See p45-p.53 for details of each initiative.

21

J-POWER "BLUE MISSION 2050"

Three Action Plans

J-POWER "BLUE MISSION 2050" is a long-term strategy and roadmap for the J-POWER Group. We will advance the transition into a carbon neutral and hydrogen society, while solving social issues by stages concerning each of the three pillars of expansion of CO₂-free power sources, creation of a zero-emission power supply, and power network stabilization and enhancement.

Expansion of CO₂-free power sources

• Further expansion of renewable energy

• Steady promotion of nuclear power generation

Creation of a zero-emission power supply

- Conversion from thermal power generation to CO₂-free hydrogen power generation
- Production and supply of CO2-free hydrogen
- CCS

Power network stabilization and enhancement

• Stabilizing power network

• Power network enhancement

Acceleration and Upcycling

We have set acceleration and upcycling as our priorities for implementation. Regarding acceleration, in addition to developing new renewable energies, we will also accelerate the expansion of renewable energy throughout Japan by providing power balancing capabilities through technologies such as hydrogen power generation, and by enhancing the power network. Upcycling refers to the transformation of existing management resources into high value-added assets through the application of new technologies. Specific initiatives include replacing hydroelectric and wind power facilities and introducing hydrogen, ammonia, and CCS technologies at thermal power plants.

Roadmap and CO₂ Emissions Reduction Targets

As part of the short- and long-term goals toward achieving carbon neutrality by 2050, we have set goals for eliminating CO₂ emissions from the Group's domestic power generation business* by FY2025 and 2030.

This roadmap will be updated, reviewed, and refined as needed based changes in the assumptions including the Japanese government's GX policy (Strategic Energy Plan, global warming countermeasures, NDC, etc.), power demand-supply situation, power system design, and progress of industry development, etc.

*Emissions from the J-POWER Group's domestic power generation business, which are covered by emissions reduction targets, account for approximately 80% of the Scope 1 emissions.

*Expansion of renewable energies and operation of Ohma Nuclear Power Plant do not directly contribute to the reduction of the Group's CO₂ emissions from thermal power plants, but they do contribute to reducing emissions intensity, as well as CO₂ reductions at power generators and consumers, who are our customers.

CO ₂ reduction target from domestic power generation business CO ₂ emissions (compared to FY2013)		-9.2 million tons	-22.5 mi -4	illion tons 6%			Realization of carbon neutrality Net-zero emissions	
	,	2025	20)30		2040	2050	
Expansion of CO ₂ -free power sources	Renewable energy	Increase of annual domestic generation volume by 4 billic Global development of new energy projects	Additional new developments, upcycling of existing facilities and maximum use of existing assets					
	Nuclear	Construction and start of operations at Ohma Nuclear Power Plant						
Creation of a zero- emission power supply	Domestic coal-fired power	Gradual phase-out of aging power plants int	adual phase-out of CO2 reduction initiatives (Expansion of biomass mixed combustion, ing power plants introduction of ammonia mixed combustion, etc.)					
	CCS	Development of t environment, des construction of fa	Development of business environment, design and construction of facilities			Achieve CO ₂ -free thermal power generation (Hydrogen, ammonia, IGCC+CCS, biomass mixed combustion +CC, etc.)		
	Hydrogen power generation	Demonstration tests in Japan	Upcycling (adding gasi	ifiers to existin	ıg assets)	issets)		
	Fuel production (CO ₂ -free hydrogen)	Feasibility study on overseas production	Utilization i	ilization in other industries				
Power network	Stabilization	Expansion of distributed energy service by improving load tracking performance through upcycling of hydroelectric and thermal power (adding a gasifier to existing assets)						
	Reinforcement*	Completion of reinforcemen New Sakuma Frequency Con Station, etc.	patribution to power network enhancement					
Strategic investment		FY2024-2026: 300 billion yen By FY2030: 700 billion yen						

*The power network enhancement is to be implemented by J-POWER Transmission Network Co., Ltd.

P.26 Capital allocation D. P.61 Policy for Initiatives in the Overseas Business D. P.67 Scope 1–3 Data D. P.68 Changes in CO₂ Emissions