

HORIBA's Environmental Activities

We provide a range of analytical measurement instruments and peripheral equipment required for environmental measurement. In order to fulfill social responsibilities, we also develop eco-design products with its life cycles in mind, which comply with environmental laws and regulations. At the same time, together with our suppliers, we make consistent efforts to conserve resources and energy during production. Our employees also have a strong interest in environmental issues. We participate in environmental volunteer work like cleaning and collecting trash in areas alongside river and around company offices. We deliver environmental classes in elementary and junior high schools, and participate in environmental events organized by government organizations.

Environmental Initiatives in 2019

In 2019, the HORIBA Group companies in Japan adopted the following objective for environmental conservation under the Integrated (Quality , Environment and Occupational Health and Safety) Management System* policy. We promote efforts to build safe and efficient clean factories and contribute to the protection of the global environment.

Objective:

1. 1% increase in energy use efficiency from 2018
2. Expand activities to reduce waste materials

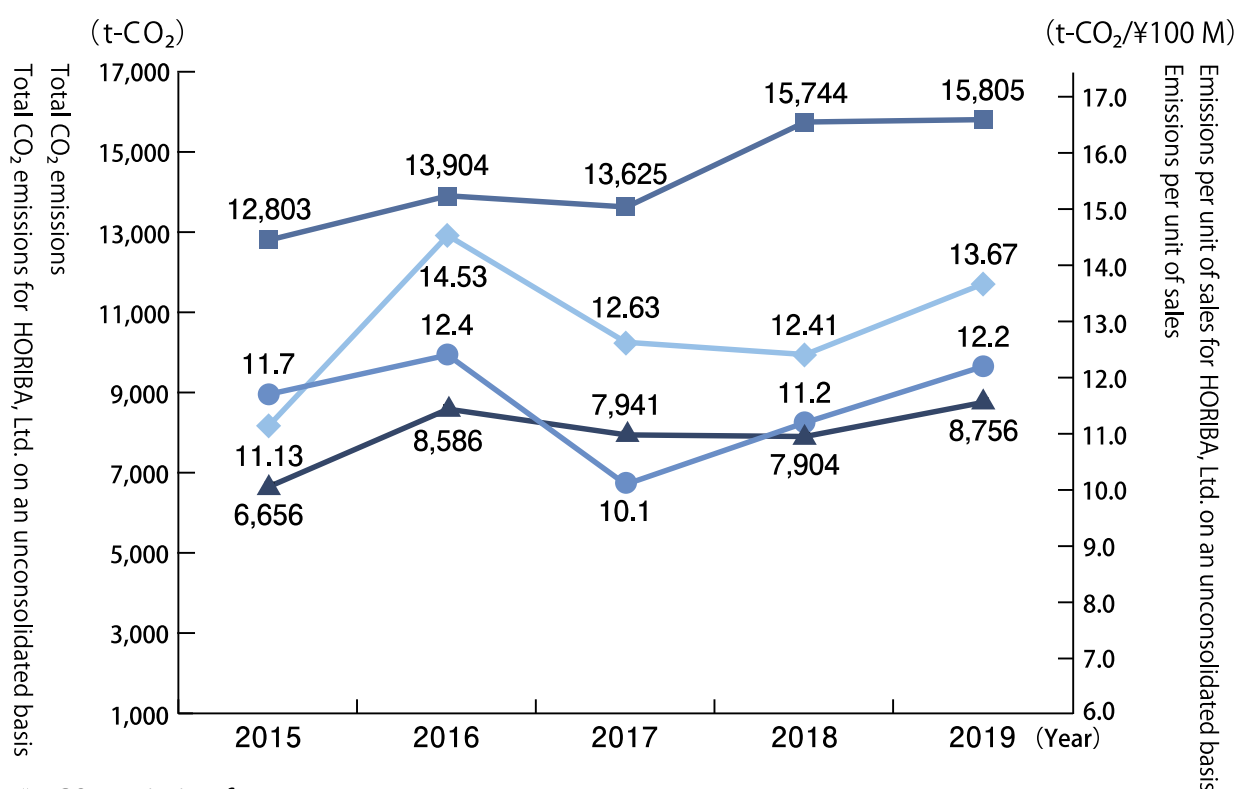
[Please find details of Integrated Management System](#)

Energy Conservation and Initiatives to Reduce CO₂ Emission

Total CO₂ emissions generated by HORIBA Group companies in Japan in 2019 was 15,805 t-CO₂. This is 1.0% increase compared to the previous year. Total CO₂ emissions per unit sales increased 8.7% from 2018. Also, CO₂ emissions for HORIBA, Ltd. alone increased by 11% to 8,756 t-CO₂ compared to 2018. Emissions per unit sales resulted in an increase of 10.2% from 2018. The increase in CO₂ emissions is attributed to increased operation at semiconductor-related facilities in line with increased sales. We will continue to make use of our energy monitoring system to use our energy efficiently.

Total CO₂ Emissions

- Total CO₂ emissions (t-CO₂/year)
- ▲ Total CO₂ emissions for HORIBA, Ltd. on an unconsolidated basis (t-CO₂/year)
- Emissions per unit of sales (t-CO₂/¥100 M)
- ◆ Emissions per unit of sales for HORIBA, Ltd. on an unconsolidated basis (t-CO₂/¥100 M)



*1 CO₂ emission factor:

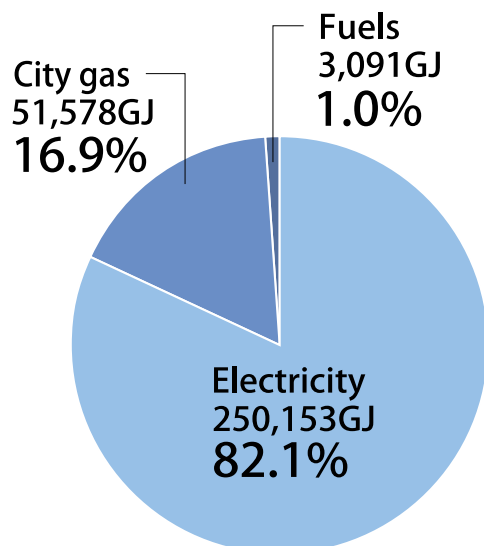
- (1) Electricity: The official values of the Kansai Electric Power Company were adopted for the Kyoto-Shiga region.
For other regions, substitute values officially published by the Ministry of the Environment were adopted.
- (2) City gas: The official values of Osaka Gas Co., Ltd. were used in calculations.

*2 City gas consumption:

Values are converted to those in standard conditions (0°C, 1 atmospheric pressure).

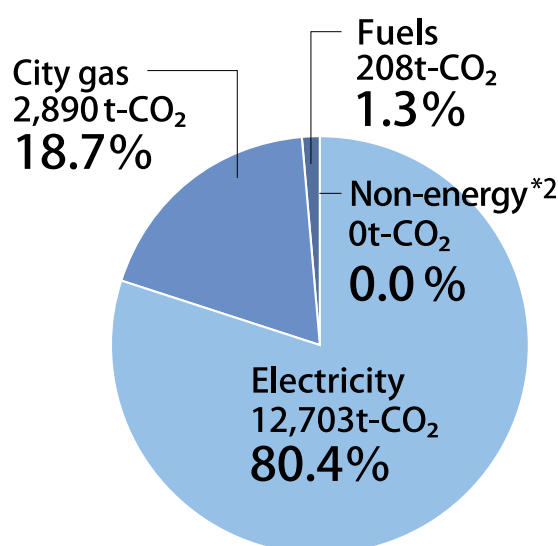
Types of Energy Consumption in 2019

(Scope: Domestic production sites*1)



Energy Types of Greenhouse Gas Emissions (CO₂ Equivalent) in 2019

(Scope: Domestic production sites*1)



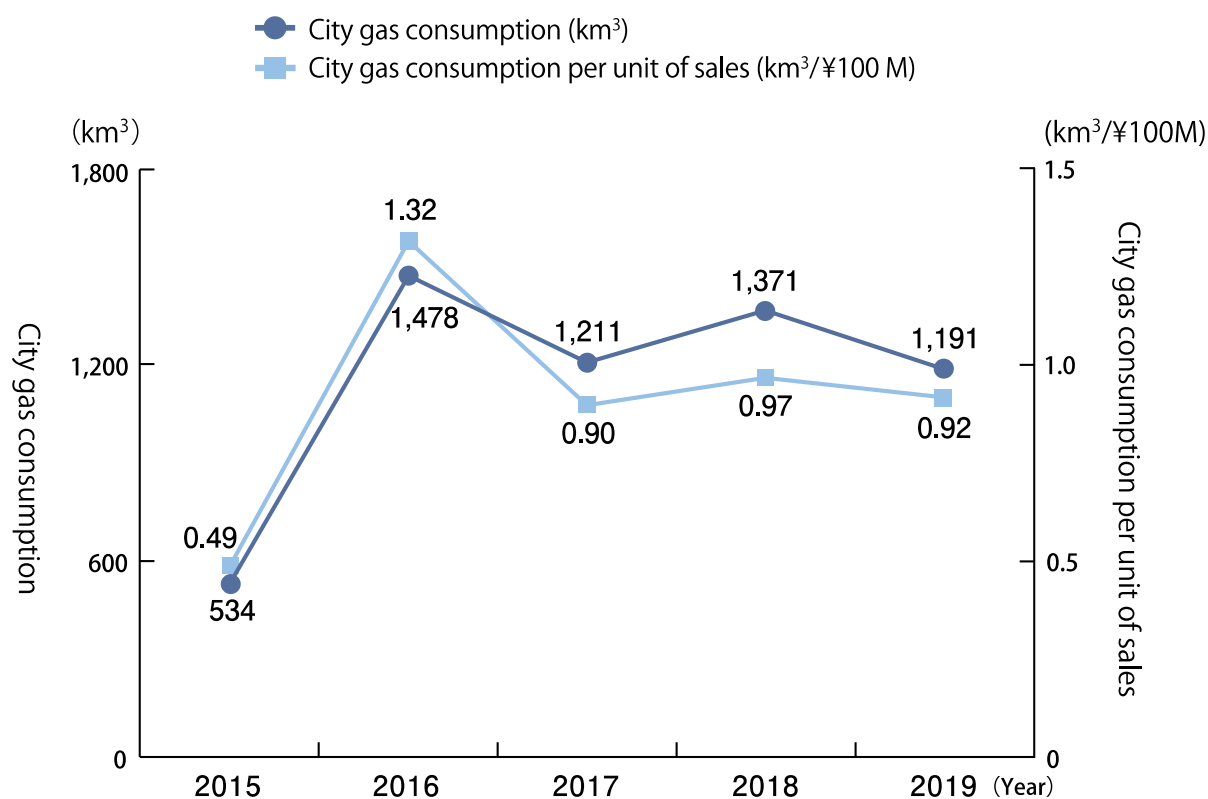
*1 Domestic production sites include the HORIBA, Ltd. head office/factory and Biwako Factory, HORIBA STEC Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.

*2 Non-energy: Sulfur hexafluoride, perfluoromethane, etc.

Energy Consumption

City Gas Consumption

(Scope: Domestic production sites*)



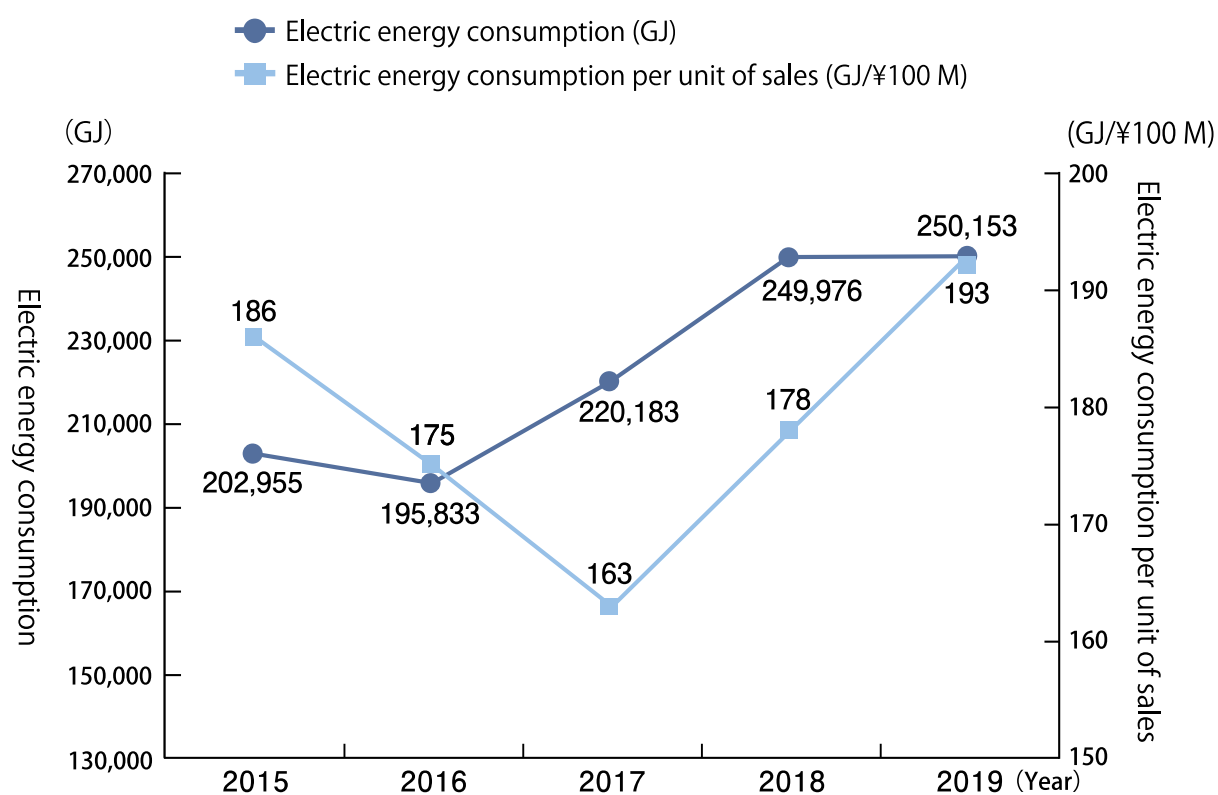
*Domestic production sites include the HORIBA, Ltd. head office/ factory and Biwako Factory, HORIBA STEC Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.

[Factor in the increase of city gas consumption]

The increase in 2016 is attributed to full-scale operation of gas cogeneration systems installed at HORIBA BIWAKO E-HARBOR. We reviewed the operation of this system in 2017. As a result, gas usage increased slightly in 2018, but the usage was the lowest since the introduction of the gas cogeneration system in 2019.

Electric Energy Consumption

(Scope: Domestic production sites*)



*Domestic production sites include the HORIBA, Ltd. head office/ factory and Biwako Factory, HORIBA STEC Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.

[Factor in the increase and decrease of electrical energy consumption]

For 2016, redevelopment in the Kyoto factory attributed to the reduced operations of facilities and equipment; however, business growth in 2017 and 2018 led to significant increase.

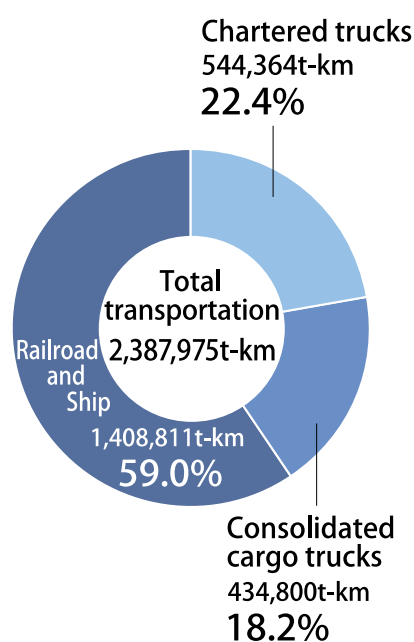
Electricity consumption in 2019 was about the same as last year due to activities for energy conservation. We will continue our energy conservation activities and strive to further reduce energy consumption.

Initiatives for Reducing CO₂ Emissions in Logistics

The HORIBA Group in Japan is committed to reducing CO₂ emissions for product transportation. Our recent initiatives include rail and marine transport. We started using rail transport between Kyoto and Tokyo in 2004. Rail transport between Kumamoto and Tokyo starting in 2006, which was switched to marine transport in September 2013. The use of rail and marine transport cover over 60% of the total transport which led to a reduction of CO₂ emissions by 300 to 400 tons every year. We remain committed to improve transport efficiency by, for example, joint transport with other companies.

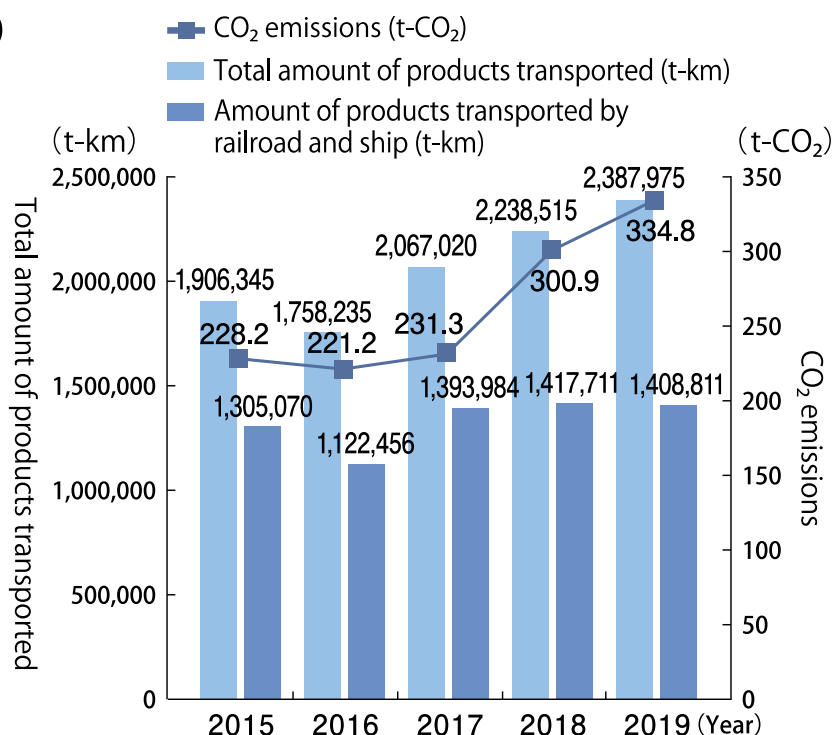
Railroad Utilization Rate for the Transportation of Products in 2019

(Scope: Domestic production sites*)



The Amount of Products Transported and the Amount of CO₂ Emissions

(Scope: Domestic production sites*)



*Calculation method

Truck (Charter) Improved ton-kilometer method

Truck (Mixed loading) Conventional ton-kilometer method

Train Cargo weight act by transport section

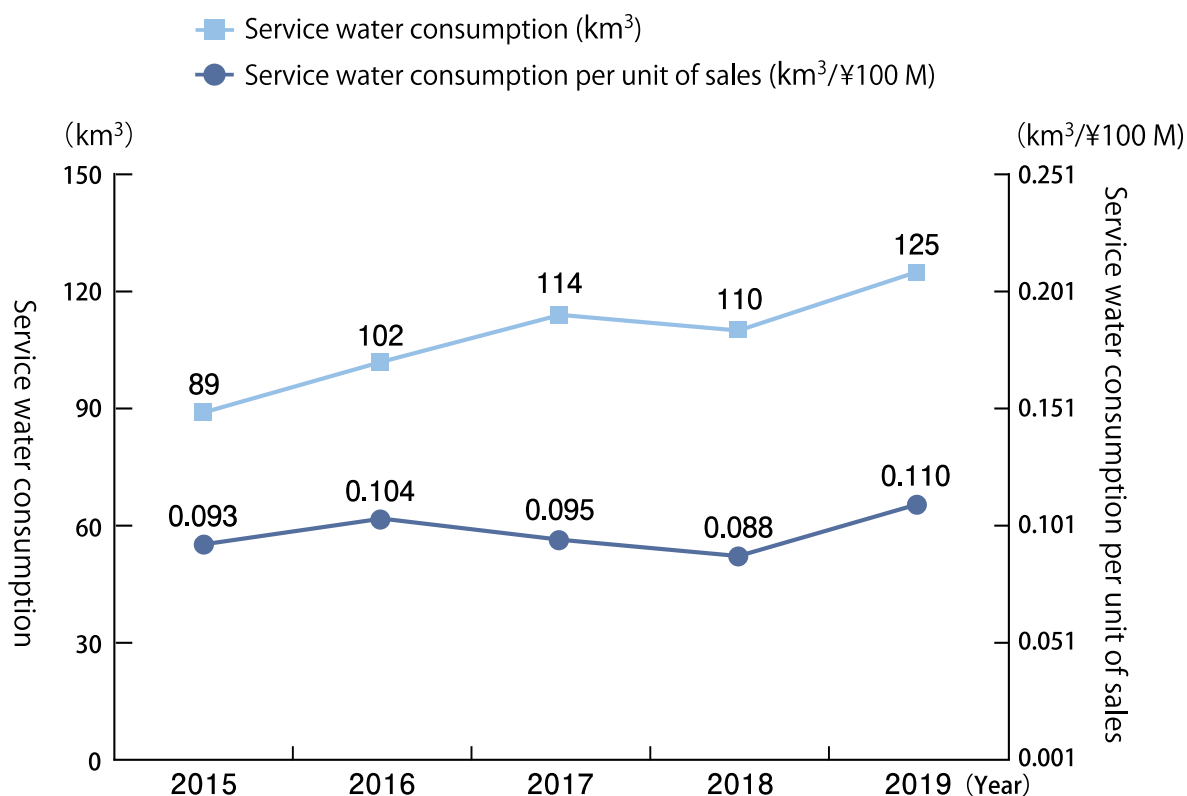
*Domestic production sites include the HORIBA, Ltd. head office/factory and Biwako Factory, HORIBA STEC Co., Ltd. head office/factory and Aso Factory and HORIBA Advanced Techno Co., Ltd. head office/factory.

Use of Service Water and Monitoring of Wastewater

In spite of the efficient use of water, usage of HORIBA Group in Japan increased approximately 13.6% from 2018 due to improvement in business performance and active production. Also, it was 22.2% increase in the total water consumption per unit sales compared to last year. In 2020, we will continue to use service water more efficiently by monitoring the use of service water. Meanwhile, HORIBA, Ltd. uses a round the-clock factory wastewater monitoring system. In 2019, there was no discharge of wastewater exceeding the Kyoto City wastewater discharge standard.

Service Water Consumption

(Scope: Domestic production sites*)



*Domestic production sites include the HORIBA, Ltd. head office/ factory and Biwako Factory, HORIBA STEC Co.,Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory.

Wastewater Measurement Categories and Trends in Measured Values

Scope: HORIBA, Ltd. head office/factory
(Units: mg/L) excluding pH * not detectable under detection limit

| Regulation Category | | Kyoto City Regulations | HORIBA Standards | Measured Result (maximum) | | | Detection Limit Value |
|--------------------------|----------------------------|------------------------|------------------|---------------------------|---------|---------|-----------------------|
| | | | | 2017 | 2018 | 2019 | |
| Environmental categories | pH | 5~9 | — | 6.2~7.6 | 6.5~7.9 | 6.3~8.0 | — |
| | n-Hexane extract | 30 | 21 | 6.2 | 5.2 | 4.6 | 0.5 |
| | Phenol | 1 | 0.3 | 0.06 | 0.02 | * | 0.01 |
| | Copper | 3 | 0.9 | 0.200 | 0.210 | 0.040 | 0.002 |
| | Zinc | 2 | 1.0 | 0.630 | 0.340 | 0.150 | 0.002 |
| | Iron (soluble) | 10 | 3.0 | 0.08 | 0.13 | 0.05 | 0.01 |
| | Manganese (soluble) | 10 | 3.0 | 0.03 | 0.01 | 0.01 | 0.01 |
| | Nickel | 2 | 0.6 | 0.08 | 0.04 | 0.08 | 0.01 |
| Toxic substances | Boron and its compounds | 10 | 3.0 | 0.2 | 2.1 | * | 0.1 |
| | Fluorine and its compounds | 8 | 4.5 | 0.2 | 0.2 | 0.1 | 0.1 |
| | Cadmium and its compounds | 0.03 | 0.03 | 0.005 | 0.011 | 0.002 | 0.001 |
| | Cyanogen compounds | 1 | 0.3 | * | * | * | 0.1 |
| | Lead and its compounds | 0.1 | 0.07 | * | 0.010 | * | 0.01 |
| | Hexavalent chromium | 0.5 | 0.15 | * | * | * | 0.02 |
| | Arsenic and its compounds | 0.1 | 0.03 | 0.009 | 0.028 | * | 0.005 |
| | Mercury and its compounds | 0.005 | 0.0015 | * | 0.0006 | * | 0.0005 |
| | Trichloroethylene | 0.1 | 0.09 | * | * | * | 0.01 |
| | Dichloromethane | 0.2 | 0.14 | * | * | * | 0.02 |
| | Carbon tetrachloride | 0.02 | 0.014 | * | * | * | 0.002 |
| | 1,1,1-trichloroethane | 3 | 0.9 | * | * | * | 0.3 |

Note: Regulation figures are from Kyoto City sewage and drainage standards.

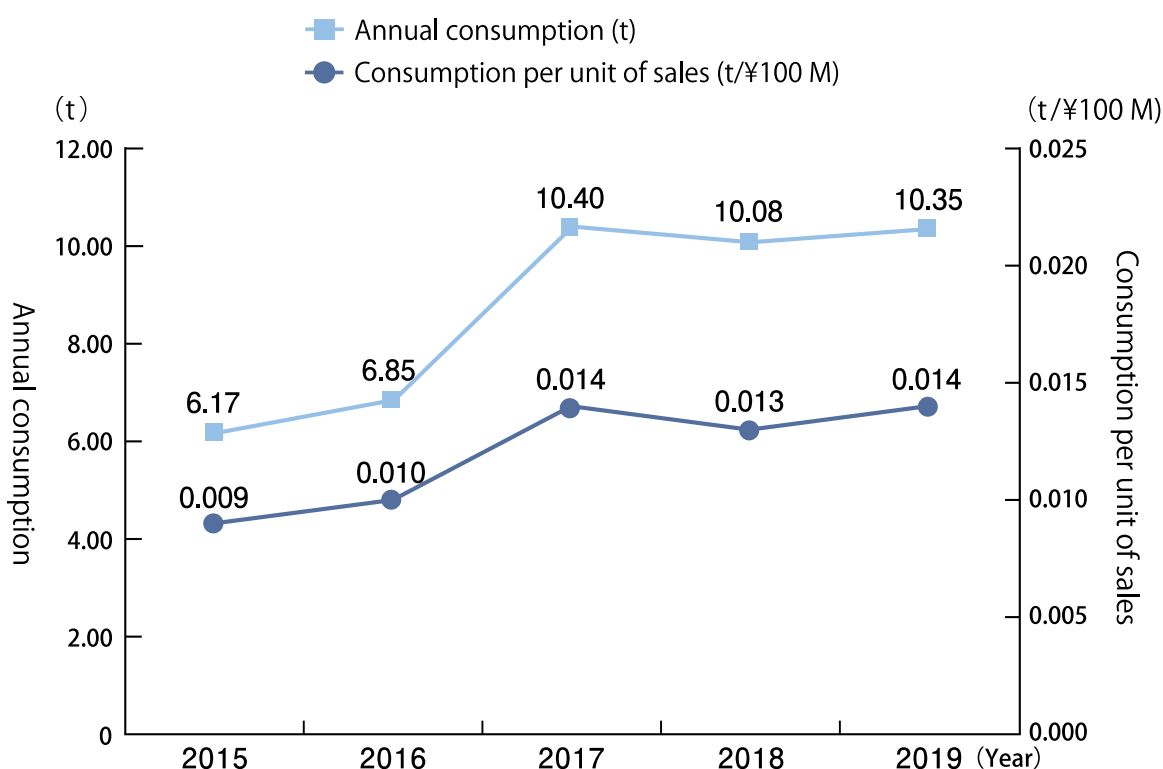
Use of Chemical Substance

In 2019, HORIBA, Ltd. used 10.35 tons of substances consuming chemical substances (volume converted to total weight), generally continued to be flat from 2018. We have been keeping track of the use of PRTR* controlled substances to ensure compliance with the revised PRTR Law. Although this law requires entities to report the use of one or more tons of a specific chemical per year (0.5 or more tons for Class 1 substances), we did not use any of the relevant chemicals to the level warranting a report in 2019. We will continue to reduce risks through our management system.

*PRTR (Pollutant Release and Transfer Register) Law : Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

Trend in Quantity of Chemical Substances Consumed

(Scope: HORIBA, Ltd. head office/factory, BIWAKO Factory, HORIBA STEC Advanced Technology Center)



Major Chemical Substances Handled

Scope: HORIBA, Ltd. head office/factory, BIWAKO Factory, HORIBA STEC Technology Center
Unit:kg

| CAS No. | Substance(IUPAC) | Annual Amount Handled | | | Amount Transferred | | | Amount Recycled | | | Main Application |
|-----------|---------------------------|-----------------------|-------|------|--------------------|------|------|-----------------|------|------|---------------------------------|
| | | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 | |
| 7664-39-3 | Hydrofluoric acid | 15 | 22 | 6 | 14 | 21 | 6 | 0 | 0 | 0 | Semiconductors and others |
| 64-17-5 | Ethanol | 500 | 1,184 | 936 | 157 | 189 | 199 | 0 | 0 | 0 | Clean components |
| 67-64-1 | Acetone (dimethyl ketone) | 262 | 444 | 409 | 222 | 401 | 340 | 0 | 0 | 0 | Cleaning |
| 507-55-1 | HCFC-225 *1 | 28 | 42 | 43 | 6 | 23 | 26 | 0 | 6 | 6 | Solvent/Product inspection |
| 62-56-6 | Thiourea | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | Regents production |
| 7439-92-1 | Lead solder | 17 | 13 | 13 | 0 | 0 | 0 | 12 | 10 | 10 | Printed circuit boards |
| 7664-93-9 | Piranha solution | 108 | 112 | 100 | 108 | 112 | 100 | 0 | 0 | 0 | Semiconductors |
| 7722-84-1 | Hydrogen peroxide | 59 | 84 | 42 | 41 | 68 | 42 | 0 | 0 | 0 | Liquid measurement and others |
| 1330-20-7 | Xylene | 95 | 34 | 20 | 24 | 34 | 19 | 0 | 0 | 0 | Semiconductors/Clean components |

*1: Dichloropentafluoropropane (Product: H- 997)

*CAS No.: Numerical identification numbers for chemical substances managed by the Chemical Abstracts Service, a division of the American Chemical Society

PRTR*1 Substances Managed in 2019

Scope: HORIBA, Ltd. head office/factory, BIWAKO Factory, HORIBA STEC Advanced Technology Center
Minimum target treatment quantity: 10 kg
Unit:kg

ering printed circuit board

| Ordinance No. *2 | Substance (IUPAC) | Annual Amount Handled | Added to Product | Amount Remove | Amount Emitted | | | Amount Transferred | | Main Application |
|------------------|---------------------------------|-----------------------|------------------|--|----------------|-------|------|--------------------|---------------------|---|
| | | | Product Delivery | Compounds Neutralized/Decomposed/Synthesized | Air | Water | Soil | Industrial Waste | Transferred Outside | |
| 300 | Toluene | 415.1 | 0.0 | 0.0 | 414.3 | 0.0 | 0.0 | 0.8 | 0.0 | Product development |
| 80 | Xylene | 19.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.7 | 0.0 | Semiconductors,Clean components |
| 185 | HCFC-225 *3 | 43.0 | 6.4 | 0.0 | 6.2 | 0.0 | 0.0 | 24.0 | 6.4 | Product manufacturing/Product inspection |
| 20 | 2-aminoethanol | 17.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.8 | 0.0 | Semiconductors/Product manufacturing/Product inspection |
| 333 | Hydrazine | 10.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.1 | 0.0 | Semiconductors/Product manufacturing/Product inspection |
| 30 | Linear alkylbenzenesulfonate *4 | 26.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.0 | 0.0 | Semiconductors/Product development/Product manufacturing/Product inspection |
| Amount | | 531.7 | 6.4 | 0.0 | 420.5 | 0.0 | 0.0 | 98.4 | 6.4 | |

*1 PRTR (Pollutant Release and Transfer Register) Law: Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

*2 Ordinance No.: Numbers given in Table 1 of the Enforcement Ordinance for the Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

*3 Dichloropentafluoropropane: product name H-997

*4 Linear alkylbenzenesulfonic acid and its salts (alkyl C=10-14)

Atmospheric Measurement Categories and Trends in Measured Values (at vents and site perimeters)

Scope : HORIBA, Ltd. head office/factory

*Under detection limit so omitted

| | Measurement Category | Unit | Kyoto Prefecture Regulations | Measured Result (maximum) | | | |
|--------------------|----------------------|---------------------|------------------------------|---------------------------|-------|-------|------|
| | | | | 2016 | 2017 | 2018 | 2019 |
| At vents | Sulfuric acid | mg/m ³ | 3 | — | <0.1 | <0.1 | 0.70 |
| | Fluorine | mg/m ³ N | 5 | — | <0.5 | <0.5 | <0.5 |
| | Hydrogen chloride | Vol ppm | 20 | — | <1 | <1 | <1 |
| At site perimeters | Sulfuric acid | mg/m ³ | 0.03 | — | 0.01 | 0.01 | 0.01 |
| | Fluorine | mg/m ³ | 0.05 | <0.01 | <0.01 | <0.01 | 0.02 |
| | Hydrogen chloride | Vol ppm | 0.2 | 0.04 | <0.02 | 0.06 | 0.02 |

Note: Regulation figures are based on ordinances to protect Kyoto Prefecture environment. Measurement at vents was not performed in 2016 due to the facility removal. In 2017, measurement category was reviewed because of maintenance in head office.

*There have been no cases where the amount of hazardous substances to the air exceeded the amount decided by the law over the past three years.

Scope : HORIBA STEC, Co., Ltd. head office/factory

| | Measurement Category | Unit | Kyoto Prefecture Regulations | Measured Result (maximum) | | | |
|--------------------|----------------------|---------------------|------------------------------|---------------------------|-------|-------|-------|
| | | | | 2016 | 2017 | 2018 | 2019 |
| At vents | Sulfuric acid | mg/m ³ | 3 | — | 0.20 | 0.50 | 0.10 |
| | Fluorine | mg/m ³ N | 5 | — | <0.5 | <0.5 | <0.5 |
| | Hydrogen chloride | Vol ppm | 20 | — | <1 | <1 | <1 |
| | Nitrogen oxide | Vol ppm | 100 | — | <10 | <10 | <10 |
| At site perimeters | Sulfuric acid | mg/m ³ | 0.03 | — | 0.02 | 0.01 | 0.02 |
| | Fluorine | mg/m ³ | 0.05 | — | <0.01 | <0.01 | <0.01 |
| | Hydrogen chloride | Vol ppm | 0.2 | — | <0.02 | 0.1 | <0.02 |
| | Nitrogen oxide | Vol ppm | 1 | — | 0.058 | 0.039 | 0.039 |

Note: Regulation figures are based on ordinances to protect Kyoto Prefecture environment.

Scope : BIWAKO Factory (outlet)

| Facilities | Measurement Category | Unit | Kyoto Prefecture Regulations | Measured Result (maximum) | | | |
|---------------------------------|----------------------|---------|------------------------------|---------------------------|------|------|------|
| | | | | 2016 | 2017 | 2018 | 2019 |
| Cogeneration generator | Nitrogen oxide | Vol ppm | 600 | 73 | 133 | 50 | 52 |
| | Dust | Vol ppm | 0.05 | <0.01 | — | — | — |
| Hot-and-chilled-water generator | Nitrogen oxide | Vol ppm | 150 | 16 | 19 | 16 | 18 |
| | Dust | Vol ppm | 0.01 | <0.01 | — | — | — |
| Hot-water boiler | Nitrogen oxide | Vol ppm | 150 | 33 | 38 | 29 | 37 |
| | Dust | Vol ppm | 0.10 | <0.01 | — | — | — |

Note1: Regulation figures are based on the Air Pollution Control Law.

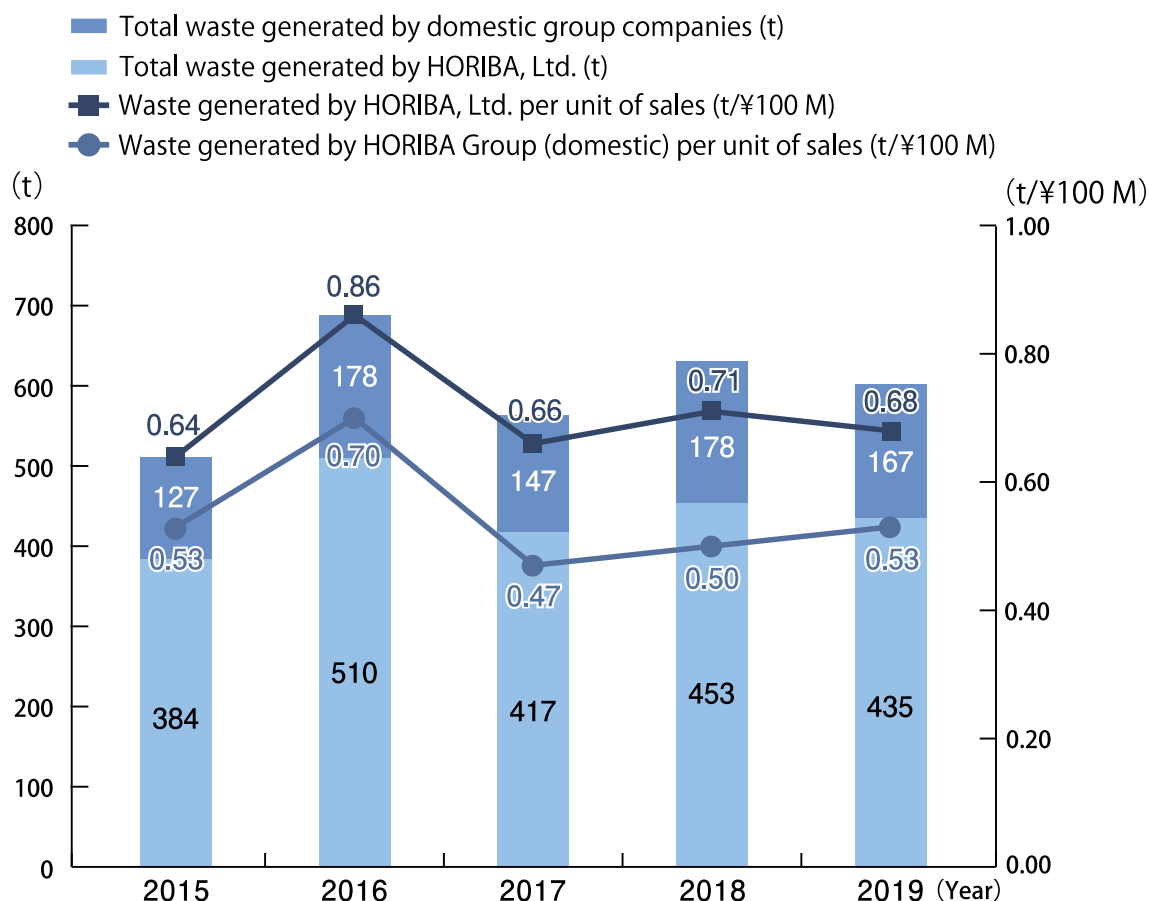
Note2: Measuring period of dust is every five years.

*** There have been no cases where the amount of hazardous substances to the air exceeded the amount decided by the law over the past three years.**

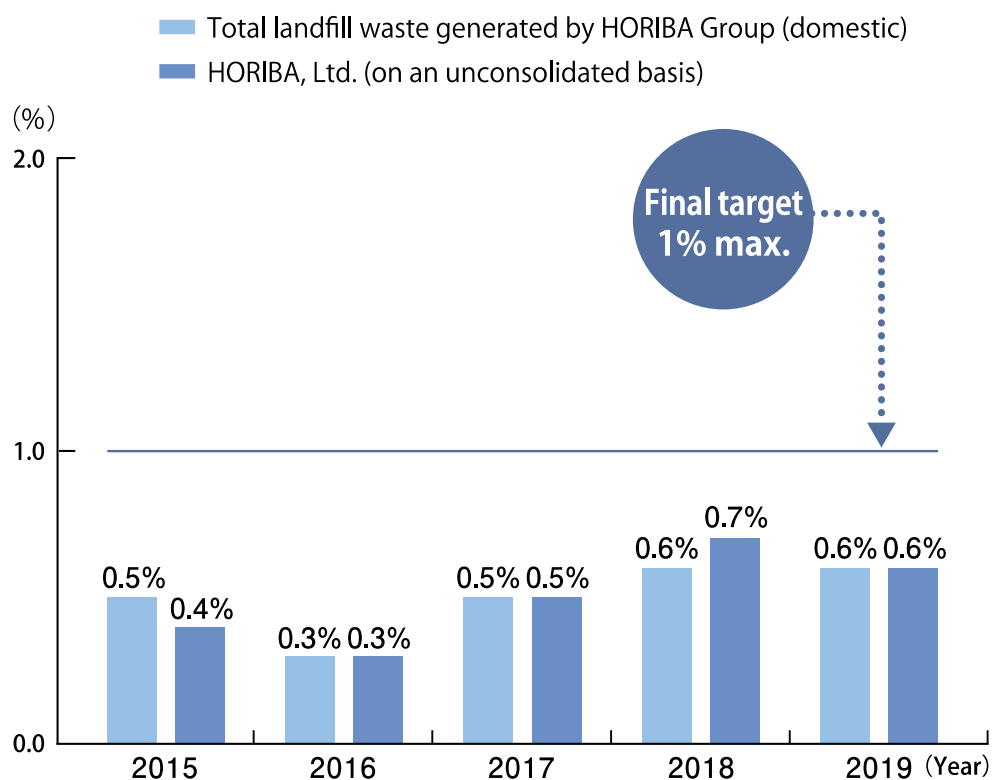
Initiatives to Reduce Waste

HORIBA, Ltd. achieved zero emissions in the second term of 2006, and we been achieving zero emission for the past five years. Since 2013, the scope expanded not only the company itself but all domestic production bases. In 2019, even in the increase in production with improved business performance, the amount of waste products decreased by approximately 5% due to waste separation and reduction activities. We will drive further efforts to maintain zero emissions and suppress the amount of waste products.

Total Waste Generation and Waste Generation per Unit of Sales



Trend in Total Amount of Landfilled Waste



Scope:

Domestic production sites:

HORIBA, Ltd. head office/factory and Biwako Factory, HORIBA STEC, Co., Ltd. head office/factory and Aso Factory and HORIBA Advanced Techno Co., Ltd. head office/factory

Domestic group companies:

HORIBA STEC, Co., Ltd. and HORIBA Advanced Techno Co., Ltd.

HORIBA Group (domestic):

HORIBA, Ltd., HORIBA STEC, Co., Ltd. and HORIBA Advanced Techno Co., Ltd.

Overview of the Environmental Impacts: Balance in Materials

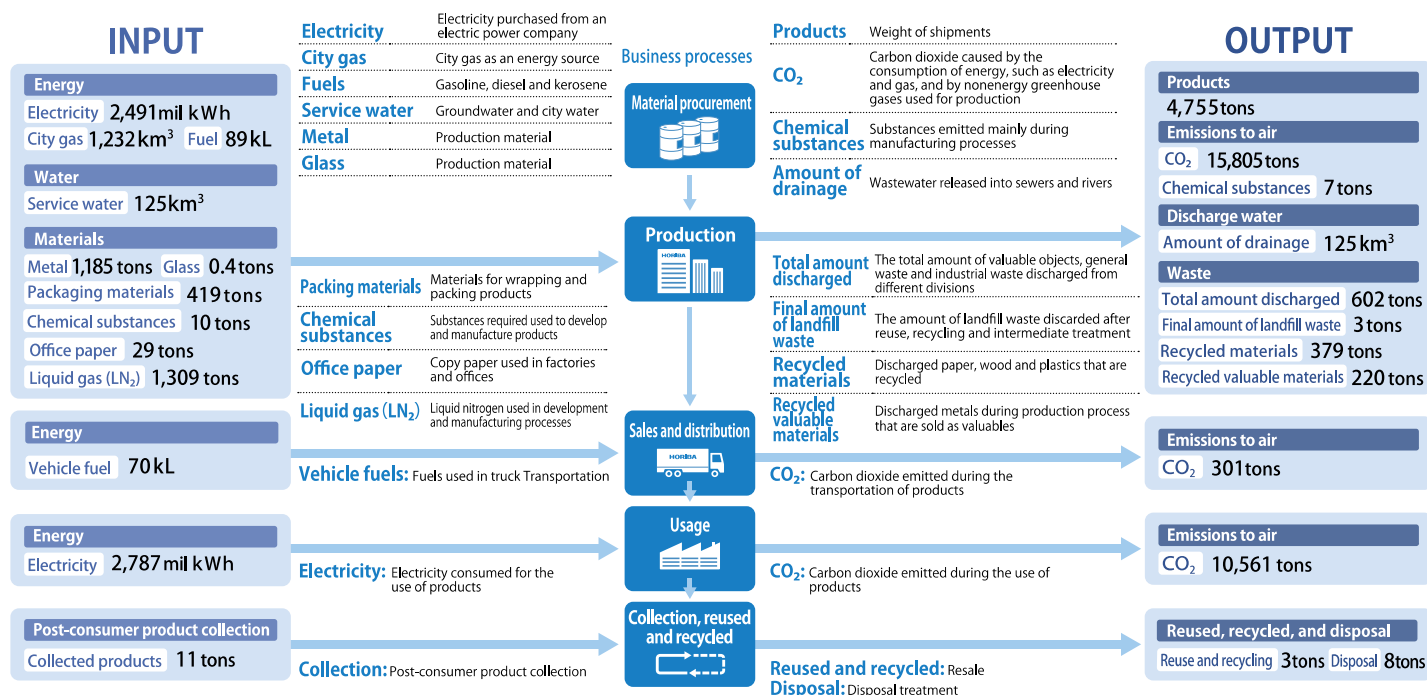
We work hard to obtain an overview of the environmental impact caused by the domestic HORIBA Group as a whole during each stage of our business activities. As for the environmental impact for 2019, both CO₂ emissions and CO₂ emissions per unit sales stayed about the same as last year in spite active production and improvement of business performance due to energy saving and CO₂ reduction activities. HORIBA Group will continue to proactively work on reducing environmental impact going forward.

(1) Balancing Environmental Impacts

Material Flow Chart for 2019 to Determine Environmental Impacts

Scope: Domestic production sites

HORIBA, Ltd. head office/factory and Biwako Factory, HORIBA STEC, Co., Ltd. head office/factory and Aso Factory, and HORIBA Advanced Techno Co., Ltd. head office/factory



(2) Environmental Impacts in Production Sites

Group Companies (Production Sites)

| Company Name | Abbreviation | Location |
|--|--|---------------------------------------|
| HORIBA Instruments Incorporated Irvine Facility | HII(Irvine) | U.S.A. (California) |
| HORIBA Instruments Incorporated, Ann Arbor Office | HII(AnnArbor) | U.S.A. (Michigan) |
| HORIBA Instruments Incorporated, Troy Office | HII(Troy) | U.S.A. (Michigan) |
| HORIBA Instruments Incorporated, Piscataway Office Former HORIBA Instruments Incorporated, Edison Office | HII (Piscataway) Former HII Edison | U.S.A.(New Jersey) |
| HORIBA Instruments Incorporated Austin Office HORIBA Instruments Incorporated Santa Clara Office Former HORIBA STEC | HII (Austin/Santa Clara) Former SHI | U.S.A. (Texas) U.S.A. (California) |
| HORIBA Europe GmbH | HE | Germany (Oberursel, Darmstadt) |
| HORIBA UK Limited | HUK | U.K. |
| HORIBA ABX SAS | HMFR | France (Montpellier) |
| HORIBA Jobin Yvon SAS | JYFR | France (Longjumeau) |
| HORIBA (Austria) GmbH | HA | Austria (Tulln) |
| HORIBA, Ltd | HOR | Japan (Kyoto) |
| HORIBA STEC, Co., Ltd. | STEC | Japan (Kyoto) |
| HORIBA Advanced Techno Co., Ltd. | HAT | Japan (Kyoto) |
| HORIBA KOREA LTD. | HKL | South Korea (Kyunggido) |
| HORIBA INSTRUMENTS (SHANGHAI) CO., LTD. | HSC | China (Shanghai) |

Environmental Impact of Group Production Sites in 2019

| Item/Region | | U.S.A. | | | | |
|-----------------------------------|--|-----------------|-------------------|---------------|---------------------|---------------------------------|
| Group Company Name (Abbreviation) | | HII (Irvine) | HII (AnnArbor) | HII (Troy) | HII (Piscataway) | HII (Austin/ Santa Clara) |
| INPUT | Electricity consumption (MW · h) | 682 | 759 | 2,500 | 1,048 | 889 |
| | City gas consumption (km ³) | — | 47 | 83 | 213 | 6 |
| | Water consumption (km ³) | 4.9 | 6 | 3 | 15 | — |
| | Consumption of fuel oil & fuel for vehicles (kL) | — | 87 | 93 | — | 17 |
| | Quantity of chemicals consumed (t) | — | — | — | — | — |
| | Office paper (t) | 2.7 | 10.0 | 19.0 | 0.0 | 1.5 |
| | Packing materials (t) | — | — | — | 3 | — |
| OUTPUT | CO ₂ emissions (t-CO ₂) | 408 | 358 | 531 | 567 | 101 |
| | Wastewater discharge (km ³) | 4.9 | 1 | 3 | 15.0 | — |
| | Waste emissions (t) | 27 | 39 | 40 | 98 | — |
| | Number of employees (Person) | 180 | 130 | 85 | 186 | 79 |

| Item/Region | | Europe | | | | |
|-----------------------------------|--|--------|----------------------|-------|-------|-----|
| Group Company Name (Abbreviation) | | HE | HUK (Northampton) | HMFR | JYFR | HA |
| INPUT | Electricity consumption (MW · h) | 1,724 | 407 | 2,971 | 4,922 | 38 |
| | City gas consumption (km ³) | 76 | 13 | — | 285 | 6 |
| | Water consumption (km ³) | 3 | 1 | 25 | 17 | 0 |
| | Consumption of fuel oil & fuel for vehicles (kL) | 265 | — | — | 134 | 18 |
| | Quantity of chemicals consumed (t) | 3 | — | 6 | — | — |
| | Office paper (t) | 6.5 | 1.6 | 7.9 | 2.6 | 1.0 |
| | Packing materials (t) | 6 | — | 311 | — | — |
| OUTPUT | CO ₂ emissions (t-CO ₂) | 1,643 | 98 | 153 | 1,251 | 60 |
| | Wastewater discharge (km ³) | 2.7 | 0.5 | — | 16.9 | 0.1 |
| | Waste emissions (t) | 99 | 27 | 621 | 148 | 6 |
| | Number of employees (Person) | 642 | 185 | 599 | 348 | 29 |

| Item/Region | | Asia | | | | |
|-----------------------------------|--|--------|--------|-----|-----|-------|
| Group Company Name (Abbreviation) | | HOR | STEC | HAT | HKL | HSC |
| INPUT | Electricity consumption (MW · h) | 12,327 | 14,427 | 970 | 317 | 1,022 |
| | City gas consumption (km ³) | 1,139 | 49 | 46 | — | — |
| | Water consumption (km ³) | 59.4 | 65.6 | 0.5 | 1.0 | 2.5 |
| | Consumption of fuel oil & fuel for vehicles (kL) | 48 | 20 | 20 | 70 | 10 |
| | Quantity of chemicals consumed (t) | 10 | — | — | — | — |
| | Office paper (t) | 21.4 | 4.0 | 3.6 | 1.2 | 0.2 |
| | Packing materials (t) | 299 | 58 | — | 1.2 | — |
| OUTPUT | CO ₂ emissions (t-CO ₂) | 8,756 | 6,318 | 732 | 146 | 384 |
| | Wastewater discharge (km ³) | 59.4 | 65.6 | 0.5 | 0.9 | 1.7 |
| | Waste emissions (t) | 435 | 167 | — | 7.0 | 2 |
| | Number of employees (Person) | 1,868 | 581 | 327 | 141 | 108 |

(3)Environmental Impacts in Non-production Sites

| Number of locations and category | | HORIBA, Ltd. sales offices (12 locations) | | | HORIBA Techno Service Co., Ltd. service stations (26 locations) | | | HORIBA, Ltd. training and recreation facilities (2 locations) | | |
|----------------------------------|--|---|------|-------|---|-------|-------|---|------|------|
| Item/Year | | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 | 2017 | 2018 | 2019 |
| INPUT | Electricity consumption (MWh) | 606 | 656 | 609 | 385 | 403 | 392 | 281 | 258 | 253 |
| | City gas consumption (km ³) | 1.3 | 1.3 | 1.2 | 3.0 | 2.2 | 1.5 | 0.3 | 0.3 | 0.4 |
| | LP gas consumption (km ³) | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 14 | 15 |
| | Fuel consumption (kL) | 101.5 | 99.2 | 104.4 | 173.7 | 167.2 | 172.4 | — | — | — |
| | Office paper (t) | 6.3 | 6.5 | 5.7 | 3.7 | 3.4 | 3.4 | — | — | — |
| | Packing materials (t) | 1.4 | 1.2 | 0.9 | 4.7 | 4.9 | 8.1 | — | — | — |
| OUTPUT | CO ₂ emissions (t-CO ₂) | 549 | 569 | 550 | 607 | 599 | 599 | 236 | 197 | 212 |
| | Waste emissions (t) | 37.5 | 56.6 | 35.6 | 36.9 | 43.6 | 38.2 | — | — | — |

sales offices (12 locations) Sapporo, Sendai, Utsunomiya, Tokyo, Yokohama, Nagoya, Toyota, Hamamatsu, Osaka, Takamatsu, Hiroshima, Fukuoka

Service stations (26 locations) Sapporo, Sendai, Fukushima, Utsunomiya, Ichihara, Kashima, Tsukuba, Kawaguchi, Tokyo, Kokubunji, Yokohama, Fuji, Hamamatsu, Toyota, Nagoya, Toyama, Yokkaichi, Osaka, Himeji, Kurashiki, Hiroshima, Yamaguchi, Takamatsu, Fukuoka, Oita, Kumamoto

Training and recreation facilities (2 locations) Takashima (Shiga Prefecture) and Kyoto