

Environmental Performance Data

Environmental Management System

	unit	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019
Status of ISO 14001 Certification Acquisition (employee coverage)	%	46.7	47.1	47.9	45.1	46.5

Note: Disclosure Boundary B

Realizing a Low Carbon Future

		Unit	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019	
GHG emissions (Scope 1)		Millions of t-CO ₂ e	0.197	0.190	0.185	0.164	0.138	
GHG emissions (Scope 2)* ²		Millions of t-CO ₂ e	4.69	4.40	4.21	3.29 (4.14)	3.06 (3.79)	
CO ₂ Emissions from Business Operations* ¹ , * ²	Total CO ₂ emissions (thousands of t-CO ₂)	Millions of t-CO ₂ e	4.87	4.58	4.38	3.44 (4.29)	3.19 (3.92)	
	Breakdown		Use of electricity	4.665	4.375	4.183	3.259 (4.115)	3.031 (3.764)
			Use of gas and fuel	0.139	0.134	0.135	0.118	0.101
			Company vehicle operation	0.042	0.038	0.033	0.031	0.027
			Use of heat	0.027	0.029	0.027	0.029	0.030
Greenhouse Gas Emissions other than CO ₂ Emissions (CO ₂ emissions-equivalent)	Total GHG emissions other than CO ₂	Thousands of t-CO ₂ e	14	18	16	16	11	
	Breakdown		CH ₄	2	2	3	2	2
			N ₂ O	3	3	2	2	2
			HFC	5	10	7	7	6
			PFC	3	3	3	4	0.5
			SF ₆	1	1	1	1	0.4
NF ₃	0	0	0	0	0			
Electric Power Consumption	Electricity purchased* ²	Billion kWh	8.74	8.36	8.23	6.54 (8.24)	6.59 (8.20)	
	Renewable energy generated		0.09	0.09	0.08	0.07	0.07	
Total amount of non-renewable energy used* ² , * ³		Billion kWh	9.77	9.36	9.20	7.43 (9.13)	7.38 (8.98)	
Clean Energy Generation (Solar power, wind power, etc.)		Thousand kWh	5,428	5,204	5,822	5,858	6,764	
Number of Clean Energy Generators (Solar power, wind power, etc.)		Units	184	258	336	360	332	
Number of Low-Emission Company Vehicles (Hybrid vehicles, electric vehicles, natural gas vehicles, and methanol vehicles)		Units	1,906	2,065	2,181	2,346	1,740	
Fuel Consumption by Company Vehicles	Gasoline consumption	kl	14,642	12,545	10,631	10,111	8,767	
	Diesel consumption	kl	3,316	3,347	2,970	2,701	1,868	
	LPG/natural gas consumption	m ³	6,969	12,937	30,760	39,320	52,905	

*1 The CO₂ emissions from business operations exclude emissions of greenhouse gases other than CO₂.

*2 The NTT Group provides equipment and the like necessary for other telecommunications carriers and data center providers to carry out their businesses. To date, we have included the fuel and electricity required for this equipment in our disclosed emission and consumption volumes in accordance with reporting methods outlined by the Act on Promotion of Global Warming Countermeasures. However, as calculation methods have been established based on the Ministry of the Environment's Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (ver. 2.3), we have adopted these for calculating the above CO₂ emissions as Scope 3. Emission amounts calculated using the previous method have been placed within parentheses. Similarly, for amounts of electricity purchased and total amount of non-renewable energy, from fiscal 2018 onward we are excluding the amount consumed by other telecommunications carriers and data center providers, and values calculated using the previous method will be placed within parentheses, and we have adopted these for calculating the above CO₂ emissions as Scope3 from fiscal 2019.

*3 For the total amount of non-renewable energy used, the volume of fuels such as gasoline and utility gas consumed have been converted into Wh values and added to the amount of electricity purchased.

Note: Disclosure Boundary B

Fiscal 2019 Scope 3 Emissions

Scope category	Scope and method of calculation	Emissions (millions of t-CO ₂ e)
GHG emissions (Scope 1 + 2 + 3)	–	22.84
Scope 1 (direct emissions)	–	0.138
Scope 2 (indirect emissions from energy use)	–	3.06
Scope 3 (indirect emissions from the value chain)	–	19.65
Category 1: Purchased goods and services	Calculation based on the number of units and monetary value of purchases of devices and services sold to customers	4.08
Category 2: Capital goods	Calculation based on capital investment costs on telecommunications and other equipment	6.02
Category 3: Fuel- and energy-related activities not included in Scope 1 and 2	Calculation based on annual consumption by energy type	0.60
Category 4: Upstream transportation and distribution	Calculation based on weight and distance, or number of devices with regard to the transport of devices sold to customers	0.05
Category 5: Waste generated in operations	Calculation based on volume of waste by type	0.01
Category 6: Business travel	Calculation based on paid expenses for business travel	0.19
Category 7: Employee commuting	Calculation based on paid expenses for employee commuting	0.07
Category 8: Upstream leased assets ^{*1}	Excluded from calculation ^{*1}	—
Category 9: Downstream transportation and distribution ^{*2}	Excluded from calculation ^{*2}	—
Category 10: Processing of sold products ^{*3}	Excluded from calculation ^{*3}	—
Category 11: Use of sold products	Calculation based on number of service subscriptions, number of devices and monetary value of telecommunications services and devices used by customers	5.67
Category 12: End-of-life treatment of sold products	Calculation based on number of service subscriptions, number of devices and monetary value of communications devices used by customers	0.05
Category 13: Downstream leased assets	Calculation based on average use of leased assets	0.75
Category 14: Franchises	Calculation based on total floor area of sales franchises	0.09
Category 15: Investments	Calculation based on Scope 1 and 2 emissions of investees in proportion to shareholding	2.07

*1 We have excluded Category 8 (upstream leased assets) from the calculation because the fuel and electricity used by leased assets is included in Scope 1 and 2 calculations.

*2 We have excluded Category 9 (downstream transportation and distribution) from the calculation because these emissions are almost entirely from our own transportation and use in our own facilities (included in Scope 1 and 2) or from outsourced transportation (included in Category 4).

*3 We have excluded Category 10 (processing of sold products) from the calculation because our main businesses involve no processing of intermediate products.

Notes:

In fiscal 2013, the NTT Group became the first telecommunications carrier in Japan to calculate and disclose emissions from all 15 Scope 3 categories based on actual data for that year, in addition to the emissions generated directly from fuel use, etc. (Scope 1) and emissions generated indirectly in conjunction with electrical and other energy use, etc. (Scope 2). We based our calculations on the Ministry of the Environment's Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain (Ver. 2.3). We will endeavor to improve the precision of our data collection while continuing to calculate and disclose Scope 3 emissions.

Disclosure Boundary B

Implementing Closed Loop Recycling

		Unit	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019		
Final Disposal Ratio	All waste	%	0.82	1.03	1.18	0.91	1.13		
	Decommissioned telecommunications equipment	%	0.10	0.07	0.07	0.05	0.06		
Waste and Final Disposal Waste	Total Waste		Thousands of tonnes	680	608	531	562	744	
	Recycling	Total amount of recycling		674	601	524	556	735	
		Breakdown		Recycled decommissioned telecommunications equipment	242	240	220	176	146
				Recycled construction works waste	244	175	133	223	325
				Recycled civil engineering works waste	141	140	129	115	228
				Recycled office waste	37	36	33	30	27
				Others	10	10	8	12	9
	Amount of waste reduced by incineration			1	1	1	1	1	
	Amount of final disposal waste			6	6	6	5	8	
Asbestos Removed from NTT Group Facilities	Total amount of asbestos removed		Tonnes	15	18	19	6	52	
	Breakdown	Buildings		6	5	4	4	19	
		Bridges		9	12	15	2	32	
Use of Water Resources	Water Use*		Million m ³	11.68	12.42	12.59	12.07	11.04	
	Water Withdrawal (tap water)			-	-	-	6.275	5.834	
	Volume of recycled wastewater and rainwater	Reused	Thousands of m ³	548	524	492	489	167	
		Reuse rate*	%	4.7	4.2	3.9	7.2	2.8	
Virgin Pulp Consumption	Total		Thousands of tons	21	19	17	14	12	
	Breakdown	Telephone directories		15	13	12	9	7	
		Telegrams		0.2	0.2	0.2	0.2	0.2	
		Office paper		2	2	2	2	2	
		Billing statements		4	4	3	3	3	
Paper Consumption Reductions from Web Billing Service	Number of users		Millions	37.28	36.07	35.36	33.71	33.64	
	Paper consumption reductions		Tonnes	3,384	3,362	3,216	3,082	2,981	

* The reuse rate shown up to fiscal 2017 corresponds to the total volume of tap water and sewage, recycled water, and rainwater used, while the reuse rate from fiscal 2018 onward corresponds to the total volume of tap water, recycled water, and rainwater.

Note: Disclosure Boundary B

Planning a Future of Natural Harmony

	Unit	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019
Expenditures on Biodiversity Preservation Projects	million yen	488.0	421.4	544.7	558.0