

Every company has a social responsibility to be proactive in its efforts to protect the global environment. N.E. CHEMCAT seeks to minimize environmental impact in all processes of its business activities.

Environmental Management

Our Corporate Philosophy includes the commitment to fulfill corporate social responsibilities and seek to co-exist with the environment and society around us. To further promote this, N.E. CHEMCAT has established an environmental policy and is actively engaged in environmental protection activities.

Environmental Policy

- Under our Responsible Care Policy, we consider global environmental conservation to be one of our most important missions. We strive to reduce the environmental impact of our business activities with help from the creativity and ingenuity of all our employees. We also actively promote business activities that aim to control environmental pollution.
- As one effort to fulfill our key mission of conserving the global environment, we properly manage chemical substances while taking into consideration technical and economic factors. This includes the management of substances in all equipment, parts, and products that we design, manufacture, and deliver.

Promotion System for Environmental Management

Environmental Conservation Committees have been established at each plant to promote initiatives related to environmental conservation, chemical substance management, and energy, as part of our Responsible Care (RC) activities.

Initiative progress is reported to the supervisory company-wide RC Committee chaired by the General Manager of the Production and Technology Div. (See P. 24 for RC Activities and RC Promotion System)

Environmental Management System

N.E. CHEMCAT has obtained ISO 14001 environmental management system certification, and the company's system is constantly being enhanced. We have also prepared an environmental manual, and conduct environmental activities as part of daily operations.

Business Sites with Environmental Management System Certification

ISO 14001:2015	Numazu Plant, Tsukuba Plant
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Environmental Education

In addition to providing employees with our environmental manual, we conduct education and training to improve employee environmental awareness and to comply with relevant environmental laws and regulations.

FY2022 Environmental Training Programs

Training name	Frequency
Internal auditor course	Once a year
Environmental safety patrol	Four times a year
Environment Month (Message from the President)	Once a year
Emergency equipment training	Once a year
High pressure gas (LNG) leak training	Once a year
Chemical leak and emergency shutoff valve training	Once a year
Chlorine gas leak training	Once a year

Initiatives to Reduce Environmental Impact

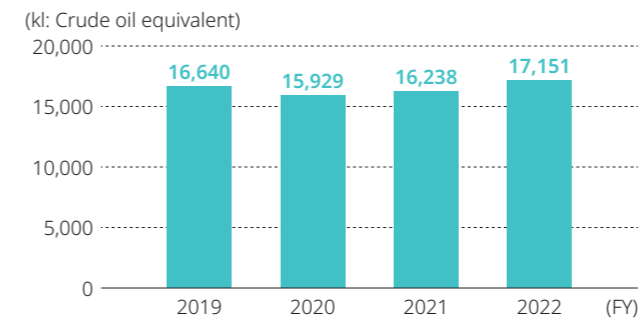
Promote Energy Conservation

Our Energy Management Committee promotes company-wide energy plans, including the adoption of new energy-saving technologies.

We have also positioned dedicated efforts to reduce environmentally hazardous substances and prevent environmental accidents and occupational accidents and injuries in all business activities as one of the 16 key drivers to achieve Vision 2030.

While energy consumption increased along with an increase in our operations in FY2022, we are implementing measures to reduce CO₂ emissions, including setting energy conservation targets at each office and plant, making improvements to development and production processes, and installing high-efficiency equipment to achieve energy savings.

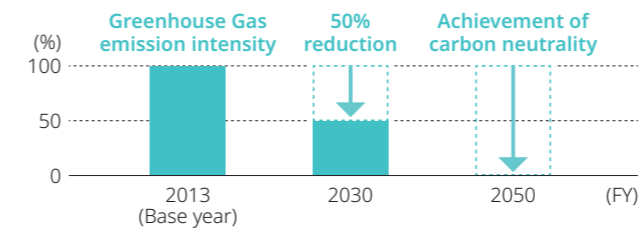
Annual Energy Consumption



Target to Reduce Greenhouse Gas Emission Intensity

We have set a target to achieve a 50% reduction in our greenhouse gas (GHG) emission intensity by 2030, compared to the 2013 level. GHG emissions are considered to be the cause of global warming, and we are pursuing initiatives to reduce them.

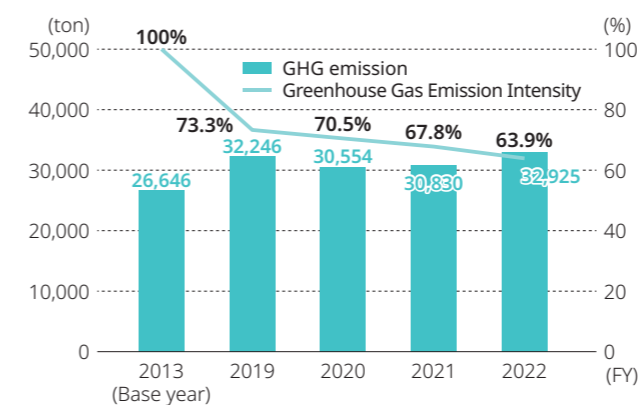
Target to Reduce Greenhouse Gas Emission Intensity



Initiatives for Target Achievement

- Energy conservation and loss reduction measures for electricity and liquefied natural gas (LNG) use (installation of LED lighting and higher-efficiency air conditioning equipment)
- Adoption of highly energy-efficient equipment and technology
- Improvement in development and production efficiency
- Adoption and expanded use of renewable energy

Annual Greenhouse Gas Emissions and Emission Intensity*

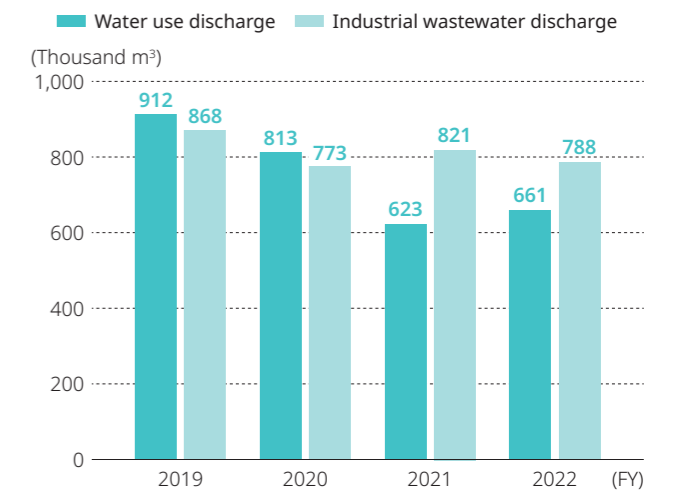


*GHG emissions with 2013 emission level set as 100%

Effective Water Use

We have installed our own water supply equipment and are working to minimize water usage by recycling water.

Annual Water Use and Industrial Wastewater Discharge

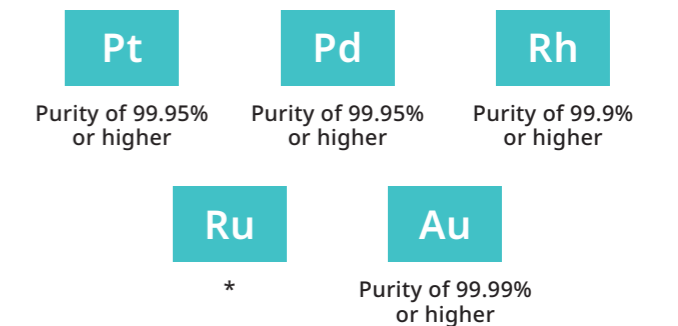


Effective Resource Use

Precious Metal Recycling

Platinum (Pt), palladium (Pd), rhodium (Rh), ruthenium (Ru), and other precious metals can be found in spent catalysts. Since they are important resources, N.E. CHEMCAT has its own facilities for recovery and refining of these metals. High-quality precious metals can be separated, recovered, and refined using appropriate technology. This is true even when the post-use precious metal catalyst contains multiple precious metal types, additives, and/or toxic substances that accumulate during use.

Each metal is recovered with a purity of 99.9% or higher purity as shown below.



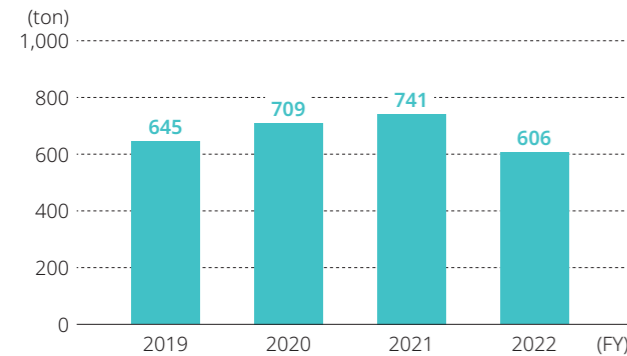
*Ruthenium is recovered as ruthenium chloride

We are developing new adsorbents and further improving other recovery technology to enable more efficient precious metal recovery.

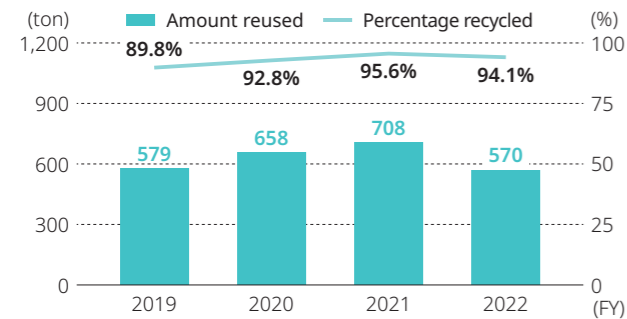
Waste Reduction

Wastewater sludge accounts for the largest volume of waste emitted by the company. In order to reduce this waste, we have been enhancing our production processes and updating equipment and machinery.

Annual Industrial Waste Generation



Amount and Percentage of Industrial Waste Reused and Recycled



Management of Chemical Substances

Along with managing chemical substances handled internally, we are promoting chemical substance management for all raw materials and products used in our processes from design to manufacturing and delivery.

Compliance with Chemical Substances Regulations

N.E. CHEMCAT complies with all relevant laws and regulations including Japan's Act on the Regulation of Manufacture and Evaluation of Chemical Substances (Chemical Control Law), Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement (Chemical Management Law), and Industrial Safety and Health Act. The appropriate management procedures are stipulated in our Chemical Substance Management Regulations, and chemicals are being properly managed accordingly.

Management of Chemical Substances Contained in Products

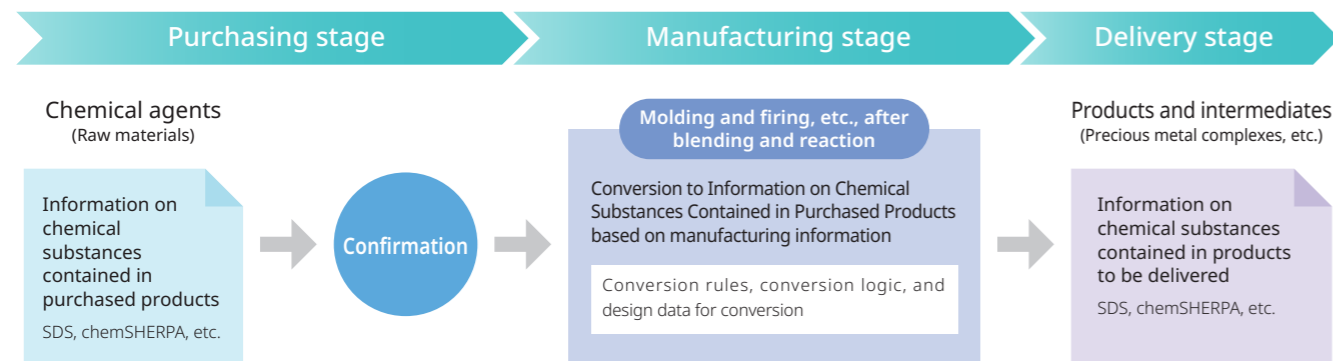
In the product design and development stage, we clarify the management standards for chemical substances contained in products to be applied at each stage, from raw material purchase to product manufacturing and delivery. This allows us to promote appropriate chemical management across the supply chain.

In order to manage chemical substances contained in products throughout the supply chain, the key is to appropriately manage chemical substances contained in intermediates and products that are the result of chemical agent conversion.

At N.E. CHEMCAT, we not only manage the amounts of chemical substances found in chemical agents used in intermediates and products; we also manage the amounts of and changes in chemical substances in the manufacturing process. This extends to the prevention of any contamination.

We have begun handling chemical substances according to the JAMA and JAPIA Guidelines for the Management of Chemicals in Products published in December 2022.

Supply Chain and Management of Chemical Substances Contained in Products



N.E. CHEMCAT emphasizes Responsible Care (RC) activities as one of its 16 key drivers for achieving Vision 2030 and is actively practicing them.

RC Activities

RC activities are being promoted by chemical industry associations in more than 70 countries worldwide. RC is a voluntary initiative for members of the chemical industry to implement and improve their environmental safety measures. Participating companies pledge to ensure environmental protection, health and safety throughout the life cycle of their chemical products, from development, manufacturing, and distribution, to use, final consumption and disposal. Since fiscal 2020, we have been participating in meetings of the Responsible Care Committee established by the Japan Chemical Industry Association (JCIA). Our participation involves presentation of activity results and engaging in dialogue with other members, and the aim is to earn the further confidence of society.



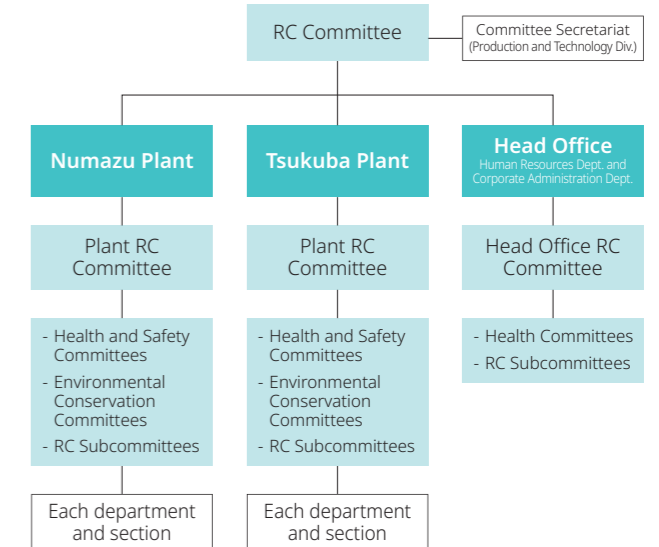
Responsible Care Policy

We regard environment protection, safety and health as the highest-priority issues, and we engage in the following voluntary and ongoing Responsible Care activities.

1. We strive to reduce environmental impact and protect the environment throughout the entire life cycles of our products, from development to disposal.
2. Based on the principle of "safety first," we aim for zero accidents and occupational injuries, and we ensure the safety of all onsite personnel and local community members.
3. We verify the safety of chemical substances found in the raw materials, intermediate products, and final products that we handle and will take into consideration the health of everyone connected to our business activities, including employees, logistics personnel, and customers.

We publicly release the results of the above activities and maintain appropriate communication with stakeholders.

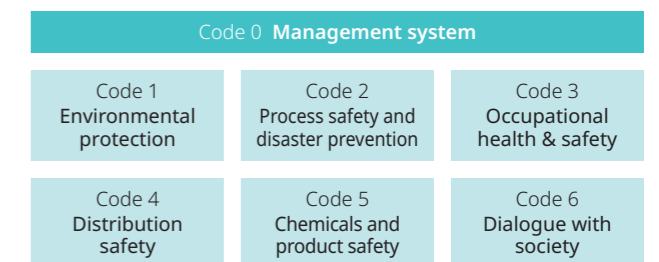
RC Promotion System



RC Management System

N.E. CHEMCAT has adopted the Responsible Care Management System (RCMS) to promote the company's RC activities. The RCMS satisfies the requirements of ISO 14001 and OSHMS (ISO 45001), and activities have been clarified for each management practice code.

RC Activities (Six Management Practice Codes)



RC Promotion System

We have established an RC Committee to promote Responsible Care activities as well as safety and environmental protection activities.

Based on the priority points of the Responsible Care Policy, the committee manages execution of the action plans established by each plant for achieving their targets.

Activities in FY2022 were implemented in accordance with the Responsible Care Manual produced in the previous year. RC verification by JCIA is scheduled at the Tsukuba Plant in FY2023.

RC Audit System

Based on the RCMS, RC audits are conducted annually at each plant.