Environmental management

Fundamental environmental policy | Environmental management system | Organigram of environmental management | Environmental accounting | Environmental management in the supply chain | Training of environmental managers

Fundamental environmental policy

As Hamamatsu Photonics K.K., we have established a "Fundamental Environmental Policy" as a comprehensive policy, and we actively promote our environmental management activities.

Principle

Hamamatsu Photonics, as a company that contributes to society through photonics technology, aims to realize a sustainable society and a rich life and happiness among all forms of life, which corresponds to the requirement to harmonize environment and society and economy.

Policy

1. Promoting environmental friendly products
   Manage chemical substances contained in products, as well as develop and provide products that contribute to environmental improvement and energy saving throughout their lifecycle.
2. Actively promote environmental protection activities
   Encourage all employees to take environmentally friendly actions, actively promote environmental press release to the exchange of opinions with local communities, and contribute to local environmental conservation.
3. Promotion of global environmental management
   Establish a global environmental management system, and promote environmental management activities such as global warming prevention, conserving water and preventing pollution.
4. Compliance with environmental laws and regulations
   Comply with environmental laws and regulations, and establish voluntary standards and requirements to satisfy stakeholders' expectations.
5. Continuing improvement of environmental management system
   Make efforts to continuously improve environmental management system, and promote environmental management activities by setting environmental objectives and targets.

Formulated on April 1, 2000
Revised on April 1, 2021
Representative Director and President
Hiroyuki Suzuki

Environmental management system

Under the Fundamental Photonics Environmental Management Policy, we have established a Sustainability Management Committee, which is chaired by the President and Representative Director, and we actively form an activity, and work to constantly improve our PDCA cycle for environmental management.

In addition, we have established a Sustainability Promotion Office as a dedicated organization for promoting environmental management activities, and we have established a Sustainability Promotion Committee, the chairperson of which is the Sustainability Promotion Office Manager, and we have established a Sustainability Promotion Subcommittee, the chairperson of which is the Sustainability Promotion Office Deputy Manager, and we have established a Sustainability Promotion Working Group, the chairperson of which is the Sustainability Promotion Office Manager, and we are promoting activities in each business division, and we make the operation of environmental management.

The environmental working groups and the meeting structure are as follows.

- Various energy saving committees (in charge of energy saving, promotion of use of renewable energy, prevention of global warming)
- Various resource saving committees (in charge of resource saving, recycle, Reduce, Reuse, Recycle*, 3R Activities)
- Various chemical substance management committees (in charge of chemical substance management, promotion of green procurement)
- Compliance working group, Pollution prevention and other environmental maintenance, maintenance of biodiversity, prevention of global warming
- Product assessment committee (in charge of environmental impact assessment of products, contributing products, management of chemical substances in products, green procurement)

*Reduce, Reuse, Recycle: Concept of reducing waste, reusing, and recycling

Certification under ISO 14001

Every business location of Hamamatsu Photonics is certified under ISO 14001:2015 and is striving to maintain and improve its environmental management system. In addition, we are also working to reduce the environmental impact of our products and services through all employee training, employee raise awareness training, internal audits and specialized environmental training.

Hamamatsu Photonics has been certified under the Eco-Action 21 environmental management system since 2000 and has been actively promoting environmental activities. Hamamatsu Photonics is also applying specialized knowledge and skills to the operating operation through training and raising the operation awareness of each business division, and is working to improve the environmental management system.

Today, 100% of our business locations are certified under ISO 14001:2015 and we are working to maintain and improve our environmental management system. In addition, we are also working to reduce the environmental impact of our products and services through all employee training, employee raise awareness training, internal audits and specialized environmental training.

Organizational unit	Initial certification date
Main Office	March 2002
Central Research Laboratory	March 2002
Hamamatsu Photonics Gaisha Hamamatsu Factory	Hamamatsu Industrial Development Center Hamamatsu Research Center	February 2005
	Sunohara Factory, Three Stars Whole Factory, Hamakita Factory, Kanzai Factory, Nikkaido Factory	December 2005
Solid State Division	Main Factory, Minaga Factory	December 2005
Electron Tube Division	Main Factory	February 2006
System Division	Joto Factory	August 2006
Electronic Components Division	Musashino Factory	December 2006

Initiatives of the Photonics Group

Hamamatsu Photonics aims to contribute to society in Japan and around the world to promote environmental activities throughout the Photonics Group. The Company gathers environmental information from each business unit and partners with them to share environmental management information and promote environmental management. In addition, we have established a Sustainability Promotion Committee and a Sustainability Promotion Subcommittee in Hamamatsu Photonics K.K. (FY2021). Beyond year-ending September 30, 2021, we are working to further strengthen our environmental management activities.

Targets and results of environmental activities

Medium- and long-term targets

Item	Medium- and long-term targets
Base	Medium- and long-term targets
Management system	Implementation and maintenance of the Fundamental Environmental Policy, its objectives and its targets Implementation of the Environmental Management System (EMS)
Reducing environmental impacts	Production and development of environmentally friendly products, expansion to new markets and new fields
Reducing environmental impacts	Establishment of greenhouse gas emission reduction measures Promotion of understanding and management of the allegedly and bypass of chemicals Promotion of measures to reduce the amount of chemicals released into the atmosphere Hazardous Substance Control and Management of Contaminated Soil and Groundwater
Compliance	Compliance with laws and regulations and efforts to prevent environmental pollution
Fulfilling global warming countermeasures	Reduction of greenhouse gas emissions by 30% or more compared with FY2019 (vs FY2021) Promotion of measures to reduce greenhouse gas emissions from business activities (Scope 1 and Scope 2) Promotion of energy consumption per unit of sales by 1% or more compared with FY2019 (vs FY2021) Promotion of use of renewable energy Increase of use of renewable energy to 30% or more of electricity used in FY2021 Expansion of Company-wide tariffs of use of less than 1.0% Achievement of Company-wide tariffs of use of less than 0.75% in FY2021 Reduction of water use per unit of sales by 5% compared with FY2019 (vs FY2021) Implementation of environmental accounting
Promotion of environmental communications	

Medium- and long-term targets

Item	Medium- and long-term targets in FY2020	Results in FY2020	Evaluation	Medium- and long-term targets in FY2021
Base	Continuous support, management and improvement of the EMS in accordance with the business business	Establishment of maintenance and revised examinations of the environmental management system Implementation of environmental protection activities in accordance with the Fundamental Environmental Policy Promotion of Sustainable Development Goals into the Medium-term Management Plan, Research Laboratory, Head assistant to wage of commission	Continuous support, management and improvement of the EMS in accordance with the business business	Continuous support, management and improvement of the EMS in accordance with the business business
Compliance	Compliance with laws and regulations	Number of violations of environmental laws and regulations: 0	Compliance with laws and regulations	Compliance with laws and regulations
Fulfilling global warming countermeasures	Reducing NEDO's energy consumption per unit of sales by 1% or more	○ Updated to version 10 of the Energy Saving Law, Promotion of Measures Against Global Warming, Promotion of Measures Against Global Warming, Promotion of Measures Against Global Warming

Reducing carbon emissions and climate change

Long-Term Vision of Global Warming Countermeasures ▲
Hamamatsu supports TCFD recommendations on climate-related financial disclosures ▲
Trends in energy usage and carbon emissions ▲
Tackling risks and opportunities arising from climate change ▲
Renewable energy ▲
Value chain carbon emissions ▲
Case study of electricity saving ▲
Response to the fluorocarbon emission control act ▲
Reductions in GHG emissions ▲

Long-Term Vision of Global Warming Countermeasures

In March 2020, Hamamatsu Photonics has set our long-term vision of global warming countermeasures and target to cut greenhouse gas emissions by 83 % for scope 1 and 2* by FY2050 compared with FY2018. Hamamatsu group will proactively work to reduce greenhouse gas emissions through our business activities.

* Scope 1: Direct emissions (use of fuel, etc.) Scope 2: Indirect emissions (use of purchased electricity, etc.)

Hamamatsu supports TCFD recommendations on climate-related financial disclosures

TASK FORCE on CLIMATE-RELATED FINANCIAL DISCLOSURES

In August 2020, Hamamatsu Photonics has announced to support recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We will proactively disclose information based on the TCFD recommendations, while proceeding with analysis on the financial risks and opportunities that climate change poses to our business.

Trends in energy usage and carbon emissions

Hamamatsu Photonics is conducting a range of energy-saving activities to achieve our medium-term target of reducing its energy consumption rate by 1% or more by FY2021 compared with FY2015.

In the fiscal year under review, we cut its energy consumption rate by 21.7 % in comparison with FY2015, outperforming its target of 8 % or more. We achieved this feat by implementing energy-saving measures in lighting and actively introducing equipment from the Top Runner system. Meanwhile, though carbon emissions[1] decreased 4.4 % against the previous fiscal year, that figure represented a 7.2 % reduction in carbon emissions per unit of net sales. In addition to taking measures against carbon-based energy sources, we continued to reduce its use of perfluorinated compounds (PFCs), sulfur hexafluoride (SF6) and other gases used in semiconductor manufacturing that are factors in global warming. We are achieving these reductions through the introduction of combustion and plasma abatement systems, which it began in FY2006.

We will continue to pursue efforts to reduce energy consumption and prevent global warming.

[1] The range of carbon emissions to which calculations are applied is based on the Law Concerning the Promotion of Measures to Cope with Global Warming. The carbon emission coefficient used for electrical power is 0.417 (FY1990 value of the Federation of Electric Power Companies of Japan (FEPC)).

Tackling risks and opportunities arising from climate change

Hamamatsu Photonics recognizes that managing the risk from climate change and taking measures against it are vital issues for our management. We aim to contribute to solving the problem of climate change through its business activities and reduce the environmental impacts they create.

Efforts and opportunities from regulation3

In keeping with its commitments in international treaties to grapple with climate change, Japan is strengthening its measures to reduce energy consumption through domestic legislation. As a specified operator under the Act Concerning the Rational Use of Energy ("Energy Saving Act"), we possesses our factories indicated for energy management. In line with future trends, we expect to be required to increase our efforts to manage energy and combat global warming. As the attendant costs rise, they may have an adverse effect on our business results. We are continually gathering information on energy-related regulations. Based on its short-to-medium-term savings plan and the medium-to-long-term plan under the Energy Saving Act, we are introducing and improving energy-saving equipment and implementing energy management.

As public interest in energy-saving solutions intensifies, we are focusing increasingly on developing products that fuse its expertise in photonics with energy-saving performance. In this way we expect to expand its market further and reap increases in sales. Our development-related expenses are working diligently to reduce environmental impact by creating environmentally friendly products.

Efforts and opportunities from physical impacts3

Our production and R&D facilities in Japan are concentrated in the Tenryu River basin. As such they are vulnerable to abnormal weather events such as major typhoons and flooding. When such disasters occur, the supply chain can be disrupted by temporary suspensions and delays in the supply chain, resulting in difficulties in obtaining supplies and even production shutdowns. Though the Tenryu River flowing through Hamamatsu and adjoining regions has not overflowed its banks for over 50 years, we plan for such an event in its continuation of business. For our R&D facilities, we have installed a flood barrier and tidal gate in its own expense manual, working closely with business partners to gather information from those partners and work together for recovery. As a preparatory measure, we work to reduce risk through measures such as securing materials from two or more companies. These preparations testify to our commitment to providing stable supplies of products to customers.

Physical impacts offer opportunities as well. To contribute to solving the problems of climate change, including global warming, major typhoons and floodings, we offer a wide range of measuring instruments and systems. For example, demand is expected to grow for our products using cavity-ring-down spectrometry (CRDS), as a possible means of elucidating the mechanisms of global warming. We appropriate about 10% of sales for R&D expenses, including research on environmentally contributing products. We expect these efforts to lead to market expansion through increased sales and development of new product offerings.

Renewable energy

Hamamatsu Photonics is working hard to reduce carbon emissions by advancing the implementation of renewables such as solar and wind power. At Toyoda Factory, we have installed solar power generating equipment (250 kW) on the walls and roof of No. 10 Building in collaboration with our solar power business. On the premises of the Central Research Laboratory, we combines solar-power generation with small-scale wind power generation, in a hybrid solution for outdoor lighting. As of January 2020, we have implemented a cumulative total 404 kW of renewable energy.

In October 2018, we commenced purchasing of Chubu Electric's "CO_2-free Electricity," expanding our introduction of renewables.

Renewable energy target	Renewable energy usage rate. 5 % or more
FY2019	5.7% (as of September 2019)

Solar power generating equipment (Toyoda Factory)

Solar power generating equipment (Nakaizumi Dormitory)

Hybrid wind-solar power powered LED lighting (Central Research Laboratory)

Solar power generating equipment (Main Factory)

Value chain carbon emissions

To grasp the environmental impact of the value chain[2], HPK is working on the calculation of Scope 3 (shown below) which is based on the Greenhouse Gas (GHG) Protocol.
Going forward, we will expand the calculation scope of Scope 3, improve accuracy, and strive to reduce emissions throughout the value chain.

Category	FY2017 emission volume (t-CO_2)		FY2018 emission volume (t-CO_2)		FY2019 emission volume (t-CO_2)	
	Emission volume (t-CO_2)	Share of total (%)	Emission volume (t-CO_2)	Share of total (%)	Emission volume (t-CO_2)	Share of total (%)
Scope 1 (direct emissions: use of fuel, etc.)	12,686	3.5	12,043	2.7	12,074	2.7
Scope 2 (indirect emissions: use of purchased electricity, etc.)[1]	43,953	12.2	45,902	10.2	41,931	9.3
Scope 3 (other indirect emissions)	303,644	84.3	390,563	87.1	398,006	88.0
1. Purchased goods and services	(151,373)	(49.9)	(219,22 4)	(56.1)	229,823	(57.7)
2. Capital goods	(60,243)	(19.8)	(68,944)	(17.7)	70,024	(17.6)
3. Fuel and energy use not included in scopes 1 and 2	(3,198)	(1.1)	(5,536)	(1.4)	5,489	(1.4)
4. Transport and delivery (upstream)	(5,875)	(1.9)	(6,388)	(1.6)	6,799	(1.7)
5. Waste generated by business activities	(236)	(0.1)	(236)	(0.1)	372	(0.1)
6. Business travel	(1,488)	(0.5)	(1,535)	(0.4)	1,630	(0.4)
7. Commuting by employees	(3,664)	(1.2)	(3,770)	(1.0)	3,930	(1.0)
8. Lease assets (upstream)	—	—	—	—	—	—
9. Transport and delivery (downstream)	—	—	—	—	—	—
10. Processing of sold products	—	—	—	—	—	—
11. Use of sold products	(77,498)	(25.5)	(84,586)	(21.7)	80,031	(20.1)
12. Disposal of sold products	(93)	(0.0)	(343)	(0.1)	9	(0.0)
13. Lease assets (downstream)	—	—	—	—	—	—
14. Franchises	—	—	—	—	—	—
15. Investments	—	—	—	—	—	—

[1] The entire series of processes involving products, including material procurement, production, logistics, use and disposal. Includes both upstream and downstream parts of the Company's supply chain.

[2]The CO_2 emission coefficient for electricity used is the actual coefficient used by Chubu Electric.

Method of calculation of scope 3

Category	Activity volume	Unit
1. Purchased goods and services	Amount of purchases of raw materials and parts	Emissions per unit amount of purchase
2. Capital goods	Monetary amount of capital goods purchased	Emissions per unit amount of purchase
3. Fuel and energy use not included in scopes 1 and 2	Quantity of electricity purchased	Emissions per unit of electricity and fuel used
4. Transport and delivery (upstream)	• Shipping volume related to purchased products and services • Cost of shipping of sold products	• Emission rate (corrected t-kg method) • Emission rate by shipping method
5. Waste generated by business activities	Output volume by type of waste	Output rate by type of waste
6. Business travel	• Distance traveled • Traveling expenses paid	Emission rate by transportation mode
7. Commuting by employees	• Distance traveled • Commuting expenses paid	Emission rate by commuting mode
8. Lease assets (upstream)	N/A	—
9. Transport and delivery (downstream)	N/A	—
10. Processing of sold products	N/A	—
11. Use of sold products	Final products. Number of units shipped, power consumption and service life	Proxy value for CO_2 emission coefficient by electricity provider (the Ministry of the Environment)
12. Disposal of sold products	Final products. Number of units shipped and product weight	Emission rate by product type
13. Lease assets (downstream)	N/A	—
14. Franchises	N/A	—
15. Investments	N/A	—

Third-party Verification of greenhouse gas emissions based on ISO 14064-3

To provide and publish transparent and reliable information on the greenhouse gas emissions data calculated by Hamamatsu Photonics (scope 1, 2, and 3), we obtained third-party verification by SGS Japan Inc., and their written opinion. We will continue to work to improve the reliability of its data and reduce greenhouse gas emissions.

FY2018>
Verification statement (503 KB/PDF)
FY2019>
Verification statement (235 KB/PDF)
FY2019>
Verification statement (1.76 MB/PDF)

Case study of electricity saving

As part of its ongoing energy-saving campaign, Hamamatsu Photonics is advancing the visualization of its electrical power use and striving to reduce peak power consumption. We publish on our intranet a Power Use Status Monitor, which displays demand and power consumption at each business location in real time. This resource plays a valuable role in each employee's self-directed activities to save electricity.

Electricity gauge

List display

Graph display

Response to the fluorocarbon emission control act

The Revised Fluorocarbons Recovery and Destruction Law, which was drafted for the purpose of preventing global warming caused by leaks of GHGs substitutes, was enacted in April 2015.

We are promoting compliance with this law by assigning a control number to each relevant equipment and building an internal database for managing that equipment information and inspection records. In each division and business site, we conduct education activities covering laws and regulations as well as internal management of fluorocarbons.

Management database

Control number sticker

Reductions in GHG emissions

GHG used in semiconductor manufacturing such as PFC, SF6, and HFC have large global warming potential (GWP). We are working to reduce its emissions by installing removal devices and optimizing processes.

Abatement systems

Copyright © Hamamatsu Photonics K.K. and its affiliates. All rights reserved.

Management of pollution including waste

Measures to prevent pollution ▲ | Appropriate management of chemicals ▲ | Appropriate waste management ▲

Preventing pollution of soil and groundwater ▲

Measures to prevent pollution

Hamamatsu Photonics works hard to prevent pollution. Our production facilities, most of which are located in Japan, use a range of chemicals in their manufacturing processes, some of which are specified chemicals with the potential to pollute the environment. Under Japanese law, all transfers and emissions of these chemicals must be reported to the government through the Pollutant Release and Transfer Register (PRTR) system. We appropriately report to the competent authority based on the data which stem from the chemical usage survey conducted twice a year.

The chemicals used at our sites are managed through the surveys of chemical use described above, as well as through Green Procurement Management Standard for Chemical Substances For HAMAMATSU Group[1]. These substances are controlled especially carefully during the disposal phase. Japan's Environmental Basic Act lists seven typical forms of pollution that can be harmful to human health and living environments; (1) Air pollution, (2) Water pollution, (3) Soil pollution, (4) Noise, (5) Vibration, (6) Land subsidence, and (7) Odor. At Hamamatsu Photonics, we manage all these forms of pollution according to the law and our own standards from the perspective of preventing accidents that can cause pollution. When the possibility of pollution from our business activities arises, we move promptly to identify the source of the pollution, report the matter to the competent authorities and local communities and strive to return conditions to their original state.

[1] Green Procurement Management Standard for Chemical Substances For HAMAMATSU Group: Hamamatsu Photonics' in-house standards applying to substances the Company designates as the Environment-related Substances. We also have the Green Procurement Management Standard for Chemical Substances For Suppliers which sets the same level of criteria as the standard for HAMAMATSU Group sets, which focuses on chemicals contained in products/parts supplied by suppliers and is opened to the public.

Note: The data tabulation period is based on the Company's fiscal year.

FY2019: October 1, 2018 to September 30, 2019
FY2018: October 1, 2017 to September 30, 2018
FY2017: October 1, 2016 to September 30, 2017
FY2016: October 1, 2015 to September 30, 2016
FY2015: October 1, 2014 to September 30, 2015

Appropriate management of chemicals

Twice a year, Hamamatsu Photonics conducts a survey of the status of chemical use, to gain an understanding of the full extent of its use of chemicals in manufacturing processes and the use of specified chemicals[1] as designated in the PRTR system. When chemicals of this type are handled by the Company in quantities of 1 t per year or more, they become subject to reporting. In 2017 the Main Factory and Miyakoda Factory reported the use of two such chemicals. The chemicals reported by Hamamatsu Photonics, the volume of Class 1 specified chemicals handled in each fiscal year[2], and their output per unit of net sales are as shown below. In FY2018, both volume handled and volume handled per unit of net sales increased. The reason for this increase is the start of operations in the Company's new operating sector, Compound semiconductor Fabrication Center.

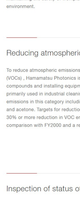
[2] Chemicals for which both submission of the volume released into the environment under the PRTR system and provision of safety data sheets (SDSs) are required. As of May 2019, 462 substances are designated as Class 1 specified chemicals.

https://www.meti.go.jp/policy/chemical_management/law/prtr-2.html (Japanese)

[1] Chemicals of this type used by any of the Company's business locations in quantities of over 1 kg per year are subject to tabulation.

Substances subject to reporting based on the PRTR system

	2014	2015	2016	2017	2018
Toyooka Factory	-	-	-	-	-
Tenno Glass Works	-	-	-	-	-
Main Factory	1. 2-amino ethanol 2. Hydrogen fluoride and its water-soluble salts	1. 2-amino ethanol 2. Hydrogen fluoride and its water-soluble salts 3. Pyrocatechol	1. 2-amino ethanol 2. Hydrogen fluoride and its water-soluble salts	1. 2-amino ethanol 2. Hydrogen fluoride and its water-soluble salts	1. 2-amino ethanol 2. Hydrogen fluoride and its water-soluble salts 3. Pyrocatechol
Mitsue Factory	-	-	-	-	-
Shingai Factory	-	-	-	-	-
Joko Factory	-	-	-	-	-
Central Research Laboratory	-	-	-	-	-
Miyakoda Factory (Compound semiconductor Fabrication Center)	-	-	-	-	Ferric chlorides
Industrial Development Research Center	-	-	-	-	-
Tsukuba Research Center	-	-	-	-	-



Advancement of collection and use of SDSs

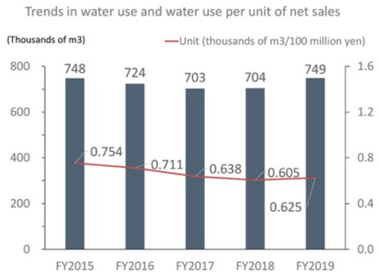
SDSs are useful for understanding the properties of chemicals and handling them safely. Hamamatsu Photonics ensures that the latest SDSs not only for chemicals for which provision of SDSs is required under the Industrial Safety and Health Act but for all chemicals it handles. SDSs are recorded in the Company's database, playing a role in risk assessment of chemicals and in maintaining the safety of workplaces and the surrounding environment.

化学物質データベース
SDS
SDS
SDS

Protecting our water resources

Effective use of water resources

Hamamatsu Photonics is conducting activities aimed at supporting a 5% or more reduction in water use per unit of net sales (in comparison with FY2016) until the fiscal year ending September 30, 2021 (FY2021). We met this target in FY2019, with a 12.1% reduction as compared with FY2016.



We recognize the importance of water resources and is dedicated to reducing its use, as well as recycling the water it does use. We conduct water-saving campaigns in-house. At its Main Factory, we have introduced a system to obtain half of the water used in pure-water manufacturing from recycled water. Today we recycle 200,000 m^3 of water per year.

Wastewater management

	Unit	FY2017	FY2018	FY2019
Water use (total)	Thousands of m^3	703	704	749
Tap water	Thousands of m^3	95	98	105
Well water	Thousands of m^3	608	575	601
Industrial water	Thousands of m^3	0	31	43
Wastewater (total)	Thousands of m^3	631	634	664
Public sewer	Thousands of m^3	95	127	135
River discharge	Thousands of m^3	536	507	529

Note: The term “third-party water” used by the CDP Water applies to the total of tap water and industrial water as shown in this table.

Hamamatsu Photonics monitors water intake and wastewater volumes at all of its factories and research facilities, based on the laws of Japan and its own criteria. Each month, third-party analytical organizations conduct wastewater analysis, testing wastewater at points just before the final discharge ports. If abnormal values are discovered, we immediately undertake to determine the causes and takes appropriate measures, in strict compliance with environmental laws and regulations.

Evaluation of water risk

Hamamatsu Photonics has participated in and responded to the CDP Water Survey every year since 2016. At each production site in Japan and overseas, we evaluate its water risk using the latest water-risk evaluation tools at least once a year. As of January 2020, we confirm that its domestic production facilities harbor no significant water risks. We will continue to evaluate water risk going forward.

Contributions to replenishment of groundwater and preservation of forests

• Replenishment of groundwater and preservation of forests
To preserve the groundwater in its home region, Hamamatsu Photonics and the Regional Groundwater Response Council cosponsor regular groundwater-replenishment and forest-preservation exercises. We participate in these exercises as a member of the Council, which is composed of Iwata City Environmental Preservation Promotion Council and groundwater users in the surrounding region. The aim of these efforts is to preserve abundant water resources for future generations by maintaining groundwater replenishment levels, through the cultivation of healthy forests. In 2019 we took part in maple-planting exercises aimed at replenishing groundwater, sponsored by the Regional Groundwater Response Council.

• Afforestation for protection against tides
As part of its activities to preserve biodiversity and contribute to the region, we participate in the "~KALA Project". The "~KALA Project" is a project to plant protective stands of trees on the inland side of seawalls, to mitigate damage from tsunamis. The effort was initiated as part of the Hamamatsu Area Seawall Plan, led by the government of Shizuoka Prefecture. Since 2017 we have participated twice a year, with activities such as planting trees and mowing grass.

(Photo courtesy of: Iwata City)

Environment >

Environmental management >
Protecting our water resources
Environmental communication activities >
Reducing carbon emissions and climate change >
Green procurement activities >
Environmental report back number >
Management of pollution including waste >
Management of chemicals in products >

Contact us Privacy Policy Terms of Use Help Site Map
Copyright © Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

Green procurement activities

To partners delivering parts and materials to Hamamatsu Photonics K.K. ↓
Request for cooperation in supplier surveys ↓
Survey tools ↓
Notes on using survey tools ↓
Inquiries concerning green procurement ↓

To partners delivering parts and materials to Hamamatsu Photonics K.K.

As interest grew on the part of society with respect to the environment and international environmental regulations were beefed up, Hamamatsu Photonics decided to formulate "Green Procurement Guidelines" and "Green Procurement Management Standard for Chemical Substances", and to promote involvement in environmental concerns. We ask our business partners for their understanding and cooperation in this effort, and to conform to these guidelines and standards when delivering products and materials to us.

■Important information

October 1, 2020
We revised "Green Procurement Guideline" to 4th edition and "Management Standard for Chemical Substances" to 17th edition. With this revision, other documents and files for supplier survey were also changed.

Main points of this revision are followings;

Green Procurement Guideline

1. Added "conservation and effective use of water resources" as one of environmental protection activities that suppliers are expected to address.

Management Standard for Chemical Substances

1. Changed the name, threshold level and management classification for some of environmentally managed substances
2. Changed the "Table 1. & 3." in response to the above

Please refer each Revision Record for more information.
The latest forms and tools for survey are available in this website.
We will ask you the details for survey request by e-mail.

Green Procurement Guideline (V4.0) [41 KB/PDF]

Revision Records (V4.0)[14 KB/PDF]

Management Standard for Chemical Substances (V17.0) [251 MB/PDF]

Revision Records (V17.0) [80 KB/PDF]

Request for cooperation in supplier surveys

We would like to ask suppliers to answer below four surveys to your parts and materials delivered to us. We will forward the survey request by email separately.

- Non-inclusion Warranty for Banned and Restricted Substances
- Non-use Certificate for Ozone-Depleting Substances in process*
- Non-use Certificate for Chlorinated Organic Solvent in process*
- Chemical Substances Survey(chemSHERPA, VT62474[ex JGPSSI], JAMP)

*Please submit only when we ask in our survey request

Survey tools

Please download the below files and use for your answer to supplier surveys.

Non-inclusion Warranty for Banned and Restricted Substances (V17.0) [72 KB/XLS]

Non-use Certificate for Ozone-Depleting Substances in process (V8.0)[84 KB/XLS]

Non-use Certificate for Chlorinated Organic Solvent in process (V8.0) [71 KB/XLS]

Guidance on Green Procurement Survey by using chemSHERPA [1 MB/PDF]

Notes on using survey tools

- Concerning format for chemical substances survey, we will make the shift to chemSHERPA from VT62474 and JAMP. For the transitional period, we will ask you to survey with designating format by e-mail.
- Please refer to tools and manuals in each website.

chemSHERPA

chemSHERPA video learning materials

Inquiries concerning green procurement

Contact office	Secretariat of environmental committee 5000, Hirakuchi, Hamakita-ku, Hamamatsu City, Shizuoka Pref.,434-8601, Japan Access >
Phone	(81)53-584-0268
Fax	(81)53-584-0276
E-mail	E-mail >

This is the primary contact information for green procurement between Hamamatsu Photonics and our suppliers. Please contact our sales office in your region for your inquiry about green procurement to our products.

Global organizations >

Copyright © Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

Management of chemicals in products

Compliance with regulations on chemicals in products
Background and objectives
Framework for advancement of green procurement
Responding to regulations
Our initiative on Mercury
System of information about chemicals included in products
Status of handling of main restricted substances
Future directions

Compliance with regulations on chemicals in products

Since 2004, we have been managing chemical substances in products. We are committed to staying up to date with the latest information regarding chemicals through industrial associations and responding swiftly and appropriately to new regulations.

Background and objectives

It is universally understood that the regulation and management of chemicals is an integral part of the international background against which manufacturers operate. Strict compliance with such rules and regulations is essential for the continuation of business. The international management of chemicals dates to the adoption of the Rio Declaration and Agenda 21, at the 1992 United Nations Conference on Environment and Development (the "Earth Summit"). The events of the Earth Summit later led to the enactment in Europe of regulations on chemicals in products. Similarly, international treaties were concluded that prohibits the use of specified chemicals, taking a strategic approach to international chemical management. In Japan, efforts are under way to pass and overhaul laws to accord with laws overseas. To comply with these regulations on chemicals is a requirement of manufacturers in all markets.
Against this background, we at Hamamatsu Photonics are advancing management of chemicals in products based on Management of chemicals in products-Principles and guidelines, a JIS standard; and Guidelines for the management of chemicals in products, published by the Joint Article Management Promotion Consortium (JAMP). On this basis, we have established the Green Procurement Management Standard for Chemical Substances for HAMAMATSU Group. At the same time, we recognize that effective management of chemicals in products is impossible without a consistent framework imposed across the entire supply chain. For this reason our Green Procurement Policy requests that business partners implement their own systems for management of chemicals included in products.

Green procurement >

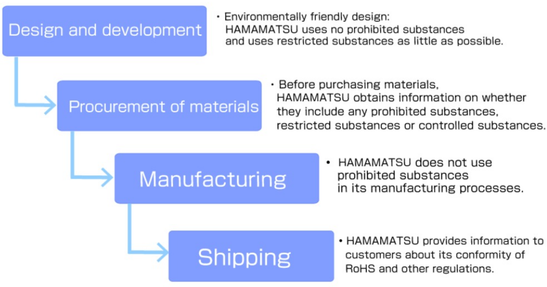
Framework for advancement of green procurement

At Hamamatsu Photonics, the task of responding to regulations on chemicals in products falls to the Headquarters Product Assessment Working Group, which is one of the Headquarters Environmental Working Groups within the Headquarters Environment Committee, the decision-making body of our environmental management system. The Headquarters Product Assessment Working Group is composed of the representatives of each business location of the Company as well as the Environment Committee Secretariats. For their part, similar Working Group are established at each business location, where they coordinate with the to frame specific regulatory responses at their locations.

Environmental management system >

Responding to regulations

Hamamatsu Photonics manages chemicals in products based on the Green Procurement Management Standard for Chemical Substances for HAMAMATSU Group. This management standard is applied consistently throughout the Company, governing all products, purchased materials and substances used in production processes. In preparing this standard and listing controlled substances, we referred to a number of international treaties, such as the Stockholm Convention on Persistent Organic Pollutants; international regulations, such as the RoHS and REACH directives in the European Union; and lists of controlled substances, such as IEC 62474. The inclusion and use of the chemicals in question are managed according to three levels: prohibited substances, restricted substances and controlled substances. To ensure that these criteria reflect updates to the related laws, they are reviewed regularly, and knowledge of any revisions is circulated by the Headquarters Environment Committee and through our environmental training programs. Guided by the Green Procurement Management Standard for Chemical Substances for HAMAMATSU Group, we strive to reduce the environmental impact of the chemicals it uses at every stage. (Please refer to the illustration.)



Our initiative on Mercury

This pertains to US Customer Only:
Hamamatsu Corporation Mercury Education Plan

Hamamatsu Corporation Mercury Education Plan is available by clicking the following title.

Hamamatsu Corporation Mercury Education Plan [50 KB/PDF]

System of information about chemicals in products

To confirm the status of chemicals in products and evaluate their compliance with regulations, Hamamatsu Photonics has introduced an information system for management of chemicals in products. This system centrally manages information on our products and information obtained from business partners about their materials. We use the system Company-wide to inform customers of the results of surveys and investigations and to manage documents to confirm compliance. To make as many employees as possible familiar with the system, we conduct regular in-house training on its use. Today the system has over 500 users throughout Hamamatsu Photonics, in departments such as Quality Control, Production Management, Environmental Management and Material Management.

Status of handling of main restricted substances

Hamamatsu Photonics has completed our response to the EU RoHS directive on six restricted substances and now supply products that are fully compliant with the directive. Four phthalate esters have been added to the list of restricted substances; we are working with our business partners to ensure an effective response. On required exemptions, we are participating in industry-association activities between Europe and Japan to gather information and continue responding in partnership with other related parties.
We publish the status of RoHS compliance in its products on the Hamamatsu Photonics website, where anyone can confirm it at any time.

Search RoHS judgments >

Future directions

To continue to fulfill its social responsibilities in the environmental aspects in cooperation with its business partners, Hamamatsu Photonics intends to place priority on partnership with companies that respond effectively to regulations on chemicals included in products. Informed by the checksheet with the Guidelines for the management of chemicals in products published by JAMP, Hamamatsu Photonics conducts regular on-site checks of implementation by its business partners. If these checks indicate that improvements are required, we will ask those business partners to take action and will provide support for them in doing so.

Copyright © Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

Environmental communication activities

Contributing to preservation of the regional environment ↓
Collection of used toothbrushes ↓

Contributing to preservation of the regional environment

Hamamatsu Photonics has always recognized the importance of a healthy and flourishing natural environment. As part of its efforts to promote a greener environment in the region, the Company carries out tree-planting activities. In addition, we are planting an acorn to make a forest on the company premises.

Clean-up activities in line with the Biodiversity Hamamatsu Strategy

As part of its efforts to preserve biodiversity, Hamamatsu Photonics participates in and publicizes the Hamamatsu Biodiversity Strategy, conducting environmental maintenance activities around its business locations and elsewhere in the city and prefecture. We participate in the Lake Hamana Cleanup Campaign, maintaining biodiversity in the region to preserve a flourishing natural environment for the future. During the period under review, Hamamatsu Photonics conducted cleanup activities around its business locations 12 times, with 529 employees participating in total. In addition, we are planting an acorn to make a forest on the company premises.

Lake Hamana Cleanup Campaign

Cleanup campaign on the Toyoda River

Planting trees on the seawall

Flower-bed display by Hamamatsu businesses

Happy memorial trees

As part of its activities to promote biodiversity and raise awareness of environmental issues, in October 2011 Hamamatsu Photonics began distributing “Happy Memorial Trees” to employees who bought a house or were married. To further encourage employees to grow trees at home, in October 2014 the Company expanded the program to include employees who enrolled a child in primary school. This program has proven valuable in raising environmental awareness among employees and their families. The photos shown here were provided by employees in commemoration of tree planting.

Hamamatsu Photonics is committed to the beautification, maintenance and management of the environment. We plant trees on the grounds of each business location and create “green curtains” that flourish in the summer.

Collection of used toothbrushes

In FY2019 the Company began a program to collect used toothbrushes. An outside organization awards us points according to the amount of toothbrushes collected by weight; these points are then converted into funds contributed to activities in the community. Although this program has barely started, Hamamatsu Photonics employees have already contributed a total of 16 kg of used toothbrushes.

Environment >

Environmental management >
Protecting our water resources >
Environmental communication activities
Reducing carbon emissions and climate change >
Green procurement activities >
Environmental report back number >
Management of pollution including waste >
Management of chemicals in products >

Copyright © Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.

ESG data

You can view various data of ESG (Environment, Social, and Governance), based on Hamamatsu Photonics's business and social activities.

− Environment

	Unit	2018	2019	2020
Energy	(kl)	29,216	29,162	30,307
Electricity	(kWh)	105,542,744	105,743,565	110,348,662
Renewable Electricity	(kWh)	6,754	6,050,668	7,099,740
Carbon Emissions	(t-CO_2)	448,508	452,011	590,936
Scope1（All Direct Carbon Emissions）	(t-CO_2)	12,043	12,074	11,671
Scope2（Indirect Carbon Emissions）	(t-CO_2)	45,902	41,931	42,359
Scope3（Other Indirect Carbon Emissions）	(t-CO_2)	390,563	398,006	536,906
Water	(1,000m^3)	704	749	730
Tap water	(1,000m^3)	98	105	101
Well water	(1,000m^3)	575	601	585
Industrial water	(1,000m^3)	31	43	44
Wastewater	(1,000m^3)	634	664	706
Public sewer	(1,000m^3)	127	135	138
River discharge	(1,000m^3)	507	529	568
VOC emissions	(t)	13.1	14.1	14.0
Materials	(t)	670	643	626
Participants of chemical substance education	(People)	542	753	499
Industrial waste	(t)	550	541	549
Certain hazardous waste	(t)	271	315	307
Valuable material	(t)	251	293	288
Recycling	(t)	914	1,050	1,077
Landfill	(t)	5	6	3
Green Purchasing Rate	(%)	97.4	96.5	89.6
ISO14001 certification (employee ratio)	(%)	96.3	95.8	98.0

+ Social

+ Governance

(Note) The reporting period is our business year (from October of previous year to September) or the general fiscal year (from April to March of next year).

Copyright © Hamamatsu Photonics K.K. and its affiliates. All Rights Reserved.