# TCFD Metrics & Targets Zero Emissions Challenge 2050

**Together with communities and our customers, we aim to simultaneously achieve "decarbonization" and "safety, stability and efficiency" through the innovation of the energy infrastructure.**

**2030**

- We will reduce $CO_2$ emissions from electricity sold to customers by **50% or more compared with FY2013**.
- We aim for 100% electrification*1, 2 of company*3-owned and operated vehicles.

**2050**

- We will take on the challenge of attaining **net zero $CO_2$ emissions** for our entire business to contribute to **the realization of a carbon-free society**.

GX League

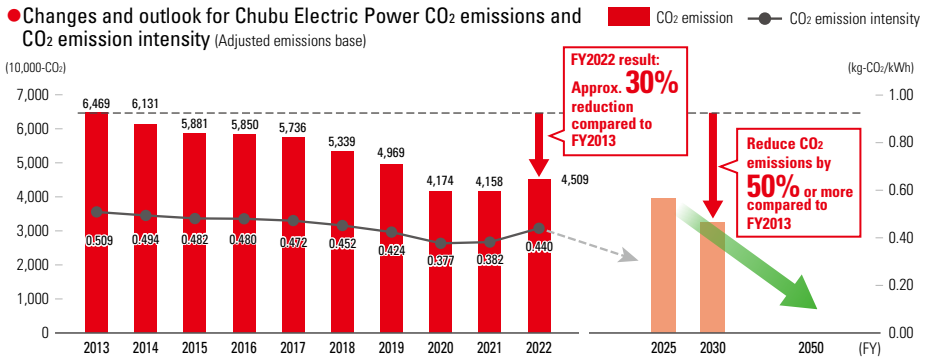
Chubu Electric Power is participating in the "GX League," an initiative established in accordance with the "GX League Basic Concept" published by the Ministry of Economy, Trade and Industry.

### Targets for FY2025 after GX League registration*4

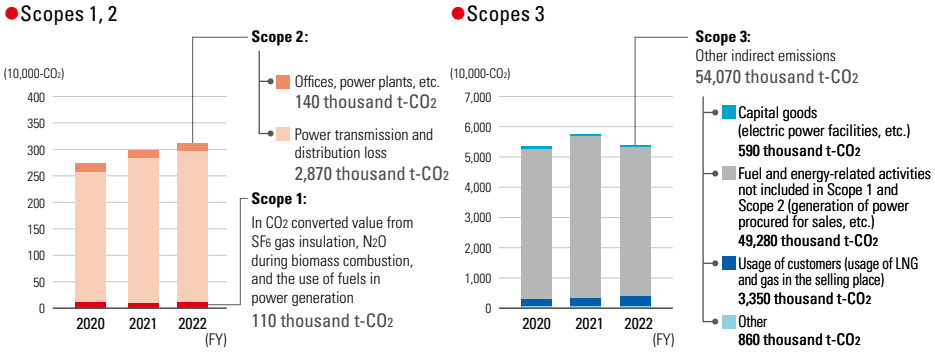
◎Domestic direct emissions: **50 thousand t-$CO_2$**
◎Domestic indirect emissions: **130 thousand t-$CO_2$**
◎CO2 emissions from electricity sold to customers: **39.8 million t-$CO_2$**

*1 Electric vehicles (EV), plug-in hybrid vehicles (PHV), fuel cell vehicles (FCV), etc.
*2 Excludes special vehicles such as emergency and construction -use vehicles not suitable for electrification
*3 Chubu Electric Power, Chubu Electric Power Grid, Chubu Electric Power Miraiz
*4 Target values of Chubu Electric Power, Chubu Electric Power Grid and Chubu Electric Power Miraiz
*5 Target values may be adjusted in case of changes in system design or other factors.

## $CO_2$ emissions and emission intensity pertaining to electrical energy sold by the Company

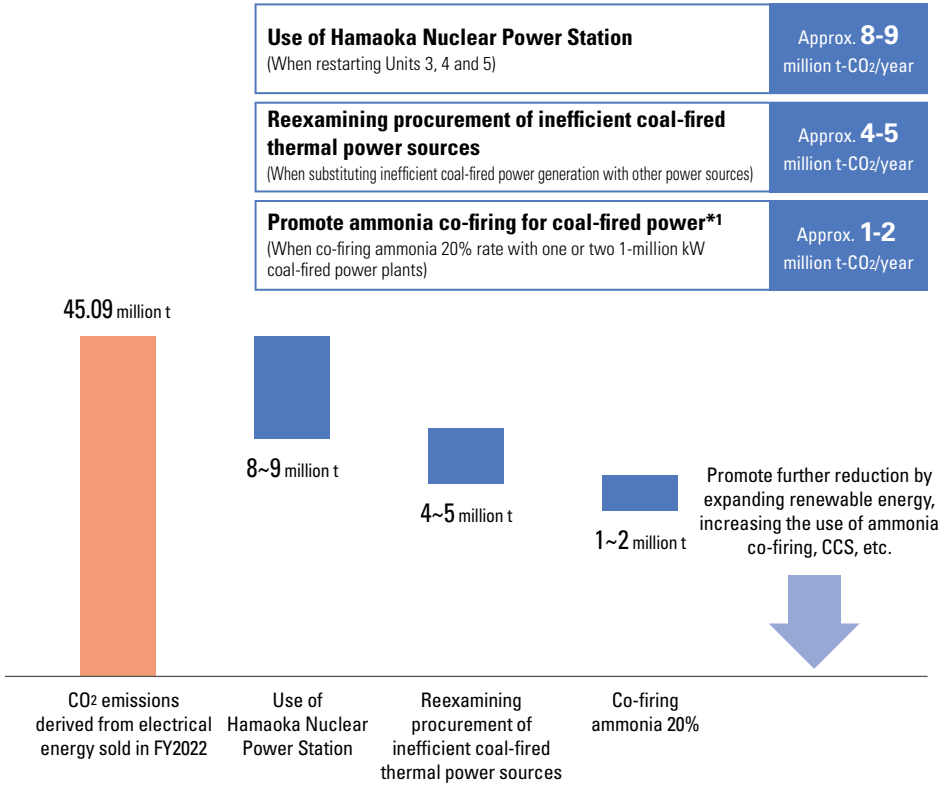



## Total greenhouse gas (GHG) emissions* from the entire supply chain




* GHG emissions represent $CO_2$ converted total value of $CO_2$, $CH_4$, $N_2O$, HFC and $SF_6$.
Represents a total of the three companies of Chubu Electric Power, Chubu Electric Power Grid and Chubu Electric Power Miraiz.

## $CO_2$ reduced by key measures




*1 The specific power sources are yet to be determined. The provided values are based on the assumption of a scenario where 20% ammonia co-firing is applied to a portion of Chubu Electric Power Miraiz's sourcing.

### [Reference] $CO_2$ reduction effects from global business activities abroad

Renewable energy capacity (FY2022)
**Approx. 550MW*2**

Targets in 2030
Renewable energy **2 GW**
**6 million tons reduction*3** per year

*2 International renewable energy capacity. For domestic renewable energy, the capacity at the end of FY2022 was approximately 740 MW, with aims to expand to over 3.2 GW by around 2030.
*3 Overall emissions reduction from global operations, including not only the renewable energy business but also other businesses.

## Issuing Green Bonds

Link Green Bonds

Based on the dual perspective of promoting initiatives for realizing a decarbonized society and diversifying fund procurement, Chubu Electric Power issues Green Bonds, which are bonds that limit the use of procured funds to environmental improvement projects such as the development of renewable energy. In the issuance of Green Bonds, we have received acclaim from DNV BUSINESS ASSURANCE JAPAN K.K., a third-party assessment organization, regarding the suitability of our various standards related to the issuance of Green Bonds.

### Reporting on the second Chubu Electric Power Green Bond (issued in May 2022)

**Appropriation of procured funds** (As of March 31, 2023)

| Item | | Amount |
|---|---|---|
| Procurement amount (amount received) | | 19.9 billion yen |
| Appropriated amounts | | 19.9 billion yen |
| (breakdown) | Seinaiji Hydro Power (Nagano) | 1.2 billion yen |
| | Abekawa Hydro Power (Shizuoka) | 2.3 billion yen |
| | Yokkaichi Biomass (Mie) | 4.4 billion yen |
| | Aichi Gamagori Biomass (Aichi) | 0.9 billion yen |
| | Godo Biomass (gifu) | 0.3 billion yen |
| | Omaezaki Port Biomass (Shizuoka) | 0.9 billion yen |
| | Kamisu Biomass (Ibaraki) | 0.9 billion yen |
| | Yatsushiro Biomass (Kumamoto) | 1.5 billion yen |
| | Yonago Biomass (Tottori) | 2.6 billion yen |
| | Tahara Biomass (Aichi) | 1.7 billion yen |
| | Atsumi Onshore Wind Power (Aichi) | 2.4 billion yen |
| | Akita Port/Noshiro Port offshore wind power (Akita) | 0.1 billion yen |
| Unappropriated balance | | — |

*1 Figures less than the expressed unit are rounded down. *2 Of the amount procured, 7.7 billion yen was allocated to the refinancing.

**Environmental improvement effect** (April 2022–March 2023)

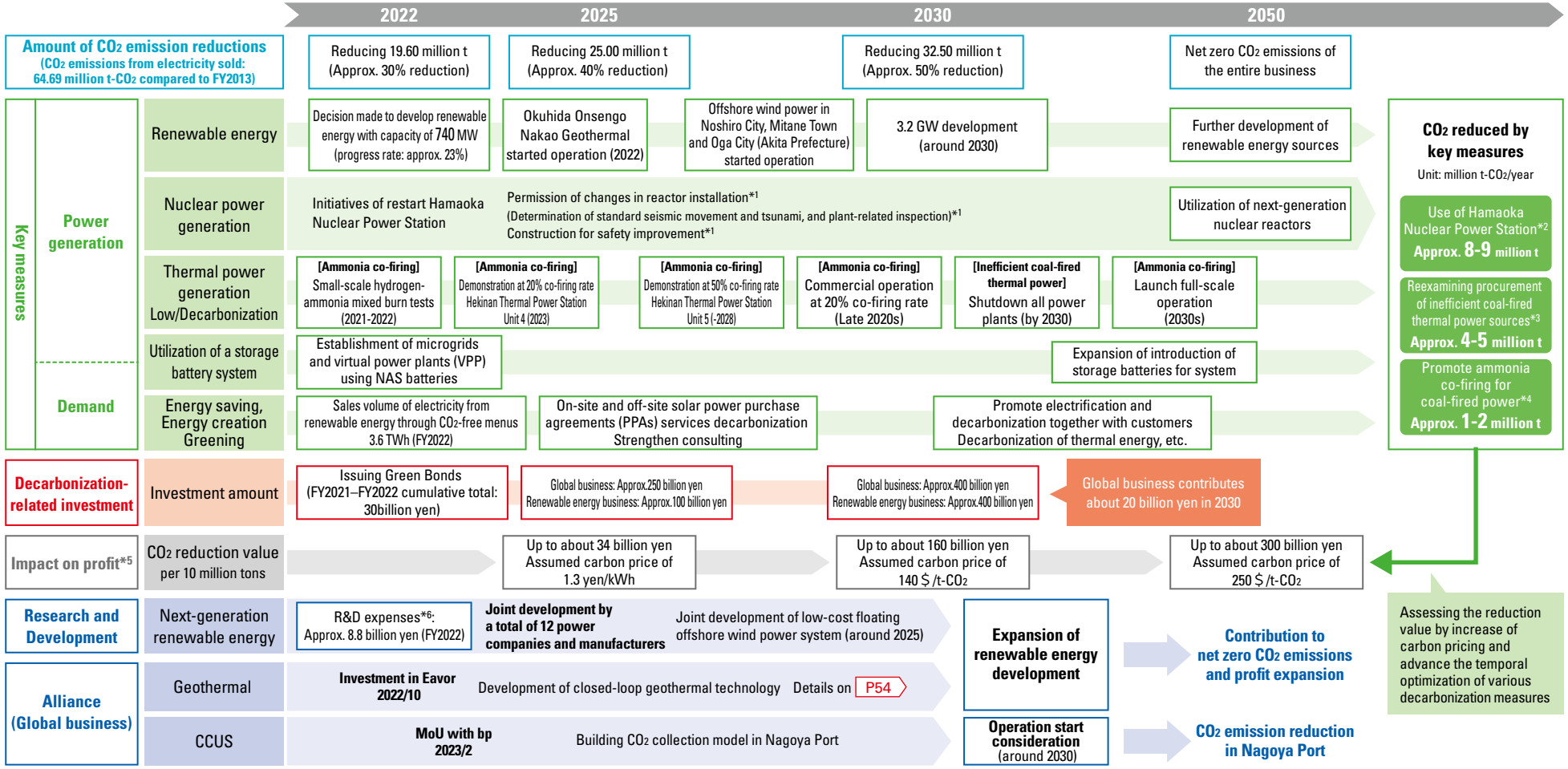
| Project | Installed capacity | Amount of $CO_2$ emission reductions |
|---|---|---|
| Yokkaichi Biomass (Mie) | 49,000 kW | 325,964 (t-CO2/y) |
| Yonago Biomass (Tottori) | 47,500 kW | |
| Akita Port/Noshiro Port offshore wind power (Akita) | 54,500 kW (Akita Port)<br>84,000 kW (Noshiro Port) | |

*1 Annual $CO_2$ emission reduction calculation method: FY2022 annual power generation volume (MWh) x $CO_2$ emission coefficient (t-CO2/MWh)
*2 Of the power plants listed in appropriation of procurement funds, we plan to report on the environmental improvement effects for the power plants under construction as of March 31, 2023, after they commence operation.

We are advancing decarbonization through three pillars: renewable energy development, ammonia co-firing, and the restart of the Hamaoka Nuclear Power Station.

In renewable energy development, particularly offshore wind power, the consortium the Group participates in has been selected as a power generation operator for three offshore regions, marking a successful start. Efforts will continue in this direction. Moreover, JERA is at the forefront of ammonia co-firing globally, and we are also working towards decarbonizing energy beyond electricity, offering ammonia solutions for customer facilities.

Furthermore, the Hamaoka Nuclear Power Station is a significant power source, not only for ensuring stability and decarbonization but also for stabilizing prices. We are approaching its reactivation with a focus on safety, while seeking the understanding of the local community.




*1 The specific timing for the completion of the inspections for confirming conformity to new regulatory requirements and the restart schedule have not been established, but efforts are being made to achieve an early restart. *2 In the case of restart of Units 3, 4, and 5 at Hamaoka Nuclear Power Station.
*3 In the case of replacing inefficient coal-fired power generation with other sources. *4 In the case of ammonia 20% co-firing in 1-2 units of 1 million kW-class coal-fired power generation. *5 Calculated based on non-FIT non-fossil fuel energy certificate prices, IEA WEO (NZE Scenario) developed nation carbon prices, etc.
*6 Including research and development expenses in fields other than decarbonization.