

ESG Data

Environmental Data

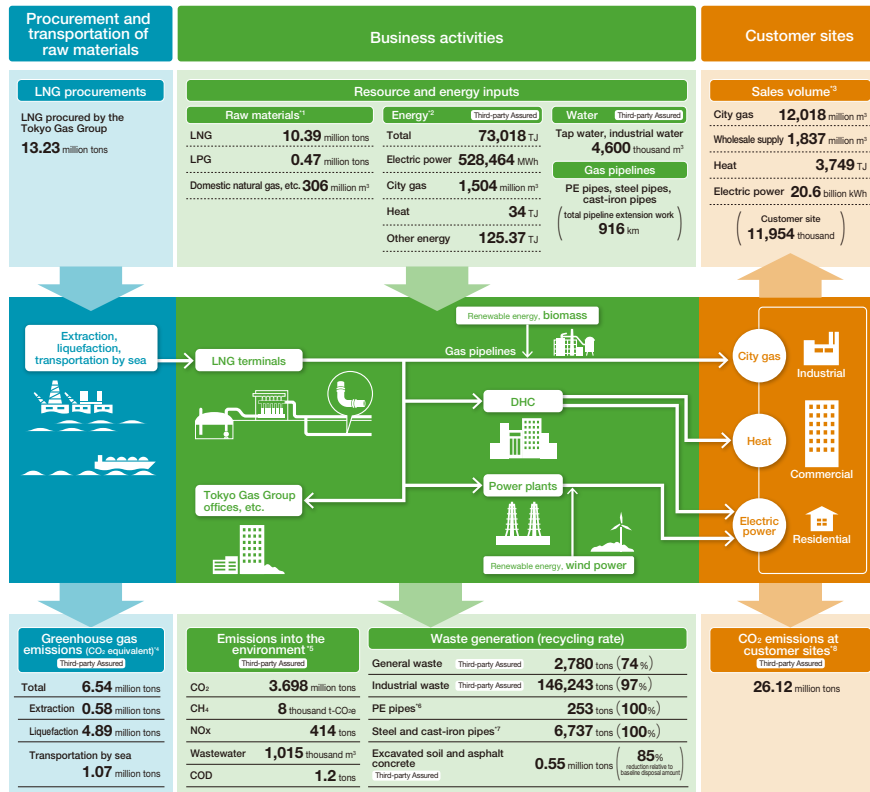
* The sum of individual environmental data may not be equal to the total due to the way figures are rounded.

The Tokyo Gas Group Business Activities and Material Balance

We monitor and manage impacts on the environment at every stage of our LNG value chain to reduce the impact on the environment.

■ Tokyo Gas Group Business Activities and Material Balance (FY2019)

Boundary: Tokyo Gas Co., Ltd. and 41 consolidated subsidiaries in Japan



¹ For city gas production by the Tokyo Gas Group.
² Energy consumption by the Tokyo Gas Group excluding double-counting due to intra-group supply of heat and electricity.
³ City gas: Volume of gas sales excluding supply to other gas utilities and sales for internal Group use.
 Wholesale supply: Volume of gas supplied to other gas utilities.
 Heat: Includes sales from LNG terminals as well as district heating and cooling centers and spot heat supply. Includes intra-group supply.
 Electric power: Volume of sales of all electric power, including power purchased for business use from other companies and the market as well as Group power stations.
⁴ "City Gas Life Cycle Assessment (issued July 2020)," Japan Gas Association website.
 Production: 0.80; Liquefaction: 6.77; Transportation by sea: 1.48 g-CO₂/MJ, based on gross calorific value
⁵ CO₂, CH₄, NO_x: Excludes double-counting due to intra-group supply.
 Volume of wastewater: Specified wastewater and domestic sewage.
^{6,7} PE pipes, Steel and cast-iron pipes: Tokyo Gas Co., Ltd.
⁸ Gas sales volume multiplied by emission intensity.

Use of Energy and Water/Emissions into the Atmosphere and Water System

Use of Energy and Water/Emissions into the Atmosphere and Water Systems

■ Feedstock and Sales Volume

| Category | | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|-----------------------------|-------------------------|------------------------|--------|--------|--------|--------|--------|
| City gas feedstock (Note 1) | Feedstock LNG | Thousand tons | 11,411 | 11,583 | 11,407 | 11,083 | 10,388 |
| | Feedstock LPG | Thousand tons | 438 | 434 | 491 | 491 | 474 |
| Production | City gas sales (Note 2) | Million m ³ | 15,263 | 15,571 | 15,380 | 15,022 | 13,855 |
| | Heat sales (Note 3) | TJ | 3,251 | 3,451 | 3,496 | 3,583 | 3,749 |
| | Power Sales (Note 4) | Billion kWh | 11.0 | 12.7 | 14.7 | 15.5 | 20.6 |

Note 1: For city gas production by the Tokyo Gas Group.
 Note 2: Volume of gas sales including supply to other gas utilities and excluding sales for internal Group use.
 Note 3: Includes sales volume from LNG terminals, in addition to district heating and cooling centers and spot heat supply. Also includes intra-group supply.
 Note 4: Volume of sales of all electric power, including power purchased for business use from other companies and the market as well as Group power stations.



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■ Energy consumption*1,2 Third-party Assured

| Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|--|-------------------------|-----------|-----------|-----------|-----------|-----------|
| Energy consumption ^(Note 1) | TJ | 68,561 | 79,230 | 82,651 | 76,784 | 73,018 |
| LNG terminals | TJ | 3,998 | 4,169 | 4,291 | 4,106 | 3,815 |
| District heating and cooling centers | TJ | 4,167 | 4,316 | 4,037 | 4,173 | 5,916 |
| Power plants | TJ | 57,871 | 68,250 | 71,967 | 66,322 | 61,321 |
| Tokyo Gas business offices, etc. | TJ | 1,387 | 1,483 | 1,444 | 1,419 | 1,389 |
| Other Group companies | TJ | 1,460 | 1,362 | 1,368 | 1,279 | 1,193 |
| Vehicles ^(Note 2) | TJ | — | — | — | — | 117 |
| (Tokyo Gas Co., Ltd.) | TJ | 5,678 | 5,954 | 6,043 | 5,877 | 5,629 |
| Electric power ^(Note 3) | MWh | 615,419 | 626,729 | 607,725 | 651,068 | 528,464 |
| LNG terminals | MWh | 345,227 | 363,053 | 368,259 | 357,068 | 324,660 |
| District heating and cooling centers | MWh | 94,640 | 98,529 | 84,621 | 84,722 | 83,433 |
| Power plants | MWh | 11,407 | 9,775 | 10,700 | 93,486 | 9,311 |
| Tokyo Gas business offices, etc. | MWh | 52,372 | 51,526 | 49,786 | 49,629 | 45,336 |
| Other Group companies | MWh | 112,890 | 103,847 | 105,089 | 98,696 | 95,591 |
| (Tokyo Gas Co., Ltd.) | MWh | 402,357 | 419,502 | 422,776 | 416,928 | 380,112 |
| City gas | Thousand m ³ | 1,447,012 | 1,691,380 | 1,775,849 | 1,628,350 | 1,503,916 |
| LNG terminals | Thousand m ³ | 14,600 | 14,544 | 16,206 | 14,450 | 14,930 |
| District heating and cooling centers | Thousand m ³ | 73,328 | 75,133 | 72,420 | 76,216 | 109,419 |
| Power plants | Thousand m ³ | 1,341,099 | 1,582,434 | 1,668,543 | 1,519,617 | 1,360,735 |
| Tokyo Gas business offices, etc. | Thousand m ³ | 15,969 | 18,209 | 17,697 | 17,082 | 17,965 |
| Other Group companies | Thousand m ³ | 2,015 | 1,060 | 984 | 985 | 867 |
| (Tokyo Gas Co., Ltd.) | Thousand m ³ | 35,990 | 38,347 | 39,676 | 37,035 | 38,814 |
| Heat ^(Note 3) | TJ | 48 | 71 | 55 | 36 | 34 |
| District heating and cooling centers | TJ | 198 | 232 | 211 | 119 | 119 |
| Tokyo Gas business offices, etc. | TJ | 88 | 93 | 95 | 96 | 96 |
| Other Group companies | TJ | 166 | 195 | 195 | 172 | 164 |
| (Tokyo Gas Co., Ltd.) | TJ | 96 | 102 | 104 | 105 | 105 |

| Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---|---------------|--------|--------|--------|--------|--------|
| Other fuels | TJ | 6 | 5 | 4 | 4 | 8 |
| LNG terminals | TJ | 1 | 1 | 1 | 0 | 0 |
| Tokyo Gas business offices, etc. | TJ | 1 | 1 | 1 | 1 | 4 |
| Other Group companies | TJ | 5 | 3 | 3 | 3 | 4 |
| (Tokyo Gas Co., Ltd.) | TJ | 1 | 2 | 1 | 1 | 5 |
| Vehicles | TJ | — | — | — | — | 117 |
| (Tokyo Gas Co., Ltd.) | TJ | — | — | — | — | 46 |
| LNG cryogenic energy | Thousand tons | 2,364 | 2,678 | 2,890 | 2,862 | 3,050 |
| Cryogenic power generation | Thousand tons | 724 | 785 | 787 | 616 | 775 |
| Portion sent to subsidiaries and affiliates | Thousand tons | 852 | 820 | 820 | 821 | 841 |
| BOG treatment, etc. | Thousand tons | 788 | 1,073 | 1,283 | 1,424 | 1,434 |

Note 1: Excludes double counting by intra-group supply of heat and electricity.

Note 2: Up through fiscal 2018 the figures for vehicles were included under "Tokyo Gas business offices, etc." and "Other Group companies." Starting with fiscal 2019, they are counted together as a separate item, "Vehicles."

Note 3: Excludes double counting by intra-group supply. Since fiscal 2018, the amount of heat accommodated was deducted for district heating and cooling centers.

■ Water Withdrawal Third-party Assured

| Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|--------------------------------------|-------------------------|---------|---------|---------|---------|---------|
| Tap water and industrial water | Thousand m ³ | 5,388 | 5,017 | 5,180 | 4,952 | 4,600 |
| LNG terminals | Thousand m ³ | 1,457 | 1,138 | 1,125 | 1,045 | 981 |
| District heating and cooling centers | Thousand m ³ | 1,459 | 1,552 | 1,507 | 1,780 | 1,716 |
| Power plants | Thousand m ³ | 1,569 | 1,492 | 1,765 | 1,325 | 1,135 |
| Tokyo Gas business offices, etc. | Thousand m ³ | 537 | 544 | 506 | 516 | 507 |
| Other Group companies | Thousand m ³ | 366 | 290 | 276 | 286 | 261 |
| (Tokyo Gas Co., Ltd.) | Thousand m ³ | 2,036 | 1,726 | 1,674 | 1,644 | 1,580 |
| Seawater | Thousand m ³ | 773,963 | 781,879 | 784,651 | 738,529 | 686,350 |



ESG Data

■ Emissions into the Atmosphere Third-party Assured

| | Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---|--------------------------------------|---|--------|--------|--------|--------|--------|
| Greenhouse gases | CO ₂ *1, 2, 3 (Note 1) | Thousand tons of CO ₂ | 3,479 | 4,014 | 4,179 | 3,877 | 3,698 |
| | LNG terminals | Thousand tons of CO ₂ | 202 | 206 | 207 | 192 | 177 |
| | District heating and cooling centers | Thousand tons of CO ₂ | 211 | 217 | 201 | 205 | 294 |
| | Power plants | Thousand tons of CO ₂ | 2,938 | 3,466 | 3,654 | 3,370 | 3,120 |
| | Tokyo Gas business offices, etc. | Thousand tons of CO ₂ | 71 | 74 | 72 | 71 | 67 |
| | Other Group companies | Thousand tons of CO ₂ | 75 | 69 | 68 | 62 | 61 |
| | Vehicles (Note 2) | Thousand tons of CO ₂ | — | — | — | — | 8 |
| | (Tokyo Gas Co., Ltd.) | Thousand tons of CO ₂ | 288 | 296 | 294 | 280 | 266 |
| | CH ₄ *3, 4 (Note 3) | Thousand tons of CO ₂ equivalent | 14 | 5 | 11 | 9 | 8 |
| | NOx | Tons | 302 | 367 | 402 | 379 | 414 |
| LNG terminals (Note 4) | Tons | 11 | 13 | 13 | 12 | 12 | |
| District heating and cooling centers | Tons | 52 | 51 | 54 | 54 | 96 | |
| Power plants | Tons | 223 | 282 | 311 | 294 | 286 | |
| Tokyo Gas business offices, etc. (Note 4) | Tons | 15 | 21 | 24 | 19 | 20 | |
| (Tokyo Gas Co., Ltd.) | Tons | 28 | 35 | 38 | 32 | 33 | |

Note 1: Excludes double counting by intra-group supply.

Note 2: Up through fiscal 2018 the figures for vehicles were included under "Tokyo Gas business offices, etc." and "Other Group companies." Starting with fiscal 2019, they are counted together as a separate item, "Vehicles."

Note 3: About 323 tons of CH₄ emissions

Note 4: Emissions from facilities that generate soot and smoke specified in the Air Pollution Control Act.

■ Greenhouse Gas Emissions (CO₂ equivalent) (SCOPE 1 + SCOPE 2) Third-party Assured

| | Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---------------|----------|----------------------------------|--------|--------|--------|--------|--------|
| SCOPE1+SCOPE2 | | Thousand tons of CO ₂ | 3,494 | 4,020 | 4,189 | 3,886 | 3,706 |
| SCOPE1 | | Thousand tons of CO ₂ | 3,186 | 3,712 | 3,902 | 3,588 | 3,467 |
| SCOPE2 | | Thousand tons of CO ₂ | 308 | 308 | 287 | 297 | 239 |

■ Greenhouse Gas Emissions from Feedstock Procurement (SCOPE 3)

| | Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---|------------------|---------------------------------|--------|--------|--------|--------|--------|
| | LNG procured | Million tons | 13.87 | 14.25 | 14.24 | 13.95 | 13.23 |
| Greenhouse gas (CO ₂ equivalent) (Note 1) | Extraction | Million tons of CO ₂ | 0.58 | 0.60 | 0.60 | 0.59 | 0.58 |
| | Liquefaction | Million tons of CO ₂ | 5.08 | 5.22 | 5.22 | 5.11 | 4.89 |
| Third-party Assured | Transport by sea | Million tons of CO ₂ | 1.12 | 1.15 | 1.15 | 1.13 | 1.07 |

Note 1: Calculated based on greenhouse gas emission intensity throughout the lifecycle, from extraction of natural gas to processing and transportation, as analyzed by the LCA approach.

• FY2012–14 emission intensity

Extraction: 0.81; Liquefaction: 8.36; Transportation by sea: 1.97 g-CO₂/MJ, based on gross calorific value

Source: "Future Forecast for Life Cycle Greenhouse Gas Emissions of LNG and City Gas 13A" (Japan Society of Energy and Resources, presentation report 28 (2), March 2007)

• Emission intensity from FY2015

Extraction: 0.77; Liquefaction: 6.71; Transportation by sea: 1.48 g-CO₂/MJ, based on gross calorific value

Source: "Study of Life Cycle Greenhouse Gas Emissions of LNG and City Gas 13A" (Proceedings of the annual meeting of Japan Society of Energy and Resources 35, pp. 23–26, 2016)

• Emission intensity from FY2019

Extraction: 0.80; Liquefaction: 6.77; Transportation by sea: 1.48 g-CO₂/MJ, based on gross calorific value

Source: "City Gas Life Cycle Assessment (issued July 2020)," Japan Gas Association website.

■ CO₂ Emissions and Emissions Reduction at Customer Sites (SCOPE 3) Third-party Assured

| | Category | Unit | FY2011 | FY2012 | FY2013 | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|-----------------|--|---------------------------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| CO ₂ | Total amount | Million tons of CO ₂ | 26.94 | 27.09 | 27.67 | 29.36 | 28.96 | 29.43 | 29.60 | 28.92 | 26.12 |
| | Amount of reduction relative to FY2011 | Million tons of CO ₂ | Baseline | 0.87 | 1.52 | 3.29 | 3.43 | 3.94 | 4.04 | 4.52 | 3.70 |

■ Energy Consumption and CO₂ Emissions Associated with Cargo Transportation (Tokyo Gas Co., Ltd.) (SCOPE 3) Third-party Assured

| | Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|--|---|----------------------|--------|--------|--------|--------|--------|
| | Transportation amount | Million tons -km | 98 | 86 | 83 | 93 | 82 |
| | Energy consumption (crude oil equivalent) | kL | 3,354 | 3,165 | 3,055 | 3,237 | 2,985 |
| | Energy intensity | kL/Million tons-km | 34 | 37 | 37 | 35 | 36 |
| | CO ₂ emissions | tons-CO ₂ | 8,810 | 8,267 | 7,993 | 8,520 | 7,836 |



ESG Data

■ Water Discharge Third-party Assured

| Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|--------------------------------------|-------------------------|--------|--------|--------|--------|--------|
| Wastewater | Thousand m ³ | 1,091 | 1,090 | 1,069 | 988 | 1,015 |
| LNG terminals (Note 1) | Thousand m ³ | 287 | 291 | 242 | 221 | 300 |
| District heating and cooling centers | Thousand m ³ | 330 | 354 | 330 | 362 | 387 |
| Power plants | Thousand m ³ | 474 | 445 | 498 | 405 | 328 |
| (Tokyo Gas Co., Ltd.) | Thousand m ³ | 296 | 300 | 258 | 254 | 335 |
| COD | Tons | 1.6 | 1.4 | 1.4 | 1.2 | 1.2 |
| LNG terminals | Tons | 1.2 | 1.0 | 0.9 | 0.9 | 1.0 |
| Power plants | Tons | 0.5 | 0.4 | 0.4 | 0.3 | 0.2 |
| (Tokyo Gas Co., Ltd.) | Tons | 1.2 | 1.0 | 0.9 | 0.9 | 1.0 |

Note 1: Data are for wastewater discharges from wastewater treatment facilities and sewage discharges.

Conversion Factor, etc.

■ CO₂ Emission Factor

| Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---|---|---|--------|--------|--------|--------|
| City gas (Tokyo Gas 13A) (Note 1) | kg-CO ₂ /m ³ | | | 2.21 | | |
| Purchased electricity (average of all power sources) (Note 2) | kg-CO ₂ /kWh | Emission factors of electric power companies, released in accordance with the ministerial ordinance for the Act on the Rational Use of Energy | | | | |
| Heat (Note 3) | Steam (excluding industrial use), hot water, cold water | | | 0.057 | | |
| | Industrial steam | | | 0.060 | | |
| Other fuels (Note 3) | Heavy oil A | | | 2.71 | | |
| | Diesel | | | 2.58 | | |
| | Kerosene | | | 2.49 | | |
| | Gasoline | | | 2.32 | | |
| | LPG | | | 3.00 | | |

Note 1: Calculated based on the typical composition of city gas (type 13A) supplied by the Tokyo Gas (15°C, gauge pressure of 2 kPa).

Note 2: The basic emission factors were used until fiscal 2017 and adjusted emission factors are used since fiscal 2018.

Note 3: Calculated using the unit calorific value released in accordance with the ministerial ordinance stipulated by the Act on Promotion of Global Warming Countermeasures, and multiplying this amount by the emission factor per unit calorific value and by 44/12.

■ Unit Calorific Value

| Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---|---|--------|--------|--------|--------|--------|
| City gas (Tokyo Gas 13A) (Note 1) | MJ/m ³ N | | | 45.00 | | |
| Purchased electricity ⁵ (Note 2) | Daytime electricity | | | 9.97 | | |
| | Nighttime electricity | | | 9.28 | | |
| | Other than general electricity utilities | | | 9.76 | | |
| Heat (Note 2) | Steam (excluding industrial use), hot water, cold water | | | 1.36 | | |
| | Industrial steam | | | 1.02 | | |
| Other fuels (Note 2) | Heavy oil A | | | 39.1 | | |
| | Diesel | | | 37.7 | | |
| | Kerosene | | | 36.7 | | |
| | Gasoline | | | 34.6 | | |
| | LPG | | | 50.8 | | |
| Crude oil equivalent coefficient (Note 2) | kL/GJ | | | 0.0258 | | |

Note 1: City gas calorific value of Tokyo Gas (0°C, 1 atmospheric pressure)

Note 2: Act on the Rational Use of Energy (the Energy Efficiency Act)

*1 Through FY2018, regarding district heating and cooling centers selling electric power using gas cogeneration systems, the data of energy used for power generation is posted under "Power plants" and the data of energy used for the production of heat is posted under "District heating and cooling centers". From FY2019, the data on all energy used at the above-stated district heating and cooling centers is posted under "District heating and cooling centers". "Tokyo Gas business offices, etc." lists the Company's non-consolidated energy use, less the amounts for LNG terminals and District heating and cooling centers. "Other Group companies" lists the data for other Group companies, less the amounts for district heating and cooling centers and power plants.

*2 Some variance in the data listed under different categories may exist since the data has been processed to properly assess the changes in energy usage intensity for each business activity (such as by reflecting the amounts commissioned by other companies at LNG terminals).

*3 The values are calculated based on the adjusted emission factors since FY2018.

*4 CH₄ (methane) emissions were converted to CO₂ emissions by multiplying by the global warming potential of 25, as stipulated in the Act on Promotion of Global Warming Countermeasures.

*5 For the crude oil equivalent of electricity usage under "District heating and cooling centers" and "Tokyo Gas business offices, etc.," the amounts purchased from power utility companies were all calculated using daytime electricity factors.



ESG Data

Waste

Industrial Waste Third-party Assured

| | Category | Unit | FY2015 | FY2016 | FY2017 ³ | FY2018 ³ | FY2019 |
|----------------------------------|-----------------|------|---------|---------|---------------------|---------------------|---------|
| Industrial waste ^{1, 2} | Generation | Tons | 149,317 | 144,230 | 161,344 | 144,827 | 146,243 |
| | Amount recycled | Tons | 142,629 | 140,373 | 156,810 | 140,015 | 141,204 |
| | Landfill | Tons | 2,433 | 1,312 | 2,001 | 2,490 | 1,702 |
| | Recycling rate | % | 96 | 97 | 97 | 97 | 97 |
| | Landfill rate | % | 1.6 | 0.9 | 1.2 | 1.7 | 1.2 |
| Production plants ¹ | Generation | Tons | 1,291 | 809 | 617 | 678 | 689 |
| | Amount recycled | Tons | 851 | 476 | 354 | 405 | 167 |
| | Landfill | Tons | 18 | 2 | 4 | 8 | 2 |
| | Recycling rate | % | 66 | 59 | 57 | 60 | 24 |
| Tokyo Gas Co., Ltd. | Generation | Tons | 4,462 | 4,449 | 5,950 | 4,767 | 4,924 |
| | Amount recycled | Tons | 3,629 | 3,701 | 4,638 | 3,607 | 3,464 |
| | Landfill | Tons | 431 | 389 | 981 | 575 | 508 |
| | Recycling rate | % | 81 | 83 | 78 | 76 | 70 |
| | Landfill rate | % | 10 | 9 | 16 | 12 | 10 |

¹ Data for "Production plants" include that from business offices that produce city gas and other products, district heating and cooling centers, and power plants.

² Including construction work for customers of our subcontractors, subsidiaries and affiliates.

³ Due to several errors in the data of operational organizations included in the figures, the figures for FY2017 and FY2018 have been reviewed and corrected as needed.

General Waste Third-party Assured

| | Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---------------------|-----------------|------|--------|--------|--------|--------|--------|
| General Waste | Generation | Tons | 3,143 | 2,931 | 2,818 | 2,990 | 2,780 |
| | Amount recycled | Tons | 2,441 | 2,224 | 2,090 | 2,333 | 2,060 |
| | Recycling rate | % | 78 | 76 | 74 | 78 | 74 |
| Tokyo Gas Co., Ltd. | Generation | Tons | 1,016 | 1,045 | 1,010 | 998 | 1,001 |
| | Amount recycled | Tons | 870 | 850 | 806 | 811 | 799 |
| | Recycling rate | % | 86 | 81 | 80 | 81 | 80 |

Amount of Copy Paper Purchased Third-party Assured

| | Category | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|---------------------|------------------|---------|--------|--------|--------|--------|--------|
| Copy paper | Amount purchased | Million | 134 | 129 | 121 | 115 | 102 |
| Tokyo Gas Co., Ltd. | Amount purchased | Million | 63 | 64 | 59 | 53 | 45 |



ESG Data

By-products from Gas Pipeline Construction

| Category | | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|--|---|--------------|--------|--------|--------|--------|--------|
| Gas pipe (Note 1) | Amount recovered | Tons | 235 | 260 | 283 | 299 | 253 |
| | PE pipe | | | | | | |
| | Amount recycled | Tons | 235 | 260 | 283 | 299 | 253 |
| | Recycling rate | % | 100 | 100 | 100 | 100 | 100 |
| | Steel and cast-iron pipe | | | | | | |
| | Amount recovered and recycled | Tons | 5,003 | 6,126 | 6,605 | 6,582 | 6,737 |
| | Recycling rate | % | 100 | 100 | 100 | 100 | 100 |
| Gas pipeline extension work | | km | 1,121 | 1,026 | 1,038 | 967 | 916 |
| Estimated excavated amount | | Million tons | 4.49 | 3.88 | 4.03 | 3.61 | 3.55 |
| Excavated soil (Note 2) | Reduction (by shallower laying of pipes in narrow trenches and non-open-cut method) | Million tons | 1.32 | 1.35 | 1.28 | 1.26 | 1.28 |
| | Reuse (generated soil) | Million tons | 0.84 | 0.62 | 0.61 | 0.55 | 0.51 |
| | Recycle (improved soil, regeneration treatment) | Million tons | 1.33 | 1.27 | 1.27 | 1.27 | 1.21 |
| | Total reduction amount | Million tons | 3.49 | 3.24 | 3.16 | 3.09 | 3.00 |
| | Rate of reduction amount (comparison to estimated excavated amount) | % | 78 | 83 | 79 | 85 | 85 |
| | Residual soil (actual amount) | Million tons | 1.0 | 0.64 | 0.86 | 0.53 | 0.55 |
| Rate of residual soil (comparison to estimated excavated amount) | | % | 22 | 17 | 21 | 15 | 15 |
| Gas pipeline extension work | | km | 1,020 | 973 | 1,003 | 934 | 882 |
| Estimated excavated amount | | Million tons | 4.25 | 3.75 | 3.94 | 3.53 | 3.46 |
| Tokyo Gas Co., Ltd. (Note 2) | Reduction (by shallower laying of pipes in narrow trenches and non-open-cut method) | Million tons | 1.25 | 1.31 | 1.24 | 1.23 | 1.24 |
| | Reuse (generated soil) | Million tons | 0.79 | 0.61 | 0.61 | 0.55 | 0.51 |
| | Recycle (improved soil, regeneration treatment) | Million tons | 1.31 | 1.26 | 1.25 | 1.24 | 1.18 |
| | Total reduction amount | Million tons | 3.35 | 3.18 | 3.10 | 3.02 | 2.93 |
| | Rate of reduction amount (comparison to estimated excavated amount) | % | 79 | 85 | 78 | 85 | 84 |
| | Residual soil (actual amount) | Million tons | 0.90 | 0.57 | 0.85 | 0.51 | 0.54 |
| Rate of residual soil (comparison to estimated excavated amount) | | % | 21 | 15 | 22 | 15 | 16 |

Note 1: Tokyo Gas Co., Ltd.

Note 2: Data for excavated soil and asphalt concrete.

Recovery of Used Gas Appliances from Customers

| Category | | Unit | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 |
|-------------------------|--------------------------|------|--------|--------|--------|--------|--------|
| Waste, etc. (Note 1) | Amount recovered | | | | | | |
| | Used gas appliance, etc. | Tons | 3,861 | 3,715 | 3,445 | 3,288 | 3,467 |
| | Other | Tons | 5,075 | 4,581 | 4,695 | 4,103 | 3,592 |
| Total | | Tons | 8,936 | 8,296 | 8,140 | 7,391 | 7,058 |

Note 1: Excludes waste from specified kinds of home appliances.

■ Breakdown (FY2019)

| Category | Amount recovered (tons) | Amount recycled (tons) | Final disposal (tons) | Recycling rate (%) | Final disposal rate (%) |
|-------------------------------------|-------------------------|------------------------|-----------------------|--------------------|-------------------------|
| Used gas appliances and scrap metal | 3,466.8 | 3,466.8 | 0 | 100 | 0 |
| Waste plastics | 516.8 | 443.7 | 73.2 | 85.8 | 14.2 |
| Polystyrene foam | 13.3 | 13.3 | 0 | 100 | 0 |
| Cardboard boxes | 584.5 | 584.5 | 0 | 100 | 0 |
| Debris | 267.8 | 249.1 | 18.7 | 93 | 7 |
| Concrete and tile scraps | 170.2 | 78.3 | 91.9 | 46 | 54 |
| Other | 2,052.3 | 1,860.8 | 191.5 | 90.7 | 9.3 |
| Total | 7,058.4 | 6,683.1 | 375.3 | 94.7 | 5.3 |

ESG Data

Assessment of CO₂ Emissions Reduction due to Reductions in Purchased Electricity

Amount of Thermal Power Generation Varies According to Electricity Usage

In Japan, the electricity supplied by electric utilities is generated primarily by thermal power, nuclear power and hydroelectric power plants.

Nuclear power plants operate at full capacity except when undergoing a routine inspection, while the annual power output of hydroelectric power plants is determined by the amount of rainfall. The electricity supply is adjusted by operations at thermal power plants.

Therefore, in terms of total annual output, it is most likely to be thermal power generation that is cut when electricity use is reduced through energy-saving measures.



▶ The Greenhouse Gas Protocol (Guidelines for Quantifying GHG Reductions from Grid- Connected Electricity Projects) [Web](#)