

## Environment

### Material Flow

INPUT	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
<b>Procurement</b>						
Items purchased through green procurement	Million	1.05	0.9	1.5	2.0	2.6
Procurement systems assessed	Companies	4	5	9	0	4
<b>Telecommunications Facilities</b>						
Power	Million kWh	723.18	667.83	690.0	450.0	460.0
Fuel	Million ℓ	3.38	2.45	4.7	1.5	1.7
Gas	m <sup>3</sup>	760,000	630,000	331,000.0	290,000.0	296,000.0
Heat	Million MJ	2.46	2.75	2.3	2.5	1.9
<b>Offices</b>						
Power	Million kWh	386.4	392.2	40.0	40.0	30.0
Water	m <sup>3</sup>	240,000	210,000	206,000.0	157,000.0	96,000.0
Paper	t	335	317	279.9	217.6	174.2
<b>Sales</b>						
Paper (brochures)	t	3,120	2,770	3,000.0	2,000.0	0.0
Invoices	t	227	186	152.1	138.5	112.4
Fuel (automobile)	ℓ	350,000	350,000	183,000.0	129,000.0	100,000.0

OUTPUT	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
<b>Telecommunications Facilities</b>						
Power	t-CO <sub>2</sub>	250,000	230,000	241,000.0	239,000.0	213,000.0
Fuel	t-CO <sub>2</sub>	91,000	66,000	130,000.0	40,000.0	45,000.00
Gas	t-CO <sub>2</sub>	17,000	14,000	10,000.0	10,000.0	7,000.00
Heat	t-CO <sub>2</sub>	1,000	2,000	0.0	0.0	1,000.00
General waste generated	t	1,021	876	691.0	666.0	633.6
Industrial waste generated	t	1,871	1,531	2,960.2	4,769.6	3,140.3
General waste landfills	t	26	7	7.3	6.5	3.1
Industrial waste landfills	t	11	7	2.2	2.1	1.1
<b>Offices</b>						
Greenhouse gases (power)	t-CO <sub>2</sub>	19,000	18,000	18,000.0	19,000.0	14,000.0
General waste generated	t	898	957	1,045.6	913.7	703.3
Industrial waste generated	t	353	302	524.0	366.4	433.4
General waste landfills	t	14	19	20.7	16.5	12.7
Industrial waste landfills	t	3	0	7.4	6.8	5.9
<b>Sales</b>						
Fuel (greenhouse gases)	t-CO <sub>2</sub>	1,000	1,000	400.00	300.00	200.00
<b>Reuse</b>						
In-house reuse of dismantled telecommunications equipment	Units	77	79	110	112	106
Equipment and packaging	Units	3,557	4,135	9,136	8,794	6,923
Collections of subscriber terminals	Units	610,000	460,000	420,000	220,000	0
Amount of removed fiber-optic cable reused	km	0	20	4.6	2.2	1.3
<b>Recycle</b>						
Recycling of coaxial cables	km	1	0	0.0	0.0	0.0
Collection of confidential documents	t	340	335	402.6	305.2	259.8

Volume of Scope 3 Emissions	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Category 1. Purchased goods and services	t-CO <sub>2</sub>	546,620	1,243,688	1,159,083	1,520,833	270,934
Category 2. Capital goods	t-CO <sub>2</sub>	644,126	714,298	692,121	725,883	517,353
Category 3. Fuel and energy activities not included in Scope 1 and Scope 2	t-CO <sub>2</sub>	76,565	97,880	91,078	95,401	37,823
Category 4. Upstream transportation and distribution	t-CO <sub>2</sub>	5,218	11,560	10,811	14,157	2,584
Category 5. Waste generated through business activities	t-CO <sub>2</sub>	219	154	387	513	303
Category 6. Business travel	t-CO <sub>2</sub>	14,478	14,378	14,713	15,571	7,673
Category 7. Employee commutations	t-CO <sub>2</sub>	12,270	12,185	12,468	13,195	6,502
Category 8. Upstream leased assets	t-CO <sub>2</sub>	0	-	-	0	-
Category 9. Downstream transportation and distribution	t-CO <sub>2</sub>	0	-	-	0	-
Category 10. Processing of products sold	t-CO <sub>2</sub>	0	-	-	0	-
Category 11. Use of products sold	t-CO <sub>2</sub>	2,460,312	1,976,614	2,255,279	2,413,631	2,309,263
Category 12. Disposal of products sold	t-CO <sub>2</sub>	101,263	92,420	90,221	90,410	86,201
Category 13. Downstream leased assets	t-CO <sub>2</sub>	0	-	-	214,210	203,387
Category 14. Franchise	t-CO <sub>2</sub>	25,394	33,368	16,906	9,730	4,627
Category 15. Investments	t-CO <sub>2</sub>	0	-	-	0	-
<b>Total</b>	<b>t-CO<sub>2</sub></b>	<b>3,886,464</b>	<b>4,196,545</b>	<b>4,343,067</b>	<b>5,113,533</b>	<b>3,446,650</b>

Environmental Accounting: Environmental Conservation Costs (Categories and Investment Corresponding to Business Activities)	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
(1) Business area cost	Million yen	693	937	603	593	850
Pollution prevention costs	Million yen	117	204	73	142	231
Oil tank facility for power generator use Management of items using PCBs						
Global environmental conservation costs	Million yen	576	733	530	450	618
Measures to reduce CO <sub>2</sub> emissions resulting from electricity use						
Resource circulation costs	Million yen	0	0	1	0	0
Waste disposal and reuse expenses						
(2) Upstream/downstream costs	Million yen	7	90	79	14	73
Measures to recover, recycle, and reuse telecommunications equipment						
(3) Administrative costs	Million yen	0	0	0	0	0
Environmental conservation management activities						
(4) R&D costs	Million yen	0	0	0	0	0
Allocated portion of the NTT Group's environmental R&D costs						
(5) Social activity costs	Million yen	0	0	0	0	0
Costs of supporting volunteer participation						
(6) Environmental remediation costs	Million yen	0	0	0	0	0
<b>Total</b>	<b>Million yen</b>	<b>699</b>	<b>1,027</b>	<b>683</b>	<b>607</b>	<b>924</b>

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Environmental Accounting: Environmental Conservation Costs (Categories and Expenses Corresponding to Business Activities)</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
(1) Business area cost	Million yen	468	583	739	1,064	1,206
Pollution prevention costs	Million yen	24	80	72	80	164
Oil tank facility for power generator use Management of items using PCBs						
Global environmental conservation costs	Million yen	174	156	205	577	526
Measures to reduce CO <sub>2</sub> emissions resulting from electricity use						
Resource circulation costs	Million yen	270	347	462	406	515
Waste disposal and reuse expenses						
(2) Upstream/downstream costs	Million yen	496	379	315	52	47
Measures to recover, recycle, and reuse telecommunications equipment						
(3) Administration costs	Million yen	69	65	66	63	70
Environmental conservation management activities						
(4) R&D costs	Million yen	169	57	32	10	1
Allocated portion of the NTT Group's environmental R&D costs						
(5) Social activity costs	Million yen	5	5	5	0	0
Costs of supporting volunteer participation						
(6) Environmental remediation costs	Million yen	0	0	0	0	0
<b>Total</b>	<b>Million yen</b>	<b>1,206</b>	<b>1,089</b>	<b>1,156</b>	<b>1,191</b>	<b>1,326</b>

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Economic Benefits Associated with Environmental Conservation Activities (Real Financial Impact)</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
<b>Revenue</b>						
Revenues from sales (cables, metal scrap, etc.)	Million yen	90	104	243	423	239
<b>Cost Reductions</b>						
Reductions in expenses as a result of measures such as those related to reducing electricity use	Million yen	722	617	591	517	391
Reductions in purchase cost as a result of reusing dismantled telecommunications equipment	Million yen	408	494	404	380	400
Decrease in postal and paper costs due to use of Mypage (online account page)	Million yen	480	505	527	422	533
Other	Million yen	10	2	3	0	0
<b>Total</b>	<b>Million yen</b>	<b>1,710</b>	<b>1,723</b>	<b>1,768</b>	<b>1,742</b>	<b>1,565</b>

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Status of Green Procurement and Green Purchasing</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Green procurement of goods, excluding office supplies	Thousand	1,050	900	1,540	2,040	2,570
Green procurement of office supplies	Thousand	200	200	220	210	240

<b>CO<sub>2</sub> Emissions from Business Activities</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019* <sup>1</sup>
Total emissions	10,000 t-CO <sub>2</sub>	44.2	38.4	37.4	32.2	23.5
Electricity consumption* <sup>2</sup>	10,000 t-CO <sub>2</sub>	42.7	37.2	35.7	23.4	22.7
Fuel for corporate vehicles and consumption of heavy oil and gas	10,000 t-CO <sub>2</sub>	1.5	1.2	1.7	8.8	0.8

\*1 Scope: NTT Communications Corporation and 12 Group companies in Japan

\*2 CO<sub>2</sub> emissions were calculated using emission factors obtained from electric power companies

<b>Other Greenhouse Gas Emissions (Converted to CO<sub>2</sub> Equivalents)</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Total emissions	t-CO <sub>2</sub>	14.6	16	13.7	13.1	12.1
CH <sub>4</sub>	t-CO <sub>2</sub>	0.3	0.3	0.2	0.5	0.3
N <sub>2</sub> O	t-CO <sub>2</sub>	13.8	11.2	9.1	7.2	6.4
HFC	t-CO <sub>2</sub>	5	4.5	4.4	5.4	5.4

<b>Power Purchases (for Use by the Group)</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Power purchases	100 million kWh	7.6	7.1	7.3	4.9	4.9

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Overall Amounts of Electricity Generated by Solar Panels at Data Centers</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Overall amounts of electricity generated by solar panels at data centers	kWh	365,953	377,689	372,069	367,108	344,848

<b>Goods Transportation Volume under the Revised Energy Conservation Law</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Total volume	10,000 tonne-kilometers	44.6	32.9	36.0	38.6	31.7
Invoices	10,000 tonne-kilometers	7.1	5.7	5.0	4.5	3.9
Connection notes	10,000 tonne-kilometers	2.3	1.8	1.3	0.4	0.3
Sales promotion tools	10,000 tonne-kilometers	2.9	1.8	0.4	0.1	0
Telecommunications equipment dismantled	10,000 tonne-kilometers	9.7	3.8	6.0	11.7	7.8
Waste	10,000 tonne-kilometers	4.7	4.3	5.2	4.4	4.3
Other	10,000 tonne-kilometers	17.9	15.4	18.2	17.5	15.5

Scope: NTT Communications Corporation

<b>Fuel Consumption by Company Vehicles</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Total volume	10,000 liters	34.9	27.1	18.3	12.9	10.1
Gasoline	10,000 liters	34	25.1	16.5	12.1	9.3
Diesel	10,000 liters	0.9	2	1.8	0.8	0.8

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>NTT Communications Group Final Waste Disposal and Total Waste Generation</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Office waste	Tonnes	42.9	26.9	37.3	31.5	22.6
Construction waste	Tonnes	82.2	105.4	183.4	187.1	282.3
Dismantled telecommunications equipment	Tonnes	10.7	6.6	0.3	0.3	0.2
<b>Volume of Waste Generated</b>	<b>Tonnes</b>	<b>6,555.1</b>	<b>14,818.40</b>	<b>261,388.8</b>	<b>11,149.8</b>	<b>14,579.0</b>

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Total Volume and Final Disposal Ratio of Dismantled Telecommunications Equipment</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
<b>Total Volume</b>	<b>Tonnes</b>	<b>1,803.6</b>	<b>1,472.6</b>	<b>2,704.9</b>	<b>4,512.9</b>	<b>2,892.4</b>
Waste	Tonnes	0.4	0.2	0.3	0.3	0.2
Communication cables	Tonnes	354	293.4	430.1	617.2	444
Other	Tonnes	1,001.4	847.6	1,500.1	2,310.1	1,397.1
Switching equipment	Tonnes	447.8	331.5	774.4	1,585.2	1,051.20
Final disposal ratio	%	0.02	0.01	0.01	0.01	0.01

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Volume of Reused Fiber-optic Cable</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Volume of reused fiber-optic cable	km	3.7	20	4.6	2.2	1.3

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Construction Waste Generation and Final Disposal Ratio</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Waste generated	Tonnes	2,389	11,132	20,918	4,434	9668
Final disposal ratio	%	3.4	0.9	0.9	4.2	2.9

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Total Office Waste and Final Disposal Ratio</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Volume recycled	Tonnes	2,050.3	2,072.6	2,363.4	2,049.1	1,943.1
Total waste generated	Tonnes	2,295.0	2,155.3	2,516.0	2,202.8	2,018.2
Final disposal rate	%	1.9	1.2	1.5	1.4	1.1

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Total and Office Paper Use per Employee</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Total paper use	Tonnes	355	322	280	218	174.2
Recycled paper	Tonnes	-	-	-	-	129.8
Environmentally sound, virgin wood pulp paper	Tonnes	-	-	-	-	34.5
Virgin wood pulp paper	Tonnes	-	-	-	-	9.9
Number of sheets	Sheets	6,964	6,383	5,480	4,224	3,585

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>NOx Emissions</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Total Emissions	Tonnes	463	350	279.7	225.5	193.6
Electricity consumption	Tonnes	122.0	78.0	72.7	67.8	65.4
Gas consumption	Tonnes	1.0	1.0	0.6	0.6	0.4
Heavy oil consumption	Tonnes	5.0	4.0	6.9	2.0	2.4
Gasoline and diesel consumption	Tonnes	335.0	268.0	199.5	155.2	125.3

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>SOx Emissions</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Total Emissions	Tonnes	90	40	44	26	25
Electricity consumption	Tonnes	84	35	36.4	22.6	21.8
Gas consumption	Tonnes	-	-	-	-	-
Heavy oil consumption	Tonnes	5.0	4.0	6.9	2.0	2.4
Gasoline and diesel consumption	Tonnes	2.0	2.0	1.4	1.4	1.2

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Volume of Specified Halons Used in Fire-extinguishing Equipment</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Volume of specified halons used in fire-extinguishing equipment	Tonnes	143.0	143.0	143.0	142.6	142.6

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Volume of Specified CFCs Used in Air-conditioning Systems</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
CFC	Tonnes	0.5	0	0	0	0
HCFC	Tonnes	14.8	14.0	14.0	12.7	3.8
HFC	Tonnes	261.9	262.0	264.0	270.4	254.3

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Asbestos Emissions</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019*
Asbestos emissions	Tonnes	0	0	0	0	0

\*Scope: NTT Communications Corporation and 12 Group companies in Japan

<b>Number of Transformers Stored</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Number of transformers stored	Units	1	1	0	0	0

Scope: NTT Communications Corporation

<b>Number of Capacitors Stored</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
High-voltage capacitors	Units	0	0	0	0	0
Low-voltage capacitors	Units	0	1	0	0	0

Scope: NTT Communications Corporation

<b>Number of Electric Ballasts Stored</b>	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Number of electric ballasts stored	Units	2,235	1,537	1,480	1,488	123

Scope: NTT Communications Corporation

## Society

Social Contribution Activities	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
<b>Preservation of the Natural Environment</b>						
Number of projects	Projects	-	-	16	21	28
Number of participants	Persons	-	-	1,376	1,095	1,019
Activity expenditure	Yen	-	-	17,449,529	7,523,153	7,425,925
<b>Social Welfare</b>						
Number of projects	Projects	-	-	34	23	37
Number of participants	Persons	-	-	1,495	7	120
Activity expenditure	Yen	-	-	5,899,112	28,065,924	3,313,607
<b>Promotion of Education and Culture</b>						
Number of projects	Projects	-	-	9	11	16
Number of participants	Persons	-	-	29	163	413
Activity expenditure	Yen	-	-	5,500,650	3,438,860	9,419,971
<b>Regional Development and Exchange</b>						
Number of projects	Projects	-	-	5	7	9
Number of participants	Persons	-	-	8	147	298
Activity expenditure	Yen	-	-	548,000	11,760,000	5,144,900
<b>International Exchange</b>						
Number of projects	Projects	-	-	0	3	3
Number of participants	Persons	-	-	0	0	0
Activity expenditure	Yen	-	-	0	5,006,000	0
<b>Promotion of Sports</b>						
Number of projects	Projects	-	-	6	4	2
Number of participants	Persons	-	-	287	378	2
Activity expenditure	Yen	-	-	3,203,200	11,760,000	20,000
<b>Others</b>						
Number of projects	Projects	-	-	5	2	3
Number of participants	Persons	-	-	85	1	41
Activity expenditure	Yen	-	-	16,257,851	33,200	12,000
<b>Total</b>						
Number of projects	Projects	0	0	75	71	98
Number of participants	Persons	0	0	3,280	1,791	1,893
Activity expenditure	Yen	0	0	48,858,342	67,587,137	25,336,403

**Japan Rugby Top League Fundraising Led by Shining Arcs (NTT Communications)**

Season	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Money donated (yen)	366,525	404,800	About 2 million	2,306,040	2,270,170	2,252,561
Participating team(s)	NTT Communications	NTT Communications	All Top League teams	All Top League teams	All Top League teams	All Top League teams
Recipient and use of funds	Donated to the Japanese Red Cross Society	Donated to the Miyagi Rugby Football Union	Invited children from disaster-affected regions to a Japanese national rugby team game held in June 2014	Held charity event for children from the city of Kamaishi, Iwate Prefecture (October 24, 2015) and invited children from Kamaishi to the LIXIL CUP 2016 rugby game	Held rugby classes in areas affected by the Kumamoto earthquake	Provided career education and rugby classes in the Tohoku region

Season	2017-2018	2018-2019	2019-2020
Money donated (yen)	805,643	1,390,002	170,680
Participating team(s)	All Top League teams	All Top League teams	NTT Communications
Recipient and use of funds	Donated to disaster-affected regions through the Central Community Chest of Japan (Red Feather)	Donated to disaster-affected regions through the Central Community Chest of Japan (Red Feather)	Donated to help resolve global hunger-related issues through the NPO TABLE FOR TWO International



Employee Data	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
<b>Number of Employees*<sup>1</sup></b>						
Non-consolidated	Persons	6,450	6,350	6,250	6,150	5,500
Male	Persons	5,500	5,350	5,250	5,150	4,600
Female	Persons	950	1,000	1,000	1,000	900
Consolidated	Persons	21,650	21,550	22,050	23,300	11,500
Percentage of women in managerial positions* <sup>2</sup>	%	4.7	4.8	5.4	6.1	6.7
Turnover rate* <sup>3</sup>	%	2.7	3.4	3.2	4.1	3.6
New employees (foreign nationals)* <sup>4</sup>	Persons	195 (22)	201 (34)	203 (16)	237 (10)	203 (7)
Male	Persons	148 (8)	128 (14)	136 (9)	163 (7)	137 (4)
Female	Persons	47 (14)	73 (20)	67 (7)	74 (3)	66 (3)
Rehiring rate (%)* <sup>4</sup>	Persons	50	43	45	57	57
<b>Employees with Disabilities*<sup>5</sup></b>						
Non-consolidated	%	2.0	2.1	2.2	2.2	2.4
Non-consolidated and domestic Group companies* <sup>6</sup>	%	1.9	2.0	2.2	2.1	2.3

\*1 As of March 31 for each fiscal year.

\*2 As of March 31 for each fiscal year. Scope: NTT Communications Corporation, including seconded employees.

\*3 As of March 31 for each fiscal year. Scope: NTT Communications Corporation, excluding seconded employees.

\*4 As of April 1 for each fiscal year. Scope: NTT Communications Corporation.

\*5 As of June 1 of the following year for each fiscal year.

\*6 NTT Communications Corporation and 9 domestic Group companies.

Number of Employees Who Took Maternity, Childcare, or Nursing-care Leave	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Maternity leave	Persons	76	74	84	63	55
Childcare leave	Persons	154	152	89	173	121
Female	Persons	150	141	84	161	111
Male	Persons	4	11	5	12	11
Nursing-care leave	Persons	5	3	4	4	8
Female	Persons	2	2	2	3	5
Male	Persons	3	1	2	1	3

Scope: NTT Communications Corporation

Number of Workplace Accidents (Occupational Accidents)	Unit	FY2015	FY2016	FY2017	FY2018	FY2019
Number of workplace accidents (occupational accidents)	Cases	6	3	4	5	4

**Governance**

<b>Information Security Training Attendance</b>	<b>Unit</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>FY2019</b>
Information security training (total)	Persons	18,796	15,753	13,050	15,055	11,641
Companywide security training/assessment of understanding	Persons	18,629	15,635	12,928	14,941	11,527
Training programs for managers and leaders in charge of implementing security management	Persons	127	118	122	114	114