

Responsible Care

As a company that handles chemical substances, Nissan Chemical Group has a great responsibility to society. In order to fulfill this responsibility, we engage in Responsible Care (RC) activities. RC activities aim to voluntarily ensure environment, health and safety throughout the entire process from development of chemicals to manufacturing, distribution, use, final consumption, disposal and recycling. These activities also serve as a form of communication with society through the announcement of their results.

Responsible Care Management

System

We have been engaged in RC activities since 1992. To achieve our RC mid-term plan (2022-2027), established in FY2022, we manage targets and make continuous improvements through PDCA (Plan, Do, Check, Act) in our RC management system based on ISO14001* throughout the Company. In addition, we have established the Environment & Safety Committee, which is chaired by the officer responsible for the Environment, Safety & Quality Assurance Department, as the organization in charge of promoting RC activities, and hold its annual meeting. The contents of the discussion, including targets for the next fiscal year, are reported to the management meeting. After approved at the management meeting, the contents are resolved at the Board of Directors.

* International standard for environmental management system. All of our plants have acquired ISO 14001 third party certification.



RC Audits

RC audits are activities in which the Environmental Safety & Quality Assurance Department inspects RC activities at each plants, laboratory, and affiliated companies in accordance with RC audit regulations. They are carried out by Environment, Safety & Quality Assurance Department in accordance with the RC audit guidelines. In these audits, the auditors check whether RC activities, as well as internal audits and patrols, are carried out appropriately and the PDCA cycle is implemented steadily, and compliance about environment, health and safety (EHS) at each site. The Environmental Safety and Quality Assurance Department has established an RC audit program to promote improvements in response to visible or potential risks to the EHS.

In FY2023, total of 17 RC audits were conducted for our plants, research laboratories and affiliated companies.



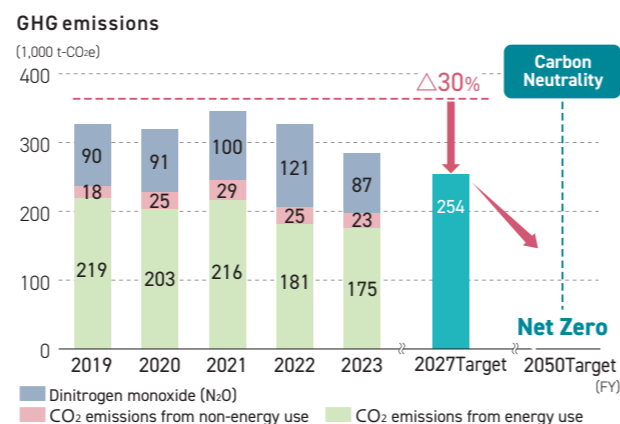
Web Responsible Care Management
https://www.nissanchem.co.jp/eng/csr_info/responsible_care/management.html

Mitigation of Climate Change and Environmental Conservation

Efforts for Reducing Greenhouse Gas (GHG) Emissions

Nissan Chemical actively strives to protect the environment, including the reduction of greenhouse gas (GHG) emissions, and has been promoting initiatives to mitigate climate change, such as energy savings and fuel conversion. With regard to reducing our GHG emissions (Scope1+2), we have set a FY2027 target of "reducing GHG emissions by at least 30% from FY2018 level" aiming for achievement of carbon neutrality in 2050.

GHG emissions in FY2023 decreased from FY2022 as a result of reductions in dinitrogen monoxide emissions from nitric acid plants and other measures.

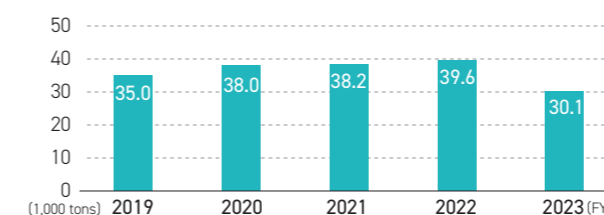


Efforts to Reduce Industrial Waste

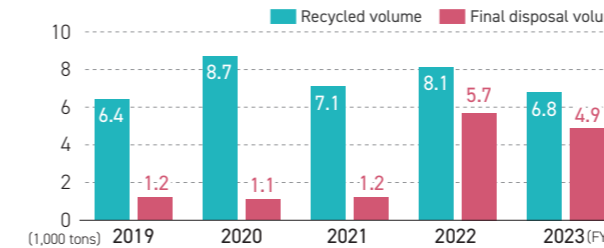
Through our RC activities, we further promote the 3Rs (Reduce, Reuse, Recycle) and strive to reduce industrial waste emissions, while at the same time thoroughly implement control measures to ensure that waste is disposed of properly. In FY2023, the amount of industrial waste generated decreased significantly to the lowest level in the past five years, and the recycled volume was the same as in previous years. The final disposal volume decreased from FY2022.

In line with the enforcement of the Act on Promotion of Re-source Circulation for Plastics (enforcement date: April 1, 2022), we have started counting the amount and recycling rate of plastic waste since FY2021. The amount of plastic waste in FY2023 decreased compared to FY2021 and FY2022 due to reductions in the amount of plastic waste at plants and laboratories. For the second year in a row, we achieved our FY2027 recycling target of "50%" of plastic waste. Going forward, we will continue to promote initiatives such as recycling.

Volume of industrial waste generated*



Recycled volume/Final disposal volume*



* Waste soil from plants was added to calculations from FY2021

	Amount of plastic waste	Recycling rate of plastic waste
FY2021	795t	44%
FY2022	830t	55%
FY2023	592t	53%

Biodiversity Conservation

Our corporate philosophy is "Contribute to the protection of the global environment and the existence/development of humanity, offering the value sought by society." We engage in business activities that take into account biodiversity and help protect the global environment. We have set the "establish and operate Bio-Park at Nissan Chemical's plants" as a target for FY2027, and are promoting biodiversity initiatives. In FY2023, a new biotope was completed at the Onoda Plant. This facility was created by renovating a pond that was originally located in the central plaza of the plant. The biotope is divided into two areas. The west side is developed as an area where various waterfront living things can live, native species are released, masonry is used in and around the pond to provide a habitat for the living things, and trees are planted to produce fruits that birds and insects like. On the other hand, on the east side, a terrace and benches are placed by the pond to provide an area for employees to relax, and flowerbeds are arranged so that seasonal flowers can be enjoyed throughout the year. The carp that were the primary inhabitants of the pond also live here in good health. Insects such as butterflies and



Onoda Plant Biotope

dragonflies, as well as many birds, are flying in and out of the area, making it a lively place.

Safety and Disaster Prevention

We carry out risk assessment, process risk predictions, and facility risk predictions by prior assessment for manufacture with the aim of ensuring safety, achieving stable operations, and improving our process safety capability. As a result, there were no accidents such as explosions in FY2023, but there were two fires. Of these, the fire at the Nagoya Plant was caused by an electrostatic precipitator at the sulfuric acid manufacturing facility. This is assumed to be due to a grounding failure caused by a tear in the grounding material of the electrostatic precipitator, leading to the generation of localized sparks. The public fire department immediately extinguished the fire, and there was no significant human damage and impact on the environment and neighborhood. We are taking thorough measures



Disaster drills (Toyama Plant)

Web Mitigation of Climate Change
https://www.nissanchem.co.jp/eng/csr_info/responsible_care/environment/reduction.html
 Reduction of Industrial Waste and Pollutant Emissions
https://www.nissanchem.co.jp/eng/csr_info/responsible_care/environment/management.html
 Water Resources Conservation
https://www.nissanchem.co.jp/eng/csr_info/responsible_care/environment/effective.html
 Biodiversity Conservation
https://www.nissanchem.co.jp/eng/csr_info/responsible_care/conservation.html

Responsible Care

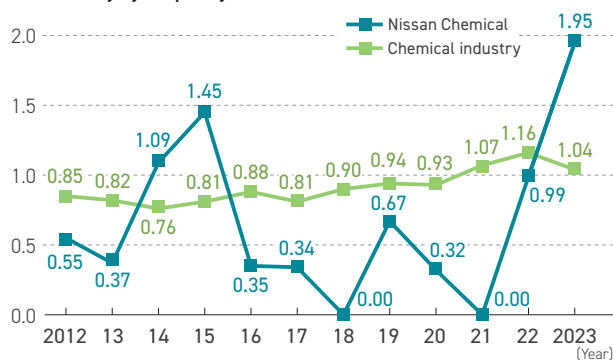
to prevent such a small fire from happening again, and deploying measures to all plants and laboratories. Our plants, laboratories, and affiliates carry out various drills and training sessions such as earthquake fire prevention drill every year, and are designed to make us ready to respond to emergencies or accidents in a speedy and reliable manner.

Promotion of Occupational Health and Safety

Through our RC management system, we prevent occupational accidents, promote the good health of staff, and build a comfortable workplace environment in our efforts to improve the level of safety and health at each business site. In addition, we carry out various drills and training sessions annually with the aim of ensuring safety, achieving stable operations, and improving our process safety capability to make us ready to respond to emergencies or accidents in a reliable manner.

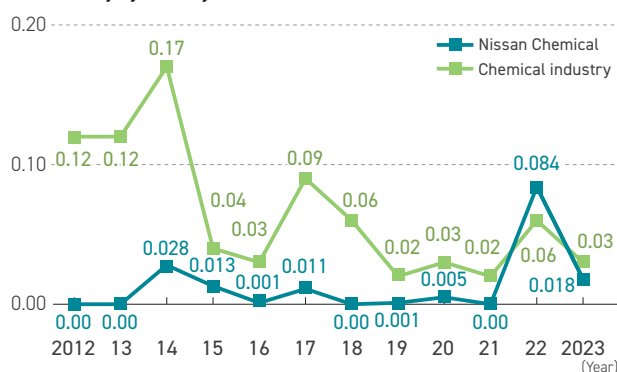
In 2023, there were 6 accidents requiring staff time off from work, and 6 accidents not requiring staff time off from work in our company, resulting in a worsening of the lost-time injury frequency rate, but an improvement in the lost-time injury severity rate. We will continue aiming to foster a culture of safety and achieve zero accident by promoting safety activities such as risk assessment, prior-work risk predictions, risk predictions training, HHK, 5S, and appropriate wearing of protective equipment and by raising awareness of safety through the safety meeting and the occupational safety newspapers.

Lost-time injury frequency rate*



* Total number of deaths and injuries due to occupational accidents per million actual working hours

Lost time injury severity rate*



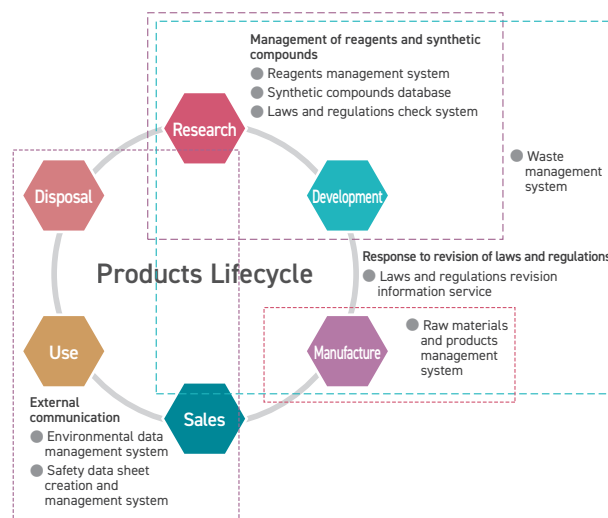
* Total number of working days lost per 1,000 working hours

Management of Chemical Substances and Products Safety

Risk Assessment in Products Lifecycle

We conduct a risk assessment (prior assessment) at each step in handling chemical products, such as R&D, manufacture, sales and revision. The risk assessment is performed based on legal and regulatory information, safety data evaluated by internal or external laboratories or obtained from SDS (Safety Data Sheet) for raw materials and literature, and data on physicochemical properties and work environment conditions. Based on the results of risk assessment, we take appropriate measures; i.e., legal and regulatory compliance, improving facilities to reduce worker exposure at manufacturing sites, improvement of operation procedures, clarification and documentation of the procedures, and the training, etc. Moreover, these results are reported to all the relevant people in the Company.

In addition, we also participate in Long-range Research Initiative, an international initiative promoted by Japan Chemical Industry Association (JCIA) that seeks to provide long-term support for research on the impact of chemicals on human health and the environment. The activities we engage in aim to advance research on the assessment of risks to human health and the environment.



Web Promotion of Safety and Disaster Prevention, and Occupational Safety and Health

https://www.nissanchem.co.jp/eng/csr_info/responsible_care/safety.html

Management of Chemical Substances

https://www.nissanchem.co.jp/eng/csr_info/responsible_care/chemical.html