

INOAC CORPORATION

# CSR REPORT 2022





## Corporate Philosophy

Creating a beautiful forest,  
comprised of many trees of varying character,  
rather than merely growing a single tall tree.

In our efforts to enrich people's lives,  
we at INOAC have specialized in not only a single business,  
but we have cultivated four business "seedlings"  
- polyurethane, rubber, plastics, and composite materials.  
Today we have developed into a conglomerate,  
supplying diverse products and services,  
thereby contributing to society.

## CONTENTS

### 01 Corporate Philosophy

#### Introduction

#### 02 The history of INOAC

#### 03 Our products

#### 04 Message from the president

#### Feature Story

#### 08 Initiatives of our Carbon Neutrality (CN) Committee

### Environment

#### 12 Environment

### Social

#### 15 Improving value

#### 18 Supply chain management

#### 19 Communication with society

#### 21 Producing an employee- friendly workplace

### Governance

#### 24 Governance

### Data & Statistics

#### 26 ESG data & statistics

#### 27 Company outline

### Applicability of report

Reporting period	This report was prepared based on the business activities of INOAC Corporation during FY 2021 (January 1 - December 31, 2021). * Also includes some information from FY 2020 and before, and from FY 2022.
Applicable scope	The business activities of INOAC Corporation on a non-consolidated basis, including certain domestic and overseas companies of the INOAC Group.
Year & month issued	November 2022
Guidelines for reference	<ul style="list-style-type: none"> <li>○ Environmental Reporting Guidelines FY 2018 Edition</li> <li>○ ISO 26000</li> <li>○ GRI Standards for sustainability reporting 2016/2018/2019/2020</li> </ul>

## INOAC Group History

## Expanded as a leading company in foaming technologies for comfortable life and a sustainable society

Since our founding in 1926, we established ourselves as Japan's first-ever producer of polyurethane foam and have gone on to create an extensive range of products and services that make people's lives better and more comfortable. The growth of INOAC is also a history of development. For the sake of people and the planet, we continue challenging ourselves to generate an abundance of new usage applications, while focusing particularly in recent years on consistently conducting environmentally-conscious development.



- Established Inoue Rubber Co., the predecessor of INOUE RUBBER CO., LTD. in Atsuta Ward of Nagoya, Japan (1926)

- Started exporting IRC (Inoue Rubber Co., Ltd.) brand tires and tubes

- Implemented polyurethane foam technology from Germany (1954)

- Established MTP Kasei Co., Ltd.

- Entered the automotive components business

- Entered the bedding and childcare products businesses

- Established first overseas joint venture Associated Rubber Industries Ltd. in Sri Lanka

- Entered the piping materials business



- Entered the consumer products business



- Entered the furniture business

- Entered the distribution materials business

- Full-scale entry into the cosmetic container business

- Full-scale entry into Southeast Asia

- Established Inoue MTP Co., Ltd. (1980)

- Entered the construction materials business

- Entered the office automation business



- Entered the packaging materials industry

- Full-scale entry into the US



- Changed company name to INOAC Corporation (1990)

- Entered the nursing care products businesses

- Full-scale entry into China



- Entered the environment business

- Bolstered and expanded locations in Southeast Asia

- Established the International Polyurethane Technology Foundation



- Held International PU Forum 2015 for the 60th anniversary of the start of manufacturing polyurethane foam



- Established INOAC Ryukyu Co., Ltd. as the first subsidiary of the INOAC Group in Okinawa



- Established Jinno R&D Center in Nagoya, Aichi Prefecture



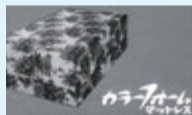
- Expanded Nagoya Head Office and established new company building



- Opened retail stores for bedding and more, primarily within business sites nationwide

1920 1950 1960 1970 1980 1990 2000 2010 2020 2023

- Launched Japan's first-ever production of polyurethane foam
- Launched sales of Colorfoam mattresses



- Performed on-site thermal insulation work on tankers and Shinkansen vehicles



- Developed cosmetic bottles using injection blow method and decorative technology



- Developed in-mold coating (double-layered) integrally molded instrument panels



- Developed foaming polyurethane R-PUR method for road construction sites



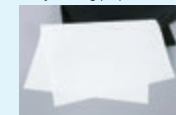
- Produced MAPS® eco-friendly interconnected fine cell polyolefin foam



- Produced FOLEC® clean polyolefin rolled sheet foam using the supercritical foaming technique



- Produced PureCell® eco-friendly, ultrafine cell foam sheet with anti-yellowing properties



- Developed Ecolocel® plant-based polyurethane foam



## Our products

# Right there beside you, making your everyday life better. Now and into the future.

In everything from household consumer products, nursing care products, and everyday IT devices, to industrial machinery used in production plants.

Also in housing and construction materials, and at civil engineering worksites. Even in cars and other means of transport, and in infrastructure facilities.

INOAC materials come in many different forms. They can be found in every aspect of the neighborhoods that surround us, adding comfort to our everyday lives in various fields.





Message from the president

My aim is to grow many trees  
of varying character  
—the attractive products that  
benefit people in their pursuits—  
to craft a beautiful forest bursting  
with diversity.



President & COO  
INOAC Corporation

野村 泰

#### PROFILE

Mar 1985 Joined Inoue MTP Co., Ltd.  
(now INOAC Corporation)  
Feb 1991 Assigned to North America  
Feb 2004 General Manager of the Technology Department,  
Automotive-related Products Division  
Oct 2007 General Manager of Quality Assurance Division,  
Automotive-related Products Division  
Oct 2008 President, Tohoku INOAC Co., Ltd.  
May 2011 Automotive-related Products Division Supervisor  
(stationed in Thailand)  
Feb 2015 Managing Director & General Manager of  
Automotive-related Products Division  
Apr 2018 Director  
Apr 2019 Managing Director  
Apr 2022 President & COO (Current)



## Message from the president

### Assuming the role of president

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My name is Yasushi Nomura. In April of this year, our previous president & COO Toyohiko Okina passed the baton and I assumed the role of president & COO of INOAC Corporation. I joined our predecessor Inoue MTP in 1985, and since then I worked mainly in the automotive-related products business. Going forward, we will be working as a team throughout the company, including to develop new products and technologies with superior environmental performance.

### Getting back to the true nature of manufacturing—*producing*

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Put simply, the business cycle in manufacturing consists of procuring materials (buying), adding value to them (producing), and marketing them to customers (selling). The business environment surrounding such operations is becoming increasingly harsh. We are currently struggling with stable procurement and spikes in costs due to factors including abnormal weather, international conflict, COVID-19, and the semiconductor shortage. If we were to pass on all of these costs increases in the form of higher prices, we would have a hard time staying competitive or gaining market acceptance. There is importance to both the *buying and selling* functions in which we must negotiate with another party. However, since I have spent my career in positions close to our manufacturing sites, my inclination is to focus attention and effort on the *producing* elements. I also think this is the quickest path to our survival.

There are two approaches to *producing*. One is to further

raise the level of our *on-site capabilities* to produce good products at an even lower price. Another is to strengthen our *technology development capabilities* to evolve what we produce according to what our customers and society need. My approach is to elevate our *producing* synergistically through two-pronged efforts both in *on-site capabilities and technology development capabilities*.

### Fields to focus our efforts

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We have three major strengths. First is our compounding technology. We are a materials manufacturer dealing in rubber, resin, polyurethane, and composites. For polyurethane in particular, our current chairman is the pioneer who was the first to introduce production of polyurethane from Germany to Japan in 1954. The compounding technology developed from that is our greatest strength. Second is our manufacturing technologies that use these materials to give added value. Third is the global network we have developed through the ongoing cycle of buying, producing, and selling.

Our corporate philosophy is to grow “many trees of varying character” to craft a “beautiful forest” bursting with diversity.

The tall tree among these is the automotive field. We have been able to grow by having a presence in the automotive industry where we have been able to leverage the three strengths mentioned above. This industry has been undergoing a period of upheaval said to occur only once every century characterized by keywords such as CASE and MaaS over the past few years, but it will continue to be our

core business. However, we cannot expect any growth in vehicle numbers in the automotive industry going forward, particularly in markets such as the Japanese market. With that in mind, we will leverage technologies developed in the automotive industry as we focus particularly on steadily developing attractive products that also benefit people in the field of industrial materials, including consumer products, bedding, and construction materials. I believe these will be the “many trees of varying character” which will grow into a “beautiful forest” bursting with diversity.

### Need for *horizontal connections* between our vertical organizations in different industries

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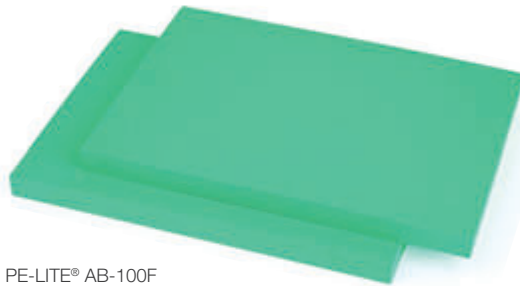
We do business with customers in a variety of industries. Of course, every industry requires a different approach, but there are particularly large differences between the automotive and consumer products industries in terms of how to approach



## Message from the president



Repeco®



PE-LITE® AB-100F

them from the point of receiving the orders through mass production.

In automotive, there is advance development, and design, prototype production, and evaluation are performed—all according to a set schedule. We also work in parallel with this to set up mass production through production preparations and verification events.

On the other hand, for consumer products people often tell us they “want something right away,” or they “want something that feels good or soft to the touch.” Quality and price are important, that goes without saying, but in these cases we need sensitivity and quick action.

It is important to accommodate the business practices of each of these industries. However, even if the industries are different, we could still miss out on unseen opportunities if we operate our organizations in a way that does not share or try

to share information (such as assessments, purchasing methods, manufacturing info, etc.) between departments.

One example would be interior space in cars and living space in housing. Both of these involve comfort-related needs and functionality needs. For cars, there are needs for electrification. In housing there are needs for energy savings via thermal insulation. They also have their own respective needs in terms of sound (soundproofing, acoustical insulation). When taking measures against sound in cars, the frequencies that must be addressed in electric vehicles are different from those in cars with internal combustion engines. We have been able to visualize these through analysis and propose the most effective measures to take. I believe that we can take this expertise we have accumulated and utilize it in other industries such as housing. Conversely, could we also take the thermal insulator compositions and methods we developed for housing and apply them for thermal insulation in cars? I think possibilities such as these exist.

For materials in particular, materials development is also one of our strengths to which we have been dedicating efforts for some time. As for the technology organization to handle these matters, we are handling the head office function to ensure that we do not miss out on opportunities in various industries, without leaning too heavily toward any one particular industry.

### Taking on environmental issues and carbon neutrality

We are actively pushing forward with efforts such as product development using biomaterials and recycled materials. In the

past, we used to think of *normal technology and product development* as separate from *eco-friendly development*. However, now eco-friendly product development through methods that contribute to carbon neutrality is a value that our customers and society desire, and it has become a main pillar of our development efforts. We are confident that this awareness and attitude are being instilled in each and every one of our employees.

Here I will share an example of one such effort involving polyurethane, one of INOAC's important materials. For a long time, we have been recycling materials using slab material cutoffs foamed within our production plants. These are being utilized in a large number of commercial applications, from car seats to living room products and more. Most recently, we have developed slabs with 50% bio content and released them as kitchen sponges and in clothing applications. Going forward, we aim to apply this technology and have it released to the market by working to get it included in manufacturers' designs for products such as bedding, cosmetics, and automotive. Over the long-term, we would like to move forward with efforts such as chemical recycling (returning products to their original substances). Chemical recycling has produced results at the laboratory level, but there are still many issues such as profitability verification and establishing partnerships that must be resolved to build a mass production system. I would like to list up each of these medium- to long-term topics, verify them, and resolve them.

### How I aim to make our organizations

Once appointed as president, I thought a lot about what form

## Message from the president

of governance (corporate governance and organizational management) to implement going forward. As a result, I reached two simple conclusions.

First was that “the true nature of governance is honesty and humility.” Do not misrepresent or hide the facts to make yourself or your own company look good. This applies both when dealing with the outside world, and with colleagues in the company. I also think this is connected to transparency in management.

The other concept I arrived at was that “working people should be able to do their jobs cheerfully and joyfully.” Trumpeting our contributions to society because we are in the “age of CSR” and waving our flag around will not amount to much if our employees feel no fulfillment in their daily work. We first need to create workplaces where individuals and the people they work with can enjoy their jobs.

## Communication skills are key

*Good communication* is absolutely essential to making that happen. Many people see communication as mutually expressing opinions, or “reciprocity.” That is not wrong, but I think communication all starts with “listening.”

I was blessed with opportunities to work in many different countries and regions, including in North America and Southeast Asia. These international experiences taught me the importance of communication. If I say things like, “I came from Japan (where Head Office is), so you must do as I say,” things will not proceed the way I expect since the people there feel like they’re being talked down to. Respect each person as an individual and show that respect with your

words and your smile while communicating the requirements. I think that once the other person feels you are giving them that level of consideration, they will then accept you as a colleague and cooperate with you in the true sense of the word.

That is also the same at our facilities in Japan. I try to visit the worksites as much as possible. When doing so, I make it a point to talk to the employees there and say, “Good morning! How have you been lately?” At first they might be caught off guard, but if I persist, they will greet me back and sometimes share their opinions about problems at the worksites. They might even tell me, “Actually, the worksite would be better if we changed this.” I gave this advice on the spot to someone who came up and talked to me. He put it into practice, and his efforts ended up receiving an award as a QC activity. I still remember how inspired I felt when he happily reported to me over the phone, “I did it. I won an award!” I have had many experiences such as this at our worksites.

If we advocate *human resources development* in a condescending, top-down manner, we tend to ignore the ideas and feelings of the people we intend to develop. However, I think our employees each have their own ambition and desire for professional growth in their work. They want to be able to deliver even more value. As an organization, I think we need to avoid obstructing that motivation. Instead, we must guide it in the right direction and give it recognition. Within an organization, the requirements of the company will not necessarily align with the desires of its individuals. That is particularly why communication is so important. AI and DX will be deployed in more places going forward, so I think the

communication between people will be increasingly important in jobs that technology cannot replace (can only be performed by humans).

## INOAC’s constant theme: Innovation & Action

The name of our company is comprised of “Constant innovation = INO” and “Constantly turning that into action = AC.” The *communication capabilities* that I mentioned are key to putting that into practice. We must also strive toward transparency in management with honesty and humility while creating workplaces where all of our employees can engage cheerfully in their work with a sense of purpose. I would like to pursue this, while keeping things simple. If we do, I am confident that our three major strengths will successfully lead to attractive products in different industries, and that we will grow from “many trees of varying character” into a “beautiful forest.”



On-site training in North America

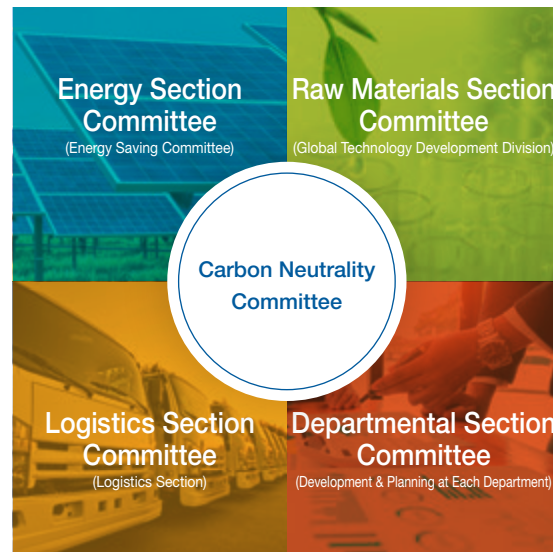


# Building the Core Organization for Initiatives to Tackle Environmental Problems



Carbon Neutrality Committee

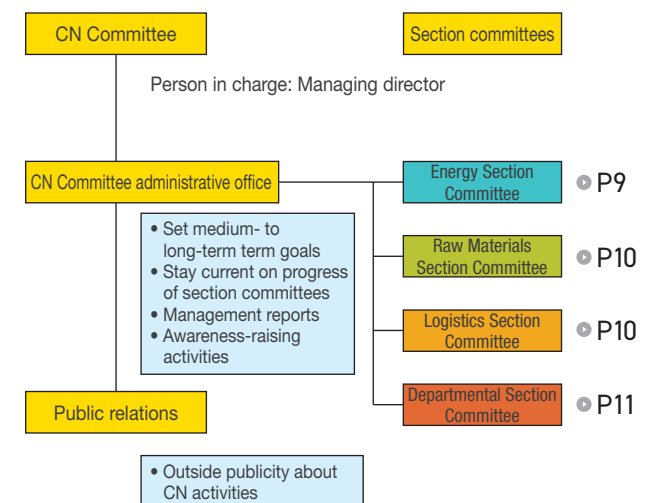
Back row, from left: Hisao Tsuge, Naoki Tanaka, Nobuyasu Torii  
Front row, from left: Nobuo Kondo, Takefumi Miura



## Organizational structure

The CN Committee is headed by a managing director. The administrative office working directly under the committee sets numerical targets and handles related tasks such as management reports and awareness-raising activities. Specific activities are coordinated by four section committees (Energy, Raw Materials, Logistics, and Departmental), each of which has its own mission and will set (medium-term) goals for 2030, three-year goals, single-year goals, and action plans, then execute them.

### CN Committee Organizational chart



\* Scope of activities is 14 facilities in Japan and 27 related locations (including affiliates)

## Background behind establishment

The dangers of climate change are now very real. One example is frequent heavy rain damage caused by abnormal weather patterns brought about by global warming. In response, in 2015 the COP21 set out the goal of “Holding the increase in the global average temperature to well below 2°C compared to pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C.” In 2021, the Government of Japan also announced its goals of reducing CO<sub>2</sub> emissions by 46% (compared to 2013) in 2030 and achieving carbon

neutrality in 2050. Concurrently with this movement, automotive manufacturers and many of our other clients now also heavily insist on CO<sub>2</sub> emissions reductions. For that reason, we established our Carbon Neutrality (CN) Committee in September 2021 to strengthen our governance toward reducing CO<sub>2</sub> and achieving carbon neutrality. Thus began the committee’s cross-divisional coordination function to engineer environmental activities throughout the INOAC Group.

## Feature Story Initiatives of the Carbon Neutrality (CN) Committee

## Initiatives of the four section committees

## Energy Section Committee

## Mission

Reduce scope 1 & 2 emissions by 50% in 2030  
(vs. 2013: total overall emissions)

## Action Plan

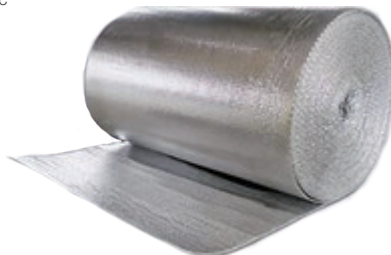
- Activities to reduce scope 1 & 2 CO<sub>2</sub> emissions at each plant (case examples 01 & 02 below)
- Promote implementation of eco-friendly parts and materials at INOAC Group companies (INOAC Housing & Construction Materials Co., Ltd.)
- Considerations for usage of solar power
- Drafting the recommended equipment for energy saving (guidelines) and promoting its implementation

## 01 Drafting “the Energy Saving Standards 2022 and rolling them out to multiple departments

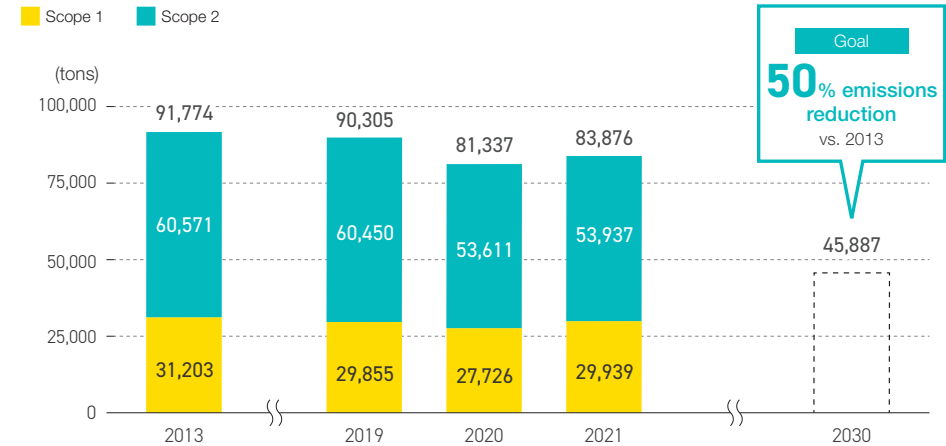
This initiative began by creating a list of energy saving standards with 15 categories and 53 items. The section committee manages score sheets for each item at 41 locations in Japan and is working to deploy them in every department to ensure the standards are exhaustively implemented.



Air leakage diagnostic

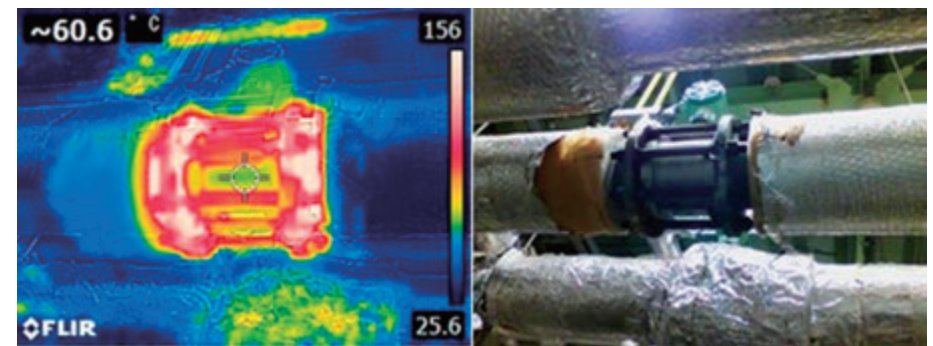


Heat insulation sheets to insulate heat

Promote usage of Therman  
(thermal insulator made  
by INOAC)CO<sub>2</sub> emissions by year

## 02 Using thermal cameras to stop heat leakage

We are working to detect heat leakages using thermal cameras. Measures to stop heat leaks are taken after identifying the locations of the leaks. Afterward, we conduct regular follow-up inspections.



Comparison of photo taken with thermal camera

## Feature Story Initiatives of the Carbon Neutrality (CN) Committee

### Initiatives of the four section committees

#### Raw Materials Section Committee

##### Mission

Setting 2030 monitoring targets for reducing scope 3 emissions  
(polyurethane, resin, rubber, and paint, which comprise a significant proportion of Category 1)

##### Action Plan

- Reduce usage volume (waste reduction, weight reduction, thickness reduction)
- Shift to material and chemical recycling for materials (case example 03 below)
- Replace with eco-friendly materials (shift from rubber to resin and biomaterials) (case example 04 at right)

	2030	2040	2050
<b>Polyurethane</b>	<ul style="list-style-type: none"> <li>• Thinner sheets</li> <li>• Use biomaterials as raw materials</li> <li>• Chemical recycling</li> </ul>	<ul style="list-style-type: none"> <li>• Build cycles for recovering products from the market</li> </ul>	<ul style="list-style-type: none"> <li>• Use biomaterials as primary raw material</li> <li>• Release biofoam products</li> </ul>
<b>Resin</b>	<ul style="list-style-type: none"> <li>• Recycle material cutoffs</li> <li>• Implement biomass</li> </ul>	<ul style="list-style-type: none"> <li>• Bolster recycling rates and shift toward biomaterials</li> </ul>	<ul style="list-style-type: none"> <li>• Expand lineup of bioproducts and recycled products</li> </ul>
<b>Rubber</b>	<ul style="list-style-type: none"> <li>• Switch to low-emissions raw materials</li> <li>• Increase recycling rate of <i>Gomspor</i></li> <li>• Implement usage of non-fossil raw materials</li> </ul>	<ul style="list-style-type: none"> <li>• Establish desulfurization recycling</li> </ul>	<ul style="list-style-type: none"> <li>• Expand lineup of desulfurization recycled products</li> </ul>

### 03 Recycling business initiative

INOAC produces and offers olefin products and was successfully able to turn the material cutoffs that arise in producing such products back into raw materials using a crosslink cleavage process (name of recycled material: *Repeco*®). The section committee will reduce overall usage volume of resin by incorporating a certain proportion of *Repeco*® in our products.

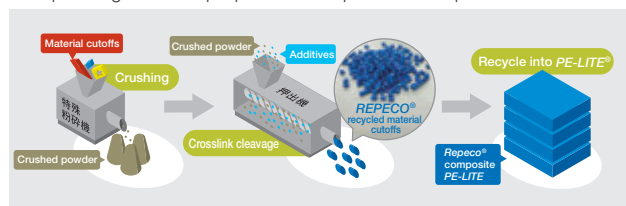
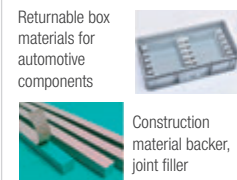


Illustration of the PE-LITE® recycling process

##### Application examples



### 04 Case example of shifting to biomaterials

We developed a polyurethane material with 50% biomass. Also having successfully made it compliant with the Food Sanitation Act, we launched it first in sponge products. Going forward, we are considering applications and commercializations for its usage in bedding, clothing, cosmetics, and the automotive field.

#### ■ Polyurethane (slabs)

## ECOLOCEL

BEH

バイオマスマーク  
50%取得  
一般社団法人日本有機資源協会 (JORA)

Food Sanitation Act compliant  
Similar mechanical properties  
as conventional products

#### ■ Usage applications

<p>Sponges</p> <p>Already launched</p> <p>Coarse cell / Fine cell</p>	<p>Mattresses</p> <p>In development</p> <p>High hardness/Low hardness</p>	<p>Pillows</p> <p>In development</p> <p>High recovery / Slow recovery</p>
<p>Clothing products</p> <p>Already launched</p> <p>Texture</p>	<p>Cosmetics</p> <p>In development</p> <p>High density</p>	<p>Automotive</p> <p>In development</p> <p>Flame retardancy</p>

#### Logistics Section Committee

##### Mission

Targeting scope 3 (category 4 upstream transportation and distribution).  
With 2023 as the base year, set monitoring targets for 2030 and work to reduce CO<sub>2</sub> emissions in logistics

##### Action Plan

- Build systems to visualize CO<sub>2</sub> emissions in logistics
- Reduce CO<sub>2</sub> emissions in logistics (increase loading efficiency, consider modal shifts, join client milk runs, switch to low-emission vehicles)



## Feature Story Initiatives of the Carbon Neutrality (CN) Committee

### Initiatives of the four section committees

#### Departmental Section Committee

**Mission** Plan and execute medium- to long-term strategies for major products

#### Action Plan

- Perform scenario analyses considering risks and opportunities on a product basis
- Execute plans that consider financial impact (sales, profit, investment) on a product basis (case example of a commercialization 05 below)
- Coordinate with other section committees to achieve targets for scope 1 & 2 and scope 3

05

#### Case example of a commercialization

##### Temperature management system solution

The logistics industry is trending away from the usage of dry ice. Based on this, the section committee is offering a temperature management system solution that combines cold storage agent and cool boxes with operational management methods as an alternative to dry ice. The system is now in use at large logistics companies and in business operations such as food transport and co-ops. Dedicated COVID-19 vaccine transport box i-Medisys was also developed to expand this solution into more markets. With the ability to transport samples and specimen while keeping them between 2 and 8 degrees Celsius for 12 hours in outside temperatures ranging between 5 and 35 degrees, orders for this box have been pouring in from local governments throughout Japan.



##### Thermax high performance thermal insulator

INOAC manufactures and sells isocyanurate foam thermal insulator. It has thermal conductivity of 0.020 W/mK and 2.3 times the heat resistance value of glass wool (16 kg). We also offer it in grades that have been certified as incombustible materials by the Ministry of Land, Infrastructure, Transport and Tourism, making it a formidable thermal insulator against fires. Its usage applications include housing, waterproofing roofs of buildings, and heated pools. Since it also has superior fabricability, it is being deployed for uses such as drying ovens and air conditioning ducts in production plants. Its usage is becoming more established through the actions of individuals such as automotive component salespeople in addition to dedicated sales teams. With catalogs in hand, these salespeople approach affiliated clients about including *Thermax* in the designs for their production plants.



### Awareness-raising activities of the administrative office

#### In-house exhibitions (March, July)

As part of our internal awareness-raising activities, "panels and actual samples" of materials, products, equipment, and other items that contribute to reducing our CO<sub>2</sub> were exhibited in March and July of this year along with presentations on the status of CN Committee section committee activities. There were approximately 400 overall attendees from the INOAC Group throughout the six total days of the exhibitions.



#### New employee training (April)

Workshops were held for new employees joining us in 2022. Classroom-style lectures were given on (1) why we must pursue carbon neutrality, (2) numerical values that our customers desire, and (3) our in-house organizations and activities. Then, in "panels and actual samples," attendees were informed about specific items at INOAC that contribute to CO<sub>2</sub> reductions.



#### Message

For some time, our company has been engaged in efforts to develop eco-friendly materials and products plus reduce CO<sub>2</sub> emissions in our production plants. However, we did not have the governance in place for related company-wide target values or cross-divisional management. In response to the 2021 turning point in demand from society and our customers for heightened efforts toward reducing CO<sub>2</sub>, we established our CN Committee and launched its activities. We still have a mountain of challenges to tackle, to expand these section committee activities overseas and to our suppliers, address the remaining categories in scope 3, and create scenarios for an eventual declaration on carbon neutrality. Therefore, I want to stay grounded and take steady action toward our objectives.

Motoyuki Asano

Managing Director  
Director of CN Committee



## 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.**

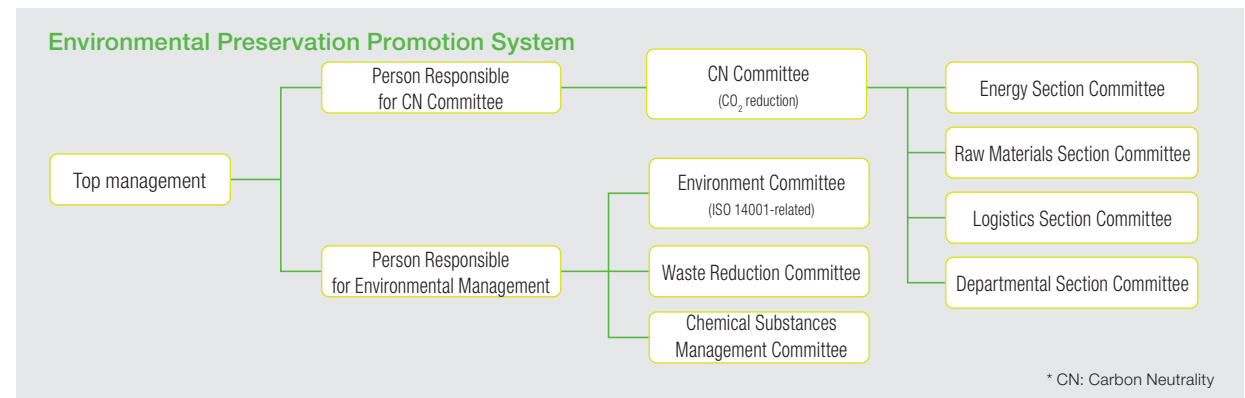
## Environmental policy

- (1) We observe environmental laws and regulations, thoroughly ensure compliance, and engage in business activities that society can trust.
- (2) We work to reduce CO<sub>2</sub> 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 CO<sub>2</sub> 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 <sub>2</sub> 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

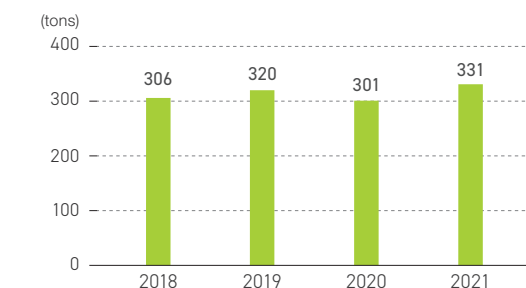
## Efforts to address water-related risks

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.

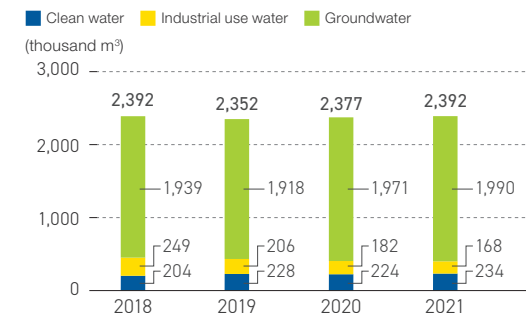
## Waste treatment amount (tons)



## 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

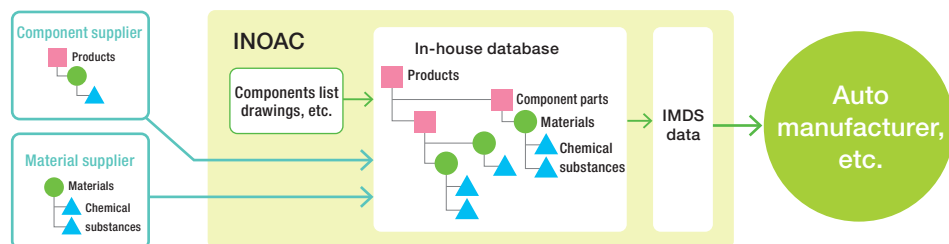
Air	Air Pollution Control Act, Automobile NOx PM Law, Act on Special Measures against Dioxins
Water quality and soil	Water Pollution Prevention Act, Purification Tank Act, Sewerage Act, Soil Contamination Countermeasures Act
Noise, vibration & odor	Noise Regulation Act, Vibration Regulation Act, Offensive 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<sup>\*1</sup>, 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<sup>\*2</sup> format, which is widely used in the industrial world, especially the electrical machinery industry.

<sup>\*1</sup> 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

<sup>\*2</sup> 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

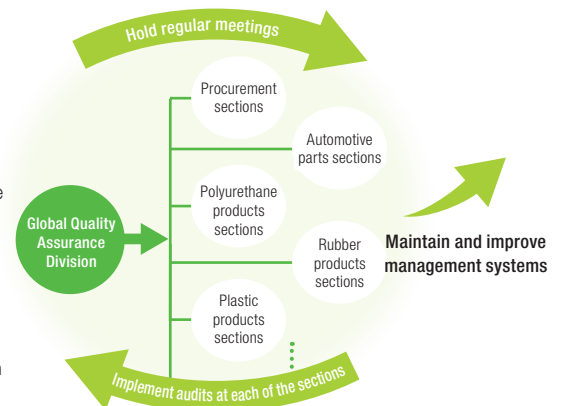
The Automotive Division is creating an in-house database through which information on chemical substances contained in parts and materials purchased from clients is identified based on information about chemical substances, and centrally managed. This has allowed us to be certain of our compliance with 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.

**Social** | Improving value**Bolstering our capabilities to propose solutions that satisfy needs****The strength as our foundation**

As a general manufacturer of high-performance materials—polyurethane, rubber, and plastic—we have strength in being able to leverage technologies and expertise built up over long years of R&D to perform everything from materials compositions and compounds to design and processing, all in one place. We also have the ability to conduct many different types of product development that suit various needs by combining high-performance materials with foaming and molding technology.

**Creating added value**

In addition to simply dealing with our customers' needs, we also propose additional and improved functionality as we engage in dialogue to learn more about the usage purpose and applications, problems, and other details. In the automotive industry where development schedules are clearly set, we also do what we call "front-loading." Establishing contact with the customer early on, we do our best to propose our own distinctive solutions and communicate the type of value that we can add.

**TOPICS: INOAC R&D Sections**

Our R&D is comprised of two sections—the section that develops our own original solutions (INOAC Technical Center Co., Ltd.), and the section that develops materials and products closely together with our customers (the Global Technology Development Division). They propose what they develop to the development and sales sections of our various departments, get them included in product designs in every industry, commercialize the results, and turn them into products.

**INOAC Technical Center Co., Ltd.**

Our technical center selects topics with a high degree of novelty that go beyond the boundaries of our existing business entities to develop original future-oriented solutions. Human resources are also particularly important to making that happen. Therefore, the center also actively dedicates effort to human resources development. For instance, the center actively organizes study sessions for acquiring high levels of expertise, including opportunities to learn basic technologies through industry-academia collaboration.



INOAC Technical Center Co., Ltd.



At a study session

**Global Technical Division**

This division ascertains various industry needs and conducts R&D for materials and products to address them. In addition to developing materials, the division also works to establish more in-depth manufacturing (developing production methods) as well as analytical and evaluation technologies. To acquire the intellectual property rights to the results of these development efforts, an Intellectual Property Department has been established within the division's organization. This group contributes to the creation of both tangible and intangible intellectual property.



Sound-absorbing PUF mold component containing biomaterials

**Working with the automotive industry**

As a company that has strong relationships with automakers, we are focusing on industry changes such as CASE and MaaS as priority topics. The shift to electric vehicles requires functionalities such as weight reduction, sound absorption, soundproofing, thermal insulation, and heat radiation. Leveraging our strengths in compounding and foaming

technologies, we are working dedicatedly to develop products that automakers desire. We have also established what we call a "Production Prep Review Panel" that handles the function of checking on the progress of production preparation. For each item that they review, we strive to improve our quality by achieving the numerical targets and making improvements.

**Social** | Improving value

## Creating enterprise value

**Environmental initiatives**

There is increasing demand for environmental considerations such as the SDGs to counteract the environmental problems spreading around us. Taking this social landscape into consideration, we are developing products that help reduce CO<sub>2</sub> emissions and pushing forward with other eco-friendly initiatives such as recycling activities and reducing resource usage.

In product development, we launched development with biomass levels over 50% among other efforts to shift toward plant-based raw materials as we chart a course away from fossil fuel-based products.

In our recycling efforts, our activities in the field of material recycling have been ongoing for many years. We are striving to establish chemical recycling technologies with even higher recycling rates, choosing the necessary equipment and considering the reaction and equipment conditions for each different material.

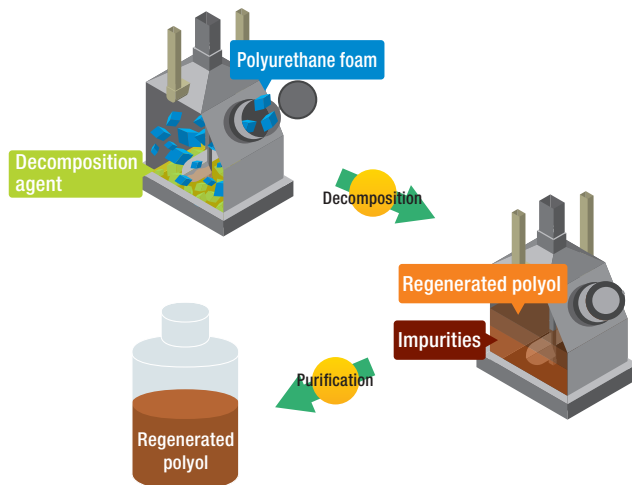


Illustration of the polyurethane foam chemical recycling process

**Intellectual property strategy**

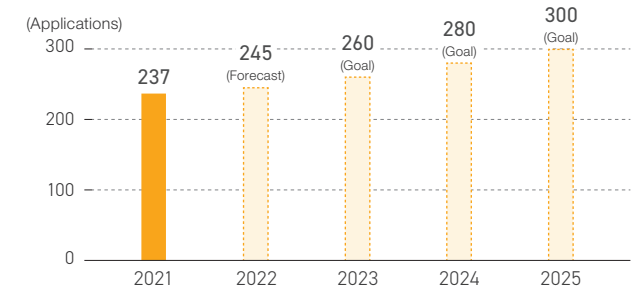
As an initiative to acquire patents in product development, we have set a goal of 300 patent applications per year. In the development of our flagship products, we are also working to bolster our competitiveness by owning a concentration of multiple patents for each individual product.

Overseas, we are expanding the presence of our R&D sections globally to address needs that must be met quickly. We are also establishing a support organization in parallel with this expansion in order to facilitate smooth local patent applications.

**Bolstering development capability through industry-academia collaboration**

We engage in joint development with universities and other institutions, primarily in medium- to long-term basic development. Taking on new perspectives and mechanisms in more specialized fields of research enables us to bolster our development capability. To manage progress, we hold internal briefing sessions twice per year to verify the progress and direction of our research. Through participation in academic presentations, we are able to further enhance our cutting-edge technologies while at the same time sharing our research findings with society.

One example of our industry-academia collaboration is “flexible aerogel” high performance thermal insulator, a product of joint development efforts with the Research Institute for Chemical Process Technology at the National Institute of Advanced Industrial Science and Technology (AIST). In light of world trends such as carbon neutrality and the SDGs in addition to Japan's Top Runner Program, demand for energy saving is increasing and superior high performance thermal insulators are attracting greater attention. Rigid polyurethane foam and vacuum thermal insulator are well-known conventional thermal insulators, but they both have issues with molding processability since they are hard materials. We engaged in this joint research

**Patent applications per year**

in order to solve that problem. Devising a compound of silica aerogel and fine cell foam, we successfully developed a high-performance thermal insulator with superior properties in terms of thermal insulation, processability, and aging performance.

**Development of flexible aerogel high performance thermal insulator**



**Social** | Improving value

## Quality improvement efforts

**FY 2022 Quality Policy****1. Practice thorough quality compliance**

- (1) Observing laws (official accreditations & certifications)
- (2) Quality assurance that meets clients' requirements

**2. Receive quality awards from clients****3. Improve our quality globally**

- (1) Develop local human resources to facilitate global business expansion
- (2) Build an INOAC global standard quality system
- (3) Improve quality by conducting quality assurance audits of overseas business entities

\* Audit production sites based on an INOAC global standard quality system

**4. More robust quality risk management for new and critical quality products**

- (1) Conduct thorough quality audits for new products and ensure quality at production launch
- (2) Thoroughly audit critical quality products (including officially accredited & certified products)

**5. Prevent critical quality problems in advance by thoroughly managing implemented changes**

- (1) Thoroughly manage changes in production processes resulting from changes to materials or compositions

**6. Utilize IoT to streamline, reduce labor, increase precision, and reduce workforce in quality-related work**

- (1) Increase reliability by automating test work

**7. Increase the reliability of products and production processes by building measurement control systems****Basic approach**

We strive to create satisfactory quality for all of our customers by thoroughly ensuring quality compliance based on our Quality Policy and strengthening our quality risk management. We have implemented a comprehensive management system based on ISO 9001 to guarantee the quality of products that can be used safely with confidence, and to provide products and services that deliver satisfaction. We are also engaged in efforts to improve quality by collaborating with our customers.

**Specific efforts****Auditing observance of official accreditations & certifications**

Our products which have received official accreditations or certifications are registered in the Global Quality Assurance Division which is in charge of our management system for quality. We verify whether there are any discrepancies between what is written in the applications and the corresponding products, production processes, and related specifications. We also periodically inspect whether there are any discrepancies between the registered information and the actual products, production processes, and related specifications.

**Biomass Mark certification**

CoolEco hard cold storage agent  
made with biomass plastic

**Product component audit for critical quality**

We guide audits of critical quality components at our production sites in Japan and abroad to prevent any serious quality issues in advance that could threaten the loss of social trust.

**Quality audit of new products**

For products created using new technologies, new materials, new processes or for new usage applications, we strive to prevent serious quality issues in advance through audits by staff members including our president to determine whether they are ready for market launch.

**Audit members**

President, Global Technology Development Division, Global Quality Assurance Division, persons in charge of technology, quality assurance, and sales in the applicable departments

**Audit areas**

Material quality, product characteristics, product performance, structure, exterior, comparison with similar products, product safety, production safety, quality risks

**Managing new materials changes**

For materials changes with high risk of serious quality issues, we build frameworks in which the Global Technology Development Division and the persons in charge of technology and quality assurance at the departments in charge deliberate over the changes, and approval is given by the Global Quality Assurance Division. We are enhancing our quality risk management by making our management systems even stronger.

**QC group activities**

We have been carrying out QC (quality control) group activities for small groups to voluntarily gather on the topic of quality improvement since around 1965. These activities have since expanded worldwide. Starting in fiscal 1985, INOAC has held the World QC & Improvement Competition on a global scale in order to share quality control activities taking place throughout the group of companies.

Many of our locations still conducted QC group activities in fiscal 2021 even as the problems surrounding the COVID-19 pandemic continued. We spread the message about what these activities have achieved by selecting some particularly outstanding examples of such activities and recording a video about them. This video featuring eight case examples in Japan and eight overseas was recorded in three languages was streamed worldwide.

**Social** | Supply chain management**Supply chain management**

From tackling global environmental problems as well as problems related to human rights and labor to carbon neutrality initiatives to combat global warming, risk management against natural disasters, and the pursuit of a sustainable society, companies are now expected to engage in very different activities than they were in the past.

In response to these changes in the surrounding environment, we are establishing a Basic Policy on Procurement and Client CSR Guidelines concurrently with the revision of our Code of Conduct.

**Basic Procurement Policy**

- (1) Promotion of global procurement activities
- (2) Observance of laws, social codes, and internal regulations
- (3) Promotion of fair, just, and sincere procurement activities
- (4) Consideration for the environment and human rights in procurement
- (5) Building partnerships based on trust with our valued suppliers

\* This Basic Procurement Policy is currently being updated

**Strengthening partnerships with our valued suppliers**

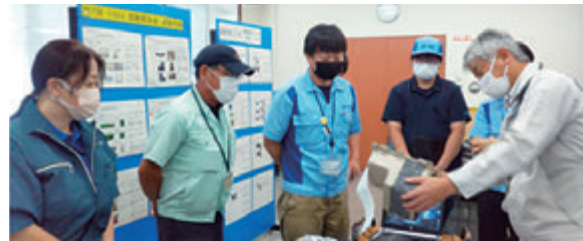
In addition to conventional specifications such as quality and price, it is now increasingly important in procurement activities to work together with clients on efforts such as improving labor conditions and making considerations for the environment. Once we have established our Client CSR Guidelines which are currently being revised, we hope that our partners will be receptive and prepared to engage in activities that lead to mutual prosperity as partners—based on greater mutual trust than ever.

**Specific efforts**

We engage in various activities through the INOAC Partnership Assembly with 67 of our valued suppliers. Teaming up with our clients, we engage in awareness-raising activities such as lecture presentations on work-style reform and cybersecurity measures, activities to ascertain problems at worksites, and activities to improve production processes. Through participation in the QC Improvement Competition to present results of improvement efforts and other such activities, we work toward mutually raising the levels of our enterprises and achieving benefits for all sides while at the same time developing human resources.

**Assembly to Address Quality Problems**

We engage regularly in activities to decide on the appropriate level of quality together with our clients while looking at the actual products.

**Supplier Awards**

We present awards to those clients who particularly contributed throughout the year.

**Seeking sustainability in procurement**

In order to offer products that are friendly to the environment and our daily lives, we avoid the use of environmentally hazardous substances in our manufacturing based on our INOAC Green Procurement Standards. We also engage in procurement geared toward achieving carbon neutrality. Every year we conduct surveys to avoid the usage of conflict minerals linked to human rights abuses and discrimination as well as raw materials and other substances obtained through unethical practices such as forced labor.

**Observing the Subcontract Act**

As part of compliance, we create a list of clients we do business with in order to thoroughly ensure our observance of the Subcontract Act (Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors), and we visualize the conditions of transactions with the clients to whom this act applies. In sections that handle purchasing work, we establish frameworks to ensure ongoing compliance by having individual employees attend Subcontract Act workshops and make action plans at periodical in-house training as part of their skills planning.

**Visualizing transaction conditions****For new clients**

When commencing business transactions, we verify whether the Subcontract Act applies to those transactions. Before beginning the transaction, we exchange payment conditions (including offsetting conditions), basic business agreements, and notices of unit price determination with those clients. We also create lists to enable centralized management of what notifications have been exchanged with subcontracting clients.

**For existing clients**

Since the Subcontract Act could become applicable to transactions when terms and conditions are changed, we manage our ongoing Subcontract Act observance by regularly checking transaction conditions and updating our lists accordingly.

**Social** | Communication with society

We take various opportunities to engage in activities that build trust with society and communities.

Considering it our mission as a company to support the growth of children who are our future, we are engaged in educational and developmental activities in Japan and around the world.

## Domestic social & community contribution initiatives

### Contributing to communities through effective use of material cutoffs

At Kyushu INOAC Co., Ltd., we are dedicating effort to community contributions through the effective use of polyurethane foam material cutoffs manufactured at production plants. Our production plants host regular workshops for children to make polyurethane stamps, squeeze toys, Christmas wreaths and other fun items out of polyurethane foam material cutoffs. We also make playground equipment for children to enjoy, which we donate to our clients' on-premises nursery schools, in addition to organizing "polyurethane parks" at production plants. All of the playground equipment is planned and produced in house, from "struck out" numbered baseball pitching target grids with targets and balls made from polyurethane foam material cutoffs, to bowling that uses prototype plastic drink bottles, playground game sets including polyurethane balls for "tamaire" in which children throw as many balls into a basket goal as they can, and more. We actively engage in these activities that prioritize time for social interaction with people in the communities, which they also enjoy.



### Supporting young musicians

As an effort to support young musicians, we held a classical music concert hosted by INOAC Corporation in the Small Hall of the Suntory Hall concert facility in Tokyo. The concert was performed together with the Tokyo Symphony Chamber Orchestra to give young musicians an opportunity to perform in an actual live concert. As part of our efforts to support culture and the arts, we also allowed free invitations by advance drawing to offer a chance to enjoy the concert to those who normally have little exposure to classical music, and we allowed admission to elementary school ages and up. The audience felt relaxed and right at home at this concert held in a relatively small hall, and they were full of praise for the event afterward.



### Providing thermal insulator to an elementary school in Hakuba

At Hakuba Minami Elementary School in Nagano Prefecture, we conducted a decarbonization project to reduce heating usage and CO<sub>2</sub> emissions by thermally insulating classrooms to keep the rooms warm. Adding a thermal insulation design that did not exist when the elementary school was built, we believe that lessening impact of changes in the outside temperature and improving energy efficiency has helped to reduce heating costs in winter, promote health, and boost motivation for learning. INOAC supported this project and provided Thermax polyisocyanurate foam thermal insulator boards which were used. Sixth graders at Hakuba Minami Elementary School also performed some of the installation work for the thermal insulation themselves. INOAC will continue to actively support similar thermal insulation efforts by providing our products.





**Social** | Communication with society

## Overseas social &amp; community contribution initiatives

**Organizing a traffic safety poster contest**

At Kenjou Industrial Co., Ltd. In Taiwan, we organized a traffic safety poster contest for children from families of employees. The contest was held to raise awareness about traffic safety through an activity that fosters children's artistic creativity, and participants entered a total of 60 posters. Cash prizes were awarded to three of them as Awards of Excellence and to another three as runners-up. Since the contest was held during Taiwan's rainy season, it helped to heighten traffic safety awareness in households.

**Supporting vaccination programs**

At INOAC Polymer Lanka (Pvt) Ltd. in Sri Lanka, we supported a vaccination program by the Sri Lanka Ministry of Health in the Horana BOI Zone. We offered the parking lots of INOAC Polymer Lanka for use as a COVID-19 vaccination center. Starting with setting up furnishings such as tables, chairs, and supplies needed for the vaccinations, we supported civil servants from the Ministry of Health by giving guidance to vaccine recipients, providing meals, and more.

**Supporting blind children**

For many years, INOAC Interior Systems has been a sponsor of the Penrickton Center that supports blind children. The Penrickton Center for Blind Children is a non-profit organization that accommodates children between the ages of one and 12 who are blind and have another additional disability and provides them with daycare and consultation services five days per week. INOAC Interior Systems supports programs designed to encourage their independence in various facets of everyday life. The Penrickton Center for Blind Children assists families, children, and specialists through support services, education, and more.



**Social** | Producing an employee-friendly workplace**Diversity & inclusion****Basic approach**

The “many trees of varying character” expressed in our Corporate Philosophy are the very definition of diversity. Thus, our philosophy itself could be considered the fundamentals behind our basic policy on diversity & inclusion. We do business with respect for diversity by employing and developing people from all walks of life, which includes operating business overseas and actively enlisting female employees.

**Global business operations**

We began expanding overseas in the 1930s, and we now have approximately 70 overseas production plants and business facilities in 13 countries. In the process of doing so, we have constructed a robust global network by respecting the various values, practices, and national identities in the places where we do business and establishing trusting relationships with the people.

**Human resource development****Basic approach**

At INOAC, we advocate the philosophy that diverse human resources are the foundation for the continued existence of the company. Rather than specializing in one particular business, we are an entity that contributes to society by creating a diverse range of products and services. By respecting the individuality of each employee who constructs these products and services, taking quick actions and making speedy decisions, we aim to develop human resources capable of forming a vibrant global team with an abundance of individual character.

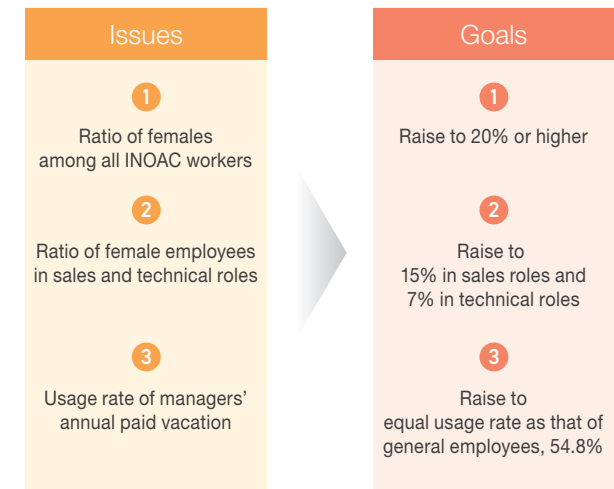
**Establishing a human resources system that reflects the times**

Work-styles have changed along with social changes from Japan's Showa Era that ended in 1989 and subsequent Heisei era that lasted until early 2019 into the current Reiwa Era. We now live in an age in which employees each determine their own individual path. Our vision for our new human resources system is to clarify the path and goals required for all employees to achieve their own professional

**Project to promote employment of women**

We enable female employees to demonstrate their skills and capabilities, actively seeking out roles for them and creating environments where they can contribute to the company. In our General Employer Action Plan which was formulated based on the Act on Promotion of Women's Participation and Advancement in the Workplace, we set three goals including specific numerical values for current issues, and we are aiming to harness capabilities and develop careers in many different departments.

In fiscal 2021 we implemented a new system that makes it easy to rehire personnel who resigned for personal reasons—such as parental or caregiving responsibilities or work transfer of their spouse—and can be immediate contributors once again. We also conduct follow-up interviews with employees who joined as experienced professionals and utilize what we learn from them to solve problems in the workplace.



growth and to develop their subordinates. For employees themselves to grow as professionals, they need to have dreams and visions. They must enhance their own market value, fields of specialization, and expertise. And for them to develop their subordinate human resources, they need to clarify their subordinates' targets and goals, in addition to clarifying a road map and methods for enhancing their market value and standards for their expertise. We aim to establish human resources development that paves the way to a new era by presenting a clear vision of the personnel that employees are expected to become and implementing evaluation systems that motivate them toward their own development.

**Global human resource development initiatives**

In order to develop human resources capable of handling globalized business, we implement programs that enable an even higher level of skills acquisition with a focus on younger employees who will drive our future growth.

In these times of flourishing online interactions and training, the Overseas Trainee System which we launched in 2019 is producing

professional growth and realizations that are unattainable in Japan by offering employees the chance to actually go on-location, experience and learn the culture and business practices first-hand, and receive support from the overseas staff members during their work and training. Going forward, we are also considering restarting the Overseas Language Study Program which we launched in 2013 but has been suspended due to the COVID-19 pandemic.



At a meeting during training in North America

## Social | Producing an employee-friendly workplace

### Promoting work-life balance

We are actively working to support balance between work and family life, to have an employee-friendly workplace and promote the advancement of women.

#### Increasing our rate of annual paid vacation taken

Since fiscal 2021 we have been publishing our company goals and working toward achieving the Japanese government's target of at least 70% usage of annual paid vacation days.

##### Company goals

All employees take at least 50% of annual paid vacation days in the fiscal year they are allotted

##### Description of initiative

Create paid annual paid vacation schedules, communicate in the early part of each month about the number of days which must be taken, and post results on the company intranet.

#### Reduced work hours for childcare

Our reduced work hours for childcare had previously applied to employees raising children up to third graders in elementary school and allowed them to work reduced hours (six-hour days) for up to three years. However, in fiscal 2022 we changed the applicability to include children up to sixth graders in elementary school and removed the three-year restriction on duration.

#### Other support systems to balance work and childcare (year enacted)

- Paternity leave (before 1980)
- Flextime system (1990)
- Regulations regarding family care leave (1990)
- Happy Holiday Leave (1991)
- Regulations regarding childcare leave (1992)
- Regulations regarding measures for maternity health management (1998)
- System for paid half days off (2000)
- Family support holiday leave (2005)
- Sick/injured childcare leave (2005)
- Amended regulations regarding childcare leave (leave period extension) (2005)
- Family Care Leave (2010)
- Regulations regarding telecommuting (2020)

\* Flextime was changed from "with core time" to "no core time" on April 1, 2020.

### Human rights

#### Basic approach

We respect the Universal Declaration of Human Rights and internationally recognized fundamental rights of workers, and we dedicate effort to respecting human rights without being complicit in any human rights violations such as forced labor or child labor. We also strive to create safe, comfortable workplace environments and are engaged in making improvements to that effect throughout our company by implementing measures against long work hours, workplace harassment, and more.

#### Guidance in rectifying long work hours

For those who have worked long hours and employees deemed to have health concerns, we follow the guidance of industrial physicians and take actions including having the applicable employees receive interview-style guidance and undergo regular or comprehensive health checkups. Additionally, when employees are deemed to have accumulated fatigue from working long hours, we take the appropriate steps as a company such as providing guidance from industrial physicians about the necessary measures to maintain their health once requested by the employees.

#### Measures against harassment

Workplace harassment is socially unacceptable behavior that wrongfully harms employees' dignity. At the same time, we also consider it a disturbance that prevents employees from harnessing their capabilities, interferes with order and performance of duties in the workplace, and can impact our social reputation.

We have declared zero tolerance for any type of harassment, whether expressed verbally or by attitude, or via email, the internet, or other means, and we are making committed efforts to prevent it. In addition, we administer an annual Power Harassment Questionnaire for all employees, establish internal reporting systems, and organize workshops for managers.

### Health management

#### Basic approach

In the past, employees were considered to be responsible for managing their own health individually. However, the idea that the company is responsible for establishing environments where employees can be physically and mentally healthy at work has now become pervasive. Improving workplace environments and promoting health make individual employees feel more motivated for their work, which in turn makes the workplace livelier as a whole.

With all three parties—the company, employees, and health insurance society—working closely together, we aim to mitigate health risks, prevent injuries and illnesses before they occur, and balance the business of the company with the health management of its employees.

#### Health promotion initiatives

We are formulating annual schedules for the company as a whole which include priority action items for each month. At each business facility, we are establishing promotion organizations, formulating Mental Health Promotion Plans, and carrying these out. Working together with the health insurance society, we are also promoting employee health based on our "Three Pillars."

#### Three Pillars

##### ▶ Prevent illnesses before they occur

For each individual employee to be healthy and thrive for longer, it is important to regularly prevent illnesses before they occur as opposed to only getting treatment after becoming ill. We provide assistance for employees to stay healthy, including subsidies for comprehensive health checkup costs, mental health courses, stress checks, and more.

##### ▶ Specific health checkups

These health checkups identify those who require health guidance for preventing lifestyle-related diseases. For health checkup categories, we use examination categories that can accurately identify those who require specific health guidance, which includes the addition of waist measurements to observe buildup of visceral fat.

##### ▶ Specific health guidance

Those who have been identified in specific health checkups create action plans based on guidance received from doctors, health nurses, and registered dietitians, and make efforts to improve their lifestyle habits.



## Social | Producing an employee-friendly workplace

## Safety and health / Disaster prevention

## Principles and basic policy for safety

- (1) Safety is the basis of the very existence of the company.
- (2) All accidents and hazards are preventable.
- (3) Safety is achieved through the awareness and responsible actions of each employee.

Based on the safety principles, we prioritize safety above all—and this is demonstrated through action. When a risk becomes known, our established practice is to “stop it, call it in, and wait.” Our yearly activity plans include activities organized by the Ministry of Health, Labour and Welfare and monthly activities that past disasters have taught us to be of critical importance. We strive to improve the safety, health, and disaster prevention levels at all of our locations by conducting repeated training and improving any weaknesses we find in our safety, health, and disaster prevention assessments.

KPIs	Applicable scope	2021 result
<ul style="list-style-type: none"> <li>Total employee occupational accidents (including no lost worktime)</li> <li>Total accident frequency rate</li> <li>Total lost-worktime accident frequency rate</li> </ul>	Japan	22
		1.68
		0.76
-30% from previous year	Overseas	16
<ul style="list-style-type: none"> <li>Severe employee occupational accidents 0</li> </ul>	Japan	0
	Overseas	0
<ul style="list-style-type: none"> <li>Fires at business facilities 0</li> </ul>	Japan	0
	Overseas	0
<ul style="list-style-type: none"> <li>Having no more administrative classification III work environments at worksites</li> </ul>	Japan	6 worksites

## All INOAC Safety and Health Committee meetings

As safety activities led by top management and attended by all employees, we hold safety meetings to increase company-wide awareness of safety, health, and disaster prevention, build organizational culture, and prevent the recurrence of accidents.

- Central Safety and Health Committee meetings: Held four times per year
- Field inspections by officers: Held twice per year
- Safety Practitioners Conference: Held four times per year
- Safety conferences: Held once per year
- Organizing safety presentations by outside instructors: Held once per year
- Safety and Health Committee meeting at each location: Held monthly



Field safety inspection by top management

## Developing safety-conscious workers with the Safety Dojo

The Safety Dojo lets employees experience potential work hazards in safe settings using 15 simulators that enable them to see, hear, and feel the hazards. The experience helps to build workplaces capable of achieving the zero-disaster standard by making employees more sensitive to potential hazards, training their ability to predict them, and building habits in safe work practices. We also introduced a virtual reality (VR) system and bring VR equipment to each location for on-site interactive safety training.



Safety Dojo

## Initiatives for healthier environments

Managers are improving their skills and knowledge through initiatives that enable them to lead by example.

- Establishing outdoor smoking space to ensure separation of smoking areas
- Taking environmental measures to reduce road surface temperature and lowering temperatures inside plants via the *Thermax* ceiling cover method, thermal insulation for furnaces, and more
- Organizing learning sessions and trainings by industrial physicians and the health insurance society
- Taking measures against heatstroke and extreme heat, creating Wet Bulb Globe Temperature (WBGT) visualizations, and systematically improving workplace environments
- Improving work environments and having no more administrative classification III (noise, organic & specified chemical substances, etc.) worksites
- Measures to prevent the spread of COVID-19
  - Implementing body temperature checking systems at entrances
  - Arranging partitions in meeting rooms and discussion areas
  - Allocating CO<sub>2</sub> measurement devices, air purifiers, and sanitizer liquid



Heat insulating pavement (reducing road surface temperature by reflecting infrared rays)



Thermal insulation for furnaces



Body temperature checking system at entrances

## Disaster prevention activities

We take action according to our Crisis Management Regulations to minimize damage by natural and other disasters, execute accurate first responses, and ensure early recovery.

- Large earthquakes
  - Measures to alleviate earthquake damage to buildings and facilities
  - Safety and disaster prevention equipment and stockpiles for earthquakes
  - Post-earthquake response
  - Stockpile of mattresses and other items to contribute to the community
- Measures against fires, storms, and floods
  - Prevention of fires and explosions at production sites
  - Preparedness and systems for dealing with storm and flood damage
  - Establishment of a weather information distribution system
- Disaster prevention education
  - Utilizing the Disaster Prevention Training Center and performing disaster prevention training at worksites
- Disaster prevention agreements with local communities
  - Providing supplies such as water and mattresses when disasters occur
  - Organizing disaster prevention events and participating in disaster prevention training together with local communities



Disaster Prevention Training Center

## Governance

### Corporate governance

#### Basic approach

We consider the improvement of corporate governance to be a key business issue for raising our performance, value, and social credibility.

#### Corporate governance structure

Our Board of Directors comprised of eight members makes decisions on key issues in INOAC's business. Each board member reports the execution, financial, and performance statuses of his/her division, based on which the Board supervises and controls the business execution of the company. In order to also separate supervisory and executional responsibilities in management, INOAC has

introduced an executive officer system. Each executive officer, endowed with his/her own authority from the Board, acts as the head of the department, group company or major functional organization to speed up decision-making, optimize business operations, and handle critical business execution.

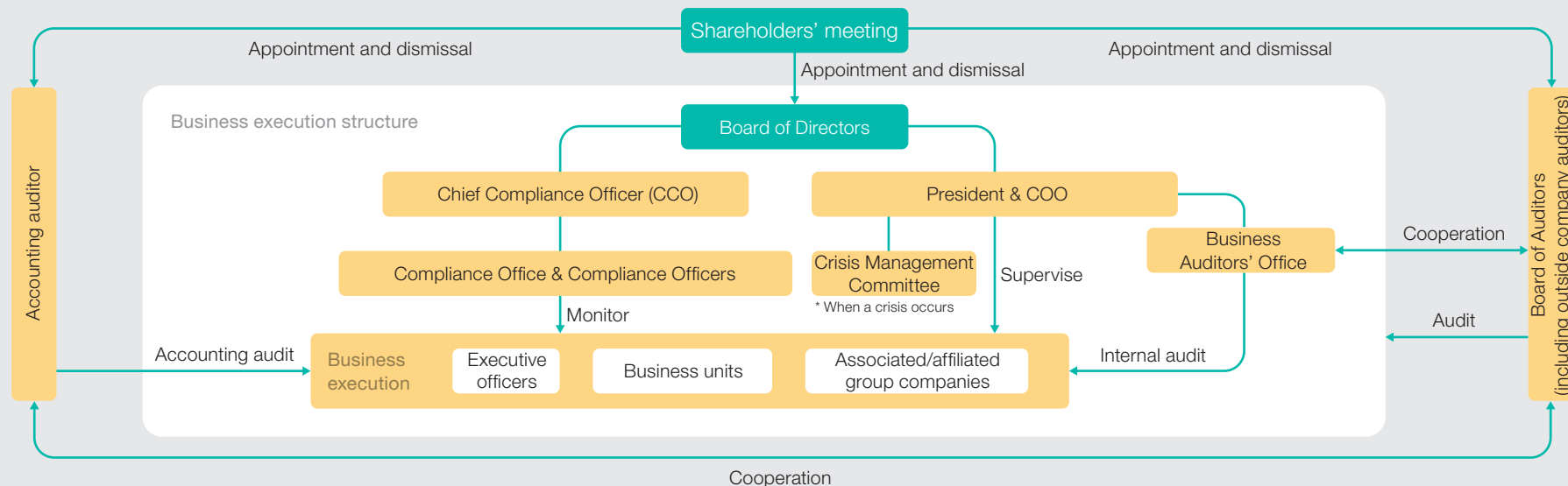
For our auditing function, we have a Board of Auditors composed of three company auditors including two external auditors. The company auditors attend important meetings such as board meetings and audit the execution of duties by the directors by inquiring about the status of their business operations.

#### Internal control system

We are implementing various measures to ensure that we comply with applicable laws as well as the company's articles of incorporation in our business execution. For information management, we determine the responsible department or section and storage period for each document according to our Document Control Procedure. The Executive Management Committee controls risk management, and Crisis Management Committee meetings are held when a crisis occurs.

For associated and affiliated companies we have established our Governance Rules for Associated Companies. We also clarify rules for business operations and conduct both operational and accounting audits as needed.

#### Corporate governance structure (organizational structure)



## Governance

## Compliance

## Basic approach

In order for INOAC to satisfy its corporate social responsibilities and expectations from customers, it is not enough to simply observe the applicable laws. Employees must also recognize their social responsibilities as part of the corporation. We strive to implement thorough compliance that goes beyond simply defining a company policy and observing the applicable laws by also holding each individual employee to high ethical standards in their actions.

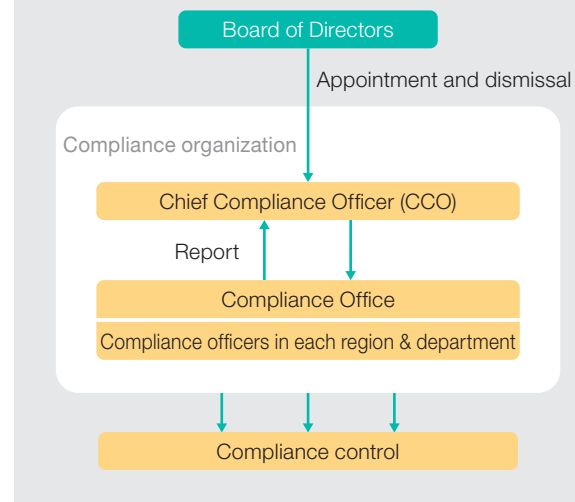
## Implementation system

With authority independent of our directors and executive officers, our Chief Compliance Officer (CCO) runs the Compliance Office, taking measures and actions for compliance-related matters. Additionally, we have compliance officers deployed in each region and department in Japan and overseas who implement compliance activities while finding ways to strengthen their overall global coordination.

If any compliance violations arise, the CCO directs the Compliance Office as the person in charge of the response. The CCO establishes a task force at Head Office to address the violation in a centralized manner according to the level of impact.

We continuously improve the program that determines our compliance organization through revisions made regularly by the CCO. Once per year, we also convene all the compliance officers to hold a Global Compliance Evaluation Conference.

## Compliance organizational chart



## Specific initiatives

## Compliance training

We are incorporating compliance portions into the regular training conducted at major intervals in all employees' careers (training for new employees, employees hired mid-career, overseas assignment candidates, and those handling core functions). In addition, we conduct separate compliance trainings according to the characteristics of each region and department.

## Whistle-blowing system

We have established a whistle-blowing system to enable everyone who works for or with our company to consult or report matters involving compliance violations that have or might have occurred. Our whistle-blowing system connects both internally (to the Compliance Office) and externally (to a law firm).

## Information Security Committee established

We established our Information Security Committee in September 2022 in order to operate properly in line with our Confidentiality Management Regulations and to further improve our management of information. The aim of our activities is to implement these globally throughout our organizations as we also work to reduce occurrences of cyber incidents and put response measures in place.

## Activities

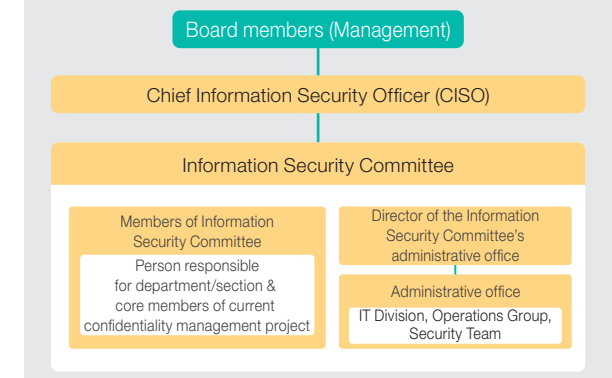
- Implement countermeasures to reduce occurrences of cyber incidents
- Build systems capable of responding quickly to address cyber incidents when they occur
- Accommodate Cyber Security Guidelines Ver. 2.0 and various guidelines set out by customers

## Goals

(\* Within the duration of our security specialist vendor agreement from September 2022 to January 2023)

- Visualize the issues to achieving 90% of the LV1 & LV2 categories of Cyber Security Guidelines 2.0 and how to deal with them, along with the main departments involved, deadlines, and amounts of investments (as needed) by December 2022
- Formulate the flow of steps to responses when cyber incidents occur

## Information security management structure (in normal circumstances)





## ESG statistics

## Environment

		2018	2019	2020	2021
Energy consumption	Heavy oil (kL)	3,894	3,778	2,891	2,997
	Natural gas (x 1,000 m³N)	939	816	800	945
	Petroleum (x 1,000 kg)	5,708	5,932	6,036	6,570
Power purchased (x 1,000 kWh)		123,678	125,753	120,162	124,521
CO <sub>2</sub> emissions (tons)		90,437	90,305	81,337	83,876
	Scope 1 (tons)	29,774	29,855	27,726	29,939
	Scope 2 (tons)	60,663	60,449	53,611	53,937
PRTR (handled & emitted) (tons)		306	320	301	331
Water intake	Clean water (x 1,000 m³)	204	228	224	234
	Industrial water (x 1,000 m³)	249	206	182	168
	Well water (x 1,000 m³)	1,939	1,918	1,971	1,990
Industrial waste	Amount generated (tons)	9,300	10,166	9,671	10,814

\* Applicable scope: 14 facilities in Japan and 27 related locations (including affiliates)

## Governance

(Non-consolidated)

		2018	2019	2020	2021
Board of Directors	Members of Board of Directors	10	10	9	8
Compliance	Compliance training participants	—	—	271	361
Information security	Information security training participants	82	87	57	1,034
	Severe incidents	0	0	0	0

## Social

(Non-consolidated)

			2018	2019	2020	2021
Employee-related data	Employees		1,745	1,853	1,903	1,884
		Male	1,544	1,628	1,642	1,590
		Female	201	225	261	294
	New graduate recruits		54	45	52	46
		Male	42	34	31	31
		Female	12	11	21	15
	Average age (years)		42.9	41.9	41.6	41.6
		Male	43.2	42.3	42.3	42.3
Human resource development		Female	40.6	39.3	37.8	37.7
	Turnover rate (%)		5.5	4.7	6.0	6.0
	Total training hours		37,892	25,562	18,608	26,023
Promoting diversity	Average training hours per year (hours/person)		20.7	19	12.9	13.2
	Ratio of female employees (%)		12	12	14	16
	Ratio of female managers (%)		2.8	3.2	3.2	4.3
Producing an employee-friendly workplace	Ratio of persons with disabilities employed (%)		2.39	2.30	2.28	2.36
	Number who took childcare leave		4	3	11	9
		of whom are male	0	0	1	4
	Ratio of paid vacation taken (%)		47.3	53.0	52.9	64.2
Occupational safety & health initiatives	Average monthly hours of overtime work per person		18.06	17.48	19.51	19.69
	Members of labor union		1,417	1,486	1,491	1,481
	Lost-worktime accident frequency rate (%)*		0.60	0.82	0.44	0.76
	Health checkup screening rate (%)		96.1	99.9	100	100
	Stress check screening rate (%)		86.1	90.1	93.9	94.6
	Participants in occupational safety & health-related training*		536	446	350	339

\* Includes associated companies in Japan

## Company outline

▶ <b>Company name</b>	INOAC CORPORATION
▶ <b>Capital</b>	720 million yen
▶ <b>Representatives</b>	Chairman Soichi Inoue President & COO Yasushi Nomura
▶ <b>Head Office</b>	2-13-4 Meieki Minami, Nakamura-ku, Nagoya, Aichi 450-0003
▶ <b>Head Office (Tokyo)</b>	4F Osaki West-city Bldg., 2-9-3 Osaki, Shinagawa-ku, Tokyo 141-0032
▶ <b>Established</b>	1954
▶ <b>Employees</b>	1,846 (as of April 1, 2022)
▶ <b>Sales</b>	176.3 billion yen (as of December 2021)

### ▶ Main Businesses

#### INOAC Materials for a Comfortable Life.

INOAC operates in five broadly-defined categories of business.

We make people's lives more comfortable and enjoyable in many different life scenarios, offering a wide range of products in various markets.

#### 1 High Performance Materials

Operating in various fields closely related to daily life, from consumer products to information technology equipment and housing and construction materials.



#### 2 Automotive-related Products

Offering products for interiors and exteriors, products for car functions, and seat-related products that help make cars safer and more comfortable.



#### 3 iRC Tire

This specialist manufacturer of motorcycle, bicycle, and wheelchair tires and tubes is the original founding section of the INOAC Group.



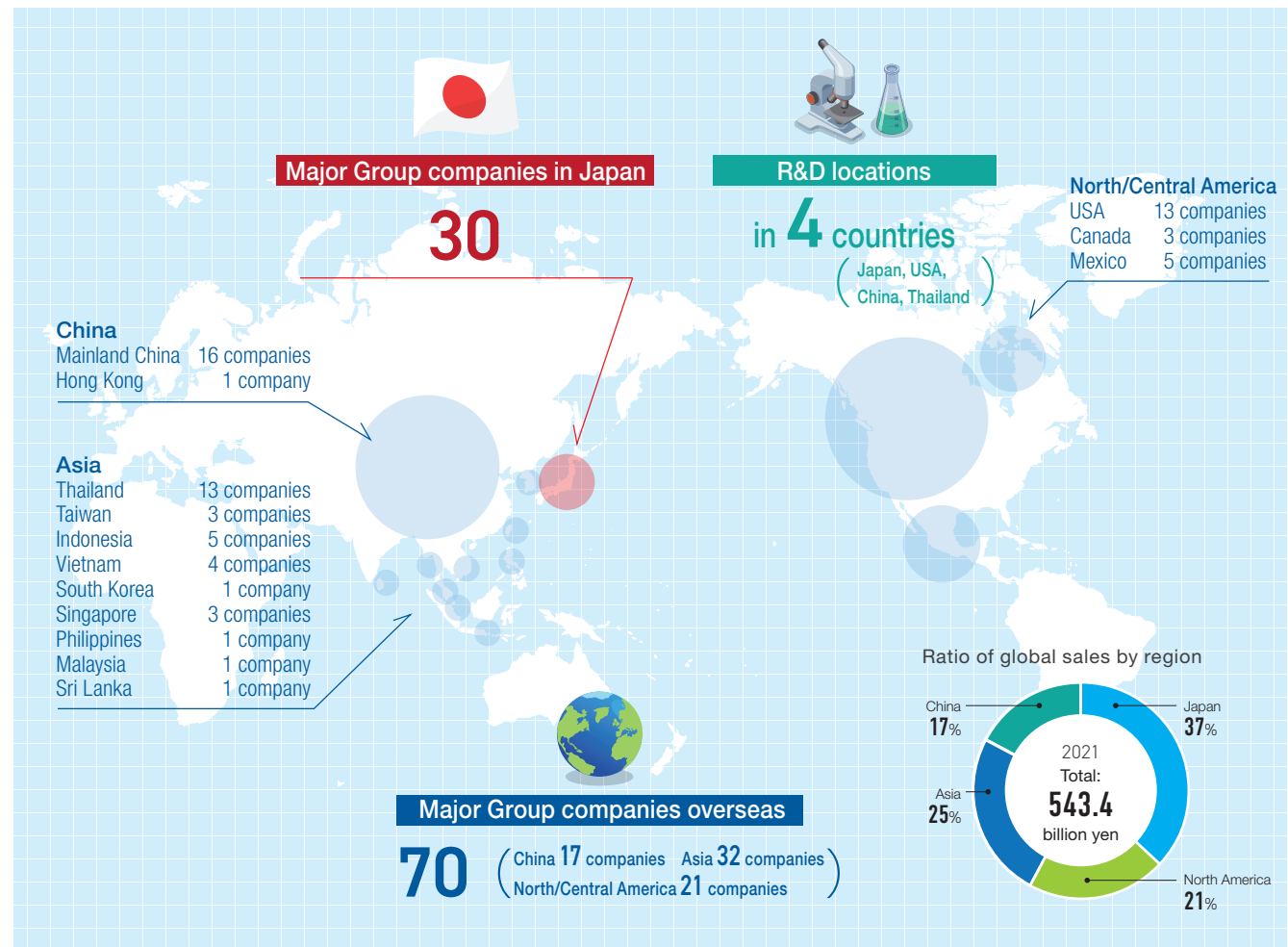
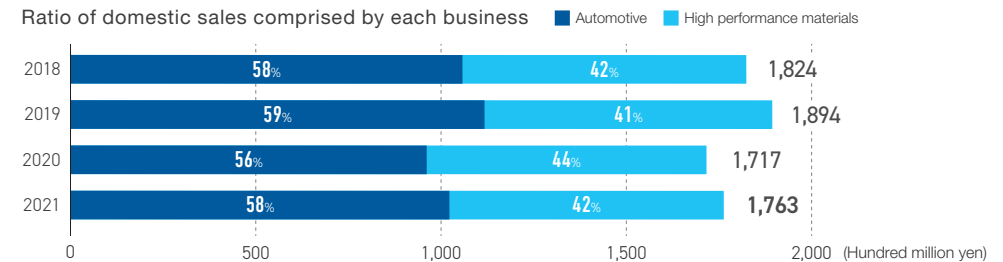
#### 4 Housing & Construction Materials

Operating mainly in housing, construction, civil engineering, and environment-related business.



#### 5 Bedding & Furniture

Producing *Colorfoam* bedding for a comfortable night's sleep, as well as *Smile* nursing care furnishings, and *HUKLA* furniture.



[Inquiries]

株式会社 **イノアック コーポレーション**

PR Department, Corporate Planning Division

4F Osaki West-city Bldg., 2-9-3 Osaki, Shinagawa-ku, Tokyo 141-0032

Phone: 03-6680-8168 E-mail: [csr@inoac.co.jp](mailto:csr@inoac.co.jp)

<https://www.inoac.co.jp/>

