

2. CSR POLICY 2 ENVIRONMENT

Actively initiate measures to secure and improve the environment.

2-1 Basic Concept

• Environmental Philosophy

T. Hasegawa recognizes the fact that passing on this irreplaceable Earth to the future generation is the most important challenge shared by mankind and as a manufacturer of flavors and fragrances, all of our business activities will be conducted to protect the environment.

• Basic Policy

We consider “security and disaster prevention”, “industrial safety and health” and “chemical safety” to be just as important as “environmental protection” and have incorporated these themes into our “Environmental Safety Activity Policy” for implementation.

Environmental Safety Activity Policy

ENVIRONMENTAL SAFETY ACTIVITIES POLICY

Environmental Protection

1. Promote energy saving measures
2. Promote resource savings and effective use of waste
3. Promote odor measures and reduce emission volumes of environmental wastes
4. Enhance environmental control system
5. Promote purchase of Green Points

Security and Disaster Prevention

1. Promote safety measures of hazardous materials
2. Promote disaster prevention and safety

Occupational Safety and Health

1. Promote occupational safety measures
2. Promote occupational health activities
3. Promote better working environments

Chemical Safety

1. Maintain chemical safety system
2. Promote chemical safety measures

- **Relationship with Stakeholders**

According to the "T. Hasegawa Corporate Code of Conduct", we endeavor to secure an unwavering relationship with all of our stakeholders built on trust.

(1) Information Disclosures to Customers

We disclose information via such platforms as CSR Procurement Self-Assessment Tool (Global Compact Network Japan), SEDEX, EcoVadis and CDP.

(2) Environmental Education to Employees

We conduct multifaceted education on environment to raise environmental awareness among employees.

- **Conduct training and provide information via intra-company network**

We post environment related pages on the intra-company network and provide environment related information such as the "Annual Environment Report".

- **Conduct intra-company seminars on environment**

The Environmental Safety Committee and/or the Education Committee host seminars and classes on environmental issues.

- **Attending external seminars on environment**

Employees engaged in environmental safety duties enhance their knowledge related to the environmental issues by attending conferences, seminars, lectures and exhibitions.

- **New employee training**

Training for new employees are conducted with dedicated training sessions on environment and safety.

- **Environmental education through The Environmental Management System (ISO14001)**

At Fukaya Factory, Itakura factory and the Research Center, education and training on environmental issues are systematically done through the Environmental Management System. At each location, "ISO14001" Bulletin Boards are setup to provide information on environmental policy, environmental promotion posters and other environment related information to promote environmental safety.

(3) Information Disclosure to Stock Holders

We publish our Environmental Report annually. From here on, the Environmental Report will be incorporated and disclosed in The Sustainability Report Section “2. CSR Policy 2 Environment”. The Sustainability Report will also be made public on our website.

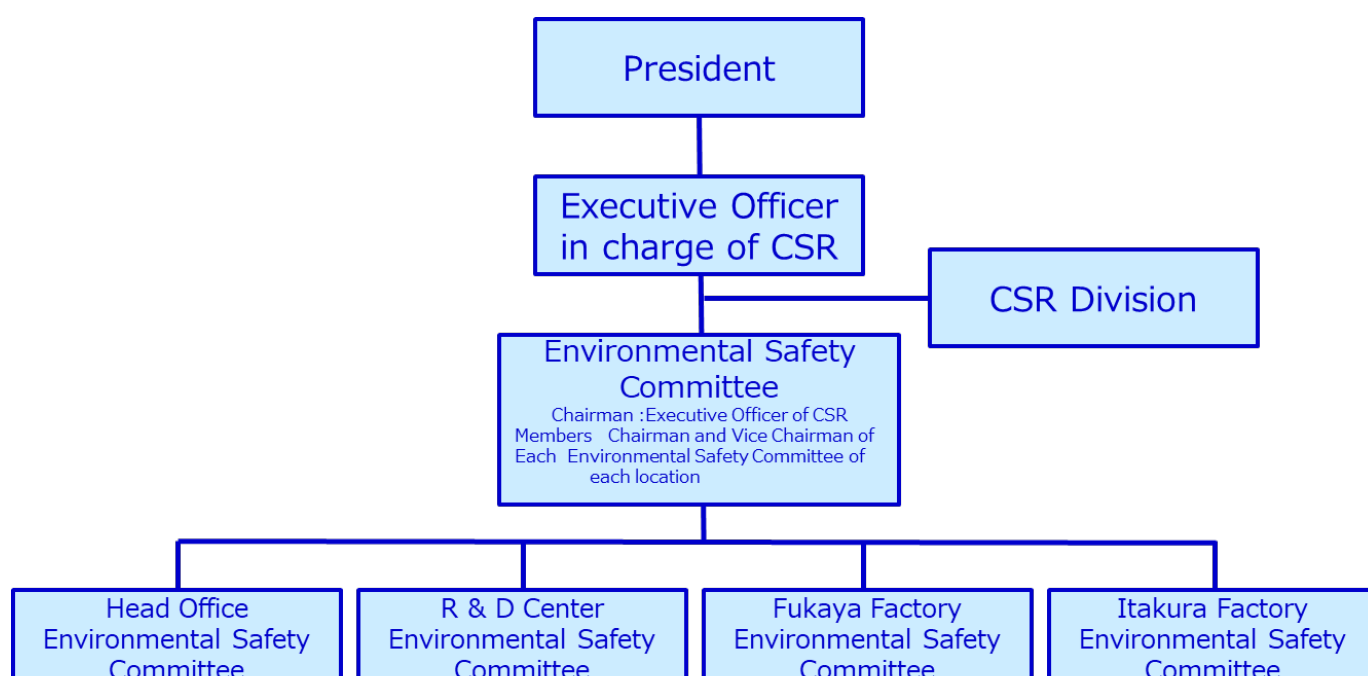
SDG Goals



2-2 Governance Framework

• Framework

We establish and promote our environmental safety with control systems based on our “Environmental Safety Control Regulation”. The Fukaya Factory, Itakura Factory and the R & D Center are certified by The Environmental Management System (ISO14001), allowing both the production division and the R & D division to operate in conjunction with each other.



(1) The Corporate Environmental Safety Committee

- ① Committee chaired by the officer in charge of CSR appointed by the Representative Director and President. Deliberates and makes decisions on policies and programs that relate to environmental protection and safety measures.
- ② Receives environmental safety reports on activity plans and performance records from all operating units to mediate issues throughout the entire company.
- ③ Selects auditors for environmental safety audits (environmental protection, security, disaster prevention, and occupational safety). These internal audits are performed annually in all premises: HQ, R&D centers and factories.

(2) The Environmental Safety Committee

- ① An environmental safety committee chaired by the top management of each location is setup at the Head office, R & D Center, Fukaya Factory and Itakura Factory respectively. Meetings are held every month.
- ② Specific policies, objectives and performance activities related to environment and safety are established per location.

(3) The CSR Department responsibilities:

- ① Drafts and promotes the plans related to CSR and SDG's.
- ② Centrally manage T. Hasegawa's environmental safety activities.
- ③ Serves as the secretariat of the Environmental Safety Committee and environmental safety audits.
- ④ Coordinates public relations efforts such as the Sustainability Report and the T. Hasegawa website.

(4) ISO14001

Since 2001, Fukaya and Itakura factories have been operating under the Environmental Management ISO14001 certification obtained from the JSA Group (current certifying body is DNV Business Assurance Japan Co., Ltd). Production divisions act in concert to achieve continuous improvement by running the PDCA under the ISO14001 System. In 2012, the R & D Center was certified to enhance our initiative to reduce environmental impact.

“ISO14001 Environmental Policy“

As a manufacturer of flavors and fragrances that engages in the production and R & D activities for food and beverage flavorings, fragrances for cosmetics, synthetic aroma chemicals, food additives, food and cosmetics ingredients, etc., T. Hasegawa aims to solidify the importance of being in harmony with the environment and be trusted by society. To realize this aim, we will engage in environmental activities according to the undermentioned policies:

- ① Foster resource and energy savings to protect the earth environment
- ② Reduce waste and promote recycling
- ③ Enhance environmental control, endeavor to prevent contamination
- ④ Comply with laws and standards on air quality management and wastewater
- ⑤ Conduct internal audits to continue improving the environmental management system
- ⑥ Conduct training on the environment and endeavor to raise awareness of all employees

• GOVERNANCE

We conduct environment and safety audits every year at each operations site. Our Environment and Safety Control Regulation stipulates that the results of the audits are to be reported at the strategic meeting. As part of being certified by ISO14001 annually, we receive regular maintenance reviews by the outside certifying body in addition to internal environmental audits being conducted within the departments. Through these regular audits, we confirm that the environmental management system is effectively functioning and make improvements as needed.

Environmental Safety Audit by the Corporate Environmental Safety Committee

Since 1997, the Corporate Environmental Safety Committee has been conducting audits on environmental protection and safety measures. Through continuous improvement and in order to provide a more detailed structure, our audits have been divided further into “Environmental Protection Audit”, “Security and Disaster Prevention Audit” and “Occupational Safety and Health Audit”. We select auditors with special knowledge to verify compliance to environmental laws, the state of all activities and the state of how all the facilities are controlled, etc. For any issues that require improvements, corrective action reports are issued. The auditees, in return, will draw up improvement action reports against the issues, report to the Corporate Environmental Safety Committee and make the required improvements. In July of 2020, individual audits were conducted at operating locations while enforcing COVID-19 protection measures.

ISO14001 Regular Maintenance Reviews and Internal Environmental Audits

Having been certified under the Environmental Management System ISO14001, Fukaya Factory, Itakura Factory and the R & D Center receive regular reviews by the outside certifying body DNV Business Assurance Company Japan to confirm that the system is functioning and operating.

Internal audits for the entire departments are also conducted by the internal environmental auditors who are registered and approved as stipulated in the environmental manual. If any corrective actions or recommendations are issued, corrective measures are promptly introduced to continue the improvement.

2-3 Risks, Opportunities and Strategies, Responses

• Risks

- (1)Administrative actions and lawsuits as a result of inadequate compliance to laws and regulations.
- (2)Obstructing the environmental protection of the local society.
- (3)Decline in social reputation.
- (4)Suspension of business by customers.
- (5)Poor harvest of raw materials due to climate changes.
- (6)Severance of the supply chain due to natural disasters, etc..

• Opportunities

- (1)Increase in demand of raw material substitutes due to period of climate change.
- (2)Acquisition of new customers.
- (3)Increase in social recognition.
- (4)Increase in valuation by ESG Investors.

• Strategies

- Thorough compliance to the laws and thorough responses to risks.
- Based on CSR policies, solve environmental challenges and materialize in growth strategies.

• Responses to Risks – Example

- In a meeting comprised of officers including the President and Representative Director, it was reported that we have achieved a significant initiative for climate change which is in line to the Paris Agreement. The initiative was based on the economic validity of an investment regarding the change of boiler fuel using evidence that CO2 emission over the past 15 years was reduced and that the rate of reduction surpassed that of Japan (reduce 26% by 2030 starting from 2013).
- Deploy continuous improvement action plans that enhance systems such as conducting the environment audit annually to run plan-do-check-action cycle (“PDCA”).
- Thorough implementation of measures against global warming (i.e. reduction of energy consumption and CO2 emission, resource saving of raw materials, effective use of waste such as composting).
- Implement information disclosures and maintain transparency by joining such platforms as CSR Procurement Assessment Tool (Global Compact Network Japan), Sedex, EcoVadis, CDP, etc.)

• **Response to Opportunities –Example**

- Expansion of business with customers through information disclosure and guarantee of traceability.
- Acceleration of innovation, new product development, presentations and sales as a part of our efforts to achieve SDGs' goals.
- Advancement in technology and partnering with bottle manufacturers using our carbonation enhancing flavors and natural light deterioration prevention inhibitors which contributes to resource saving of raw materials that are used to reduce the thickness and weight of PET bottle containers.

2-4 Major Initiatives of Fiscal Year 2020

(1) Environmental Accounting

To efficiently and effectively promote environmental protection activities, we implemented the “environmental accounting” by referring to the “Environmental Accounting Guidelines” published by the Ministry of the Environment in Japan.

Period Covering: October 1, 2019~September 30, 2020

(Unit: JPN thousand)

| Environmental Maintenance Costs | | | |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------|---------|
| Classification | Main Initiatives Undertaken | invested | Cost |
| (1)Costs incurred within business | | 110,564 | 546,656 |
| 1 Pollution Control Costs | Modified waste water treatment facilities Optimum operations of environmental facilities (waster water , air, odor, etc.) | 31,001 | 235,401 |
| 2 Earth Environmental Protection Costs | Energy saving measures | 79,563 | 77,092 |
| 3 Resource re-cycling costs | Promote effective utilization of wastes | 0 | 234,163 |
| (2)Upstream & Downstream Costs | | (Note) | (Note) |
| (3)Management Activity Costs | Committee related activities, ISO14001 operations, publication of the Environment Report | 0 | 62,895 |
| (4)R & D Costs | | (Note) | (Note) |
| (5)Social Activities Costs | | - | - |
| (6)Environmental Damages Costs | | - | - |
| Total | | 110,564 | 609,551 |

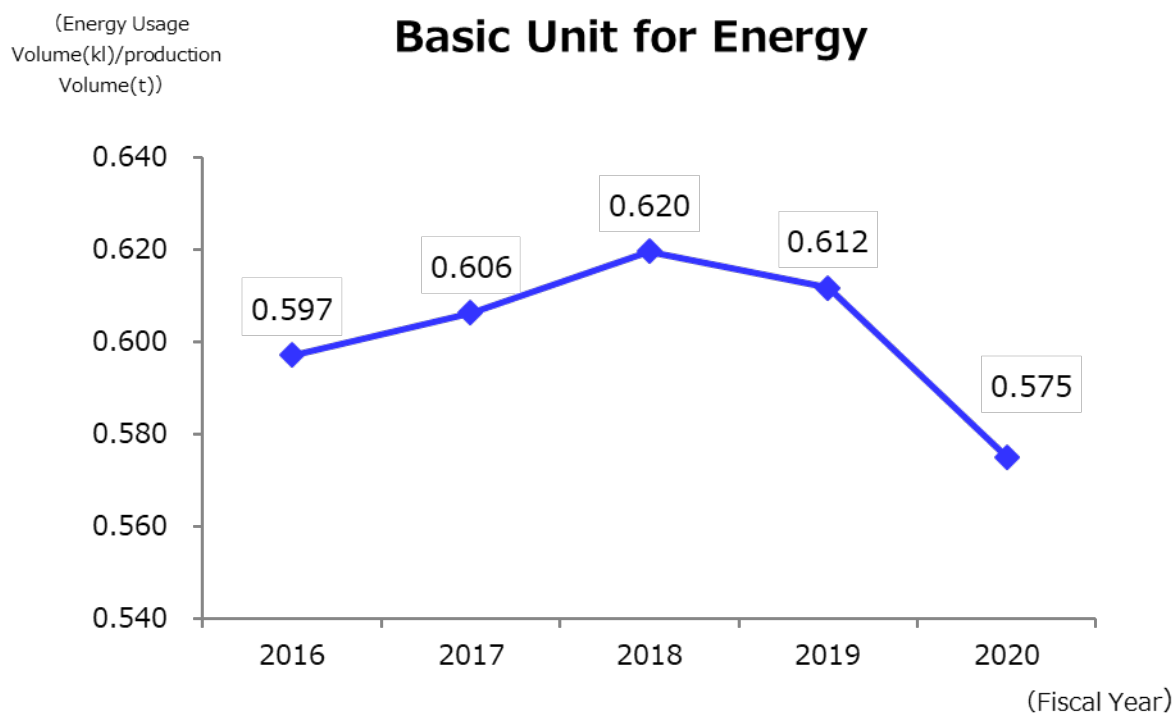
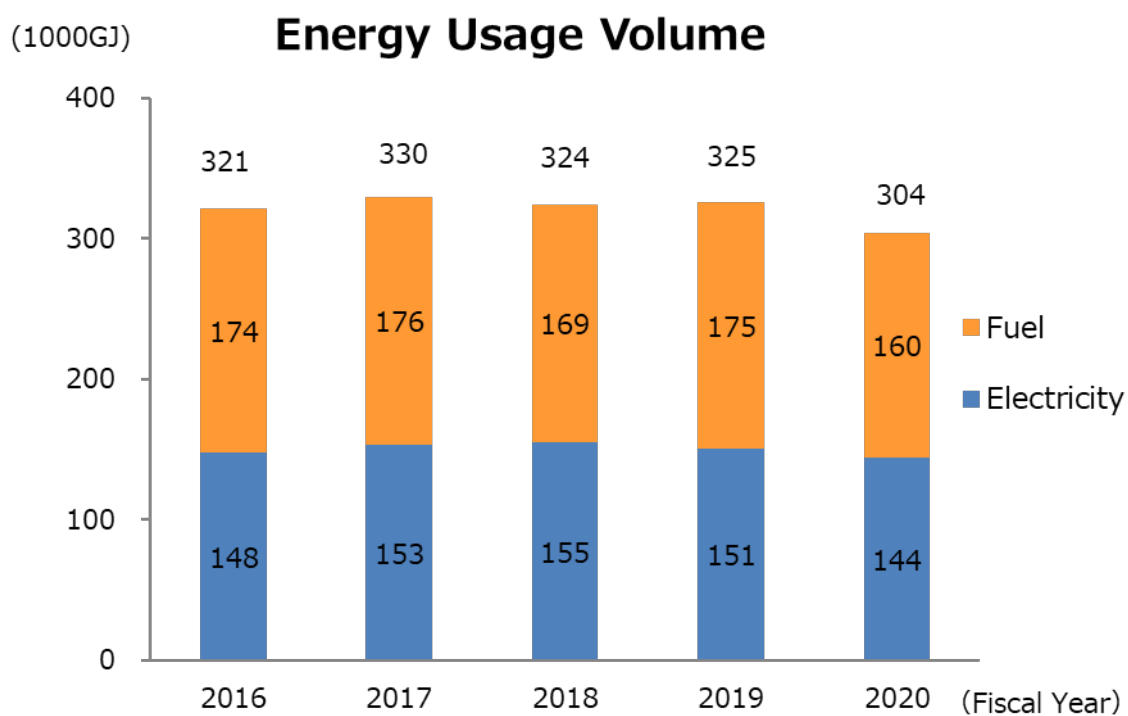
(Note)Upstream & down stream costs, R&D costs are omitted since they are difficult to calculate

| Environmental Protection Effects | | | | |
|--------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------------------|----------------|
| Details of the Effects | | Environmental Protection Effects Indicators | | |
| | | Classification | Values (vs past year) | |
| (1)Effects against business costs | ①Effects related to resources that were invested for the business | Energy | 21,606 GJ decrease | |
| | | CO ₂ | 1,402 t decrease | |
| | | Water | 26,257 m ³ decrease | |
| | ②Effects related to environmental loads and waste emitted from business activities | Atmospheric and water related emissions | Set self-imposed voluntary numbers and controlled emissions | |
| | | Waste generated | Total waste | 634 t decrease |
| | | | Effective Use Rate | 96.6% |
| | | | Landfill waste | 0 t |
| (2)Effects against upstream and downstream costs | Effects generated from business activities related to finance and services | - | (Note) | |
| (3)Other environmental protection effects | Effects related to transportation and others | - | (Note) | |

(Note)Upstream & down stream costs and other environmental protection effects are omitted since they are difficult to calculate

• Energy Consumption

Energy saving is an active opportunity at T. Hasegawa. We have streamlined and set up standards of usage to engage in energy saving activities throughout the company, like upgrading all the boilers of the facilities to those with better efficiency. We also introduced cogeneration facilities and energy monitoring systems. The Fukaya Factory and the Itakura Factory are both designated as ‘Class 1 Energy Control Factory’ under the Energy Saving Law in Japan. In Fiscal Year 2020, the modification of the manufacturing processes, reduction of steam loss by effective use of steam and efficient operations of the boilers have reduced energy consumption by 21600 GJ year over year and improved 6% in terms of Basic Unit for Energy, which is a unit measured consumed energy in KL per manufactured products per ton. We will continue to implement effective measures and endeavor to continue reducing energy consumption.



Designated as an “S” Class Evaluation Grade for Six Consecutive Years under the Business Classification Evaluation System

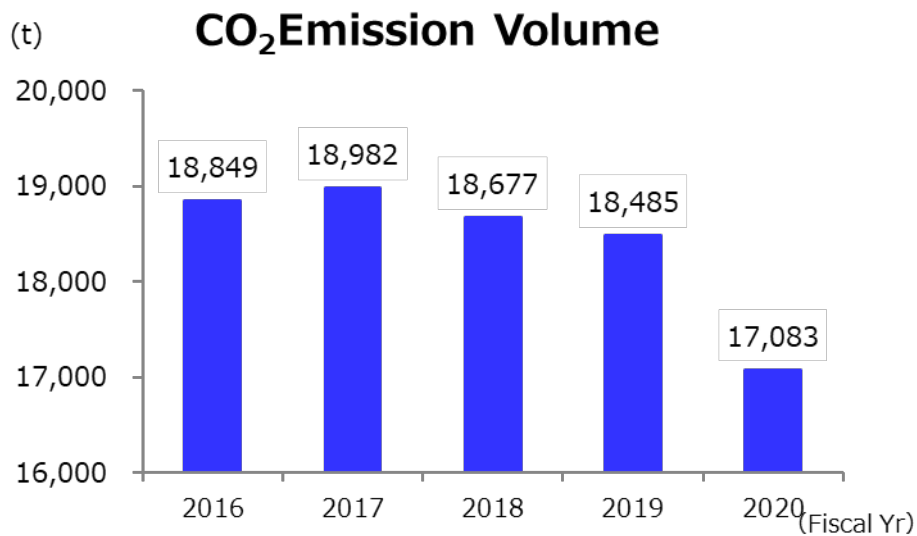
Energy Saving Law Periodic Report/Business Classification Evaluation System is a system where The Ministry of Economy, Trade and Industry of Japan evaluates businesses that submit periodic reports and grades them into 4 categories(S,A,B,C) and publishes the results on its Homepage website. We received the S class evaluation (the highest ranking) for the first time in 2015 and have continued to receive the same S class evaluation for six consecutive years. Under the 2020 report, based on the 2020 actual figures, our 5 year moving average of the energy intensity recorded 99.0%, qualifying for the Energy Saving Law's requirement of more than 1% annual improvement in terms of Basic Unit for Energy.

The Environmental Safety Committee plays the central role to plan the energy saving policies, and the production division assumes the primary role to design and develop facilities with energy efficiency, monitoring the actual state of the operations of energy and implement modifications.

Working in collaboration with the R & D division, we have been able to receive such high marks by building procedures to achieve energy savings and will continue to initiate further energy saving measures.

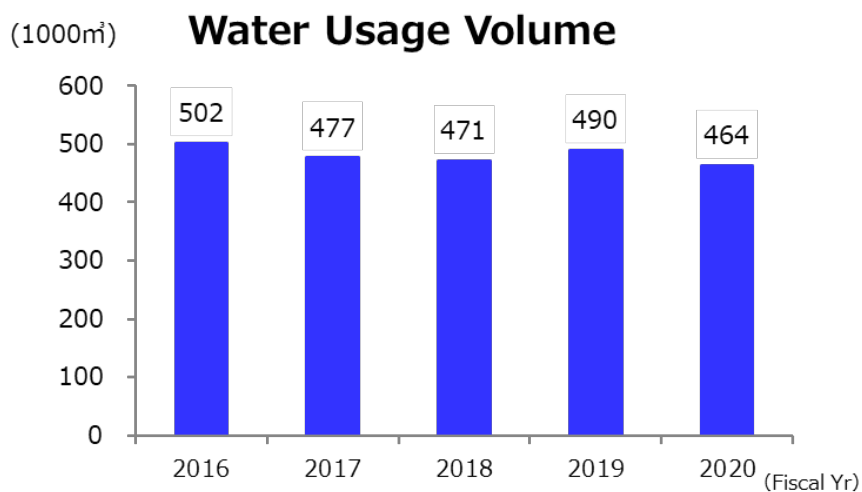
• CO2 Emission

In 2020, we accomplished a major reduction in energy use due to the effective consumption of energy. The CO2 emission was reduced by 7.6% year over year. On a mid to long term basis we will continue to implement effective measures and endeavor to reduce CO2 emission significantly.



• Water Consumption

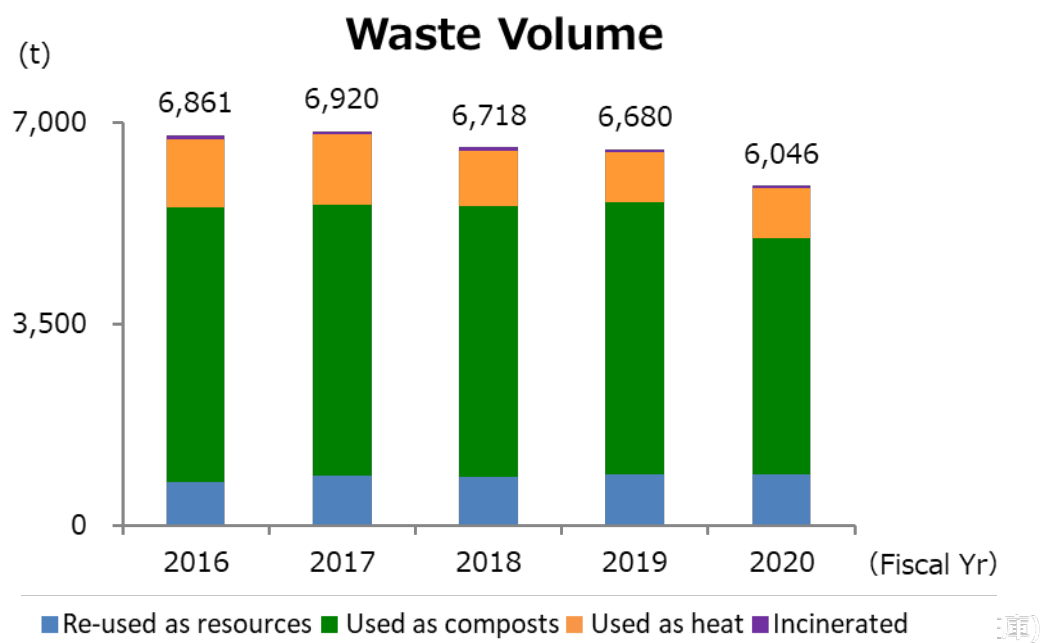
We use water not just for production but also for cooling and cleaning. We have been reducing water consumption by modifying the production processes and increasing the number of water recycling facilities. In 2020, our water consumption was 463.648 m³ which resulted in a 5.4% decrease compared with the preceding year. We will continue efforts to reduce water consumption in the future.



• Effective Utilization of Waste

As a result of manufacturing flavors and fragrances, we generate waste. Waste management, is a priority at T. Hasegawa, so we can effectively utilize waste and divert or reduce waste from going to a landfill. We champion programs for recycling of cans, paper, glass, oil, etc. In 2020, we reduced waste 9.5% in

comparison with the preceding year and the effective utilization rate of waste was 9.6%. In addition, our factories continue not to generate any landfill wastes.



We also generate a high volume of botanical residue from our natural botanical extraction process. This botanical residue is currently being processed into compost using the fermentation composting technology of the Koumi Compose Co., Ltd., which is a joint venture company between T.HASEGAWA CO.,LTD. (45% ownership) and a company producing compost. Growers of highland vegetables are the prime beneficiaries of this compost.



Spraying compost (Koumi Town, Nagano Prefecture)



Vegetable fields (Koumi Town, Nagano Prefecture)

- **Air Quality Management**

Being a manufacturer of flavors and fragrances, we place special attention to odor countermeasures and volatile compounds. Using deodorizing technology, we make efforts to prevent the emission of malodors. We conduct regular environmental evaluation of our locations and the surrounding local community areas.



Deodorizing System (Itakura Factory)



Deodorizing System (R & D Center)

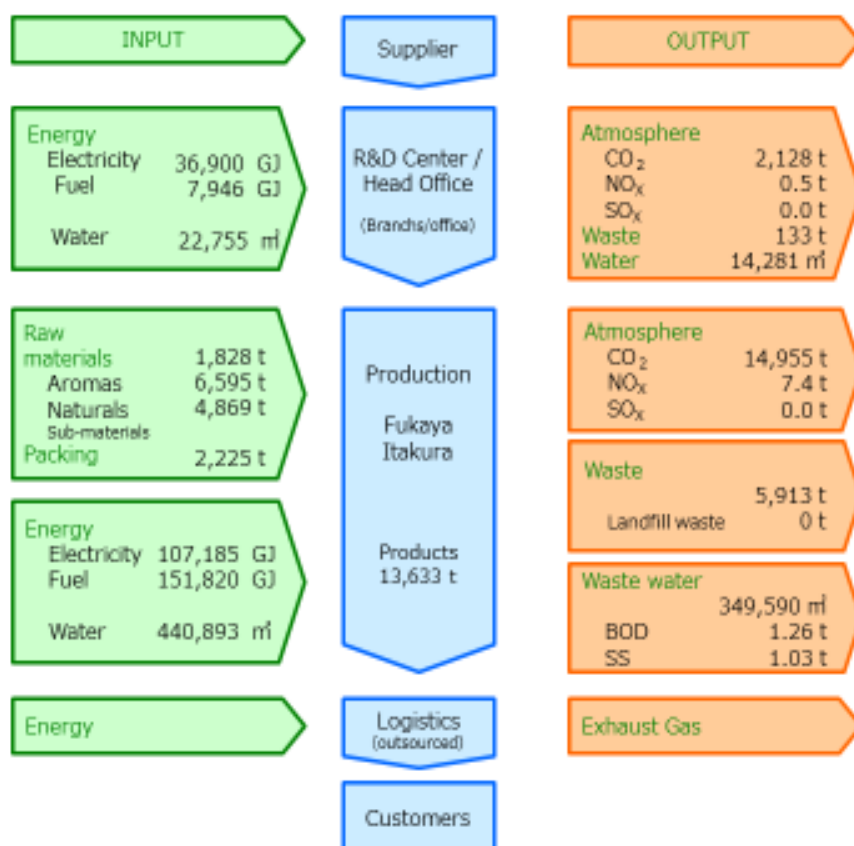
- **Waste Water Treatment**

Since the installation of the waste water treatment system at the Fukaya Factory in 1969, we have been improving our waste water treatment by increasing our treatment technology such as the activated sludge method, dissolved air floatation method, anaerobic method, coagulation and sedimentation method and the membrane filtration method. We are engaged in efforts to purify waste water by not just complying with the regulatory values set by the water pollution control laws, but to exceed the regulations in our self-governed requirements.

Environmental Data Library

(1) Impacts on environment through our business activities

ENVIRONMENTAL DATA LIBRARY : Business Activities Environmental Effects in 2020



(2)Environmental Targets and Actual Achievements (year 2020)

| Environmental Goals | Fiscal 2020 Goals | Fiscal 2020 Achievements | Mid Term Goals |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1. Environmental Control System Improvement and Expansion | | | |
| 1) Continuous Improvement of the Environmental Management System | <ul style="list-style-type: none"> Continue operations and improvement of environmental protection activities Continue operations and improvement of ISO14001 practices of certified Departments | <ul style="list-style-type: none"> Continuous operations and improvement of ISO14001 at the production divisions and R & D | Continue practice Continue practice |
| 2) Conduct Environmental Audits | <ul style="list-style-type: none"> Conduct environmental audits Conduct ISO14001 reviews and internal audits | <ul style="list-style-type: none"> Conducted environmental audits Conducted ISO14001 review at the certified departments | Continue practice Continue practice |
| 3) Promote Environmental Safety Education | <ul style="list-style-type: none"> Plan and conduct various education programs Plan and conduct various ISO14001 training | <ul style="list-style-type: none"> Conducted in-house intra-net education and other training Conducted ISO14001 training at certified departments | Continue practice Continue practice |
| 4) Improvement of Environmental Control | <ul style="list-style-type: none"> Publication of Environmental Report Conduct Environmental Accounting | <ul style="list-style-type: none"> Published the 2020 Environment Report Conducted Environmental Accounting | Continue improving Environmental Report and enrich contents of environmental accounting |
| 2. Promote Energy Saving | | | |
| 1) Reduction of Energy Consumption | <ul style="list-style-type: none"> Reduction of energy intensity by 2.0% vs preceding year | <ul style="list-style-type: none"> Reduced by 21600GJ(6.6% decrease vs preceding year) (production volume intensity improved by 6.0%) | Continue practice |
| 2) Reduction of CO2 Emission | <ul style="list-style-type: none"> Reduction of CO2 emission by 0.7% vs preceding year (total volume) | <ul style="list-style-type: none"> Reduced by 1,402t(7.6% decrease vs 2019) | Continue practice |
| 3. Resource Saving, Effective Utilization of Waste | | | |
| 1) Promote Resource Saving | <ul style="list-style-type: none"> Continuous improvement in reduction of water usage Continuous improvement in reduction of office paper consumption | <ul style="list-style-type: none"> Water consumption reduced by 26,257m3 (5.4%decrease vs preceding year)(4.7% improvement in intensity) Reduction of office paper consumption reduced by 1,563kg (8.8% improvement vs preceding year) | Continue improvement |
| 2) Promote Effective Utilization of Waste | <ul style="list-style-type: none"> Continuous improvement in waste effective utilization rate | <ul style="list-style-type: none"> Effective waste utilization rate of 96.6%(0.2% decline vs preceding year) | Continue practice |
| 3) Reduction of Landfill Waste | <ul style="list-style-type: none"> Zero landfill waste generation | <ul style="list-style-type: none"> Zero landfill disposal Effective use of landfill glass waste | Zero landfill disposal |
| 4. Suppression of Environmental Emission | | | |
| 1) Prevention of Air Pollution, Water Pollution | <ul style="list-style-type: none"> Control by self-imposed restriction values | <ul style="list-style-type: none"> Appropriate control of self-imposed regulatory values Improvement of waste water disposal facility | Continue practice |
| 2) Odor Measures | <ul style="list-style-type: none"> Additional installments of deodorizing facilities and appropriate maintenance | <ul style="list-style-type: none"> Optimum operations Received one malodor claim | Continue practice |
| 3) Chemical Substances Control | <ul style="list-style-type: none"> Conduct odor patrol(factories, R&D Center), zero malodor complaints | <ul style="list-style-type: none"> Conducted PRTR | Continue practice |
| 5. Purchase of Green Points | | | |
| 1) Promote Purchase of Green Points | <ul style="list-style-type: none"> Conduct PRTR(PRTR law and self imposed controlled substances) | <ul style="list-style-type: none"> Operated following basic principle of purchasing green points and guidelines | Continue practice |

(3)Emissions of Pollutant Release and Transfer Register Regulation (“PRTR”) subjected materials/Transported Data (Last 3 years)

| Factory | No | Ingredient | Fiscal 2017 (2017/4/1-2018/3/31) | | | Fiscal 2018 (2018/4/1-2019/3/31) | | | Fiscal 2019 (2019/4/1-2020/3/31) | | |
|--------------------|-----|---------------------------------|-------------------------------------|-------------------|-----------------|-------------------------------------|-------------------|-----------------|-------------------------------------|-------------------|-----------------|
| | | | Handled Volume | Emitted to Air | Moved Volume | Handled Volume | Emitted to Air | Moved Volume | Handled Volume | Emitted to Air | Moved Volume |
| Fukaya Factory | 12 | Acetaldehyde | 3,528 | 0 | 0 | 4,460 | 0 | 0 | 3,782 | 0 | 0 |
| | 28 | Allyl Alcohol | - | - | - | 1,194 | 0 | 0 | 1,193 | 0 | 0 |
| | 204 | Diphenyl ether | 1,891 | 0 | 0 | 1,669 | 0 | 0 | 1,868 | 0 | 0 |
| | 207 | 2,6-di-tertiary-buthyl-4-cresol | 4,097 | 0 | 0 | 4,994 | 0 | 0 | 3,849 | 0 | 0 |
| | 232 | N,N-Dimethyl form aldehyde | 1,144 | 0 | 1,093 | 1,041 | 0 | 1,035 | 1,539 | 0 | 1,514 |
| | 300 | Toluene | 3,865 | 376 | 3,489 | 9,497 | 680 | 8,817 | 4,994 | 476 | 4,519 |
| | 392 | n- Hexane | 24,829 | 1,909 | 14,809 | 22,904 | 1,957 | 15,247 | 36,819 | 1,407 | 31,329 |
| | 399 | Benzaldehyde | 1,166 | 0 | 0 | 1,318 | 0 | 0 | 1,626 | 0 | 0 |
| | 436 | Alpha Methyl Styrene | 2,903 | 0 | 0 | 2,900 | 0 | 0 | 2,902 | 0 | 0 |
| Itakura Factory | 392 | n- Hexane | 1,280 | 1,254 | 0 | 1,204 | 1,198 | 0 | - | - | - |

Note: Reporting year ends of Emissions of PRTR subjected materials/Transported Data do not coincide with final year end of T.HASEGAWA CO.,LTD.