

ESG Data 2026

E : Environmental Data

Updated Oct. 2026

					UNIT	2021	2022	2023	2024	2025		
Realization of a carbon-free society	CO2 emission intensity of electricity sold to customers ^{※1}				kg-CO ₂ /kWh	0.382 (0.449)	0.440 (0.433)	0.393 (0.439)	0.376 (0.411)	0.391 (0.443)		
	CO2 emissions of electricity sold to customers ^{※1}				10 thousand t-CO ₂	4,158 (4,892)	4,509 (4,439)	4,081 (4,555)	4,044 (4,044)	4,236 (4,236)		
	Total greenhouse gas (GHG) emissions ^{※2,3,4}	Summary	Scope1 ^{※5}		10 thousand t-CO ₂	10 (27)	26 (29)	20 (20)	19	20.4		
			Scope2 ^{※6}	Market-based ^{※7}	10 thousand t-CO ₂	295 (296)	241 (242)	286 (286)	241	285.9		
				Location-based ^{※8}	10 thousand t-CO ₂	—	—	—	—	287.0		
			Scope1,Scope2 Total		Market-based	10 thousand t-CO ₂	305 (323)	267 (270)	306 (306)	260	306.4	
					Location-based	10 thousand t-CO ₂	—	—	—	—	307.5	
			Scope3 ^{※9}			10 thousand t-CO ₂	5,740 (5,913)	5,614 (5,805)	5,911 (5,922)	5,631	9,013.7	
		Scope2 Breakdown	Scope2	Market-based	Offices, power plants, etc. ^{※10}	10 thousand t-CO ₂	15 (16)	17 (18)	19 (19)	17	41.0	
					Transmission and distribution losses ^{※11}	10 thousand t-CO ₂	280 (280)	224 (242)	267 (267)	224	245.0	
					Total	10 thousand t-CO ₂	295 (296)	241 (242)	286 (286)	241	285.9	
				Location-based	Offices, power plants, etc.	10 thousand t-CO ₂	—	—	—	—	42.1	
					Transmission and distribution losses	10 thousand t-CO ₂	280 (280)	224 (224)	267 (267)	224	245.0	
					Total	10 thousand t-CO ₂	—	—	—	—	287.0	
			Scope3	Category 1	Purchased goods and services ^{※12}	10 thousand t-CO ₂	71 (110)	134 (168)	187 (189)	153	172.0	
				Category 2	Capital goods ^{※13}	10 thousand t-CO ₂	48 (53)	73 (74)	66 (67)	68	84.5	
				Category 3	Fuel- and energy- related activities(not included in scope1 or scope2) ^{※14}	10 thousand t-CO ₂	5,335 (5,445)	4,987 (4,987)	5,011 (5,011)	4,983	5,164.4	
				Category 4	Upstream transportation and distribution ^{※15}	10 thousand t-CO ₂	— (1)	1 (4)	8 (8)	1	0.5	
				Category 5	Waste generated in operations ^{※16}	10 thousand t-CO ₂	1 (1)	1 (1)	1 (1)	2	1.5	
				Category 6	Business travel ^{※17}	10 thousand t-CO ₂	0.2 (0.3)	1 (1)	1 (1)	1	1.0	
				Category 7	Employee commuting ^{※18}	10 thousand t-CO ₂	1 (2)	2 (2)	2 (2)	2	2.1	
				Category 8	Upstream leased assets ^{※19}	10 thousand t-CO ₂	—	—	—	—	0.0	
				Category 9	Downstream transportation and distribution ^{※20}	10 thousand t-CO ₂	—	—	—	—	0.0	
				Category 10	Processing of sold products ^{※20}	10 thousand t-CO ₂	—	—	—	—	0.0	
				Category 11	Use of sold products ^{※21}	10 thousand t-CO ₂	284 (285)	409 (561)	627 (634)	412	434.5	
				Category 12	End-of-life treatment of sold products ^{※22}	10 thousand t-CO ₂	— (0.0)	0 (1)	1 (1)	0.1	0.1	
				Category 13	Downstream leased assets ^{※23}	10 thousand t-CO ₂	— (16)	6 (6)	8 (8)	10	11.6	
				Category 14	Franchises ^{※20}	10 thousand t-CO ₂	—	—	—	—	0.0	
				Category 15	Investments ^{※24}	10 thousand t-CO ₂	—	—	—	—	3,141.5	
	Total energy consumption				GWh	1,191	1,209	1,357	1,397	2,016		
	Renewable energy generation capacity ^{※2,25}				Hydroelectric(General)	10 thousand kW	215.5	215.5	216.6	217.3	218.2	
					Hydroelectric(Pumped storage)	10 thousand kW	331.7	331.7	331.7	331.7	331.7	
					Solar	10 thousand kW	50.9	50.4	56.7	59.7	57.2	
					Wind	10 thousand kW	17.9	18.4	20.6	20.6	21.6	
					Biomass	10 thousand kW	11.9	15.3	20.7	27.2	31.1	
					Geothermal	10 thousand kW	0.0	0.1	0.1	0.1	0.1	
					Total(excluding pumped storage)	10 thousand kW	296.2	299.7	314.7	324.9	328.2	
	Fuel consumption of vehicles				ℓ	2,562	2,511	2,408	2,304	2,054		
	Office electricity consumption				10 thousand kWh	10,118	9,756	9,072	8,851	8,599		
	Transmission and distribution losses ^{※26}				Transmission losses	MWh	3,700,591	3,609,151	3,611,694	3,648,781	3,691,009	
					Distribution losses	MWh	2,757,985	1,551,642	2,476,584	1,642,822	2,100,318	
					Transmission losses	%	3.0	3.0	3.1	3.1	3.1	
					Distribution losses	%	3.0	1.8	2.8	1.9	2.4	
Coexisting with nature	SOx emissions				t	1	2	2	1	0		
	NOx emissions				t	74	77	84	77	72		
	SF ₆ recovery rate ^{※27}				In equipment inspections	%	96.8	99.5	99.5	99.6	99.7	
					In equipment removal	%	99.5	99.3	99.4	99.3	99.4	
	Amount of Leaked Fluorocarbons ^{※28}				10 thousand t —CO2	0.1	0.1	0.1	0.3	0.2		
	VOC emissions				t	0	0	0	0	0		
	Water resources ^{※29}				Total water withdrawal (including seawater and freshwater) ^{※30}	Million m ³	51,258	50,760	50,824	50,952	47,640	
					Water discharge from biomass and nuclear power stations	10 thousand m ³	6.3	6.4	7.0	10.4	6.6	
					Fresh water use(used for nuclear, biomass power generation)	10 thousand m3	16	15	16	19	19	
					Water use for offices	10 thousand m ³	38.7	39.5	36.8	39.0	35.6	
					Water use for offices per employee	m ³ /employee	25.7	26.5	24.9	25.7	23.4	
					Used quarry water collected in the quarry	10 thousand m ³	0	0	0	0	0	
					Water withdrawal from water-stressed regions ^{※31}	10 thousand m ³	0	0	0	0	0	
					Facilities, assets, production and revenue in water-stressed regions ^{※31}	number/amount	0	0	0	0	0	
					Number of incidents of non-compliance with water-related regulations	cases	0	0	0	0	0	
Creating a circular society	Amount of waste generated ^{※32}				10 thousand t	4.6	4.5	5.0	5.2	5.7		
	Hazardous waste				10 thousand t	0.3	0.2	0.2	0.2	0.2		
	Plastic waste				10 thousand t	0.1	0.1	0.2	0.3	0.3		
	Industrial waste, etc., recycling rate ^{※32}				%	97.8	97.3	98.3	99.0	99.4		
	Paper waste generated				t	1,148.6	1,017.4	793	700	522		
	Paper waste recycling rate				%	70.7	71.8	80.5	74.6	93.4		
	Green procurement rate of consumable office supplies				%	99.2	98.8	98.9	99.4	99.5		
Environmental compliance	Violation of important environmental laws and regulations				amount/accidents	0	0	0	0	0		

■ Values for the total of the three companies : Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc.

The scope of total greenhouse gas emissions is as described in ※4.

※1 Reflects adjustments involved in CO2 emission credits, non-fossil fuel energy certificates and the FIT scheme for renewable energy obtained from the methods stipulated in the Act on Promotion of Global Warming Countermeasures. Figures in parentheses represent Basic emissions factor and Basic emissions.

※2 Figures are rounded and may not match the total.

※3 GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials.

※4 Scope of calculation is as follows:

FY2021:

Not in parentheses ... Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc. and Chubu Electric Power Miraiz Co., Inc.

In parentheses ... Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc., + 7 of the domestic consolidated subsidiaries as of the beginning of FY2021

FY2022:

Not in parentheses ... Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc. + 8 of the domestic consolidated subsidiaries as of the beginning of FY2022

In parentheses ... Scopes 1 and 2: Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc. + 37 of the domestic consolidated subsidiaries as of the beginning of FY2022

Scope 3: Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc. + 11 of the domestic consolidated subsidiaries as of the beginning of FY2022

FY2023 :

Not in parentheses ... Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc.+ 15 of the domestic consolidated subsidiaries as of the beginning of FY2023

In parentheses ... Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc. + 36 of the domestic consolidated subsidiaries as of the beginning of FY2023

FY2024 : Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc. + all of the domestic consolidated subsidiaries as of the end of FY2024(Excluding companies that became consolidated subsidiaries during the FY2024)

FY2025 : Chubu Electric Power Co., Inc., Chubu Electric Power Grid Co., Inc., Chubu Electric Power Miraiz Co., Inc. + all of the domestic consolidated subsidiaries as of the end of FY2025(Excluding companies that became consolidated subsidiaries during FY2025, etc.)

※5 Scope1 :

Emissions of greenhouse gases released directly into the atmosphere from emission sources within organizational boundaries.

Calculated, in principle, with the emission factors specified in the GHG emissions accounting, reporting, and disclosure system administered by Japan's Ministry of the Environment, based on the Act on the Rational Use of Energy and the Act on Promotion of Global Warming Countermeasures.

※6 Scope2 : Emissions due to the electricity and heat consumption.

※7 Market-based approach : Calculated using the basic emission factor of the electricity suppliers and heat suppliers, adjusted for non-fossil energy sources, etc.

※8 Location-based approach : Calculated using average emission factor for the region.

※9 Scope3 :

Indirect greenhouse gas emissions from business. We follow major guidelines have been published:

"the GHG emissions accounting, reporting, and disclosure system administered by Japan's Ministry of the Environment", based on "the Act on the Rational Use of Energy" and

" the Act on Promotion of Global Warming Countermeasures"

"Corporate Value Chain (Scope 3) Accounting and Reporting Standard(GHG protocol)"

"Green Value Chain Platform (Japanese Ministry of the Environment website, which provides Scope 3 emissions calculation methods and models) (Ver.3.5) "

"IDEA Ver.2.3"

"Evaluation of Life Cycle CO2 Emissions of Domestic and Foreign Biomass Fuel for Coal-fired Power Plant" (CRIEPI Report Y10010 (May 2011))"

"Comprehensive Assessment of Life Cycle CO2 Emissions from Power Generation Technologies in Japan" (CRIEPI Report Y06 (July 2016))"

※10 Includes pumping power losses from FY2025.

※11 Transmission and distribution losses :

Calculated by subtracting the amount of electrical energy at use end from that at transmission end and multiplying the result by the emission factor of general electricity transmission and distribution utility companies in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and GHG Protocol Scope2 Guidance.

- ※12 Category 1 : Product/service price × emission factor
- ※13 Category 2 : Amount of a price increase of non-current assets × emission factor
- ※14 Category 3 :
The sum of the following three values;
-Emissions from generation of electricity we procured and sold to end users :
the quantities of electricity procured from other companies × emission factor
-Emissions from upstream activities (extraction, production and transportation) of fuels for electricity we procured and sold to end users :
the quantities of electricity procured from other companies × emission factor
-Emissions from upstream activities (extraction, production and transportation) of fuels we consumed :
the quantities of fuels consumed × emission factor
- ※15 Category 4 : Calculated in accordance with the Specific Shipper Business Report under the Act on the Rational Use of Energy.
- ※16 Category 5 : Industrial waste, etc. generated × emission factor
- ※17 Category 6 : Business travel expenses × emission factor
- ※18 Category 7 : Travel expenses for employee commuting × emission factor
- ※19 Category 8: Already accounted for in Scope 1 or Scope 2.
- ※20 Category 9, 10, and 14 : Not calculated because there are no applicable activities, or such activities are immaterial, in the business activities of the Chubu Electric Power Group.
- ※21 Category 11 : LNG・Gas sales volume × emission factor etc.
- ※22 Category 12 : Expected waste volume × emission factor
- ※23 Category 13 : Number of leased assets, etc. × emission factor
- ※24 Category 15 : Domestic and overseas equity-method affiliates are recognized as investees, and their Scope 1 and Scope 2 emissions are accounted for in proportion to the Chubu Electric Power Group’s equity interests.
- ※25 Power generation capacity owned by Chubu Electric Power Group for business (the capacity of joint project is counted by equity share) .
- ※26 Losses include power consumption within the substation.
- ※27 The value for calendar year (from January 1 to December 31).
- ※28 Leakage of chlorofluorocarbons based on the Fluorocarbon Emissions Control Act
- ※29 Chubu Electric Power Co., Inc. also discloses water-related information in the CDP water security questionnaire. <https://www.chuden.co.jp/english/esg/environment/initiatives/cdp/>
- ※30 Includes seawater for cooling at power plants, fresh water (river water) for hydroelectric power generation, etc.
- ※31 In WRI's Aqueduct assessment, we define water-stressed regions as those with high water stress.
- ※32 Industrial waste, etc. = Industrial waste + Valuables + Internally recycled goods