

Environment

Environmental management

Environmental vision

INOAC respects the natural environment of our irreplaceable earth and contributes to realizing an affluent society that is comfortable to live in through technology harmonized with our environment and environment-friendly corporate activities.

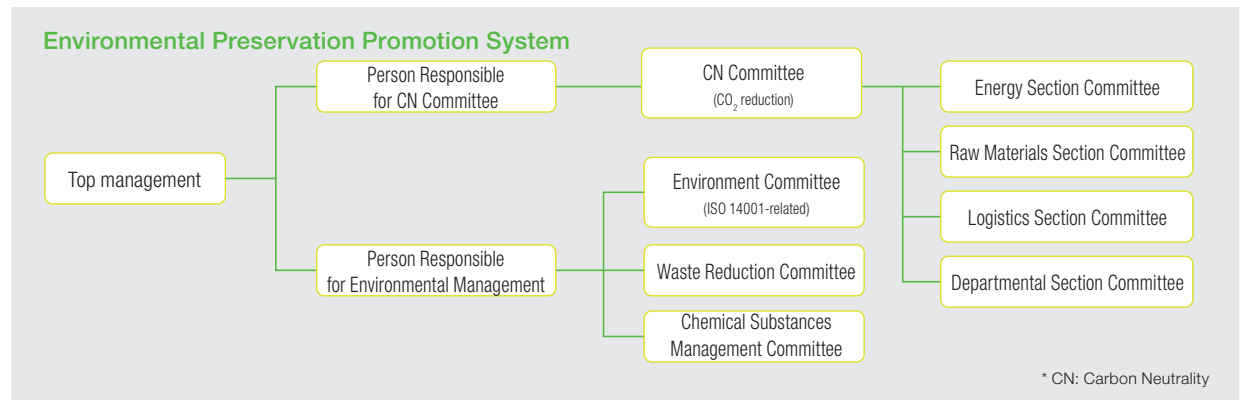
Environmental policy

- (1) We observe environmental laws and regulations, thoroughly ensure compliance, and engage in business activities that society can trust.
- (2) We work to reduce CO₂ emissions such as by saving energy, to help achieve a carbon neutral society and prevent global warming.
- (3) We work on resource conservation, waste reduction and recycling to contribute to a recycling-oriented society.
- (4) We properly manage chemicals that could impact the environment and seek to preserve our environment by reducing risk.
- (5) We actively develop products with less environmental impact, contributing to the conservation of nature throughout the life cycles of the products.
- (6) We engage in environmental management, educate employees about the environment, implement environmental audits, and continue to improve.
- (7) We contribute to establishing a sustainable society through local environmental preservation work as good corporate citizens.



Environmental management system

In order to engage in environmental activities in an organized fashion, the Person Responsible for Environmental Management implements integrated management related to the environment, under the direct control of top management. In addition, the company as a whole also engages in environmental activities under the direction of the Environment Committee. We have organized specific section committees to handle industrial waste and energy saving, and we coordinate environmental management through these committees while seeking further improvements in mitigating our environmental impact. As we strengthen the connection between environmental management and our main business in managing our objectives, we are also supporting the appropriate efforts where changes are taking place, such as newly built business locations, buildings, and production lines.



Internal environmental audits

We implement internal environmental audits to check the operational state of our environmental management system. The audit team consists of two to three employees who have completed the auditor training prescribed by the company. The team checks if the environmental management system is being properly operated, maintained, and improved. We create audit guidance and take steps such as revising checklists to emphasize efforts toward goal achievement and compliance in order to improve the quality of the audits.

External environmental examinations

The Japan Quality Assurance Organization (JQA), an external certification body, conducts examinations to check if our environmental management system is functioning properly in accordance with ISO 14001:2015. The majority of examinations during FY 2021 were conducted remotely due to the pandemic. In the results, one point for improvement was identified, but swift corrective action was taken afterward, and we were able to renew our certification. Also, as overall findings, some issues were raised in terms of environmental aspects, competences and awareness, and processes such as compliance evaluations.

Environment

Environmental management

Summary of major activities in FY 2021

The results of our main environmental efforts in FY 2021 are shown in the table below. In terms of reducing CO₂ emissions resulting from energy use, the CN Committee took the lead in implementing various initiatives. However, fluctuations in production volume due to factors such as world trends and the semiconductor shortage resulted in lower production efficiency, thus we were unable to reach our targets. For industrial waste disposal, we moved forward with efforts to reduce our volume of industrial waste disposal including in recycling and disposal of valuables. Our disposal of valuables is shrinking on a yearly basis, and we did not achieve the corresponding goal. For emissions of PRTR substances, we made progress in efforts such as replacing the materials that contain these substances. Since we are producing higher volumes of products that use PRTR substances, our emissions of these substances also increased year-on-year.

Initiative		Targets in FY 2021	Achieved in FY 2021	Result
Reduce energy consumption (in plants)	Measured units (tons/million yen) [CO ₂ emissions (tons)]	0.500 or less [81,337 (2020 result)]	0.5276 [83,876 (2021 result)]	
Reduce waste (in plants)	Measured units (tons/hundred million yen) [treated amount (tons)]	6.7 or less [10,653 (2020 result)]	7.0 [10,814 (2021 result)]	
PRTR substances reduction in release and transfer amounts	Measured units (tons/hundred million yen) [amount emitted + amount transferred (tons)]	1.97 or less [286 (2020 result)]	2.2 or less [331 (2021 result)]	
Environmental proposal activities*	Number of environmental improvements	At least 1,298	1,722	
Environmental communication		Issuance of CSR report	Issuance of CSR report	

* ISO 14001 targets

Target reached Not yet reached but progressing Target not reached

Business locations from which environment data is collected to summarize major activities are shown below.

Plants				
Anjo Plant	Seino Plant Ikeda Factory	Yana Plant	Shinshiro Plant	Hadano Plant
Sakurai Plant	Seino Plant Ikeda 2nd Factory	Yana 2nd Plant	Kira Plant	Uruma Plant
Nanno Plant	Seino Plant Ohno Factory	Ishimaki Plant	Toyohashi Plant	
Associated companies (including affiliates)				
Hokkaido INOAC	Kyushu INOAC Kikuchi Plant	RIC Mie	PEC Okazaki	
Tohoku INOAC Kogota Plant	Kyushu INOAC Ukiha Plant	HUKLA Japan	Miyama Kasei	
Tohoku INOAC Wakayanagi Plant	Kyushu INOAC Yukuhashi Plant	Taiyo Rika Industry Seki Plant	IWFK	
Tohoku INOAC Kitakami Plant	Kyushu INOAC Kitakyushu Plant	Daito Kasei	INOAC Housing & Construction Materials Ibigawa	
Tohoku INOAC Tsukidate Plant	TFJ Saitama	I-Sheet Industries	INOAC Housing & Construction Materials Ariake	
Higashi Nihon INOAC	TFJ Fukama	Meinan Aiko Kasei	Kyushu Color Foam	
Nishi Nihon INOAC	RIC Taketoyo	Far East Tooling		

Reducing our environmental footprint

Activities to reduce waste

In waste reduction, the company-wide Waste Reduction Committee led efforts to improve our rate of product commercialization by reducing defects and increasing yield, and to reduce waste by reusing more material cutoffs. The committee is working on technology to recycle cross-linked polyethylene material cutoffs that we produce and is developing a cyclical system to re-employ material cutoffs that would normally be discarded as raw materials. Production lines are currently being prepared for mass production of recycled material. The committee is striving to commercialize recycled materials and reduce waste.

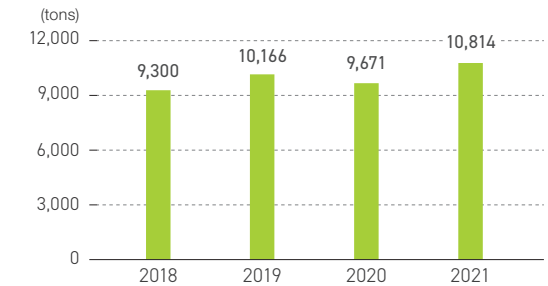
Activities to reduce the use of environmentally hazardous substances

We use PRTR substances such as m-tolylene diisocyanate, a raw material for polyurethane foam, as well as xylene and toluene which coatings contain. To reduce the amount of these substances handled, released, and transferred, we have made progress in replacing dichloromethane and bis (2-ethylhexyl) phthalate plasticizer which is partially left over as foaming agent. On the other hand, we also launched new products that use coatings containing large quantities of these substances, so our overall amounts handled increased compared to the previous year. Efforts to address water-related risks

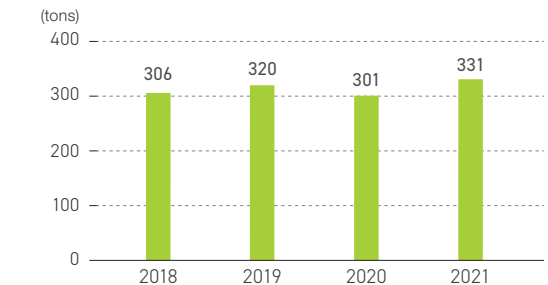
Efforts to address water-related risks

Since we use large volumes of water for cooling our facilities and cleaning, we consider water to be a precious resource. Our previous activities for water-related risks involved efforts to address droughts, water-related disasters, water pollution, and water regulations. For water recycling, we recycle the water we use to clean equipment in our coatings processes. As measures against water pollution, we conduct training to prevent spills or runoffs of raw materials, and we also monitor ground and drainage water. To reduce water usage going forward, we started conducting present state investigations in FY 2022 and are pushing forward with activities geared toward reductions.

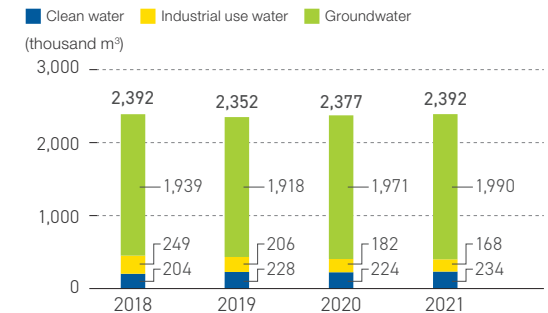
Waste treatment amount (tons)



PRTR (amount emitted + amount transferred) (tons)



Water intake (thousand m³)



Environment

Environmental risk & information management

Observing environmental laws and regulations

At INOAC, we identify environmental laws and regulations that are relevant to our business activities and manage them on a daily basis. Through monitoring, measurement, and assessment at each plant, we prevent environmental pollution and otherwise conduct environmental risk management to ensure that we properly comply with laws and regulations related to noise and industrial waste treatment as part of our environmental management system. In accordance with business ethics, we will continue strictly observing environmental preservation agreements with local governments, including environmental laws and regulations.

Major environment-related laws and regulations pertaining to our business

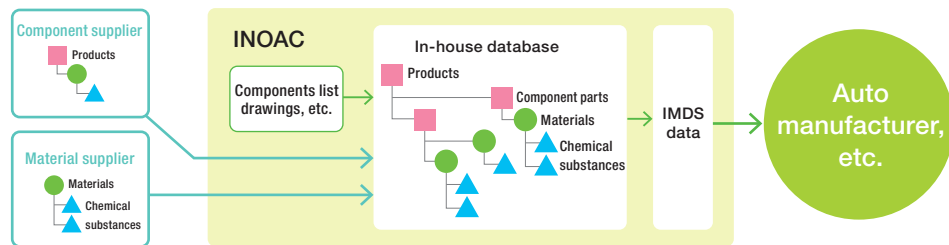
Air	Air Pollution Control Act, Automobile NOx PM Law, Act on Special Measures against Dioxins
Water quality and soil	Water Pollution Prevention Act, Purification Tank Act, Sewerage Act, Soil Contamination Countermeasures Act
Noise, vibration & odor	Noise Regulation Act, Vibration Regulation Act, Offensive Odor Control Act
Chemical substances	Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, Poisonous and Deleterious Substances Control Act
Resource conservation & recycling	Act on the Rational Use of Energy, Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging, Act on Rational Use and Appropriate Management of Fluorocarbons, Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes, Waste Management and Public Cleansing Act
Disaster prevention	Fire Service Act, High Pressure Gas Safety Act
General & others	Factory Location Act, Act on Improvement of Pollution Prevention Systems in Specified Factories, Radio Act

* Local government ordinances are omitted
 * Some of the above are abbreviated

Promoting IMDS, chemSHERPA and more

INOAC registers information on chemicals and reports it to our customers through IMDS^{*1}, particularly in the automotive field which is our main field of business. We have a management system to obtain the necessary information via our supply chain and to register the information into IMDS.

Information collection through IMDS in INOAC – reporting process and chemical management system



We also collect information and report it to our clients using the chemSHERPA^{*2} format, which is widely used in the industrial world, especially the electrical machinery industry.

*1 IMDS (International Material Data System): A database for transmitting and obtaining information on materials and chemicals over the Internet for the automotive industry, which was originally developed to comply with the EU ELV

*2 chemSHERPA: A unified format to transmit information on chemicals contained in products in the supply chain, which the Ministry of Economy, Trade and Industry took the initiative in developing

Creating an in-house database

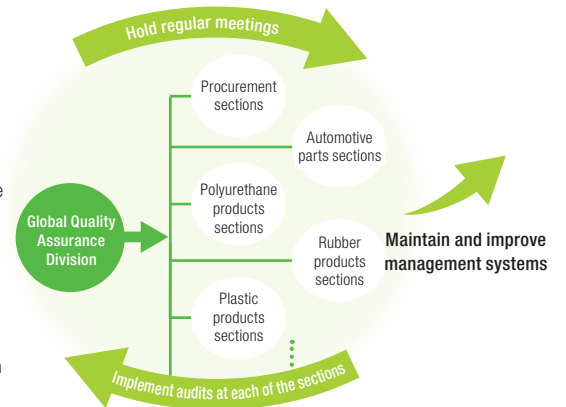
The Automotive Division is creating an in-house database through which information on chemical substances contained in parts and materials purchased from clients is identified based on information about chemical substances, and centrally managed. This has allowed us to be certain of our compliance with laws and regulations on chemical substances and client requirements which increase each year, while also helping to improve the efficiency and the reporting accuracy of information we register in IMDS and when examining the chemical substances contained in our products.

Establishment and implementation of green procurement criteria

We ascertain what chemical substances are regulated by laws, regulations, and by our customers, based on which we create our green procurement criteria - a list of those chemical substances that we should work to reduce. We present these criteria to clients and use them to obtain information on chemical substances contained in raw materials to be purchased. We are also consistently monitoring the latest regulatory developments, based on which we revise these criteria once each year.

Communication about chemical substance management

The Global Quality Assurance Division is a company-wide organization for environmental stewardship, which organizes and leads meetings for the chemical substance management sections of each department once every two months. They review green procurement criteria, check the management system and establish or change its operating rules, and exchange opinions concerning the latest trends in chemical regulations, such as the REACH regulation and RoHS Directive. They also periodically audit the management system in each department. We strive to maintain and improve chemical substance management systems that are appropriate and reliable.



Training for emergencies

We identify accidents and emergencies according to the characteristics of each business facility, and periodically conduct training to prevent and stop the spread of environmental pollution resulting from earthquakes, fires and leakage of oils and raw materials. In 2021, disaster prevention training was conducted at the Anjo Plant (in Aichi Prefecture) on July 21 and raw material spill prevention training was conducted in manufacturing sections on October 22. These trainings were smaller in scale due to the pandemic. In other facilities, training for emergencies and urgent circumstances is conducted on a preparatory basis.