Fuji Electric Environmental data

August 29, 2024

Energy Purchase Amounts / Greenhouse Gas Emissions / Emissions Transactions / Renewable Energy Use / Total Waste / Waste Sent to Landfills / Water Resources / PRTR- of PRTR Law Regulated Substances Handled / Emitted

- The aggregation range is equivalent to 95.2% of the entire Group (percentage figures refer to our environmental management activities)
- Verification by a third party has been completed for the results of the fiscal year 2022.
 The verification for the results of the fiscal year 2023 is scheduled to be completed by the end of the fiscal year 2024.

Amounts of Energy Purchased

Transition of Amount of Energy Purchased

| Category | Unit | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|---|------|---------|---------|---------|---------|---------|
| Grid electricity purchased in Japan (After redemption) | GWh | 234.844 | 247.216 | 277.876 | 272.881 | 263.477 |
| Solar power purchased in Japan (PPA) | GWh | 0.000 | 0.000 | 0.000 | 0.000 | 2.698 |
| Green electricity purchased in Japan | GWh | 0.000 | 0.000 | 0.000 | 7.204 | 7.268 |
| Redemption amount of renewable energy certificates in Japan | GWh | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Grid electricity purchased overseas (After redemption) | GWh | 194.063 | 195.829 | 137.458 | 120.610 | 144.132 |
| Solar power purchased overseas (PPA) | GWh | 1.309 | 1.730 | 3.304 | 3.285 | 6.095 |
| Green electricity purchased overseas | GWh | 0.000 | 0.000 | 0.000 | 3.874 | 2.500 |
| Redemption amount of renewable energy certificates overseas | GWh | 0.000 | 0.000 | 0.000 | 9.238 | 5.277 |
| Total grid electricity purchased (After redemption) | GWh | 428.907 | 443.044 | 415.334 | 393.491 | 407.609 |
| Total solar power purchased (PPA) | GWh | 1.309 | 1.730 | 3.304 | 3.285 | 8.792 |
| Total green electricity purchased | GWh | 0.000 | 0.000 | 0.000 | 11.078 | 9.768 |

| Total redemption amount of renewable energy certificates | GWh | 0.000 | 0.000 | 0.000 | 9.238 | 5.277 |
|--|-------|-----------|-----------|-----------|-----------|-----------|
| Total electricity purchased | GWh | 442.268 | 430.217 | 444.775 | 417.092 | 431.446 |
| Eugl nurchased in Japan | TJ | 1,933.460 | 1,845.059 | 1,822.379 | 1,949.111 | 1,979.349 |
| Fuel purchased in Japan | (GWh) | 537.072 | 512.516 | 506.216 | 541.420 | 549.819 |
| Fuel purchased overseas | TJ | 121.560 | 128.561 | 111.763 | 78.900 | 72.223 |
| ruei purchaseu overseas | (GWh) | 33.767 | 35.711 | 31.045 | 21.917 | 20.062 |
| Total Eugl numbacad | TJ | 2,055.020 | 1,973.620 | 1,934.142 | 2,028.011 | 2,051.572 |
| Total Fuel purchased | (GWh) | 570.839 | 548.228 | 537.262 | 563.336 | 569.881 |
| Total | GWh | 1,001.056 | 993.002 | 955.899 | 980.428 | 1,001.327 |

Notes

- 1. Amount of grid connected power purchased (after amortization): The amount of renewable energy certificates amortized is deducted from the amount of grid connected power purchased.
- 2. The scope of data collection includes all domestic and overseas bases.
- No heat was purchased.
 Volumes of fuel purchased are aggregated based on lower heating value (J) and converted at a rate of 3,600 GJ, or 3.6 TJ, to 1 GWh.
- 4. "Total" includes the amount of purchased electricity generated from renewable sources but excludes the amount of electricity generated in-house (both non-renewable and renewable energy)..

Breakdown of Amount of Fuel Purchased

| | l lecit | In J | lapan | Over | seas | То | tal |
|--|---------|------------|------------|-----------|-----------|------------|------------|
| | Unit | FY 2022 | FY 2023 | FY 2022 | FY 2023 | FY 2022 | FY 2023 |
| Gasoline | kL | 92.911 | 87.134 | 49.399 | 48.710 | 142.310 | 135.843 |
| Kerosene | kL | 324.022 | 318.901 | 0.000 | 0.000 | 324.022 | 318.901 |
| Diesel oil | kL | 53.089 | 53.045 | 85.730 | 69.280 | 138.819 | 122.324 |
| Fuel oil | kL | 352.016 | 343.312 | 12.000 | 39.452 | 364.016 | 382.764 |
| Liquified petroleum gas | t | 321.149 | 295.179 | 71.327 | 61.793 | 392.476 | 356.973 |
| Liquified natural gas | t | 3,288.500 | 691.080 | 0.000 | 0.000 | 3,288.500 | 691.080 |
| City gas (converted to calorific value*) | | 38,274.962 | 42,151.951 | 1,552.580 | 1,407.399 | 39,827.542 | 43,559.350 |

^{*} As the calorific value per area of gas varies by supplier and pressure varies by supply pipe, amounts are converted at a rate of 1,000 m³ at a pressure of 0°C 1 to 45 GJ.

In-House Power Generation

(GWh)

| С | Category | | FY2020 | FY2021 | FY2022 | FY2023 |
|---------------------|--------------------------------|---------|---------|---------|---------|---------|
| | Electricity generated in Japan | 140.512 | 133.232 | 125.387 | 138.601 | 153.887 |
| Nonrenewable energy | Electricity generated overseas | 0.289 | 0.113 | 0.079 | 0.064 | 0.113 |
| | Total electricity generated | 140.802 | 133.345 | 125.466 | 138.665 | 154.000 |
| | Electricity generated in Japan | 0.539 | 0.592 | 0.621 | 0.619 | 0.483 |
| Renewable energy | Electricity generated overseas | 2.113 | 1.575 | 1.609 | 1.739 | 2.146 |
| | Total electricity generated | 2.652 | 2.167 | 2.230 | 2.358 | 2.629 |

Greenhouse Gas Emissions

Transition of Greenhouse Gas Emissions

| Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|---|--------|--------|--------|--------|--------|
| CO ₂ in Japan | 207.2 | 203.7 | 213.7 | 216.8 | 218.4 |
| Non-CO ₂ greenhouse gases in Japan | 59.7 | 53.6 | 54.1 | 35.1 | 25.0 |
| Total greenhouse gas emissions in Japan | 266.9 | 257.2 | 267.8 | 251.9 | 243.4 |
| CO ₂ in overseas | 128.8 | 131.7 | 93.2 | 80.1 | 91.6 |
| Non-CO ₂ greenhouse gases overseas | 55.8 | 48.0 | 3.0 | 2.2 | 3.2 |
| Total greenhouse gas emissions overseas | 184.6 | 179.7 | 96.2 | 82.3 | 94.8 |
| Total CO ₂ emissions | 336.0 | 335.4 | 306.9 | 296.9 | 310.1 |
| Total emissions of non-CO ₂ greenhouse gases | 115.5 | 101.6 | 57.1 | 37.4 | 28.2 |
| Total greenhouse gas emissions | 451.5 | 437.0 | 364.0 | 334.2 | 338.2 |
| (per unit of net sales [t-CO₂e/¥100 million]) | 50.13 | 49.89 | 39.99 | 33.11 | 30.66 |

Breakdown of Scope 1 and Scope 2 Emissions

(kt-CO₂e)

| Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|--|--------|--------|--------|--------|--------|
| Scope 1 (direct) emissions in Japan | 158.1 | 147.5 | 145.8 | 133.0 | 127.2 |
| Scope 2 (indirect) emissions in Japan | 108.7 | 109.8 | 122.0 | 119.0 | 116.2 |
| Scope 1 (direct) emissions overseas | 62.2 | 54.7 | 8.7 | 6.3 | 7.0 |
| Scope 2 (indirect) emissions overseas | 122.4 | 125.0 | 87.5 | 76.0 | 87.8 |
| Total Scope 1 emissions | 220.3 | 202.2 | 154.5 | 139.3 | 134.3 |
| Total Scope 2 emissions | 231.1 | 234.8 | 209.5 | 194.9 | 204.0 |
| Total emissions (Same as total greenhouse gas emissions above) | 451.5 | 437.0 | 364.0 | 334.2 | 338.2 |

Notes

- 1. The scope of data collection includes all domestic and overseas bases.
- 2. Power coefficients are used to calculate the indirect CO₂ emissions from power plants for each kWh of electricity purchased.

Japan source – FY2023: Emission coefficients by electric utility (Announced by the Ministry of the Environment and the Ministry of Economy, Trade and Industry)

FY2022: Japan's average power coefficient by the Electric Utility Low-Carbon Society Council (Fiscal Year 2022: 0.436 kg-CO2e/kWh)

Overseas source - Average power coefficients for the respective countries described in IEA-Emission Factors (2022 edition) : Coefficients for [fiscal] 2021 are used for fiscal 2023.

Breakdown of Scope 1 Emissions

(kt-CO₂e)

| | Gas | | | | | | (Kt CO ₂ C) | | |
|-----------|-----------------|--------|--------|--------|--------|--------|---|--|--|
| | type | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | Major Applications | | |
| | CO ₂ | 98.5 | 93.9 | 91.7 | 97.9 | 102.3 | Cogeneration systems, boilers, drying furnaces, automobile operation on Company premises, heating | | |
| emissions | HFCs | 3.5 | 1.4 | 1.5 | 2.3 | 0.8 | Coolants, heat insulating materials (polyurethane foam), semiconductor etching materials% | | |
| in Japan | PFCs | 33.7 | 31.4 | 33.4 | 22.7 | 13.2 | Semiconductor etching materials: | | |
| | SF ₆ | 22.1 | 20.1 | 18.6 | 9.8 | 10.6 | Semiconductor etching materials*, isolating gas | | |
| | NF ₃ | 0.4 | 0.7 | 0.6 | 0.5 | 0.4 | Semiconductor etching materials* | | |
| | total | 158.1 | 147.5 | 145.8 | 133 | 127.2 | | | |
| | CO ₂ | 6.3 | 6.7 | 5.7 | 4.1 | 3.8 | Boilers, automobile operation on Company premises, drying furnaces, non-emergency generators | | |
| emissions | HFCs | 42.5 | 46.6 | 1.4 | 0.1 | 0.4 | Semiconductor etching materials*, isolating gas | | |
| overseas | PFCs | 0.9 | 1.0 | 1.2 | 1.3 | 2.0 | Semiconductor etching materials* | | |
| | SF ₆ | 12.4 | 0.5 | 0.4 | 0.8 | 0.7 | Semiconductor etching materials*, isolating gas | | |
| | NF ₃ | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | Semiconductor etching materials** | | |
| | total | 62.2 | 54.7 | 8.7 | 6.3 | 7.0 | | | |
| | CO ₂ | 104.8 | 100.6 | 97.4 | 101.9 | 106.1 | Cogeneration systems, boilers, drying furnaces, automobile operation on Company premises, heating | | |
| Total | HFCs | 46.0 | 47.9 | 2.9 | 2.3 | 1.2 | Semiconductor etching materials**, isolating gas | | |
| Scope 1 | PFCs | 34.6 | 32.4 | 34.6 | 24 | 15.1 | Semiconductor etching materials: | | |
| emissions | SF ₆ | 34.5 | 20.5 | 19.0 | 10.6 | 11.3 | Semiconductor etching materials**, isolating gas | | |
| | NF ₃ | 0.4 | 0.7 | 0.6 | 0.5 | 0.6 | Semiconductor etching materials** | | |
| | total | 220.3 | 202.2 | 154.5 | 139.3 | 134.3 | | | |

^{**/}semiconductor etching materials' include use in semiconductor etching processes as well as in chamber cleaning processes in semiconductor manufacturing equipment.

Notos

- 1. The scope of data collection includes all domestic and overseas bases.
- 2. Greenhouse effect coefficient (GWP): Used AR5, the 100-year coefficient in the 5th IPPCC periodic report since fiscal 2021 in accordance with the COP24 international agreement. Used AR4 for fiscal 2013 to 2020.
- 3. The calculation of emissions other than CO_2 uses the IPCC inventory & (default) emission factors (IPCC1996 Tier2c factors) in accordance with the calculation guidelines of the Act on Promotion of Global Warming Countermeasures.

In addition, emissions due to SF₆ use (proprietary inventory) in high-voltage manufacturing processes have

also been added.

The default values (90%, 95% for NF_3 only) are used for the exclusion rate of exhaust gas elimination systems for the etching process of semiconductors.

However, in each inventory for product HFC refrigerant filling processes and SF_6 insulating gas filling processes, actual measured values are used instead of default emission coefficients.

4. Since fiscal 2017, we have been undergoing third-party verification within the year following the year under review with respect to calculation methods, data sources, calculation processes, and companywide totals.

Breakdown of Scope 1 and 2 Emissions by Business segment in Fiscal 2023

(kt-CO₂e)

| | Purchased electricity | Fuel | Gas | Total |
|-----------------------------------|-----------------------|---------|--------|---------|
| Energy | 33.636 | 4.481 | 4.182 | 42.299 |
| Industry | 21.079 | 3.061 | 0.212 | 24.352 |
| Semiconductors | 136.726 | 94.740 | 23.337 | 254.803 |
| Food and Beverage Distribution | 12.523 | 3.819 | 0.442 | 16.784 |
| Total | 203.964 | 106.101 | 28.173 | 338.238 |

Breakdown of Scope 1 and 2 Emissions by Country in Fiscal 2023

| Country | Scope 1 | Scope 2 | Total |
|-------------|---------|---------|---------|
| Japan | 127.228 | 116.185 | 243.413 |
| Malaysia | 2.966 | 48.767 | 51.733 |
| China | 3.359 | 26.084 | 29.443 |
| Philippines | 0.092 | 6.991 | 7.083 |
| Thailand | 0.586 | 3.767 | 4.353 |
| India | 0.043 | 1.899 | 1.942 |
| Singapore | 0.000 | 0.208 | 0.208 |
| France | 0.000 | 0.063 | 0.063 |
| Total | 134.274 | 203.965 | 338.238 |

Scope3 Emissions (FY2023 results and Scope and Method Calculations)

| ı | | Category | Figures | Rate | Scope and Method of Calculations |
|----------|--------------|---|----------|--------|---|
| | 1 | Products and services purchased | 2,410 | 4.4% | Scope of Calculation: Purchased materials, components, and outsourced services. Materials: Iron, copper, plastic, etc. Components: Electronic parts, mechanical parts, etc. Outsourced services: Processing and assembly, construction, and utilities, etc. |
| | 2 | Capital goods | 196 | 0.4% | Scope of Calculation: All company capital investments Calculation method: Capital investment amount × Emission factor for the electric and electronic sector |
| | 3 | Fuel and energy purchases (outside Scope 1/2) | 51.8 | 0.1% | Scope of Calculation: All company production bases. Calculation method: Fuel and power procurement emission factors |
| Upstream | 4 | Transport and delivery (upstream) | 16.6 | 0.0% | Domestic: Emission from transportation related to our own operations Overseas: Estimated from domestic transportation volume (based on sales ratio) |
| Nps | 5 | Waste discharged from business operations | 7.12 | 0.0% | Scope of Calculation: All company production bases. Calculation method: Emissions related to waste processing at all production bases |
| | 6 | Business travel | 3.56 | 0.0% | Scope of Calculation: Entire company (including office sector) Calculation method: Emissions from business trips of all employees |
| | 7 | Commuting | 13.9 | 0.0% | Domestic: Emission from the commuting of full-time employees at all sites Overseas: Estimated based on employee ratio |
| | 8 | Use of lease assets (upstream) | 3.97 | 0.0% | Scope of Calculation: All company office sectors. Domestic: Emission from offices leased as tenants Overseas: Estimated emissions from office sectors based on employee ratios. |
| | | Subtotal | 2,703 | 4.9% | |
| | 9 | Transport/deli very (downstream) | _ | | Excluded from calculations because of minimal movement from product delivery (category 4) destinations |
| | 10 | Processing of sold products | _ | | Excluded from calculations owing to no sales of intermediary products requiring downstream processing |
| stream | 11 | Use of products sold | 55,370.6 | 100.0% | Scope of Calculation: Emissions for seven product groups, which account for approximately 80% of emissions during the use phase of all our products. • Final product emissions: Annual power consumption × Product lifespan × Power coefficient • Intermediate product emissions: Annual loss of power × Product lifespan × Power coefficient |
| Down | 12 | Waste processing of products sold | _ | | Excluded from calculations because most of products are made from metal and emissions during recycling are expected to be very minimal |
| | 13 | Use of lease assets (downstream) | _ | | No applicable emissions |
| | 14 Franchise | | _ | | No applicable emissions |
| | 15 | Investment | _ | | No applicable emissions |
| | | subtotal | 55,371 | 95.3% | |
| | | Total | 58,074 | 100.0% | |
| | | | | | |

Transition of Scope3 Emissions

| | | Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|----------------|----------|---|---------|--------|---------|---------|----------|
| | 1 | Products and services purchased | 1,978 | 1,795 | 1,924 | 2,300 | 2,410 |
| | 2 | Capital goods | 138 | 103 | 170 | 241 | 196 |
| | 3 | Fuel and energy purchases (outside Scope 1/2) | 52.9 | 52.9 | 50.6 | 50.9 | 51.8 |
| Up | 4 | Transport and delivery (upstream) | 15.9 | 13.6 | 15.5 | 16.2 | 16.6 |
| stream | 5 | Waste discharged from business operations | 6.49 | 5.93 | 7.16 | 6.46 | 7.12 |
| | 6 | Business travel | 3.65 | 3.60 | 3.49 | 3.54 | 3.56 |
| | 7 | Commuting | 13.8 | 13.7 | 13.4 | 13.7 | 13.9 |
| | 8 | Use of lease assets (upstream) | 5.83 | 5.67 | 4.99 | 4.98 | 3.97 |
| | Subtotal | | 2,215 | 1,993 | 2,190 | 2,637 | 2,703 |
| | 9 | Transport/deli very (downstream) | × | × | × | × | - |
| | 10 | Processing of sold products | × | × | × | × | _ |
| | 11 | Use of products sold | 122,066 | 54,453 | 177,383 | 173,930 | 55,370.6 |
| Down stream | 12 | Waste processing of products sold | × | × | × | × | - |
| | 13 | Use of lease assets (downstream) | 0 | 0 | 0 | 0 | _ |
| | 14 | Franchise | 0 | 0 | 0 | 0 | - |
| | 15 | Investment | 0 | 0 | 0 | 0 | - |
| subtotal | | | 122,066 | 54,453 | 177,383 | 173,930 | 55,371 |
| Total | | | 124,281 | 56,447 | 179,572 | 176,567 | 58,074 |

Greenhouse Gas Emissions in Fuji Electric's Overall Supply Chain

| | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | % |
|--------|---------|--------|---------|---------|--------|--------|
| Scope1 | 220 | 202 | 155 | 139 | 134 | 0.2% |
| Scope2 | 231 | 235 | 210 | 195 | 204 | 0.3% |
| Scope3 | 124,281 | 56,447 | 179,572 | 176,567 | 58,074 | 99.4% |
| Total | 124,732 | 56,884 | 179,936 | 176,902 | 58,412 | 100.0% |

Emissions Transactions

Emissions Transaction System

(t-CO₂e)

| Location (Period) | Emissions credit acquisition | Emissions credit purchase | Emissions credit redemption | Outstanding credits |
|---|------------------------------|---------------------------|-----------------------------|---------------------|
| Tokyo (Tokyo Factory) FY2022 (FY2015–2020) | 0 (4,231) | 0 (0) | 336 (723) | 3,172 (3,508) |
| Saitama prefecture (Fukiage Factory) FY2023 (FY2011–2020) | 3,341 (41,220) | 0 (0) | 0 (0) | 44,561 (41,220) |
| Shenzhen CY2023 (CY2013-2021) | 1,384 (14,144) | 0 (0) | 0 (9,615) | 5,917 (4,533) |

Note: The above figures have been independently verified.

Emissions Transaction System

| Location | Third reduction period | Reduction target (Result from second reduction period) |
|--------------------------------------|------------------------|---|
| Tokyo (Tokyo Factory) | FY2020-2024 | 25% reduction in emissions from base year (15% reduction) |
| Saitama prefecture (Fukiage Factory) | FY2020-2024 | 20% reduction in emissions from base year (13% reduction) |
| Shenzhen | FY2021-2025 | Annual reduction in emissions of 1.71% (6.39%/year reduction) |

Renewable Energy Use

Transition of Renewable Energy Use

(MWh)

| Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|--|--------|--------|--------|--------|--------|
| Renewable energy certificates purchased | | | | 9,238 | 5,277 |
| Solar power generated in Japan | 539 | 592 | 621 | 619 | 483 |
| Solar power generated overseas | 2,113 | 1,575 | 1,609 | 1,739 | 2,146 |
| Renewable power **1 purchased in Japan | | | | 7,204 | 9,965 |
| Renewable power *1 purchased overseas | 1,309 | 1,730 | 3,304 | 7,166 | 8,595 |
| Total | 3,962 | 3,897 | 5,533 | 25,967 | 26,466 |
| Ratio of renewable energy consumption/power consumption **2 | 0.9% | 0.9% | 1.3% | 6.2% | 6.1% |
| Ratio of renewable energy consumption/energy consumption **3 | 0.6% | 0.6% | 0.9% | 4.1% | 3.9% |

Notes:

Since fiscal 2022, we have been purchasing renewable energy and amortizing electricity certificates in Japan and abroad.

- **1 Renewable power: On-site photovoltaic power generation (PPA), off-site renewable energy power generation, and green electricity
- *2 Power consumption: Total amount of all power purchased + amount of photovoltaic (self-generated) power.
- **3 Energy consumption: Total amount of all power purchased + amount of photovoltaic (self-generated) power + amount of fuel consumed.

Power Supply Capacity from Renewable Energy Projects (Feed-In Tariff Scheme Electricity Sales)

(MWh)

| Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|-------------|--------|--------|--------|--------|--------|
| Wind power | 2,628 | 2,628 | 2,628 | 2,628 | |
| Solar power | 4,205 | 4,205 | 4,205 | 4,205 | |
| Total | 6,833 | 6,833 | 6,833 | 6,833 | 0 |

Total Waste / Waste Sent to Landfills

(t)

| Dogian | Total / | Catamani | EV2010 | EV2020 | EV2021 | EV2022 | (L) |
|----------|-------------------|----------------------------------|--------|--------|--------|--------|--------|
| Region | Landfill | Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
| | | Sludge | 1,667 | 1,778 | 2,188 | 2,453 | 2,504 |
| | | Waste oil | 1,309 | 1,105 | 1,477 | 1,384 | 1,585 |
| | | Acid / alkali waste | 1,523 | 1,305 | 1,183 | 1,486 | 2,121 |
| | Total | Waste plastic | 1,951 | 1,699 | 1,812 | 1,868 | 1,727 |
| | waste | Paper / wood scraps | 4,157 | 3,561 | 3,699 | 3,610 | 3,557 |
| Japan | | Metal scraps | 12,097 | 9,996 | 10,836 | 12,024 | 11,772 |
| | | Others | 275 | 284 | 334 | 247 | 232 |
| | | Total | 22,979 | 19,728 | 21,529 | 23,073 | 23,496 |
| | Sent to | | 115 | 122 | 24 | 29 | 13 |
| | landfills | Ratio of waste sent to landfills | 0.5% | 0.6% | 0.1% | 0.1% | 0.1% |
| | | Sludge | 1,976 | 2,051 | 1,360 | 1,226 | 2,587 |
| | | Waste oil | 250 | 323 | 442 | 316 | 343 |
| | | Acid / alkali waste | 2,689 | 1,394 | 102 | 196 | 193 |
| | Total | Waste plastic | 272 | 335 | 747 | 232 | 254 |
| | waste | Paper / wood scraps | 255 | 324 | 284 | 449 | 695 |
| Overseas | | Metal scraps | 3,716 | 3,235 | 5,510 | 4,458 | 4,472 |
| | | Others | 250 | 192 | 112 | 198 | 157 |
| | | Total | 9,408 | 7,856 | 8,558 | 7,077 | 8,701 |
| | Cont to | | 229 | 367 | 654 | 122 | 50 |
| | Sent to landfills | Ratio of waste sent to landfills | 2.4% | 4.7% | 7.6% | 1.7% | 0.6% |
| | | Sludge | 3,643 | 3,829 | 3,548 | 3,679 | 5,092 |
| | | Waste oil | 1,559 | 1,428 | 1,919 | 1,701 | 1,927 |
| | | Acid / alkali waste | 4,212 | 2,699 | 1,285 | 1,683 | 2,313 |
| | Total | Waste plastic | 2,224 | 2,034 | 2,559 | 2,101 | 1,981 |
| | waste | Paper / wood scraps | 4,412 | 3,885 | 3,983 | 4,059 | 4,252 |
| Total | | Metal scraps | 15,813 | 13,232 | 16,346 | 16,482 | 16,244 |
| | | Others | 525 | 476 | 447 | 445 | 388 |
| | | Total | 32,387 | 27,584 | 30,087 | 30,150 | 32,197 |
| | Sout to | | 345 | 489 | 678 | 151 | 63 |
| | Sent to landfills | Ratio of waste sent to landfills | 1.1% | 1.8% | 2.3% | 0.5% | 0.2% |

Notes:

- 1. Total waste is the amount of unnecessary articles created during production activities (industrial waste, general waste, and valuable waste).
- 2. Ratio of waste sent to landfills is calculated as follows: Waste sent to landfills ÷ Total waste
- 3. In fiscal 2021, landfill waste increased due to difficulties in recycling fluorine sludge into cement overseas.
- 4. The scope of data collection includes all domestic and overseas bases.

Hazardous waste / non-hazardous waste

(t)

| Туре | Indicator | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|------------------------|----------------------------------|--------|--------|--------|--------|--------|
| | Total waste | 9,415 | 7,957 | 6,754 | 7,084 | 9,353 |
| | Amount of waste recycled | 8,707 | 6,774 | 5,340 | 5,887 | 8,017 |
| Hazardous waste | Recycling rate | 92% | 85% | 79% | 83% | 86% |
| | Sent to landfills | 83 | 288 | 564 | 33 | 29 |
| | Ratio of waste sent to landfills | 0.9% | 3.6% | 8.3% | 0.5% | 0.3% |
| | Total waste | 22,972 | 19,627 | 23,332 | 23,066 | 22,844 |
| | Amount of waste recycled | 21,993 | 18,988 | 22,862 | 22,372 | 22,513 |
| Non-hazardous waste | Recycling rate | 96% | 97% | 98% | 97% | 99% |
| | Sent to landfills | 262 | 201 | 114 | 118 | 35 |
| | Ratio of waste sent to landfills | 1.1% | 1.0% | 0.5% | 0.5% | 0.2% |
| | Total waste | 32,387 | 27,584 | 30,087 | 30,150 | 32,197 |
| Total | Amount of waste recycled | 30,700 | 25,762 | 28,202 | 28,259 | 30,530 |
| | Recycling rate | 95% | 93% | 94% | 94% | 95% |
| | Sent to landfills | 345 | 489 | 678 | 151 | 63 |
| | Ratio of waste sent to landfills | 1.1% | 1.8% | 2.3% | 0.5% | 0.2% |

Notice: Hazardous waste: Hazardous waste: Under Japan's Waste Management and Public Cleansing Act, businesses are responsible for all of the industrial waste they generate (including the issuing of manifests and final disposal). This law does not distinguish between hazardous waste and non-hazardous waste. We consider hazardous waste to be harmful waste materials and we therefore retallied our figures according to the following types of waste: waste oil, waste acid and waste alkali, organic and inorganic sludge, and used activated carbon.

Water Resources

Water Intake

(km³)

| | Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|----------|-----------------------------|--------|--------|--------|--------|--------|
| | Potable water purchased | 925 | 1,100 | 990 | 984 | 1,072 |
| | Industrial water purchased | 2,749 | 2,766 | 2,589 | 2,605 | 2,626 |
| Japan | Total water purchased | 3,674 | 3,866 | 3,579 | 3,589 | 3,698 |
| | Groundwater intake | 3,962 | 3,894 | 3,900 | 4,055 | 4,060 |
| | Total water intake in Japan | 7,636 | 7,760 | 7,479 | 7,645 | 7,758 |
| | Industrial water purchased | 5,762 | 5,575 | 2,272 | 1,740 | 2,095 |
| Overseas | Groundwater intake | 0 | 1 | 0 | 0 | 1 |
| | Industrial water purchased | 5,762 | 5,576 | 2,272 | 1,740 | 2,096 |
| Total | Total water intake | 13,398 | 13,336 | 9,751 | 9,386 | 9,854 |

Notes:

- 1. "Potable water" refers to drinkable tap water. "Industrial water" refers to water for industrial purposes that is not drinkable.
- 2. Total water intake in Japan is the sum of potable water purchased, industrial water purchased, and groundwater intake.
- 3. Volume of groundwater does not include groundwater used for soil cleanup, for agricultural purposes, or for melting snow.
- 4. The scope of data collection includes all domestic and overseas bases.

Water Recycled

(km³)

| | Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|----------|--------------------------|--------|--------|--------|--------|--------|
| Japan | Amount of water recycled | 1,940 | 2,087 | 2,303 | 2,347 | 2,493 |
| | Recycling rate | 20.3% | 21.2% | 23.5% | 23.5% | 24.3% |
| | Amount of water recycled | 725 | 917 | 258 | 106 | 121 |
| Overseas | Recycling rate | 11.2% | 14.1% | 10.2% | 5.7% | 5.7% |
| Tatal | Amount of water recycled | 2,665 | 3,004 | 2,561 | 2,453 | 2,613 |
| Total | Recycling rate | 12.2% | 16.6% | 18.4% | 20.8% | 21.0% |

Notes : Recycling rate is calculated as follows: Amount of water recycled \div Amount used (Intake amount + Amount recycled)

Wastewater

 (km^3)

| | Category | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|----------|-----------------------------------|--------|--------|--------|--------|--------|
| | Volume of wastewater to the sewer | 1,170 | 1,166 | 1,278 | 1,483 | 1,415 |
| Japan | Volume of wastewater to the river | 6,466 | 6,593 | 6,201 | 6,162 | 6,343 |
| | Subtotal | 7,636 | 7,760 | 7,479 | 7,645 | 7,758 |
| | Volume of wastewater to the sewer | 520 | 510 | 499 | 486 | 438 |
| Overseas | Volume of wastewater to the river | 5,242 | 5,066 | 1,772 | 1,254 | 1,658 |
| | Subtotal | 5,762 | 5,576 | 2,272 | 1,740 | 2,096 |
| | Volume of wastewater to the sewer | 1,690 | 1,676 | 1,778 | 1,969 | 1,853 |
| Total | Volume of wastewater to the river | 11,708 | 11,660 | 7,973 | 7,416 | 8,000 |
| | Total | 13,398 | 13,336 | 9,751 | 9,385 | 9,854 |

Notes:

Sewerage includes the drainage sent to general sewage treatment facilities in industrial parks. Rivers and waterways include direct discharge to sea areas, drainage that has seeped underground, and evaporation at factories. However, it does not include the amount of drainage from rainwater at factories.

Volume of PRTR Law Regulated Substances Handled / Emitted

(t)

| | | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|-----------|---------|---------|---------|---------|---------|---------|
| _ | Handled | 782.1 | 723.6 | 683.4 | 646.9 | 662.8 |
| Japan | Emitted | 143.6 | 169.7 | 189.7 | 210.0 | 149.8 |
| Over cons | Handled | 1,516.5 | 939.4 | 525.5 | 437.5 | 463.6 |
| Over-seas | Emitted | 755.3 | 478.6 | 305.5 | 304.5 | 250.4 |
| Tatal | Handled | 2,298.6 | 1,663.0 | 1,208.9 | 1,084.4 | 1,126.4 |
| Total | Emitted | 898.9 | 648.3 | 495.2 | 514.5 | 400.2 |

Volume of VOCs Handled / Emitted

(t)

| | | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|-----------|---------|---------|---------|---------|---------|---------|
| _ | Handled | 565.4 | 597.5 | 699.1 | 787.9 | 712.7 |
| Japan | Emitted | 257 | 260.8 | 269.1 | 297.7 | 232.8 |
| Over coac | Handled | 922.1 | 650.1 | 494.5 | 491.4 | 385.5 |
| Over-seas | Emitted | 826 | 557.8 | 348.3 | 327.5 | 246.9 |
| Total | Handled | 1,487.5 | 1,247.6 | 1,193.6 | 1,279.3 | 1,098.2 |
| IOLAI | Emitted | 1,083.0 | 818.6 | 617.4 | 625.2 | 479.7 |