

SHOWA DENKO Web site Sustainability Information (As of March 2022)

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Message from CEO

Change society through the power of chemistry

In January 2022, Showa Denko K.K. and Showa Denko Materials Co., Ltd. achieved substantial integration of the two companies through integration of their management systems realized by appointing 12 common Corporate Officers including the President and CEO. Process of the integration of the two companies is progressing favorably to achieve complete integration in January 2023. We have established the management philosophy of the newly integrated company as combination of “Purpose” and “Four Values.” Purpose refers to the purpose of the newly integrated company’s existence, which is to “change society through the power of chemistry,” which was announced in the Long-term Vision for Newly Integrated Company. The four values we have established are: “Passionate & Results-Driven,” “Agile & Flexible,” “Open Minds & Open Connections,” and “Solid Vision & Solid Integrity.” We will make this management philosophy permeate into the Showa Denko Group globally, and make the new Showa Denko Group operate its business as a body. We will also strengthen the Group’s human resource development, conduct fair employee performance evaluation, and strive to promulgate the merit system.

With regard to solutions which we provide for our customers, we believe that the newly integrated company will be able to make technological breakthroughs and offer wide-ranging functions by blending Showa Denko’s midstream material technologies, Showa Denko Materials’ downstream application technologies, and both companies’ evaluation/analysis technologies into one.

The Showa Denko Group has been making the most of technological strengths of Showa Denko and Showa Denko Materials, and promoting management that takes advantage of its mutually complement business portfolio. The Showa Denko Group has four business categories: “Core Growth” businesses that produce products boasting top market shares in growing markets and leading growth of the Group (Electronics and Mobility); “Next-Generation” business that will function as the mainstay of the Group (Life Science); “Stable Earnings” businesses (Carbon, Petrochemicals, Device Solutions,

etc.); and “Fundamental Technologies/Materials” businesses that support innovations made by other businesses (Ceramics, Functional Chemicals, etc.). The Group will realize sustainable growth by making these four business categories exert their full powers.

Furthermore, we will utilize the “Stage for Fusion,” which is a laboratory of the Showa Denko Group where we set and promote research and development themes that aim to realize sustainability through solution of various social issues including realization of carbon neutrality by 2050, and will also utilize “Packaging Solution Center,” which is an institution to cooperatively develop leading-edge packages for semiconductor integrated circuits. By making the most of these R&D facilities and promoting innovation through cooperation with customers and partner companies, we will achieve the purpose of the newly integrated company, which is to “change society through the power of chemistry.”

Through steady promotion of the integration as stated above, the Showa Denko Group will realize its ideal states, which are “Company that can compete on the world stage,” and “Company that contributes to a sustainable global society.”

Please have high hopes for the new Showa Denko Group and the newly integrated company.



January 2022
President and CEO
Hidehito Takahashi

A handwritten signature in blue ink, reading "H. Takahashi".

Sustainability Management

CSR Policy, CSR Promotion Framework and Materiality

[Responsible Care activity](#)

[Stakeholder communications](#)

CSR Policy, CSR Promotion Framework and Materiality

CSR Policy

For the Showa Denko Group, “sustainability” means to be a sustainable company that can give satisfaction to its stakeholders by providing them with products and services that are useful for society and unique to the Group with a focus on the environment, society and governance (ESG), thereby creating both economic and social value, and also to make contributions to the sustainability of international society. In order to make contributions to the sustainability of international society, we set the Showa Denko Group’s CSR Policy, based on which we conduct our activities.

Showa Denko Group's CSR Policy

We at the Showa Denko Group will aim to make ourselves a social contribution company that satisfies all stakeholders by contributing to solving issues concerning SDGs through its business activities, and ensuring all employees' conduct conforming to "Our Code of Conduct."

Main Theme

"Creation of economic and social value through deepening of risk management on the basis of safety and compliance, and through creation of business opportunities on the basis of CSR communication"

Contribution to creation of society where affluence and sustainability are harmonized through effective use of technologies, products and services

Tackling environmental issues in order to realize sustainable society and as a mission of manufacturer

Development of human resources that contribute to sustainable growth of international society and the Showa Denko Group

(Revised in May 2019)

For the Group, CSR means to make social contributions through business operations, with all employees taking actions sincerely in line with Our Vision and Our Code of Conduct. In Our Vision, we are committed to contributing to the sound growth of international society as the Group's basic approach, and we believe that working for the achievement of the SDGs through our business activities will help us give satisfaction to all stakeholders, which the Group upholds as its mission.

Related link [Our Code of Conduct](#)

As the main theme for the Policy, we have upheld, "Creation of economic and social value through deepening of risk management on the basis of safety and compliance, and through creation of business opportunities on the basis of CSR communication." We need to ensure safety to be "qualified as a manufacturer," and ensure compliance to be "qualified to participate in



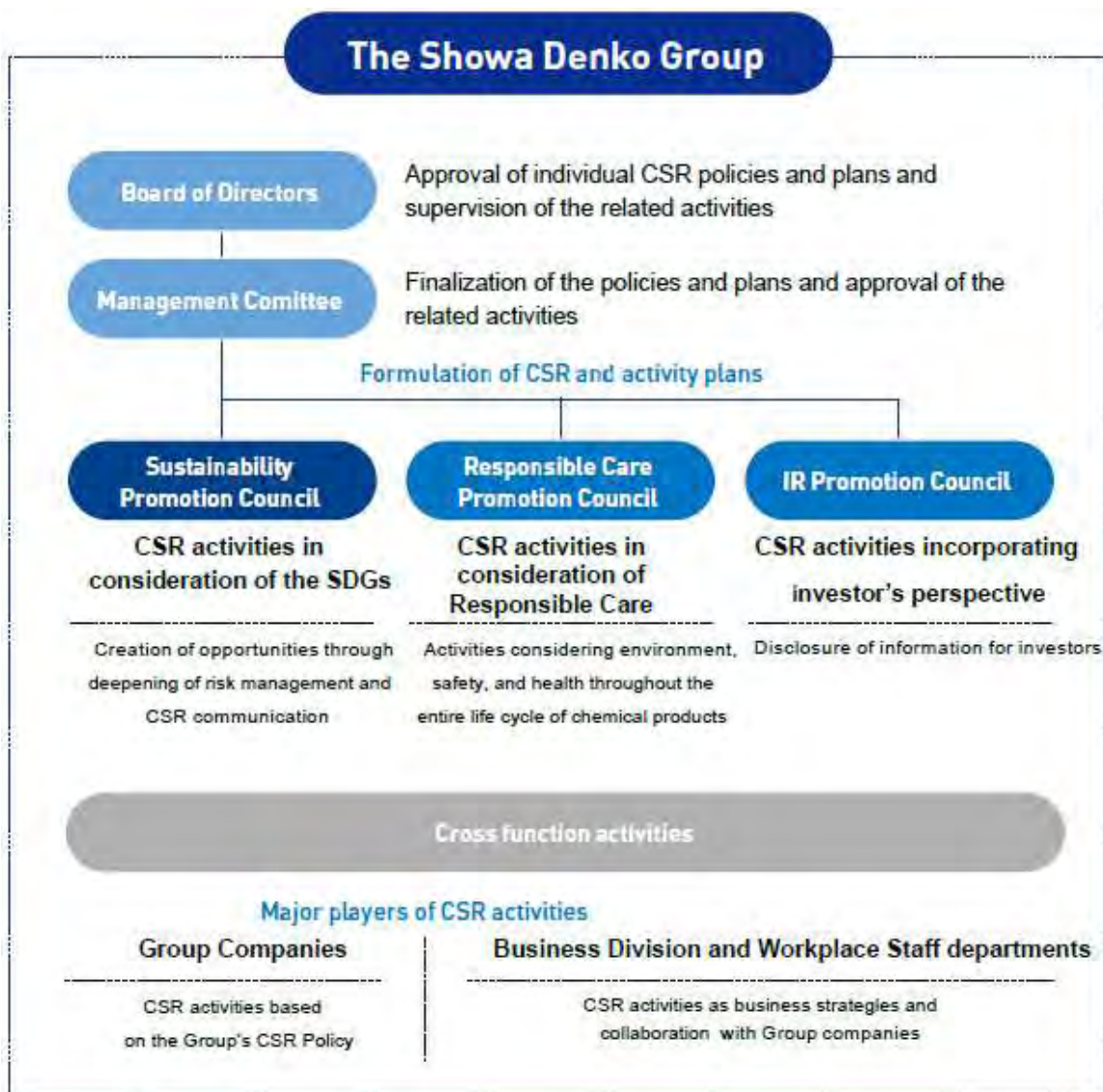
competition.” The Showa Denko Group, having such “qualifications,” will contribute to reducing risks for society and increasing associated value through risk management and communication with stakeholders. At the same time, we will enhance our corporate governance (corporate soundness) and conduct activities to create KOSEIHA Businesses, thereby creating economic and social value to become a sustainable “social contribution company.”

CSR Promotion Framework

CSR activity-related policies and plans are deliberated by the Management Committee composed of the president, corporate officers, and Audit & Supervisory Board members and are then finalized by the Board of Directors.

For CSR-related issues, we have the Sustainability Promotion Council, Responsible Care Promotion Council and IR Promotion Council as advisory bodies to the Management Committee. Through these organizations, we discuss individual issues related to CSR, such as risk management, compliance, progress in contributing to the achievement of the SDGs, and measures against climate change and other environmental issues. We then incorporate the results of the discussions in our CSR plans and activities.

Moreover, our divisions and plants conduct Responsible Care, risk management, human rights and compliance activities by receiving support from Responsible Care, CSR & General Affairs, Human Resources, and other staff departments. For contribution to SDGs, the disclosure of climate-change-related information in response to the activities of the TCFD, and other issues to be tackled across the organization, we are conducting cross-functional activities.



Materiality and core tasks

Aiming to contribute to realization of sustainable society, the Showa Denko Group analyzed materiality of impacts of its business activities on stakeholders, economy, society and environment, and selected 14 material issues in 2015.

In 2019, in order to clarify, both internally and externally, the social tasks to be prioritized by the Group, we have classified the 14 material issues into three core task groups, and then set the medium to long-term policy for each of the tasks. We will also set specific KPIs for each of the material issues and disclose the indicators when they are decided. By implementing initiatives based on the policies and KPIs, we aim to make achievements in a steady manner.

■ Core tasks and materiality

Core tasks	Medium- to long-term policy	Materiality
Contribution to achievement of SDGs through business activities	<p>By making effective use of the Group's products, technologies, and services, we will contribute to the creation of a society where affluence and sustainability are harmonized.</p> <ul style="list-style-type: none"> · Promote R&D in consideration of the SDGs · Monitor contribution to the SDGs made through business activities and announce the results 	<ul style="list-style-type: none"> ◦ Provision of products, technologies and services ◦ Access to Essential Services ◦ Consumer Safety and Health Protection ◦ Participation in Community Activities
Tackling environmental issues	<p>We will conduct Responsible Care activities with a strong focus on "responsibilities as a manufacturer and as a user," thereby contributing to the solution of global environmental problems.</p> <ul style="list-style-type: none"> · Reduce GHG emissions · Foster 3Rs to reduce waste generation · Reduce the discharge of chemical substances 	<ul style="list-style-type: none"> ◦ Prevention of Pollution ◦ Use of sustainable resources ◦ Measures against climate change
Establishment of sustainable methods for human resource development and improvement in working environment	<p>We will develop diverse human resources made up of people who can achieve growth with their company and contribute to a sustainable society, while also providing individual employees with workplaces where they can work with peace of mind and in good health.</p> <ul style="list-style-type: none"> · Develop employees and support their growth · Promote diversity 	<ul style="list-style-type: none"> ◦ Development of Human Resources ◦ Creating a comfortable workplace ◦ Equipment safety ◦ Occupational Health and Safety ◦ Thorough corporate ethics ◦ Protection of intellectual property ◦ Decision-making process and structure

■ How to select material issues

Step.1 Conduct a survey and identify the issues to be examined.

Identify the issues that stakeholders want the Group to deal with in reference to the core subjects of ISO 26000 and the GRI guidelines. List the important items and issues to be examined by Showa Denko as a manufacturer and a chemical company.



Step.2 Select particularly important items.

Select particularly important items based on the Showa Denko Group's Vision, Medium-Term Business Plan, annual plans, business execution system, Our Code of Conduct and other guidelines. Check whether the themes of past activities align with the core subjects of ISO 26000.

Step.3 Prioritize the items and focus on the priorities.

Analyze materiality from the viewpoints of stakeholders and the company to prioritize the items. Evaluate the materiality of impacts on stakeholders in reference to the results of surveys conducted for them. Evaluate the materiality of impacts of the company's business activities in consideration of their influence on society and on financial information.

Step.4 Check appropriateness.

Interview internal related departments, make decisions at meetings of the former CSR Committee chaired by the president, and report the results to the Board of Directors.



2021.

Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report

[SHOWA DENKO Report 2021\(Showa Denko Group's integrated report\)](#)

Contributing solutions to Social Issues through Business Activities

Challenges to Realize Carbon Neutrality

Tackling SDGs through Business Activities

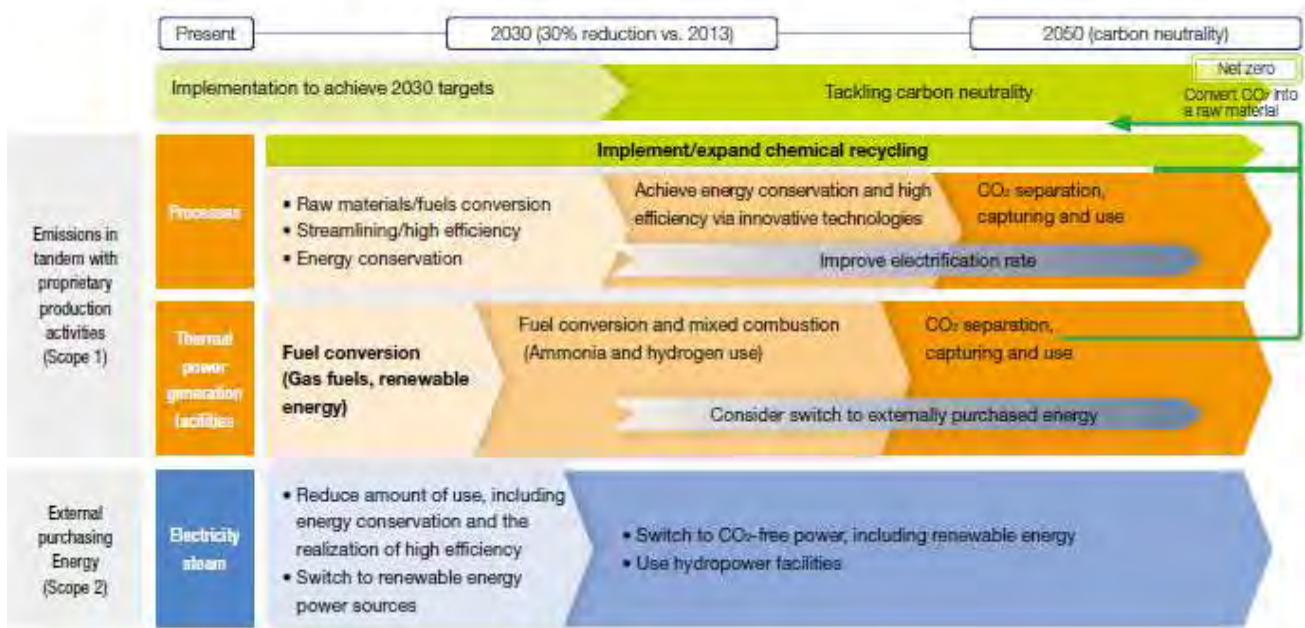
Challenges to Realize Carbon Neutrality

Basic ideas and policies

Climate change phenomena are occurring frequently and on a global scale. According to the science, greenhouse gases are considered to be a major factor for such phenomena. Under the Paris Agreement, a leading international initiative to tackle this issue, a goal was set to keep the rise in mean global temperature to less than two degrees Celsius above pre-industrial levels (“two degree target”), and efforts to address this challenge are expected to be accelerated over the coming years.

In order to support such efforts, the Showa Denko Group will take up new challenges aimed at carbon neutrality, setting goals for 2050. This is one of our key approaches to becoming a “company that contributes to a sustainable global society,” the ideal state defined in our Long-term Vision.

Roadmap to carbon neutrality in 2050

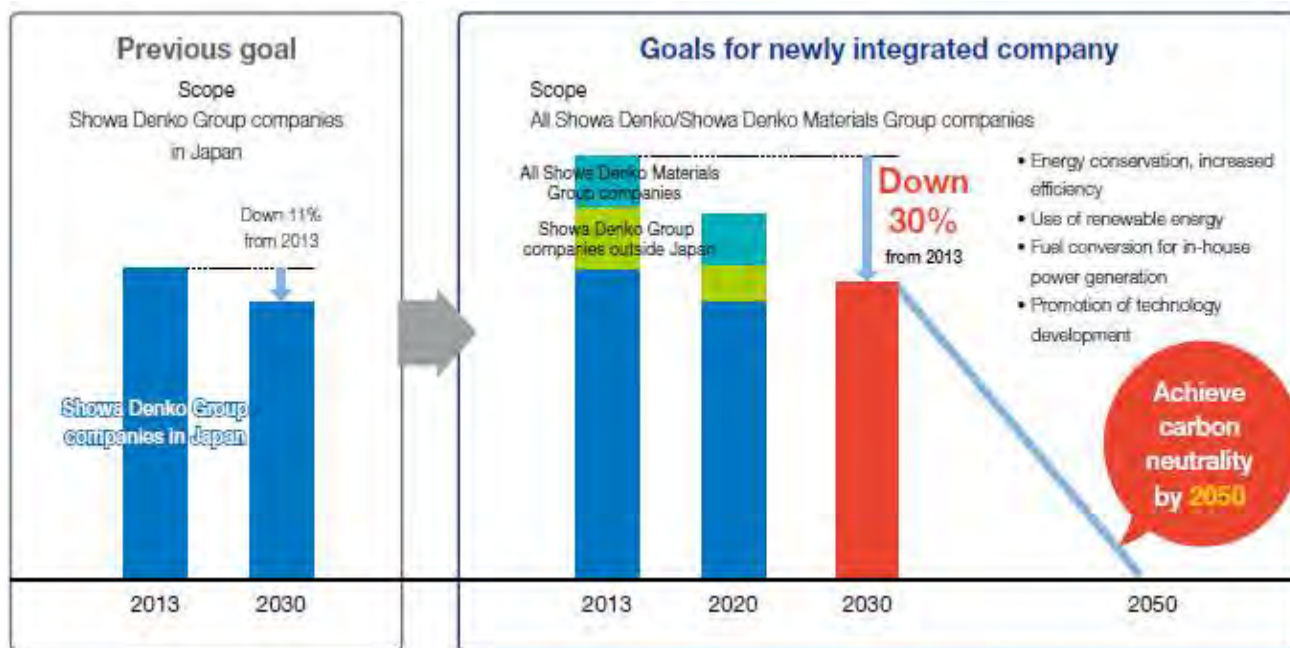


Up to 2030, promote initiatives for rigorous streamlining, increased efficiency, energy conservation, conversion to gas fuels (high-efficiency co-generation system)

Promote technology development for new GHG capture and utilization processes and sustainable plastic chemical recycling

From 2030 to 2050, promote in earnest initiatives for fuel conversion/mixed-combustion using ammonia and hydrogen, and electrification of production processes
Promote utilization of private hydroelectric power and shift to renewable energy power for use in production

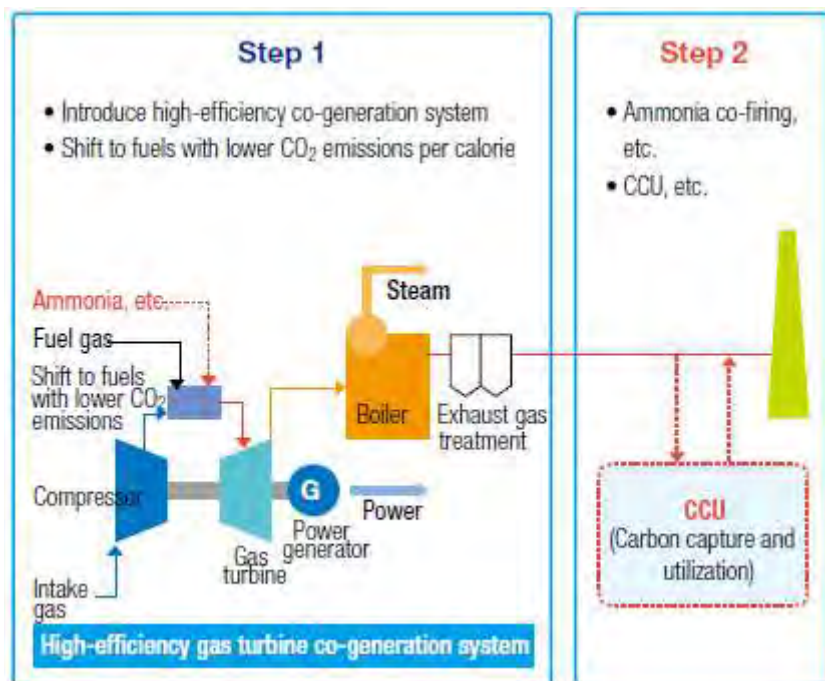
Aiming to achieve carbon neutrality, promote the development of innovative GHG capture/utilization technologies, utilization of recycled GHG as chemical materials, and implementation of sustainable plastic chemical recycling technologies



Initiatives for carbon neutrality

High-efficiency co-generation system

The Showa Denko Group has installed in-house thermal power generation systems with the boiler and the steam turbine designed so as to ensure the efficient supply of electricity and heat (steam) energy sourced from fossil fuels. This is to allow the energy to be used effectively for each of the different production processes, such as heating and distillation, at chemical plants. Also, this off-grid power supply function represents an essential BCP item at chemical plants in preparation for the contingency of a power outage.



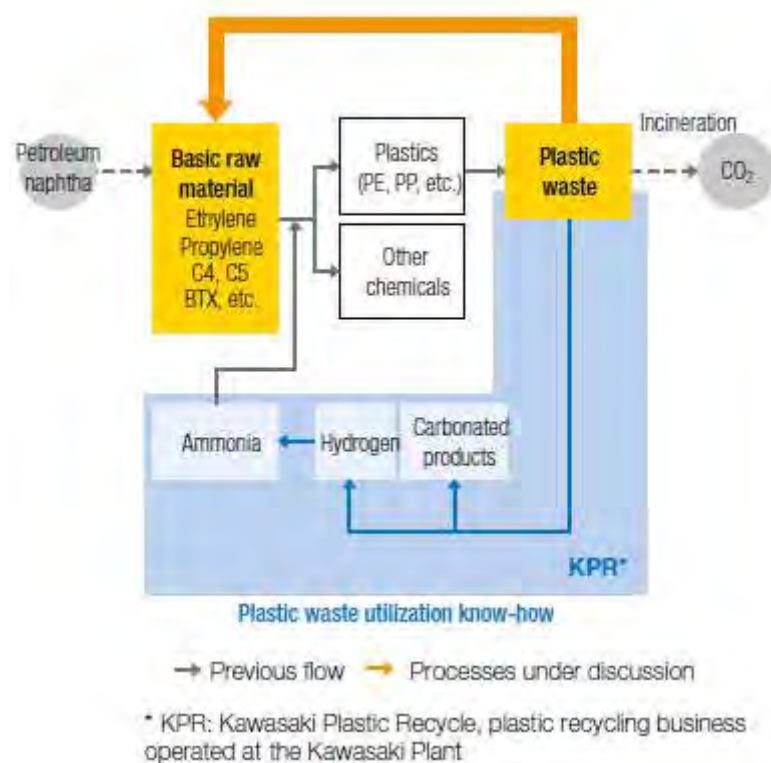
We will upgrade the above in-house thermal power generation systems so as to serve

our carbon neutrality initiatives. The plan consists of two steps. In the first step, we will introduce a state-of-the-art high-efficiency gas turbine co-generation system, among others, to improve overall energy efficiency, and then switch to fuels with lower CO₂ emissions per calorie in an effort to promote lower-emission operations. These measures involve conversion from solid to liquid fuels, which will effect a significant reduction of CO₂ emissions, thereby contributing to environmental conservation. The second step is the planned adoption of co-firing systems based on carbon-free ammonia and other fuels as well as of carbon capture utilization (CCU) and other carbon recycling processes, aiming for carbon neutrality.

Promotion/expansion of chemical recycling

In order to facilitate carbon neutrality in the chemicals industry, it is imperative, along with increasing energy use efficiency, to reduce the use of fossil resources, a leading raw material for many chemical products, as exemplified by plastics. In Japan, a reported 70% of used plastics are incinerated, resulting in CO₂ emissions, including for the purpose of heat recovery. Among a number of proposed solutions to this issue, chemical recycling—referring to the reuse of plastic waste as a raw material for chemical products—is drawing broad attention.

The Showa Denko Group is already engaged in plastic chemical recycling for ammonia and hydrogen manufacturing. Based on the practical knowledge on plastic waste utilization that has been cultivated through past operations, we are ramping up R&D activities to expand the application of chemical recycling capabilities. Specific plans are discussed for adopting recycled plastics to manufacture ethylene, propylene and other substances used as raw materials for plastics and many other types of organic chemical products in place of petroleum naphtha, a primary conventional option.



We are striving to raise the chemical recycling rate to the extent possible, overcoming limitations related to dirt and impurities, with the aim of achieving fossil-free chemicals production, which represents a significant stride toward a carbon neutral society. We will accelerate our efforts to introduce the results of the above activities to the market as early as possible to broaden the range of applicable products that support a recycling-oriented, carbon neutral society, thus fulfilling our social responsibility as a chemicals manufacturer.



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Measures against Climate Change (Disclosure in Line with TCFD)

Basic ideas and policies

Although it does use fossil raw materials and fuels in its product manufacturing processes and emits a considerable amount of greenhouse gases (GHGs), the Showa Denko



Group has many products contributing to energy conservation and the carbon cycle. We regard measures against climate change as a management priority in terms of both risks and opportunities.

In May 2019, we took part in the Task Force on Climate-related Financial Disclosures (TCFD) Consortium to evaluate the risks and opportunities provided by climate change to the Group, enhance our resilience through climate change scenario analysis and promote sound dialogue with our stakeholders.

Related link [Challenges to Realize Carbon Neutrality](#)

- ▼ Governance and risk management
- ▼ Strategy and scenario analysis
- ▼ Indicators and targets

Governance and risk management

At the Showa Denko Group, the Sustainability Promotion Council, which is chaired by an officer in charge of CSR, makes assumptions about climate change-related risks and opportunities, and the Management Committee discusses those risks and opportunities. Details of the decisions made by the Committee are regularly reported to the Board of Directors.

A cross-organizational working group on TCFD is established under the Sustainability Promotion Council to identify risks and opportunities based on the scenarios analyzed according to the framework of TCFD.

Meanwhile, a special working group on risk management (Risk Management Working Group) is also managing climate change-related risks with a company-wide risk evaluation system (“risk inventory” activity).

Related link [Risk Management](#)

Strategy and scenario analysis

For impacts (risks and opportunities) of climate change on the Showa Denko Group’s businesses, we assumed the following risks for 2050 based on the framework set by the TCFD and in light of the integration with Showa Denko Materials: (1) risks related to a shift to a low-carbon economy under the 1.5- and 2-degree scenarios, and (2) risks related to the physical impact of climate change caused by the failure to achieve the world’s CO₂ emission reduction targets under the 4-degree scenario.

Possible shift-related risks that may have company-wide impacts include an increase in operating costs due to rise in carbon pricing and other energy taxes. GHG emissions after 2023, when Showa Denko and Showa Denko Materials integrate, would be about 4.5 million tons/year. If GHG emissions in 2030 are constant and carbon pricing is 10,000 yen/t-CO₂ based on the IEA’s*¹

2-degree scenario (SDS)*², the amount that the entire Showa Denko Group should pay will increase by 45 billion yen/year. If the Group achieves a 30% reduction in emissions relative to the 2013 level by 2030, the Group should pay about 35 billion yen/year, meaning the cost increase due to carbon pricing would be restrained.

Meanwhile, physical risks that have an impact on the entire company include increasing flood risk at manufacturing sites due to frequent flooding. In 2020, Showa Denko Materials analyzed physical risks at its plants. The analysis results will be integrated into a new risk management system, which is under discussion, for continued management. The Showa Denko Group assumes that climate change will have a tremendous impact on the following business domains: (1) transportation, (2) information and communication, (3) energy and (4) construction and infrastructure. In 2020, as we did in the previous year, we reviewed the impact of climate change in the transportation domain in light of the integration with Showa Denko Materials.

Under the 1.5- and 2-degree scenarios, our operating cost will increase due to the introduction of ICP*3 . However, business opportunities will also expand, driven by the need for energy conservation and the spread of electric vehicles (EVs) and fuel cell vehicles, which will boost demand for the related components. Therefore, we have concluded that we have sufficient resilience against the climate change-related risks in the transportation domain. We will incorporate the examined matters into our strategy for our mobility business, which is positioned as a Core Growth business in our long-term vision. We will conduct scenario analysis on other business domains as well in a phased manner.

*1 IEA: International Energy Agency

*2 2-degree scenario: Sustainable development scenario

*3 ICP: Internal carbon pricing

■ TCFD disclosure (scenario analysis) procedure

A plan to review priorities in response to the Green Growth Strategy and analyze the information and communication domain after doing the transportation domain



■ Climate change-related risks and opportunities and major responses to them

For risks and opportunities in the transportation domain, we reviewed the 2-degree scenario implemented in 2020 and conducted analysis by adding the 1.5-degree scenario.

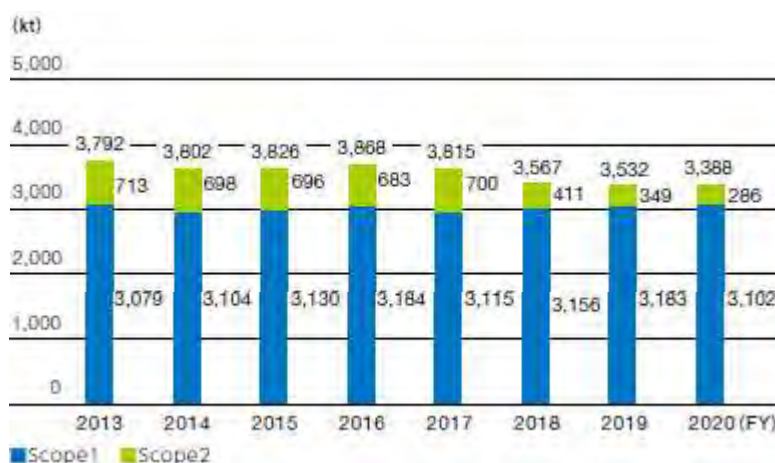
	Impact of climate change on our company	Domain	Risk	Opportunity	Response
Risks and opportunities related to the shift to a low-carbon economy (1.5- and 2-degree scenarios)	Response to life cycle assessment (LCA) regulations		○		<ul style="list-style-type: none"> Improving/rebuilding internal systems based on LCA results and knowledge
	Increase in tax (cost) due to the introduction of carbon pricing (CP)		○		<ul style="list-style-type: none"> Energy conservation and equipment renewal at manufacturing sites Increasing the introduction of renewable energy
	Increase in cost for procurement of renewable energy		○		<ul style="list-style-type: none"> Use of hydroelectric power generation facilities Considering procurement of renewable energy from outside
	Demand for advanced recycling-based society		○	○	<ul style="list-style-type: none"> Initiatives for plastic chemical recycling and iron recycling (graphite electrodes)
	Promotion of R&D for carbon neutrality	All business domains	○	○	<ul style="list-style-type: none"> Maximizing synergies of the integration of Showa Denko and Showa Denko Materials Promotion of R&D at the stage of integration (new research laboratory)
	Response in manufacturing process to carbon neutrality		○		<ul style="list-style-type: none"> Review of manufacturing processes and introduction of innovative technologies
	Difficulty in financing associated with changes in investors' behavior		○		<ul style="list-style-type: none"> Proactive information disclosure and communication in response to the concerns of investors and the market
	Increase/decrease in sales due to changes in consumer behavior and awareness		○	○	<ul style="list-style-type: none"> Sales promotion and development of new products that meet the needs of a low-carbon economy, and enhancement of product competitiveness
	Increase in demand for materials and components contributing to low-fuel and energy-saving vehicles			○	
	Promotion of R&D on battery-related materials	Transportation domain	○	○	<ul style="list-style-type: none"> Maximizing synergies of the integration of Showa Denko and Showa Denko Materials
	Promotion of R&D on composite materials		○	○	
	Increase in demand for materials and components related to EVs due to their widespread use			○	
Physical risks and opportunities (4-degree scenario)	Suspended operation of manufacturing sites due to flooding, and decrease in profit caused by an increase in the equipment repair cost	All business domains	○		<ul style="list-style-type: none"> Analysis of flood risks at each site Regular risk identification and reduction activities, and enhancement of business continuity planning (BCP)

[View this image in a larger size](#)

Indicators and targets

We upheld “Measures against Climate Change” as one of our material issues (materiality) and set the following KPI in 2019: For 2030, reduce GHG emissions from the

- GHG emissions (Showa Denko and Group companies in Japan)
- ✕ Excluding Showa Denko Materials
- ✕ Emission amounts were calculated in line with the GHG Protocol.



Group's sites in Japan by 11% relative to the 2013 level. Toward the integration of Showa Denko and Showa Denko Materials, we revised in 2021, the GHG emissions reduction target for 2030 to "a 30% reduction relative to the 2013 level" (as of July 2021).

- GHG emissions (Group companies outside Japan) (kt)
- ✕ Excluding Showa Denko Materials
- ✕ Sites which emitted 3 kt or more

2016	2017	2018	2019	2020
402	416	735	636	445

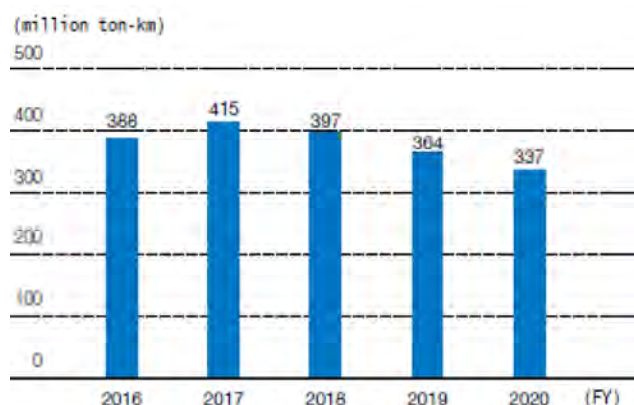
For 2020, Showa Denko and other Showa Denko Group companies in Japan (excluding Showa Denko Materials) reduced their GHG emissions by 10.7% relative to the 2013 level. We also own hydroelectric power stations, which generate about 30% of the electricity used by Showa Denko and thus contribute to reducing our GHG emissions.

We will review the medium- to long-term plans made for each of our sites toward the creation of a low-carbon economy and set the medium-term targets for our overseas Group companies. In order to achieve our GHG emission reduction targets for 2030, we will further reduce our GHG emissions and promote energy conservation.

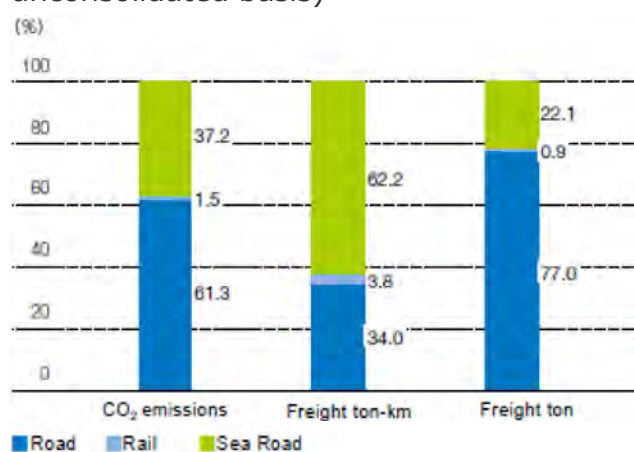
- Transportation sector's CO₂ emissions and energy consumption rate (Showa Denko unconsolidated basis)



■ Freight ton-km (Showa Denko unconsolidated basis)



■ Ratios for use of various modes of transport (FY2020, Showa Denko unconsolidated basis)



■ Scope3 GHG emissions (FY2020, Showa Denko Group)

※ Excluding Showa Denko Materials

Scope3		(kt/Year)
	Category	The amount of emission
1	Purchased goods and services	4,000
2	Capital goods	300
3	Fuel- and energy-related activities not include in Scope1 and 2	600
4	Upstream transportation and distribution	40
5	Waste generated in operations	20
6	Business travel	0.5
7	Employee commuting	1
	Other (down stream)	30,000

In order to reduce the environmental impact associated with logistics, we are promoting a modal shift from truck to rail and ship transportation as well as making efficient use of large trucks and increasing their loading efficiency to reduce our CO₂ emissions. In fiscal 2020, in addition to promoting a modal shift, we also strove to reduce energy consumed for transportation by increasing the shipment amount to minimize the frequency of transportation and by increasing the number of storage sites to reduce long-distance transportation. As a result, we succeeded in reducing the transportation volume and thereby CO₂ emissions. We also improved per-unit energy use for transportation year on year, mainly by increasing the ratio of marine transportation, which is more energy efficient, to truck transportation (on a ton-kilo basis).



Toward the future

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[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Environmental Considerations; Atmosphere and Water

Basic ideas and policies

The Showa Denko Group has been conducting “Active Safety” activities* to achieve zero environmental incidents.

We are also implementing measures to reduce the discharge of chemical substances and our environmental impacts by voluntarily setting in-house control standard for the emissions of exhaust gas and the discharge of wastewater, promoting fuel conversion and improving manufacturing processes at each of our sites.

* Active Safety activities: Activities in which we analyze past incidents and disasters and summarize the lessons learned from them in the “Active Safety checklist,” and then make use of the list to identify related risks and as an educational material to prevent the reoccurrence of similar incidents

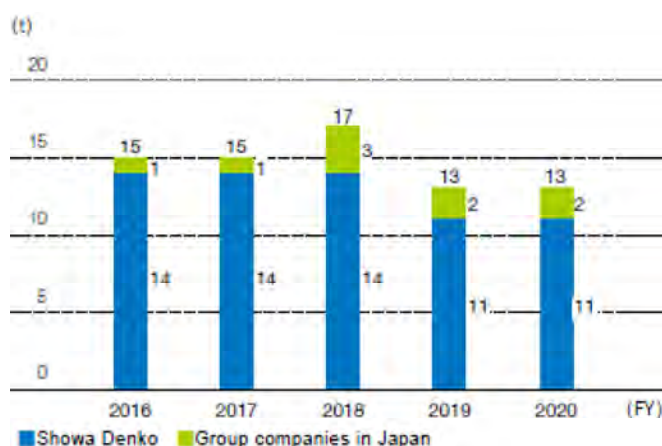
- ▼ Reducing emissions of hazardous air pollutants
- ▼ Reducing our environmental impact on the air
- ▼ Minamata disease in Niigata Prefecture
- ▼ Measures to prevent soil and groundwater pollution

Reducing emissions of hazardous air pollutants

Of the 12 substances designated by the Japan Chemical Industry Association (JCIA) as hazardous air pollutants, the Showa Denko Group handles nine. We continued our efforts toward reducing the emissions of these substances by promoting a shift to alternative substances and collection and recycling of the substances.

■ Total amounts released of harmful atmospheric pollutants(VOC) (Showa Denko)

※ Excluding Showa Denko Materials



Reducing our environmental impact on the air

To reduce emissions of SO_x, NO_x, dust and soot, and other substances having adverse effects on the air, the Group continued advancing a variety of measures including fuel switching, improvement of combustion methods, proper operational management of desulfurization and denitrification devices, and reduced fuel consumption through waste heat recovery.

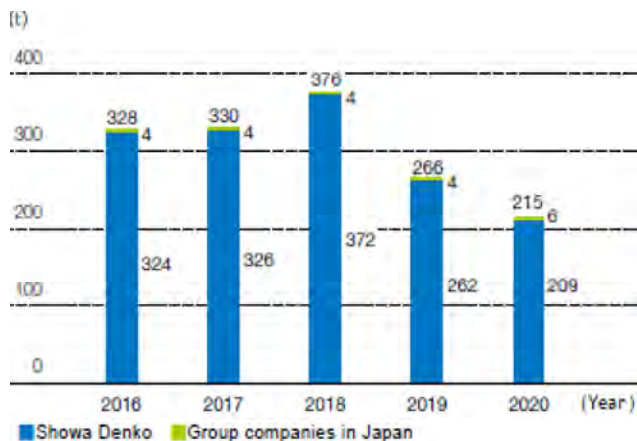


Exhaust gas treatment facility
(Isesaki Plant Showa Denko K.K.)

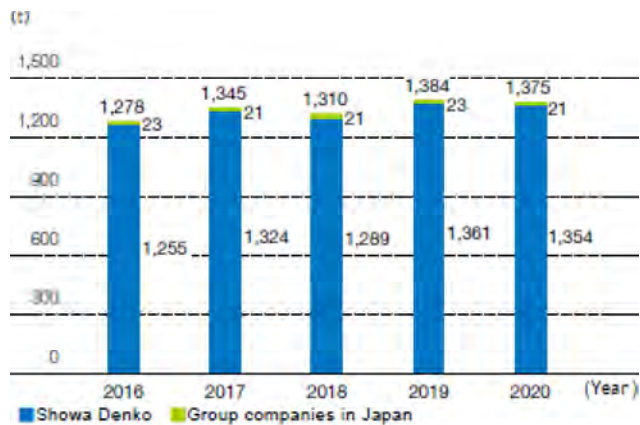
■ Change in discharged amounts of substances with atmospheric impact (Showa Denko and Group companies in Japan :22 sites)

※ Excluding Showa Denko Materials

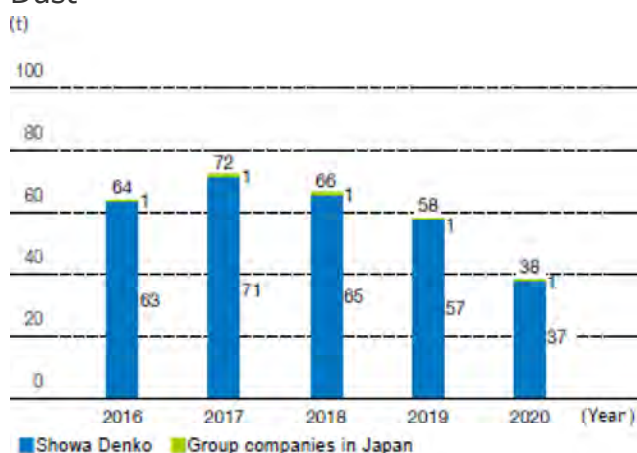
SOx



NOx



Dust



Reducing our environmental impact on water

To reduce chemical oxygen demand (COD), total nitrogen, total phosphorus, and other water pollution indexes, the Group continued implementing various measures including improvement of production processes, upgrading and proper operational management of wastewater treatment facilities, and recycling of water. Moreover, we installed equipment to prevent high concentration wastewater from leaking outside via drainage pipes.

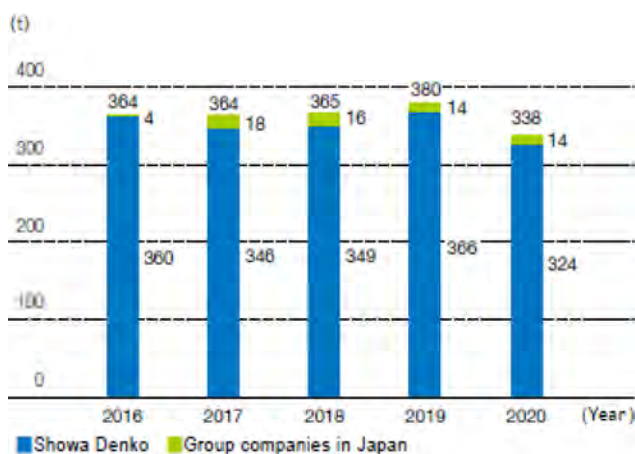


Water quality monitoring system
(Oyama Plant Showa Denko k.k.)

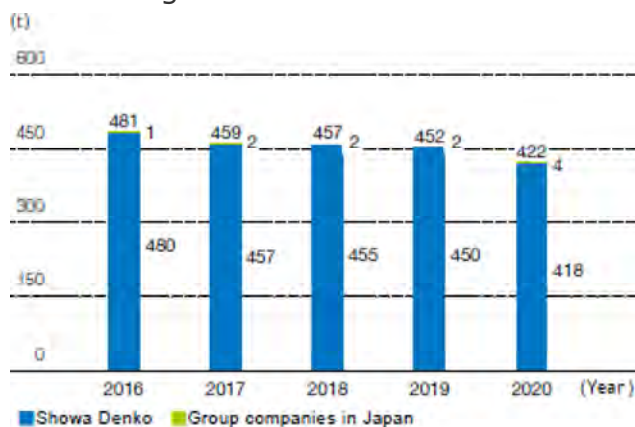
■ Discharged amounts of substances with water quality impact (Showa Denko and Group companies in Japan :28 sites)

✕ Excluding Showa Denko Materials

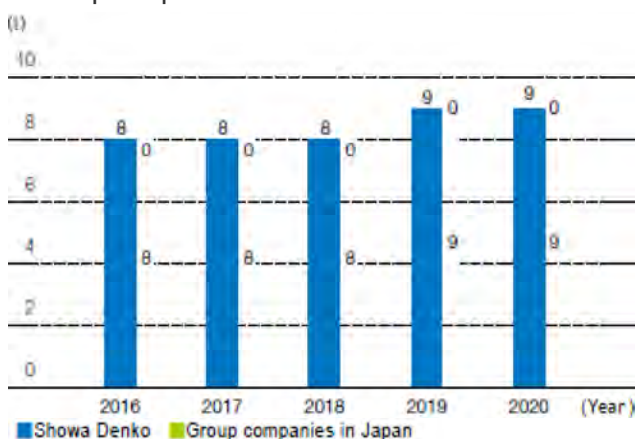
COD



Total nitrogen



Total phosphorus



[For the scope of data collection, please click here.](#)

Minamata disease in Niigata Prefecture

With regard to Niigata Minamata disease, which was officially recognized in 1965, we maintain an awareness of the significant scale at which substances emitted by Showa Denko have caused damage to the victims and residents of neighboring areas through contamination of the Agano River, and are committed to collaborating with the Japanese government as well as local governments in order to cope with this issue with sincerity, and provide solutions in accordance with the Act on Compensation, etc. for Pollution-related Health Damage and other relevant laws and regulations.

Measures to prevent soil and groundwater pollution

On occasions such as changes in the uses of plant sites or soil removal, the Showa Denko Group undertakes surveys and other measures in line with the Soil Contamination Countermeasures Law and local government regulations.

In October 2020, at our aluminum specialty components production base in Kitakata City, Fukushima Prefecture, it was revealed that the content of fluorine and other substances in underground water exceeded the regulatory standards on the premises as a result of past operations. In response, we decided to implement environmental measures at the site in line with the Soil Contamination Countermeasures Act.



Toward the future

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[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Use of Sustainable Resources

Basic ideas and policies

The Showa Denko Group promotes the 3Rs (Reduce, Reuse and Recycle) and enhances the businesses that contribute to a recycling-based sustainable society, such as turning plastic waste into a material for ammonia and manufacturing graphite electrodes that are necessary for the recycling of iron scrap. We also recognize water shortage as a global issue and are working to make effective use of water and reduce water use across the Group.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds “Use of Sustainable Resources” as one of its material issues (materiality) and set the following KPI: Continue to reduce the use of water at all sites in consideration of their respective situations.

* The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

Initiatives for water resources

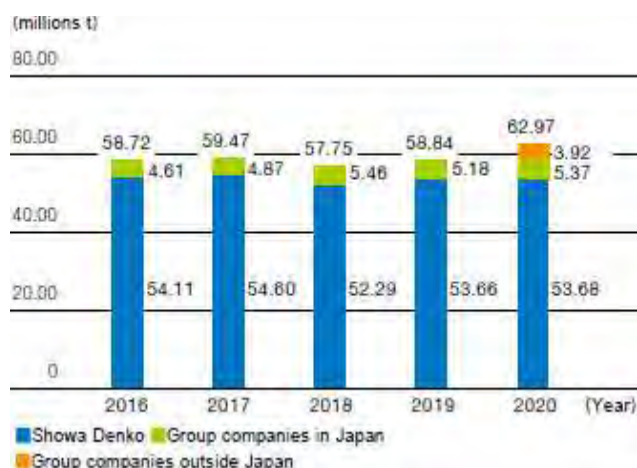
The Showa Denko Group has made targets for water resources as part of its Responsible Care Action Plan. We are fostering the effective use of water and reduction of its use at each of our sites in consideration of their individual business features. We are also working to maintain and increase the quality of water discharged from the sites. In particular, at our sites located in areas prone to water shortages (water stress), we proactively engage in dialogue with local stakeholders to make efficient use of water for

water conservation. Communities neighboring the Higashinagahara Plant are exposed to high water stress, making it difficult to secure water sources for firefighting. In response, we have had dialogues with officials of the prefectural government to obtain the prefecture's approval for those communities to use water from the plant's Toishigawa Kyu-suiso water tank for firefighting purposes.

Also, for the Asahi Dam owned by the plant, we concluded an agreement to prevent Agano River flooding with the Hokuriku Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism to prepare against the risk of flooding posed by typhoons and linear rainbands, which Japan has frequently experienced in recent years. We are thereby helping the national government enhance its anti-flooding measures. In the future, we will set our own water use targets on a medium- to long-term basis based on a detailed examination of water-related risks in the geographical areas where we are conducting operations and will announce the actual results achieved against the targets.

■ The amount of water used (53 sites)

✕ Excluding Showa Denko Materials



■ Wastewater volume (47 sites)

✕ Excluding Showa Denko Materials



TOPICS **Efforts made by the Tokuyama Plant for water saving: Collaborating with other organizations to reduce water**

The Tokuyama Plant of Showa Denko K.K. has been working to reduce water consumption in collaboration with other companies, in response to the annual request for voluntary water conservation made by the council of industrial water users in the Shunan district. Regardless of the request, the plant is committed to saving more water



■ Tree thinning

and monitoring seasonal changes in water temperature and the operational status of plant equipment. The amount of water saved differs by year, but in 2020 the plant achieved a roughly 34% reduction in water use (relative to the volume of water contracted to be supplied).

Moreover, employees of the Tokuyama Plant participate in a local volunteer activity conducted for forest and water management. The activity is designed to help participants deepen their understanding of the water source protection and global warming prevention functions provided by forests and to foster forestation and the appropriate management of forests as a voluntary initiative. It is conducted twice in fall by employees of companies located in the Shunan district and their families. (In 2020, the activity was not held due to the COVID-19 pandemic.)



Toward the future

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Prevention of Pollution

The Showa Denko Group deals with chemical substances that impact the global environment in its businesses. For various environmental risks posed by waste, water/air/soil pollution, and noise and vibrations, we should take responsibility by building and maintaining a strict monitoring system and an effective environmental risk management system across our supply chain. By minimizing and continuously reducing the release of hazardous substances, waste and pollutants to the environment, we will contribute to the creation of a sustainable society.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds “Prevention of Pollution” as one of its material issues (materiality) and set the following KPI: Continue to reduce the use of water at all sites in consideration of their respective situations.

By 2030 achieve the following across Group companies in Japan:

- (1) Maintain the final landfill rate of industrial waste at 0.5% or lower
- (2) Increase the plastic waste effective utilization rate to 75% or higher
- (3) Reduce the discharge of chemical substances to 360 tons or below

* The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

1. Zero emissions

The Showa Denko Group defines “zero emissions” as follows: the proportion of waste sent to final landfill is 1.0% or less of total waste generated. Aiming to achieve zero emissions as the entire Group, we made efforts and were able to achieve the target in 2015. Subsequently, the entire Group’s final landfill rate was reduced to 0.3% after 2016. The Group then set a stricter target in 2020: maintain the final landfill rate at 0.5% or less. We foster the effective use and recycling of materials and continue to inspect our contractors for intermediate treatment and final disposal of waste to confirm that they treat and dispose of our waste properly.

Results of KPI

■ Final landfill rate of industrial waste at Group companies in Japan (34 sites)

Excluding Showa Denko Materials



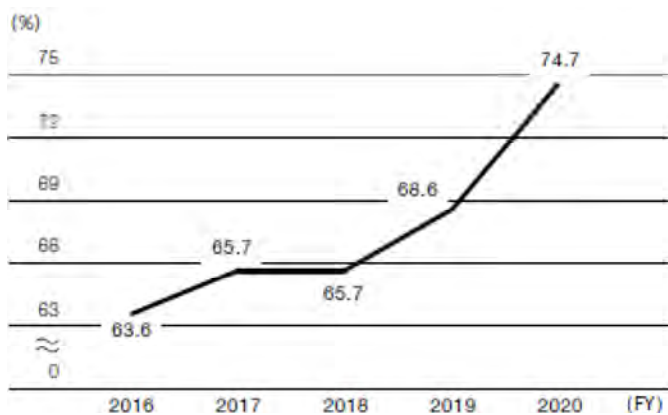
2. Effective use of plastic waste

In order to contribute to solving the problem of ocean plastic waste, which is emerging as a new global issue, and the creation of a low-carbon economy, we will foster the effective use of plastic waste (as an alternative to simple incineration or landfilling). By promoting sorting as well as by fostering material/chemical/thermal recycling, we will increase our plastic waste effective utilization rate to more than 75% by fiscal 2030.

Results of KPI

■ The plastic waste effective utilization rate at Group companies in Japan (32 sites)

✕ Excluding Showa Denko Materials



3. Reduction of the release of chemical substances

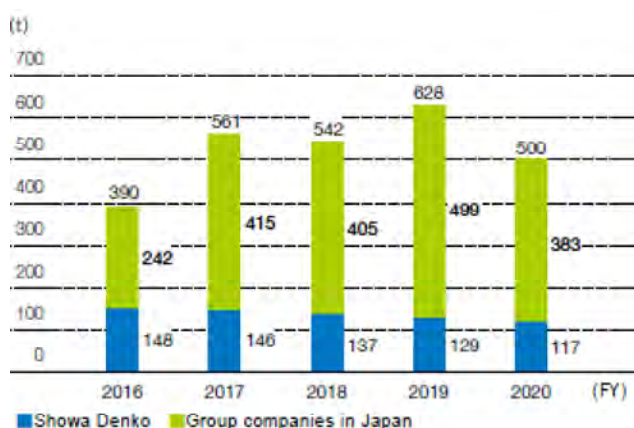
As a chemical manufacturer, the Showa Denko Group is striving to reduce the release of chemical substances to the environment, including the substances regulated by the Japanese Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (“PRTR law”), substances included in the target of voluntary surveys by the Japan Chemical Industry Association and volatile organic compounds (VOCs). By improving the related processes and equipment and installing devices such as equipment to incinerate exhaust gas, we plan to reduce the release of these substances to 360 tons or below by fiscal 2030, excluding an increase in the release amount due to an increase in the number of chemical substances regulated under the PRTR law following its revision.

Results of KPI

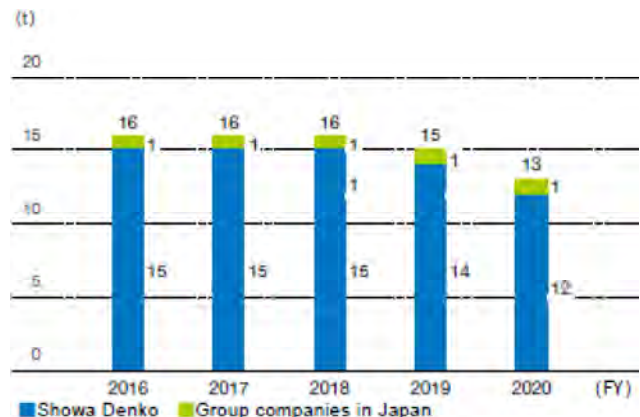
■ The discharge of chemical substances at Group companies in Japan (33 sites)

✕ Excluding Showa Denko Materials

■ Into air



■ Into water



We discharged no such substances to soil.

As for PCB waste, we regularly check the status of stored PCB waste for appropriate management by using our PCB control checklist. We are also replacing equipment containing PCBs with alternatives that do not contain the substances and commission the disposal to professional companies in a planned manner.

For PRTR law-regulated substances and substances that are discharged in large annual amounts, we will continue to make reduction plans for each of our sites and implement intensive measures for the reduction. We will also check and evaluate the impact that the substances have on areas around our sites and work to reduce the discharge while engaging in risk communication with local residents and government bodies to deepen mutual understanding.



Toward the future

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Efforts for Preservation of Biodiversity

Basic ideas and policies

In order to pass down to the next generation the beautiful scenery and rich natural resources provided by ecosystems, the Showa Denko Group will make efforts for biodiversity conservation based on the following policies.

- Evaluate and reduce the impact of the Showa Denko Group's business activities on biodiversity

- Work to restore threatened biodiversity

- Implement measures through conservation and cooperation with stakeholders

We will work for biodiversity conservation in collaboration with stakeholders, including governmental agencies and regulatory authorities, giving our support to the Initiative based on the Declaration of Biodiversity by Keidanren and joining the Japan Business and Biodiversity Partnership* .

We also regard the issue of ocean plastic waste as one that we must address with leadership as a chemical manufacturer. Accordingly, we joined the Japan Initiative for Marine Environment (JaIME), which was launched in 2018, and have been discussing the measures to be taken, compiling and sharing information, and conducting awareness-raising activities for developing countries in Asia in cooperation with other business associations.

* Japan Business and Biodiversity Partnership: A multi-stakeholder biodiversity initiative that consists of business entities which endorse "Action Policies of Japan Business and Biodiversity Partnership" and are implementing or planning to implement one or more actions among them, and economic organizations, NGOs, researchers, local/national governments and other public organizations which support those business entities' biodiversity initiatives.

Activities in 2020

We have included firm-wide biodiversity conservation activities in the target of the RC action plan. Specifically, we have set a three-year plan for 2019 to 2021, under which we aim to make measurable achievements by conducting business activities in consideration of biodiversity and implementing initiatives that contribute to environmental conservation.

Based on this company-wide target, we are making plans for each of the sites to ensure the appropriate maintenance and management of greenspaces, reduce wastewater as part of their proactive environmental impact reduction measures, and conduct environmental conservation activities in consideration of the features of the sites. In 2020, we were unable to implement all of the plans due to COVID-19, but we planted trees, promoted rooftop greening and conducted cleanup activities in the areas surrounding our sites.



The Omachi Plant, Carbon Division of Showa Denko K.K., uses local water resources in its business activities. Plant personnel conducted a cleanup activity in cooperation with members of the local fishing cooperative association, which kindly supports the operations of the plant's hydroelectric power station. They clean Lake Kizaki and Lake Aoki and Lake Nakatsuna every year.



Wastewater from the Isesaki Plant of Showa Denko K.K. is discharged via the Nira River to the Tone River, meaning the plant is somewhat reliant on the Nira River. Accordingly, plant personnel have been participating in the local Nira River cleanup group since 2013.



The area surrounding the Higashinagahara Plant includes habitats for rare animals, such as the Japanese serow, which is designated as a national natural treasure. This fact makes us more strongly recognize the importance of conducting our business activities in consideration of biodiversity.



Toward the future

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Employees' Safety and Health

[Safety and health management](#)

[Occupational health and safety](#)

[Equipment safety](#)

[List of safety-related awards](#)

Safety and health management

Basic ideas and policies

The Showa Denko Group gives first priority to safety, and we deem it essential to ensure safety as a precondition to remain “qualified as a manufacturer,” regarding safety as the basis for our business continuity. In order to eliminate occupational accidents at our sites for the sake of all who work there, we are urging all related parties, including employees of the Showa Denko Group as well as employees of our partner companies and suppliers, to adopt our ideas about occupational safety and health as expressed in Our Code of Conduct. Also, focusing on preventing occupational accidents, we are enhancing our risk assessment system and fostering activities to reduce related risks.

For employees to work vigorously with peace of mind, they need to attribute importance to their own and their families' health. Accordingly, we will build appropriate systems and implement various measures to raise their health awareness and help them maintain and promote their health.

Promotion system

The president of Showa Denko K.K. assumes ultimate responsibility for the Group's occupational safety and health. Under the leadership of the president, each of the divisions and sites conduct safety and health management activities, receiving support

from the administrative departments of the head office. At weekly safety meetings, the Management Committee is briefed on safety-related activities of the Group and gives relevant instructions, which will be conveyed to the divisions and sites for implementation.

The Labor-Management Committee, which is composed of the president and other executives as well as representatives of the labor union, meets annually to discuss issues related to occupational health and safety. Also, in line with the Industrial Safety and Health Act of Japan, each of our sites has a safety and health committee and other organizations in place to conduct safety and health activities for employees through a concerted effort by labor and management, such as discussing the related issues and conducting workplace patrols.

We have also acquired certification for occupational health and safety management systems at each of our sites.

Occupational health and safety management systems

Educational system

We deem it urgently necessary to increase the safety sensitivity of managers, supervisors and workers to eliminate industrial accidents and to prevent the retirement of experienced employees and replacement of staff from resulting in any degradation in safety and environmental management at our sites. Accordingly, we make and implement annual safety education plans for each of our sites and check their learning levels. We also give support for the educational curriculum of our partner companies in a planned manner toward the elimination of industrial accidents at those companies. The following shows the details of the safety-related collective training held by the head office. Participants from each of the sites make use of what they have learned in the training for the safety activities conducted at their own workplaces. Since the middle of 2020, we shifted from collective training to online training due to COVID-19 and have been providing education in this new format.

■ Number of participants in the occupational health and safety training held by the head office in 2020

Date	Name of training	Target	No. of participants
February	Seminar to increase physical function to prevent falls at workplaces	Environment & safety managers and others	10
April	RC training for new employees(Online training)	New employees	62
October	Labor-management safety training seminar (Online training)	Manufacturing department managers of the sites and head of the labor union's branches	66

Occupational health and safety education—Example (1)

Sharing good examples across the Group at a labor-management safety training seminar

The Showa Denko Group holds a labor-management safety training seminar every July, specifically around National Safety Week. In 2020, however, the seminar was postponed due to COVID-19. We finally held it online in October 2020 through the use of Microsoft Teams. We have been holding the seminar since 2003 with a view toward creating “safety first” workplaces based on labor-management collaboration. In the online seminar, a total of 66 people participated, including executives from the labor union and heads of manufacturing departments and those in similar positions from the company. The seminar was held in two parts as follows.

Part 1: Presentation of cases in which activities were promptly conducted by referring to the good examples shared in the previous training seminar

- (1) Introduction of a “Why” analysis for accidents/critical close calls at the Isesaki Plant of Showa Denko K.K.
- (2) On-site indication of accident examples at the Kawasaki Plant of Showa Denko Gas Products Co., Ltd.
- (3) Organization of “toolbox” meetings for regular and irregular operations at the Oyama Plant of Showa Aluminum Can Corporation

(4)

Utilization of the results from examining similar accidents, and prompt accident reports for workplace risk assessments at the Tatsuno Plant of Showa Denko K.K.

Part 2: Discussion on the culture of safety (communication)

Lecture on the basic knowledge about the safety foundation and culture, and self-diagnosis regarding the ability to speak up and listen to others

Group discussion and presentation on the improvement of in-house communications

In Part 1, four plants made presentations about how they had implemented measures at their sites in reference to the activity examples introduced at the previous year's training seminar. In Part 2, participants conducted a self-diagnosis of their ability to listen carefully to others and communicate what they have to say as a non-technical skill. Then, they shared information about communication-related problems faced at their workplaces and measures devised on-site to promote communication, thereby making the seminar even more meaningful.

Occupational health and safety education—Example (2)

Seminar to increase physical function to prevent falls at workplaces

In February 2020, we held a fall prevention seminar for environment & safety managers at the head office of Showa Denko K.K. This event was organized in light of the fact that the number of occupational accidents, including falls, involving elderly workers had been on the rise. Participants deepened their understanding of the importance of preventing occupational accidents exacerbated by aging, which lowers physical function, and learned how to self-check their physical abilities through a simple physical test.



Training seminar for mental health line care

The Oyama Plant of Showa Denko K.K. has been holding lectures to help employees maintain their mental health by inviting

lecturers from outside the company. In 2020, the plant held a seminar for managers on “assertion” skills for expressing oneself while respecting others, with an eye toward helping them to understand the importance of listening to and communicating with their subordinates for line care. It also held a seminar for non-managers to understand the importance of maintaining mental health through self-care and acquire related knowledge and communication/listening skills. A total of 134 people participated in the seminars. The plant will hold seminars in 2021 and 2022 as well so that all plant employees can participate in them.



Toward the future

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Consumer Safety and Health

Consumer safety and health protection

Quality assurance

Chemical substances safety

Consumer safety and health protection

Basic ideas and policies

The Showa Denko Group works to ensure the safety of chemicals and chemical products by using a risk-based method, not only by checking the safety of its products during the stages of development, design, marketing, manufacture, sales and after-sale service, but also by monitoring how customers use and dispose of the products. By this method we identify and reduce risks for various product-related items.

We conduct these risk assessments with a focus on (1) ensuring compliance and (2) promoting product stewardship.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds "Consumer Safety and Health Protection" as one of its material issues (materiality) and set the following KPI: Reduce the number of complaints about quality (calculated based on Showa Denko's criteria) to 40 or below for Group companies in Japan by 2030

※ The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

Results of KPI

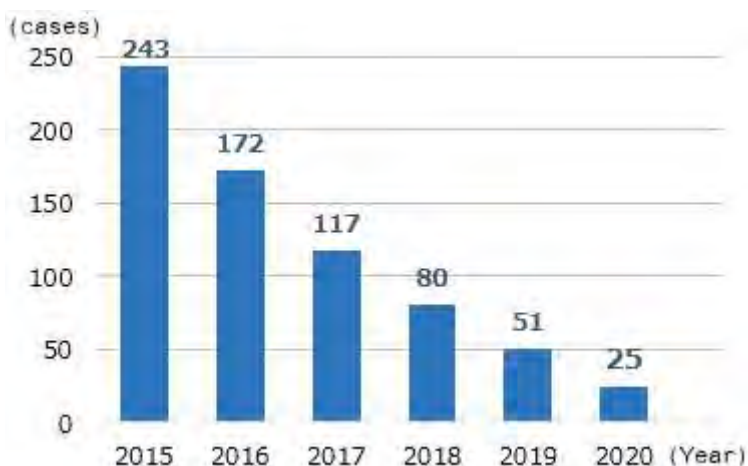
We conducted activities to attain the target of halving the number

of complaints about the quality of our products relative to 2015. In 2020, we reduced the number of complaints to one-tenth of that in 2015, and 50% of that in the previous year by implementing measures to prevent a recurrence of similar complaints based on the analysis of the fundamental causes of complaints and by learning and sharing lessons from the complaints made to the Showa Denko Group.

In the future, we will revise the numerical target in consideration of the integration of Showa Denko Materials.

■ Trends in annual numbers of complaints
(Group companies in Japan)

✕ Excluding Showa Denko Materials



(1) Ensuring compliance

The Showa Denko Group constantly monitors regulatory trends for chemical substances in Japan and abroad to ensure compliance with the laws and regulations of each country in a proactive manner. The head office and each of the sites cooperate with one another in a close manner and share information to prevent noncompliance.

Also, as the basic rules for product safety activities, we set the Quality Assurance and Quality Control Rules ("Rules") within the company. In 2020, we set our vision for quality assurance & management and for product safety, and fully revised our quality assurance and management rules based on the vision. We will work to provide even safer and more reliable products and services and solutions beyond the framework of the manufacturing industry.



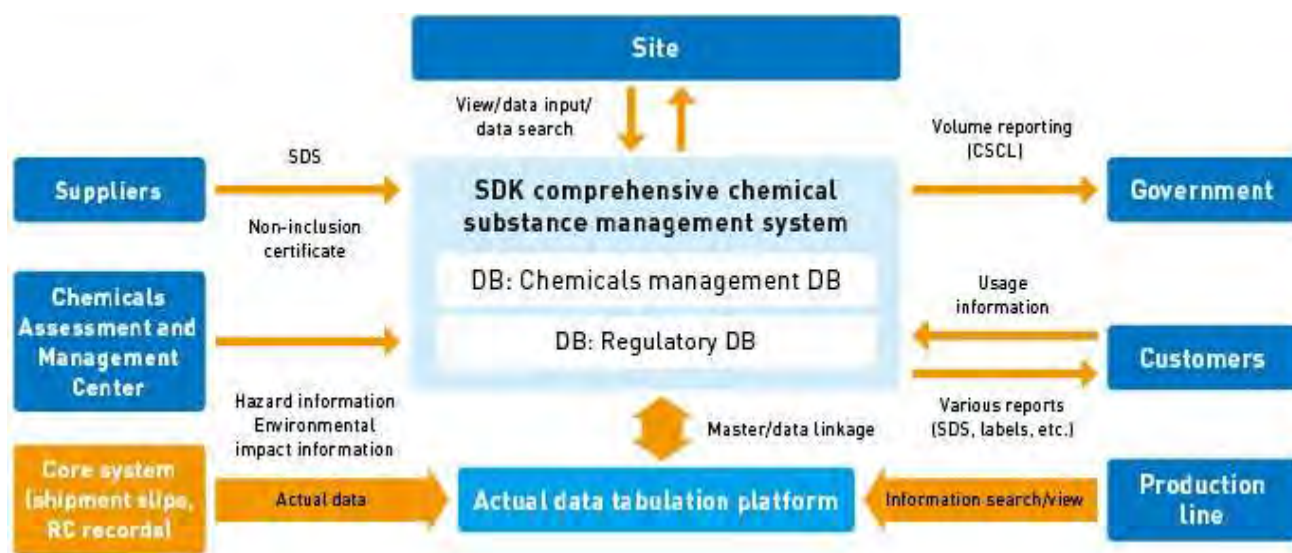
(2) Promotion of product stewardship

For the Showa Denko Group, “product stewardship” means to make product safety-related risk assessments in the development, design, manufacturing, sale, use and consumption stages of its products and disclose the assessment results to stakeholders as part of its effort for safety, health and the environment.

Based on this idea, we assess the risks related to our chemical products and manage the products in an appropriate manner.

Management system for product safety and regulatory information

As the basic infrastructure for the management of chemicals, we have built a comprehensive chemical substance management system for use within the Showa Denko Group. This system is composed of a database (DB) of information about chemical substances to be managed and another database of information about legal regulations on chemicals enforced in each country, and is equipped with functions that help employees to make effective use of the DB-stored information to perform their duties.



We manage information about raw materials of chemical substances, and our products in an exhaustive manner under the system. For each chemical substance, our Chemicals Assessment and Management Center collects extensive hazard and regulatory information and evaluates the collected information in a professional manner to ensure high information quality. Also, by updating the regulatory database in a timely manner and regularly reviewing the information stored in the database, we ensure the availability of the latest information. By making use of the functions of this system, which stores high-quality information in an exhaustive manner and provides the latest regulatory information, we efficiently and effectively deal with legal issues to ensure compliance.

For example, by making use of the search function to easily identify and list specific substances and products, we make appropriate responses to the revision of laws in each country. Further, we manage production/import volume and provide necessary notifications in Japan and abroad by linking the tabulation function of the system with another in-house core system. We also make use of the function to create safety data sheets (SDSs) to create and submit SDSs in line with laws and regulations.

As chemical substance-related laws and regulations are now being enacted and revised in an accelerated manner across the world, we will enhance and expand the management system to ensure our own compliance and also fulfill our responsibility as a member of the supply chain.

Consideration for animal testing in safety assessment

To develop useful chemicals for society and ensure appropriate control of chemicals, we need to conduct various types of safety assessment as required by laws and regulations. The Showa Denko Group respects the “3Rs principles” in animal testing: Replacement (using alternative methods); Reduction (reducing the number of animals used); and Refinement (relieving pain). We are therefore working actively to introduce new evaluation technologies such as computer-based toxicity prediction assessment (in silico) and alternative test methods (in vitro) such as the use of cultured cells. We are conducting safety assessment using these new technologies. Meanwhile, it is extremely difficult to complete all safety assessment without any animal testing. Thus, we are entrusting animal testing to external institutions that are operating in accordance with Act on Welfare and Management of Animals.



Toward the future

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Labor Practice and Diversity

Development of human resources

Creating a comfortable workplace

Promotion of diversity and inclusion

Development of human resources

Basic ideas and policies

The Showa Denko Group deems it important to globally employ human resources and develop them into individuals who can demonstrate their abilities for the entire Group, so that it can globally expand its business and innovate each of its businesses and technologies.

Training system

Showa Denko annually provides individual employees with the training that is suitable for their current roles and expected careers based on a level-specific training system that focuses on business literacy and career development. We also offer correspondence courses and e-learning programs to support employees' self-development. In addition, we have a program to develop business and corporate reform leaders, in which candidates for the Showa Denko Group's future top management receive training in a step-by-step manner. Specifically, we have been offering the Management Leader Course (MLC) as a selective training course for assistant departmental managers and section managers since 2001, and the Rising Stars Initiatives (RSI) as a selective training course for acting section managers since 2015.

Moreover, in 2019, we launched the Showa Denko Global Executive Development Program (SGED) for the globalization of human resources, in which excellent human

resources selected from Group companies in Japan and abroad receive education as the next generation of business executives. Moreover, in 2019, we launched the Showa Denko Global Executive Development Program (SGED) for the globalization of human resources, in which excellent human resources selected from Group companies in Japan and abroad receive education as the next generation of business executives.

Furthermore, in 2021, through the use of an educational portal site, we started a program to help all employees, not just those selected, to demonstrate abilities that are defined as “core competencies” for the Group. We are implementing this competency education program at our bases around the world. We are also proactively globalizing Japanese human resources.

Specifically, we provide them with opportunities to conduct research or acquire an MBA at overseas universities, receive practical training at overseas subsidiaries to become facilitators for the globalization of our organizations in Japan, receive training before being transferred to our bases outside Japan, and obtain language training with financial support.

Personnel system(MB-OJT system)

Personnel system Showa Denko is operating a personnel system that values growth and development. Known as the “MB-OJT system,” it incorporates OJT elements into the conventional management-by-objectives (MBO) framework. In the face-to-face discussion between employees and their supervisors called “commu-cussion,” employees and supervisors develop a shared understanding of the employee’s targets and performance appraisals and discuss what has and what has not been achieved as well as what lessons were learned for the future. This helps individual employees to achieve self-growth and development.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds "Development of Human Resources" as one of its material issues (materiality) and set the following KPI:

By 2030:

- (1) Increase the number of participants in MLC and RSI training for the next generation of leaders in Japan to at least 20 annually (*MLC and RSI training will be provided alternately each year)

- (2) Increase the percentage of non-Japanese participants in the Group's managerial human resource development program to that equivalent to the Group's overseas sales ratio (at least 200 people over a decade from 2020 to 2029)
- (3) Achieve a proportion of female managers that is 10% of the total number of managers (section managers and those in higher positions) in Japan (on an unconsolidated basis)

✕ The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

1. Human resource development (in Japan)

In 2020, we implemented the Rising Stars Initiatives (RSI), which we had launched as a selective training course to develop the next generation of business leaders in 2019, for the first time online and completed the course up to the stage of proposing solutions to the management team. As for the Management Leader Course (MLC) launched as a selective training course to develop the next generation of management leaders, we postponed its organization due to COVID-19 and because we decided to hold it jointly with Showa Denko Materials. For the Showa Denko Global Executive Development (SGED) program to develop the next generation of management executives, we are continuing to provide online training and interviews.

The Rising Stars Initiatives (RSI) as a selective training course for acting section managers

Since 2015, we have provided the RSI training four times. In the last training held in 2019, a total of 20 people participated, selected from among acting section managers.

In September 2019, 20 employees selected from acting section managers and those in equivalent positions participated. As the first (kickoff) session of the training, which lasted about eight months, participants went to a two-night, three-day team-building camp on an uninhabited island located in Suo-Oshima Town in Yamaguchi Prefecture.

Subsequent sessions comprise an MBA program in which the participants learned about management strategies and marketing research, worked on specific themes in four teams, and finally made presentations to the management team.



Camping on an uninhabited island

2. Development of excellent non-Japanese human resources

We will foster the introduction of a fair personnel system at a global level, while continuing to implement the SGED program. In 2020, 12 people participated in the program, with four being local staff from overseas subsidiaries. The competency education program, which we newly started, is designed to help subordinates identify the business challenges they face jointly with their managers, choose the competencies necessary to meet the challenges from among the core competencies defined by Showa Denko and acquire them through actual business operations. Through the educational portal site used for the program, employees can receive similar education from across our sites, including those outside Japan. We will thereby provide many employees with high-quality education in an efficient manner, which will lead to an increase in the number of employees who can participate in the SGED program.

The Showa Denko Global Executive Development Program (SGED) for the globalization of human resources

SGED is a training program which is implemented by selecting participants, assessing their past achievements, giving them feedback about the results, having them make self-development plans, providing them with training, and encouraging them to implement the self-development plans at their workplaces. Led by divisional managers and others in

charge of human resource development, selected participants receive training and acquire broad knowledge, beyond the scope of their career experiences, one-to-one from their mentors, who serve as directors or in equivalent positions from business divisions other than those to which the respective participants belong.

In the face of the COVID-crisis, we are continuing to develop the next generation of leaders through IT-based interviews and training seminars.

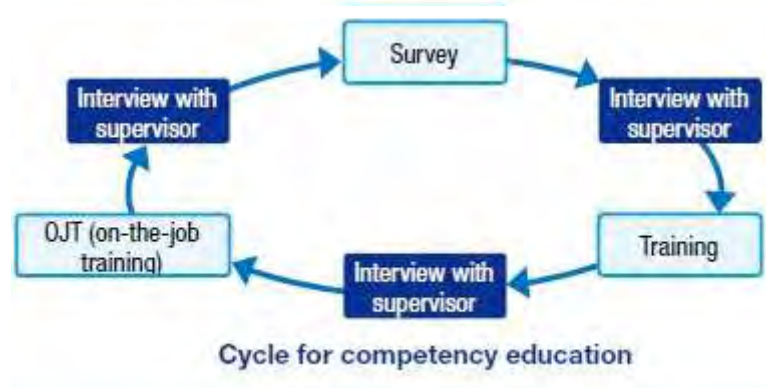


President Morikawa giving instructions to participants

Development of next-generation leaders and leadership competency*

Showa Denko provides selective training courses to develop individual employees who may be future candidates for senior management positions, with a major focus on the development of MBA elements and leadership competency. For the

competency development, we started to use online programs in 2021 to increase the number of employees who can participate around the globe. We will expand the scope of application of competency development to leaders other than those selected, while providing more effective leadership development programs to those who are selected.



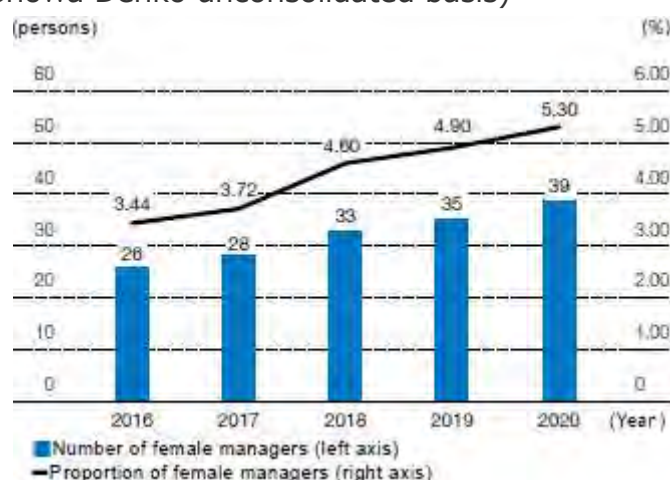
* Competency: Possession of behavioral characteristics that allow one to demonstrate outstanding results in one's work or role

3. Empowerment of female employees

We aim to increase the proportion of women to 30% or more of the total number of career-track employees, and continuously hold career support seminars for mid-level career-track female employees. Moreover, we are improving the work environment to enable female employees to achieve compatibility between their work and life events, such as marriage, childbirth and childcare.

Related link [Promotion of Diversity and Inclusion](#)

■ Number and proportion of female managers (section managers and those in higher positions/ Showa Denko unconsolidated basis)





Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Participation in Community Activities

Basice ideas and policies

The Showa Denko Group will proactively participate in community activities with an eye to becoming a “social contribution company,” as stated in the Group’s CSR Policy. We will also deepen mutual understanding with local residents through sincere dialogue and will collaborate with them to solve local issues for the sustainable development of their communities.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds "Participation in Community Activities" as one of its material issues (materiality) and set the following KPI:

"At each site in Japan, plan activities to contribute to the local community according to the needs of the community and continue voluntary operation"

✕ The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

Resluts of KPI

We collect information about social issues recognized by local stakeholders by communicating with them and implementing measures to solve these issues. Specifically, based on past activities conducted by our sites and affiliated companies, we implement the following measures according to the situation of each local community:

- (1) Identify the issues through communication with local communities
- (2) Set the medium- to long-term vision and priority themes (toward 2025)
- (3) Formulate and implement annual action plans

In 2020, we were unable to conduct many of the planned activities at our sites due to COVID-19. In 2021, we will formulate action plans that we can implement even in the face of the COVID-19 crisis toward contributing to the solutions for local issues.

Results of our local and social contribution activities

■ 2020 Results of our local and social contribution activities (SHOWA DENKO and the group companies in Japan *Excluding Showa Denko Materials)

Details of the activities		Results
Education (Developing Human Resources to Lead the Next Generation)	Dispatched employees as instructors	7 cases; Dispatched 124 man-hours
	Accepted interns	25 events implemented; Accepted 56 interns
	Offering guided plant tours (For students)	346 persons
Improvement of the environment around the worksites	Cleaning activities	117 cases; Conducted for 1,017 man-hours in total
Promotion of arts, culture and sports	Cooperation for and granting subsidies to arts, culture and sports: spend	Spent 2,809,000 yen
Exchange with local communities	Events	1,915 residents participated

Details of the activities		Results
	Facilities rented	Rented for 1,774 hours in total
	Offering guided plant tours (For Local communities and authorities, and the families of employees)	346 residents visited plants
Community development and social welfare	Harmonizing with local economy: spend	Spent 1,769,000 yen
	Aluminum can recycling: proceeds *Donated to a range of facilities and organizations, including local social welfare councils	1,225,061 yen
	Collaborating with NPOs and local organizations	Spent 574,000 yen
Social Contribution Expenditures	Social Contribution Expenditures including above	43,089,000 yen

Local and social contribution activities—Example(1) **Conducting an aluminum can recycling activity with the participation of all employees**

The Showa Denko Group has been continuously conducting an aluminum can recycling activity with the participation of its employees as well as employees from partner companies.

A part of the proceeds from this activity is donated to various facilities and organizations, including local social welfare councils, welfare facilities and circles of people with disabilities, and the activity has been established as one of the regular social contribution activities conducted by the Group.



Donation to the local social welfare council (by the Omachi Plant)

Local and social contribution activities—Example(2) **Providing support to the Sakuranbo Marathon**

In order to promote local culture and sports, Showa Denko HD Yamagata K.K. annually provides special support to the Sakuranbo Marathon. This event is held in Higashine City, which is famous for its fruit production, as the largest marathon event in



Volunteers working for the Sakuranbo Marathon

Tohoku. Moreover, individual employees support management of the event, including providing runners with towels cooled by ice water. In 2019, a total of 48 employees from the company worked with employees from neighboring companies as volunteers for the event, and many employees also participated in the event as runners themselves.(Cancelled in 2020 due to the COVID-19 pandemic)

Local and social contribution activities—Example(3) **Acquiring the right to name the stadium in Oita Sports Park**

The multi-purpose stadium in Oita Sports Park is one of the representative facilities of Oita Prefecture, where Showa Denko houses its Oita Complex as a central base for one of its core businesses. The stadium is used for a range of sports events, such as J. LEAGUE football matches. Showa Denko



Multi-purpose stadium in the center of Oita Sport Park named “Showa Denko Dome Oita

acquired the naming rights for the stadium from Oita Prefecture. As a result, the stadium was named “Showa Denko Dome Oita” in 2019, and will continued to be called by this name for five years until 2024. The fees for the naming rights will partially be used for the prefecture’s “partnership project,” through which we can make local contributions, promote local sports, and revitalize local communities.

Moreover, we decided to become a uniform sponsor for Oita Trinita from 2020, believing that the football club is making great contributions to local revitalization and sports promotion as an Oita-based football team belonging to the Japan Professional Football League (J.LEAGUE). We believe that providing support to the team will in turn help us to improve our CSR activities.



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Supply Chain

[Sustainable procurement](#)[“White Logistics” movement](#)[Access to essential services](#)

Sustainable procurement

Basic ideas and policies

We are currently facing a range of social issues, including environmental problems such as the depletion of resources and energy issues as well as problems related to human rights, corporate ethics and compliance. Through its business activities and the provision of products and services, the Showa Denko Group has been striving to contribute to the solution of these social problems and to the creation of a society where affluence and sustainability are harmonized. On the other hand, our business activities cover many fields, and our supply chains extend into various industries. Accordingly, in order to promote our social contribution activities, we need to gain the understanding and support of all stakeholders of the Group. Based on this recognition, we established the Showa Denko Group’s CSR Procurement Guidelines, which we share with our business suppliers within and outside Japan (including contractors or agents) so that we can increase each other’s corporate value through compliance with the guidelines.

[About Us; Promotion of CSR procurement](#)[Showa Denko's CSR procurement guidelines](#) (170 kB)

Activities in 2020

Self-assessments

Each year we ask about 400 business suppliers to fill out the self-assessment

questionnaires

regarding the Showa

Denko Group's CSR

Procurement Guidelines

and thereby self-check

their CSR activities. We

ask major business

suppliers to do it once

every three years and

all new suppliers to do it

when starting business

with us. In 2020, the total response rate came to 92%. We changed the self-

assessment questionnaire items in 2018, and now our business suppliers perform a self-

assessment regarding the following 9 items both within and outside Japan: promotion of

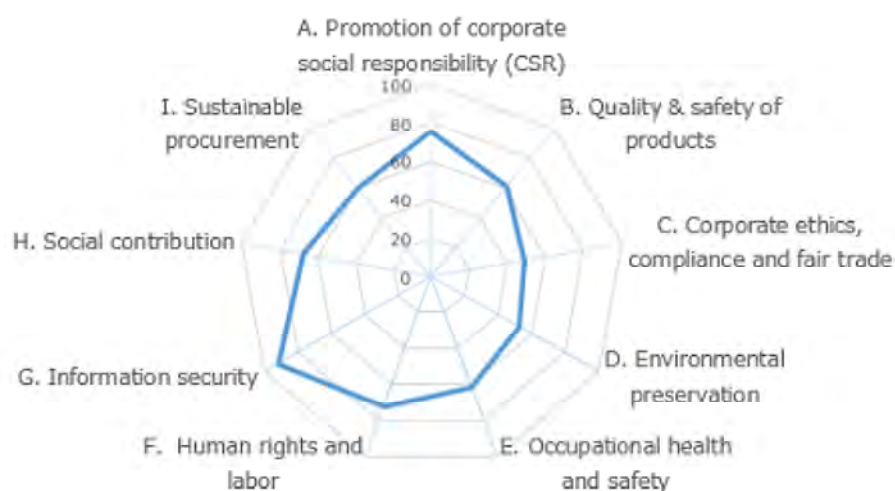
corporate social responsibility (CSR) as a whole; quality & product safety; corporate

ethics, compliance and fair trade; environmental preservation; safety & health of

worksites; human rights & labor; information security; social contributions; and

sustainable procurement.

- Results of CSR self-assessments made in 2020 (average score by item)



CSR visits

Since we launched this initiative in 2010, we have visited a total of 504 suppliers. We engage in dialogue with the suppliers to check their CSR activities and introduce them to some examples of our excellent CSR activities. In 2020, we visited 41 suppliers and found no

- Number of CSR visits (Showa Denko and Group companies)



serious cases of human rights infringement or noncompliance for these companies. If a noncompliance is detected concerning a supplier, we will discuss with the supplier and implement necessary measures for early improvement. We will also review our business relations with suppliers who we think do have a serious negative impact on our business continuity. According to the level of negative impact that might be caused by a supplier, we will stop requesting quotes from and placing orders with the supplier for a certain period, reduce the trade volume, or cancel the sales contracts concluded with the supplier. We will decide whether to resume transactions with the supplier or not after our purchasing personnel check how the supplier has made improvements by interviewing the supplier and confirm that our concerns about the negative impact have been mitigated or eliminated.

Follow up

We scored the CSR measures taken by the suppliers who conducted CSR self-assessments and those to whom we made CSR visits. We clearly indicated to each their CSR level against the total average and industry average. We also sent feedback reports to all the suppliers who performed CSR self-assessments to give them advice for improvements.

■ Total average score for the 2020 CSR self-assessments and measures taken for improvements

Number of suppliers respondent: 355 companies, average score 67.3 points
(Sent a feedback report (including a comparison with the total average score and industry average score, and requests for improvements) to each of the respondent companies)

	Number of cases	Rate	Measures for improvements
50 and higher	292	82%	Requested improvements for the items for which problems were identified while working to further increase the scores for the items with high scores.
From 30 to below 50	56	16%	Requested improvements for the items for which problems were identified and proposed improvement measures. *Made visits as required to exchange views about each other's measures. Will check the status of improvements in the next round of self-assessments.

	Number of cases	Rate	Measures for improvements
Below 30	7	2%	Requested improvements for the items for which problems were identified and proposed improvement measures. *Made visits as required to discuss measures for early improvements. Will check the status of improvements in the next round of self-assessments.

Training of purchasing personnel

For CSR procurement, we deem it important to increase the awareness and improve the skills of our staff in charge of purchasing. Accordingly, we provide them with a range of training and study opportunities. For the educational activities, we provide learning on various themes, including the concept of compliance; laws such as those related to antimonopoly, subcontractors, customs and foreign exchange; the civil code and other regulations; and also our internal purchasing procedures and rules on approval authority. We thus help the purchasing personnel at our plants and divisions to improve their performance. In 2020, a total of 1,128 Group employees received training on purchasing.



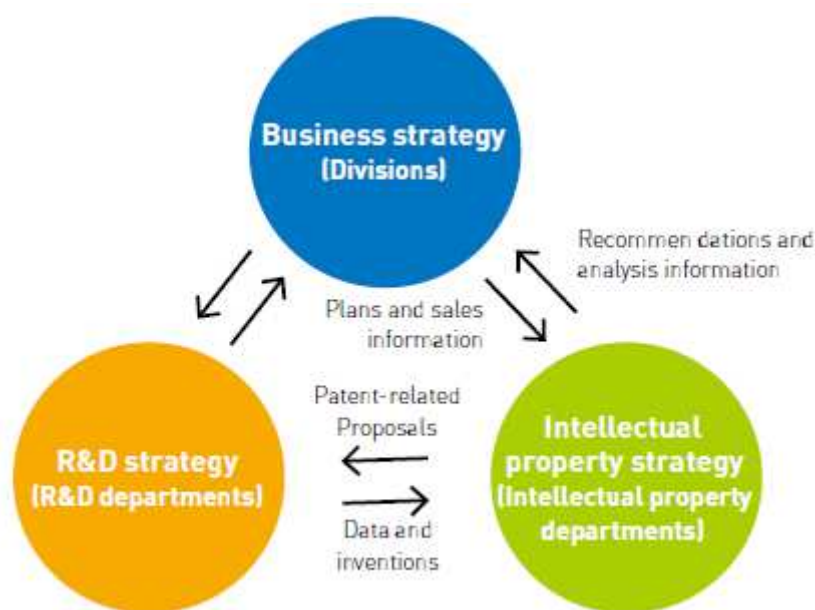
Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

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Protection of intellectual property

The Showa Denko Group regards its intellectual property strategies as one of its important managerial strategies, and formulates and implements the business, R&D and intellectual property strategies in an integrated manner. We also constantly work to build a robust and broad network of patents for our major business segments and important products developed by the Group, thereby maintaining our competitive edge.



Business, R&D and intellectual property strategies are mutually inseparable like the two sides of a coin.

Showa Denko shares information about the three types of strategies it employs closely and seamlessly between the three parties to ensure that they are aligned with each other.

Medium- to long-term target and activities in 2020

1. Building a global intellectual property network

We operate many of our businesses globally, and in order to support these businesses, we proactively file applications for intellectual property rights outside Japan as well. The global application rate (percentage of applications made outside Japan based on applications in Japan) has been at least 50% on average for the past eight years.

2. Enhancement of the intelligence function

Showa Denko makes use of the results of its intellectual property information-based surveys and analyses to formulate its research and business strategies. Specifically, we are utilizing the results not only to grasp the market and technology trends and provide solutions required by the market but also to search for new applications for our products. We will continue to enhance this intelligence function.

3. Establishment of a high-quality intellectual property portfolio

Robust intellectual property rights support robust business operations. In order to establish a powerful portfolio of patents, Showa Denko attributes importance to making high-quality patent applications while fostering new inventions and new patent applications to maintain its intellectual property at an appropriate level. In 2020, we filed more than 350 new patent applications, just as in the previous fiscal year. As a quality indicator for patent applications, we deem it important to maintain a high registration rate against the number of requests for examination, and we have been maintaining this rate as high as 80%.

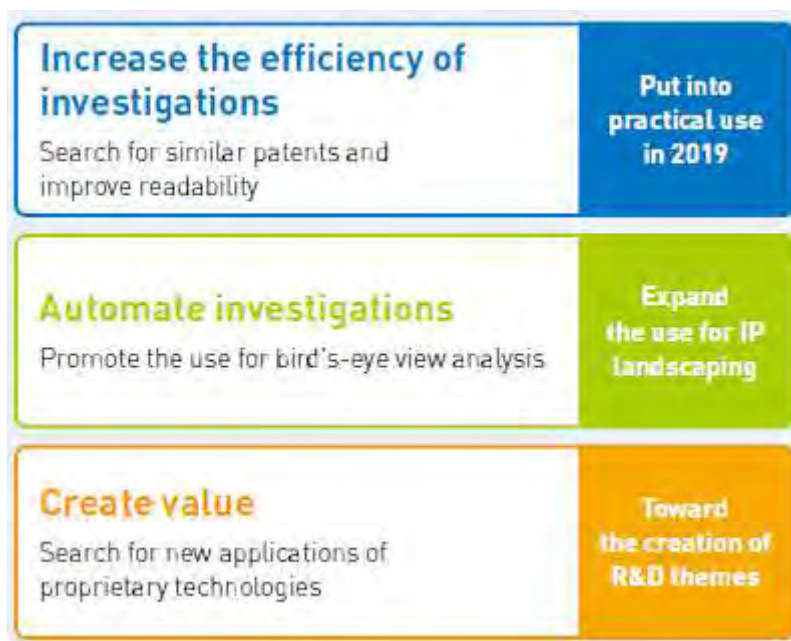
Other measures

Use of AI

Showa Denko has been proactively making use of artificial intelligence (AI) in the intellectual property field as part of its efforts to spread the use of AI across the company. By making effective use of AI, we will increase our research efficiency, reduce the risk of infringing upon the intellectual property rights of other companies, and more strategically conduct intellectual property-related operations to enhance the

competitiveness of our company. In 2020, as advanced measures to increase the efficiency of our intellectual property-related operations, we expanded the application of AI for the sorting of data in order of similarity for SDI* in Japan and made the “ai-SRT” patent interpretation support system, in which AI developed jointly with IBM Japan, Ltd. is used, operable in English in addition to Japanese.

We will make use of AI, mainly software originally developed by Showa Denko, to create new R&D themes and develop new product applications and will promote the advancement of these functions.



* Selective Dissemination of Information(SDI):System for the regular sharing of information about patent applications related to the company

Corporate Governance

[Corporate Governance Basic Policies \(Amended December 26, 2018\)](#) (115KB)

[Corporate Governance Report \(December 27, 2021\)](#) (980KB)

- ▼ Basic policies
- ▼ Policies and procedures of the Board of Directors in the selection of senior management personnel and the nomination of director and auditor board candidates
- ▼ Explanation regarding the selection of senior management personnel and the nomination of board candidates
- ▼ Criteria on the independence of outside directors
- ▼ Overview of Governing Bodies/Committees/Councils ▼ Board of Directors
- ▼ Board of Auditors ▼ Accounting audits
- ▼ Management Committee and R&D Committee ▼ Internal Audit Department
- ▼ Committees and Promotion Councils

Basic policies

Showa Denko continuously promotes corporate governance to ensure the soundness, effectiveness, and transparency of management, and to contribute enhancing its corporate value, thereby contributing to the sound growth of society and earning its full trust and confidence. To that end, it is essential for the Company to strengthen relations with its stakeholders, including shareholders, customers, suppliers, community residents, and employees. Based on the above, the Company has clarified its mission in

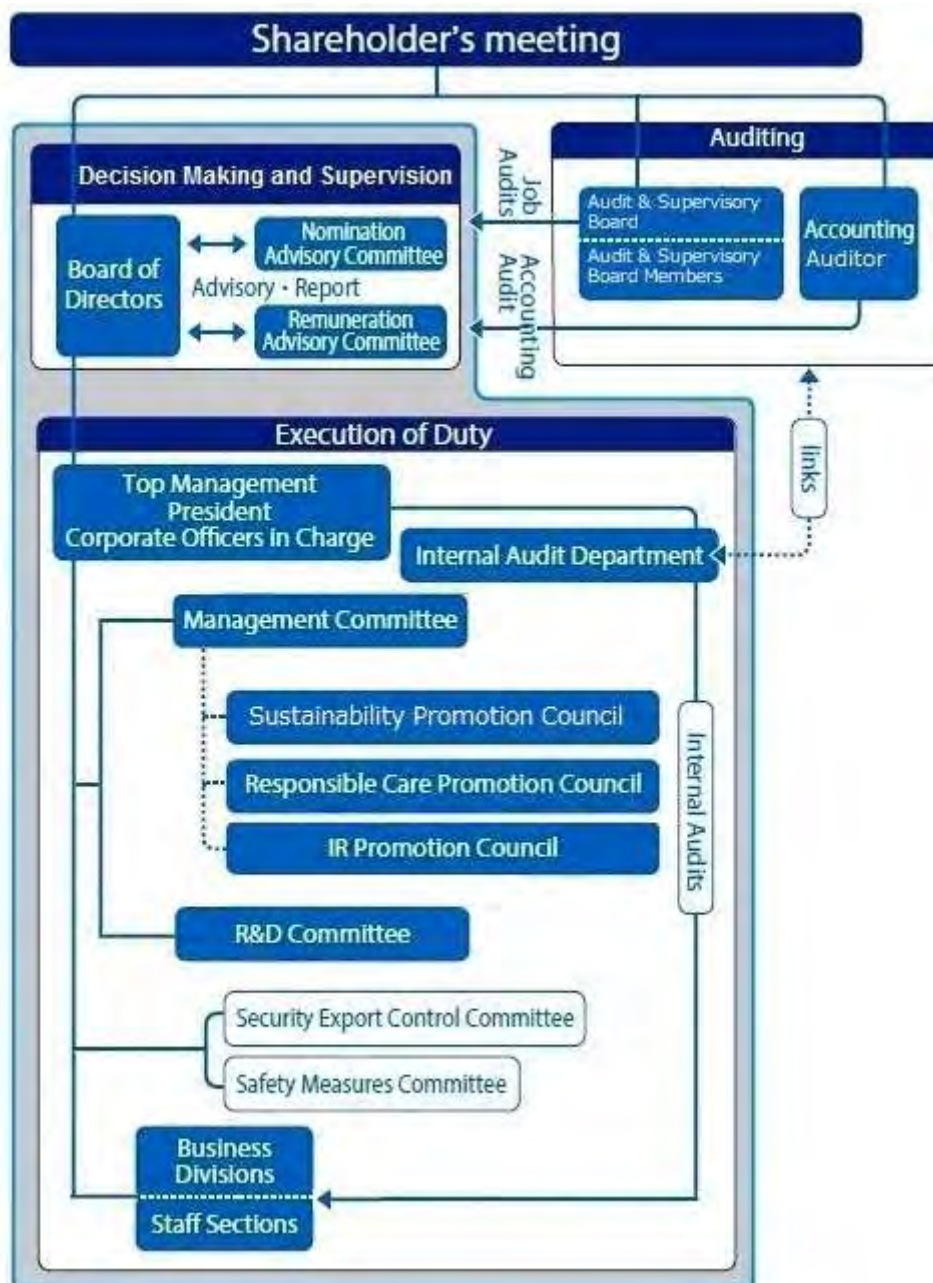
the form of Our Vision and Showa Denko is working hard to realize this Vision. Showa Denko includes “Decision-making process, structure” in its material issues and regards continuing the evaluation of the Board of Directors’ effectiveness and disclosing the results as a KPI for materiality.

Our Vision

Materiality and core tasks

Showa Denko formulated the Corporate Governance Basic Policies in line with Japan’s Corporate Governance Code and discloses the policies at its website.

■ Corporate governance structure



Implementation status of corporate governance measures

Policies and procedures of the Board of Directors in the selection of senior management personnel and the nomination of candidates for Directors and Auditor & Supervisory Board Members

Candidates for Directors must possess sufficient knowledge, experience and capabilities to fulfill their obligations as Directors. Senior management personnel are selected by additionally taking into account, among others, their corporate and individual performance. Candidates for the Audit & Supervisory Board Members must possess, in addition to an appropriate level of expertise in the areas of finance and accounting, sufficient knowledge, experience and capabilities to fulfill their obligations as Audit & Supervisory Board Members.

The Nomination Advisory Committee deliberates the nomination of candidates for the aforementioned positions and submits recommendations to the Board of Directors. The Committee is an advisory body to the Board of Directors and more than half of its members are independent outside directors.

Explanation regarding the selection of senior management personnel and the nomination of candidates for Directors and Audit & Supervisory Board Members

Reasons why each candidate has been nominated are stated in the Reference Materials for the General Meeting of Shareholders.

Criteria on the independence of outside directors

The Board of Directors has established independence standards for Outside Directors based on independence criteria stipulated by law and the Tokyo Stock Exchange and selects candidates who meet the standards. See the Attachment of Corporate Governance Basic Policies for the independence standards.

Policies and procedures for determining the remuneration of directors, Audit & Supervisory Board members, and corporate officers

1.Policies

The remuneration of directors (excluding outside directors) and corporate officers shall be composed of base remuneration, short-term performance-linked remuneration, and mid- to long-term performance-linked remuneration. The base remuneration shall be decided according to the job title and others, while the short-term performance-linked remuneration shall be determined in consideration of corporate and individual performance and others under the performance evaluation system. The mid- to long-term performance-linked remuneration shall be paid in line with the stock ownership rules set for directors. Only the base remuneration shall be paid to outside directors and Audit & Supervisory Board members.

2.Procedures

The upper limit of the total amount of remuneration to be paid to directors and Audit & Supervisory Board members shall be resolved at the general meeting of shareholders. In line with the policies described above, the Remuneration Advisory Committee, with a majority of members being independent outside directors and outside Audit & Supervisory Board members, shall conduct deliberations about the remuneration of directors and corporate officers, and the Board of Directors shall make the final decision. The amount of remuneration to be paid to Audit & Supervisory Board members shall be determined through discussions at the meetings of the Audit & Supervisory Board.

3.Remuneration of directors (excluding outside directors) and corporate officers

Breakdown	Outline
Base remuneration	Fixed remuneration decided according to job title and others
Short-term performance-linked remuneration	Performance indicators: Sales, ordinary income and ROA
Mid- to long-term performance-linked remuneration	Stock-based rewards based on the trust system Total points given before resignation are multiplied by the adjustment index for changes in stock prices to calculate the amount of reward

① Average remuneration composition for directors (excluding outside directors) (2020)

Basic Compensation : 67%

Short-term Performance-linked Compensation :18%

Stock Compensation : 15%

② Amount of remuneration paid to Directors and Audit & Supervisory Board Members (2020)

	Remuneration, etc.(Millions of yen)	Total Amount by Type of Remuneration, etc. (Millions of yen)			Num appli per s
		Basic Compensation	Short-term Performance- linked Compensation	Stock Compensation	
Directors	362	258	56	48	11
Outside members included in above	53	53	—	—	4
Audit & supervisory Board Members	96	96	—	—	7
Outside members included in above	35	35	—	—	4

*48 Million yen is filed as Stock Compensation for Directors, not including outside Directors, based on the performance-linked stock compensation plan resolved at the 107th ordinary general meeting of shareholders held on March 30, 2016.

Overview of Governing Bodies/Committees/Councils

Governing Body	Members	Meeting frequency
Board of Directors	10 members (Four of them are outside directors.(One is female.)) (As of March 2021)	Once or twice a month
Management Committee	President, Corporate Officers in Charge, and other Corporate Officers and General Managers of Staff Departments as deemed necessary by the President	Once a week in principle
Audit & Supervisory Board	5 Auditors (Three of them are outside Auditors. (Two are female.)) (As of March 2021)	Once or twice a month
Nomination Advisory Committee	2 inside directors and 4 outside directors	3 or 4 times a year
Remuneration Advisory Committee	2 inside directors, 2 outside directors and 1 outside Auditor	3 or 4 times a year

Attendance at Meetings of the Board of Directors and Auditit & Supervisory Board (2020)

*Marked Directors and Audit & Supervisory Board Member : Number of attendances after appointment at the Ordinary General Meeting of Shareholders held in March 2020

Directors

		Bord of Directors
Representative Director, President	Kohei Morikawa	14／14 (100%)
Representative Director	Hidehito Takahashi	14／14 (100%)
Representative Director	Motohiro Takeuchi	14／14 (100%)
Director (Chairman of the Board)	Hideo Ichikawa	14／14 (100%)
Director	Hiroshi Sakai *	11／11 (100%)
Outside Director	Masaharu Oshima	14／14 (100%)
Outside Director	Kiyoshi Nishioka	14／14 (100%)
Outside Director	Kozo Isshiki	14／14 (100%)
Outside Director	Noriko Morikawa *	11／11 (100%)

Audit & Supervisory Board Members

		Board of Directors	Audit & Supervisory Board
Audit & Supervisory Board Members	Toshiharu Kato	14／14 (100%)	13／13 (100%)
Audit & Supervisory Board Members	Jun Tanaka*	11／11 (100%)	10／10 (100%)
(Outside Member)	Kiyomi Saito	14／14 (100%)	13／13 (100%)
(Outside Member)	Setsu Onishi	14／14 (100%)	13／13 (100%)
(Outside Member)	Masako Yajima *	11／11 (100%)	10／10 (100%)
		Board of Directors	Audit & Supervisory Board

Attendance at Nomination Advisory Committee and Remuneration Advisory Committee (April 2020~March 2021)

Nomination Advisory Committee

		Attendance records
Director, Chairman of the Board	Hideo Ichikawa	5/5 (100%)
Representative Director, President	Kohei Morikawa	5/5 (100%)
Outside Director	Masaharu Oshima (Chairman)	5/5 (100%)
Outside Director	Kiyoshi Nishioka	5/5 (100%)
Outside Director	Kozo Isshiki	5/5 (100%)
Outside Director	Noriko Morikawa	5/5 (100%)

Remuneration Advisory Committee

		Attendance records
Representative Director, President	Kohei Morikawa	2/2 (100%)
Representative Director	Motohiro Takeuchi	2/2 (100%)
Outside Director	Kiyoshi Nishioka (Chairman)	2/2 (100%)
Outside Director	Noriko Morikawa	2/2 (100%)
Outside Auditor	Setsu Onishi	2/2 (100%)

Board of Directors

Showa Denko introduced the corporate officers system to clearly separate the business execution function from the management supervision function. Under the system, a top management team composed of the president and corporate officers makes prompt and dynamic decisions on management. At the same time, the number of Board of Directors members has been substantially reduced while the number of independent outside directors has been kept at two or more for the enhancement of the supervision function.

The Board of Directors decides basic policies of the Company. It also thoroughly discusses and makes decisions regarding matters specified in the Companies Act or the Company's Articles of Incorporation as well as important issues in executing business operations, while promoting prompt and dynamic decision making on management. We appoint directors with emphasis on the viewpoint of corporate governance, aiming to strengthen the Board of Directors' monitoring and supervisory functions and ensure the propriety of decision making process. We have adopted a management system in which corporate officers dedicate themselves to business execution, which is their primary duty, but do not concurrently serve as directors, in principle. Furthermore, we have abolished the system of officer directors except the Chairman and the President, while strengthening monitoring by Audit & Supervisory Board Members including outside Members and mutual supervision among directors.

The term of office of directors is set to one year to ensure a quick and flexible formation of management team corresponding to changes in the business environment.

[Management Team](#)

Audit & Supervisory Board Members

Showa Denko employs an auditor system. The Audit & Supervisory Board Members attend the Board of Directors meetings and other important internal meetings, offering opinions as necessary. They conduct audits on execution of business operations through on-site investigations, interviews with responsible persons, and reference to important documents so as to provide suggestions, advice, and recommendations for securing

soundness in management. They also audit group companies in cooperation with auditors of major affiliated companies.

[Management Team](#)

Accounting audits

Showa Denko concluded an auditing contract with KPMG AZSA, and this audit corporation performs accounting audits for the Company.

The Accounting Auditor confirms the annual audit plan with the Audit & Supervisory Board Members and reports the audit results to them. The Accounting Auditor and the Audit & Supervisory Board Members also exchange information and views as required, to promote their cooperation.

Management Committee and R&D Committee

The Management Committee, which is chaired by the President, deliberates and decides on matters to be referred to the Board of Directors' meetings and important matters pertaining to overall management of the Company. The decisions are made after deliberations on two occasions. As for the investment issues to be submitted to the Management Committee, risk analysis as well as achievement/progress management are conducted in advance, through preliminary risk reviews and examinations by a relevant task team. The basic business policies including Company's medium-term business plans are decided not only through the deliberation of the Management Committee but also through sufficient examination by all corporate officers.

The R&D Committee deliberates and makes decisions on important issues related to research and development.

Internal Audit Department

We have the Internal Audit Department reporting directly to the President. The Internal Audit Department investigates the overall execution of business including group companies and verifies its accuracy, validity and efficiency. It also investigates and verifies the functional state of management policies, business plans and internal control systems. The results of internal auditing are also reported to the Audit & Supervisory Board Members for mutual cooperation with Auditors' auditing.

Decision-making Process and Structure

Basic ideas and policies

Showa Denko aims to achieve sustainable corporate growth and to increase its medium- to long-term corporate value. To this end, as its responsibility and role, the Board of Directors is expected to build a system to make decisions in a transparent, fair, prompt and resolute manner and to supervise the management of the system. Showa Denko conducts a questionnaire survey to check the effectiveness of the Board of Directors as a whole, in which directors and Audit & Supervisory Board members conduct a self-evaluation about whether they have fulfilled that responsibility and role. Based on the survey results, issues to be solved are discussed by the Board of Directors.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds "Decision-making process and structure" as one of its material issues (materiality) and set the following KPI:

"Continue to evaluate the effectiveness of the Board of Directors and disclose information about improvements made based on the results"

※ The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

Results for 2020

Evaluation method

Regarding the effectiveness of the Board of Directors in 2020, we conducted a survey in December 2020 in which the directors and Audit & Supervisory Board members answered questions and made free comments. Subsequently, in January 2021, we interviewed the four outside directors individually.

Then, in March 2021, the Board of Directors held a meeting for all directors and Audit & Supervisory Board members to discuss the self-evaluation results collected from the directors, create a summary of the evaluation results for fiscal 2020, and formulate the action plan for fiscal 2021.

In order to ensure the objectivity of the survey and further increase the effectiveness of the Board of Directors, the survey is conducted and the results are tabulated by an external organization.

Evaluation results

Based on the survey, interview and discussion results, the Board of Directors has confirmed as follows: members who have diverse experience and expertise make the Board highly effective by taking broad views and having diverse values, and proactive and constructive discussions have been conducted, with the Board taking sufficient time to deliberate the items, for which reference materials are distributed and explanations are made in advance of the meetings.

For the effectiveness evaluation results for fiscal 2020, participants in the Board meeting expressed the following opinions when comparing the results with those for fiscal 2019.

Whereas sufficient discussions have been held regarding the concepts of the long-term vision set toward the integration of Showa Denko Materials, it is also necessary to foster discussions for the optimization of the business portfolio.

It is important to continue deliberating the important items, such as the establishment and enhancement of the governance and compliance systems, in consideration of a substantial increase in the number of Group companies and further globalization of the businesses.

Due to the business integration, the number of items included in the Board of Directors' meeting agenda is increasing. In order to secure adequate time to conduct in-depth deliberations on future management strategies, it is necessary to increase the

efficiency of the meetings by, for example, reviewing the method used to select items to be included in the agenda.

Moreover, participants in the meeting agreed on the following: In 2021, they will foster in-depth deliberation on management strategies, the governance system and Group management at Board meetings, promote the exchange of opinions on the issues among all directors and corporate officers, and continue implementing measures to further enhance the effectiveness of the meetings in the face of the coronavirus crisis.

(Free comments)

The diversity of the Board of Directors has steadily been enhanced by the addition of female outside members and by the broadening of viewpoints due to the diverse backgrounds of the Board members.

Challenges related to the integration of Showa Denko Materials have been appropriately discussed at Board meetings, but more in-depth discussions are needed as we strive to meet these challenges.

Due to COVID-19, we had to hold Board meetings online. We need to devise more measures to increase the effectiveness of the meetings in consideration of the situation regarding the pandemic.



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021](#)
(Showa Denko Group's integrated report)

Committees and Promotion Councils

For specific issues to be addressed to ensure appropriate business execution, Showa Denko operates the Security Export Control Committee and Safety Measures Committee, which report directly to the president. Moreover, under the Management Committee chaired by the president, we have the Responsible Care Promotion Council, Risk Management Promotion Council, Human Rights/Corporate Ethics Promotion Council, and IR Promotion Council. Each of these councils conducts surveys and research and holds deliberations regarding the issues entrusted to them.

Sustainability Promotion Council

The Sustainability Promotion Council examines the Showa Denko Group's important CSR issues, with a focus on compliance and risk management. With regard to compliance, the Council examines the medium- to long-term action plans and other important issues, decides on the measures to be taken in line with the action plans and evaluates the implementation of the measures. The Council also collects data and make assessments about risks on a regular basis, formulates measures to deal with high-level risks that might adversely affect the Group and checks how the measures are being implemented.

[CSR Policy](#)

Responsible Care Promotion Council

The Showa Denko Group conducts activities based on the Responsible Care Action Guidelines, which set forth the Group's management policies related to the environment, safety and health. The Responsible Care Promotion Council conducts preliminary discussions concerning important issues around Responsible Care.

These issues are reported to and approved by the Management Committee (Members: President, Corporate Officers in Charge, and other Corporate Officers and General Managers of Staff Departments as deemed necessary by the President. Chairperson: President).

[Responsible Care](#)

IR Promotion Council

The IR Promotion Council is chaired by the CFO. The Council examines the comprehensive measures and basic plans for IR, centrally manages the important factual data, such as the financial results, in line with the Tokyo Stock Exchange's timely

disclosure rules, and ensures the appropriate disclosure of important facts.

Showa Denko conducts information disclosure and IR activities to help shareholders and investors deepen their understanding of its corporate management, business activities, and strategies so that they can evaluate its corporate value in an appropriate manner.

To this end, we work to communicate proactively with shareholders and investors, improve management transparency, and strive to disclose information concerning Showa Denko in an easy-to-understand, fair, timely, and accurate manner. In April 2018, the Revised Financial Instruments and Exchange Act was enforced in Japan, and to ensure compliance with the fair disclosure rules of this law, we revised our disclosure policy and made it public on our website.

[For Investors](#)

Security export control Committee

For all export products, the Security Export Control Committee determines whether or not government permission is required, investigates customers, and makes a decision on whether to enter into each transaction through systematized procedures.

Safety Measures Committee

The Safety Measures Committee examines comprehensive measures and basic plans for the environment, safety and health, and offers relevant opinions to the related agencies.

Risk Management and Compliance

Risk Management

Information Security

Compliance

Anti-corruption

Risk Management

Basic ideas and policies

The Showa Denko Group upholds “Deepening of risk management on the basis of safety and compliance” as the main theme for its CSR Policy. Accordingly, we are striving to improve our risk control for both ordinary times and emergencies and to reduce the detected risks.

Promotion system

Important issues related to compliance and risk management are discussed and examined at the working group on risk management and the working group on human rights and compliance for deliberation at the meetings of the Sustainability Promotion Council chaired by the director in charge of CSR. The working groups are comprised of members from the head office’s administrative departments and are under the control of the Sustainability Promotion Council, which reports the results of deliberation on important management issues to the Management Committee and the Board of Directors.

During normal times, the head office’s administrative departments work to control risks in their respective fields by standardizing the appropriate risk control measures. Also,

each of the divisions, plants and Group companies appoint their risk officers/managers to autonomously implement their own risk management systems for risk reduction.

In the event that an existential risk to the company is identified or an unexpected crisis occurs, we will establish headquarters to deal with the crisis headed by the President so that we can promptly respond to it. We have also set the rules to be followed by the administrative departments of the head office regarding risks related to personnel, PR and safety. Issues regarding the risk management situation are deliberated by the Management Committee twice a year and the results are reported to the Board of Directors for continuous improvement. We thereby ensure that our risk management process functions effectively.

“Risk inventory” activity

The Showa Denko Group annually conducts a “risk inventory” (risk assessment) activity as its standard management scheme to identify the specific risks concerning the Group’s business activities and to monitor risk controls conducted by the head office’s administrative departments and each of its sites and assess the effectiveness of their anti-risk measures.

Through the ISO 31000-compliant risk assessment, response and review process, we are executing a PDCA cycle for risk management to make all employees well aware of the importance of risk management and to promote the effective and efficient escalation of important information for the management team to make decisions about business strategies and resource distribution. We are thereby ensuring that the management team can constantly monitor and grasp information about the risks that could have serious impacts on the Group’s management.

As for serious risks for which adjustments need to be made to implement company-wide measures, such as anti-earthquake measures for equipment safety and information security measures, the head office’s administrative departments in charge provide needed advice. They also offer risk-related education and training, carry out on-site inspections and give instructions, as required, under the leadership of the management team.

■ Cycle of the risk inventory activity



Risk classification

- | | | | |
|--|---|--|--|
| <p>① Accidents and disasters</p> <ul style="list-style-type: none"> Facility accidents Fires and explosions Injuries or deaths Environmental accidents Natural disasters and climate change Infrastructural accidents Traffic and distribution accidents Chemical handling accidents Accidents involving products | <p>② Risks related to violation of laws, antisocial acts</p> <ul style="list-style-type: none"> Violation of industrial property rights Violation of antitrust laws Insider trading Violation of Foreign Exchange Law Violation of Subcontract Law Violation of laws concerning environment, chemical substances, security and safety Defamation, violation of privacy Crimes committed by employees Bribery | <p>③ Risks related to human resources and labor</p> <ul style="list-style-type: none"> Human rights Outflow and security of human resources Evaluation, rewards and assignment Infectious diseases Work hours Diversity of employment patterns Involvement as victim of crimes and terrorist acts | <p>④ Information management</p> <ul style="list-style-type: none"> Information leaks System failures Problems involving media, rumors, whistle blowing Commercial software Management of login ID |
| <p>⑤ Risks related to management and business</p> <ul style="list-style-type: none"> Stocks and corporate bonds Investments Finance and accounting | <p>⑥ Risks related to supply chains</p> <ul style="list-style-type: none"> Inventory, assets Procurement Business | <p>⑦ Risks related to external environment</p> <ul style="list-style-type: none"> Nation, region community Industry | |

Loss classification

Loss of social credibility	Loss of human resources	Loss of financial assets
<ul style="list-style-type: none"> Damage to corporate reputation Loss of brand values Damage to relationship of trust with concerned governmental agencies Damage to relationship of trust with local communities 	<ul style="list-style-type: none"> Business-related Death, Permanent disorders Non-permanent disorders, injuries and illnesses Damage to mental health Outflow of human resources Failure in human resource security Additional workloads Lower productivity 	<ul style="list-style-type: none"> Damage to facilities Suspension of operations Loss of business opportunities Damage compensation Lawsuit costs Costs of environmental measures Increase in production costs Surcharges

Enhancement of business continuity plans (BCPs)

We at the Showa Denko Group are aware of the importance of ensuring our business continuity as our responsibility as a supplier, recognizing the fact that the availability of our products has an impact on society at large. While expanding our business domain, we have been making BCPs based on the idea that we need to build a business system that is highly resistant to disasters and other crises both in Japan and overseas.

We make specific BCPs in consideration of the features of each of our businesses and products and work to implement equipment-related measures and build systems for disaster control and mitigation, and improve stockpiling plans in preparation against possible disasters, and to clarify and solve problems by continuing the aforementioned “risk inventory” activity to make risk assessments. We are thereby managing our business in a manner that enables us to continue it while giving first priority to people’s lives. Moreover, we regularly conduct drills to foster collaboration for BCPs between the divisions, plants and Group companies, through which participants can share the lessons learned, problems and best practices. We also incorporate the findings made through the drills in our BCPs.

In 2020, toward the integration of the head offices of Showa Denko and Showa Denko Materials, we reviewed the functions of the emergency response headquarters to be located at the Shiba Daimon and Marunouchi head offices, and of the headquarters to be established on-site in the event of an inland earthquake in the Tokyo metropolitan area. Moreover, in response to a rise in the rate of telecommuting employees, we are conducting examinations on remote management of the headquarters toward building an even more effective risk management system.

As for the outbreak of the novel coronavirus disease (COVID-19), the secretariat of the emergency response headquarters collect related information from both within and outside Japan to provide regular cautionary advice to employees and instruct them on infection control measures. Moreover, the Group CEO shared a message promising employees that the Group will: (1) give first priority to protecting the health of all Group employees and employees of partner companies; (2) continue to supply the products that are indispensable for society and daily life as its social responsibility; and (3) make preparations to achieve further growth for the Group after the pandemic ends. We are dealing with the coronavirus crisis also in line with the BCPs.



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021](#)
(Showa Denko Group's integrated report)

Risk Management and Compliance

[Risk Management](#)

[Information Security](#)

[Compliance](#)

[Anti-corruption](#)

Information Security

Basic ideas and policies

The Showa Denko Group has established its rules on information security to ensure strict handling of its information assets and to protect these assets from a range of threats. In line with the rules, the Group is working to increase employees' awareness of information security and implementing multifaceted measures to prevent information security-related incidents, such as illegal access to and destruction of said assets as well as information leakage and falsification, thereby maintaining and improving the Group's information security level.

Management system

We are protecting and managing our information assets in an appropriate manner and have built a management system to implement necessary measures to ensure compliance with information security-related laws, regulations and in-house rules. Through these measures, we are maintaining, managing and improving our information security level.

Security measures

We set our basic information security measures to protect the Group's information assets from external threats, including using anti-virus software, conducting access control and limiting the use of external storage media, and have introduced these measures to our sites in Japan and abroad. We regularly monitor the implementation of these measures at the sites.

Employee education

We provide all employees with e-learning opportunities, including training with regard to targeted e-mail attacks, with a view toward helping them to increase their information security awareness and prepare against more skillful targeted attacks.

Management of outsourcing companies

Before outsourcing operations to other companies, we check their information security risk-related education, enlightenment and initiative levels to confirm that they are on par with the Showa Denko Group in terms of information security.



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

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(Showa Denko Group's integrated report)

Risk Management and Compliance

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Compliance

Basic ideas and policies

The Showa Denko Group believes that compliance provides the basis of its business continuity and is essential for the achievement of its vision. Accordingly, we comply with social norms of each country and region, and corporate ethics as well as laws and regulations. In addition, we are implementing the system and conducting a range of activities to spread ethical values based on honesty, impartiality, and integrity.

* For employee education on corporate ethics, please refer to the “Thorough corporate ethics”.

[Thorough corporate ethics](#)

For the past ten years, we had no cases of serious compliance violations and received no sanctions, including fines, for compliance-related issues.

Corporate Ethics Hotline

We operate the Corporate Ethics Hotline so as to be able to detect from across the Showa Denko Group any incidents of noncompliance or unfair and other behaviors that contravene corporate ethical standards at an early stage in order to resolve them.

Employees can make a report via Showa Denko's website and intranet as well as through the external law firm designated by the company. Not only Group employees but also all other stakeholders, including suppliers and local residents, can make reports to the Group through the hotline. For national staff of Group companies outside Japan, we have also been providing a multilingual hotline service (external service in 12 languages) since April 2018. The hotline service can be used anonymously both within and outside Japan, and we clearly state that we respect the privacy of service users and prohibit any disadvantageous treatment of users by their companies. For each of the reports made to the hotline internally and via the external contact, we talk to the company/site in question, and the department in charge conducts a survey on the issue to confirm the facts. If noncompliance with laws, regulations and others is confirmed as a result of the survey, we promptly take corrective actions. For serious issues, reports are made to the Sustainability Promotion Council chaired by the director in charge of CSR and to the Board of Directors, including details of the internal report made to the hotline, the survey, corrective actions, and measures to be taken to prevent the reoccurrence of similar problems.

The secretariat of the Corporate Ethics Hotline received 54 reports and requests for consultation in 2020. After prompt and careful investigation of the details, we took corrective measures as necessary.

Regarding the cases of harassment, including those involving sexual harassment and abuse of power, which account for about 50% of the cases for which requests for consultation were made, we conduct relevant training for managers of Group companies toward the reduction of such cases.

Risk Management and Compliance

[Risk Management](#)

[Information Security](#)

[Compliance](#)

[Anti-corruption](#)

Anti-corruption

Basic ideas and policies

The Showa Denko Group takes the expectations of all stakeholders seriously and is committed to fulfilling its promises to them in a sincere manner. In all countries and regions, we will eliminate acts of corruption, such as breach of loyalty, abuse of authority, forcible transactions using undue influence, bribery, embezzlement, concealment, obstruction of justice, and money laundering as well as other unfair and anti-social actions. We clearly state our policies on “Anti-corruption” and “Compliance with competition laws” in the respective sections of Our Code of Conduct, which sets out the basic behavioral rules that all Group employees are expected to follow when performing their day-to-day duties. Moreover, we work to ensure the implementation of the policies by all employees.

Compliance with anti-bribery laws and regulations, and prevention of corruption

Bribery of public servants, etc. (including executives and employees of companies under substantial control of national and local governments, executives and employees of public international organizations, candidates for public office and others) or executives

and employees of companies in the private sector and the compulsion, offer, and inducement to bribe are acts that cause corruption in national economy and politics, and prevent the sustainable growth of the international community. The Showa Denko Group has formulated the Showa Denko Group's Global Anti-Bribery Policy, and we are implementing drastic measures to comply with anti-bribery laws and regulations enforced in each country. The Showa Denko Group has also been holding an e-learning seminar to provide basic knowledge on bribery to its employees in Japan and abroad, and a total of over 800 employees have participated so far. Through this e-learning seminar, we clearly explain that it is a violation of the bribery regulations enforced in each country and of the Group's internal rules to provide government officials or executives/employees of companies in the private sector with excessive entertainment or gifts, either directly or through third parties, for the purpose of unfairly obtaining sales orders or to receive entertainment or gifts, engage in collusion or make facilitation payments for such purpose. The Group also educates employees on how to avoid bribery-related risks.

Also, for the provision of benefits and exchange/entertainment opportunities that do not constitute bribery, we conduct sufficient examinations as to the reason why we need to provide them, recognizing that providing them for the purpose of making profit unfairly may lead to corruption. Moreover, we prohibit, in principle, individual employees and workplaces from accepting any money or gifts from suppliers and other related parties. Specifically, we prohibit in our in-house rules the provision and receipt of benefits, exchange/entertainment opportunities, and gifts that could be suspected as being intended to produce unfair profit. We also set an upper limit on the amount of money that can be spent for the purpose of socializing, thereby preventing the provision of excessive benefits. We have also set an approval process for the provision of such benefits.

Furthermore, we are enhancing anti-corruption measures targeting businesses and transactions with high corruption-related risks. In particular, for transactions with governmental agencies, we ensure through internal audits that no form of bribery—including the provision and receipt of entertainment or gifts—collusion or embezzlement has occurred. In addition, through the CSR Procurement Guidelines, we raise the awareness of all our suppliers, agents, consultants, distributors and other intermediaries about Showa Denko's anti-corruption policy, which prohibits the entertaining of government officials and giving/receiving of inappropriate benefits. Also, in the self-check questionnaire on CSR that we ask suppliers to fill out, we include questions about corruption risks to evaluate the suppliers in regard to such risks and prevent their materialization.

[Showa Denko Group's Global Anti-Bribery Policy](#) (108kB)

[Promotion of CSR procurement](#)

[Showa Denko Group's CSR Procurement Guidelines](#) (166kB)

Compliance with competition laws

For complying with competition laws, which are designed to ensure fair and open competition, in each country, we formulated our own anti-cartel rules in 2010 and have been implementing the rules to control cartel risks appropriately in our daily business operations. Also, since 1999, we have been carrying out internal audits every year to check for illegal sales activities to ensure compliance with competition laws and reported the results to top management. We also published a range of guidelines, including the handbook on antimonopoly laws for sales personnel, the Antitrust Compliance Guideline, and the Compliance Program of EU Competition Laws, with an eye to raising employees' compliance awareness regarding competition laws across the Group. Furthermore, we have been holding an annual seminar on competition laws for the Group's sales personnel (including national staff of Group companies outside Japan), inviting external experts in competition law to serve as lecturers. (Cancelled in 2020 due to the COVID-19 pandemic)

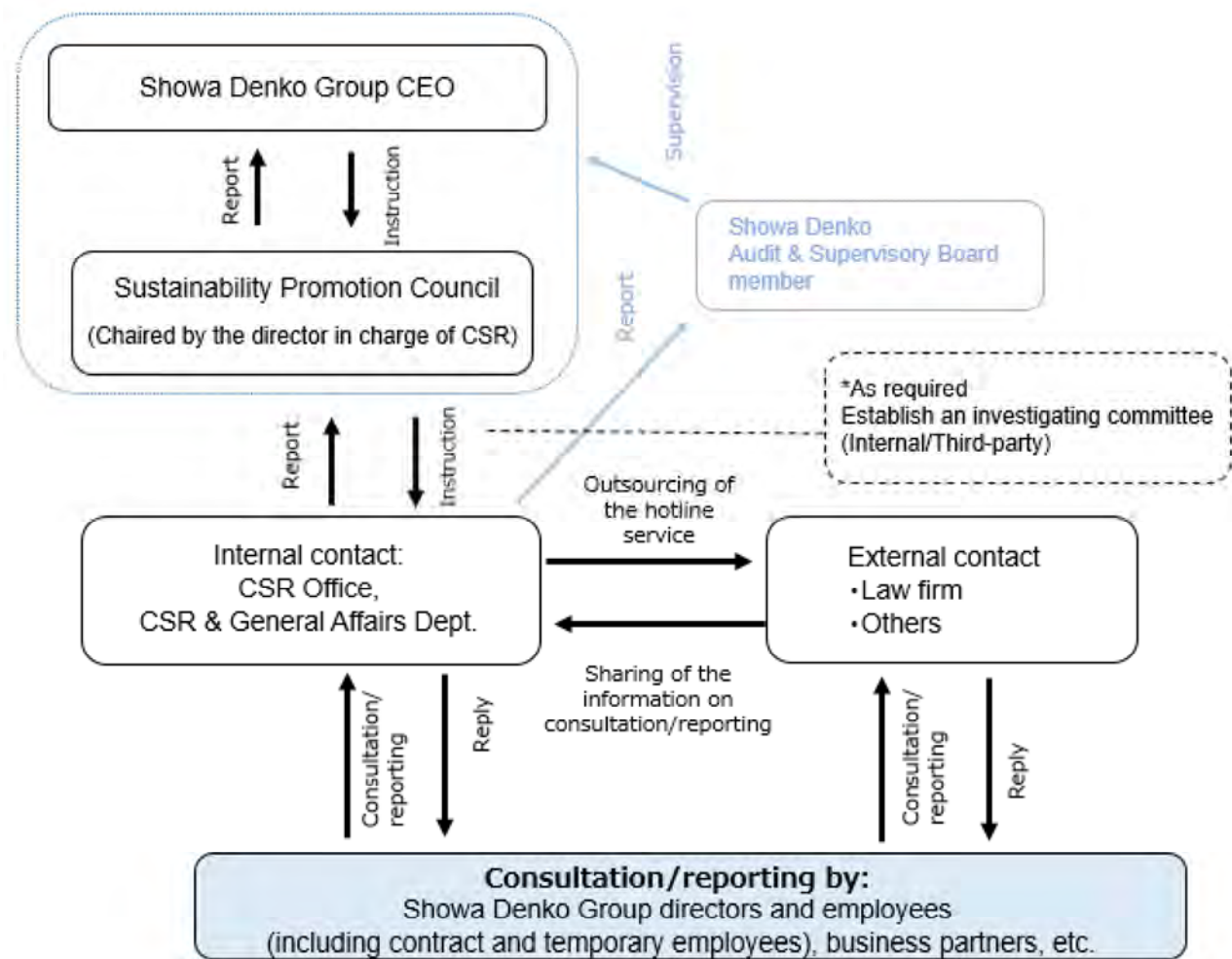


Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021](#)
(Showa Denko Group's integrated report)

■ System for the Corporate Ethics Hotline



Corporate Ethics Hotline

Number of requests for consultation received by the Corporate Ethics Hotline

Promotion of diversity and inclusion(Harassment-related training for managers)

Tax compliance

The Showa Denko Group set the tax code of conduct based on the recognition that it is one of the social responsibilities of an enterprise to contribute to society's growth through tax payment in all countries and regions where it conducts business activities. We will make appropriate and prompt responses to the taxation system and regulations of each country and region, while continuing to provide employees with training to maintain and raise their tax compliance awareness.

Showa Denko Group's Tax Code of Conduct



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

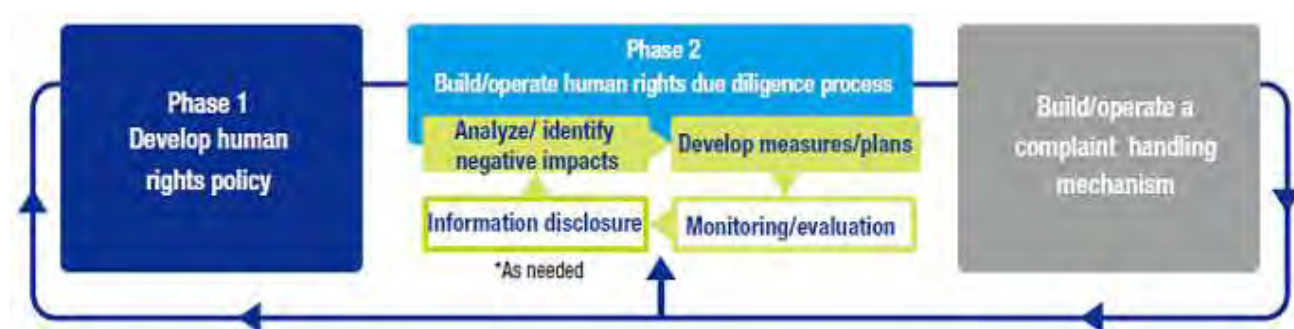
[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Respect for Human Rights

Basic ideas and policy

In October 2021, we formulated our human rights policy.

We will not only ask all Group employees, including those working outside Japan, to abide by the policy but also all our business partners, including suppliers, to incorporate the ideas. Meanwhile, we will also establish a framework for human rights due diligence by the end of 2021 to make this policy effective.



The Showa Denko Group Human Rights Policy

The Showa Denko Group aims to contribute to the sustainable development of a global society based on its significance of existence (purpose) of "changing society with the potential of chemistry."

The Showa Denko Group has human rights as the basis of its business activities in all countries and regions where it operates in order to realize a society in which the dignity of all people is ensured and everyone is equally respected without being left behind.

We have clarified these ideas and attitudes, and have formulated a human rights policy (hereinafter referred to as this policy) here as a promise to our stakeholders.

Scope of human rights policy

This policy applies to all officers and employees (including contract employees) working in the Showa Denko Group. We also expect all business partners, including our suppliers, to understand and support the content of this policy, and will continue to work to ensure that this policy is respected by them.

Commitment to respect for human rights

We are aware that the businesses of the Showa Denko Group and all business partners including suppliers, directly or indirectly affect human rights in each process of the value chain from product development to procurement, manufacturing, distribution, use, final consumption, and disposal.

The Showa Denko Group is committed to prohibiting all discrimination and harassment, providing a safe working environment and reducing excessive working hours, ensuring minimum wages, and respecting freedom of association and the right to collective bargaining. We also do not allow child labor, forced labor or human trafficking for the purpose of labor exploitation, especially in the field of supply chain management.

● Support for international human rights principles

The Showa Denko Group supports internationally recognized human rights principles ("International Bill of Human Rights", the International Labour Organization's (ILO's) "Declaration on Fundamental Principles and Rights at work", "the Children's Rights and Business Principles", etc.) and make them our own standards.

In addition, as a UN Global Compact signatory company, we will respect human rights in all aspects of our business activities and strive to prevent and mitigate adverse impacts by operating our business in accordance with the "the Ten Principles of the UN Global Compact" and "the UN Guiding Principles on Business and Human Rights."

● Remediation

In the unlikely event that the operations, products and services of the Showa Denko Group and its business partners including suppliers, have an adverse impact on the human rights of our customers, local communities and other stakeholders, we will endeavor to provide for remediation through appropriate procedures.

● Compliance with applicable laws and regulations

In making business decisions, the Showa Denko Group will comply with all applicable laws and regulations in each country and region in which it operates. In the unlikely event that the laws and regulations of the country or region differ or conflict with the internationally recognized human rights principles, or when faced with conflicting requirements, we will pursue ways to respect the internationally

recognized human rights principles. In the context of stakeholders and circumstances where the Showa Denko Group cannot control decision-making, we will strive to exert influence so that this policy will be respected, and will continue to work to avoid complicity in human rights violations.

Governance

In order to fulfill our responsibility to respect human rights, the Showa Denko Group will maintain an internal system to steadily implement human rights due diligence initiatives based on this policy.

In addition, we will reflect this policy in relevant policies, procedures and operations so that it can be properly incorporated into our business activities.

Human rights due diligence

In accordance with the UN Guiding Principles on Business and Human Rights, the Showa Denko Group will establish a process to properly assess the impact of business decision-making and execution on human rights, identify, prevent and mitigate risks that cause or contribute to serious human rights violations, and strive to provide for remediation.

In addition, in order to verify whether the adverse impact on human rights is being dealt with, we will continuously track and evaluate the effectiveness of the response.

Grievance mechanism

The Showa Denko Group will establish grievance mechanisms both internally and externally with the aim of early detection of concerns, including adverse impacts on human rights, and the resolution of problems. The grievance mechanisms are available to all stakeholders such as employees, business partners including suppliers, and local communities. We will ensure the anonymity of the person making the report and the confidentiality of the content of the report. In addition, we will prohibit unfavorable treatment and retaliation against the whistleblowers, and will thoroughly protect them.

Stakeholder engagement

The Showa Denko Group recognizes that it is important to understand the adverse impacts on human rights from the perspective of those affected. Therefore, we will endeavor to utilize it in our efforts to respect human rights by continuously conducting dialogues and discussions with our stakeholders.

Information disclosure

The Showa Denko Group regularly discloses information on initiatives on respecting human rights and human rights due diligence taken based on this policy through its website and other means.

Dissemination / education

The Showa Denko Group will not only continue to provide appropriate education and training to all officers and employees (including contract employees) but also work on capability building necessary to put this policy into practice so that this policy will permeate the company.

In addition, we will strive to respect human rights throughout the value chain by thoroughly communicating the contents of this policy to our business partners, including suppliers.

Human rights policy formulation process and review.

This policy is informed by the advice of external experts who have expertise and practical experience in human rights and has been formulated based on internationally recognized human rights principles, "the Ten Principles of the UN Global Compact", and "the UN Guiding Principles on Business and Human Rights" with the approval of the Board of Directors.

We will review this policy on a regular basis in light of changes in the social environment and dialogues and discussions with stakeholders, and strive to enhance efforts to respect human rights.

Showa Denko K.K.
Group CEO
Kohei Morikawa
October 1, 2021

[The Showa Denko Group Human Rights Policy](#) (348KB)

Human rights education

The Showa Denko Group works to help employees deepen their understanding of the importance of respecting human rights. Specifically, in order to raise the awareness of employees about its basic approach to human rights as described in Our Code of Conduct as well as about its human rights-related priority issues, the Group provides e-learning and holds workplace discussions while giving due consideration to differences in employee work styles.

Moreover, the Showa Denko Group aims to provide each employee with education on human rights and corporate ethics totaling 1.5 hours annually as a KPI for "Thorough corporate ethics." For details about this education, please see the pages on "Thorough corporate ethics."

Related link [Thorough Corporate Ethics](#)

Human rights throughout the supply chain

In order to conduct business that takes human rights throughout the supply chain into consideration, we ask our business partners to respect basic human rights, prohibit discrimination, ensure proper work conditions, and protect the rights of the workers through our CSR procurement program. We work together with our partners to comply with these matters.

Related link [Sustainable Procurement](#)

Related link [Compliance](#)



Toward the future

Showa Denko and Showa Denko Materials (former Hitachi Chemical) will be integrated into one corporate entity in 2023. For the vision, strategies and present measures that Showa Denko and Showa Denko Materials are promoting for the newly integrated company, please refer to SHOWA DENKO Report 2021.

[Showa Denko Report 2021\(Showa Denko Group's integrated report\)](#)

Thorough Corporate Ethics

Basic ideas and policies

In order to foster environment, society and governance (ESG)-oriented management, it is important for individual employees of the Showa Denko Group to take actions based on the recognition of their respective responsibilities. Accordingly, we regularly provide employees with an opportunity to learn more deeply about corporate ethics and human rights and measure the results to promote the dissemination of ethical values throughout the Group.

Medium- to long-term target (Materiality KPI)

The Showa Denko Group upholds "Thorough Corporate Ethics" as one of its material issues (materiality) and set the following KPI:

"Provide Group employees in Japan and abroad with a total of 1.5 hours of training on corporate ethics and human rights per employee per year on an ongoing basis"

✕ The KPI was set without any consideration for the integration of Showa Denko Materials. Going forward, we will set a new material issue and KPI for the newly integrated company.

Results for the KPI

In 2020, we achieved the KPI at Group companies in Japan:

1. The Showa Denko Group annually translates the Group CEO's message for Corporate Ethics Month to dispatch it in multiple languages to Group employees in and outside

Japan. In 2020, when Our Code of Conduct was revised for the first time in about eight years, the Group explained about the background for and important points regarding the revision through the in-house magazine and other media. Moreover, employees received e-learning about CSR and sustainability and exchanged their opinions about what they had learned and what they would like to focus on in their respective workplaces.

2. For Human Rights Week in December, Group CEO Morikawa gave a message to Group employees. Also, targeting Showa Denko Group employees in Japan (including employees of the Showa Denko Materials Group), an online seminar was held on the basics of human rights in companies, with the participation of 16,000 or more employees (participation rate: 87%; held as part of the workplace discussions at some sites). Through this e-learning seminar, the Showa Denko Group helped employees deepen their knowledge about human rights in business.

TOPICS **Holding a joint seminar on human rights in the Keihin district**

The Showa Denko Group provides human rights-related training at each of its sites with an eye toward raising individual employees' awareness of respect for human rights.

Moreover, the head office, Kawasaki Plant and Yokohama Plant of Showa Denko have been holding an annual joint seminar on human rights in the Keihin district since 1995. For the seminar held in 2020, we invited comedian



Joint seminar held in January 2020

Smiley Kikuchi to give a lecture on the impact of the Internet on individuals (violation of human rights on the Internet). In the lecture, the comedian, who is known for his appearances on TV programs such as "Bakusho On-Air Battle" (NHK) and "Enta no Kamisama" (NIPPON TV), talked about the slander that was committed against him on the Internet, which was triggered by an Internet posting that accused him of a murder which he had nothing to do with.

Since the original posting, the slander had continued for as long as 10 years. Based on this experience, the lecturer also referred to the seriousness and horror of online crimes and countermeasures in a light but efficient manner by applying his ability as a comedian, and the audience listened to him earnestly while also laughing occasionally.

On the Internet, information is widely spread and it is difficult to eliminate an online message once it is posted. Also, even if a slanderer posts a message anonymously on an internet bulletin board, that person could be identified through an official

investigation and be arrested or have to pay damages. The lecture provided the audience with an opportunity to re-realize the fact that the Internet provides not only convenience but also risks.



Toward the future

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[Showa Denko Report 2021](#)
(Showa Denko Group's integrated report)

ESG Performance Data

Environment, society and governance (ESG)-related data are posted in this website section. Data for fiscal 2017 to fiscal 2020 as well as for fiscal 2020 are posted for Showa Denko and Showa Denko Materials, respectively. The data can be downloaded in Excel/PDF format.

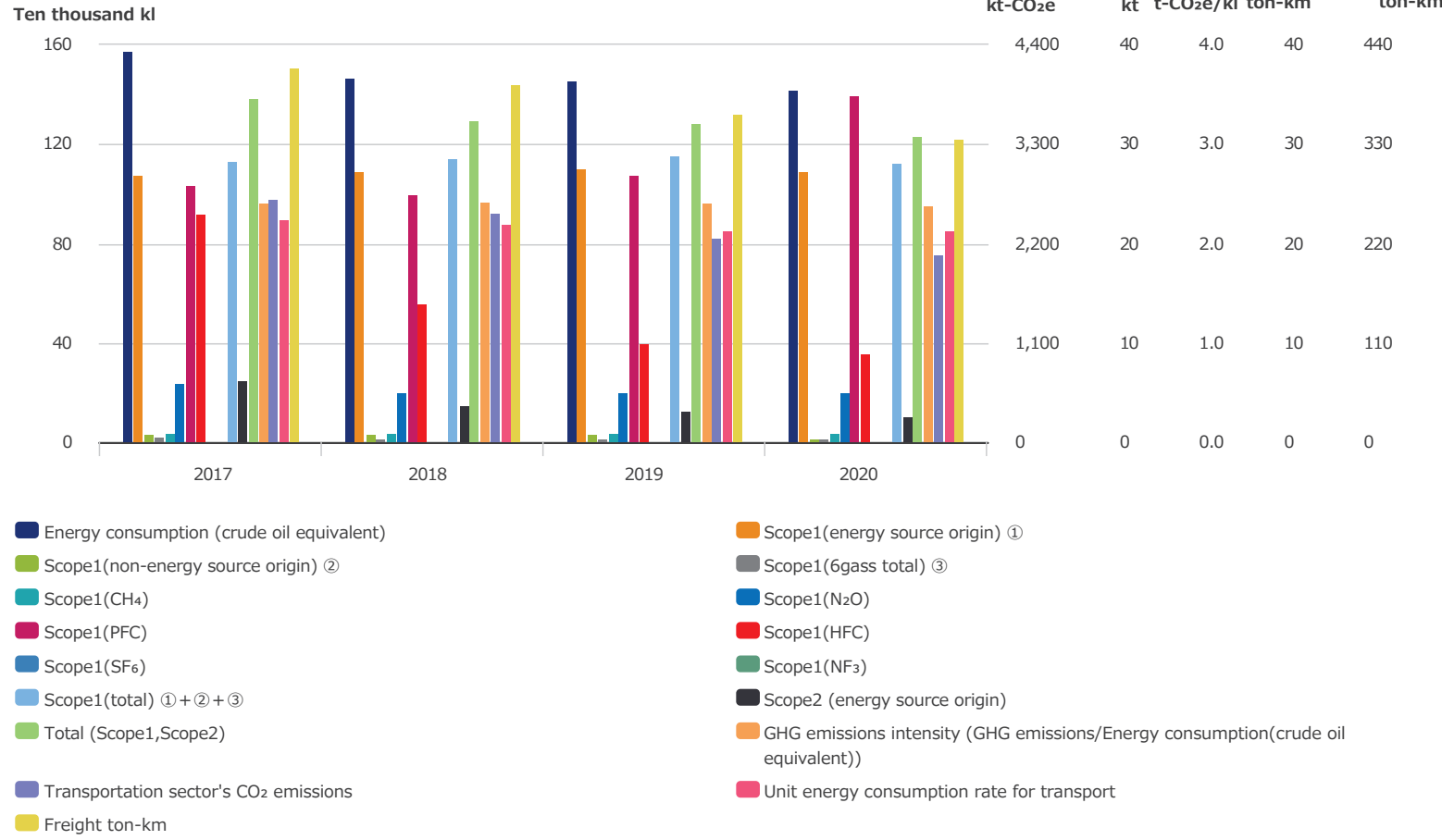
※ We receive third-party verification for Showa Denko's environment- and safety-related data. For details, please refer to the "Third-party Verification" section.

[Third-party Verification](#)

For Showa Denko Materials' data for fiscal 2019 and before, details are disclosed in Showa Denko Materials Sustainability Databook 2020.

[Showa Denko Materials Sustainability Data Book](#) 

Showa Denko



		2017	2018	2019	2020
Energy consumption (crude oil equivalent)	Ten thousand kl	158	147	146	142
Scope1(energy source origin) ①	kt-CO ₂ e	2,960	3,016	3,049	3,017
Scope1(non-energy source origin) ②	kt-CO ₂ e	100	96	91	41
Scope1(6gass total) ③	kt-CO ₂ e	56	45	43	45
Scope1(CH ₄)	kt	1	1	1	1
Scope1(N ₂ O)	kt	6	5	5	5
Scope1(PFC)	kt	26	25	27	35
Scope1(HFC)	kt	23	14	10	9
Scope1(SF ₆)	kt	0	0	0	0
Scope1(NF ₃)	kt	0	0	0	0
Scope1(total) ① + ② + ③	kt-CO ₂ e	3,116	3,157	3,183	3,103
Scope2 (energy source origin)	kt-CO ₂ e	700	411	349	286
Total (Scope1,Scope2)	kt-CO ₂ e	3,816	3,568	3,532	3,389
GHG emissions intensity (GHG emissions/Energy consumption(crude oil equivalent))	t-CO ₂ e/kl	2.42	2.43	2.42	2.39
Transportation sector's CO ₂ emissions	kt	24.6	23.1	20.6	19.0
Unit energy consumption rate for transport	kl per million ton-km	22.4	22.0	21.4	21.3
Freight ton-km	million ton-km	415	397	364	337

Notes

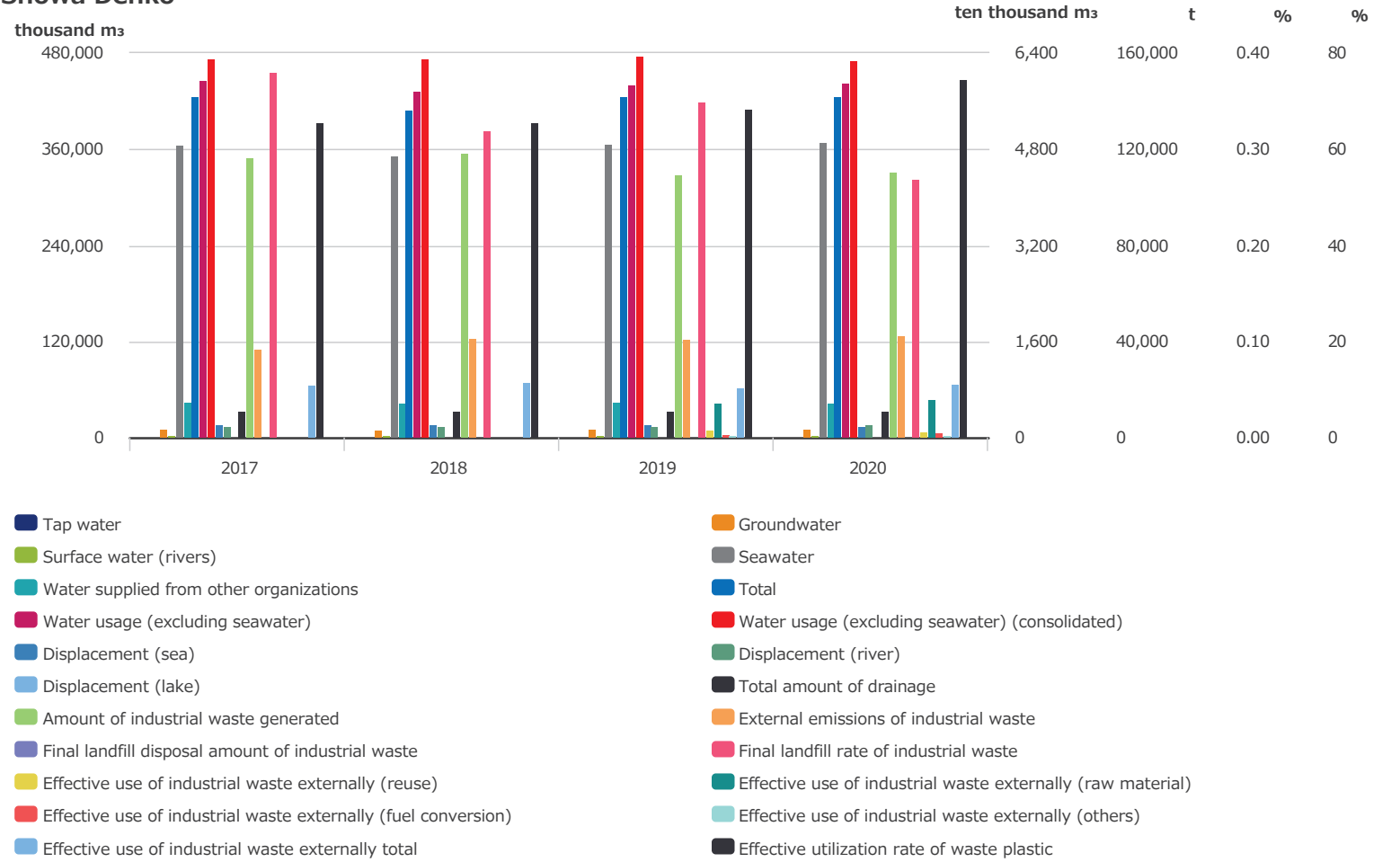
1.Scope1(CH₄) - Includes values less than 3kt that are not subject to warm-to-war method aggregation

2.Scope1(N₂O) - 2020: Includes values less than 3kt that are not subject to warm-to-war method aggregation

3.GHG emissions intensity (GHG emissions/Energy consumption(crude oil equivalent)) - The greenhouse gas emission intensity is the value obtained by dividing the greenhouse gas emission amount by the energy consumption (crude oil equivalent).

4.If there is no note, Showa Denko is a domestic group connection (excluding Showa Denko Materials), and Showa Denko Materials is a single data.

Showa Denko



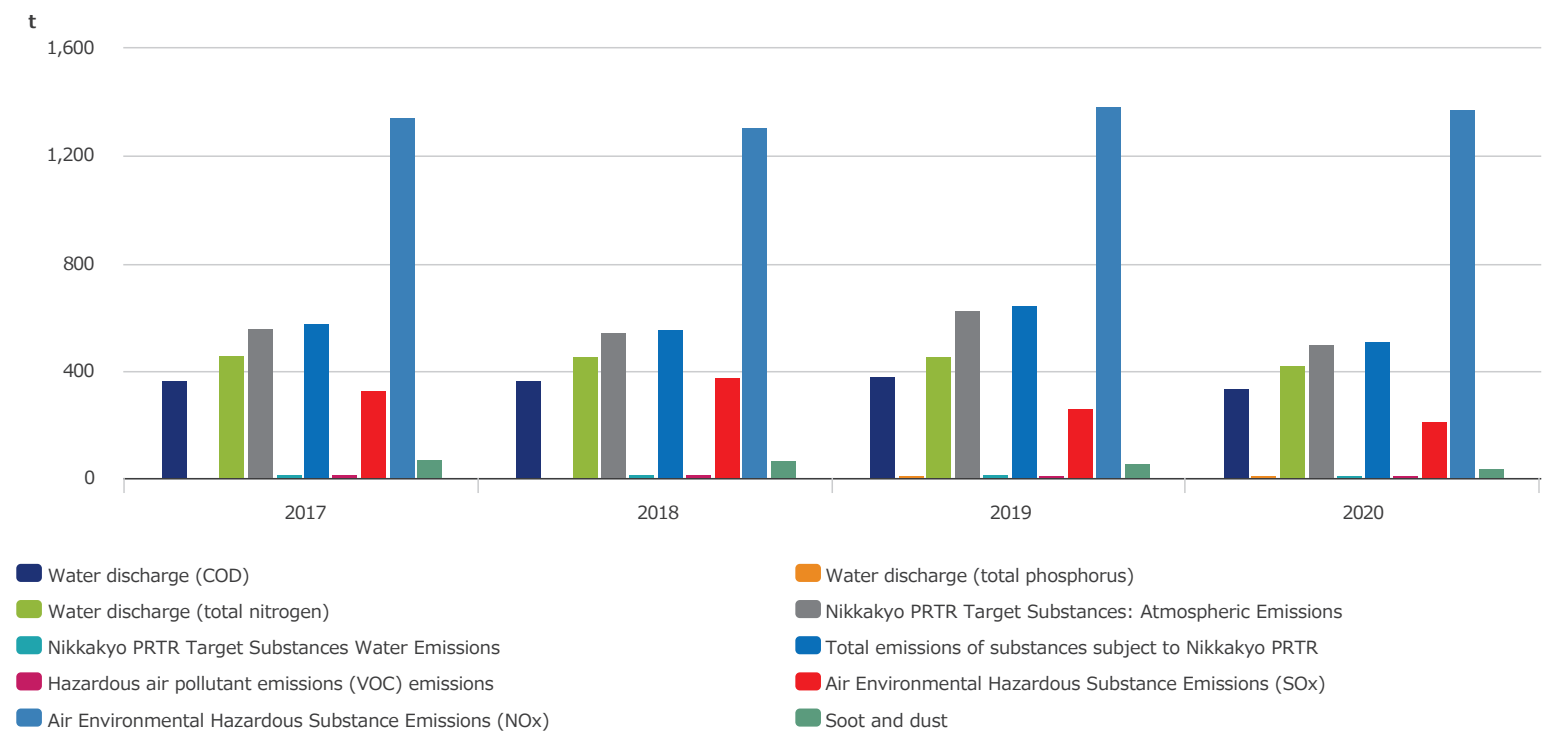
		2017	2018	2019	2020
Tap water	thousand m³	410	419	442	402
Groundwater	thousand m³	10,960	10,916	11,196	11,357
Surface water (rivers)	thousand m³	3,004	2,958	2,545	2,923
Seawater	thousand m³	366,006	352,020	367,000	368,193
Water supplied from other organizations	thousand m³	45,355	43,447	44,655	43,956
Total	thousand m³	425,735	409,760	425,838	426,830
Water usage (excluding seawater)	ten thousand m³	5,947	5,775	5,884	5,905
Water usage (excluding seawater) (consolidated)	ten thousand m³	6,305	6,300	6,357	6,297
Displacement (sea)	thousand m³	17,660	16,365	16,615	15,542
Displacement (river)	thousand m³	14,561	15,800	15,735	17,050
Displacement (lake)	thousand m³	837	812	793	691
Total amount of drainage	thousand m³	33,057	32,976	33,141	33,283
Amount of industrial waste generated	t	116,926	118,414	109,580	110,354
External emissions of industrial waste	t	37,311	41,466	41,100	42,424
Final landfill disposal amount of industrial waste	t	448	378	385	300
Final landfill rate of industrial waste	%	0.38	0.32	0.35	0.27
Effective use of industrial waste externally (reuse)	t	-	-	3,633	2,955
Effective use of industrial waste externally (raw material)	t	-	-	14,443	16,147
Effective use of industrial waste externally (fuel conversion)	t	-	-	1,666	2,468
Effective use of industrial waste externally (others)	t	-	-	1,059	1,160
Effective use of industrial waste externally total	t	21,622	22,883	20,802	22,730
Effective utilization rate of waste plastic	%	65.7	65.7	68.6	74.7

Notes

1.Total amount of drainage - No discharge to sewer

2.If there is no note, Showa Denko is a domestic group connection (excluding Showa Denko Materials), and Showa Denko Materials is a single data.

Showa Denko



		2017	2018	2019	2020
Water discharge (COD)	t	364	365	380	338
Water discharge (total phosphorus)	t	8	8	9	9
Water discharge (total nitrogen)	t	459	457	452	422
Nikkakyo PRTR Target Substances: Atmospheric Emissions	t	561	542	628	500
Nikkakyo PRTR Target Substances Water Emissions	t	16	16	15	13
Total emissions of substances subject to Nikkakyo PRTR	t	577	558	643	513
Hazardous air pollutant emissions (VOC) emissions	t	15	17	13	13
Air Environmental Hazardous Substance Emissions (SOx)	t	330	376	266	215
Air Environmental Hazardous Substance Emissions (NOx)	t	1,345	1,310	1,384	1,375
Soot and dust	t	72	66	58	38

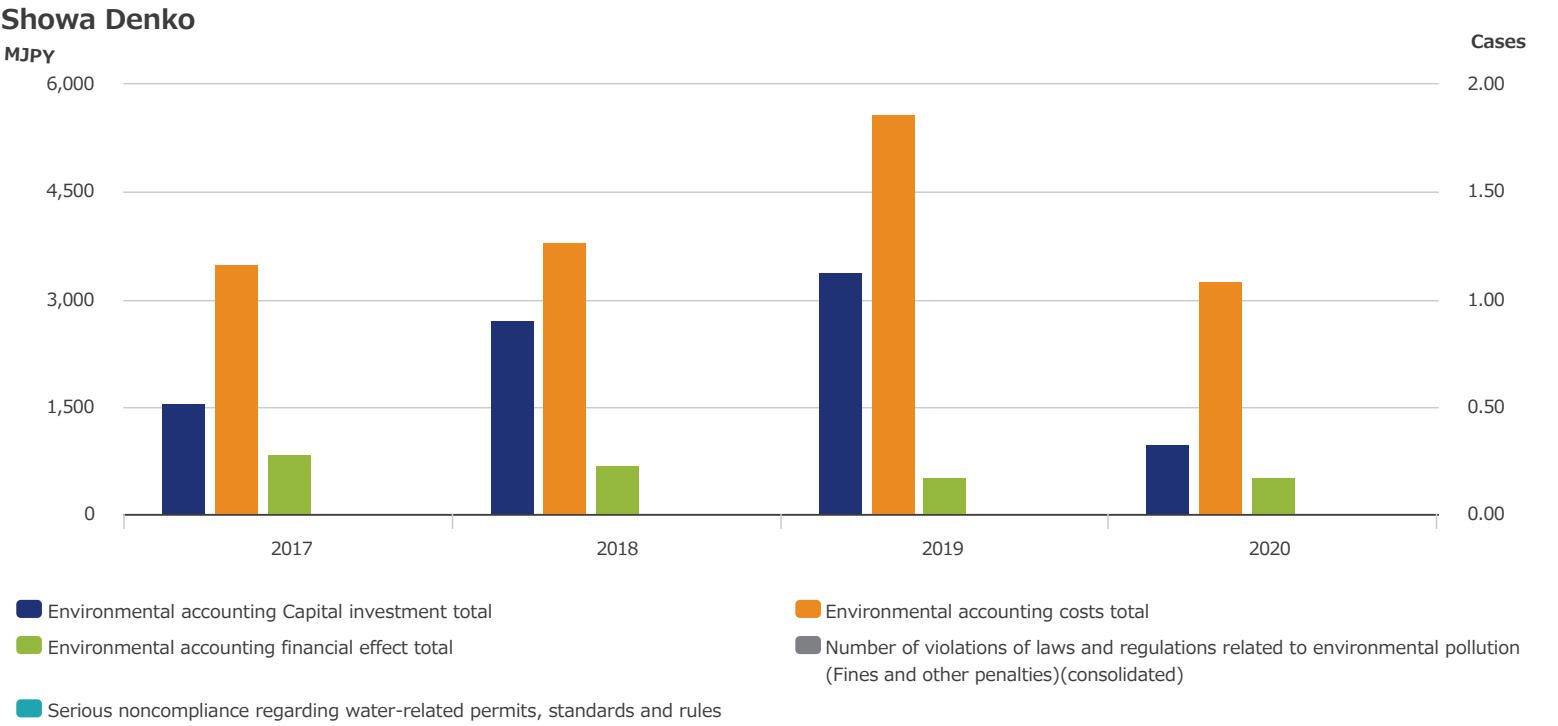
Notes

1.Water discharge (COD) - No discharge to sewer

2.Water discharge (total phosphorus) - No discharge to sewer

3.Water discharge (total nitrogen) - No discharge to sewer

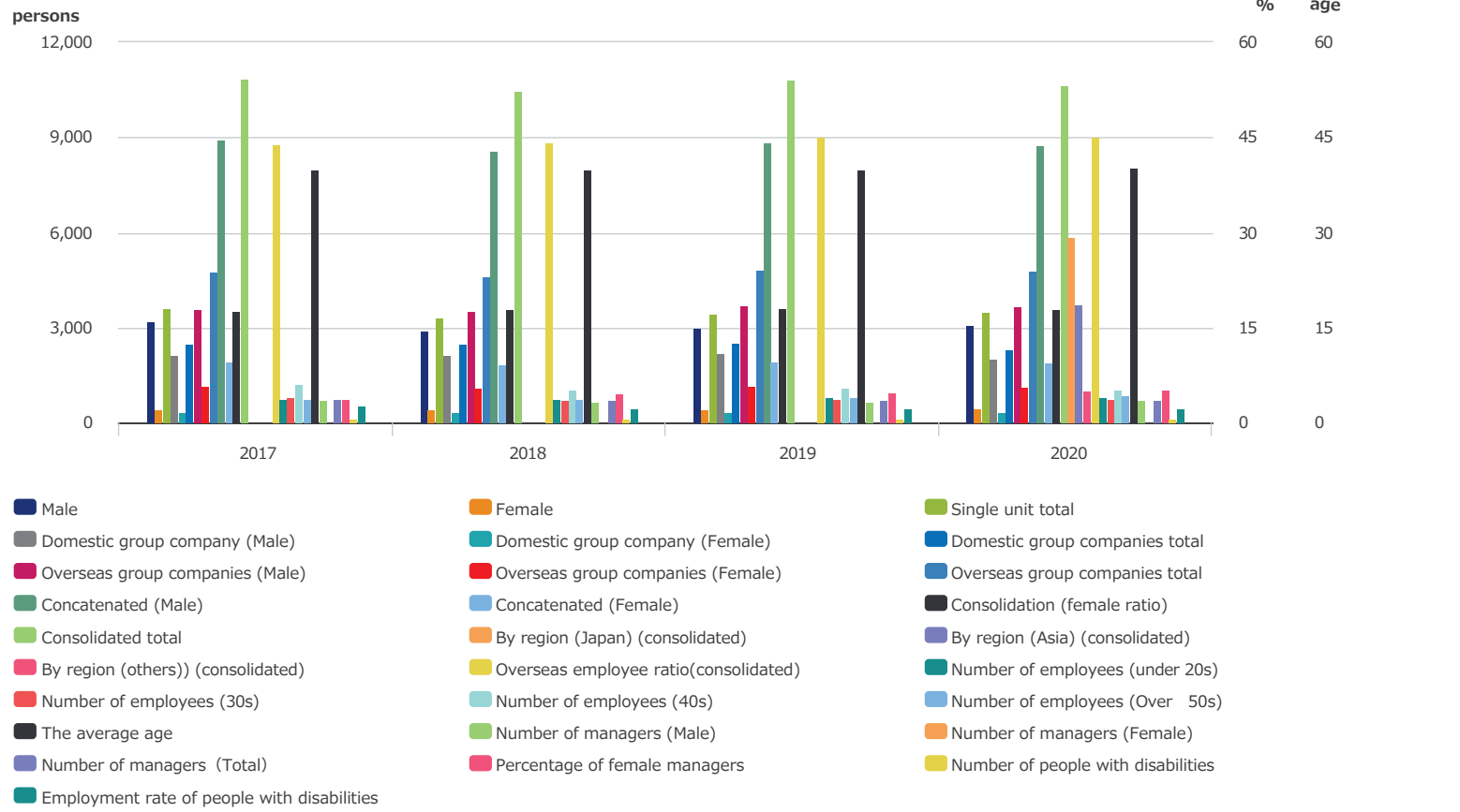
4.If there is no note, Showa Denko is a domestic group connection (excluding Showa Denko Materials), and Showa Denko Materials is a single data.



Notes

1.If there is no note, Showa Denko is a single data, and Showa Denko Materials is a single data.

Showa Denko



		2017	2018	2019	2020
Male	persons	3,198	2,919	2,995	3,060
Female	persons	418	428	442	455
Single unit total	persons	3,616	3,347	3,437	3,515
Domestic group company (Male)	persons	2,147	2,160	2,172	2,008
Domestic group company (Female)	persons	324	336	342	320
Domestic group companies total	persons	2,471	2,496	2,514	2,328
Overseas group companies (Male)	persons	3,599	3,526	3,695	3,673
Overseas group companies (Female)	persons	1,178	1,107	1,167	1,117
Overseas group companies total	persons	4,777	4,633	4,862	4,790
Concatenated (Male)	persons	8,944	8,605	8,862	8,741
Concatenated (Female)	persons	1,920	1,871	1,951	1,892
Consolidation (female ratio)	%	17.7	17.9	18.0	17.8
Consolidated total	persons	10,864	10,476	10,813	10,633
By region (Japan) (consolidated)	persons	-	-	-	5,843
By region (Asia) (consolidated)	persons	-	-	-	3,759
By region (others)) (consolidated)	persons	-	-	-	1,031
Overseas employee ratio(consolidated)	%	44.0	44.2	45.0	45.0
Number of employees (under 20s)	persons	777	747	784	795
Number of employees (30s)	persons	804	736	762	776
Number of employees (40s)	persons	1,240	1,067	1,101	1,057
Number of employees (Over 50s)	persons	764	767	790	887
The average age	age	40.0	39.9	40.1	40.2
Number of managers (Male)	persons	724	684	683	696
Number of managers (Female)	persons	28	33	35	39
Number of managers (Total)	persons	752	717	718	735
Percentage of female managers	%	3.7	4.6	4.9	5.3
Number of people with disabilities	persons	136	114	125	126
Employment rate of people with disabilities	%	2.64	2.39	2.28	2.29

Notes

1.By region (Asia) (consolidated) - Excluding Japan

2.Number of managers (Male) - Manager or above

3.Number of managers (Female) - Manager or above

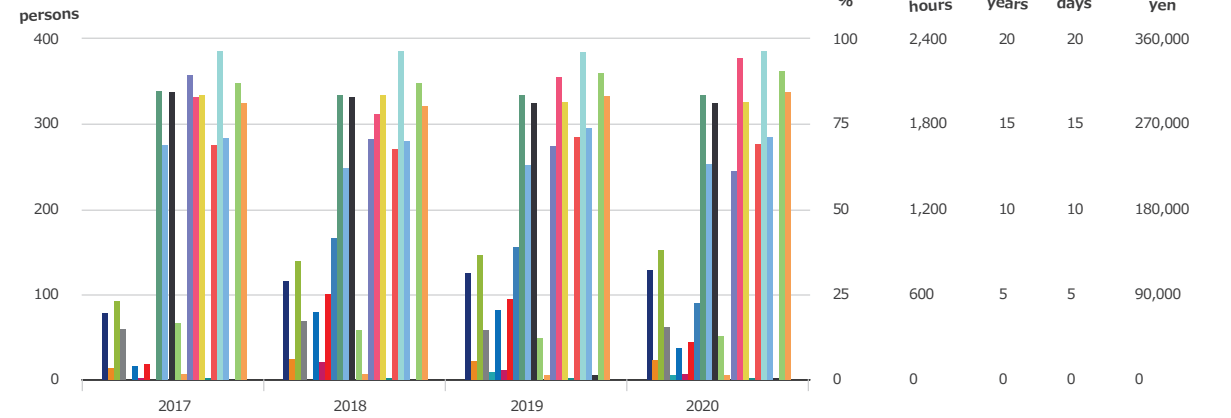
4.Number of managers (Total) - Manager or above

5.Percentage of female managers - Manager or above

6.If there is no note, it will be single data.

7.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.

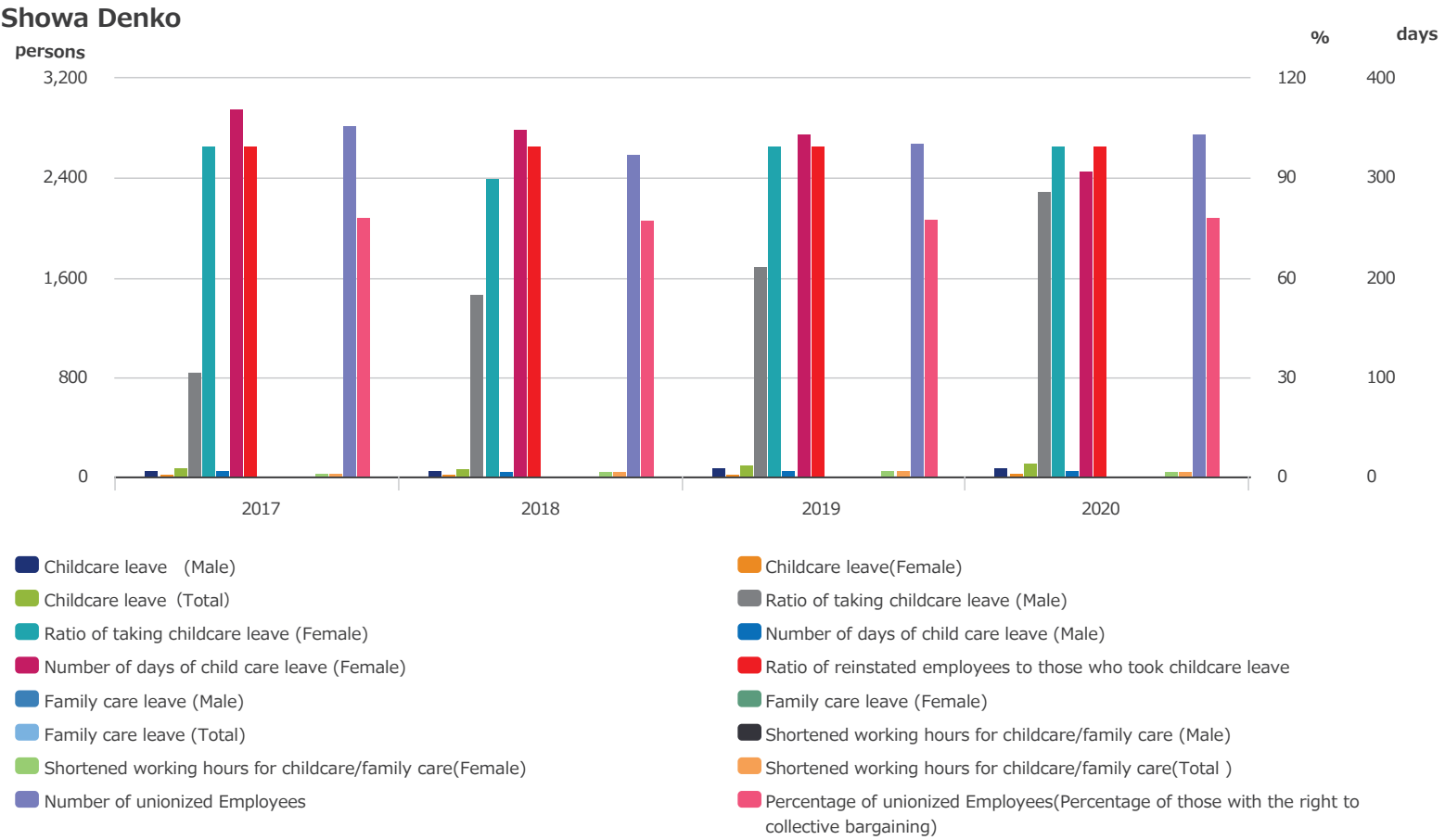
Showa Denko



- Number of newly hired employees (Male)
- Number of newly hired employees (Female)
- Number of newly hired employees (Total)
- Ratio of female in newly hired employees
- Training hours per new career-track employee
- Number of employees hired through the mid-career recruitment (Male)
- Number of employees hired through the mid-career recruitment (Female)
- Number of employees hired through the mid-career recruitment (Total)
- Mid-career recruitment ratio
- Average years employed by the company (Male)
- Average years employed by the company (Female)
- Average years employed by the company (Total)
- Number of voluntary turnover
- Voluntary turnover rate
- Number of reemployed employees
- Ratio of reemployed employees
- Working hours (per employee per year)
- The average over time work per month
- Number of days of annual leave taken per person
- Number of days of annual leave granted per person
- Annual leave acquisition rate
- Training time per person who attends group training
- Average monthly wage (Male)
- Average monthly wage (Female)

		2017	2018	2019	2020
Number of newly hired employees (Male)	persons	78	116	126	129
Number of newly hired employees (Female)	persons	14	25	22	24
Number of newly hired employees (Total)	persons	92	141	148	153
Ratio of female in newly hired employees	%	15.2	17.7	14.9	15.7
Training hours per new career-track employee	hours	-	-	56	32
Number of employees hired through the mid-career recruitment (Male)	persons	17	80	83	38
Number of employees hired through the mid-career recruitment (Female)	persons	3	21	13	7
Number of employees hired through the mid-career recruitment (Total)	persons	20	101	96	45
Mid-career recruitment ratio	%	-	41.7	39.3	22.7
Average years employed by the company (Male)	years	17.0	16.8	16.8	16.8
Average years employed by the company (Female)	years	13.8	12.5	12.6	12.7
Average years employed by the company (Total)	years	16.9	16.6	16.3	16.3
Number of voluntary turnover	persons	67	59	49	52
Voluntary turnover rate	%	1.85	1.76	1.43	1.48
Number of reemployed employees	persons	359	284	275	246
Ratio of reemployed employees	%	83.0	78.4	89.2	94.7
Working hours (per employee per year)	hours	2,011.9	2,013.5	1,963.4	1,961.0
The average over time work per month	hours	18.8	18.9	16.8	15.7
Number of days of annual leave taken per person	days	13.8	13.6	14.3	13.9
Number of days of annual leave granted per person	days	19.4	19.4	19.3	19.4
Annual leave acquisition rate	%	71.1	70.1	74.1	71.6
Training time per person who attends group training	hours	-	-	30.3	16.2
Average monthly wage (Male)	yen	314,638	315,015	324,165	326,846
Average monthly wage (Female)	yen	293,266	290,641	301,093	304,400

- Notes
- Number of newly hired employees (Male) - Data revised back to 2018
 - Number of newly hired employees (Female) - Data revised back to 2018
 - Number of newly hired employees (Total) - Data revised back to 2018
 - Ratio of female in newly hired employees - Data revised back to 2018
 - Training hours per new career-track employee - Average hours of attendance among career-track employees at the head office (in their 1st to 5th years at the company)
 - Number of employees hired through the mid-career recruitment (Male) - Data revised back to 2018
 - Number of employees hired through the mid-career recruitment (Female) - Data revised back to 2018
 - Number of employees hired through the mid-career recruitment (Total) - Data revised back to 2018
 - Number of reemployed employees - Data revised back to 2018
 - Ratio of reemployed employees - Data revised back to 2018
 - Average monthly wage (Male) - Mager and minor career path
 - Average monthly wage (Female) - Mager and minor career path
 - If there is no note, it will be single data.
 - Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.



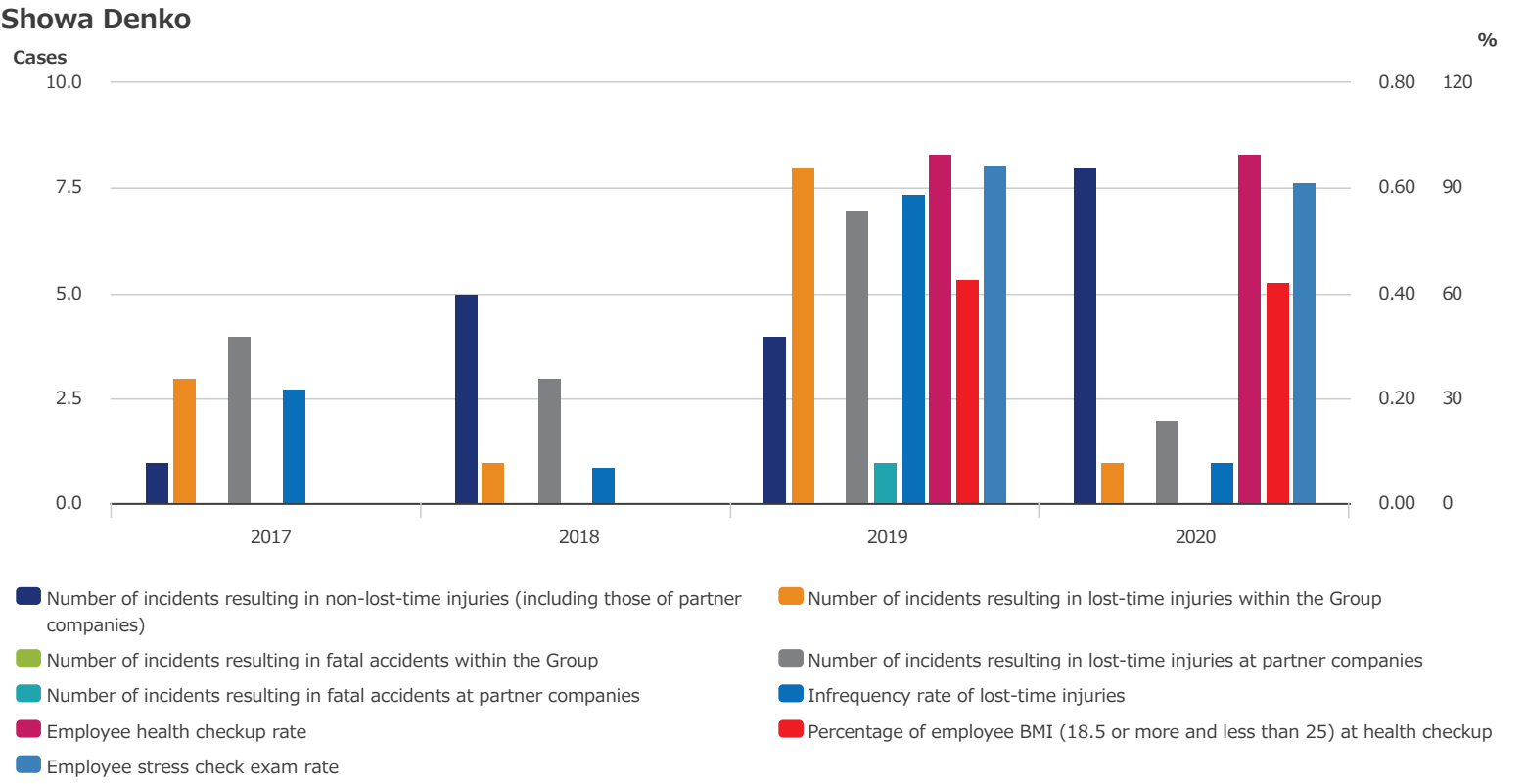
		2017	2018	2019	2020
Childcare leave (Male)	persons	56	52	74	82
Childcare leave(Female)	persons	24	18	24	32
Childcare leave (Total)	persons	80	70	98	107
Ratio of taking childcare leave (Male)	%	31.7	55.2	63.6	86.3
Ratio of taking childcare leave (Female)	%	100	90	100	100
Number of days of child care leave (Male)	days	7	6	7	7
Number of days of child care leave (Female)	days	371	350	345	307
Ratio of reinstated employees to those who took childcare leave	%	100	100	100	100
Family care leave (Male)	persons	2	0	0	0
Family care leave (Female)	persons	1	0	1	1
Family care leave (Total)	persons	3	0	1	1
Shortened working hours for childcare/family care (Male)	persons	0	0	0	0
Shortened working hours for childcare/family care(Female)	persons	33	45	57	41
Shortened working hours for childcare/family care(Total)	persons	33	45	57	41
Number of unionized Employees	persons	2,832	2,590	2,678	2,760
Percentage of unionized Employees(Percentage of those with the right to collective bargaining)	%	78.3	77.4	77.9	78.5

Notes

1.If there is no note, it will be single data.

2.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.

3.The number of employees taking childcare leave, the number of days taken, and the rate of taking childcare leave are counted including employees who have not born children during the year.



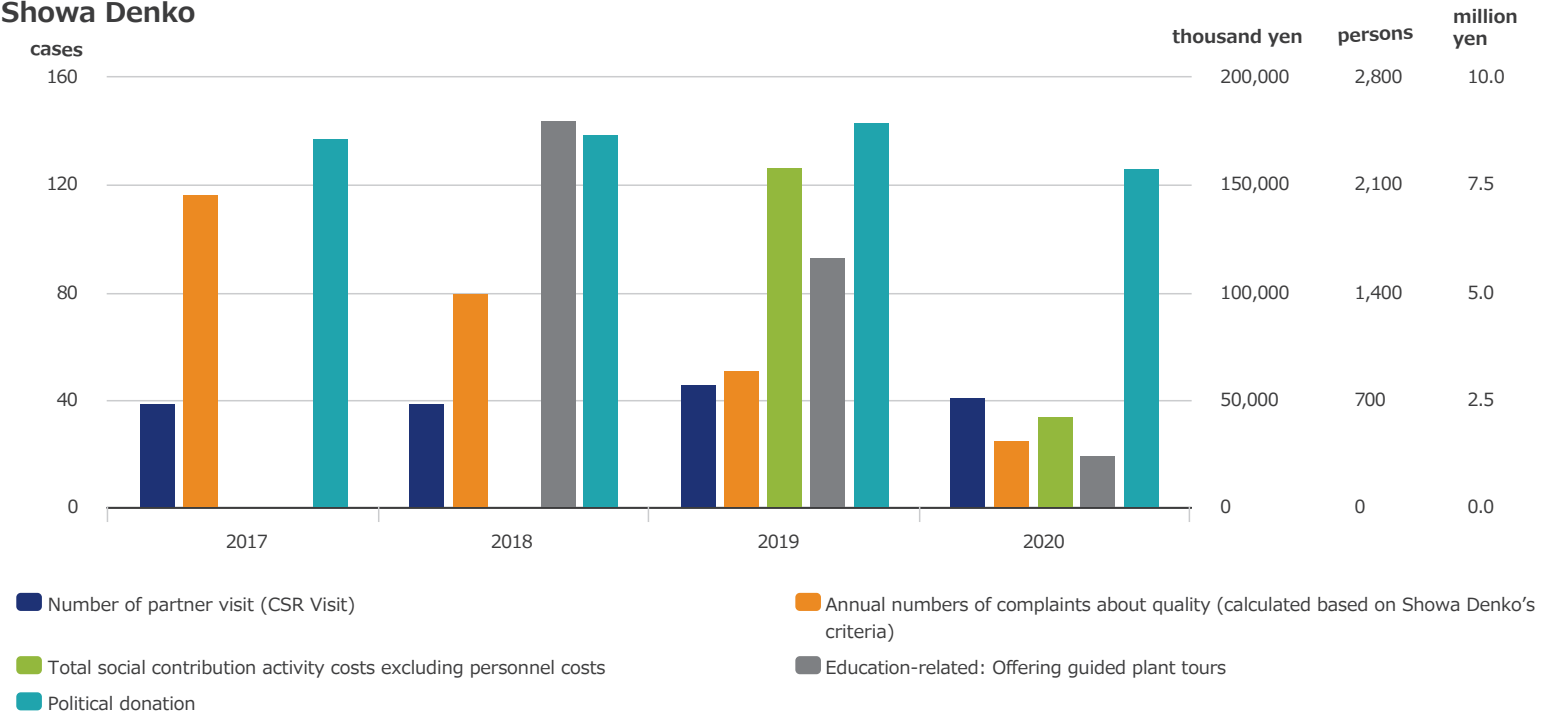
		2017	2018	2019	2020
Number of incidents resulting in non-lost-time injuries (including those of partner companies)	Cases	1	5	4	8
Number of incidents resulting in lost-time injuries within the Group	Cases	3	1	8	1
Number of incidents resulting in fatal accidents within the Group	Cases	0	0	0	0
Number of incidents resulting in lost-time injuries at partner companies	Cases	4	3	7	2
Number of incidents resulting in fatal accidents at partner companies	Cases	0	0	1	0
Infrequency rate of lost-time injuries		0.22	0.07	0.59	0.08
Employee health checkup rate	%	-	-	100	100
Percentage of employee BMI (18.5 or more and less than 25) at health checkup	%	-	-	64.1	63.3
Employee stress check exam rate	%	-	-	96.5	92.0

Notes

1.If there is no note, the data will be for domestic group consolidation.

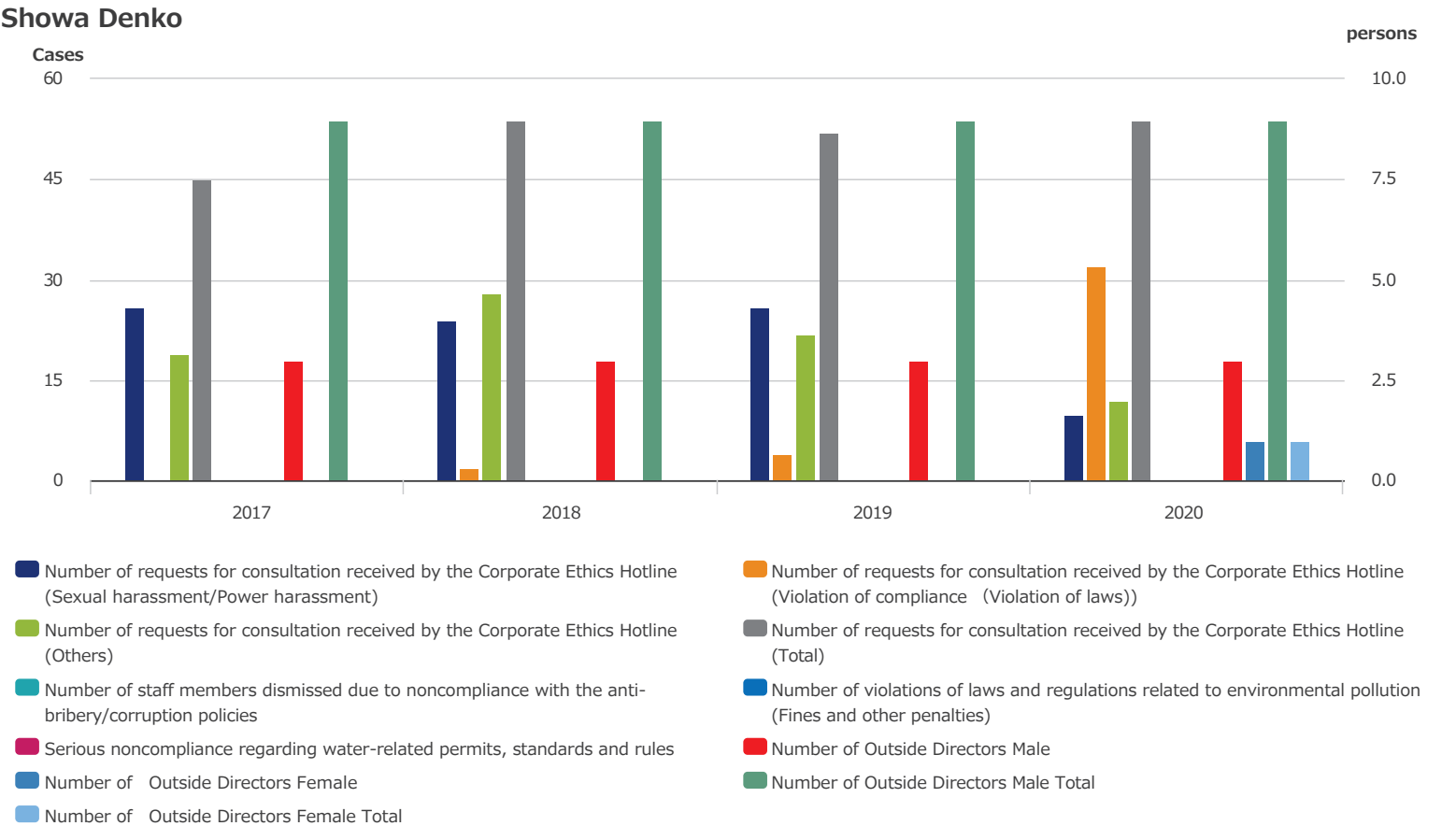
2.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.

Showa Denko



		2017	2018	2019	2020
Number of partner visit (CSR Visit)	cases	39	39	46	41
Annual numbers of complaints about quality (calculated based on Showa Denko’s criteria)	cases	117	80	51	25
Total social contribution activity costs excluding personnel costs	thousand yen	-	-	158,882	43,089
Education-related: Offering guided plant tours	persons	-	2,522	1,628	346
Political donation	million yen	8.6	8.7	9.0	7.9

- Notes
- 1.If there is no note, the data will be for domestic group consolidation.
 - 2.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.
 - 3.Social contribution activity costs were calculated based on the Keidanren standard. The cost of Showa Denko in 2019 has been retroactively revised.



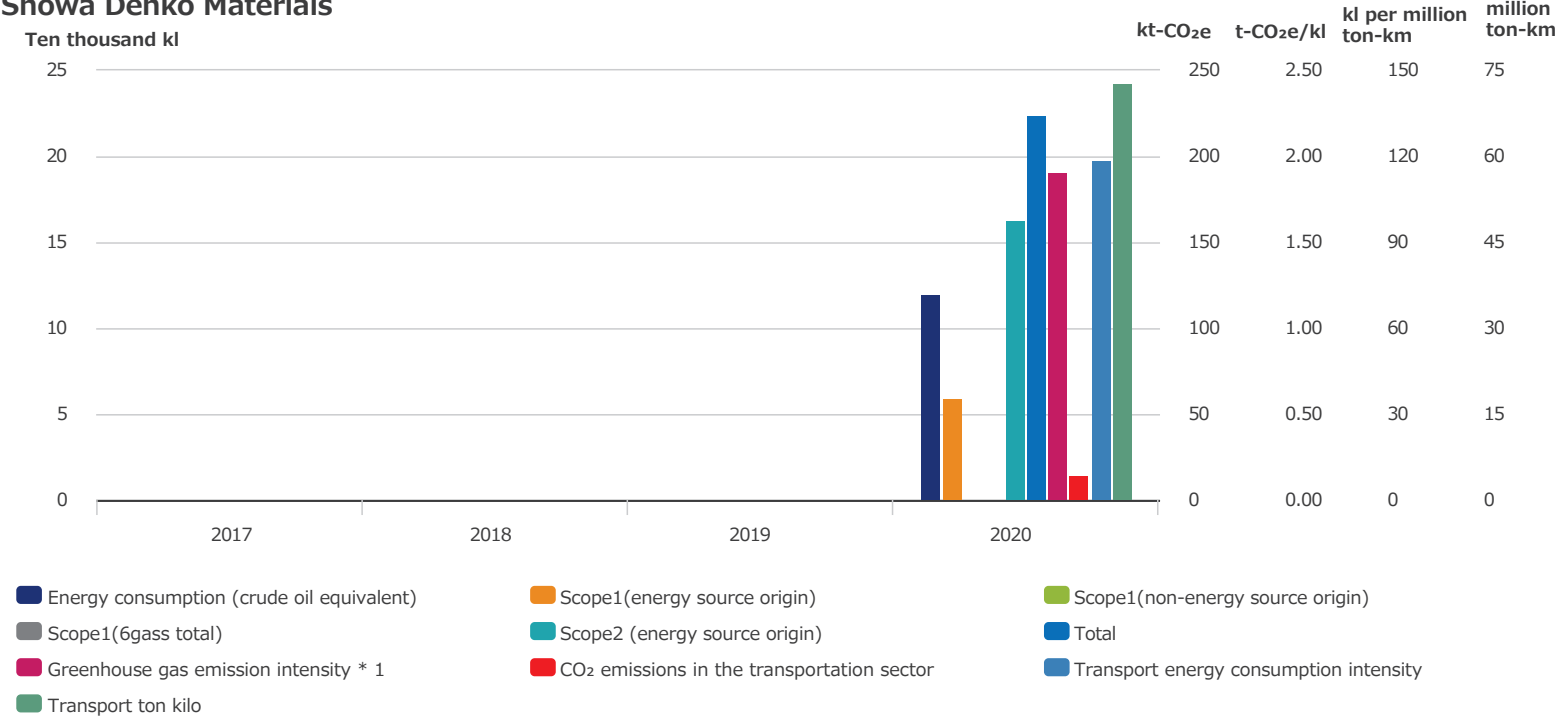
		2017	2018	2019	2020
Number of requests for consultation received by the Corporate Ethics Hotline (Sexual harassment/Power harassment)	Cases	26	24	26	10
Number of requests for consultation received by the Corporate Ethics Hotline (Violation of compliance (Violation of laws))	Cases	0	2	4	32
Number of requests for consultation received by the Corporate Ethics Hotline (Others)	Cases	19	28	22	12
Number of requests for consultation received by the Corporate Ethics Hotline (Total)	Cases	45	54	52	54
Number of staff members dismissed due to noncompliance with the anti-bribery/corruption policies	persons	0	0	0	0
Number of violations of laws and regulations related to environmental pollution (Fines and other penalties)	Cases	0	0	0	0
Serious noncompliance regarding water-related permits, standards and rules	Cases	0	0	0	0
Number of Outside Directors Male	persons	3	3	3	3
Number of Outside Directors Female	persons	0	0	0	1
Number of Outside Directors Male Total	persons	9	9	9	9
Number of Outside Directors Female Total	persons	0	0	0	1

Notes

1.If there is no note, it will be concatenated data.

2.The number of outside directors and the number of directors are data only for the relevant company. The number of directors includes outside directors.

Showa Denko Materials



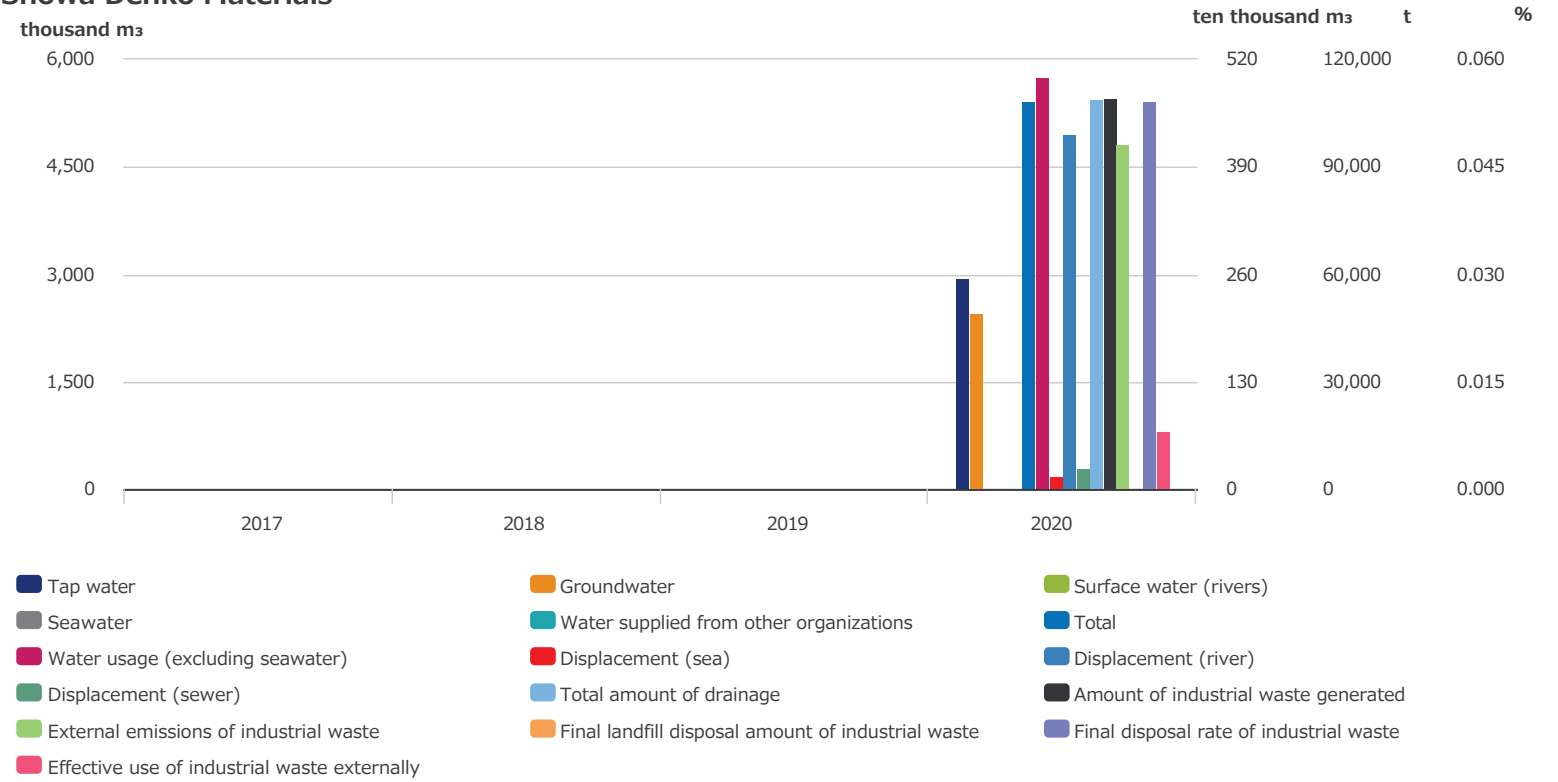
		2017	2018	2019	2020
Energy consumption (crude oil equivalent)	Ten thousand kl	-	-	-	12
Scope1(energy source origin)	kt-CO ₂ e	-	-	-	60
Scope1(non-energy source origin)	kt-CO ₂ e	-	-	-	1.20
Scope1(6gass total)	kt-CO ₂ e	-	-	-	0.07
Scope2 (energy source origin)	kt-CO ₂ e	-	-	-	164
Total	kt-CO ₂ e	-	-	-	224
Greenhouse gas emission intensity * 1	t-CO ₂ e/kl	-	-	-	1.91
CO ₂ emissions in the transportation sector	kt-CO ₂ e	-	-	-	15
Transport energy consumption intensity	kl per million ton-km	-	-	-	119
Transport ton kilo	million ton-km	-	-	-	73

Notes

1.Greenhouse gas emission intensity * 1 - The greenhouse gas emission intensity is the value obtained by dividing the greenhouse gas emission amount by the energy consumption (crude oil equivalent).

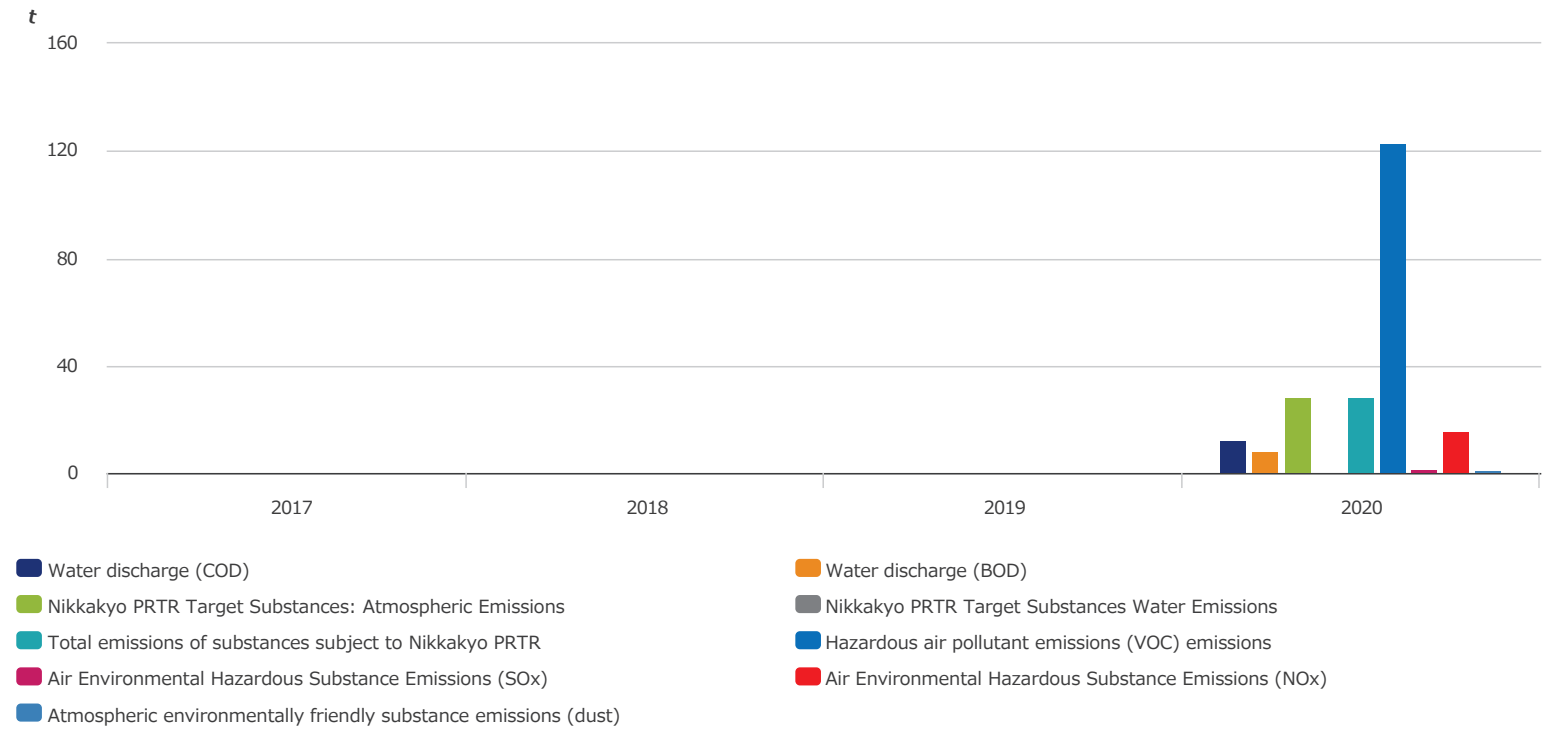
2.If there is no note, Showa Denko is a domestic group connection (excluding Showa Denko Materials), and Showa Denko Materials is a single data.

Showa Denko Materials



Notes
1.If there is no note, Showa Denko is a domestic group connection (excluding Showa Denko Materials), and Showa Denko Materials is a single data.

Showa Denko Materials

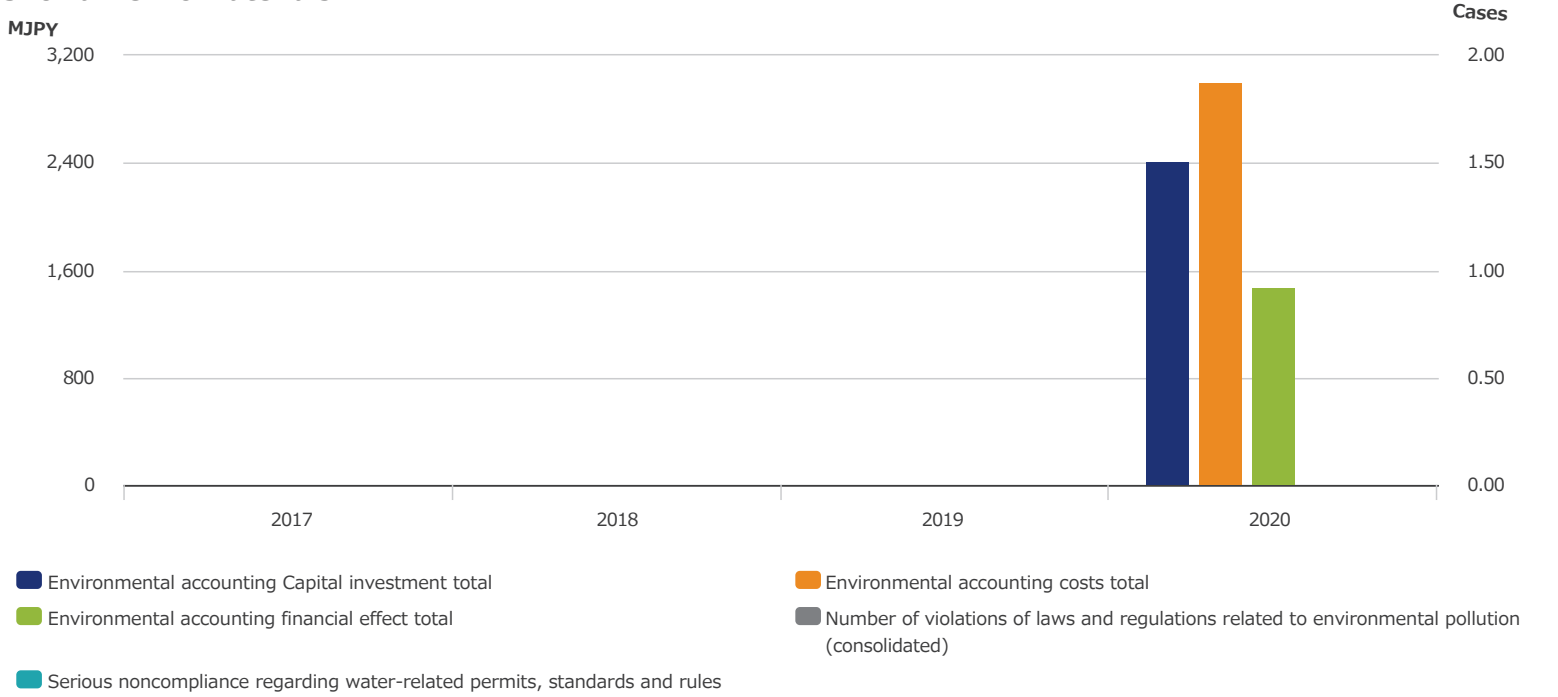


		2017	2018	2019	2020
Water discharge (COD)	t	-	-	-	12
Water discharge (BOD)	t	-	-	-	8
Nikkakyo PRTR Target Substances: Atmospheric Emissions	t	-	-	-	29
Nikkakyo PRTR Target Substances Water Emissions	t	-	-	-	0.00
Total emissions of substances subject to Nikkakyo PRTR	t	-	-	-	29
Hazardous air pollutant emissions (VOC) emissions	t	-	-	-	123
Air Environmental Hazardous Substance Emissions (SOx)	t	-	-	-	2
Air Environmental Hazardous Substance Emissions (NOx)	t	-	-	-	16
Atmospheric environmentally friendly substance emissions (dust)	t	-	-	-	1

Notes

1.If there is no note, Showa Denko is a domestic group connection (excluding Showa Denko Materials), and Showa Denko Materials is a single data.

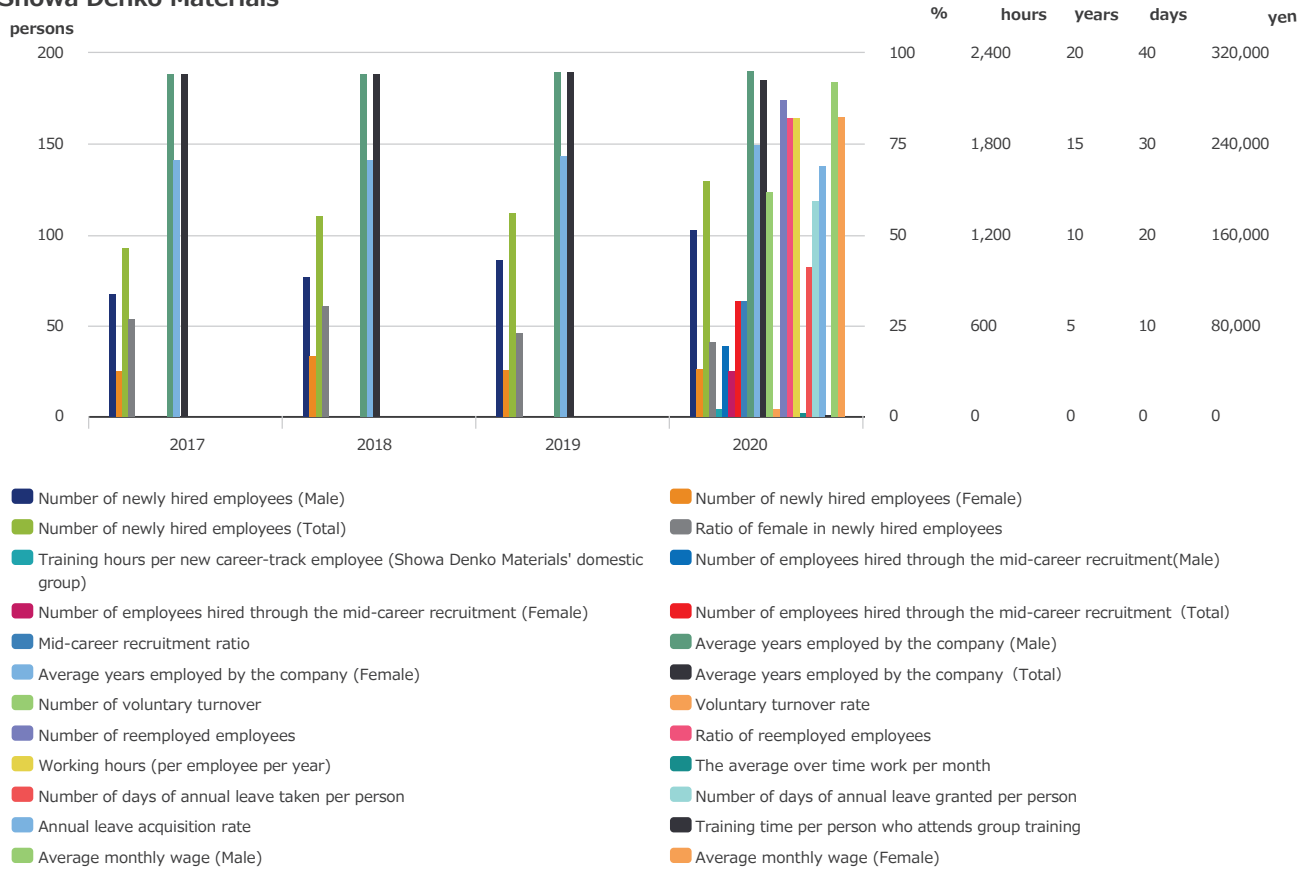
Showa Denko Materials



		2017	2018	2019	2020
Environmental accounting Capital investment total	MJPY	-	-	-	2,409
Environmental accounting costs total	MJPY	-	-	-	3,010
Environmental accounting financial effect total	MJPY	-	-	-	1,486
Number of violations of laws and regulations related to environmental pollution (consolidated)	Cases	-	-	-	0
Serious noncompliance regarding water-related permits, standards and rules	Cases	-	-	-	0

Notes
1.If there is no note, Showa Denko is a single data, and Showa Denko Materials is a single data.

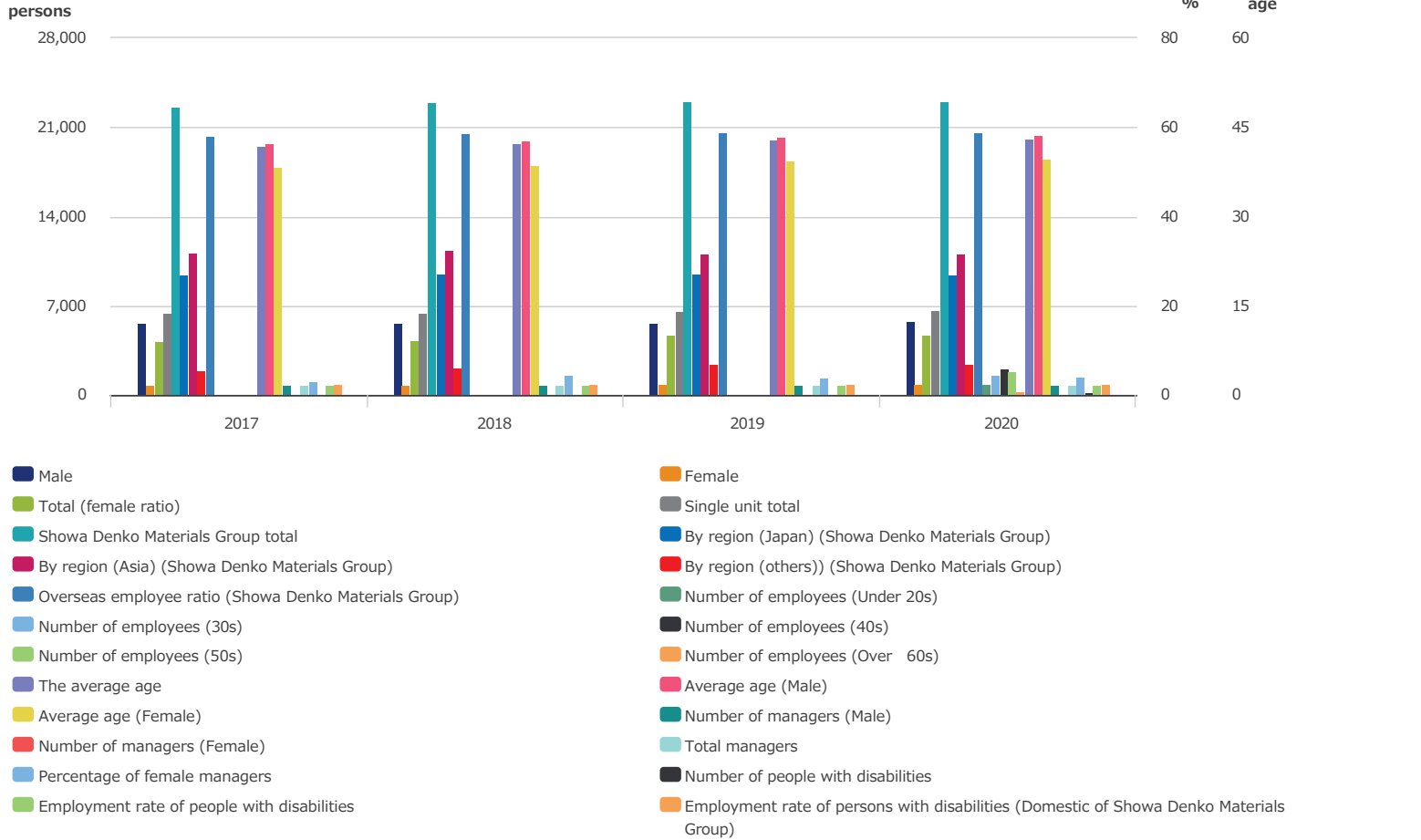
Showa Denko Materials



Notes

- 1.Training hours per new career-track employee (Showa Denko Materials' domestic group) - Average hours of attendance among career-track employees at the head office.
- 2.Average monthly wage (Male) - Mager and minor career path
- 3.Average monthly wage (Female) - Mager and minor career path
- 4.If there is no note, it will be single data.
- 5.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.

Showa Denko Materials



		2017	2018	2019	2020
Male	persons	5,693	5,716	5,718	5,812
Female	persons	787	812	897	917
Total (female ratio)	%	12.1	12.4	13.6	13.6
Single unit total	persons	6,480	6,528	6,615	6,729
Showa Denko Materials Group total	persons	22,623	22,989	23,095	23,051
By region (Japan) (Showa Denko Materials Group)	persons	9,465	9,499	9,496	9,447
By region (Asia) (Showa Denko Materials Group)	persons	11,185	11,355	11,133	11,130
By region (others)) (Showa Denko Materials Group)	persons	1,973	2,135	2,466	2,474
Overseas employee ratio (Showa Denko Materials Group)	%	58.2	58.7	58.9	59.0
Number of employees (Under 20s)	persons	-	-	-	881
Number of employees (30s)	persons	-	-	-	1,604
Number of employees (40s)	persons	-	-	-	2,046
Number of employees (50s)	persons	-	-	-	1,869
Number of employees (Over 60s)	persons	-	-	-	329
The average age	age	41.9	42.3	42.9	43.2
Average age (Male)	age	42.4	42.8	43.4	43.7
Average age (Female)	age	38.4	38.8	39.3	39.8
Number of managers (Male)	persons	778	751	784	781
Number of managers (Female)	persons	25	35	33	34
Total managers	persons	803	786	817	815
Percentage of female managers	%	3.1	4.5	4.0	4.2
Number of people with disabilities	persons	-	-	-	170
Employment rate of people with disabilities	%	2.28	2.31	2.29	2.27
Employment rate of persons with disabilities (Domestic of Showa Denko Materials Group)	%	2.50	2.46	2.49	2.40

Notes

1.By region (Asia) (Showa Denko Materials Group) - Excluding Japan

2.Number of managers (Male) - Manager or above

3.Number of managers (Female) - Manager or above

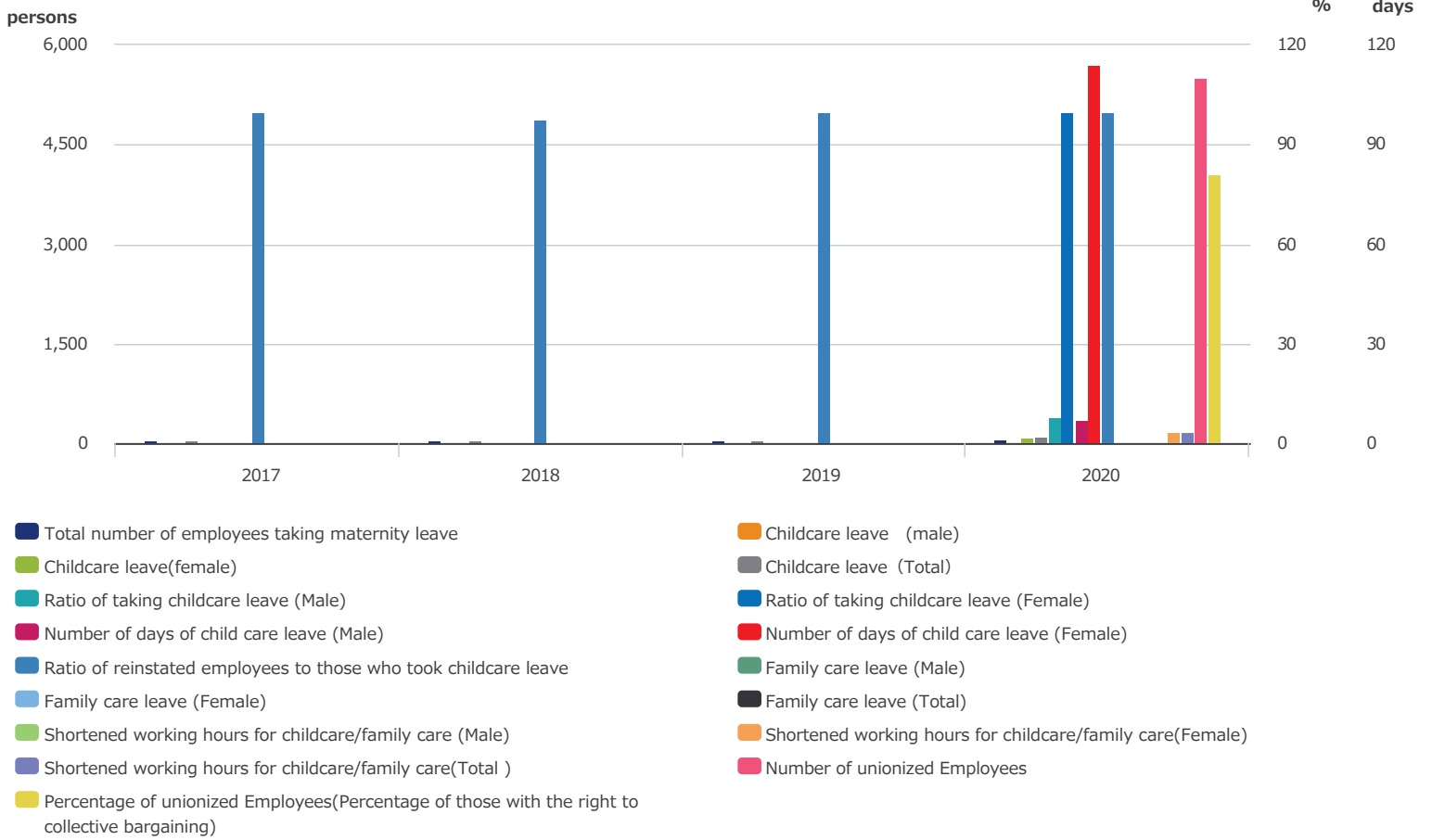
4.Total managers - Manager or above

5.Percentage of female managers - Manager or above

6.If there is no note, it will be single data.

7.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.

Showa Denko Materials



		2017	2018	2019	2020
Total number of employees taking maternity leave	persons	39	41	38	64
Childcare leave (male)	persons	-	-	-	28
Childcare leave(female)	persons	-	-	-	84
Childcare leave (Total)	persons	40	43	46	112
Ratio of taking childcare leave (Male)	%	-	-	-	8.1
Ratio of taking childcare leave (Female)	%	-	-	-	100
Number of days of child care leave (Male)	days	-	-	-	7
Number of days of child care leave (Female)	days	-	-	-	114
Ratio of reinstated employees to those who took childcare leave	%	100	98	100	100
Family care leave (Male)	persons	-	-	-	4
Family care leave (Female)	persons	-	-	-	9
Family care leave (Total)	persons	-	-	-	13
Shortened working hours for childcare/family care (Male)	persons	-	-	-	3
Shortened working hours for childcare/family care(Female)	persons	-	-	-	158
Shortened working hours for childcare/family care(Total)	persons	-	-	-	161
Number of unionized Employees	persons	-	-	-	5,525
Percentage of unionized Employees(Percentage of those with the right to collective bargaining)	%	-	-	-	81.3

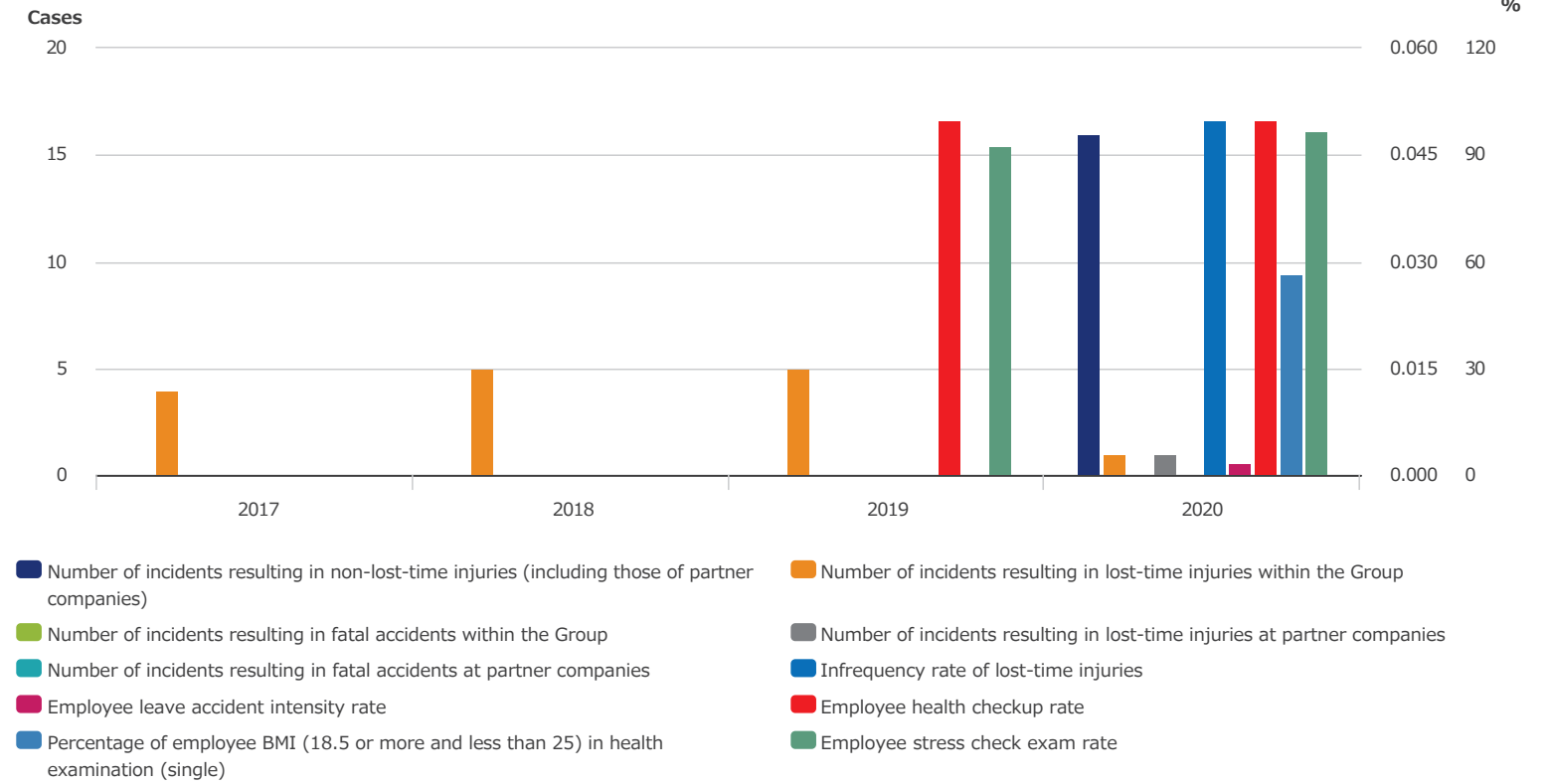
Notes

1.If there is no note, it will be single data.

2.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.

3.The number of employees taking childcare leave, the number of days taken, and the rate of taking childcare leave are counted including employees who have not born children during the year.

Showa Denko Materials

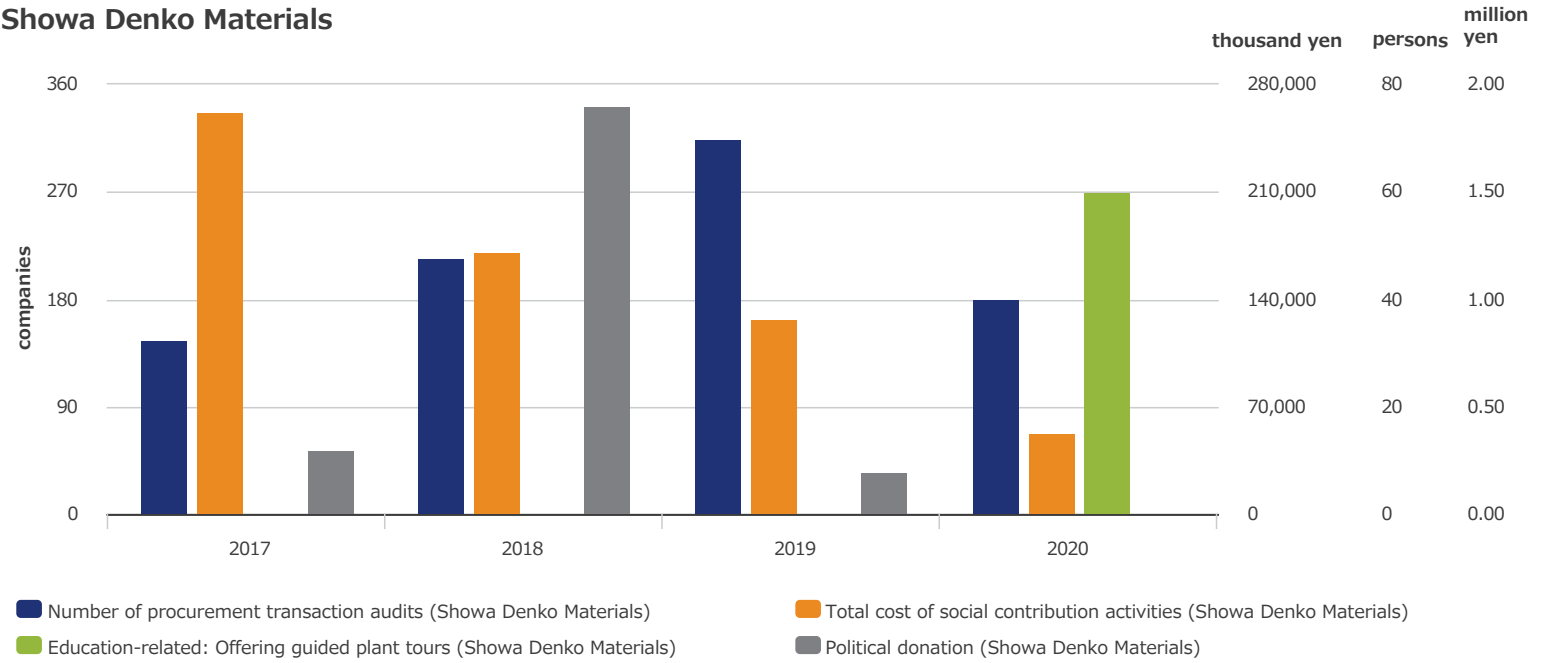


		2017	2018	2019	2020
Number of incidents resulting in non-lost-time injuries (including those of partner companies)	Cases	-	-	-	16
Number of incidents resulting in lost-time injuries within the Group	Cases	4	5	5	1
Number of incidents resulting in fatal accidents within the Group	Cases	-	-	-	0
Number of incidents resulting in lost-time injuries at partner companies	Cases	-	-	-	1
Number of incidents resulting in fatal accidents at partner companies	Cases	-	-	-	0
Infrequency rate of lost-time injuries		-	-	-	0.05
Employee leave accident intensity rate		-	-	-	0.0017
Employee health checkup rate	%	-	-	100	100
Percentage of employee BMI (18.5 or more and less than 25) in health examination (single)	%	-	-	-	56.5
Employee stress check exam rate	%	-	-	92.6	97.0

Notes

1.If there is no note, the data will be for domestic group consolidation.

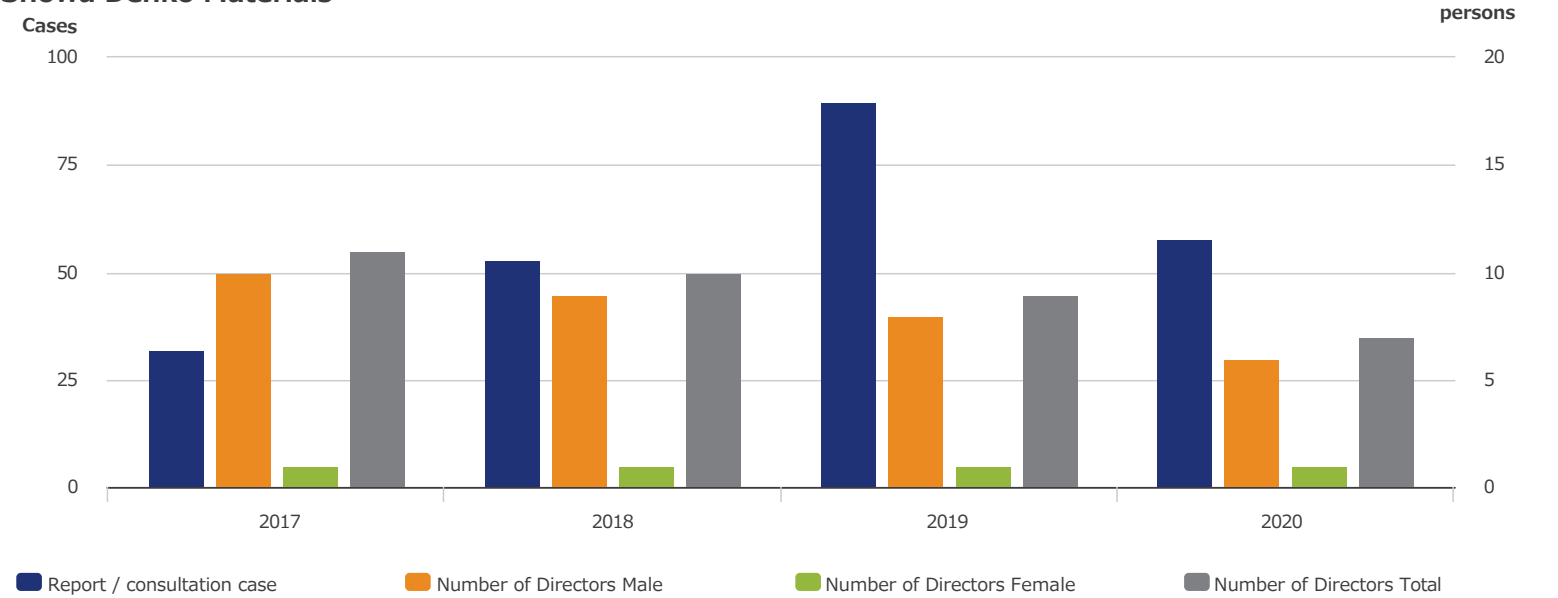
2.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.



		2017	2018	2019	2020
Number of procurement transaction audits (Showa Denko Materials)	companies	147	215	314	181
Total cost of social contribution activities (Showa Denko Materials)	thousand yen	262,805	170,730	127,642	52,732
Education-related: Offering guided plant tours (Showa Denko Materials)	persons	-	-	-	60
Political donation (Showa Denko Materials)	million yen	0.3	1.9	0.2	0.0

Notes
 1.If there is no note, the data will be for domestic group consolidation.
 2.Showa Denko's domestic group and consolidated data do not include Showa Denko Materials' data.
 3.Social contribution activity costs were calculated based on the Keidanren standard. The cost of Showa Denko in 2019 has been retroactively revised.

Showa Denko Materials



		2017	2018	2019	2020
Report / consultation case	Cases	32	53	90	58
Number of Directors Male	persons	10	9	8	6
Number of Directors Female	persons	1	1	1	1
Number of Directors Total	persons	11	10	9	7

Notes
1.If there is no note, it will be concatenated data.
2.The number of outside directors and the number of directors are data only for the relevant company. The number of directors includes outside directors.

Editorial Policies/ Report Scope

Editorial policies

In this CSR section of Showa Denko's official website, we are committed to posting information about the Showa Denko Group's initiatives including those for the environment, society and governance (ESG) and showcasing the Group's ideas, policies, systems, activity details and numerical data in an exhaustive manner.

In our integrated report (Showa Denko Report), we publish both financial and nonfinancial information to help our stakeholders understand the Showa Denko Group's value creation story.

We invite you to read this report along with the CSR section of the website.

Related link [Integrated report "SHOWA DENKO Report"](#)

Report scope

Publication date

As for sustainability information (in English), we made an annual update on August 31, 2021 to disclose the actual results for 2020. In order to provide our stakeholders with the latest information, we will continue to update the information from time to time in and after September 2021 as well.

Period covered by this report

This report covers information for the period from January 1 to December 31, 2020, with some information also provided for 2021.

Organizations covered by this report

“Showa Denko” as used in the text of this report refers to Showa Denko K.K., while “Showa Denko Group” or “the Group” refers to Showa Denko and its consolidated subsidiaries in Japan and abroad. “Group companies in Japan” refer to Showa Denko and its consolidated subsidiaries in Japan.

Showa Denko made Showa Denko Materials (former Hitachi Chemical) a consolidated subsidiary in 2020, but our current sustainability information does not include Showa Denko Materials-related data, in principle. For details regarding Showa Denko Materials’ ESG measures, please refer to the company’s official website.

Related link [List of Data Collection Boundaries](#)

Related link [Showa Denko Materials' website \(Sustainability\)](#) 

Guidelines/guidance referenced

ISO26000 : 2010

GRI Sustainability Reporting Standards 2016

Environmental Reporting Guidelines 2018 from the Ministry of the Environment of Japan

Task Force on Climate-related Financial Disclosures (TCFD)

SASB Standards from Sustainability Accounting Standards Board Industries Chemicals

Prepared by

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ESG Investment Indexes

ESG Investment Indexes adopting Showa Denko

As of July 2021, Showa Denko is included in the following ESG investment indexes:

■ FTSE4Good Global Index



This socially responsible investment index was launched by FTSE International, Ltd., a subsidiary of the London Stock Exchange. The index is intended to foster investments in companies that are highly rated based on widely approved international criteria on corporate social responsibility.



■ FTSE Blossom Japan Index



Included in this index are Japanese companies that are excellent in terms of ESG-related performance. This ESG index is designed to be industry-neutral by weighting based on the FTSE Japan Index (parent index).



■ MSCI Japan ESG Select Leaders Index



Included in this index are companies that are highly rated for ESG among those included in



the MSCI Japan IMI Top 500 Index (parent index).

■ MSCI Japan Empowering Women Index (WIN)

2021 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)

Included in this index are companies that are highly rated for gender diversity among those included in the MSCI Japan IMI Top 500 Index (parent index).



* THE INCLUSION OF SHOWA DENKO K.K. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF SHOWA DENKO K.K. BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

■ S&P/JPX Carbon Efficient Index



This index by S&P Dow Jones Indices and the Tokyo Stock Exchange overweights or underweights the companies comprising the index based on their disclosure of environmental information and the level of their carbon efficiency.



■ SNAM Sustainability Index



Launched by Sompo Japan Nipponkoa Asset Management (SNAM), this index comprises companies highly rated for ESG and is utilized to enable the company to make sustainable investments.



List of Declarations and Certifications

Environmental management system

(As of June 2021)

Sites with certified systems among Showa Denko's 16 plants and 13 affiliated companies (17 plants) in Japan and 21 affiliated companies outside the country:

	Operation site	Category
Showa Denko K.K.	Oita Complex	ISO14001
Showa Denko K.K.	Kawasaki Plant, Higashinagahara Plant Kawasaki Plant Higashinagahara Plant (excluding Power Generation Group) Kawasaki Unit, Institute for Integrated Product Development Carbon Group, Institute for Integrated Product Development Flow battery Group, Institute for Integrated Product Development	ISO14001

	Operation site	Category
	Green Project, Institute for Integrated Product Development Battery Materials Unit, Okawa Development Center, Institute for Integrated Product Development	
Showa Denko K.K.	Tokuyama Plant	ISO14001
Showa Denko K.K.	Isesaki Plant	ISO14001
Showa Denko K.K.	Tatsuno Plant, HIPACK Co.,LTD. Tatsuno Plant	ISO14001
Showa Denko K.K.	Omachi Plant	ISO14001
Showa Denko K.K.	Shiojiri Plant, Showa Denko Ceramics Co.,Ltd Shiojiri Plant	ISO14001
Showa Denko K.K.	Yokohama Plant	ISO14001
Showa Denko K.K.	Oyama Plant	ISO14001
Showa Denko K.K.	Sakai Plant	ISO14001
Showa Denko K.K.	Kitakata Plant	ISO14001
Showa Denko K.K.	Chichibu Plant	ISO14001
Showa Denko K.K.	Chiba Plant, SHOWA DENKO Electronics K.K.	ISO14001
Showa Denko K.K.	Institute for Integrated Product Development (Toke)	ISO14001
Tsurusaki Kyodo Doryoku Co., Ltd.		ISO14001

	Operation site	Category
Sun Allomer Ltd.	Oita Plant	ISO14001
Sun Allomer Ltd.	Kawasaki Plant	ISO14001
Showa Denko Ceramics Co., Ltd.	Toyama Plant	ISO14001
Shinshu Showa Co., Ltd.	Omachi Plant	ISO14001
Union Showa K.K.	Head Office, Yokkaichi Plant, Aizu Plant	ISO14001
Shoko Electronics Co.,Ltd.		ISO14001
Showa Denko Gas Products Co., Ltd.	Production Division (Kawasaki Plant/Yokkaichi Plant/Quality Assurance Department/Environmental Safety Department/Engineering Department/Okawa Gas Center) Sales Division(Industrial Materials Department/Development Department)	ISO14001
Showa Denko HD Yamagata K.K.		ISO14001
Niigata Showa K.K.		ISO14001
Showa Denko Packaging Co.,Ltd.	Whole company	Eco-action 21
SHOTIC Europa Industria de Aluminio Lda.		ISO14001
Showa Aluminum Manufacturing Philippines Corporation		ISO14001
Showa denko Sichuan Carbon Inc.		ISO14001

	Operation site	Category
Shanghai Showa Highpolymer Trading Co., Ltd.		ISO14001
Showa Denko HD Singapore Pte Ltd.		ISO14001
Showa Denko HD Trace corp.		ISO14001
Showa Denko HD (Malaysia) Sdn.Bhd.		ISO14001
Showa Specialty Gas(Taiwan) Co., Ltd.	Showa Specialty Gas (Taiwan) Co., Ltd., Taiwan Showa Chemicals Manufacturing Co., Ltd.	ISO14001
Showa Denko (Dalian) Co., Ltd.		ISO14001
Zhejiang Quzhou Juhua Showa Electronic Chemical Materials Co., Ltd.		ISO14001
Showa Specialty Gas Singapore (Pte.) Ltd.		ISO14001
SHOWA DENKO New Material (Zhuhai) CO.,LTD.		ISO14001

Occupational health and safety management systems

(As of June 2021)

Sites with certified systems among Showa Denko's 16 plants and 13 affiliated companies (17 plants) in Japan and 21 affiliated companies outside the country:

	Operation site	Certification
Showa Denko K.K.	Oita Complex	ISO45001

	Operation site	Certification
Showa Denko K.K.	Kawasaki Plant	OSHMS
Showa Denko K.K.	Higashinagahara Plant	ISO45001
Showa Denko K.K.	Tokuyama Plant	ISO45001
Showa Denko K.K.	Isesaki Plant	ISO45001
Showa Denko K.K.	Tatsuno Plant, HIPACK CO.,LTD. Tatsuno Plant	ISO45001
Showa Denko K.K.	Omachi Plant	OSHMS
Showa Denko K.K.	Oyama Plant	OSHMS
Showa Denko K.K.	Kitakata Plant	ISO45001
Showa Denko K.K.	Chichibu Plant	OSHMS
Showa Denko K.K.	Chiba Plant, SHOWA DENKO Electronics K.K.	ISO45001
Showa Denko K.K.	Institute for Integrated Product Development (Toke)	ISO45001
Tsurusaki Kyodo Doryoku Co.,Ltd.		ISO45001
Sun Allomer Ltd.	Oita Plant	ISO45001
Sun Allomer Ltd.	Kawasaki Plant	ISO45001
Showa Ceramics Co., Ltd.	Toyama Plant,Shiojiri Plant, Yokohama Plant	ISO45001
Showa Denko Gas Products Co., Ltd.	Kawasaki Plant	JISHA Good Safety Company
Showa Denko Gas Products Co., Ltd.	Yokkaichi Plant	JISHA Good Safety Company

	Operation site	Certification
Showa Denko HD Yamagata K.K.		ISO45001
Showa Denko HD Singapore Pte Ltd.		ISO45001
Showa Denko HD Trace corp.		ISO45001
Showa Denko HD Malaysia SDN.BHD		ISO45001

※ Rate of the Group's domestic and overseas manufacturing bases with certified systems (as of June 2021):

- Environmental management systems: 76% (41/54 plants)
- Occupational health and safety management systems: 41% (22/54 plants)
- OHSAS 18001/ISO 45001: 37% (20/54 plants)

※1 For Group companies, the following companies are excluded from the calculation target: Certified as a Showa Denko plant, has a plant on the premises for manufacturing services, and does not involve Showa Denko directly with the promotion of Responsible Care at the company.

Quality management system

(As of June 2021)

	Operation site	Category
Showa Denko K.K.	Oita Complex	ISO9001
Showa Denko K.K.	Kawasaki Plant	ISO9001
Showa Denko K.K.	Higashinagahara Plant	ISO9001

	Operation site	Category
Showa Denko K.K.	Isesaki Plant	ISO9001
Showa Denko K.K.	Tatsuno Plant	ISO9001
Showa Denko K.K.	Oita Production Department, Tatsuno Plant	ISO9001
Showa Denko K.K.	Tokuyama Plant	ISO9001
Showa Denko K.K.	Omachi Plant	ISO9001
Showa Denko K.K.	Shiojiri Plant	ISO9001
Showa Denko K.K.	Yokohama Plant	ISO9001
Showa Denko K.K.	Aluminum Rolled Products Division	ISO9001
Showa Denko K.K.	Oyama Plant	ISO9001
Showa Denko Photonics Co., Ltd.		ISO9001・ IATF16949
Sun Allomer Ltd.	Head Office, Oita Plant, Kawasaki Plant, Research and Development Division, Osaka Branch	ISO9001
Showa Denko Gas Products Co., Ltd.	Production Division, Sales Division, STT	ISO9001
Union Showa K.K.	Head Office, Yokkaichi Factory, Aizu Factory	ISO9001
HIPACK Co.,LTD.		ISO9001
Showa Denko Ceramics Co., Ltd.	Shiojiri Plant, Toyama Plant,Yokohama Plant	ISO9001
Showa Fine Ceramics Co., Ltd.		ISO9001

	Operation site	Category
Showa Denko Sakai Aluminum K.K.		ISO9001
Showa Denko Kitakata Aluminum K.K.		ISO9001・IATF16949
Showa Denko Electronics		ISO9001
Showa Denko HD Yamagata K.K.		ISO9001
Showa Denko Packaging Co.,Ltd.	Hikone Plant , Tokyo branch, Osaka branch, Isehara Plant	ISO9001・IATF16949
Showa Denko Kenzai K.K.	Head Office	ISO9001
Niigata Showa K.K.		ISO9001
Shoko Electronics Co.,Ltd.		ISO9001・IATF16949
F2 Chemicals Limited		ISO9001
Shanghai Showa Highpolymer Co., Ltd.		ISO9001
Showa Specialty Gas (Taiwan) Co., Ltd.		ISO9001
Taiwan Showa Chemicals Manufacturing Co., Ltd.		ISO9001
Shanghai Showa Chemicals Co., Ltd.		ISO9001
Zhejiang Quzhou Juhua Showa Electronic Chemical Materials Co., Ltd.		ISO9001

	Operation site	Category
Showa Specialty Gas Singapore (Pte.) Ltd.		ISO9001
Anseong Gas Center, Korea Showa Chemicals Co.		ISO9001
Shanghai Showa Electronics Materials Co., Ltd.		ISO9001
SHOWA DENKO New Material (Zhuhai) CO.,LTD.		ISO9001
Lianyungang Zaoling Abrasives Co., Ltd.		ISO9001
Showa Denko Carbon, Inc.		ISO9001
Showa Denko Sichuan Carbon Inc.		ISO9001
SHOTIC Europa Industria de Aluminio Lda.		ISO9001・IATF16949
Showa Aluminum Manufacturing Philippines Corporation		ISO9001
SHOTIC MALAYSIA SDN. BHD.		ISO9001・IATF16949
Showa Denko (Dalian) Co., Ltd.		ISO9001
Showa Denko HD Singapore Pte Ltd.		ISO9001
Showa Denko HD Trace corp.		ISO9001
		ISO9001・IATF16949

	Operation site	Category
Showa Denko Battery Materials (Shanghai) Co., Ltd.		
Showa Denko Europe GmbH		ISO9001

GRI Sustainability Reporting Guideline

Our website refers to "GRI Sustainability Reporting Standards 2016". (As of September, 2021)

Related documents

[Integrated Report "SHOWA DENKO Report 2021"](#) (7.2MB)

[Corporate Governance Basic Policies](#) (115kB)

[Corporate Governance Report\(Last Updated: August 26, 2021\)](#) (361kB)

[Showa Denko Group's CSR Procurement Guidelines](#) (166kB)

[112th Securities Report \(Japanese only\)](#) (1.2MB)

[ANNUAL REPORT 2020](#) (3.1MB)

GRI-102:General Disclosures

Indicator		References (As of October 2021)
102-1	Name of the organization	Profile
102-2	Activities, brands, products, and services	Profile Company History Business Segments Products
102-3	Location of headquarters	Profile
102-4	Location of operations	Profile

Indicator		References (As of October 2021)
		Locations (Showa Denko K.K.) Locations (Subsidiaries / Affiliates (Japan)) Locations (Subsidiaries / Affiliates (Overseas))
102-5	Ownership and legal form	Profile
102-6	Markets served	Profile Locations (Showa Denko K.K.) Locations (Subsidiaries / Affiliates (Japan)) Locations (Subsidiaries / Affiliates (Overseas))
102-7	Scale of the organization	Profile Locations (Showa Denko K.K.) Locations (Subsidiaries / Affiliates (Japan)) Locations (Subsidiaries / Affiliates (Overseas)) Performance Trends (Tool for financial analysis) Financial Results Basic Stock Information Annual Report 2020: Financial Data (P.24)
102-8	Information on employees and other workers	ESG Performance Data (Society: Number of employees) Securities Report: 5 Employees (Japanese only) (P.12)
102-9	Supply chain	Supply Chain
102-10		News Releases in 2020:

Indicator		References (As of October 2021)
	Significant changes to the organization and its supply chain	Announcement regarding Company Split (Absorption-Type Company Split) and Transfer of Energy Storage Devices and Systems Business through Share Transfer by a Consolidated Subsidiary (Change of Second-Generation Subsidiary) Notice regarding Share Transfer with Change in Subsidiary Execution of Master Agreement regarding Series of Transactions, including the Succession of the Aluminum Can and Aluminum Rolling Businesses through Company Splits, and Deconsolidation of a Subsidiary of Showa Denko K.K. (63KB)
102-11	Precautionary Principle or approach	Risk management
102-12	External initiatives	Major initiatives that we support, and the organizations to which we belong as a member
102-13	Membership of associations	Major initiatives that we support, and the organizations to which we belong as a member

2.Strategy

Indicator		References
102-14	Statement from senior decision-maker	Message from CEO SHOWA DENKO Report 2021: Top Message (P.24-27)
102-15		

Indicator		References
	Key impacts, risks, and opportunities	Measures against Climate Change (Disclosure in Line with TCFD) Risk management Annual Report 2020: Risk Factors (P.22)

3.Ethics and integrity



Indicator		References
102-16	Values, principles, standards, and norms of behavior	Our Vision
102-17	Mechanisms for advice and concerns english/about ethics	Corporate Ethics Hotline

4.Governance



Indicator		References
102-18	Governance structure	Corporate Governance CSR Promotion Framework
102-19	Delegating authority	Corporate Governance CSR Promotion Framework
102-20	Executive-level responsibility for economic, environmental, and social topics	CSR Policy, CSR Promotion Framework and Materiality Management Team
102-21		Materiality and core tasks

Indicator		References
	Consulting stakeholders on economic, environmental, and social topics	Stakeholder communications
102-22	Composition of the highest governance body and its committees	Corporate Governance Corporate Governance Report: [Direct ors] (P.6)  Annual Report 2020: Management Team (P.14) 
102-23	Chair of the highest governance body	Corporate Governance Notice of Convocation of the 112th Ordinary General Meeting of Shareholders (Proposal No.2: Election of Ten Directors) (P.8) 
102-24	Nominating and selecting the highest governance body	Corporate Governance Corporate Governance Basic Policies: (3) Election (P.4)  Notice of Convocation of the 112th Ordinary General Meeting of Shareholders (Proposal No.2: Election of Ten Directors) (P.8) 
102-25	Conflicts of interest	Corporate Governance Basic Policies: 5. Related Party Transactions (P.2) 
102-26	Role of highest governance body in setting purpose, values, and strategy	CSR Policy, CSR Promotion Framework and Materiality
102-27	Collective knowledge of highest governance body	Corporate Governance
102-28	Evaluating the highest governance body's performance	Decision-making process and structure

Indicator		References
102-29	Identifying and managing economic, environmental, and social impacts	Materiality and core tasks Measures against Climate Change (Disclosure in Line with TCFD) SHOWA DENKO Report 2021: Materiality (P.49)
102-30	Effectiveness of risk management processes	Risk Management Measures against Climate Change: Governance and risk management
102-31	Review of economic, environmental, and social topics	Committees and Promotion Councils Risk Management Measures against Climate Change: Governance and risk management
102-32	Highest governance body's role in sustainability reporting	CSR Promotion Framework
102-33	Communicating critical concerns	Risk Management
102-34	Nature and total number of critical concerns	-
102-35	Remuneration policies	SHOWA DENKO Report 2021: Remuneration of directors and corporate officers (P.63) Securities Report: 4. Remuneration of executives (Japanese only) (P.62)
102-36	Process for determining remuneration	SHOWA DENKO Report 2021: Remuneration of directors and corporate officers (P.63) Securities Report: 4. Remuneration of executives (Japanese only) (P.62)

Indicator		References
102-37	Stakeholders' involvement in remuneration	SHOWA DENKO Report 2021: Remuneration of directors and corporate officers (P.63)  Securities Report: 4. Remuneration of executives (Japanese only) (P.62) 
102-38	Annual total compensation ratio	-
102-39	Percentage increase in annual total compensation ratio	-

5. Stakeholder engagement

Indicator		References
102-40	List of stakeholder groups	Stakeholder communications SHOWA DENKO Report 2021: Stakeholder Communications (P.48) 
102-41	Collective bargaining agreements	ESG Performance Data (Society: Promoting sound work-life balance, Labor union)
102-42	Identifying and selecting stakeholders	Medium-Term Business Plan Stakeholder communications SHOWA DENKO Report 2021: Stakeholder Communications (P.48) 
102-43	Approach to stakeholder engagement	Stakeholder communications

Indicator		References
		SHOWA DENKO Report 2021: Stakeholder Communications (P.48) □
102-44	Key topics and concerns raised	Materiality and core tasks SHOWA DENKO Report 2021: Materiality (P.49) □ Participation in Community Activities




6.Reporting practice

Indicator		References
102-45	Entities included in the consolidated financial statements	Locations (Showa Denko K.K.) Locations (Subsidiaries / Affiliates (Japan)) Locations (Subsidiaries / Affiliates (Overseas)) Securities Report: 4 Subsidiaries and Affiliates (Japanese only) (P.8) □
102-46	Defining report content and topic Boundaries	Editorial Policies/ Report Scope Materiality and core tasks SHOWA DENKO Report 2021: Materiality (P.49) □
102-47	List of material topics	Materiality and core tasks SHOWA DENKO Report 2021: Materiality (P.49) □
102-48	Restatements of information	-
102-49	Changes in reporting	-

Indicator		References
102-50	Reporting period	Report Scope SHOWA DENKO Report 2021: Report scope (P.1) 
102-51	Date of most recent report	Report Scope SHOWA DENKO Report 2021: Publication date (P.1) 
102-52	Reporting cycle	Report Scope SHOWA DENKO Report 2021: Report scope (P.1) 
102-53	Contact point for questions regarding the report	Report Scope SHOWA DENKO Report 2021: Prepared by (Back cover) 
102-54	Claims of reporting in accordance with the GRI Standards	Guidelines/guidance referenced SHOWA DENKO Report 2021: Guidelines/guidance referenced (P.1) 
102-55	GRI content index	This table
102-56	External assurance	Third-party Verification SHOWA DENKO Report 2021: Third-party verification of sustainability-related data (P.1) 



GRI103:Management Approach

Indicator		References
103-1	Explanation of the material topic and its Boundary	Materiality and core tasks

Indicator		References
		SHOWA DENKO Report 2021: Materiality (P.49) 
103-2	The management approach and its components	Materiality and core tasks SHOWA DENKO Report 2021: Materiality (P.49) 
103-3	Evaluation of the management approach	Materiality and core tasks SHOWA DENKO Report 2021: Materiality (P.49) 

GRI200:Economic topics

GRI-201:Market Presence

Indicator		References
201-1	Direct economic value generated and distributed	ESG Performance Data (Society: Other) Participation in Community Activities Annual Report 2020: Financial Data (P.24) 
201-2	Financial implications and other risks and opportunities due to climate change	Measures against Climate Change (Disclosure in Line with TCFD)
201-3	Defined benefit plan obligations and other retirement plans	Annual Report 2020: Accounting Policy for Retirement Benefits (P.31) 
201-4		-

Indicator		References
	Financial assistance received from government	

GRI-202:Market Presence

Indicator		References
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	-
202-2	Proportion of senior management hired from the local community	-

GRI-203:Indirect Economic Impacts

Indicator		References
203-1	Infrastructure investments and services supported	Participation in Community Activities
203-2	Significant indirect economic impacts	-

GRI-204:Procurement Practices

Indicator		References
204-1	Proportion of spending on local suppliers	-

GRI-205:Proportion of spending on local suppliers

Indicator		References
205-1	Operations assessed for risks related to corruption	-
205-2	Communication and training english/about anti-corruption policies and procedures	Anti-corruption
205-3	Confirmed incidents of corruption and actions taken	ESG Performance Data (Governance)

GRI-206:Confirmed incidents of corruption and actions taken

Indicator		References
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	-

GRI207:Tax (2019)

Indicator		References
207-1	Approach to tax	Showa Denko Group's Tax Code of Conduct
207-2	Tax governance, control, and risk management	Showa Denko Group's Tax Code of Conduct
207-3	Stakeholder engagement and management of concerns related to tax	Showa Denko Group's Tax Code of Conduct
207-4	Country-by-country reporting	-

GRI-300:Environmental topics

GRI-301:Materials

Indicator		References
301-1	Materials used by weight or volume	-
301-2	Recycled input materials used	ESG Performance Data (Environment: Resource recycling)
301-3	Reclaimed products and their packaging materials	-

GRI-302:Energy

Indicator		References
302-1	Energy consumption within the organization	ESG Performance Data (Environment: Prevention of global warming)

Indicator		References
302-2	Energy consumption outside of the organization	-
302-3	Energy intensity	ESG Performance Data (Environment: Prevention of global warming)
302-4	Reduction of energy consumption	Challenges to Realize Carbon Neutrality ESG Performance Data (Environment: Prevention of global warming)
302-5	Reductions in energy requirements of products and services	ESG Performance Data (Environment: Prevention of global warming)

GRI-303:Water and Effluents

Indicator		References
303-1	Interactions with water as a shared resource	Use of Sustainable Resources Reducing our environmental impact on water
303-2	Management of water discharge related impacts	Use of Sustainable Resources Reducing our environmental impact on water
303-3	Water withdrawal	ESG Performance Data (Environment: Resource recycling)
303-4	Water discharge	ESG Performance Data (Environment: Resource recycling)
303-5	Water consumption	ESG Performance Data (Environment: Resource recycling)

304-1:Biodiversity

Indicator		References
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	-
304-2	Significant impacts of activities, products, and services on biodiversity	-
304-3	Habitats protected or restored	Efforts for Preservation of Biodiversity
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	-

GRI305:Emissions

Indicator		References
305-1	Direct (Scope 1) GHG emissions	Measures against Climate Change (Disclosure in Line with TCFD) ESG Performance Data (Environment: Prevention of global warming)
305-2	Energy indirect (Scope 2) GHG emissions	Measures against Climate Change (Disclosure in Line with TCFD) ESG Performance Data (Environment: Prevention of global warming)

Indicator		References
305-3	Other indirect (Scope 3) GHG emissions	Measures against Climate Change (Disclosure in Line with TCFD)
305-4	GHG emissions intensity	ESG Performance Data (Environment: Prevention of global warming)
305-5	Reduction of GHG emissions	Measures against Climate Change (Disclosure in Line with TCFD) ESG Performance Data (Environment: Prevention of global warming) Challenges to Realize Carbon Neutrality
305-6	Emissions of ozone-depleting substances (ODS)	-
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Reducing emissions of hazardous air pollutants ESG Performance Data (Environment: Pollution prevention)

GRI306:Waste (2020)


Indicator		References
306-1	Waste generation and significant waste-related impacts	-
306-2	Management of significant waste-related impacts	-
306-3	Waste generated	Prevention of Pollution ESG Performance Data (Environment: Resource recycling)
306-4	Waste diverted from disposal	Prevention of Pollution

Indicator		References
		ESG Performance Data (Environment: Resource recycling)
306-5	Waste directed to disposal	Prevention of Pollution ESG Performance Data (Environment: Resource recycling)

GRI-307:Environmental Compliance

Indicator		References
307-1	Non-compliance with environmental laws and regulations	ESG Performance Data (Environment: Other)

GRI-308:Supplier Environmental Assessment

Indicator		References
308-1	New suppliers that were screened using environmental criteria	Promotion of CSR procurement Supply Chain SHOWA DENKO Report 2021: Promotion of Sustainable Procurement (P.58) 
308-2	Negative environmental impacts in the supply chain and actions taken	Promotion of CSR procurement Supply Chain

GIR400:Social topics

GRI-401:Employment

Indicator		References
401-1	New employee hires and employee turnover	ESG Performance Data (Society: Recruitment, Labor Practices)
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Creating a comfortable workplace *About the system
401-3	Parental leave	ESG Performance Data (Society: Promoting sound work-life balance, Labor union)

GRI402:Labor/Management Relations

Indicator		References
402-1	Minimum notice periods regarding operational changes	-

GRI-403:Occupational Health and Safety


Indicator		References
403-1	Occupational health and safety management system	Safety and health management Occupational health and safety management systems
403-2	Hazard identification, risk assessment, and incident investigation	Safety and health management Occupational health and safety Equipment safety

Indicator		References
403-3	Occupational health services	-
403-4	Worker participation, consultation, and communication on occupational health and safety	Safety and health management
403-5	Worker training on occupational health and safety	Safety and health management Occupational health and safety Equipment safety
403-6	Promotion of worker health	Safety and health management Occupational health and safety
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety
403-8	Workers covered by an occupational health and safety management system	Occupational health and safety management systems
403-9	Work-related injuries	Occupational health and safety Equipment safety ESG Performance Data (Society: Safety, health)
403-10	Work-related ill health	-

GRI404: Training and Education

Indicator		References
404-1	Average hours of training per year per employee	Development of Human Resources ESG Performance Data (Society: Recruitment, Labor Practices)
404-2	Programs for upgrading employee skills and transition assistance programs	Development of Human Resources
404-3	Percentage of employees receiving regular performance and career development reviews	Development of Human Resources

GRI405: Diversity and Equal Opportunity

Indicator		References
405-1	Diversity of governance bodies and employees	Promotion of diversity and inclusion ESG Performance Data (Society: Number of employees) ESG Performance Data (Governance) SHOWA DENKO Report 2021: Directors (P.68-69) 
405-2	Ratio of basic salary and remuneration of women to men	ESG Performance Data (Society: Recruitment, Labor Practices)

GRI-406:Non-discrimination

Indicator		References
406-1	Incidents of discrimination and corrective actions taken	-

GRI-407:Freedom of Association and Collective Bargaining

Indicator		References
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Promotion of CSR Procurement Supply Chain

GRI-408:Child Labor

Indicator		References
408-1	Operations and suppliers at significant risk for incidents of child labor	Promotion of CSR Procurement Supply Chain

GRI-409:Forced or Compulsory Labor

Indicator		References
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Promotion of CSR Procurement Supply Chain

GRI-410:Security Practices

Indicator		References
410-1	Security personnel trained in human rights policies or procedures	-

GRI-411:Rights of Indigenous Peoples

Indicator		References
411-1	Incidents of violations involving rights of indigenous peoples	-


GRI-412:Human Rights Assessment

Indicator		References
412-1	Operations that have been subject to human rights reviews or impact assessments	-
412-2	Employee training on human rights policies or procedures	Respect for Human Rights Thorough Corporate Ethics
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	-

GRI-413:Local Communities

Indicator		References
413-1	Operations with local community engagement, impact assessments, and development programs	Participation in Community Activities
413-2	Operations with significant actual and potential negative impacts on local communities	-

GRI-414: Supplier Social Assessment

Indicator		References
414-1	New suppliers that were screened using social criteria	Promotion of CSR procurement Supply Chain SHOWA DENKO Report 2021: Promotion of Sustainable Procurement (P.58) 
414-2	Negative social impacts in the supply chain and actions taken	Promotion of CSR procurement Supply Chain

GRI-415:Public Policy

Indicator		References
415-1	Political contributions	ESG Performance Data (Society: Other)

GRI-416:Customer Health and Safety

Indicator		References
416-1	Assessment of the health and safety impacts of product and service categories	Consumer Safety and Health
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	-

GRI-417:Marketing and Labeling

Indicator		References
417-1	Requirements for product and service information and labeling	Consumer Safety and Health
417-2	Incidents of non-compliance concerning product and service information and labeling	-
417-3	Incidents of non-compliance concerning marketing communications	-

GRI-418:Customer Privacy

Indicator		References
418-1	Substantiated complaints concerning breaches of	-
	customer privacy and losses of customer data	

GRI-419:Socioeconomic Compliance

Indicator		References
419-1	Non-compliance with laws and regulations in the social and economic area	Compliance



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Library

The Showa Denko Group restructured its CSR report and annual report in 2017 to publish the Showa Denko Report as an integrated report.

Integrated Reports

[SHOWA DENKO Report \(2017-\),
Sustainability Website \(2020-\)](#)

Archive

[CSR Report \(2005-2016\)](#)

[Responsible Care Report
\(2000-2004\)](#)

List of Data Collection Boundaries

“Showa Denko” as used in the text of this report refers to Showa Denko K.K., while “Showa Denko Group” or “the Group” refers to Showa Denko and its consolidated subsidiaries in Japan and abroad. “Group companies in Japan” refer to Showa Denko and its consolidated subsidiaries in Japan.

For details of organizations (Group companies) covered for each data item;

[List of Data Collection Boundaries](#) (365kb)

Third-party Verification

We receive third-party verification for Showa Denko's environment- and safety-related data from SGS Japan Inc. in July 2021.



[Third-party Verification Report](#) (856kB)