

Sustainability Report

2022



NIPPON FINE CHEMICAL CO., LTD.

Contents

Top Message	2
NFC VISION 2030	3
Performance Highlights	4
Topics for FY2021	5
History of Nippon Fine Chemical	6
Business Locations	7
Business Contents	8
Corporate Governance	10
Sustainability Basic Policy for Nippon Fine Chemical	11
Initiatives for Compliance	12
Relations with Stakeholders	12
Relations with Shareholders & Investors	13
Relations with Suppliers	14
Relations with Employees	15
Relations with Customers	16
Initiatives for Diverse Product Development that Meets Customer Needs	17
Relations with Local Communities	17
Relations with Future Generations	18
Initiatives for the Environment	18
Initiatives in Line with TCFD Recommendations	24
Initiatives for Environmentally-Friendly Product Development	27
Initiatives for Safety and Security	28

Editorial Policy	This Report has been published in order to allow our stakeholders to understand the sustainability activities of Nippon Fine Chemical Co., Ltd.
Reference Guidelines	This Report has been created using the GRI “Sustainability Reporting Guidelines Vol. 4” as reference.
Scope of Reporting	From April 2021 to March 2022 (including some information from outside this period.)

Inquiries

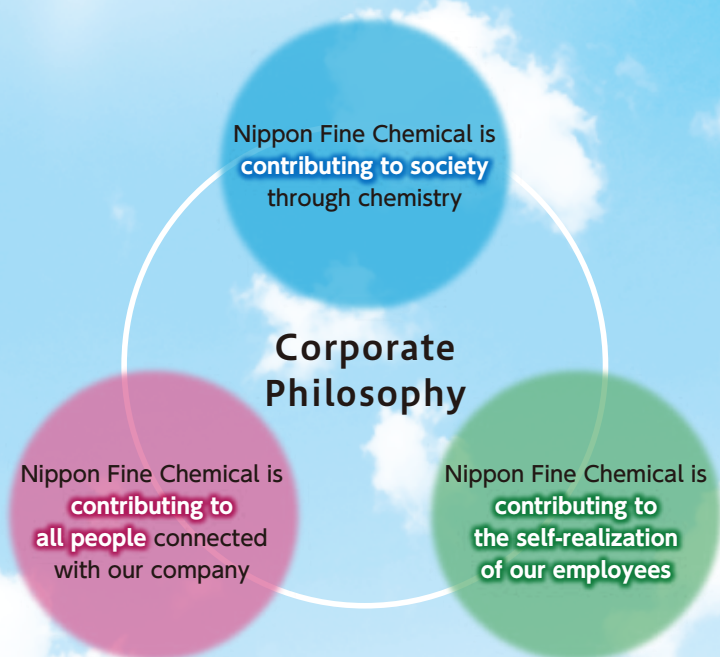
Nippon Fine Chemical Co., Ltd.

4-9, Bingomachi 2-chome, Chuo-ku, Osaka 541-0051 (10F, Nippon Fine Chemical Building)
<https://www.nipponseika.co.jp/>

This Report is conscious of the following.



We use fonts that are easy to read based on the ideas of Universal Design (UD).



Towards ESG Management by Putting Our Corporate Philosophy into Practice

Nippon Fine Chemical celebrated the centennial of our founding in February 2018, and, looking ahead to the next hundred years, aims to become a company that grows sustainably by continuing to boost our uniqueness, and creating further innovations to suit the changing times.

When I was appointed President in June 2020, I offered the following five key items as necessary to achieve sustainable growth for our new hundred years.

- (1) Compliance and safety
- (2) Human resources training and working style reforms
- (3) Formulating a long-term vision
- (4) Multiplying our core businesses
- (5) Promoting digitalization

For the long-term vision, one of these key items, we are working towards achieving the NFC VISION 2030, the embodiment of the dreams of our employees (where they want the company to be in 2030).

Our corporate philosophy of "Contributing to Society Through Chemistry" as well as the "Smiles on Faces: The Power of KIREI" in our long-term vision, the NFC VISION 2030, and our sub-concept of helping to sustain the three "KIREIs" of the Earth, society, and the future, form the basis of our Basic Policy for Sustainability, which aims to achieve both sustainable corporate growth and to bring about a sustainable society.

To carry out this basic policy properly, we have established a Sustainability Promotion Committee, which, following discussions among members, has set KPIs (key performance indicators) and numerical goals for key issues to work on as management and has begun working towards achieving these.

In addition, in December 2021 we declared our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) based on our recognition that risks and opportunities due to climate change are key management issues.

We used scenario analysis to assess the risks and opportunities of the impact of climate change on our business, and formulate the countermeasures we need to take as a company.

We promote ESG management, and consider our most important issue to be contributing to all stakeholders through chemistry, as noted in our corporate philosophy and based on our ambition to contribute to achieving the SDGs and their goal of a sustainable society. To that end, we are promoting activities in line with environmental changes.

November 2022

Nippon Fine Chemical Co., Ltd.
Representative Director, President

Hiroshi YANO

NFC VISION 2030



**Sustaining
the KIREI
of the Earth**
through sustainable
manufacturing

**Sustaining
the KIREI
of communities**
through compliance,
safety, and actions
that ensure peace
of mind

**Sustaining
the KIREI
of the future**
through diversity-driven
innovation

Smiles on Faces: The Power of KIREI

NFC VISION 2030 is the collectivity of Nippon Fine Chemical's aspirations that we seek to make a reality. The Nippon Fine Chemical of 2030 will be striding out together as one, all eyes on the goal of showing the world the important role that we play.

Our Company Statement, "Smiles on Faces: The Power of KIREI," is a declaration that we will assist in making the Earth, society, and the future more "KIREI" based on the following concept: through contributing to achieving the SDGs and promoting ESG management, Nippon Fine Chemical wants to see smiles on the faces of everyone connected with us. To achieve the NFC VISION 2030, we set in place seven goals—goals that embody the aspirations of all our employees. Furthermore, to achieve these seven goals, each goal has been assigned separate, specific targets. Moreover, we have widely announced our determination to achieve NFC VISION 2030 through advertising in newspapers and trains.

From here on out, we will attain those goals, steadily and step by step, aiming for our result: the achievement of NFC VISION 2030.

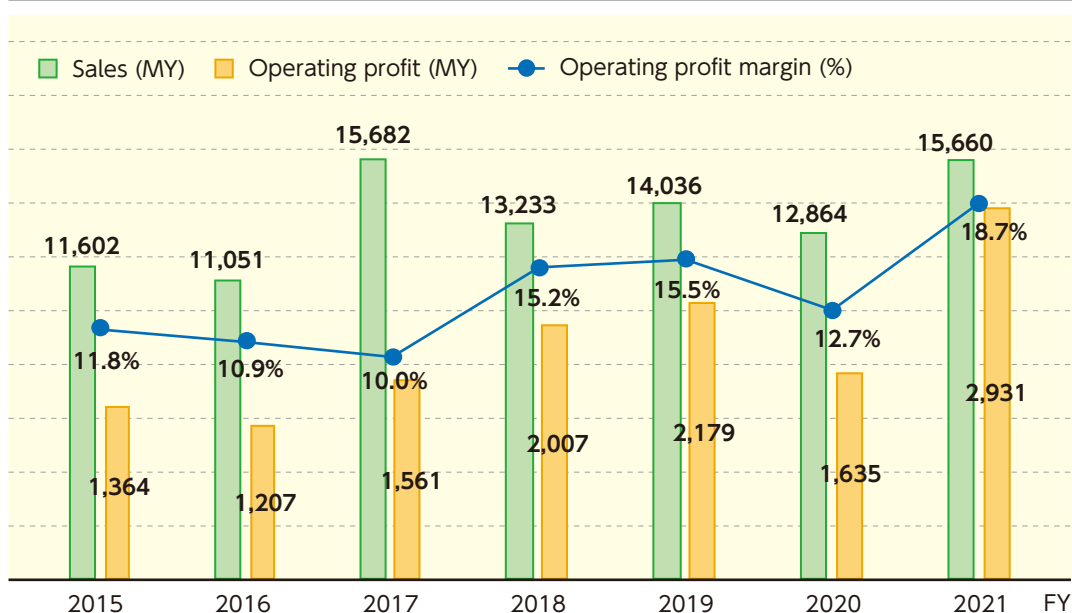
Performance Highlights



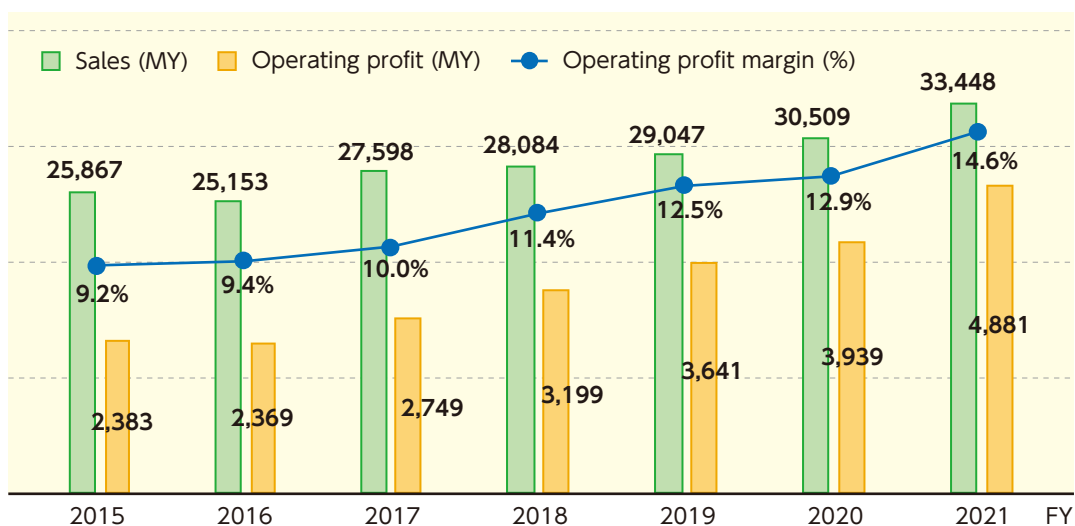
Company Name	NIPPON FINE CHEMICAL CO., LTD.
Established	February 1918
URL	https://www.nipponseika.co.jp/
Paid in Capital	5,933.22 million yen
No. of employees	370 (as of March 31, 2022)
Listed stock exchange	Prime Market of the TSE (as of April 4, 2022)
Representative Director, President	Hiroshi Yano

*Please see our website for the latest information.

■ NFC alone



■ Consolidated



Topics for FY2021

The main topics for FY2021 have been announced as follows. For Nippon Fine Chemical to continue sustainable growth into the future, we consider it necessary to continue to change to suit changes to the environment. We fulfill our social responsibility as a corporation that contributes to creating a sustainable society with continual new business development and active investment,

TOPICS

Announced our endorsement of the Ministry of Economy, Trade and Industry's GX League Basic Concept

Nippon Fine Chemical has endorsed the Ministry of Economy, Trade and Industry's GX (Green Transformation) League Basic Concept. The GX League was established as a venue to put into practice ways to create new markets and for debates to reform the socio-economic system as a whole by corporate groups actively engaging in GX along with players tackling the challenges of GX in government, academia, and finance.

The GX League Basic Concept lays out the basic directions to move ahead the debate and the verification of initiatives of detailed plans in 2022 for implementation of the GX League. The approach to carbon neutrality by 2050 must be seen as an opportunity for growth to increase industrial competitiveness, and that the corporate groups which win international business must drive the transformation of the whole socio-economic system including different stakeholders.

Announced our agreement with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations



Nippon Fine Chemical uses raw materials derived from fossils and fossil fuel as energy sources in manufacturing many of our products, and recognizes that risks and opportunities due to climate change are key management issues,

which lead to the declaration of our support for the recommendations of the TCFD in December 2021.

Going forward, we will use scenario analysis to assess the risks and opportunities of the impact of climate change on our business, and we will recognize the significance of such impact, strengthen the resilience of our strategies by reflecting such impact in our management measures and strengthen relationships of trust with our stakeholders.

Switching to 100% renewable energy sources

Our Head Office building and other sites have switched to 100% renewable energy sources, including from solar or wind power, as of March 2022. Our offices and plants in Takasago, Kakogawa, and Kobe have also switched to using 100% renewable energy sources as of May 2022.



Successfully developed material used in new solar batteries Contributed to improving the durability of perovskite solar batteries

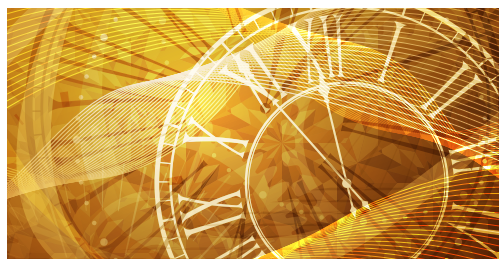
In a joint development with the Global Zero Emission Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Nippon Fine Chemical developed a new organic hole transport material that offers high performance without requiring the additive known as dopant for use in perovskite solar batteries, which show the most promise as a new renewable energy source.

Establishment of Sustainability Promotion Organizations

We have established a Sustainability Promotion Committee and a Sustainability Office chaired by the Representative Director and President. Sustainability Promotion Committee carries on the work on responsible care regarding the environment, safety, and quality that we have been engaged in previously.

History of Nippon Fine Chemical

Nippon Fine Chemical was established as Nippon Camphor Co., Ltd. in 1918, with the goal of integrating camphor businesses in Japan. Later, the company started manufacturing fatty acids and other oil and fat-related products, and expanded its business lines by forging its own unique fields within chemistry.



1918	Nippon Camphor Co., Ltd. (Kobe) founded with 6 million yen in capital
1941	Nippon Camphor Chemical Industries Co., Ltd. established
1954	Took over the work of Nippon Camphor Chemical Industries Co., Ltd. (Kobe Plant)
1969	Kakogawa Plant [currently Kakogawa-nishi Plant] built
1970	Takasago Plant built
1971	Changed company name to Nippon Fine Chemical Co., Ltd.
1976	Relocated Head Office to Osaka City
1979	Listed in the Second Section of the Osaka Securities Exchange
1992	Listed in the First Section of the Osaka Securities Exchange
1995	Merger with Yoshikawa Oil and Fat Co., Ltd. [now Kakogawa-higashi Plant]
1996	Production of fatty acid mono-amide accredited with ISO 9002
1997	Listed in the First Section of the Tokyo Stock Exchange
1998	Production of cholesterol accredited with ISO 9002
1999	New production line built at Takasago Plant for phospholipid complexes for medical use, full-scale production starts
2000	Kakogawa-higashi Plant accredited with ISO 14001
2001	Takasago Plant accredited with ISO 14001
2012	Built an FPC plant inside the Kakogawa-higashi Plant
2017	Built a plant to manufacture phospholipids for pharmaceutical use in the Takasago Plant
2018	Centennial of founding
2022	Listed on the Prime Market under the new market categories of the Tokyo Stock Exchange Expanded the plant to manufacture phospholipids for pharmaceutical use in the Takasago Plant

Aiming for sustainable growth for the next hundred years

Nippon Fine Chemical reached our centennial on February 12, 2018, and is now working to expand new businesses under the slogan, "To be a corporate group growing sustainably for the next hundred years."

Business Locations

Domestic Business Locations

- Head Office 541-0051 4-9, Bingomachi 2-chome, Chuo-ku, Osaka [Nippon Fine Chemical Building]
- Tokyo Office 103-0001 4-9, Kodenma-cho, Nihonbashi, Chuo-ku, Tokyo [Kodenma-cho Shinnihonbashi Building]
- Kakogawa-higashi Plant 675-0011 Kitano, Noguchi-cho, Kakogawa, Hyogo
- Takasago Plant 676-0074 1-1, Umei 5-chome, Takasago, Hyogo
- Kobe Plant 658-0015 4-55, Motoyama Minamimachi 5-chome, Higashinada-ku, Kobe

Offices

The artwork on display in the entrance lobby, on the 1st floor of our Head Office building, represents the theme of "the wind carrying out message as it travels the world." Its shape represents the current of the times, from the past to the present, then continuing on to the future. It incorporates our wish to be a breeze that quietly informs others of what is important to us at that time, in that era.



Entrance Lobby, 1F, Head Office



Artwork theme: "Winds of Time"



Entrance Lobby for Visitors, 9F, Head Office



Refresh Room, 10F, Head Office



Entrance Lobby for Visitors, Tokyo Branch Office



Refresh Room, Tokyo Branch Office



We have installed "refresh rooms" as places where customers can experience comfort while at the same time, employees can work there pleasantly.

In addition, updating to high-efficiency air conditioning means we also save energy.

Production sites



Takasago Plant



Kakogawa-higashi Plant



Takasago Plant (new plant for phospholipids for pharmaceutical use)



Group companies



- Nissei Kosan Co., Ltd.
- Nissei Bilis Co., Ltd.
- Arbos Co., Ltd.
- Oleotrade International Co., Ltd.
- NISSEI PLAS-TECH CORPORATION
- Sichuan Nipo Fine Chemical Co., Ltd.
- Zillion Fine Chemicals International Co., Ltd.

Business Contents

Lanolin Cholesterol Business

Lanolin is a natural oil obtained by purifying the washing liquid generated when washing out the lipids adhering to wool taken from sheep each year. It is used as a base ingredient for cosmetics and pharmaceuticals.

The cholesterol obtained from lanolin is the lipid component in human skin and hair, so it is used as a raw material for cosmetics and pharmaceuticals, as well as shrimp feed additives and vitamins.

In addition, the by-products obtained during the processing and refining of lanolin cholesterol can also be “up-cycled” to be effectively used as raw materials for cosmetics or industrial use.

As a recyclable, sustainable material that is people friendly, sheep friendly, and environmentally friendly, Nippon Fine Chemical uses it as a raw material for cosmetics in our Ecolano™ and as a raw material for industrial use in our LanoAce™.



Nippon Fine Chemical's lanolin mascots

Cosmetic Ingredients Business

We offer added value to customers through raw materials used in cosmetics (skin care, hair care, makeup).

In particular, we focus on phospholipid materials that use the technologies we developed in the field of pharmaceuticals, functional oils that provide added value to cosmetics functions, and biologically active substances that help create beautiful, healthy skin from the cellular level.

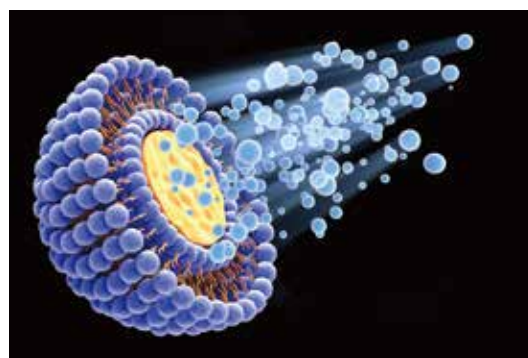
Our development of environmentally-friendly products actively uses vegetable oil-sourced raw materials. For products using palm oil as an ingredient in particular, we obtain RSPO (Roundtable on Sustainable Palm Oil) certification and expand products covered by this, allowing us to promote the use of sustainable palm oil. In addition, our lineup of products with certification from Ecocert/COSMOS, an international organization for certifying products as organic, we are also working on developing products that do not use genetically-modified (non-GMO) raw materials for reasons of biodiversity and the impact on the environment.



Lipids Business (phospholipids for pharmaceutical use)

We provide a range of materials to use in the manufacture of pharmaceuticals and so on, including liposomes, which are nano-sized, capsule-shaped particles of phospholipids, and LNP (lipid nanoparticle: nanoparticles composed of lipids) as typified by the COVID-19 vaccines that have been certified recently. Liposomes and LNP can improve the transport of medicinal ingredients to affected areas by packing them, increasing therapeutic efficacy and reducing side effects. This helps reduce the burden on patients and contributes to an improved quality of life for them.

Nippon Fine Chemical supports our customers' formulation development by manufacturing that supports GMP (Standard for manufacturing/quality control of medicinal products) and supplying Presome™ (a phospholipid complex) that allows easy preparation of liposomes.



Fine Chemicals Business

Utilizing the organic synthesis technologies we have developed over many years, we provide raw materials or intermediates in a range of industrial fields, including the hole transport materials used in perovskite solar batteries, which are looked to as a source of renewable energy, resin materials with functions such as high heat resistance used in circuit boards or the low dielectric constant needed for the next generation of high-speed communications (5G), and pharmaceutical intermediates based on specific synthesis techniques.

In addition, we are rolling out the Neutron™ series, a fatty acid amide manufactured using natural fatty acids used for lubricants for synthetic resins, and have a high share within Japan. Recently, we are expanding into biodegradable resin uses developed to protect the global environment, and also expanding uses into powder metallurgy.

We provide fatty acid amides manufactured using highly purified, high-quality fatty acids in the form of lubricants for synthetic resins (polyethylene, polypropylene, etc.),

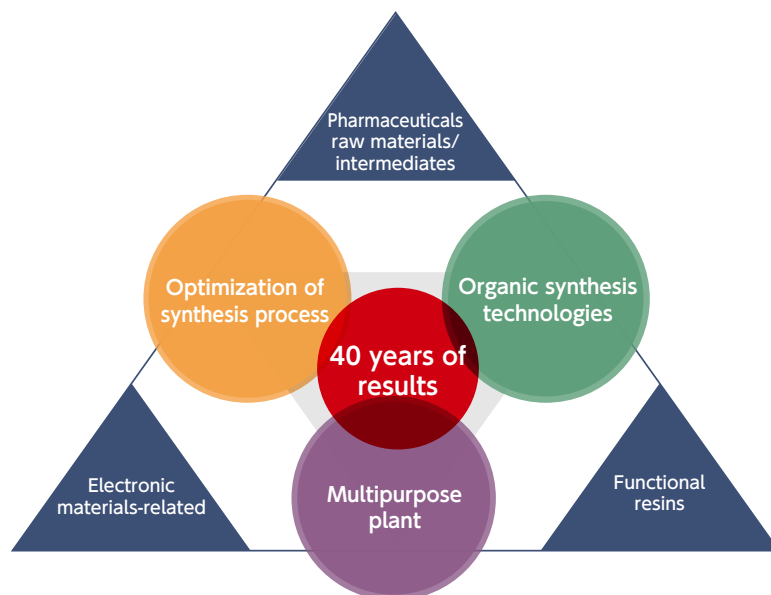
antiblocking agents, release agents, additives for printing inks, dispersants for pigment dyes, and so on.

Adding lubricants reduces friction on the contact surfaces of plastic bags and makes them easier to part. Nippon Fine Chemical's Neutron™ series of amides has a high share in Japan as a lubricant for synthetic resins.



Neutron™

Drawing on our more than 30 years of history as a hard coat agent manufacturer, we provide thermosetting and UV-curing hard coat agents. In addition, we are developing coating agents to suit customers' requirements and high-function coating agents developed using our in-house synthesis technologies. Anti-fog coating agents are also used for face shields for protection against COVID-19.



Corporate Governance

Basic Ideas on Corporate Governance

Nippon Fine Chemical is aware that enhancing corporate governance is a key issue required for improving corporate value over the mid to long term, and for sustainable growth. We are working to construct a corporate governance system and establish a sound, transparent, and highly effective management system, including meeting our management and explanatory responsibilities towards our shareholders and other stakeholders.

Strengthening the corporate governance system

–Outline of corporate governance–

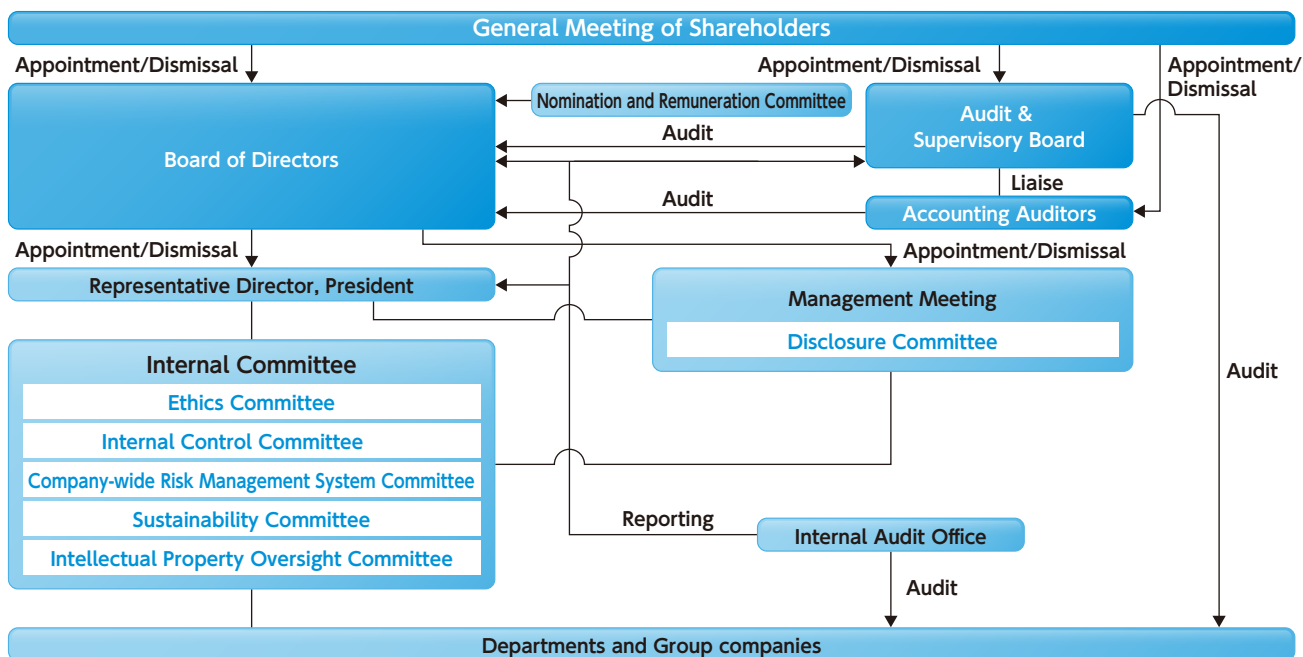
Nippon Fine Chemical established an effective business execution system. The introduced executive officer system separates the decision-making/supervisory function and the business executive function. The decision-making process of the matters for which business execution decisions are delegated to representative directors and/or other directors/executive officers, is clarified based on the regulations.

The Board of Directors is made up of six members, including two independent outside directors who are selected in order to further enhance the audit functions.

As the highest decision-making organization for management, it determines matters related to laws and regulations and the Articles of Association as well as other key matters, and supervises the business execution of directors and executive officers. In addition, the Management Meeting, made up of the Representative Director and other full-time directors and executive officers, deliberates referrals to the Board of Directors of key matters relating to management planning and management policy from multiple perspectives to ensure accurate decision-making.

Status of initiatives to strengthen corporate governance

June	2003	Introduction of executive officer system
June	2008	Abolition of the retirement benefit system for directors
June	2010	Appointment of one independent outside director
December	2019	Establishment of Nomination and Remuneration Committee
June	2021	Increase of outside director ratio to 1/3



Glossary

What is Corporate Governance?

This refers to the mechanism for a company to make transparent, fair, quick and decisive decisions, taking into account the position of shareholders, customers, employees, local communities, and other stakeholders.

Sustainability Basic Policy for Nippon Fine Chemical

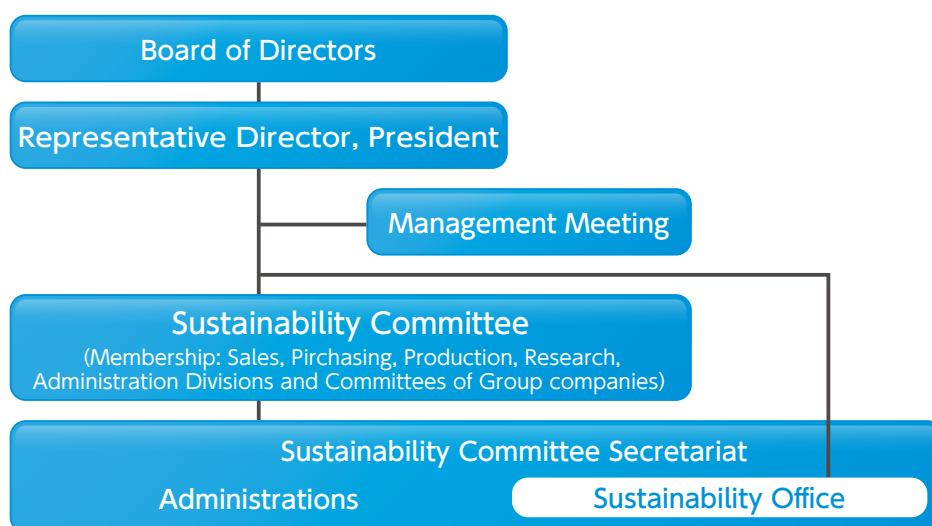
Our corporate philosophy of "Contributing to Society Through Chemistry" as well as the "Smiles on Faces: The Power of KIREI" in our long-term vision, the NFC VISION 2030, and our sub-concept of helping to sustain the three "KIREIs" of the Earth, society, and the future, form the basis of our Basic Policy for Sustainability, which aims to achieve both sustainable corporate growth and to bring about a sustainable society.



To ensure that this Basic Policy is put into practice, we have established the Sustainability Promotion Committee and the Sustainability Office, and set specific initiatives, KPIs (Key Performance Indicators) and numerical goals. Responsible care activities related to the environment, safety, and quality that we have been engaged in for years now will be carried out on an ongoing basis under the Sustainability Promotion Committee.

We shall ensure sustainability awareness reaches each and every employee, and, through each of our initiatives, brings about the three "KIREIs" of the Earth, society, and the future, contributing to the smiles of everyone who is part of our company.

Sustainability Organizations



Basic Management Policy on Environment, Safety, and Quality

We have set out our basic policies regarding the environment, safety and quality as follows, and all employees of Nippon Fine Chemical are constantly and autonomously making sustained improvements and fulfilling their social responsibility based on these basic policies.

Basic environmental policy

Nippon Fine Chemical is independently and continuously developing environmental impact assessment and reduction activities in all processes, from product development to manufacturing, use, and disposal, as well as complying with laws and regulations related to business activities, in its effort to protect the global environment.

Basic safety policy

Nippon Fine Chemical will continue to run operations without accidents and disasters to ensure the safety of employees and local communities.

Nippon Fine Chemical specifies the properties of products and how to handle them to protect the safety and health of all users including customers.

Basic Quality Policy

Nippon Fine Chemical will continue to provide quality products and services that satisfy customers and are reliable.

Initiatives for Compliance



Compliance

Nippon Fine Chemical positions compliance as one of our key issues, and work to ensure it. We distribute to all officers and employees our Code of Ethics, which is made up of our Corporate Code of Conduct, which presents the universal ideas and is the code of conduct to ensure all officers and employees working at NFC put into practice our Corporate Philosophy, and our Corporate Standards of Conduct, which present how we should act in order to practice the Corporate Code of Conduct in the workplace, and carry out ongoing instruction to ensure that what seems acceptable at Nippon Fine Chemical does not stray from what is acceptable in society.



Code of Ethics distributed to all officers and employees

Whistle-blower System

Nippon Fine Chemical has an internal whistle-blower system in the event anyone discovers compliance violations or suspicious actions. In order to maintain and operate a sound whistle-blowing system, the Ethics Committee, Internal Audit Office and auditors work together to protect whistle-blowers and those who talk with us, investigate the facts of their reports, and take corrective measures.

Fostering an awareness of compliance

Nippon Fine Chemical carries out training on compliance and ethics to fostering an awareness of compliance among officers and employees.

- Ethics education during on-boarding training
- Reading the Code of Ethics when joining the company
- Reading the Code of Ethics (annually)
- Listing cases of compliance violations on the internal intranet (quarterly)
- Workplace discussions on cases of non-compliance (biannually)



Relations with Stakeholders



Respect for stakeholders

Nippon Fine Chemical maintains a good and sound relationship with all our different stakeholders.

The diagram on the left shows some of the main stakeholders of NFC. Important information related to corporate management and business activities is disclosed to stakeholders as and when appropriate.

Transition to the TSE Prime Market

Nippon Fine Chemical transitioned from the First Section of the Tokyo Stock Exchange to the Prime Market on April 4, 2022. We shall use this to actively work to even further strengthen our corporate governance and internal management systems.



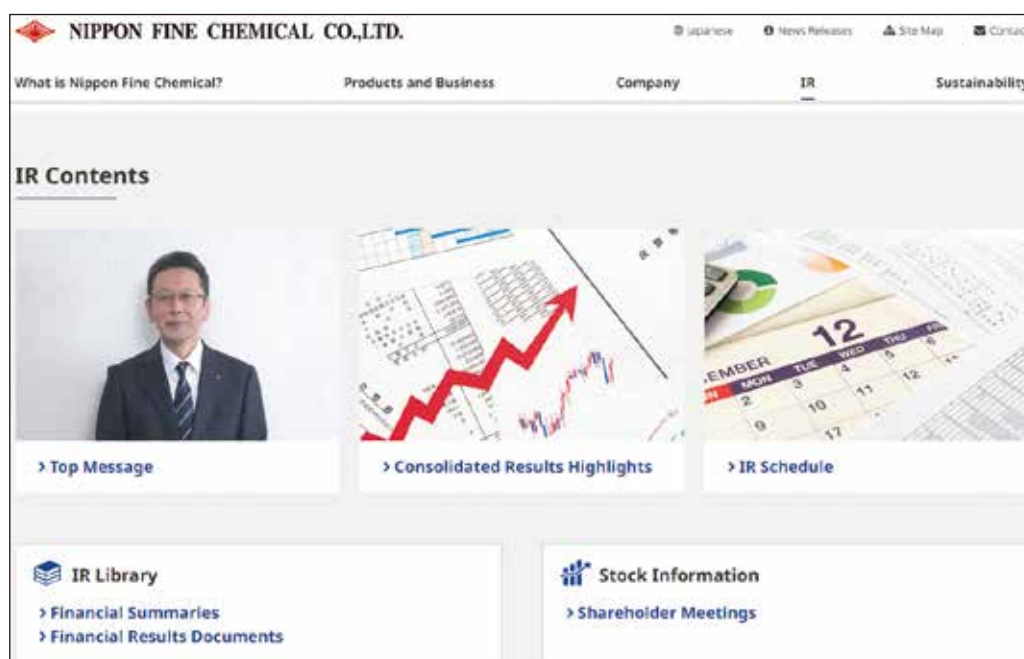
Financial results briefing

We held a financial results briefing for investors and analysts on May 18, 2022. Due to concerns about the COVID-19 situation, the briefing was held online. This was the first such briefing held at Nippon Fine Chemical, and a large number of analysts were present. The materials and questions and answers from that briefing are available on our website.



English translations of financial results for shareholders

Nippon Fine Chemical has published English-language translations of our Financial Summaries, Financial Results Documents, and Notices of Convocation (agendas only) on our website starting with the March 2022 financial results. We intend to enhance our information disclosure in English in future.



Relations with Suppliers



Nippon Fine Chemical has established the following Basic Purchasing Policy and the Flow up to the Transaction Start and published them on our website.

In line with our Basic Policy for Purchasing, while complying with the relevant laws and regulations, we open our gates widely to all suppliers, both in Japan and around the world, in the name of equal opportunities. In addition, our purchasing activities are done with an awareness not just of economic rationality in the selection of items, but Green purchasing as well.



Nippon Fine Chemical's Basic Purchasing Policy

Equal opportunities, fairness, impartiality

We open our gates widely to suppliers both at home and abroad, striving to ensure equal opportunities, and engaging in fair and impartial transactions with all our customers.

Economic rationality

We select and evaluate our suppliers based on a comprehensive perspective that covers points such as quality, delivery time, price, service, reliability and safety.

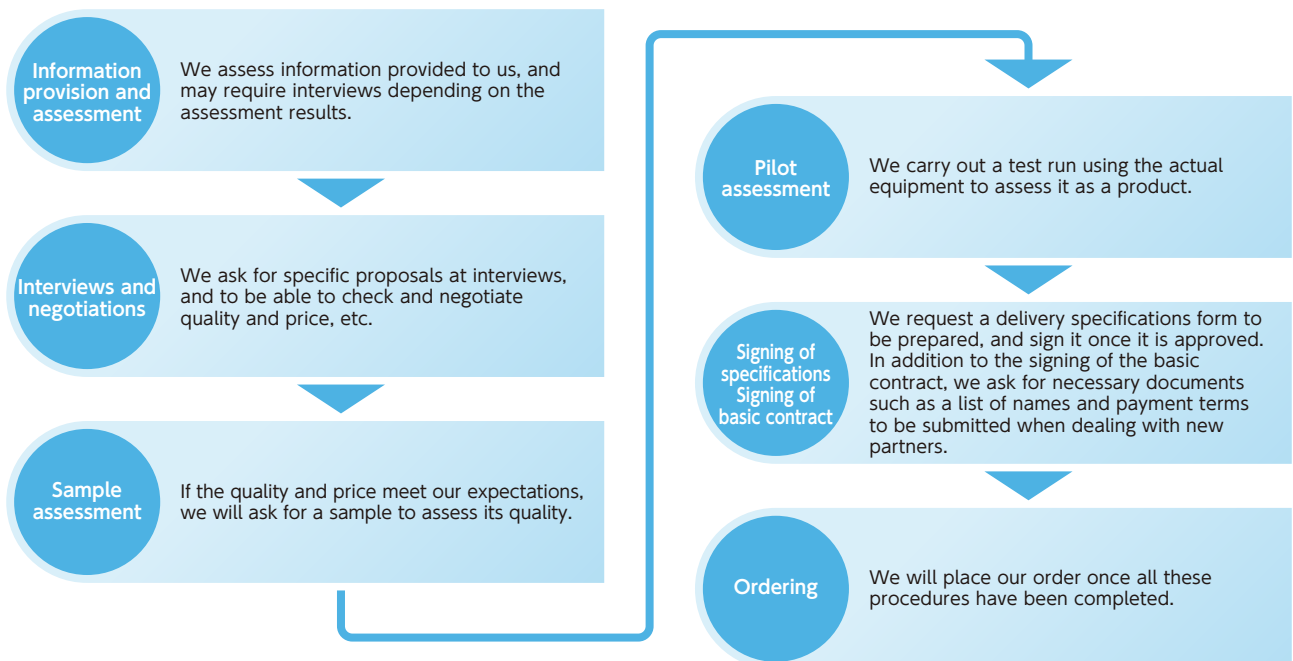
Compliance with laws and regulations; elimination of antisocial forces

We comply with related laws and regulations, and their spirit, in our purchasing transactions.

Green purchasing

We aim to make our purchasing activities based on protection of resources and the environment in our selection of items.

The Flow up to the Transaction Start





Human resources training and development

Part of the Corporate Philosophy of Nippon Fine Chemical is contributing to the self-realization of our employees. We believe there is a great deal of sense of worth gained when employees are able to realize the contributions they can make to society, when their goals of trying something new or tackling a range of challenges are fulfilled. In human resources training, our aim is to develop people who have the ambition to tackle new challenges, think for themselves what is needed, and can use their diversity to overcome difficulties.

<Specific measures for human resources training>

The pillars of human resources training measures are OJT and OFFJT (level-based training, selective training, external training, correspondence education, etc.). OJT in particular is positioned as key due to the use of the experience-learn cycle, and training for OJT trainers from the hosting department or management positions is carried out.

For OFFJT, we provide support for the autonomous development of abilities by employees with a focus on assessment training and level-based training when promoted or moved up. In addition, we provide learning opportunities using external training such as taking business school classes for management. In addition, our correspondence education and skill qualification training systems are dynamic learning opportunities where each person can choose and study the skills they need. We provide support for more than a hundred different types of correspondence education.

Support for balancing child-rearing/nursing care with work

We promote an environment where employees can be active in both work and child-rearing/nursing care.

For our own in-house systems, we have a range of systems, starting with the (Short-term) Working From Home System for Child-Rearing (Targeted at Employees Raising Children Until their First Term of School) and the (Short-term) Working From Home System for Nursing Care (Targeted at Employees Providing Care for Family Members Who Require Care). We support employees who wish to develop their careers while raising children or providing nursing care.

●Changes in the amount of child-care leave taken by birthing mothers (spousal birthing mothers)

Fiscal Year	Overall	Of which, female	Take-up rate
FY2019	16.7%	100%	16.7%
FY2020	18.1%	100%	18.1%
FY2021	12.5%	100%	12.5%

*From FY2019, the ratio of those returning to work after taking child-care leave has been 100%.

●Changes in number of users of the working from home system for child-rearing

FY2019	0
FY2020	0
FY2021	2(1 male, 1 female)

●Changes in the number of users of the working from home system for nursing care

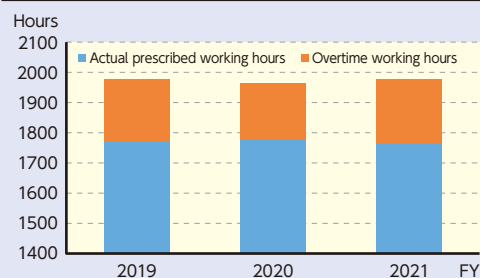
FY2019	0
FY2020	0
FY2021	2(1 male, 1 female)

Work-life balance

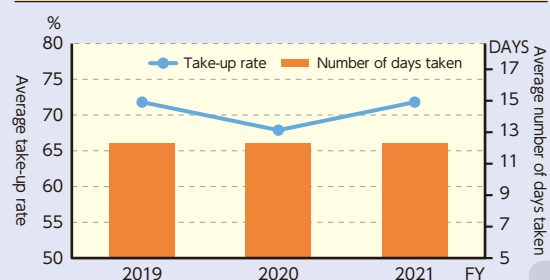
It is very important to preserve a work-life balance so what each employee can utilize their abilities sufficiently. Along with promoting changes of mindset regarding working hours, we are introducing flex-time and teleworking systems to serve as diverse working styles.

Through improvements to business tasks by promoting efficient working styles or creating system, we promote initiatives that preserve the work-life balance for each of them so that they might use the time and energy thus gained to growth further as individuals.

■ Total working time per person



■ Average take-up rate and average number of days taken for annual leave



Relations with Customers



Activities for product safety

Improving customer satisfaction is also stated in the ISO Quality Management System, but in addition to quality, providing safe products is a key part of customer service.

Nippon Fine Chemical prepares Product Safety Data Sheets (SDS) based on the Japanese Industrial Standards (JIS) and provides them to customers.

In addition, to enhance the contents of these SDSs, in April 2021 we started operating our new chemical substances management system and expanded it to all our products.

Initiatives for alternatives to animal testing

Cosmetics are used on human skin and hair, so more than anything, they must be safe. At the same time, a move to avoid animal testing in safety testing for cosmetics raw materials is spreading from Europe to the world.

Nippon Fine Chemical is actively working on a range of alternatives to animal testing from the development stage, striving to provide safe products.

Initiatives for quality assurance

Nippon Fine Chemical works unceasingly to prepare and strengthen our quality assurance system so that we can provide top-quality products that will satisfy our customers.

We registered with the ISO 9002 Quality Management System, the global standard, in 1996, and since then, through our transition to ISO 9001, we have been expanding the scope of target products from the initial fatty acid monoamides and cholesterol to lanolin and functional cosmetics raw materials in general.

At present, we are expanding application to the second stage at our Kakogawa-higashi Plant and to the first stage at our Takasago Plant, basing our management on ISO 9001 (2015 Edition).

Along with implementing planned employee training based on ISO 9001, we use both internal audits and examinations by external audit organizations to help us continually improve and increase our level.

In the fields of pharmaceuticals and pharmaceutical intermediates, we assure quality by complying with GMP (Good Manufacturing Practice) standards. The method for improving the pharmacokinetics of pharmaceuticals is called the drug delivery system (DDS). NFC's Lipids Business, which is particularly in the limelight as a DDS formulation, has passed the GMP compliance inspections of

the US FDA (Food and Drug Administration) and other bodies, and we shall continue to maintain a high quality assurance system to provide high-quality products.



Initiatives for Diverse Product Development that Meets Customer Needs



Development of non-GMO products

The development of crops that are disease-resistant, grow quickly, are hardy in cold or heat, or have other features is becoming commercialized through the use of genetic modification. However, due to concerns about biodiversity and environmental impact, many people prefer products that are non-GMO (do not use genetically modified raw materials).

Nippon Fine Chemical is also engaged in the development of non-GMO products to meet our customers' needs. We have already developed and provide a large number of such products.

Development of readily biodegradable products

Nippon Fine Chemical is putting efforts into the development of environmentally-friendly products such as ones that do not leave any environmental residue when disposed of.

People are paying close attention to the environmental impact of plastic waste. Our amides are used in place of plastics for scrubbing agents used to remove skin, excess fat and so on for skin cleansers. In addition, they are used as lubricants in biodegradable resins.

Relations with Local Communities



Initiatives to help us contribute to communities

One yen from every drink bought at the vending machines inside the Kakogawa-higashi Plant is donated to the Hyogo Greening Promotion Association's Green Donations.

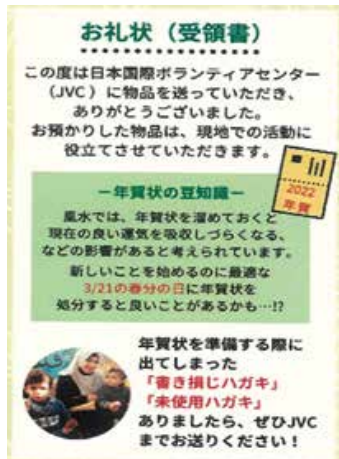
We have been doing this since 2008, and have donated a total of more than 1800 cedar tree seedlings, which converts to 26 t of carbon dioxide absorbed.

We are continuing our efforts to help with tree-planting and protecting forests.



We do more business via e-mail, and receive far less postal mail than before, but we still collect used stamps and meter stamps and send them to volunteer groups, as we have done since 2006.

While we promote our CSR activities, we will also actively work on contributing to society.



Relations with Future Generations



Initiatives for the Environment

■ The social situation of environmental activities and Nippon Fine Chemical's steps

Awareness of environmental conservation socially spiked around the year 2000, with a number of new laws and regulations related to environmental conservation, listed below, promulgated in addition to the existing Water Pollution Prevention Act, Air Pollution Control Act, Act on the Rational Use of Energy, and Act on Promotion of Global Warming Countermeasures. In addition, the environmental laws and regulations have also been revised, strengthening their restrictions and new legal requirements are being added.

Act on Special Measures against Dioxins

Act on Rational Use and Appropriate Management of Fluorocarbons

Act on the Promotion of Effective Utilization of Resources

Act concerning the Promotion of Utilization of Recyclable Food Waste

Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement

Soil Contamination Countermeasures Act

Home Appliance Recycling Act

Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities

In this sort of situation, the interest shown by society overall in the environment is increasing. More and more weight is being put on environmental management in the assessment of companies, and we are required to carry out initiatives for environmental conservation more than ever.

Based on this sort of social situation, Nippon Fine Chemical has been working to bring in energy-efficient equipment as well as introduce the ISO 14001 Environmental Management System. An outline of our initiatives for environmental activities follows below.

By being aware of our stakeholders, including local residents and employees, and developing and producing in ways that minimize the environmental impact on society, we hope to be able to maintain our business sustainably.

At our main business locations, the Kakogawa-higashi Plant and the Takasago Plant, we have in place specific environment policies based on the ISO 14001 Environmental Management System (ISO 14001:2015)



Environment Policy

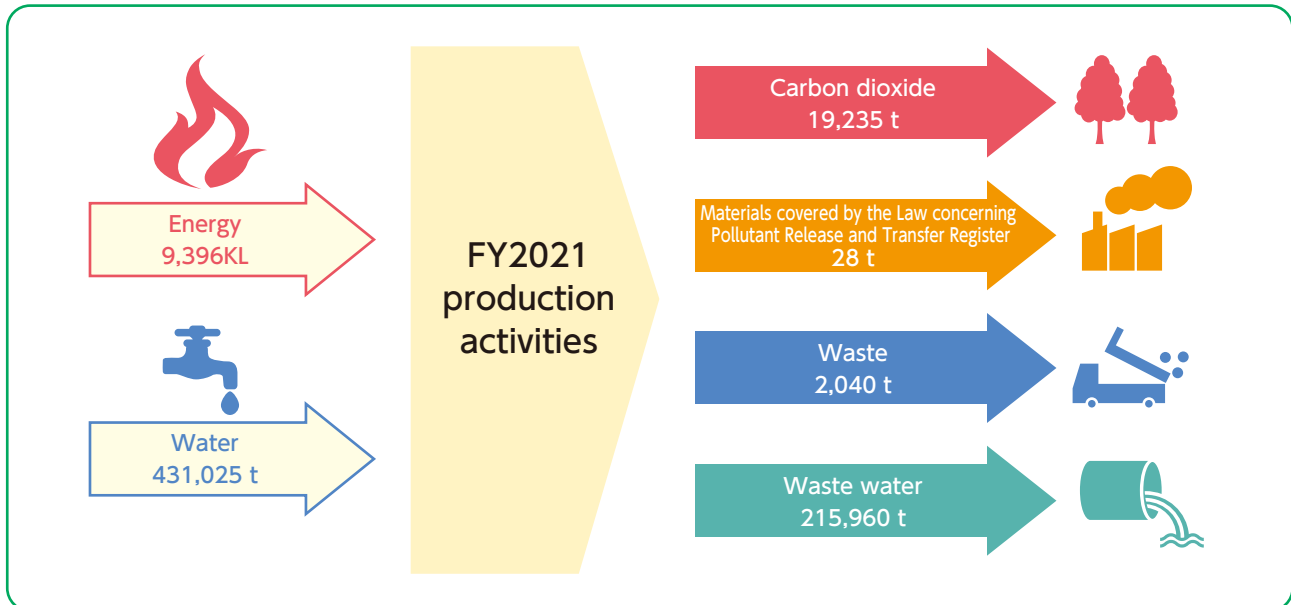
Nippon Fine Chemical's Kakogawa-higashi Plant and Takasago Plant manufacture raw materials for cosmetics, for pharmaceuticals, and for industrial use. In carrying out our production activities on an ongoing basis, we have set the following policies regarding the environment and work to improve them steadily.

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 Our production is designed to understand and comply with environmentally-related laws and regulations, and ensure there are no serious effects on the environment in or outside our company.</p> | <p>2 We are reducing the usage of chemical substances that impact the environment and using raw materials that consider sustainability to provide environmentally-friendly products.</p> |
| <p>3 Specific targets, goals, and periods are set, energy-saving activities are done in a planned fashion, and we save resources and reduce the amount of waste generated.</p> | <p>4 We work to suppress or mitigate the dispersion of bad smells (waste water, raw materials, or other bad smells arising from production) to co-exist with the community.</p> |

Material flow

The material flow due to the production activities of Nippon Fine Chemical in FY2021 have been summarized as follows. Energy and water for raw materials, fuel and electricity were used to produce products, generating carbon dioxide, substances subject to the Law concerning Pollutant Release and Transfer Register, as well as waste and waste water.

We are always striving to produce more products more efficiently using less raw material, energy and water, while producing less waste.



Note: For "Energy" here, City Gas, electricity and other energy sources are used, so the energy conversion coefficient as per the Act on the Rational Use of Energy is used and the unit standardized as KL.

Initiatives for preventing atmospheric pollution

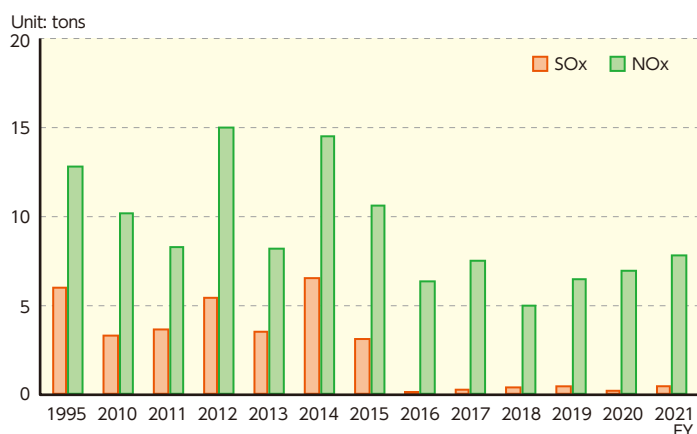
Atmospheric pollution

Changes in the amount of atmospheric pollutants emitted from the boilers (SOx, NOx) are shown in the graph (FY1995, FY 2010-2021)

SOx is generated by the combustion of sulfur-containing compounds in fuel, but the amount has dropped as we have been moving ahead with the transition from heavy oil to City Gas starting in 2016.

NOx is generated not only during the combustion of nitrogen-containing compounds in fuel, but trace amounts are also generated in the reaction between nitrogen and oxygen under high temperature conditions. In FY2021, emissions rose a small amount over FY2020, but we maintained the decline in NOx emissions over FY1995.

SOx and NOx emissions



Glossary **What is SOx?**

It is the generic term for sulfur oxides, which cause acid rain. They are also considered to cause illnesses such as bronchitis and asthma.

Glossary **What is NOx?**

It is the generic term for nitrogen oxides, which are considered to be a cause of photochemical smog.

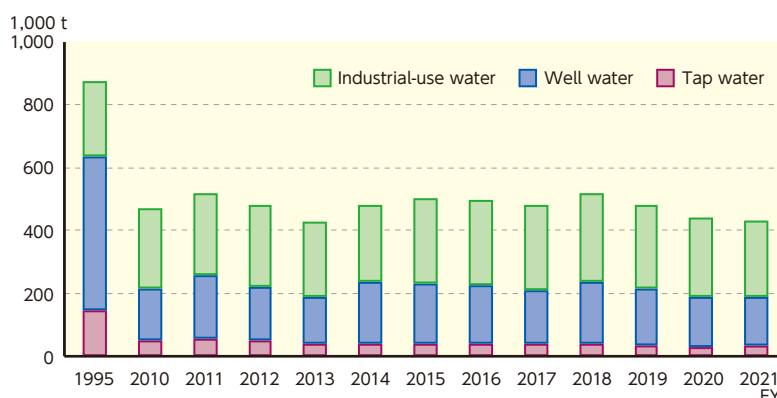
Initiatives for protecting water resources

Amount of water used

We use the three categories of tap water, industrial-use water, and well water as our water resources, and the amount of each used is shown on the graph.

FY2021 achieved a major drop, 50%, compared to FY1995. We have to reduce the use of water resources by promoting the appropriate management of water for production and bringing in equipment to recover and recycle plant cooling water and steam drain water, resulting in a 49-59% drop compared to FY1995.

Amount of water used



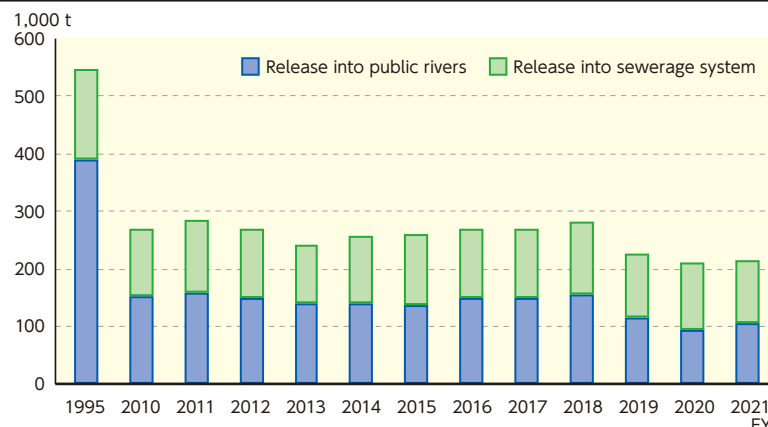
Amount of waste water

The amount is shown on the graph

Plant waste water is cleansed by being treated with microbes at treatment facilities within our plants. Each plant has agreed with its municipality to an emissions standard that is stricter than the legal one, and releases water that meets that standard.

FY2021 achieved a major drop, 39%, compared to FY1995. We have brought in equipment to recover and recycle as much cooling water and steam drain water as possible, and are working to strengthen our daily water use management, resulting in a 39-52% drop compared to FY1995.

Amount of waste water

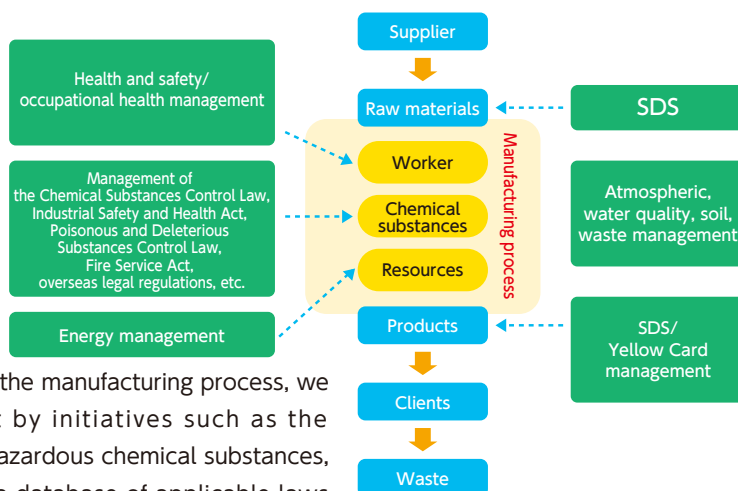


*At Nippon Fine Chemical, we list the various data using FY1995, the year we merged with former Yoshikawa Oil and Fat Co., Ltd., as our reference year.

Initiatives for the appropriate management of chemical substances

A very great number of regulations are involved in the manufacture and sale of chemical substances. These include the Chemical Substances Control Law, Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Law, Fire Service Act, Air Pollution Control Act, and Water Pollution Prevention Act.

At Nippon Fine Chemical, in order to minimize as much as possible the impact on the environment, harm to humans and hazards during the manufacturing process, we are working on strengthening management by initiatives such as the comprehensive management of environmentally-hazardous chemical substances, creating management standards, and compiling a database of applicable laws and regulations for the raw materials and products we use.



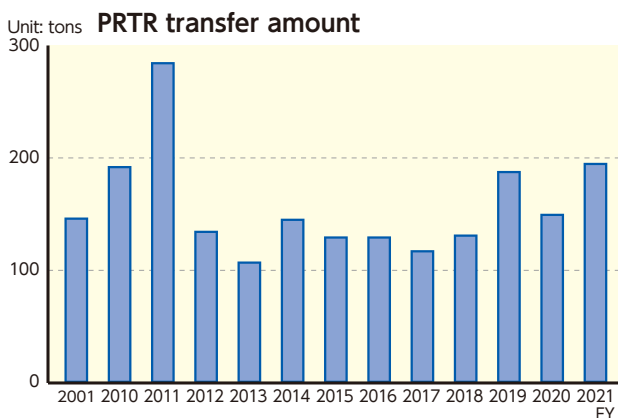
Initiatives for the PRTR System

In accordance with the PRTR (Pollutant Release and Transfer Register) system, one of the pillars of the Law concerning Pollutant Release and Transfer Register, the Nippon Fine Chemical submits to the state annually the amount of target substances released into the environment and the amount transferred as waste, etc., and is working to reduce the amount of emissions of target chemical substances. In addition, we manage the amount of chemical substances specified by the Japan Chemical Industry Association that we emitted or transferred to provide more wide-ranging chemical substance management. The changes in the amount of emissions and transfers of substances covered by the Law concerning Pollutant Release and Transfer Register is shown below.

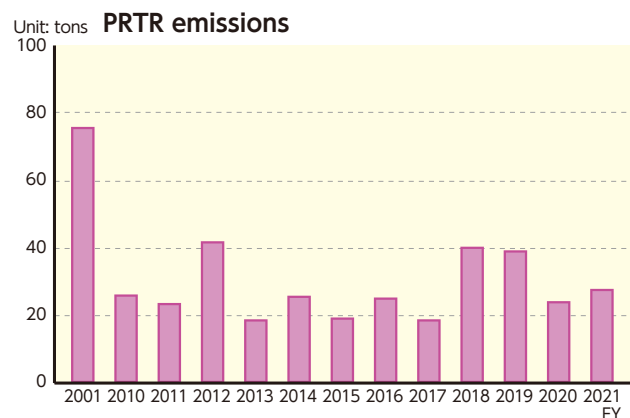
The amount of emissions of target substances changes in line with changes in the products we make, but in FY2021 we were able to achieve a drop of 37% over FY2001, the first year of our performance reports. We will strive to reduce emissions through even greater strengthening of management.

In terms of the amount transferred, we are working on turning waste into valuable resources, but there was an increase in production amount in FY2021 compared to FY2020, so there ended up being an increase of 33% compared to FY2001. We are working to reduce this still further.

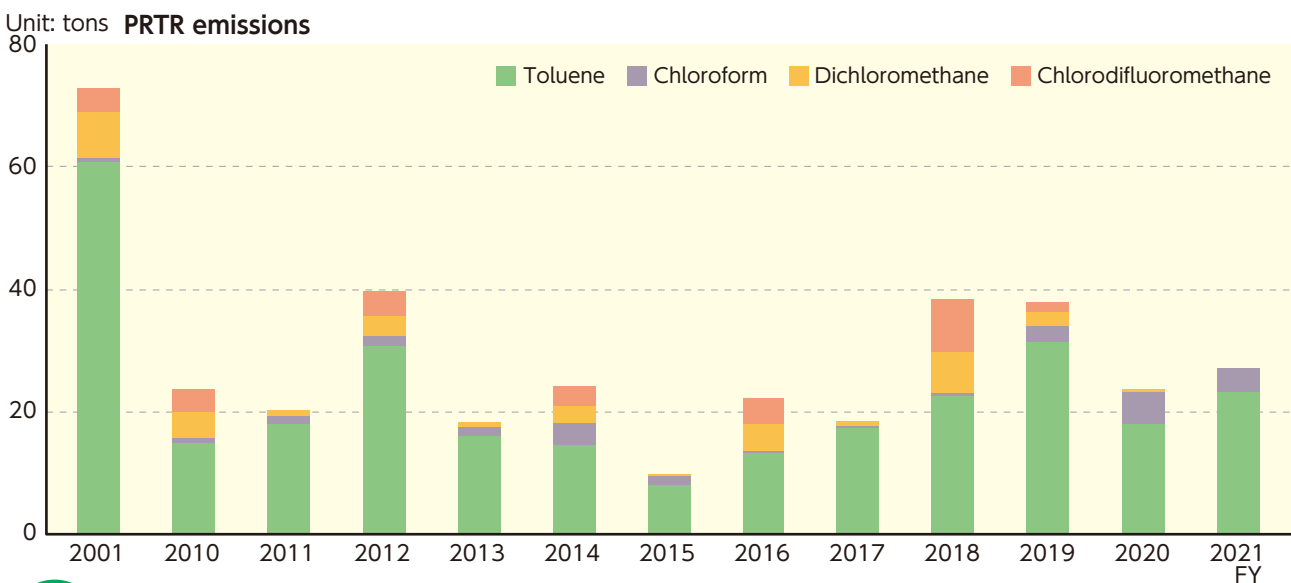
Changes in PRTR transfer amount



Changes in PRTR emissions amount



Changes in chemical substances with high atmospheric emission amounts



Glossary

What is the PRTR system?

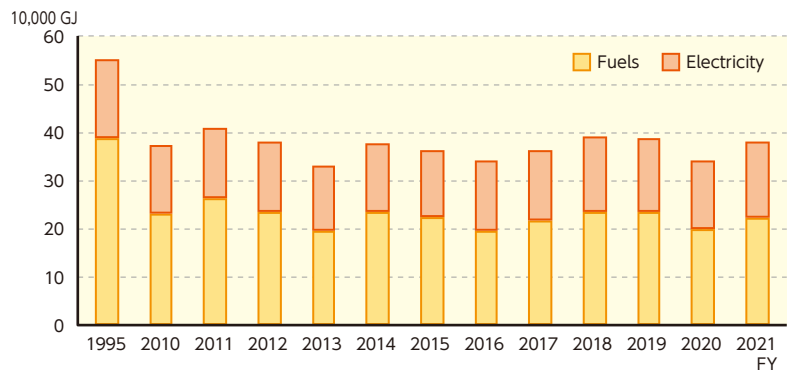
The PRTR (Pollutant Release and Transfer Register) is a system by which the state uses submitted data and estimates to aggregate and publish the emitted and transferred amounts of chemical products that contain the risk of damaging human health or the ecosystem emitted from places of business into the environment (air, water, soil) and the amounts, including waste products, transferred to outside the place of business, based on submissions regarding what the business owner understands.

Initiatives for preventing global warming and saving energy

Changes in energy consumption

Nippon Fine Chemical is engaged in energy-saving through our Environmental Management Program, and to reduce steam losses, we have updated our high-efficiency steam boilers, installed waste heat recovery devices, optimized our methods for using steam, strengthening management of steam traps, manage the amount of steam used for melting wool grease raw materials, and manage the maintenance of steam pipes, etc. These efforts have led to better results in the reduction of energy consumption. Moreover, we promote a number of measures to reduce the amount of electricity we use, including actively using low-power, high-efficiency motors and inverters, updating to high-efficiency freezers, and replacing bulbs with LEDs.

Amount of energy used



High-efficiency steam boiler
[Takasago Plant]



High-efficiency steam boiler (FT boiler)
[Kakogawa-higashi Plant]



High-efficiency refrigerating machine
[Kakogawa-higashi Plant]

Changes in carbon dioxide emissions

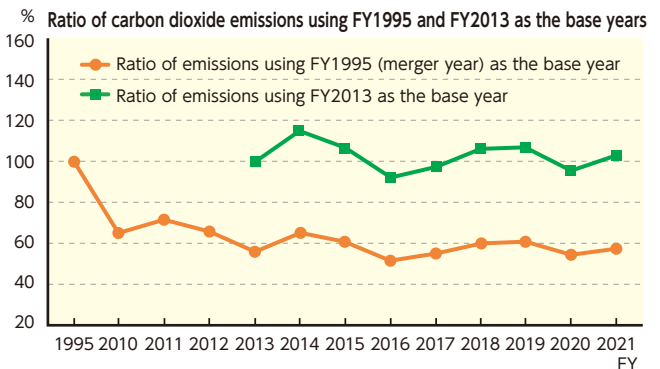
Nippon Fine Chemical uses byproducts (biofuels) generated from the processing and separating steps of wool grease. Starting in FY2013, we have aggregated the changes in the amount of carbon dioxide emissions including and excluding the amount of biomass fuel used.

The graphs show the changes in the amount of carbon dioxide emissions in FY1995, the year of our merger with Yoshikawa Oil and Fat Co., Ltd., and since FY2010. A range of energy-saving activities and the switch from fuels to City Gas by updating our equipment has had an effect, and even if the amount of biofuel used is included, there has been a 42% drop by FY2021 over FY1995.

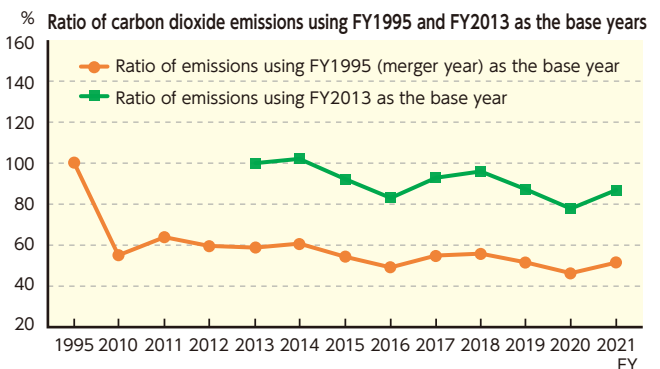
The ratio of carbon dioxide emissions using FY2013 as the base year is shown by the green lines.

There has been an increase of 3.5% over FY2013 if we include the emissions of carbon dioxide due to the use of biofuels. As biofuels are a type of renewable energy source, if we consider Nippon Fine Chemical's carbon dioxide emissions after excluding them, we see that the effects of promoting a switch to City Gas are a 13% reduction.

Carbon dioxide emissions including biofuel usage



Carbon dioxide emissions excluding the use of biofuel



Glossary

What are biofuels?

This refers to organic fuels (organic compounds) that do not include fossil fuels. They are categorized as renewable energy as they can be regenerated through the activities of living creatures, and are considered as not increasing the total carbon dioxide emissions even when used as fuel. Some typical biofuels are bio-ethanol, bio-diesel, and wood pellets.

Initiatives for waste reduction and recycling

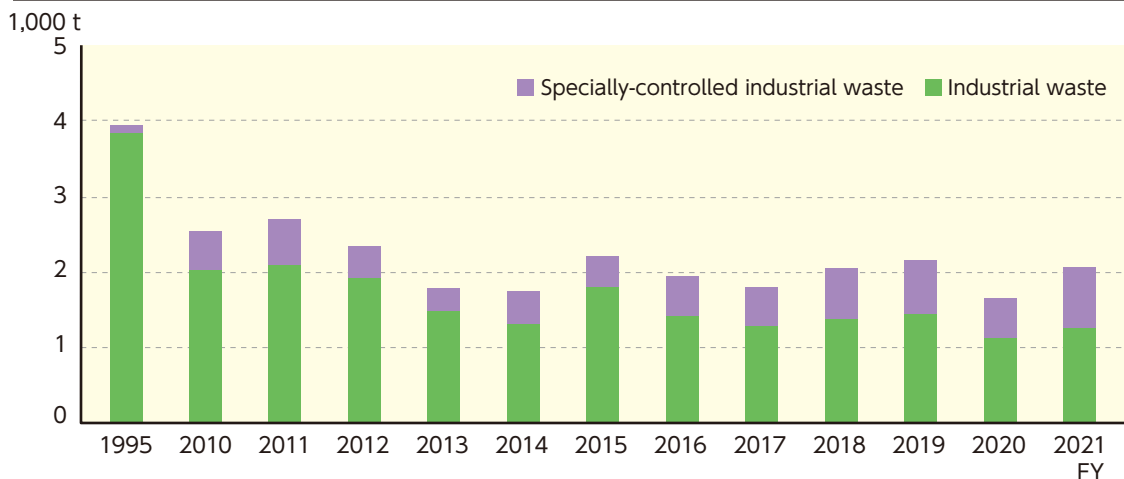
Aiming to create a recycling society that values limited resources, Nippon Fine Chemical carries out the following activities based on the concept of the 3Rs (Reduce, Reuse, Recycle).

- Improvements to raw materials/solvent recovery rates and reuse as resources
- Promotion of recycling waste products
- Promotion of waste paper recovery and recycling

To reduce the amount of waste generated, we have brought in equipment to reuse waste alkalis as neutralizers for waste acids at the Kakogawa-higashi Plant, which has enabled us to reduce the amount of waste generated by about 430 t annually. In addition, along with working to reuse waste solvents, and as a result of promoting the recycling of waste into valuable resources and our initiatives to recycle that include heat recovery at processing subcontractors, our recycling rate for FY2021 was 64%. In future, we will continue strengthening management while studying improvement measures, and strive to improve our waste reduction and recycling rate.



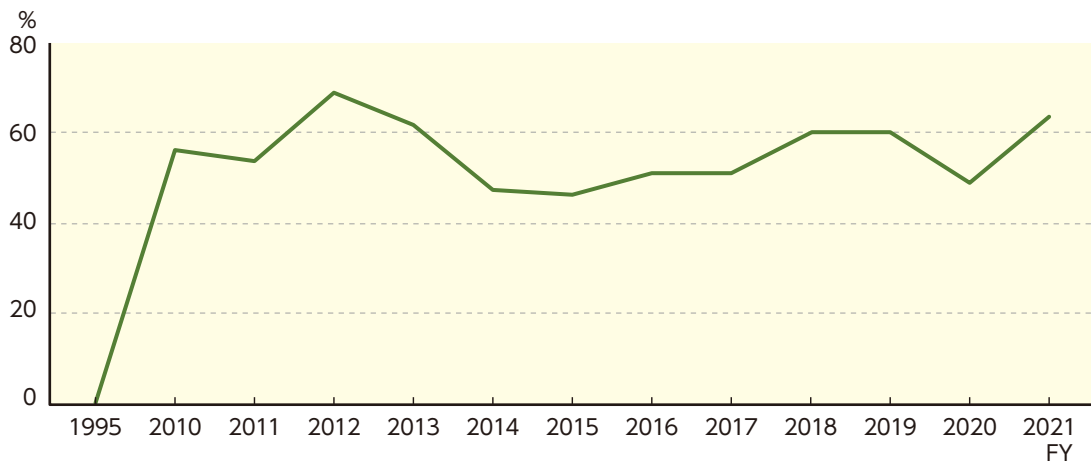
Waste volume



Recycling rate

This shows the ratio of recycling from among the industrial waste created at Nippon Fine Chemical. It was 0% in FY1995.

Recycling rate



Initiatives in Line with TCFD Recommendations

Nippon Fine Chemical uses raw materials derived from fossils and fossil fuel as energy sources in the manufacture of many of our products. Based on our recognition that risks and opportunities due to climate change are key management issues, in December 2021, we declared our support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Going forward, we will use scenario analysis to assess the risks and opportunities of the impact of climate change on our business, and we will recognize the significance of such impact, strengthen the resilience of our strategies by reflecting such impact in our management measures and strengthen relationships of trust with our stakeholders.

Governance

We have established a Sustainability Committee, chaired by our Representative Director, President and composed of members selected from each division.

The Sustainability Committee identifies risks and opportunities based on scenario analysis of climate-related issues, assesses their importance, formulates plans for promotional activities, and manages the progress of such activities.

The Sustainability Committee puts together a promotion action plan once a year, which is approved by the Board of Directors following deliberation by the Management Meeting.

The Sustainability Committee checks the state of promotional activities on a quarterly basis, in principle, and reports the results of such checks to the Management Meeting and the Board of Directors.

Details of external trends and information on climate change are shared with the Management Meeting and the Board of Directors through the Sustainability Committee by endorsing the TCFD recommendations and joining the TCFD Consortium.

Sustainability Organizations



Risk Management

The Company-wide Risk Management System Committee, chaired by the Representative Director, President and composed of managers, is the highest decision-making body in our risk management system (RMS). The committee discusses risk management policies, plans, implementation, RMS improvements, and other general RMS-related matters, and final decisions on such matters are made by the chairman based on the outcome of such discussions. The Sustainability Committee identifies risks relating to climate-related issues, with reference to the risk items in the final TCFD report and examines risk severity based on the impact on our business activities, customers, and suppliers, etc. and the likelihood of such risks occurring. The Sustainability Committee uses scenario analysis to assess the risks and opportunities of the impact of climate change on our business, conducts business impact assessments, and formulates measures to be taken with respect to items that are assessed as having a large impact on risks and opportunities. The Committee manages the progress of promotional activities, and reports such progress to the Management Meeting.

The Management Meeting deliberates management plans and business strategies based on the state of current initiatives and other factors, and such plans and strategies are then approved by the Board of Directors.

Strategies

We have set 2030 as the time frame for considering the impact of climate change on our business, and we have analyzed scenarios for “risks and opportunities associated with the transition to a low-carbon economy” and “risks and opportunities associated with the physical impact of climate change” in a “1.5°C world” in which climate change measures have progressed and the Paris Agreement targets have been realized, and in a “4°C world” in which no new climate change measures are taken and greenhouse gases have increased. In assessing the impact on our business, we found that under the 1.5°C scenario, there will be a significant impact on our business of policies and regulations relating to carbon taxes and emission reductions, while there will also be opportunities to expand the sale of raw materials for perovskite solar cells. Under the 4°C scenario, we found that there will be a significant impact on our business of soaring crude oil prices and concerns over the procurement of naturally-derived raw materials, while there will also be opportunities to expand the sale of raw materials for UV care and cooling-related products and for infectious disease-related products. Note that this analysis only covers Nippon Fine Chemical. Going forward, we will consider whether to conduct analysis for the entire group.

Results of 1.5°C and 4°C Scenario Analysis (Climate Change Risks and Opportunities)

Type	Risk/Opportunity		Envisaged Risks and Opportunities	Importance Assessment		
	Main Category	Sub Category		1.5°C	4°C	
Transition Risks and Opportunities	Policies/Regulations	Carbon tax and carbon price	Carbon pricing (carbon tax and emissions trading) will be applied mostly to suppliers of raw materials with high greenhouse gas (GHG) emissions, which will be passed on by being added to the price of raw materials, resulting in an increase in procurement costs. Product manufacturing and transportation costs will also increase and profitability will deteriorate.	Large	Small	
		Carbon emission targets for each country/Stricter reporting requirements for policy emissions	<ul style="list-style-type: none"> - If emissions are regulated in countries where our raw material suppliers are located, such suppliers' adjustment costs may increase, which could in turn affect purchase prices. - The replacement of fossil fuels with renewable energy and reductions in GHG emissions are required in the production process and in distribution, and costs may increase due to reduction of existing assets and investment in additional equipment. 	Large	Medium	
				Mandatory afforestation and changes in land use policies may reduce yields of biological resources, which in turn may make it difficult to obtain naturally-derived raw materials (wool grease, palm oil) or may increase procurement costs.	Large	Small
		Introduction of water withdrawal and wastewater discharge restrictions	<ul style="list-style-type: none"> - Restrictions on water withdrawal and wastewater discharge in areas where raw material suppliers are located may affect operations, resulting in it being difficult to obtain raw materials and increased purchasing costs. - Water withdrawal Restrictions in areas in which we operate due to climate change will lead to lost sales opportunities due to the suspension of operations. 	Small	Small	
		Energy-saving policies	<ul style="list-style-type: none"> - Restrictions on energy use may increase the cost of changing manufacturing processes, procuring alternative materials, and installing energy-saving and high-efficiency equipment, and the acquisition of new equipment or the disposal of existing equipment may result in increased costs and losses, etc. - Mandatory use of renewable energy following the revision of the Act on the Rational Use of Energy may result in cost increases 	Medium	Medium	
		Litigation	<ul style="list-style-type: none"> - There is a possibility of lawsuits against companies that use fossil fuels. - There is a possibility of reduced demand for products and increased costs due to fines and court rulings. 	Small	Small	
	Industry/Market	Soaring price of raw materials	Soaring crude oil prices will increase the cost of procuring petroleum-derived raw materials	Small	Large	
		Changes in energy demand	Manufacturing costs will increase if the cost of procuring energy to operate plants increases. As a result, the cost competitiveness of products may fall, which may affect earnings.	Medium	Medium	
	Resource Efficiency	Products/Services	Development of new products and services through R&D and innovation	<ul style="list-style-type: none"> - The development of decarbonized products through the use of non-petrochemically-derived raw materials will increase our advantage over our competitors and create opportunities to increase earnings. - The development of energy-saving and low-cost production methods during the manufacturing stage will lead to improved profitability. - Opportunities to increase earnings by developing raw materials for renewable energy (such as perovskite solar cells). 	Large	Medium
		Technology	Streamline production and distribution processes	<ul style="list-style-type: none"> - the introduction of renewable energy, energy-saving equipment, and solar power generation equipment, for self-consumption may lead to reductions in production costs. - Organizing and integrating supply chains (sales channels, distribution bases, etc.) may lead to reductions in carbon dioxide emissions and distribution costs. 	Medium	Medium
Transition to low emission technologies			Transition to low emission technologies may lead to higher research & development costs for climate change-compliant products, higher investment costs for manufacturing processes, and higher costs for transitioning to low-carbon-emitting technologies and equipment.	Medium	Medium	
Reputation		Changes in consumer preferences	Consumers' increased interest in the use of natural materials, packaging recycling, and carbon dioxide emissions, etc., may lead them to purchase products from companies which engage in proactive climate change initiatives, which may lead to a fall in sales.	Medium	Medium	
	Reputation among investors	<ul style="list-style-type: none"> - An insufficient response to GHG reduction demands from customers and investors may result in a lower assessment. - Proactive disclosure of information on how we are addressing climate change will improve our corporate value and increase opportunities to obtain ESG investments, while securing customer confidence may lead to business expansion. 	Medium	Medium		
Physical Risks and Opportunities	Chronic	Increase in average temperature/changes in precipitation and temperature patterns	Rising average temperatures may reduce yields of biological resources, which in turn may make it difficult to obtain naturally-derived raw materials (wool grease) or may increase procurement costs.	Small	Large	
			Rising average temperatures may result in a deterioration in shrimp farming operations at existing customers, which may adversely affect sales of our products.	Small	Small	
		<ul style="list-style-type: none"> - Rising average temperatures may require enhanced cooling equipment needed during the manufacturing process, which may result in the need for more equipment and increased energy costs. - climate change may increase water stress in China, and price increases by suppliers may lead to higher raw material prices. 	Large	Large		
	Rise in sea level	<ul style="list-style-type: none"> - Rising sea levels may result in flooding, rapid rises in tides, and other water-related damage, which may shut down operations at plants located in coastal areas vulnerable to disasters and in low-lying areas. - it may be necessary to relocate bases. 	Small	Small		
	Markets	Access to new markets (demand)	<ul style="list-style-type: none"> - The increase in the population exposed to infectious diseases and other risks associated with rising temperatures may lead to an increase in demand for raw materials for our products (sanitizer and pharmaceuticals). - The rise in average temperatures may increase sales of our functional oil products for UV care and cooling-related products. 	Medium	Large	
Acute	Intensification of extreme weather	<ul style="list-style-type: none"> - Flooding caused by torrential rainfall and drought associated with climate change may shut down production at some offices and plants. - Production stoppages and lost sales opportunities may increase due to disruptions, etc. in the supply chain 	Small	Small		

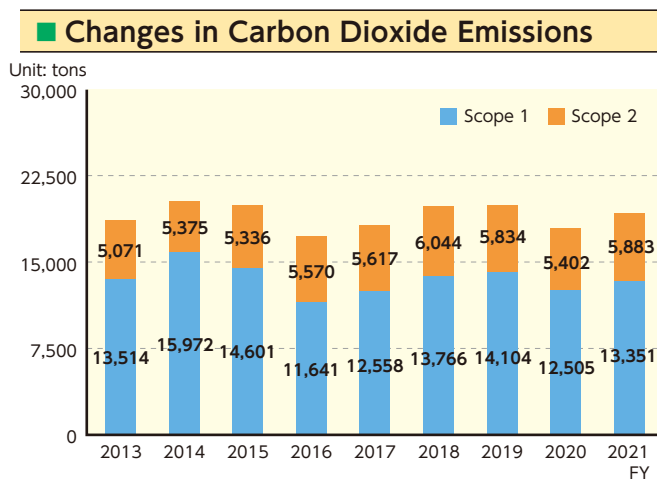
Addressing Climate Change Risks and Opportunities

Scenario	Risk/Opportunity	Risks Due to Climate Change	Countermeasures	Opportunities	Countermeasures
1.5°C Scenario	Carbon tax and carbon price	The introduction of carbon pricing, as a policy approach to put a price on carbon which causes carbon emitters to change their behavior, may increase procurement and transportation costs due to the increase in the price added to carbon emissions by suppliers and transporters, as well as the direct tax burden.	<ul style="list-style-type: none"> - Reduce GHG emissions by reviewing product composition and production processes - Reduce GHG emissions by introducing renewable energy, energy-saving equipment, and solar power generation equipment for self-consumption - Reduce GHG emissions by consolidating and integrating raw material supply chains 	Introduction of carbon pricing will encourage the use of renewable energy.	Develop raw materials for perovskite solar cells and expand sales
	Development of new products and services through R&D and innovation				
	Carbon emission targets/policies in each country	Restrictions on new plantation construction due to mandatory afforestation and changes in land use policies and a shortage of feed due to a decrease in pastureland may make it difficult to procure naturally-derived raw materials (wool grease, palm oil) and may increase procurement costs	<ul style="list-style-type: none"> - Secure stable suppliers of wool grease and palm oil - Consider substituting wool grease and palm oil-derived raw materials for naturally-derived raw materials which have less of an impact on climate change 		
4°C Scenario	Increase in average temperature/changes in precipitation and temperature patterns	Poor pasture growth caused by drought and reduced demand for wool as a result of rising average temperatures may make it difficult to procure naturally-derived raw materials (wool grease) and procurement costs may increase			
	Soaring price of raw materials	Soaring crude oil prices following an increase in demand for fossil energy may increase the cost of procuring petroleum-derived raw materials.	Consider substitution with non-petroleum-derived raw materials		
	Access to new markets (demand)			<ul style="list-style-type: none"> - Increase in the population exposed to infectious diseases and other risks. - Demand for UV care and cooling-related products will continue to grow. 	<ul style="list-style-type: none"> - Establish of a system to increase production and expand sales of raw materials for infectious disease-related products (sanitizer and pharmaceuticals) - Establish of a system to increase production and expand sales of raw materials for UV care and cooling-related products (cosmetics, etc.)

Indicators and Targets

The greenhouse gas emitted by Nippon Fine Chemical is mostly energy-derived carbon dioxide. In October 2021, the Japanese government published its Plan for Global Warming Countermeasures for Scope 1 and 2* which calls for a 46% reduction in Japan's overall GHG emissions by FY2030 compared to FY2013 levels. Within this overall goal, the industrial sector's target is a 38% reduction in energy-derived carbon dioxide by FY2030, and so we are working to reduce our carbon dioxide emissions by 38% in FY2030 compared to FY2013. We will also work to achieve carbon neutrality by 2050.

*Scope 1: Direct GHG emissions from an operator's own fuel combustion
Scope 2: Indirect GHG emissions from the use of electricity and heat supplied by other companies



Initiatives for Environmentally-Friendly Product Development



The MATSURI environmentally-sustainable industrial creation project

We are an industry-structuring partner with MATSURI, which is a project to create environmentally-sustainable industries based on algae, run by Chitose Laboratory Corp. MATSURI is a project that brings together companies to create new industries that utilize algae in order to bring about a carbon-neutral society. Through our participation in MATSURI, we can help create new environmentally-friendly values, providing values that support the health and beauty of people, and prosperous lifestyles, with the goal of being a vital part of society.



In promoting the search and evaluation of algae-based materials and the development and sale of algae-based materials and products such as sustainable raw materials for cosmetics or distinctive chemical products, we will provide values that support the health and beauty of people, and prosperous lifestyles, with the goal of being a vital part of society.

Research and development using renewable raw materials with low environmental impact

RSPO certification

Nippon Fine Chemical has a strong focus on research and development of raw materials for cosmetics that use plant-derived raw materials, and already provides a large number of such products.

In particular, our products made using palm oil obtained RSPO certification in June 2020, certifying their sustainable production and use, and we are working on increasing the number of compliant products.



Lanolin and cholesterol

Wool grease, the raw material for lanolin products, is a fat secreted from sheep that has been known to exist since BCE. It is a by-product extracted when cleaning sheared wool. NFC's lanolin products use highly-refined wool grease, and are provided to customers in a range of fields as a derivatives.

Product development using plant-derived raw materials

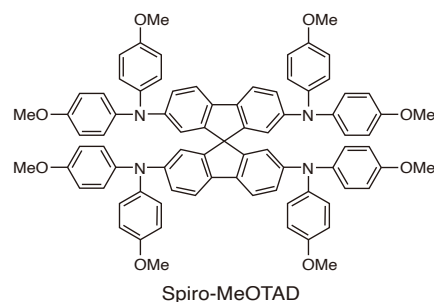
Nippon Fine Chemical is actively engaging in the development of products that use plant-derived raw materials due to their high reproductivity in order to bring about a sustainable society. For example, in our Cosmetic Ingredients Business, our Plandool™ and LUSPLAN™ series of raw materials for cosmetics are used by a large number of customers. In our Amides Business, we provide plant-derived amides such as plant-derived fatty acid amides, etc.



Development of next-generation perovskite solar batteries

The films for perovskite solar batteries, which are expected to form the next generation of solar batteries and which are currently being developed, can be manufactured for low costs. They are expected to be used for multiple applications due to being both light and very flexible, and not requiring as much installation space as older types.

Nippon Fine Chemical is working on initiatives for the development and commercialization of Spiro-MeOTAD, which is used in perovskite solar batteries.



Glossary

What is carbon neutrality?

This refers to when the amount of emissions of greenhouse gases, such as carbon dioxide, is subtracted from the amount absorbed by trees and forest management and so on, and the total is effectively zero.

Initiatives for Safety and Security



Employee safety

Aware that occupational health and safety and accident prevention are key issues for a chemicals company, Nippon Fine Chemical is engaged in the following activities.

- (1) Ensuring safe operation through regular equipment maintenance
- (2) Specifying emergency situations, creating emergency manuals, and holding regular drills for emergencies
- (3) Hazard prediction drills using past accidents as reference
- (4) Regular workplace patrols and elimination of latent risk factors
- (5) Promoting hazard forecast activities

We aim to be accident-free through these activities.

Lost-time accidents

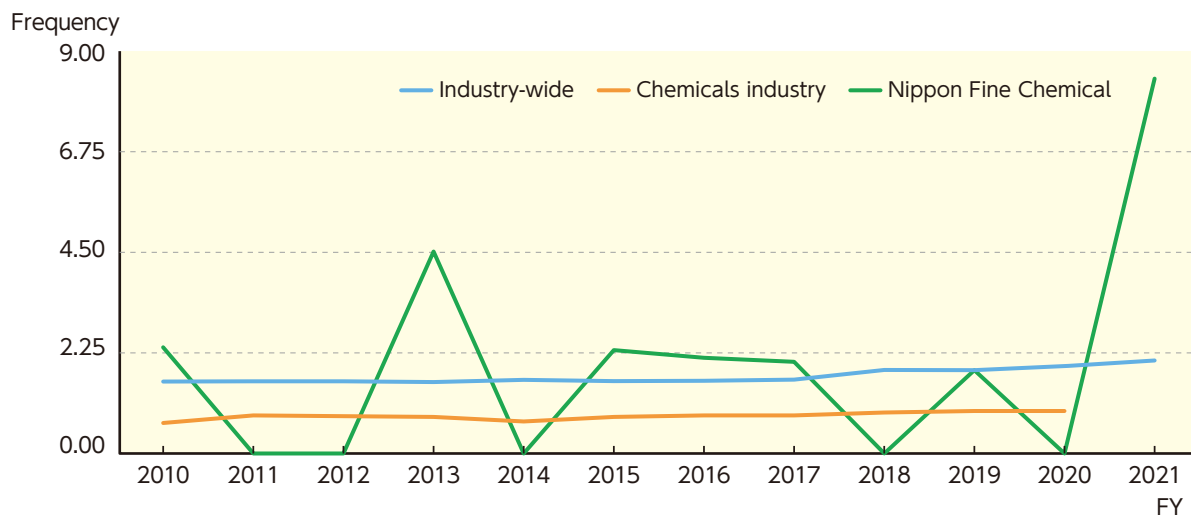
The changes in lost-time accidents since FY2010 are shown below. In FY2021 there were five occupational accidents that resulted in at least one day of time taken off. We investigate their causes and consider countermeasures while at the same time, we carry out internal safety training that looks back at the basics.

■ Lost-time accident rate (number of lost-time accident victims per million working hours)

Lost-time accident rate = 1,000,000 x (number of lost-time accident victims) / (total hours worked)

Nippon Fine Chemical: aggregate of lost-time accidents requiring at least one day off

The lower the number, the lower the lost-time accident rate.



Statistics from: January to December

Industry-wide: From the occupational accident statistics of the MHLW's "Workplace Safety Site" page

Chemicals industry: From the Japan Chemical Industry Association's "Results of Occupational Health and Safety Survey Results" (edition for FY2021 not yet published)

Emergency drills (disaster drills, etc.)

We hold annual evacuation drills and disaster drills using fire extinguishers and so on so that we can act promptly and smoothly in our initial responses to emergencies such as major earthquakes and fires. In addition, we also hold planned drills that assume a leak of combustible raw material or solvent, etc. on the premises to ensure its impact can be kept to a minimum.



Disaster drill taking place (Kakogawa-higashi Plant)

Business Continuity Plan (BCP)

Nippon Fine Chemical is formulating a business continuity plan (BCP), one that prioritizes the safety of our employees and their families, in order to minimize the effects on our stakeholders and reduce the long-term impact of a business stoppage even when business continuance is difficult due to large-scale disasters such as major earthquakes or epidemics.



RECPY activities

At our plants, Nippon Fine Chemical carries out environmental beautification (safety) and productivity improvement through RECPY activities. Improvements are done using small-group activities, and each group reports on what it has done. By rewarding outstanding activities, we aim to sustainably improve environmental beautification (safety) and productivity improvement.

Internal proposals

Nippon Fine Chemical makes improvements by having employees offer proposals for methods to improve daily task efficiency or improve hidden risks through their ideas and creativity as they carry out their work.



Glossary

What are RECPY activities?

RECPY is formed from "**RE**formation of **C**lean and **P**roductiv**Y**", and refers to activities designed to improve in-house beauty and productivity.

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