declining grid demand due to the development of distributed resources
- Intensified natural disasters and possible earthquakes in the Nankai Trough

Kansai Transmission and Distribution Group Vision

The Kansai Transmission and Distribution Group Vision has been established to envision the path toward 2050. We are committed to improving and expanding Kansai network facilities, our group's human resources and technologies, and platforms serving customers and society, thereby providing stable electricity, creating new value that goes beyond expectations, and better serving customers and society.

As an entity that supports the entire energy industry in addition to transmitting and distributing electricity, we are also committed to serving as an "energy platform," expanding our services from providing electricity to creating new value for customers and society.



Business strategies

Directions to take

areas with wheeling business, one of our core businesses, positioned as the "wheeling domain," and domestic and overseas business, expanded by utilizing our group strength, as the "expanded domain." At the same time, we will create a "business foundation" to support these two areas.

We will pour resources into two business

1 Wheeling domain

Leading the industry in pursuing decarbonization and strengthening resilience

We will create a system to provide new value, taking into account the needs of customers and society, such as developing next-generation networks and implementing cost structure reforms to be an industry front-runner.

2 Expanded domain

Establishing a primary source of revenue, following wheeling business

We will roll out initiatives and services at home and abroad, going beyond the boundaries of wheeling business.

3 Business foundation

Creating an organization where exploration and ambition in providing new value is taken as matter-of-fact

We will develop an organizational culture to aim for more ambitious goals and implement innovative operational reforms, emphasizing Kaizen (the Toyota production system) and DX.

5-year Efforts

Basic premise of our business operations

- Doing business with integrity, beginning with compliance with laws and regulations
- Recreate a fair basis for competition
- Create a robust safety culture

Wheeling domain

- Create next-generation networks (decarbonization and greater resilience)
- Implement renovation for aging facilities
- Implement cost structure reforms to be an industry front-runner

2 Expanded domain

- Create new value in power transmission and distribution business
- Establish other sources of revenue

3 Business foundation

- Promote Kaizen and DX, innovate the organizational culture
- Strengthen human resources and support various workstyles
- Contribute to local communities (to win understanding and confidence)
- Strengthen the financial bases

Initiatives in fiscal 2022

Basic premise of our business operations

Doing business with fairness and integrity

Learning lessons from a serious violation of the Electricity Business Act (power producer and supplier data breach, etc.), we have strengthened our system to comply with laws and regulations. Specifically, the president, appointed as the chief compliance officer (CCO), controls compliance and behavior issues, with directors in charge of compliance in place. In addition, the Compliance Promotion Division was set up to run day-to-day operations under the direct control of the president, where compliance and behavior issues are centrally controlled. Moreover, we will create a framework for checking compliance and systems by incorporating external perspectives to make control more effective.

Framework for legal compliance



*Compliance manager of each department and area. Department: Department Compliance Officer (DCO), Area: Area Compliance Officer (ACO)

Wheeling domain

To provide high-quality electric power

Our commitment is to ensure the operation of power grids between power plants and customers, optimize facilities, and prevent and respond quickly to power outages. As a result of our efforts, with the exception of major natural disasters, we are maintaining one of the world's highest power quality levels in the transmission and distribution business.

Annual duration of power outage per household



DER flexibility platform

Developing a stable electricity system by utilizing the value of distributed energy resources (DERs) is critical to achieving carbon neutrality by 2050. We, therefore, will continue to develop technology for incorporating DERs into grid operation to ensure greater flexibility.



Upgrading grid distribution networks

We will introduce next-generation equipment to closely monitor and control the operation status of the grid distribution networks, thereby dealing with problems arising from the input of massive amounts of renewable electricity, upgrading the capacity of grid distribution networks to accommodate more renewable electricity. All of this will contribute to decarbonization. In addition, we will prevent power outages by incorporating grid information (grid voltage/current waveforms, etc.) and develop an early detection system for power outage causes. These measures will also contribute to increasing resilience.

Advanced asset management

The number of aging facilities is increasing. These facilities should be systematically refurbished to ensure safe and stable electricity supply. Rational and efficient implementation of refurbishment, however, requires a comprehensive plan that takes into account facility risks, refurbishment costs, construction capabilities, etc.

We will develop and verify a system to map out a plan based on investment value evaluation, with efforts underway to upgrade our asset management.



Emergency response system for disasters, etc.

We designate initial responders and have initial response supervisors put on night watches to prepare for quickly setting up the response system in case of emergency. In addition, special training drills are conducted several times a year for both initial response supervisors and initial responders.

Moreover, the Kansai Electric Power Group comprehensive emergency response drills are conducted every year. We are committed to improving our disaster response skills and raising disaster awareness, not only to prepare for the occurrence of the Nankai Trough Earthquake but also with consideration for severe incidents such as the simultaneous occurrence of a nuclear power disaster or during occasions when the balance of power supply and demand is tight.

Furthermore, in line with the disaster cooperation plan, we will cooperate with general power transmission and distribution utilities and relevant authorities in times of disasters to quickly recover and restore electricity facilities and systems for stable supply of power.

Number of participants in group-wide comprehensive emergency response drills (fiscal 2022)

1,002

Implementing cost structure reforms to be an industry front-runner

A cost reduction of 55.1 billion yen/year expected for measures discussed before fiscal 2022 is incorporated in the business plan submitted to the government in accordance with the new wheeling charge system. We will make these measures a standard practice to start with. At the same time, we will implement cost structure reforms in all areas, incorporating external knowledge, to be a front-runner in power transmission and distribution operation.

2 Wheeling/expanded domains

Upgrading and reforming power transmission and distribution business

The structures of electricity systems are changing, with distributed resources increasing and users beginning to participate in the market, and we will develop a business strategy designed to upgrade and reform our power transmission and distribution business to become more sustainable and continue growing. Accordingly, we have established a Frontier Lab, which is tasked with research and analysis of future trends and exploration and implementation of new initiatives, all under the direct control of the president.

3 Expanded domains

Services to prevent fraudulent account creation, leveraging information on electrical power facilities

Fraudulent accounts using "stolen identities" are often abused for criminal purposes such as money laundering, which is becoming a public concern. Kansai Transmission and Distribution, Inc. and Caulis Inc., therefore, collaborate with each other in providing financial institutions with services to prevent fraudulent account creation, with the former's proprietary information on power facilities combined with the latter's fraudulent access detection system.

In addition, we are incorporating electric facility information to provide new services for continuous customer management designed to streamline management of existing accounts for financial institutions. These services will help prevent crimes, including money laundering.

Overview of services leveraging information on electrical power facilities to prevent fraudulent account creation



Expanding overseas operations

We are extending our reach worldwide, focusing on "expansion of earnings," "technological contribution," and

"sustainability promotion." In fiscal 2022, for example, we were awarded three consulting projects in three countries, including Nigeria and Lebanon.

Kansai Transmission and Distribution, Inc., meanwhile, is looking at investing independently in overseas projects to further boost its earnings.



Meeting with the president of AEDC (a local power distribution company)

Business foundation

Promoting Kaizen and DX

We implemented 197 Kaizen projects in fiscal 2022 to create a new organizational culture that aims to improve productivity. Specifically, we eliminated waste and conducted a fundamental review of work procedures, which resulted in drastic improvements in productivity and added value.

As part of the DX initiative, moreover, we incorporated Al-based image analysis to streamline facility patrols and develop a management system, which upgraded on-site and management operations.

We will implement operational reforms through Kaizen and DX, specifically by further pursuing Kaizen, introducing innovative technology and utilizing digital technology.