

HOME > Sustainability > Message From the President

Message From the President

We will contribute to the development of a sustainable society by achieving our corporate vision.

President, Atsuhiro Wakumoto



The Nippon Kayaku Group has a corporate vision, the KAYAKU spirit, "Continuously providing society with the best products through ceaseless progress and the combined forces of our consciences."

Under the "combined forces of our consciences" that connect good mind of everyone for helping each other, the KAYAKU spirit is the Group's shared philosophy that provides the "best products" needed by society through our constant advances of "ceaseless progress".

Within this KAYAKU spirit, I especially value the words "combined forces of our consciences" as I personally want this Company to be one where all Group employees can feel well-being through their work. Of course, financial stability and a good working environment are very important for us all in our work, but I also think it is essential to have a sense of well-being with the feeling that you are growing and making a contribution. Employees who get this sense of well-being while thinking about each other work better together to achieve higher targets and goals. Under such circumstances, I believe we can continue to be a Company that is needed in a sustainable society by working together as one and earnestly thinking about what value each and every one of us can provide for a sustainable society.

In order to put the KAYAKU spirit into practice and earn the trust of all our stakeholders, we have identified the CSR Key Themes (Materiality), such as innovation through business, energy use and greenhouse gases, and compliance, for the sustainable growth of society and the Group. We have made various efforts to achieve this in our mid-term business plan that started in fiscal 2019 by formulating a mid-term CSR action plan linked to a business strategy for each materiality.

The world is seeing more and more of the issues brought up by the SDGs (United Nations Sustainable Development Goals) and the Paris Agreement on climate change, including increasing global warming, human rights issues such as child labor, and food and water shortages due to population growth. Japan has declared its ambitions to be a carbon–neutral, carbon–free society by 2050 which has accelerated efforts throughout industry in Japan toward the realization of a net–zero greenhouse gas society. In July 2020, we announced the formulation of our 2030 environmental targets to promote reductions in greenhouse gases emitted in the Group's business activities. With our aim to strengthen business continuity through countermeasures identified as Group risks on climate change and meeting the goals of the internationally agreed Paris Agreement, we have decided to reduce 2030 greenhouse gas emissions emitted in the Group's business activities (Scope 1 & 2) by 32.5% compared to fiscal 2019. In order to achieve this goal, we are working to actively convert energy used into energy which produces less greenhouse gas emissions, as well as strongly promoting more efficiency in our utilities, adopting MFCA* methods, and expanding our energy saving activities to date.

On the other hand, we in the chemicals industry must also operate while keeping long term risks to, and opportunities to make improvements for the environment as well. The market size of the automobile industry continues to expand around the world, making

improved vehicle safety an even more important issue. These are not easy tasks to realize. Following our corporate slogan, "Sukima ideas", my aim is to maintain a flexible and diverse approach to find out how to achieve our goals, instead of focusing on why they cannot be done, in order to keep contributing necessary values to society through our business activities.

The coronavirus pandemic has had a major impact on the world from the end of fiscal 2019 through to fiscal 2020. The Nippon Kayaku Group is working hard to stay on top of global trends in order to ensure safety of our employees and minimizing impact to our company. However, we can use times such as these as an opportunity to reconsider what we need to prioritize for a sustainable society and environment. Management, business and corporate divisions have worked together to deepen discussions, announcing the Group's Vision in May 2021. In times like these since the pandemic began, where it is difficult to foresee the future, this Vision has enabled us to think about whether it is possible to streamline the roles and functions of corporate divisions to demonstrate organizational strength, and to think about what fields in each Group business we should be prioritizing the allocation of management resources to enable growth. It has made us think again about the value we can provide to everyone through our business leading to a redrawing of our Company Blueprint (our future vision and roadmap for making it a reality). Based on this Vision and Company Blueprint, we will formulate a business plan and work with a sense of speed.

We will also continue to be thorough with corporate governance and compliance, and enhance our corporate value through the practice of CSR-centered management with a high degree of ethics in order to maintain a safe and secure work environment, and promote human resource development along with diversity in the work place.

To our stakeholders, I sincerely ask for your continued support as we continue on with our efforts.

* Material flow cost accounting (MFCA) is an environmental management accounting method that visualizes by quantity and cost the loss of raw materials and materials in the production process

President Hahrhbliste

Copyright © Nippon Kayaku Co.,Ltd. All Rights Reserved.



HOME > Sustainability > CSR Management > Our Corporate Vision and CSR Management



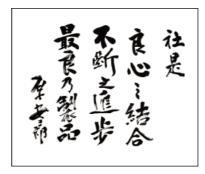
Our Corporate Vision and CSR Management

The Nippon Kayaku Group is implementing CSR management that fosters trust among all stakeholders through its focus on the KAYAKU spirit, which calls for "continuously providing society with the best products through ceaseless progress and the combined forces of our consciences."

The KAYAKU spirit and CSR Management

The KAYAKU spirit, or "continuously providing society with the best products through ceaseless progress and the combined forces of our consciences," stands as the Nippon Kayaku Group's corporate vision. The KAYAKU spirit is based on the corporate motto created more than half a century ago and it has stood at the root of our CSR management ever since. We will be able to achieve our vision for CSR management that earns the trust of all stakeholders by engaging in corporate activities that realize the KAYAKU spirit.





The image at the bottom left is an overhead view of the KAYAKU Spirit.

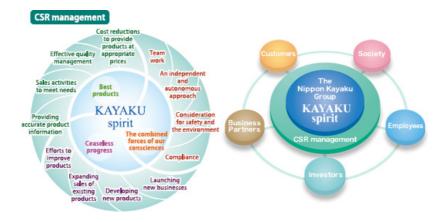
This image pictures the daily efforts of each of our employees, based on the concepts of "best products", "ceaseless progress" and "the combined forces of our consciences",

holding hands and supporting each other as they work towards achieving the corporate vision shown at the top.

This is our commitment to realize a CSR management that fulfills our social, economic and environmental responsibilities, and meets the

trust and expectations that our stakeholders have put into us as a corporate member of our society.

CSR management is positioned as a key corporate activity for achieving the vision outlined in the KAYAKU spirit



Stakeholders	Overview of initiatives	Means of communication
Customers Example initiatives	We conduct company-wide quality activities under our quality system in order to supply the best products to customers. We are mindful that product quality improvements, safety and reliability, as well as the provision of technical services and information are paramount to improving customer satisfaction. • Users of resins, colorants, catalyst, and optical materials • Car module manufacturers • Agrochemical manufacturers, agrochemical wholesalers, Japan Agricultural Cooperatives, and agrochemical retailers • Medical practitioners and patients	 Confirming needs through sales activities Improving products and services Offering plant tours Conducting customer satisfaction survey Providing safety guidance on agrochemicals and proposing pest extermination methods Providing information via information site
Business partners <u>Example initiatives</u>	We pursue mutual and sustainable growth with our suppliers, based on the understanding that they are important business partners who help us produce products of the best quality.	 Exchanging information through purchasing briefings and visits Conducting surveys
Investors Example initiatives	We strive to disclose information to all of our shareholders, investors, and other stakeholders in a timely, impartial, and fair manner, so they may have a proper understanding of the Group's business status, and the various initiatives we are taking.	 Conducting briefings on financial results Holding shareholders meetings Conducting teleconferences
Employees Example initiatives	A company is nothing without its people. We respect the human rights of each and every employee, and strive to offer a workplace environment that offers peace of mind to them. Our goal is to be a company where employees can grow personally and professionally through work and feel a sense of motivation in what they do.	 Conducting compliance awareness surveys and mental health checks Issuing in-house reports Operating a whistleblower system Holding discussions with labor union
Government agency/Industry group		 Participating in outside initiatives Participating in related associations, etc. Complying with laws, regulations, and industry rules Conducting local evaluations of agrochemical compatibility Prefectural administration (Agriculture and Forestry Office, etc.)

Stakeholders	Overview of initiatives	Means of communication
Society Example initiatives	We aim to be a company closely rooted in communities through our involvement at the local level, proactive engagement with all stakeholders and support for the educational needs of the next generation.	Holding local events and contributing to local communities
		Offering plant toursExchanging information with local governments
General consumers		 Providing product information and handling inquiries via website Holding local explanatory meetings and providing guidance to farmers and
Environment Example initiatives	We are committed to achieving a balance between the efficiency of production and reducing its impacts on the environment. For this reason, we consider environmentally friendly management to be an important task. We are now striving to achieve the various environmental targets we have set. We are working to improve facilities and treatment processes in order to use energy more efficiently, reduce exhaust gas including greenhouse gas emissions, and to lower the amount of substances released from effluent and waste that impact the environment.	 Reducing environmental burden through collection and reuse of solvents Reducing energy use and CO₂ emissions

Participation in external initiatives

Nippon Kayaku's initiatives in the ESG (environment, social, and governance) go beyond mere compliance with international standards. We believe that collaboration with other institutions and corporations is critical, and we are proactively participating in such initiatives.

External initiatives participating in

Name	When selected (participated in)	Scope	Relationship with corporate philosophy and reason for agreeing with
Responsible Care Global Charter	2014	In Japan	The Company signed the Responsible Care Global Charter in 2008 and the revised global charter in 2014. Many Nippon Kayaku Group companies handle various chemical substances and develop, manufacture, and sell numerous chemical products. We will continue to actively promote responsible care activities in order to "continuously provide society with the best products through ceaseless progress and the combined forces of our consciences", our corporate vision, the KAYAKU spirit.

United Nations Global Compact	2021	Whole group	The KAYAKU spirit is based on the corporate motto and it has stood at the root of our CSR management. We will be able to achieve our vision for CSR management that earns the trust of all stakeholders by engaging in corporate activities that realize the KAYAKU spirit. UNGC requires participating organizations incorporate UNGC 10 principles on human rights, labor, the environment, and anti-corruption, into their daily operations and strategies, and actively engage in CSR activities. The principles are in line with the Nippon Kayaku Group Charter of Conduct and Code of Conduct. The Nippon Kayaku Group supports the principles and will contribute to sound globalization and the realization of a

Membership qualifications of major external organizations

Name	When to join	Membership	Activity content
KEIDANREN (Japan Business Federation)	1946	Executive member	The Company agrees with the idea of contributing to the autonomous development of Japan's economy and improvement in the living standards of Japanese. Nippon Kayaku has been a member of various committees including the Executive Member Meeting of the Policy Board, Committee on Administrative Reform, Committee on Social Security, and Committee on Diversity & Inclusion. We contribute to creating a sustainable society and economy by broadening exchanges and relations beyond individual industries and broadly leveraging the knowledge and experience of the business world.
The Japan Chemical Industry Association (JCIA)	1948	Director Policy Coordinating Committee	Yasusaburo Hara, the Company's third president, served as the first director of the Japan Chemical Industry Association for fourteen years, starting in 1948, the year the association was founded. Having built the foundation of the postwar recovery of the chemical industry, he worked to introduce and expand the petrochemical industry, one of the driving forces of Japan's strong economic growth. Carrying on the purpose established by Hara, the Company contributes to the expansion and improvement of the chemical industry.
The Japan Dyestuff and Industrial Chemicals Association (JDICA)	1948	Director	Yasusaburo Hara, the Company's third president, served as the first director of the Japan Dyestuff and Industrial Chemicals Association for thirty-three years, starting in 1948. Carrying on the purpose established by Hara, the Company contributes to safety and the environment, internationalization, proposals on and promotion of measures related to business support, and surveys and research in fields related to the chemical industry.

The Japan Pharmaceutical Manufacturers Association (JPMA)	1968	Board member	We agree with idea of and participate in contributing to improvements in the health of and medical care for Japanese and people throughout the world through the development of innovative, highly-useful pharmaceuticals and the sound expansion of the pharmaceutical industry. As a manufacturer of new drugs, we contribute to the sound development of the pharmaceutical industry by creating and promoting a vision related to code compliance, distribution improvements, promotions, clinical evaluations, PMS, quality, pharmaceutical affairs, and R&D.
The Biosimilar Association (JBSA)	2016	Director Company Chairman	Four companies involved in the biosimilar business established the association in April 2016 to spread and promote the biosimilar business. The Company actively takes part as a founding member. By exchanging information with and making proposals to various stakeholders, including administrative authorities, through the Japan Biosimilar Association, the Company contributes to restraining medical costs and improving medical access for patients who are reluctant to seek treatment using biopharmaceuticals for financial reasons.
Pharmaceutical manufacturers' association of Tokyo	-	Director	The Pharmaceutical Manufacturers' Association of Tokyo consists of manufacturers and sellers of all types of pharmaceuticals, including new drugs, generic drugs, and OTC products. As a pharmaceutical manufacturer in east Japan, we contribute to better medical services through the examination and sharing of information related to pharmaceutical affairs, intellectual properly, medical product safety, and education/training.
Japan Investors Relations Association	1993	Board member	The Company participates to improve the quality of its IR activities, gather information, and create a network of IR staff. Efforts are also made to improve communication with shareholders and investors and win greater trust from financial and capital markets.

CSR Implementation System

We established the CSR Management Committee and set up the CSR Department within the Corporate Planning Division of our Strategic Corporate Planning Group. When reviewing the CSR Action Plan's goals and accomplishments, the CSR Management Committee takes a top-down approach in its deliberations and decision-making.

At the same time, the CSR Department administers cross-functional CSR projects, while the business sites and group companies take the lead in implementing these projects.



SDGs and the KAYAKU spirit

Sustainable Development Goals (SDGs) consist of the 17 economic, social, and environmental goals that were adopted by all United Nations Member States for the purpose of building a sustainable world and that are to be accomplished by various institutions, organizations, and other entities by fiscal 2030. The concept behind SDGs is synonymous with the Nippon Kayaku Group's corporate vision of "continuously providing society with the best products through ceaseless progress and the combined forces of our consciences." This is because we believe that our corporate initiatives to realize the KAYAKU spirit are consistent with the goals of the UN in realizing its SDGs, although they differ in terms of their scale and targets. The business initiatives being taken by our Functional Chemicals, Pharmaceuticals, Safety Systems, and Agrochemicals Businesses, whose business vision is "to continue to provide the best products, technologies and services that safeguard the life and health of consumers and support a comfortable life," also align with the goals of the SDGs.

Realizing the KAYAKU spirit will enable us to promote CSR management that gains the trust of all our stakeholders so that we will be able to communicate the initiatives that we have taken so far in the lingua franca of SDGs.







































Instilling the Company with the KAYAKU spirit

To instill all of our domestic and overseas employees with the KAYAKU spirit, we have translated and distributed a booklet describing our corporate vision and Group Action Guidelines into the language of each country where we operate, for a total of eight languages. In fiscal 2019, we revised this booklet to make it easier to understand. We will also be revising and distributing the versions for each language. We are also creating opportunities to spread the KAYAKU spirit among our domestic and overseas employees at Management Strategy Meetings and joint forums on the Mid-term Business Plan and through such means as group training and e-learning.

Our aim is to be a company where all employees throughout the world are united in sharing our vision, regardless of which area they work in, be it production, development, sales, management, or anywhere else.



The booklet describing our corporate vision and Group Action Guidelines. It comes in eight versions: Japanese, Czech, Chinese, English, Korean, Spanish, Malay, and Thai.

KAYAKU spirit Promotion Efforts using Kayakuma the Bear

We have created a mascot character called Kayakuma the Bear in order to make KAYAKU spirit a concept that is more familiar to all Nippon Kayaku Group employees around the world. This character appears in the CSR section of our company newsletter, where we introduce our CSR activities and initiatives for implementing our corporate vision, using visual depictions that are easy to understand for all audiences. The mascot has also been incorporated into our daily stationery, clear file folders and even the designs of conference rooms. This ensures our employees are always aware of Kayakuma the Bear, and in touch with our corporate vision in all aspects of their work. We are currently filing for a trademark for Kayakuma the Bear and plan on using it widely as a symbol of the Nippon Kayaku Group in newspaper ads, on novelty items, and at company events such as factory festivals.



conference room and employee lock



HOME > Sustainability > CSR Management > Respect for human rights and the KAYAKU spirit



Respect for human rights and the KAYAKU spirit

The words "combined forces of our consciences" can be found in the fundamental philosophy of our KAYAKU spirit. We believe that the fundamental principle of our corporate management is respect for the human rights of everyone, be they employees or business partners, in all aspects of our corporate activities, and the mutually combined forces of our consciences.

Respect for Human Rights

The Nippon Kayaku Group Charter of Conduct, which constitutes the Group's principles of conduct, stipulates respect for the basic human rights, diversity, character, and individuality of individuals in all its business activities. Furthermore, Chapter 1–5. of the Nippon Kayaku Group Code of Conduct states that we respect internationally recognized human rights and recognize and respect diversity in regard to gender, age, nationality, race, religion, disability, ethnicity, skin coloring, culture, philosophy, beliefs, political views, and gender orientation, and this is considered to be a principle of conduct for all employees throughout the entire group. In addition, we never allow any unfair labor practice, including forced labor and child labor.

Human Rights Initiatives for Employees

The Nippon Kayaku Group has established an Ethics Committee chaired by the head of the Administration Group, which deliberates on various issues related to the prevention of workplace harassment and human rights violations. The committee sponsors training sessions with guest speakers and other types of educational sessions, such as e-learning and work-level based training for managers and employees alike to educate them about human rights and how to prevent power, sexual, or maternity harassment and to further their understanding of LGBT people. Nippon Kayaku is committed to creating a vibrant workplace environment by continuously striving for employee diversity and inclusion.

Human Rights Considerations in CSR Procurement

As the Nippon Kayaku Group strives to achieve a sustainable society with everyone in its supply chain, its procurement activities take into consideration such aspects of CSR as respect for human rights, environmental protection, workplace health and safety, legal compliance, and fair business dealings.

The Nippon Kayaku Group Basic Procurement Policy, which is the Company's basic stance regarding CSR procurement, has been formulated so that procurement practices align with CSR management, and CSR procurement decisions are made based on the Charter of Conduct and Code of Conduct. To improve understanding of the Nippon Kayaku Group's Basic Procurement Policy, documents are sent out each year by mail to key business partners with trading volumes over a certain amount. Moreover, "Chapter 2. Human Rights and Labor" of the CSR Procurement Guidelines, which prohibits all forms of discrimination, specifically stipulates that inhumane treatment, discrimination, forced labor, and child labor are all prohibited. Along with our business partners, we are striving to engage in procurement activities that take human rights into consideration.



HOME > Sustainability > CSR Management > Key Themes ("Materiality") and Our Action Plan



Key Themes ("Materiality") and Our Action Plan

The Nippon Kayaku Group is implementing CSR management that fosters trust among all stakeholders through its focus on the KAYAKU spirit, which calls for "continuously providing society with the best products through ceaseless progress and the combined forces of our consciences."

Practicing CSR management involves properly ascertaining the Key Themes facing our Group from both an internal and external point of view and formulating a mid-term CSR Action Plan that links to our business activities.

CSR and Business Strategy

We believe that CSR is integral to managing our Company. To realize the KAYAKU spirit and increase the value of the Company, we believe it is necessary to take the dual approach of implementing both a mid-term business plan and initiatives toward a sustainable society and environment, and that we need to integrate these initiatives into our business strategy.

We have the basic management policy which is "The Nippon Kayaku Group engages in CSR management by outlining a mid-term CSR action plan that reflects the trust we receive from all our stakeholders. We continuously implement this mid-term CSR action plan to expand our management resources. This enables us to work towards maximizing our corporate value, achieving sustainable growth, and contributing to a sustainable society and environment."

Under this basic management policy, we ascertain our risks and opportunities by considering the business environment and listening to our stakeholders so that we can identify the Key Themes (CSR materiality) in our business over the medium-term, then we create our Mid-term Business Plan and Mid-term CSR Action Plan that syncs with Mid-term Business Plan. Our CSR activities, which are integral to our business strategy, are highly ethical and place priority on safe operations, strict compliance, and the environment in all of our businesses.

CSR Key Themes ("Materiality")

In creating our mid-term business plan, **KAYAKU Next Stage**, which began in fiscal 2019, Nippon Kayaku went through the themes that it needs address as it strives to contribute to a sustainable society and to achieve sustainable growth for the Company. This exercise yielded our CSR Key Themes.

CSR Key Themes ("Materiality") Identification Process

In formulating our mid-term business plan, **KAYAKU Next Stage**, which kicks off in fiscal 2019, we have organized the themes that we should address and identified the CSR Key Themes (CSR materiality).

CSR Key Themes (CSR Materiality) Identification Process

Make a list of Themes, taking topics from the GRI standards on the items needed by a diversifying society and adding topics from the Nippon Kayaku Group's CSR Action Plan.

[Step 2 Assign Points from Internal and External Feedback]

A. Assignment of points from external assessments

Assign points from external assessments by linking the Themes on the list with assessment criteria for each of the Company's business segments from multiple international assessment organizations that promote responsible investing and SASB* need criteria for each industry.

B. Assignment of points from internal assessments

Survey those responsible for Company's major departments, including its business divisions, to evaluate how much of an impact the Nippon Kayaku Group can have. Set up listening opportunities in the major departments to verify the Themes and rank them by priority. Assign points from the internal assessments by incorporating views on past key Themes addressed in CSR Action Plans.

* An independent non-profit, SASB develops reporting standards that enable businesses around the world to identify, manage and communicate financially-material, sustainability information to investors.

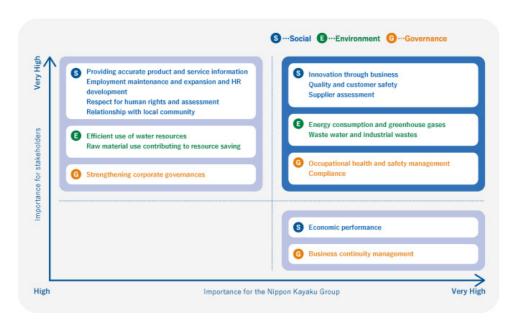
[Step 3 Materiality mapping]

Make a matrix of the Themes that have been assigned points from the external and internal assessments to create a materiality mapping. Include thresholds in the point-based map so that those Themes with points that meet or exceed the threshold are considered key.

[Step 4 Validity testing and approval]

Get feedback on the identification process and identification results from experts who specialize in CSR, review the process and results at the CSR Management Committee, which is the Company's decision-making body, and approve them after two sessions of deliberation.

Nippon Kayaku Group's CSR Key Themes ("Materiality")



Identification and Implementation of Key Themes

Below, we describe the Nippon Kayaku Group's recognition of its identified Key Themes and how we intend to accomplish them by focusing on the most important of these themes.

Why Is This Key?

The world is moving in the direction of a better life for people. Technological progress is not the be-all and end-all. However, achievement of a sustainable society involves not only making the world more convenient, but also such major issues as enabling everyone to live safe and healthy lives, alleviating climate change, and protecting the global environment. Chemical companies need to take responsibility and tackle these issues seriously. At Nippon Kayaku, we believe that we need to acquire the new business opportunities and new technologies that will lead to innovation through continuous progress so that we can solve these wide-ranging, thorny problems and respond to the needs of society. We believe that tackling these Key Themes will enable us to contribute to a sustainable society by giving society the value that it is seeking.

Nippon Kayaku's Initiatives

The Nippon Kayaku Group's business vision is, "Continuing to provide the best products, technologies, and services that safeguard the life and health of consumers, and support a comfortable life." Since its founding, Nippon Kayaku has been striving to solve social issues as it has grown. In the future as well, we will continue making contributions toward a sustainable society and environment as we alter our three "genes" of explosives, dyes, and pharmaceuticals so that we can keep providing the best products, technologies, and services using the many elemental technologies that we have nurtured over our past century of history. Our endeavors involve honing our elemental technologies, taking advantage of open innovation, and carrying out corporate and other research that will support future growth for realizing a super-smart society and SDGs. This includes distinctive products based on resins, colorants, and catalysts, pharmaceuticals and ancillary products in our cancer-related specialty areas, products for advanced automobile safety components and future mobility technologies, high-quality environmentally friendly agrochemicals for supporting stable agricultural production, and the development of products and creation of businesses in new fields that merge these technologies. To this end, we are working to consolidate our entire corporate foundation in the utilization of advanced IT and the enhancement of our entire work force's skills.

Tackling these themes also entails the key themes' economic performance. In view of our initiatives with respect to key environmental issues, such as "energy use and greenhouse gases," "wastewater and waste," "efficient use of water resources," and "use of materials that contribute to resource conservation," we believe that new technologies and other innovations that will contribute to society are just around the corner.

Click here to find out about other initiatives

Quality and customer safety	read more ▼
Supplier assessment	read more▼
Energy consumption and greenhouse gases / Waste water and industrial wastes / Efficient use of water resources / Raw material use contributing to resource saving	read more▼
Occupational health and safety management / Compliance	read more▼

Mid-term CSR Action plan 2019-2021

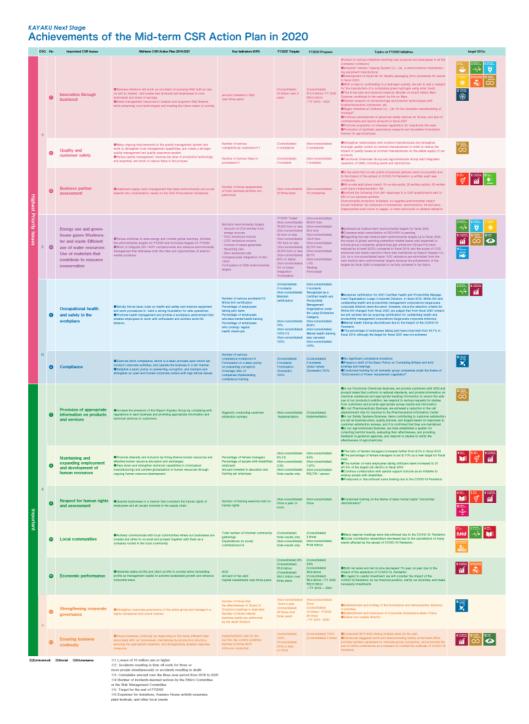
Based on the materialities that we identified, we have formulated our Mid-term CSR Action Plan 2019-2021, which sets forth specific initiatives and goals. The themes and goals of the Mid-term CSR Action Plan have been integrated with the medium- and long-term key themes set by each corporate division in order to flesh out the major themes of our mid-term business plan, **KAYAKU Next Stage**. The medium- and long-term key themes are linked with the more specific organizational goals of the entire Nippon Kayaku Group, as well as with the performance goals of each individual employee. Therefore, the Mid-term CSR Action Plan is being put into practice by all of our employees as part of our business strategy.

Mid-term Business Plan, Growth Strategy Important themes in the Mid-term Plan Key themes Specify Break down Action Plan for CSR Key Themes Mid-term Disclosure CSR Action Plan Mid-term Disclosure CSR Action Plan Stake holders Goals progress achievements Action Plan for CSR Key Themes Organizational goals CSR Key Themes Integration completed Organizational goals CSR Action Plan for CSR Key Themes Integration completed Organizational goals CSR Action Plan for CSR Key Themes

			KAYAKU	Next Stage Mid-term CSR Action Pla	in 2019-2021	
	ESG	Na	Important CSR Issues	Mid-term CSR Action Plan 2019-2021	Key Indicators (KPI)	FY2021 Target
		1	Innovation through businesst	●Business divisions will work as one team on pursuing R&D with an eye on exit to market, and create new products and businesses in core businesses and ereas of synargy. ●invest management resources in medium and long-term R&D themse withis enhancing core technologies and meeting the future needs of society.	Amount invested in R&D over three years	(Consolidated) ¥40 billion over 3 years
	s	2	Quality and oustomer safety	•Make ongoing improvements to the quality management system and work to strengthen local management capabilities, and create a stronger quality management and quality assurance system.	Number of serious complaints by customers # 1	(Consolidated) 0 complaints
				Pursue quality management, improve the level of production technology and expertise, and work to reduce flaws in the process.	Number of serious flaws in processes@1	(Consolidated) 0 incidents
		1	Business partner assessment	Trollement supply chain monagement that takes environmental and social espects into consideration, based on the CSR Procure- ment Guidelines.	Number of times assessments of main business portners are performed	(Non-consolidate 50 times/year
					Mid-term environmen- tal targets - Amount of CO2 emit- ted from energy sources	FY2020 Target (Non-consolidate 79,500 tons or le
					· VOC emissions volume	(Non-consolidate 42 tons or less
			Energy use and green- house gases	Pursue activities to save energy and combat global warming.	· COD emissions volume	(Non-consolidate 150 tons or less
	E	4	Wastewater and waste Efficient use of water resources	Achieve the environmental targets for FY2020 and formulate targets for FY2020. • Work to integrate ISO 14001 company-wide and advance environ-	· Volume of waste generated	(Non-consolidate 23,500 tons or le
lighest Priority			Use of materials that contribute to resource conservation	mental management that addresses both the risks and opportunities of environmental problems.	Recycling rate	(Non-consolidate 80% or higher
isue s			Some ronon		· Zero emissions rate	(Non-consolidate 3% or lower
					Company-wide integration of ISO 14001	Integration
					Formulation of 2020 environmental targets	Formulation
					Number of serious	(Consolidated)
					accidents = 2 White 500 certification	0 incidents (Non-consolidate
			Occupational	 Strictly follow basic rules on health and safety and improve equipment and work procedures to build a strong foundation for safe operations. 	Percentage of employees	Maintain certifica (Non-consolidate
		5	health and safety in the workplace	 Promote health management and provide a workplace environment that enables employees to work with enthusiasm and achieve 	toking paid leave	70% (Non-consolidate
				work-life balance.	Percentage of employees who take mental health training Percentage of employees	100%/43
	Ì				who undergo regular health check-ups	(Non-consolidate 100%
				Exercise strict compliance, which is a basic principle upon which we conduct corporate activities, and operate the business in a fair	Number of serious compliance violations © 4	(Consolidated) 0 incidents
		í	Compliance	manner. Catabilish a basic policy on preventing corruption, and maintain and	Formulation of a basic policy on preventing corruption	Formulation
				strengthen an open and honest corporate culture with high ethical values.	Coverage ratio of companies implementing compliance training	(Domestic) 100%
		7	Provision of appropriate information on products and services	 Increase the presence of the Nippon Kayaku Group by complying with regulations in each business and providing appropriate information and technical services to customers. 	Regularly conducting oustomer satisfaction surveys	(Non-consolidate implementation
					Percentage of female managers	(Non-consolidate 8%#5
		ì	Maintaining and expanding employment and development of human resources	©Promote diversity and inclusion by hiring diverse human resources and effective human resource allocation and exchanges. © Press down and strengthen technical capabilities in monoculauri (manufacturing) and achieve globalization in human resources through	Percentage of people with disabilities om- played	(Non-consolidate 2.3%
				ongoing human resource development.	Amount invested in education and training per employee	(Non-consolidate Note results only
	S	,	Respect for human rights and assessment	Operate businesses in a manner that considers the human rights of employees and all people involved in the supply chain.	Number of training sessions held on human rights	(Non-consolidate Once a year or more
		10	Local communities	Actively communicate with local communities where our business- es are located and strive to co-exist and prosper together with them	Total number of informal community gatherings	(Consolidated) Note results only
portant			- Committee	es are located and strive to co-exist and prosper together with them as a company rooted in the local community.	Expenditures on social contributions 0.6	(Non-consolidate Note results only
					ROE	(Consolidated) 8%
		11	Economic performance	 Generate stable profits and return profits to society while reinvest- ing profits as management capital to achieve sustainable growth and enhance corporate value. 	Amount of tox paid	(Consolidated) 95.6 billion
				STEPHONE TORK	Capital investments over three years	(Consolidated) 950.0 billion over three years
		12	Strengthening corporate	Strengthen corporate governance of the entire group and manage in	Number of times that the effectiveness of Board of Directors meetings is evaluated	(Non-consolidate Once a year
		nd	governmence	a highly transparent and sound manner.	Number of times internal business audits are performed by the Audit Division	(Consolidated) 45 times over three years
			Ensueino husinese	Ensure business continuity by responding to the many different risks associated with our businesses, maintaining the production	Implementation rate for the top five risk control activities	(Consolidated) 100%
		13	Ensuring business continuity	risks associated with our businesses, maintaining the production structure, securing the oppropriate materials, and strengthening disas- ter response measures.	Number of times BCP drills are conducted	(Consolidated) Once a year or more
					ElEnvironment Gideolai Giddovernance 11 Loseas of 10 million pare in higher 22 Acadestri variety in them of noor face to tors acode introduced or acadestri haut 2. Compatible variety or acadestri haut 2. Compatible variety or acadestri haut 2. Compatible variety or acadestri haut 4. Plancher of Invitation to served set aux by the the Third Millengement Committee 18. Targett for the one of P79200. 1	nee or ting in death riod from 8046 to 2028 e Ethice Committee

Achievements of the Mid-term CSR Action Plan in Fiscal 2020

Below is a summary of the progress made in our Mid-term CSR Action Plan 2019-2021 in its second year of 2020.



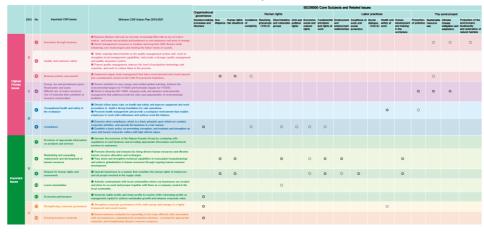
> Achievements of the Mid-term CSR Action Plan in Fiscal 2020

Mid-term CSR Action Plan 2019-2021 for ISO26000 Core Subjects

The Nippon Kayaku Group has created a table of correspondence between the 37 Core Issues of ISO26000 and our each item of Midterm CSR Action Plan 2019-2021.

KAYAKU Next Stage

Mid-term CSR Action Plan 2019-2021 for ISO26000 Core Subjects



												1902600	O Core Subj	ects and F	lelated Is	iues							
							perating p						sumer issues						munity involv				
	ESG	i No	Important CSR Issues	Mid-teres CSR Action Plan 2019-2021	Anti- corruption	Responsible political involvement	competi-	Promoting social responsibility in the value chain	Respect for property rights	marketing.	consumers'	Sustainable consumption	Consumer service, support, and complaint and dispute resolution	data protection	essential services	end	involve-	Education and culture	Employment creation and skills development	Technology development and access	Income	Health S	Social Investment
		0	Innovation through business	Business delicions will work as one have on pursuing R&D with an eye on exist to market, and create new products and businesses in core businesses and areas of synegy of Invest management resources in mediar and long-term R&D whose white orchancing core technologies and meeting the future needs of society.							0	0											
	s	0	Guality and customer safety	 Make organing represented to the quality management system and work to strengthms local management capabilities, and create a stronger quality management quality assessment system. Pursue quality management, improve the Isreel of production technology and supertise, and work to reduce there in the process. 		0					0		0			0							
Highest		Θ	Dusiness partner assessment	Implement supply chain management that takes environmental and social aspects into consideration, based on the CSR Procurement Guidelines.			0	0															
Priority Issues	Е	0	Energy use and greenhouse gases Wastewater and waste Efficient use of water recourses Use of materials that contribute to resource conservation	® Pursue activities to save energy and combat global warming. Achieve the environmental targets for F72000 and formstate targets for F72000. ® titled to talegrate ED 16801 company-reliad and advance environmental management that addresses both the risks and opportunities of environmental problems.																			
	٥	0	Occupational health and safety in the workplace	© Etricity follow basic rules on health and safety and improve equipment and work procedures to build a strong foundation for safe operations. © Promote health management and provide a vocifiace enricement that enables employees to work with esthusiasm and actives work-life belance.																			
	ľ	0	Compliance	® Exercise shirt compliance, which is a basic principle upon which we conduct composed activities, and operate the business in a fair namer. © Establish a basic policy on preending compliance, and maintain and strengthen on open and honest corporate culture with high ethical values.	0	0	0	0	0	0	0			0									
		0	Provision of appropriate information on products and services	 Increase the presence of the Nippon Kayaku Group by complying with regulations in each business and providing appropriate information and technical services to customers. 		0					0		0			0							
		0	Maintaining and expanding employment and development of human resources	® Promote diswelly and inclusion by hiring disense human resources and offsettive human resource allocation and exchanges. ® Pass down and strengthen fectivated capabilities in monoxibari insanstitutaring and adhieve globalization in human resources through ongoing human resource development.																			
Importar	Ů	0	Respect for human rights and assessment	Operate businesses in a manner that considers the human rights of employees and all people involved in the supply chain.																			
Issues		0	Local communities	 Activity communicate with local communities where our businesses are located and strire to co-solat and prosper together with them as a company rected in the local community. 												0	0	0	0	0	0	0	0
		0	Economic performance	Generate stable profits and return profits to society white releventing profits as management capital to achieve sustainable growth and enhance corporate value.			0					0											
		Ð	Strengthening corporate governance	Strengthen corporate governance of the entire group and manage in a highly transporent and sound manner.	0	0	0	0	0	0				0									
	G	Φ	Ensuring business continuity	Ensure basiness continuity by responding to the many different risks associated with our businesses, maintaining the production structure, securing the appropriate materials, and strengthening disaster response measures.				0															

> Mid-term CSR Action Plan 2019-2021 for ISO26000 Core Subjects ይ



HOME > Sustainability > CSR Management > Compliance



Compliance

The Nippon Kayaku Group widely recognizes compliance as not only adhering to laws and ordinances, but also upholding social norms and responding to the needs of society.

Nippon Kayaku Group Charter of Conduct and Code of Conduct

With the recognition that compliance holds a position of the utmost importance in its business activities, the Nippon Kayaku Group, established the Nippon Kayaku Action Charter and Nippon Kayaku Action Standards in 2000. Subsequently, in 2011, these documents were amended in accordance with ISO26000 (guidance standards for organizations' social responsibility), and in 2020, they were amended with the aim of being carried out voluntarily as progress is made toward realizing a sustainable society.

The Nippon Kayaku Group Charter of Conduct

Business activities

- 1. The Nippon Kayaku Group will provide products and services that satisfy customers through Communication with customers and the provision of appropriate information, giving due consideration to the safety and reliability of its products and services.
- 2. In all its business activities, the Nippon Kayaku Group will comply with all relevant laws and regulations, including competition law, the spirit of these laws, and internal regulations, and will engage in fair, transparent, and free competition. We will also maintain sound relationships with the governing authorities in all regions.
- 3. The Nippon Kayaku Group respects human rights in all its business activities, and will not discriminate or tolerate any inappropriately behavior for reasons based on gender, age, nationality, race, religion, or disability.
- 4. The Nippon Kayaku Group will appropriately manage and utilize the company's assets to improve the efficiency of its business activities and strive for continuous development.
- 5. The Nippon Kayaku Group implements systematic crisis management in preparation for the actions of antisocial forces that threaten the lives of citizens and corporate activities, as well as for terrorism, cyber attacks, natural disasters, and other events.

Relationship with society

- 6. The Nippon Kayaku Group respects the cultures, religions and traditions of each country and region, works in harmony with society, and contributes to the development of society as a good corporate citizen.
- 7. The Nippon Kayaku Group will disclose information on its business activities to stakeholders in a timely and appropriate manner based on objective facts. We will also strive to increase corporate value through constructive dialogue with stakeholders.
- 8. In order to contribute to a sustainable society and the environment, the Nippon Kayaku Group strives to conduct its business activities in harmony with the natural environment by constantly taking into account the impact on the global environment, not only complying with relevant laws and regulations, but also establishing its own voluntary standards.

Information handling

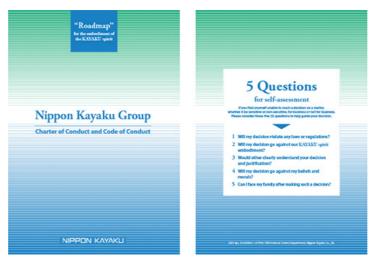
9. The Nippon Kayaku Group will appropriately protect the information it possesses through its business activities and take all possible measures for information management. In addition, we recognize the value of information assets and respect the intellectual property rights of others.

Relationships between the company and individuals

10. The Nippon Kayaku Group complies with labor–related laws and regulations, ensures a safe and comfortable working environment, and respects the basic human rights, diversity, character, and individuality of individuals.

Roles of top management and thorough adherence to this charter

11. Those involved in the management of the Nippon Kayaku Group recognize that realizing the spirit of this charter is their own role and responsibility, and will thoroughly disseminate it to all employees. In addition, we will listen to the opinions of people inside and outside the group, establish effective systems within the group, and ensure thorough implementation of corporate ethics. In the event of a situation that contravenes the spirit of this charter, we will clarify both inside and outside the company our stance of solving the problem, investigate the cause, and work to prevent any recurrence.



The Nippon Kayaku Group Charter of Conduct and Code of Conduct

Initiatives to prevent corruption and anti-competitive behavior

The Nippon Kayaku Group Charter of Conduct and Code of Conduct stipulate that fair, transparent, and free competition should be conducted in all business activities in compliance with relevant laws and regulations, including the Competition Law, the spirit thereof, and internal rules. In addition, we have set forth the prohibition of bribery and other illegal activities related to our business activities.

Relationship between the "Nippon Kayaku Group Charter of Conduct and Code of Conduct for business activities" and ISO 26000

Relationship between the "Nippon Kayaku Group Charter of Conduct and Code of Conduct for business activities" and ISO 26000

Nippon Kawaku Group Charter of Conduct		Nippon Kayaliu Group Code of Conduct		ŧ	ISO26000 Core Subje			olated Iss	ues	
reppor ruyano dedup Criater di Conduct		reppor rayaru droup cade or careaux	Governance of the organization	Human rights	Labor practices	The	Fair operating practices	Consumer insures	Community involves and development	
■ Business activities		Code of Conduct for business activities								
The Nippon Kayaku Group will provide products and services that satisfy customers through Communication with outstewers 1, and the provision of appropriate information, giving due consideration to the safety and reliability of its products and services.		1 Safety and quality of products					•	•		
		Provision of product information					•	•		
services. In all 1s business activities, the Nippon Kayaku Group will comply with all relevant laws and regulations, including competition law.		Fair, impartial transactions					•	•		
the spirit of those laws, and internal regulations, and will engage in fair, transparent, and tree competition. We will also maintain	4	Prohibition of exchanging excessive gifts or entertainment					•			
sound relationships with the governing authorities in all regions. The Nippon Kayaku Group respects human rights in all its	5	Respect for human rights		•	•				•	
 business activities, and will not discriminate or tolerate any isappropriately behavior for reasons based on gender, age, nationality, non-relation, or disability. 	6	Prohibition of conflicts of interest					•		•	
The Nippon Kayaku Group will appropriately manage and 4. utilize the company's assets to improve the efficiency of	7	Appropriate protection and effective utilization of corporate assets					•			
its business activities and strive for continuous development. The Nippon Kayaku Group implements systematic crisis	8	Proactive efforts to improve operations			•	•	•			
 management in preparation for the actions of anti-social forces that threaten the lives of citizens and copporate activities, as well as for femorem, cyber affacts, natural clearly. 	9	Exclusion of anti-social forces					•			
as well as for femorers, cyber affacks, natural cleasters, and other events.	10	Thorough crisis response			•		•	•	•	
■ Relationship with the society		Code of Conduct for relationship with society								
The Nippen Kayaku Group respects the cultures, religions and traditi- 6., one of each country and region, works in harmony with society, and	11	Respect for cultures, religions, traditions, etc. in each country and region		•	•	•	•	•	•	
contributes to the development of society as a good corporate citizen. The Nippon Kayaku Group will disclose information on its	12	Good corporate citizenship							•	
 business activities to stakeholders in a timely and appropriate manner based on objective facts. We will also atrive to increase 	13	Interaction with local communities				•			•	
corporate value through constructive dialogue with stakeholders. In order to contribute to a sustainable society and the environment.	14	Timely and appropriate information disclosure					•	•	•	
the Nippon Kapaku Group strives to conduct its business activities 8, in harmony with the natural environment by constaintly taking into account the impact on the abole environment, not only complying	15	Coexistence with the environment				•				
with relevant laws and regulations, but also establishing its own voluntary standards.	16	Environmental protection initiatives				•				
■Information handling		Code of Conduct for information handling								
	17	Protection of corporate information					•			
The Nippon Kayaku Group will appropriately protect the information it possesses through its business activities and take all possible	18	Protecting personal information		•			•	•		
measures for information management. In addition, we recognize the value of information assets and respect the intellectual property	19	Appropriate use of information systems					•			
rights of others.	20	Prohibition of insider trading					•			
	21	Respect for the rights of others					•			
Relationship between the company and individuals	Г	Code of Conduct for relationships between the company and individuals								
The Nippon Kayaku Group complies with labor-related laws and regulations, ensures a safe and confortable working environment.	22	Maintenance of the working environment								
 regulations, ensures a safe and confination working environment, and respects the basic human rights, diversity, character, and individuality of individuals. 		Prohibition of harassment		•	•					
MRoles of top management and thorough adherence to this charter										
Those involved in the management of the Nippon Kayaku Group recognise that residing the spell of this charter is two own note and experiment of the spell of the charter is two own note and experiment to the spell of the spell			•							
cause, and work to prevent any recurrence.										

- > Relationship between the "Nippon Kayaku Group Charter of Conduct and Code of Conduct for business activities" and ISO 26000 ይ
- > Nippon Kayaku Group Basic Policy on Anti-Bribery 🔼

Raising Awareness about Compliance

The Nippon Kayaku Group provides training on compliance for its employees, and calls on each workplace to establish an action plan and carry out activities to raise awareness of compliance among them. The results of these activities are evaluated and are utilized in continuous efforts to further educate employees about the importance of compliance.

Compliance Month and Compliance Survey

Every October, which is designated Compliance Month, we conduct a compliance survey. Issues concerning the promotion of compliance are identified for each business site, and feedback is provided in the form of a report that includes recommendations for improvements. Each workplace uses this as a reference to formulate a compliance action plan for the following fiscal year, implementing the PDCA cycle to raise awareness.

In fiscal year 2015, we entered into a new contract with a survey analysis firm, and also shared objective feedback with each workplace, such as comparisons with other companies and improvement proposals, with recommendations for improvements to be made.

Compliance Training

The Nippon Kayaku Group holds domestic compliance education and training on different themes every year, and it also uses regular meetings at its business sites to conduct study groups and training based on case studies. The compliance training sessions held in fiscal 2020 addressed the topic of legislation on power harassment. Most training sessions at Nippon Kayaku take the form of e-learning so that every employee has the opportunity to take the programs being offered. For our affiliates, we offer training in the form of group training sessions.



Training scene in 2019



Raising Awareness at Overseas Group Companies

Nippon Kayaku's overseas group companies now account for almost half of the Group's sales and more than half of its employees. In particular, our seven Group companies in China have almost 1,000 employees, who all need to be trained on the KAYAKU spirit and compliance awareness. Every year, the general managers and ethics officers of our Chinese Group companies gather to hold the Ethics Officer Conference to report on compliance initiatives and issues at each company, and identify issues and problems and the steps to be taken.

Furthermore, the Company's Internal Control Management Division and the person in charge of legal affairs from KSC* collaborates to provide compliance training for local employees at each company. Going forward, we will take into account each country's situation and strengthen ties among departments so that we can initiate a more effective and efficient global compliance activities.



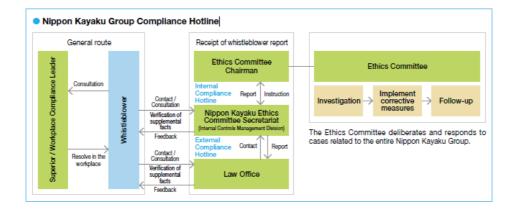
Training at Chinese Group companies



* KSC: Kayaku (Shanghai) Co., Ltd

The Nippon Kayaku Group's whistle-blower system

We have set up whistle-blower hotlines for employees both inside and outside the company. Through these hotlines we strive to quickly remedy situations and also prevent violations of laws, company rules and our code of business conduct before they occur. In addition, the staff at the whistle-blower hotlines follow the Nippon Kayaku Group Guidelines for Handling Whistle-blower Complaints so that whistle-blowers will not receive adverse treatment because they contacted the hotline and filed a complaint.



Number and nature of reports over the previous three years

In fiscal 2020, the hotline received 7 reports, but none of these incidents were serious enough to affect our business operations. With regard to these reports, we ascertained the facts or conducted investigations and then took corrective action when it was deemed necessary.

Going forward, we will take steps toward preventive action, early detection, and prevention of escalation of violations or damages by informing everyone about the existence and importance of the whistle-blower system.

Nature of reports	2018	2019	2020
Acts that damage the work environment (power harassment/sexual harassment, etc.)	4	8	6
Violations of company rules or etiquett	3	2	0

Nature of reports	2018	2019	2020
Labor/Management Relations	2	1	1
Others	0	0	0

Political donations

The following are the donations to political organizations for FY2017-FY2020.

2017	2018	2019	2020
1.15 million yen	1.15 million yen	1.18 million yen	1.13 million yen

Copyright © Nippon Kayaku Co.,Ltd. All Rights Reserved.



HOME > Sustainability > CSR Management > Risk Management



Risk Management

Identifying and controlling various risks is an important element of corporate governance. The Nippon Kayaku Group has a standing Risk Management Committee headed by an executive director who is appointed by the President. In normal times, this committee takes steps to prevent risks that could inflict serious damage on the management of the Company or its business activities or that could downgrade the Company's social reputation, while in times of crisis, it configures and manages our crisis management system, ranging from the first response to post–crisis damage repair efforts. The Risk Management Committee meets regularly (twice a year), as well as on an extraordinary basis when deemed necessary. In addition to its efforts to reduce risk in accordance with the Risk Management Action Plan, which was approved by the Risk Management Committee, it regularly holds a Risk Information Liaison Meeting to check on and monitor the status of each department's efforts to deal with risk events that have taken place.

Activities Promoting Risk Management

The Nippon Kayaku Group carries out Business Risk Control Activities and TOP5 Risk Control Activities as part of its Risk Management Action Plan.

Business Risk Control Activities are activities targeting risks that may affect business strategy and management at the nine (business) headquarters that form the basis of the business and management of the Nippon Kayaku Group. Risks are identified within each (business) headquarters, and countermeasures are examined and implemented. We will confirm whether the countermeasures have been implemented or not at the end of the fiscal year.

TOP5 Risk Control Activities cover activities at the Nippon Kayaku Group's domestic and overseas factories, research institutes, Group companies, pharmaceutical branches and sales offices. The "TOP5 risks" are those identified as the five most critical risks that may affect our business operations across these business sites. We will consider and implement countermeasures against the identified risks, and confirm the results at the end of the fiscal year.

Business Risk Control Activities are risk management activities that factor in the possibility of Company-wide risks that may affect management across the whole Company, whereas TOP5 Risk Control Activities take a bottom-up risk management approach aimed at reliably reducing key risks unique to each business site. These activities give a continual understanding of the trends and analysis of the risks present so that they can be used for management decisions, enabling the Risk Management Committee to evaluate the risk management process.

Information Security Initiatives

In accordance with the Code of Conduct for the Management of Business Information, which is set forth in the Nippon Kayaku Group Charter of Conduct and Code of Conduct, we aim to protect corporate information on a daily basis and are continuously pursuing information security initiatives. In addition, we have established the Information Security Subcommittee under the Risk Management Committee, which is working to reinforce information security throughout the Company by controlling and monitoring companywide information security on an ongoing basis and devising programs to prevent data leaks and the illegal acquisition of the Company's data by third parties. Based on our Corporate Information Management Regulations, which cover the entire company, persons appointed to be in charge of corporate information at each business site draft the regulations for their respective workplaces and also work to raise each and every employee's awareness about information security by conducting annual information security self-checks and periodic information security training sessions for all employees.

Initiatives taken in fiscal 2020 were meant to enlighten our employees through training in the communications and response procedures to be taken in the event of an information security incident, so that we can prevent tardy responses or response oversights. In fiscal 2020, there were no cases of infringement of customer privacy or of customer data being lost that resulted in a petition for redress of a grievance.

Risk Management Training

The Nippon Kayaku Group implements the Plan, Do, Check, Act (PDCA) cycle continuously so that it can minimize and raise awareness of risks. As part of these efforts, we conduct risk management training for all employees. Also, a separate risk management training session is organized for new hires, newly appointed managers, and Japanese expatriate employees being assigned overseas.

Risk Management System

We have established a "Risk Management Manual" and "BCP Manual" in preparation for risks that could have a serious impact on corporate activities.

The first version of the Risk Management Manual was created in FY 2000, so that various risks surrounding the Nippon Kayaku Group's business operations could be managed and addressed in a proper manner.

The Risk Management Manual has been through several revisions due to various situations faced since then, currently being version 4.1 which was updated in FY 2019.

The Nippon Kayaku Group's Business Continuity Plan Initiatives

We have conducted business continuity plan (BCP) training at the head office since FY 2012, utilizing the lessons learned from the Great East Japan Earthquake and tsunami that struck Japan on March 11, 2011. This section takes a closer look at our BCP initiatives.

Preparing BCP Manuals

The Nippon Kayaku Group has launched a cross-organizational BCP project whereby all of our domestic business groups and plants have compiled BCP Manuals based on our policy of restoring business within a given time frame. In addition, the Nippon Kayaku Group has begun preparing BCP manuals at overseas group companies in order to respond to global risks. In FY 2018, four Chinese subsidiaries established BCP manuals and put them into practice.

BCP Training

Ongoing BCP training is critical to putting the plans established in the BCP Manual into action promptly. We hold BCP training every year, attended by executive officers, including the president.

In fiscal 2020, we conducted a simulation of first response and follow-up response in an earthquake drill at the Fukuyama Plant and the Color Materials Division of the Functional Chemicals Group. In addition, the Agrochemicals Division conducted a simulation for a scenario where a manufacturing contractor suffered damaged from a typhoon.

Going forward, we will be holding more BCP drills based on various scenarios.





Fire and Disaster Prevention Activities

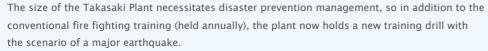


To be prepared for emergencies, all of the Nippon Kayaku Group's business sites and Group companies hold regular fire drills, disaster drills, BCP drills, and emergency communication drills. In fiscal 2020, some business establishments carried out more simplified group drills on paper in light of the COVID-19 Pandemic.

> FY 2020 Nippon Kayaku Group Disaster Prevention Training Activities Summary sheet 🔀

Takasaki Plant Fire and Disaster Prevention Activities

Since the Great Hanshin-Awaji Earthquake, increasing the ability to respond to large-scale disasters has become an important issue. Given this, the Fire Services Act was partially revised, and the Disaster Prevention Management System was newly established in accordance with the current Fire Prevention Management System.



Now, the plant holds a comprehensive fire prevention drill as part of fire prevention management during the spring, and a comprehensive disaster prevention training using the scenario of a major earthquake (seismic intensity of 6 upper) as part of its disaster prevention management in the fall each year.

All employees participate in both trainings, in which they assigned to teams with their designated roles, and practice evacuation, rescue, communications (using satellite phones), and protection measures.

The Takasaki Plant is surrounded by rivers and forests, which also exposes it to the risk of wild fires. With this in mind, the plant's firefighting brigade conducts fire extinguishing drills at the same time as those mentioned above, using the plant's own fire truck. On the day of the drills, all participants take part earnestly and the nearby fire chief visits to assess the drill every year. These activities make the training quite beneficial to all involved.

Also, fire drills using actual fire extinguishers are conducted as part of the annual safety training for new hires, and AED training is offered during Safety Week in October each year.

Furthermore, following the Great East Japan Earthquake, we have stocked up provisions of food rations (1,000 meals), drinking water and fuel (diesel and gasoline) in preparation for any emergency in the future.





Kayaku Safety Systems de Mexico, S.A. de C.V. (KSM) Disaster Prevention Training

Due to the products it handles and the environment around the factory, KSM is considered at high risk of fire. As such, disaster prevention measures are being taken on a daily basis to

prepare for the risk of fire.

At present, KSM has 205 fire extinguishers and 29 fire hydrants.

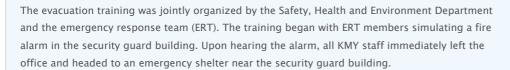
Disaster prevention drills were scaled down in 2020 due to the COVID-19 Pandemic. Nine employees participated in the disaster prevention drills which involved drills on putting out fires using fire extinguishers.





Kayaku Safety Systems Malaysia Sdn. Bhd. (KMY) Evacuation Training

KMY held its annual evacuation training on March 9, 2020. This training was designed to be compliant with local fire safety requirements. The purpose of this training is to help all KMY staff understand emergency response procedures in case of an emergency during normal everyday work. On the day, supervisors also checked to see if there were any problems with the procedures.



All KMY staff, as well as cafeteria workers and other external contractors congregated at the emergency shelter. Leaders counted the number of people present and reported to the ERT members on duty. All of KMY's staff cooperated very well and the training finished smoothly without any problems.





HOME > Sustainability > CSR Management > The Nippon Kayaku Group's Commitment to CSR



The Nippon Kayaku Group's Commitment to CSR

The Nippon Kayaku Group has business operations in twelve countries around the world, comprising a total of 35 group companies, 13 in Japan and 22 overseas. This section presents the unified CSR commitment of the 31 consolidated group companies.

```
Kayaku Safety Systems Europe a.s.

Euro Nippon Kayaku GmbH

Dejima Tech B.V.

RaySpec Ltd

United Kingdom

Netherlands

Czech Republic

Nippon Kayaku Korea

Thailand

Taiwan

Nippon Kayaku Korea

Thailand

Taiwan

Nippon Kayaku Korea

Thailand

Taiwan

Nippon Kayaku Korea

Thailand

Taiwan Nippon

Kayaku Korea

Thailand

Taiwan Nippon

Kayaku Co., Ltd.

Malaysia

Kayaku Safety Systems Malaysia Sdn.Bhd.

Kayaku Safety Systems Malaysia Sdn.Bhd.

Kayaku Safety Systems de Mexico, S.A. de C.V.

Kayaku Safety Systems de Mexico, S.A. de C.V.
```

Japan Functional Chemicals Group Hitoshi Sasakawa, CEO & Representative Director & President, Polatechno Co., Ltd.

On October 1, 2020, Polatechno embarked on a new start as the Nippon Kayaku Joetsu Plant. Carrying forward our specialization as a "Light Control Business," we will expand our business with the aim of offering distinctive products that assist people worldwide in many scenarios.

At the Joetsu Plant, we recycle water, recycle and reuse liquids and other wastes, and detoxify exhaust gas, among our actions aimed at realizing a better global environment.

We will continue producing distinctive products at this energy-saving and eco-friendly plant to keep contributing to society.



Top of Page1

Japan Functional Chemicals Group Hirotsugu Tsubouchi, Representative Director & President, NIKKA FINE TECHNO Co., Ltd.

Nikka Fine Techno is the only domestic trading company in the Nippon Kayaku Group. We strive to be a helpful trading company that immediately accommodates our customers' wishes, and we market not only the Nippon Kayaku Group's products but also the best goods and materials carefully chosen from a broad range of available products in the market. So that our customers will feel comfortable using our products, we market only goods that have passed checks that are stricter than those required by safety, quality, and legal standards. This is why our employees work together as a team in pursuing corporate activities according to the Company's Charter of Conduct and Code of Conduct. Our goal is to realize the KAYAKU



Japan Functional Chemicals Group Kazuki Uchida, Representative Director & President, Kowa Sangyo Co., Ltd.

Kowa Sangyo performs contract manufacturing work at Nippon Kayaku's Asa Plant. Specifically, our main safety and health initiatives entail using interactive training tools to further improve employee education with first–hands experiences or simulations of dangerous situations. We also believe that we can help provide some help in the event of an emergency be offering training in first aid and AED use and by supporting local fire departments.

The Wasshoi! Kayaku Festival that we co-sponsor with the Asa Plant every November has become an annual community event. We hope that all of our employees will be able to continue contributing to the community through their corporate activities.



Top of Paget

Japan Functional Chemicals Group Keitaro Tada, CEO, Teikoku Taping System Co., Ltd.

Teikoku Taping System (TTS), which joined the Nippon Kayaku Group on April 1, 2021, is a company that designs, develops, manufactures, markets, and maintains semiconductor manufacturing equipment. The TTS Values contained in our Corporate Philosophy clearly express what sort of company we should strive to be, the goals we should tackle, and our basic concepts of management. Maintaining an awareness of CSR activities, we will tackle our everyday work and all of our activities through these TTS Values.



Top of Paget

Japan Pharmaceuticals Group Tomomasa Tsuchibuchi, Representative Director & President, NIPPONKAYAKU FOOD TECHNO CO., LTD.

NIPPONKAYAKU FOOD TECHNO CO., LTD. manufactures and sells food preservatives and other products. As part of our CSR-centered management, we aim to contribute to society through the provision of highly valuable services and excellent products that emphasize food safety and healthy diets. As a member of the Nippon Kayaku Group, each and every employee abides by the Nippon Kayaku Group Charter of Conduct and Code of Conduct, following an esteemed set of ethical values with safe operations, compliance and environmental consciousness receiving top priority to realize the KAYAKU spirit. With this stance, we are working to develop new fields in the food industry, and live up to the trust and expectations of our customers.



Top of Page1

Japan Pharmaceuticals Business Daisuke Funagoshi, Representative Director & President, Gunnan Sangyo Co., Ltd.

Gunnan Sangyo provides the security, landscaping and janitorial services for the Takasaki Plant, and is responsible for the property management of Hisho, the training center for the employees of the Nippon Kayaku Group. We are working to carry out CSR activities by providing a more comfortable environment for local residents, the people that work at Takasaki Plant and the training center.



Top of Page1

Japan Pharmaceuticals Business Koichi Ono, Representative Director & President, Tumor Diagnosis Support Co., Ltd.

The Tumor Diagnosis in Tumor Diagnosis Support stands for tumor diagnosis. We support the diagnosis of pathological tissue found in mammary glands. Today, breast cancer has the highest prevalence rate of any cancer for women. However, breast cancer is believed to be an extremely difficult type of cancer to diagnose accurately with pathological tissue. Without the right diagnosis, a patient will not be able to receive the most effective treatment. As part of The Nippon Kayaku Group's Commitment to CSR management, Tumor Diagnosis Support is working day in and day out to contribute to an environment where breast cancer patients can receive treatment with the best possible outcome.



Top of Page1

Japan Other Businesses Nobuhisa Nakano, Representative Director & President, Wako Toshi Kaihatsu Co., Ltd.

Wako Toshi Kaihatsu engages in the real estate leasing business. We own land and a six-story building located in front of Wakoshi Station in Saitama Prefecture, which is leased to retailer Itoyokado's Wako store. We also lease two company housing buildings and one employee dormitory to Nippon Kayaku, as well as the building used for Asunaro House, a facility for supporting families of children with intractable diseases such as pediatric cancer, or who require bone marrow transplants and are being treated at specialist institutions. Our facilities, including Asunaro House, are used by a large number of people, and this is why we strive to continually update and upgrade each to ensure user safety and comfort.



Top of Page1

Japan Other Businesses Naoki Shiota, Representative Director & President, JHMS Co., Ltd.

Japan Human Resources Medical Science Research Institute (JHMS) is active as a company providing comprehensive business support solutions, particularly in healthcare-related fields. We are developing various contract businesses within the Nippon Kayaku Tokyo business zone, including human resource development, worker dispatch, and medical statistics, and have departments that employ people with disabilities. We will continue striving to be a workplace where all employees can exert their capabilities and contribute to society.



Top of Page1

Japan Other Businesses Tadayuki Kiyoyanagi, Representative Director & President, Okiura Golf Center Co., Ltd.

Okiura Golf Center was established in 1985 and began operations in 1986 with the goal of utilizing idle land. We offer one of the largest golf practice facilities in Hiroshima Prefecture, featuring a 250 yard natural grass driving range with 72 tee boxes, along with a putting green, chipping green, sand trap and even a restaurant. The facility is surrounded by trees we have planted with the environment in mind. We are open from early in the morning to late at night and offer a host of golf lessons taught by professionals, and our facilities and services have earned us a strong reputation among customers. We promote CSR management to ensure that customers of all ages, from children to seniors, can enjoy using our facilities with peace of mind, and utilize our facilities as a venue for socializing with other members of the local community.



Top of Paget

Japan Other Businesses

Hisayoshi Nakajima, Representative Director & President, Nishiminato Driving School Co., Ltd.

Nishiminato Driving School supports the creation of a safe and secure automotive society by training safety-conscious, considerate drivers at our driver education facilities for the acquisition of many types of car, truck, motorcycle, large vehicle, and towing licenses. In addition to offering beginning driver education, we play an active role as a contract organization providing courses for seniors. We also conduct outreach traffic safety programs for schools, companies, and other organizations while serving as a community traffic safety education center. With the support and endorsement of our community, we will practice CSR management as a comprehensive institute for traffic safety education that also tackles energy conservation and global warming countermeasures.



Top of Page1

United Kingdom Functional Chemicals Group Peter Smith, Managing Director, RaySpec Ltd.

RaySpec Ltd is committed to conducting business in a fair and just manner, fully respecting its legal obligations regarding equal opportunities and non-discrimination, and providing a safe and healthy environment for its employees. Environmental impact is considered for all new product developments and the company actively promotes energy saving through both investments and daily activities. RaySpec actively promotes engagement with charitable organizations and supports fund raising initiatives.



RaySpec's products contribute to the safety and well-being of people around the world by utilizing systems which can measure and restrict the use of hazardous substances, determine material failure modes and check product quality.

Top of Page1

Netherlands Functional Chemicals Group Henk Kalsbeek, Managing Director, Dejima Tech B.V.

Dejima aims to conduct its business in a socially responsible and ethical manner, to contribute to the community in which it operates, and to respect the needs of its employees, shareholders, customers, suppliers, regulators and other stakeholders. Dejima is committed to maintaining a healthy and safe work environment that ensures tolerance, respect and dignity for all its employees. Dejima is also committed to providing equal opportunity in all aspects of employment, and will not engage in or tolerate unlawful workplace conduct, including discrimination, intimidation, or harassment. Dejima recognizes that pollution prevention, biodiversity and resource conservation are key to a sustainable environment, and will effectively integrate these concepts into its business decision–making. All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.



Top of Page1

Germany Functional Chemicals Group Naoya Miyachi, Managing Director, Euro Nippon Kayaku GmbH

Euro Nippon Kayaku sells functional chemical products in the European market. Europe has led the world in calling for carbon neutrality by 2050 and is implementing advanced initiatives toward that end. The new European Green Deal growth strategy has been worked out, and in industry, too, a movement to establish new business models is accelerating. All of our employees will work to raise awareness of the KAYAKU spirit and to provide businesses and products that contribute to greening.



Top of Page↑

Kayaku Safety Systems Europe a.s. manufactures and sells safety components for automobiles. The products we supply serve as important safety related components that help to save the lives of passengers. With safety being our utmost concern, we provide the market with high quality products. We aim to contribute to the community through implementing CSR-centered management, practicing environmental awareness, improving the quality of life of employees, and organizing charity activities.



Top of Page1

United States Functional Chemicals Group Shigeyuki Kawamura, CEO & President, MOXTEK, Inc.

MOXTEK makes contributions to society through utilizing the latest nano optical technology and x-ray technology in visual devices and analysis equipment.

As part of our CSR activities, we support programs in the local community through active participation in the Homeless Assistance Program. We strive to continue operating as a well rooted local business in the community.



Top of Page1

United States Functional Chemicals Group · Safety Systems Group Tsuneharu Hiramatsu, President, NIPPON KAYAKU AMERICA, INC.

Nippon Kayaku America is responsible for the sale of chemicals that contribute to the efficient use of energy and resources and sales promotion and technical support for all automobile safety components in North America. As an enterprise that handles chemical products, the company is diligent in observing laws and regulations and in managing product quality, and the products it sells take safety and the environment into consideration. To accomplish the SDGs, it is also promoting initiatives that for proposing to its customers products and services that contribute to solving social issues.



Top of Page

United States Functional Chemicals Group
J. Cole Jr., President & CEO Jeremiah, KAYAKU Advanced Materials Inc.

KAYAKU Advanced Materials is committed to its corporate responsibilities for the welfare of our employees and to creating economic value for the community, environment, and stakeholders. We are dedicated to helping our customers succeed through our innovative products and technologies. In addition, we ensure that our business success is in line with KAYAKU Advanced Materials's high ethical principles and societal expectations.



Top of Paget

Mexico Safety Systems Group Susumu Tokutake, Director General, Kayaku Safety Systems de Mexico, S.A. de C.V.

Since its establishment in May 2007, Kayaku Safety Systems de Mexico (KSM) has worked to instill the KAYAKU spirit in its employees and to implement CSR-centered management. KSM's key focus under the COVID-19 pandemic has been to ensure the safety and health of the employees who are its stakeholders. By stably providing high-quality KSM automotive safety components to countries around the world and by communicating to our many stakeholders how we protect human lives from automobile accidents, KSM aims to continue growing as a company that is recognized globally as a member of the Nippon Kayaku Group.



Top of Paget

China Functional Chemicals Group Hiroyuki Emori, General Manager, Wuxi Polatechno Optics Co., Ltd.

Wuxi Polatechno Optics (WPLC) undertakes marketing activities and post-processing in China for liquid crystal projector components and automobile polarized films. In China, too, community-rooted CSR activities involving environmental protection, social contribution, and other topics are growing in importance. It is vital that we forge ahead in creating environments that allow all employees to work with peace of mind, following the Charter of Conduct and Code of Conduct as signposts for achieving the KAYAKU spirit.



Top of Page1

China Functional Chemicals Group Kazuhiko Ishii, General Manager, KAYAKU CHEMICAL (WUXI) CO., LTD.

China is faced with many environmental issues and other problems associated with its rapid economic growth, which has heightened the challenging nature of the business environment here. CSR management has become more important in terms of continually growing our business in this environment. We find it extremely important for each and every one of our employees to take action based on our corporate principles and behavioral standards in order to practice CSR management for the realization of KAYAKU spirit. We will continue to contribute to society by continually supplying our customers with the products they need, at the highest quality in many aspects through actions based on individual ethical values, instead of what others are doing, while respecting the local culture, history and business practices.



Top of Paget

China Functional Chemicals Group Yoshiki Akatani, General Manager, Wuxi Advanced Kayaku Chemical Co., Ltd.

Wuxi Advanced Kayaku Chemical manufactures pigments for textiles, paper, and inkjet inks under a management policy of people first, environmental protection, and the manufacturing of products that satisfy customers. Environmental and safety demands are becoming increasingly strict in China. With the health of employees and safe operations as our base and with an aim of achieving the KAYAKU spirit, we will move ahead with energy saving and effluent/waste reduction in our production processes. At the same time, we will increase our products that lead to energy saving, resource saving, and environmental impact reduction for our customers, and will work to contribute as much we can to a sustainable society.



Top of Page1

China Functional Chemicals Group Ryo Fujimori, General Manager Shanghai, KAYAKU International Trading Co., Ltd.

Shanghai KAYAKU International Trading (SKT) sells dyes, inks for industrial ink jet printers and heat-sensitive developing agents to the China and ASEAN markets. Environmental and energy conservation issues in these regions will only continue to grow in importance moving forward. In particular, environmental consideration and energy efficiency are very important issues facing customers who dye textiles. We are actively rolling out dyes that take about half the normal time to complete, which contributes to our customers' production efficiency, energy conservation and reduction in wastewater.



Top of Page↑

China Safety Systems Group Fumihiro Kamiwatari, General Manager, Kayaku Safety Systems (Huzhou) Co., Ltd.

As Kayaku Safety Systems (Huzhou), we have constructed a five-point corporate vision which consists of "safety first, best quality, technical advance, employee development and focus on market". We have been



carrying out the "KAYAKU spirit" through our IATF16969 (for quality), ISO14001 (for environment) and ISO45001 (for occupational health and safety) management systems.

Furthermore, for the purpose of improving our employee's awareness and skills about CSR management, we have established the education and training department as well as a training ground named as Dojo in 2018 to level up our employees positively.

By manufacturing and selling automobile safety parts, all of our employees are striving to contribute to the improvement of safety in automotive society in China and to bring about sustainable synergistic development of both communities and society.

Top of Page1

China Other Businesses Masayuki Arakawa, General Manager, Kayaku (Shanghai) Co., Ltd

Kayaku (Shanghai) Co., Ltd. implements activities to mitigate management risks of Nippon Kayaku Group companies in China. We implement regular compliance training to ensure the employees of our group companies are cognizant of correct compliance information while carrying out their daily duties. In addition, we also provide accurate information regarding financial and legal matters to promote appropriate and efficient business operations.



Top of Page1

South Korea Functional Chemicals Group Naoki Shiroiwa, Representative Director & President, Nippon Kayaku Korea Co., Ltd.

Nippon Kayaku Korea imports and sells Nippon Kayaku's functional materials and pigment materials in Korea, and exports pigment material and safety-related raw materials from suppliers in Korea to Japan and overseas group companies. Laws in Korea that govern the import and sales of chemical materials into the country, namely the Act on the Registration, Evaluation, etc. of Chemicals (K–Reach) and the Chemicals Control Act, are being made more strict year by year, while the country's labor laws, corresponding to Japan's Labor Standards Act, are undergoing revision in the direction of further protection of workers. To sustainably develop our business under these circumstances, we will work to make all employees constantly aware of CSR management and to contribute to all of our stakeholders in every respect.



Top of Page1

Taiwan Pharmaceuticals Group • Functional Chemicals Group Daisuke Komagata, General Manager, Taiwan Nippon Kayaku Co., Ltd.

Taiwan Nippon Kayaku markets products from, and carries out market research for the Pharmaceuticals Group and Functional Chemicals Group. Currently, Taiwan Nippon Kayaku is carrying out daily activities to realize the KAYAKU spirit. Our commitments include: (1) correctly understanding customer needs, and striving to improve the quality of our daily work and convey those practices to related departments; (2) contributing to cultural and economic exchange by actively participating in and supporting activities and events of the Interchange

Association of Japan and the Taiwan Chamber of Commerce; and (3) displaying corporate vision boards in central locations of our office to constantly raise awareness of the KAYAKU spirit, and carrying a card at all times that contains our corporate vision. Moving forward, we will continue to proactively carry out CSR activities for the benefit of the local community.



Top of Page1

Malaysia Safety Systems Group Yasushi Yoshida, Managing Director, Kayaku Safety Systems Malaysia Sdn. Bhd. Kayaku Safety Systems Malaysia was founded in Malaysia at the end of 2012 to manufacture and market automotive safety components. Our product line-up encompasses a broad range that includes inflators, MGGs, and glass-to-metal-sealed squibs. We are working to imbue the company with the KAYAKU spirit, the Nippon Kayaku Group's corporate vision, and to put CSR management into practice. Putting safety first, we will continue providing our customers with quality products that will meet their satisfaction aims to be useful to society by contributing to the reduction of car accident fatalities in its region through its safety components.



Top of Page↑

Thailand Functional Chemicals Group
Tetsuya Tomita, Managing Director, NIPPON KAYAKU (THAILAND) CO., LTD.

NIPPON KAYAKU (THAILAND) CO., LTD. is a new company, recently established in 2018. Its primary business focuses on the sale of products from the Functional Chemicals Business in ASEAN and the South Asian region, procurement of raw materials and intermediates, as well as surveys of related markets.

Together with all of our employees, we will embrace the KAYAKU spirit and make great contributions to ASEAN and local communities in Southern Asia through the observance of compliance, and provision of safer materials and materials that lead to energy saving.

Top of Page1



HOME > Sustainability > CSR Activities That Fulfill Our Environmental Responsibilities > Environment/Health/Safety/Quality Management System



Environment/Health/Safety/Quality Management System

We prioritize health, safety and environmental matters in our management of the company as well as strive to reduce our impact on the environment through the reduction of environmental emissions across the entire Nippon Kayaku Group.

The Declaration on Environment, Health and Safety, and Quality

The Nippon Kayaku Group, under the spirit of its CSR philosophy and Responsible Care*, has formulated The Declaration on Environment, Health and Safety, and Quality, in order to maintain and enhance its environmental protection, health and safety and quality assurance practices. We are also implementing this declaration using organized activities.

The Declaration on Environment, Health and Safety, and Quality

Enacted November 7, 1995 Amended May 22, 2017

The Nippon Kayaku Group, under its corporate motto of "KAYAKU spirit", which calls for continuously providing society with the best products through ceaseless progress and the combined forces of our consciences, we will contribute to the realization of a sustainable society that safeguards the life and health of consumers, and supports a comfortable life.

Fundamental Policies

- We will strive to maintain and improve the environment, people's health and safety across the entire product lifecycle, from R&D to production, distribution, sales, recycling, and disposal.
- 2. We will strive to conserve the environment by introducing and developing technologies that are useful toward reducing waste, carrying out the appropriate disposal of waste, conserving resources, conserving energy, and implementing global warming prevention measures.
- We will actively provide business partners with information needed for the safe usage and handling of our products and for conserving the environment.
- We will enhance the quality of not only products, but operating processes as well, and also work to enhance customer satisfaction.
- We will heighten employee knowledge and skills through education and training and achieve our goal of zero pollution, zero injuries, zero accidents and enhanced quality.
- We will disclose information so that stakeholders correctly understand our business activities and also strive to engage in dialogue with local communities and government authorities.

June 25, 2019

President & Representative Director Nippon Kayaku Co., Ltd.

* Responsible Care: A voluntary initiative under which companies that manufacture or handle chemical substances actively work on ensuring an operation that is aware of the environment, safety and health throughout its entire value-chain; from product development through production, sales, consumption, and disposal of chemical substances. The initiative began in Canada in 1985, and has now spread to encompass activities at companies in over 50 countries around the world.

The Nippon Kayaku Group has been developing high-quality chemical technology based products which are safely produced in the environment-friendly production equipment, and supplied to customers with maintaining and improving their quality.

In terms of environment, we will steadily promote reducing manufacturing processes and energy waste, and tackle the issues raised in the "Sustainable Development Goals (SDGs)".

In terms of safety, we systematically carry out employee education and training. We will anticipate risks in daily work, and continue to supply our products.

In terms of hygiene and health, we will take various measures to maintain and improve the health of each employee.

We believe that the Nippon Kayaku Group's social mission is to keep supplying high-quality products, that is the "best products", safely produced by the physically and mentally healthy employees.

Nippon Kayaku Group Responsible Care

The every Nippon Kayaku Group company hereby commits to "Prioritize Safety Above All" in our efforts. And we agreed not only complying with related environmental and safety laws in Japan and Overseas, but also preventing environmental and safety accidents. Furthermore we ensured they can carry out activities together under The Declaration on Environment, Health and Safety, and Quality, with the ultimate goal of realizing the KAYAKU spirit.

The following "Nippon Kayaku Group Responsible Care Policy" has been created, based on a policy that should be continued from fiscal 2019, with a special focus on a review of our environment, health and safety diagnostics with an emphasis on a risk assessment of machine safety, and a review of health and safety activities with an emphasis on revealing unsafe actions through 30-second patrols * and fixed-point observations. The policy was also created with a focus on decarbonization to achieve the newly formulated 2030 mid-term environmental targets, and confirmed throughout the Group. The Nippon Kayaku Group will continue to promote Responsible Care activities based on this policy.

* 30-second patrols:Patrol method of observing behavior for about 30 seconds.

Nippon Kayaku Group Responsible Care Policy Statement

The Nippon Kayaku Group companies hereby commit to "Prioritize Safety Above All" in our efforts, and have all employees work on our business activities in accordance with the spirit of Responsible Care and the Fundamental Policies stated in "The Declaration on Environment, Health and Safety, and Quality."

Each group company shall work towards meeting their goals, set in accordance with their specific needs, status and country of location.

1)Promoting initiatives for "Zero Accidents, Zero Injuries"

- · Zero serious accidents or disasters
- · Zero serious environmental accidents or disasters
- · Zero serious traffic accidents
- To achieve the above goals, we will review diagnostic methods with a focus on a risk assessment of machine safety, strengthen 30-second patrols and promote fixed-point observation.

2 Improving Health and Safety in the Workplace

- Improve evaluation of the Responsible Care progress confirmation table
- · Strengthen risk assessment of chemical substances on the premise of revisions to the Industrial Safety and Health Act
- · Understand and improve high-stress workplaces
- · Maintain status as a White 500 company (large enterprise category)
- · Improve incident command system and information acquisition in the event of a disaster

3 Promoting Activities to Achieve Environmental Targets

- · Promote energy conservation and global warming countermeasures (promote MFCA projects and rollout across the Company)
- Examine measures and act to achieve environmental targets for fiscal 2030
- · Rollout company-wide risks and opportunities on climate change to all plants

Company-wide System for Managing Environment, Health and Safety, and Quality Assurance

The Nippon Kayaku Group takes part in organized activities at all of its sites and certain Group companies including overseas plants to ensure employees are aware of the environment, health and safety, and quality assurance as well as to maintain and improve quality assurance. These activities revolve around the Environment, Health and Safety, and Quality Assurance Management Committee, which is led by the President of Nippon Kayaku.

> Structure of Environment, Health and Safety, and Quality Assurance related Functions throughout the Company 🕻



Management Structure at Our Business Sites

Each of our business sites has a committee on the health and safety or the environment, health and safety headed by the head of that particular site. In addition, as a subordinate body, each business site also has a committee for promoting health and safety that consists of members representing each of the site's workplaces. Matters discussed by the Health and Safety Committee or the Environment, Health and Safety Committee are shared with all employees at roundtable meetings organized by the Health and Safety Promotion Committee. Conversely, matters discussed at roundtable meetings and by the Health and Safety Promotion Committee are communicated back to the Health and Safety Committee or the Environment, Health and Safety Committee as employee feedback.

Each business site's quality assurance (management) department leads Quality (Assurance) Committee meetings on a regular basis to check raw materials handled at each business site, examine customer complaints or quality issues concerning products made at that particular site, and deliberate on how to eliminate such complaints and quality issues. The committee also debates quality issues pertaining to new products, modified products and existing products to ensure that quality is constantly improved.



The Nippon Kayaku Group has moved forward with acquiring ISO14001 certification in order to develop, manufacture and provide eco-friendly products. We started acquiring ISO14001 environmental management system certification in 1998 with all seven Nippon Kayaku plants having obtained certification. Group companies, including those outside of Japan, are also considering obtaining this certification.

Environmental Management System Certified Business Sites

Workplace	ISO14001
Fukuyama Plant	April 1999
Asa Plant	Sept. 1998
Tokyo Plant	Dec. 1998
Joetsu Plant (including distribution center)	Aug. 2002
Takasaki Plant	Jan. 2000
Himeji Plant	March. 1993
Kashima Plant	Aug. 2002
KAYAKU CHEMICAL (WUXI) CO., LTD.	Aug. 2006
Wuxi Advanced Kayaku Chemical Co., Ltd.	July 2007
Wuxi Polatechno Optics Co., Ltd	April 2006
Kayaku Safety Systems Europe a.s.	Dec. 2002
Kayaku Safety Systems (Huzhou) Co., Ltd.	Jun. 2016

Quality Management System Authorization Status

The Nippon Kayaku Group has moved forward with acquiring certification for international quality assurance standards in order to provide and develop products and services of superior quality.

With respect to quality management system ISO 9001, which is an international standard for quality assurance, we began acquiring ISO9001 quality assurance system certification starting with our plants in 1995 and later expanded this scope to include business divisions, R&D departments, and Group companies outside of Japan.

Our overseas Group companies involved in the auto industry are working on obtaining ISO/TS 16949 certification.

In the Pharmaceuticals Group, which includes the Takasaki Plant and the Pharmaceutical Research Laboratories, we are working to strengthen our quality assurance system and have acquired integrated certification for ISO 9001 and for ISO 13485, which is a quality assurance management system standard for medical devices and in vitro diagnostics.

Also, the Safety Systems Group, which includes our Himeji Plant and the Safety Systems Development Laboratories, has acquired IATF 16949 certification, which is an international quality management system standard for the automotive industry created by the International Automotive Task Force (IATF). Our automotive-related overseas group companies have also acquired IATF 16949 in their quest to provide higher-quality products.

Quality assurance Management System Certified Business Sites

Workplace	●ISO9001 ■ISO13485 ▲IATF16949
Fukuyama Plant	•
Asa Plant	•
Tokyo Plant	•
Functional Chemicals Group	
Functional Chemicals R&D	•
Taiwan Nippon Kayaku Co., Ltd.	
Takasaki Plant	
Pharmaceuticals Business	• =
Pharmaceuticals R&D	
Himeji Plant	
Safety Systems Group	A
SSD R&D	
Kashima Plant	•
Agrochemicals Business	•
Agrochemicals Group	•
Joetsu Plant (formerly Polatechno Co., Ltd.)	•
Wuxi Polatechno Optics Co., Ltd.	•
MOXTEK,Inc.	•
Dejima Optical Films B.V.	•
RaySpec Ltd.	•
KAYAKU Advanced Materials Inc.	•
Wuxi Advanced Kayaku Chemical Co., Ltd.	•
KAYAKU CHEMICAL (WUXI) CO., Ltd.	•
NIPPON KAYAKU FOOD TECHNO CO., LTD.	•
Kayaku Safety Systems Europe a.s.	A
Kayaku Safety Systems (Huzhou) Co., Ltd.	A
Kayaku Safety Systems de Mexico, S.A. de C.V.	A
Kayaku Safety Systems Malaysia Sdn. Bhd.	A

Kayaku Safety Systems de Mexico, S.A. de C.V. (KSM) Obtained IATF16949 quality management certification for the automotive industry

In June 2018, KSM Quality Management System received an external audit by LRQA* Certification Team according to ISO 9001:2015 and IATF 16949:2016 requirements, and we obtained the recommendation for the IATF Certificate.

To keep this certificate we have to take periodic audits by LRQA. Maintaining this certification endorse the commitments of KSM; providing high quality products through safety, high quality, increasing customer satisfactions and continuous improvements.

Achieving this certification is possible due to dedication, teamwork and commitment of KSM collaborators.

* LRQA – third certification party for IATF certificate.



IATF 16949Certificate



GMP Authorization Status

The Takasaki Plant has obtained manufacturing approval under the Ministerial Ordinance on Standards for Manufacturing Control and Quality Control for Drugs and Quasi-drugs (GMP ordinance) and has obtained accreditation from the United States and Europe (EU).



Workplace	Main governments
Takasaki Plant	Japan,USA,Europe,Canada,Brazil

SECTION We will also with a GMP: A Japanese standard issued by the Ministry of Health and Welfare as a ministerial ordinance in 1980. Stipulates production control and compliance standards to ensure supply of high quality pharmaceutical and medical products.

Response to environmental regulations

To comply with environmental laws and regulations, the Nippon Kayaku Group acts in response to all the various environmental laws and regulations, gives training to employees, and provides information on hazardous substances with the aim of maintaining zero legal and social problems in the life cycle from product research and development to disposal after use.

In fiscal 2020 also, the Nippon Kayaku Group did not violate any environmental laws or regulations.

Dealing with the Global Laws and Regulations on Chemical Products

The Functional Chemicals Group provides both domestic and overseas users with specialty industrial—use chemical products that take safety, quality, and the environment into account. As laws addressing the quality of chemical products are being developed and strengthened throughout the world, it is becoming increasingly important for the Nippon Kayaku Group to conduct its business in compliance with these laws and to be able to provide accurate information through our supply chain on the chemical substances in our products.

Chemical Management System

The Chemical Management Department, which is part of the Quality Assurance Division, oversees and facilitates the Functional Chemicals Group's management of chemical substances. Its main tasks include (1) dealing with chemical substance registration systems in Japan and overseas, (2) keeping abreast of developments in each country's laws and regulations regarding chemicals, making proposals on how to deal with them, and informing and giving advice to the relevant departments, and (3) management of products' safety data sheets (SDS)* and product labeling.

* SDS: Safety Data Sheet. A document that lists information about the hazards and toxicity of chemical substances that is given to another business when the company is transferring (or furnishing) chemicals or a product that contains chemicals

Education and Assistance

Researchers involved in development and other group members involved in product sales need to possess correct knowledge about the laws and regulations on chemicals in the countries and regions where our products are sold. In fiscal 2019, we held study sessions with guest lecturers on laws and regulations concerning chemicals in China, South Korea, and Taiwan. A total of 75 people attended. In addition, since 2017, we have been operating an in-house "chemical management portal site" as a means of supporting our increasingly complex chemical management work. The site carries simple explanations and up-to-date information on various countries' chemical laws and regulations, ways to research lists of chemical laws and regulations, and cases of dealing with these laws and regulations. We plan to enhance the site so that it can respond to regulatory changes and contribute to our collective experience.

Providing Hazard and Toxicity Information in Line with the GHS

As each country adopts the GHS,* we need to issue an SDS in each local language and attach it to our product labels in accordance with local laws and regulations. The Functional Chemicals Group operates an SDS production system (3E generate), which contains a wealth of translations, regulatory data for each country, and data on physical properties and toxicity, so it can print whichever SDS complies with the local laws and regulations for attachment to the product's GHS label. Also, since the Japan Industrial Standards (JIS) were amended in 2019, we are in the middle of a three-year transition period for changing over to new versions of the SDS and product labels that will comply with the new JIS.

* GHS: Globally Harmonized System of Classification and Labeling of Chemicals

Measures to Reduce Risk in the Manufacture and Handling of Chemicals

conduct risk assessments on the manufacture and handling of chemical substances. We are therefore performing risk assessments and implementing measures to reduce risk using a proprietary safety inspection system for new or revised production operations that handle substances mandated under this law or other hazardous or toxic substances.

The GHS label is attached at the site that handles the chemical, so that the users will be aware of the hazards and toxicity of any chemicals that they could be exposed to.



We are ensuring the users will be aware of the hazards and toxicity of the chemicals that they could be exposed



HOME > Sustainability > CSR Activities That Fulfill Our Environmental Responsibilities > Initiatives for Environmental Protection



Initiatives for Environmental Protection

Nippon Kayaku is committed to achieving a balance between the efficiency of production and reducing its impacts on the environment. For this reason, we consider environmentally friendly management to be an important task. We are now striving to achieve the various environmental targets we have set.

We are working to improve facilities and treatment processes in order to use energy and exhaust gas including green house gas emissions more efficiently and to lower the amount of substances released from effluent and waste that impact the environment. We have added some disclosure items according to GRI (Global Reporting Initiative) this year.

Promotion of Environmental Protection Activities

Nippon Kayaku has established specific numerical targets as part of its mid-term environmental targets ended in fiscal 2020. We have now further formulated mid-term environmental targets up to fiscal 2030 with a focus on combating climate change. To achieve these targets, we will continue to carry out activities such as reinforcing our responses to natural disasters, developing and improving wastewater treatment technologies, and countermeasures for global warming and energy conservation.

Results of the Fiscal 2020 Mid-Term Environmental Targets

Nippon Kayaku established mid-term environmental targets for fiscal 2011 to fiscal 2020 that consisted of six items covering three

Fiscal 2020 was the final year of our mid-term environmental targets. The mid-term environmental targets were reported only for Nippon Kayaku and not the Joetsu Plant.

As a result of efforts at each business site to achieve the mid-term environmental targets, we achieved targets in all six items in the three areas of the mid-term environmental targets by fiscal 2020.

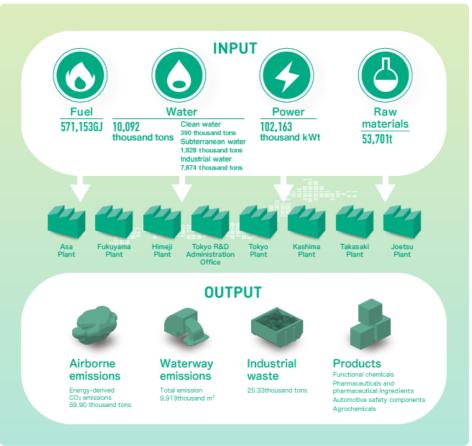
Final Results for Mid-Term Environmental Targets up to FY2020

	Prevention of Global warming		Prevention of Global warming		Reduction of waste			
	Energy Derived CO ₂ Emission* ₁ (Production Divisions+ Operation Divisions)	VOC*2 COD*3 Emissions Emissions		Total waste produced	Recycling Rate	Zero Emission Rate*4		
Fiscal 2020 results	61.3 thousand tons	33.3 tons	122.6 tons	22,732 tons	83.7% Displacement outside of the factory 20,080 tons of which final disposal volume 870 tons	1.4%		
Target	79.5	Under 42 tons	Under 150tons	23,500 _{tons}	More than 80%	3.0%		
Target comparison	18.2 thousand ton decrease (25.9% decrease)	8.7 ton decrease (20.7% decrease)	27.4 ton decrease (18.3% decrease)	768 ton decrease (3.3% decrease)	3.7% rise	Further 1.6% improvement		
Evaluation	0	0	0	0	0	0		

- *2 VOC: Volatile Organic Compounds (VOCs). This tally includes all chemical substances of reporting regulation, emitted into the atmosphere.
- *3 COD: Chemical Oxygen Demand. An indication of the amount of oxygen needed to oxidize a subject compound under a predetermined condition using oxidizing agents.
- *4 Zero emission rate: The amount of internal and external landfill waste produced as a percentage of total waste produced.

Energy and Material Balance

Overview of business activities and environmental impacts



Scope: Nippon Kayaku (Including Joetsu Plant)

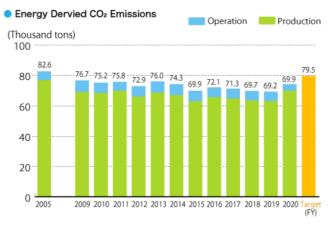
Results of Our Efforts to Reduce Environmental Impacts

As part of its effort to reduce environmental impacts, Nippon Kayaku focuses on preventing air, water and noise and odor pollution as well as stopping global warming and reducing waste.



Preventing Global Warming

At each business site, we have been working on energy conservation measures such as improving the operation of utility equipment, replacing it with high efficiency equipment, and changing to LED lighting. Energy-derived CO_2 emissions have been changing as shown below, and are declining year by year.



*Includes loetsu Plant from fiscal 2020

■The Nippon Kayaku Group has been investigating and tabulating the energy saving activities of each group company since fiscal 2011.

> FY2020 Energy saving activity summary sheet of Nippon Kayaku Group

About climate change

The "Paris Accords" adopted at COP21* held in 2015 aims to maintain the average temperature rise of the world before the Industrial Revolution to "below 2° C" and to tackle "below 1.5° C". In addition, based on this agreement, each country promises national CO₂ emission reduction targets. The Nippon Kayaku Group set the target range for reducing CO₂ emissions from energy sources at Nippon Kayaku on a non-consolidated basis in the fiscal 2020 Mid-Term Environmental Targets. However, under its newly established 2030 Mid-Term Environmental Targets, the Nippon Kayaku Group will continue to take measures against climate change expanding the reduction of greenhouse gases emitted by business activities across the entire Nippon Kayaku Group with the aim to reduce greenhouse gas emissions (Scope 1 and 2) in 2030, by 32.5% compared to 2019.

* COP21: 21st Conference of the Parties to the United Nations Framework Convention on Climate Change. As a new framework after the Kyoto Protocol, which expires in 2020, all 196 countries have adopted the Paris Agreement held in the suburbs of France.

Disclosure of CO₂ emission data (Scope 3) throughout the supply chain

In recent years, there has been an increasing trend for companies to grasp and manage CO_2 emissions in the entire supply chain, which are indirectly emitted, and disclose them externally. Nippon Kayaku is calculating not only Scope 1 and Scope 2 that have been aggregated and managed until now, but also calculation of CO_2 emissions "Scope 3" in the supply chain.

Since fiscal 2017, we have been calculating Scope 3 emissions for Nippon Kayaku on a non-consolidated basis, but from fiscal 2019 we began calculating Scope 3 emissions after expanding the scope to include domestic and overseas Group companies. The Nippon Kayaku Group plans to systematically promote efforts to reduce CO₂ emissions throughout the supply chain by collecting and managing data based on the "Basic Guidelines for Accounting Greenhouse Gas Emissions Throughout the Supply Chain" issued by the Ministry of the Environment.

[Scope 1] GHG emissions generated from emission sources owned or controlled by the business operator (fuel use, emissions from manufacturing processes, etc.)

[Scope 2] Indirect GHG emissions from the use of electricity, heat and steam supplied from other companies (use of purchased electricity, etc.)

[Scope 3] Indirect emissions other than Scope 2 (procurement of raw materials, employee commuting, business trips, waste processing consignment, product use, disposal, etc.)

	Categories	Emissions (Thousand tons-CO ₂ e)				
	Categories	2019 2020				
1	Purchased goods and services	84.9	79.5			
2	Capital goods	42.7	44.6			
3	Fuel- and energy-related activities (not included in scope 1 or scope 2)	22.6	21.1			

	Catanavias	Emissions (Thou	sand tons-CO ₂ e)		
	Categories	2019	2020		
4	Upstream transportation and distribution	19.2	17.7		
5	Waste generated in operations	26.5			
6	Business travel	0.8			
7	Employee commuting	2.5			
8	Upstream leased assets	Not calculated as included in Scope 1 and 2			
9	Downstream transportation and distribution	1.0			
10/11	Processing / use of sold products	-	-		
12	End-of-life treatment of sold products	15.4	23.2		
13	Downstream leased assets	0.4	0.4		
14/15	Franchise / investment	-	-		
Scope 3 to	tal	218.0	219.6		
Scope 1		38.0	35.2		
Scope 2		93.5	84.4		
Scope 1+2	+3 total	349.5	339.2		

Calculation method: As a general rule, CO₂ emissions are described in the basic guidelines of the Ministry of the Environment and the Ministry of Economy, Trade and Industry and the IDEA Lab, National Institute of Advanced Industrial Science and Technology, Safety Science Research Division. Calculated using coefficients.

Promoting the Adoption of Material Flow Cost Accounting (MFCA)

To date, Nippon Kayaku has been trying to reduce its burden on the environment by making its production processes more energy-efficient and conserving resources, and now it is working toward the adoption of material flow cost accounting (MFCA) by taking its environmental burden-reducing initiatives as an opportunity for "environmental management." Adopting MFCA helps us to identify and clarify energy losses and material losses in the production process, making it possible for us to continuously reduce our impact on the environment such as by reducing CO₂ emissions in our production activities.

Since the second half of fiscal 2018, Nippon Kayaku has been working on adopting MFCA for certain products at its Fukuyama Plant, and some results have been achieved. In fiscal 2019, we adopted MFCA at our Tokyo and Asa Plants, and in fiscal 2020 we also introduced MFCA at our Kashima Plant. We plan to expand MFCA to other plants in the future so that we can further promote energy and resource conservation.

The Formulation of New Mid-Term Environmental Targets

Nippon Kayaku has been engaged in environmental conservation activities after setting specific numerical targets as its mid-term environmental targets which came to an end in fiscal 2020. We therefore newly formulated new mid-term environmental targets for 2030 with the aim of expanding and promoting the reduction of greenhouse gases emitted by our business activities from the entire Nippon Kayaku Group.

Nippon Kayaku has set "energy use and greenhouse gases" as one of its key CSR issues (materiality). The mid-term CSR Action Plan for achieving this key issue is to "Pursue activities to save energy and combat global warming. Achieve the environmental targets for FY2020 and formulate targets for FY2030." Going forward, we will aim to contribute to the goals of the internationally agreed Paris Agreement and strengthen business continuity by identifying our climate change risks and taking countermeasures. And as an environmental target for fiscal 2030, we have decided to reduce greenhouse gas emissions emitted by the Group's business activities (Scope 1 and 2) in fiscal 2030 by 32.5% compared to fiscal 2019.

In addition, the COD emissions, waste generated, recycling rate and zero emission rate, which have been set as targets thus far, continue to be maintained as the targets of the 2020 mid-term environmental targets for Nippon Kayaku alone. We decided not to

set a new target for VOC emissions as we judged that we could manage it sufficiently without setting and working on a mid-term environmental target.

Area	ltem	Scope	Target	Achieved by
Combat global warming	Greenhouse gas emissions (Scope 1 and 2)	Group	88,790 tons or less (32.5% or more reduction compared to 2019)	Fiscal 2030
Reduce chemical substance emissions	COD emissions	Non- consolidated	150 tons or less (maintaining 2020 target)	_
Reduce waste	Amount of waste generated	Non- consolidated	23,500 tons or less (maintaining 2020 target)	-
	Recycling rate	Non- consolidated	80% or more (maintaining 2020 target)	_
	Zero emission rate	Non- consolidated	3% or less (maintaining the 2020 target)	_

Click to show the other activities

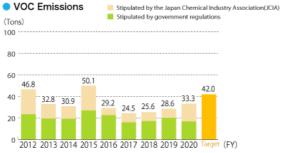
Himeji Plant Introduction of a Photovoltaic System	read more ▼
Activities by Kayaku Safety Systems de Mexico, S.A. de C.V. (KSM) to Reduce its Environmental Impacts	read more ▼
Wuxi Advanced Kayaku Chemical Co., Ltd. (WAC) Switching to LED lighting	read more ▼
Rolling Out Eco-friendly Sales Vehicles	read more ▼

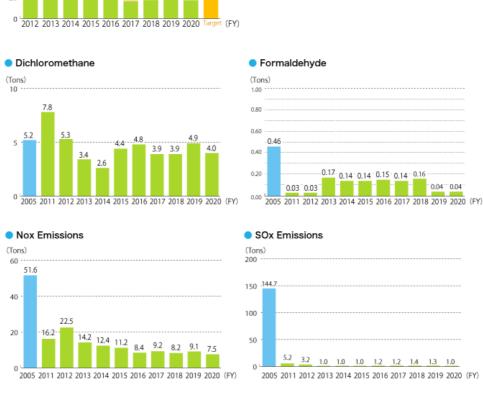
Preventing Air Pollution

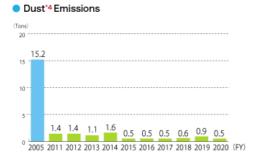
To help prevent air pollution, we carefully manage substances subject to Japan's Air Pollution Control Act, hazardous substances released into the air and other air pollutants.

(Under the initiative of the Japan Chemical Industry Association, the industry is taking action to voluntarily manage and reduce emissions of 12 control substances *1 that are deemed to be harmful air pollutants. Of these 12 control substances, we used five substances after 1995, but stopped the use of benzene in 1995. Emissions of chloroform and ethylene oxide have been cut to zero since fiscal 2007. About dichloromethane emissions there were few times of zero since fiscal 2007, but have risen slightly since fiscal 2010 because of their minor use in products. Formaldehyde emissions continue to occur, albeit in small amounts, because of its use in products and in sterilization and fumigation. Going forward we will focus particularly on reducing the use and emissions of dichloromethane and formaldehyde through production process improvements and other means.

Air pollutants sulfur oxide (SOx)*2 and nitrogen oxide (NOx)*3 are emitted during boiler operations. To date, the Nippon Kayaku Group has gradually shifted the fuel for its boilers from Bunker C heavy oil with high sulfur content to other lower sulfur content fuels such as Bunker A, in addition to LPG and natural gas, which are sulfur free. As a result, since fiscal 2008, we maintain to reduce SOx emissions about, we made further reductions. The Nippon Kayaku Group will continue to make efforts. to properly maintain air pollution prevention equipment, carry out regular inspections and upkeep, and reduce overall emission of air pollutants into the atmosphere.







- *1 12 control substances subject to voluntary controls: acrylonitrile, acetaldehyde, vinyl chloride monomer, chloroform, 1,2-dichloroethane, dichloromethane, tetrachloroethylene, trichloroethylene, 1,3-butadiene, benzene, formaldehyde, and ethylene oxide.
- *2 SOx (sulfur oxide): SOx is emitted when fossil fuels that contain sulfur are burned. SOx reacts with water in the atmosphere to form sulfuric acid and sulfurous acid, which are causes of air pollution and acid rain.
- *3 NOx (nitrogen oxide): NOx is produced when burned chemical substances react to nitrogen in the air and when fuels and chemical substances that contain nitrogen compounds such as coal are burned. Not only is it a major cause of air pollution including photochemical smog and acid rain, but NOx also has a harmful effect on the human respiratory system. In addition, NOx is also known to include the greenhouse gas dinitrogen monoxide.
- *4 Dust: Dust mainly refers to fine particulate soot found in dust smoke produced when burning fossil fuels. In addition to a major cause of air pollution, humans can contract pneumoconiosis or other harmful health conditions when breathing dust in high concentrations.

Fukuyama Plant VOC Reduction Initiative

Some of the products manufactured at the Fukuyama Plant are made utilizing organic solvents which are target compounds of VOC emission control.

While removal of such compounds is a required process at the final stage of manufacturing, a small amount of these organic solvents are released into the atmosphere during this process. Upon reviewing the potential of recovering and reusing these organic solvents, we achieved a reduction of VOCs released into the air by more than 30% as well as reduced the amount of organic solvents used through equipment modifications and process improvement.

VOC Emissions 2013 12.0 2014 10.0 2015 11.5 2016 5.6 2017 52 2018 6.0 2019 2020 5.7

Response to Water Risks

The Sustainable Development Goals (SDGs) were adopted at the UN Summit in September 2015. The SDGs consist of 17 goals and 169 targets to achieve by 2030. Within the 17 goals, Goal 6 (water and sanitation), Goal 12 (sustainable production and consumption), Goal 13 (climate change), Goal 14 (ocean conservation), and Goal 15 (ecosystems and forests) are items related to water risks*. The Nippon Kayaku Group is working not only to resolving waste water issues as discussed in the Special Feature article of fiscal 2018 CSR report, but also the reduction of water usage.

- * Water risks refer to the following three main categories.
- 1. Physical risk: impact on business operations due to drought, flood, and water pollution
- 2. Regulation risk: tightening water quality standards and revisions to waterworks and sewerage charges
- 3. Reputation risk: declined corporate image based on response to water access rights

Preventing Water Pollution

The Nippon Kayaku Group has set voluntary wastewater discharge control standards that are tougher than requirements laid out in national laws and local ordinances. And The Nippon Kayaku Group produces color material-related products including dyes and ink jet printer ink, among others. Our Tokyo and Fukuyama plants, where color material-related products are manufactured, fully decolorize colored wastewater before it is discharged.

As a result of efforts to reduce COD emissions by installing activated sludge treatment equipment at plants with high levels of COD emissions, Company-wide emissions reached 122.6 tons, achieving our 2020 mid-term environmental target. The Nippon Kayaku Group will continue to thoroughly manage wastewater and make efforts to protect the environment.

PRTR*1Initiatives

Since 1995, the Nippon Kayaku Group has participated in the Japan Chemical Industry Association led initiative to reduce compounds identified in the PRTR regulation, working to reduce its emissions of PRTR controlled compounds into the environment. In fiscal 2019, our emissions of PRTR controlled substances totaled 32.2 tons which marked about 13% decrease from 28.5 tons in fiscal 2018. In addition, we continue to handle a large amount of toluene which produces large emissions, but this amount decreased from 15.5 tons in 2015 to 5.3 tons in 2019, and further decreased to 3.5 tons in 2020.

The result of the VOC emission reduction effect surely appeared.



*1 PRTR: Pollutant Release and Transfer Register. The PRTR regulation is designed to prevent occurrences of environmental safety incidents by encouraging

2005 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 (FY)

*2 SS: Suspended Solids. SS is a water-quality indicator generally referring to insoluble substances of 2 mm or less in diameter suspended in water. The organic matter and metal originating in particulate-like mineral, animals-and-plants plankton and its corpse, a sewer, factory effluent, etc. are contained. The increase in SS worsens transparency, and influences underwater photosynthesis by preventing light penetration.

Fukuyama Plant Initiative to Reduce Water Usage

businesses to improve their own chemical substance management.

As of 2015, the amount of contracted volume of industrial water usage was 24,000 m^3 /day. In addition, we have reduced from 23,000 m^3 /day to 22,000 m^3 /day from fiscal 2018.

The Fukuyama Plant conducts treatment of waste water resulting from the colorant manufacturing process at its own expense. The treated water is then released into the Seto Inland Sea. Since the beginning of 2000, we have strived to optimize the treatment method of waste water resulting from the manufacturing of colorants for inkjet printer ink. This included many efforts to implement individualized treatment by brand and to revise the manufacturing process to realize reduced wastewater amounts.

Through these efforts, we have achieved a reduction in industrial water usage as stated above since 2015. At present, we are still working to develop better wastewater treatment techniques. Moreover, in addition to industrial water, we also use the city water supply during the manufacturing and equipment cleaning processes, which is also target for our reduction initiative.

Kayaku Safety Systems Europe a. s. (KSE) Effective Rainwater Usage

KSE* has introduced a system in order to utilize rainwater more effectively following capital investment activities to support the environment and environmental protection policies. This system both contributes to the Nippon Kayaku Group's CSR-centered management and saves on costs both through reduced usage of potable water and the efficient use of non-potable water.



Up to the end of fiscal 2019, water storage tanks with capacities totaling 650.5m³ have been put into service. In 2020, KSE installed water storage tanks with a capacity of 100m³. By the end of 2019, a total of 4,433 m³ of water had been stored giving a saving of about 2.82 million yen. In 2020, the amount of water stored was 6,177 m³ against a projection of 4,877 m³ with an effective amount saved at about 3.61 million yen. The amount of potable water saved (effective amount) at KSE corresponds to the annual drinking water consumption of all KSE employees and their families (approx. 4,000 people).

In addition to rainwater, wastewater from reverse osmosis stations supplies water tanks. KSE production areas require regulated humidification controlled by an air-conditioning system. This air-conditioning system requires demineralized water, which is attained through mineral removal in osmosis stations. Half of the water treated in this manner becomes wastewater. This wastewater serves as an additional source feeding the water tanks.

In these times, when a lack of precipitation is becoming a global issue, it is more essential than ever to implement water-recycling practices close to the source. In achieving this initiative, KSE comes closer to the fulfillment of the KAYAKU spirit.

* [KSE] A company belonging to the KAYAKU Group located in the Czech Republic that manufactures automotive safety components.

Waste Reduction

In fiscal 2019, the Nippon Kayaku generated 23,204 tons of waste (excluding the Joetsu Plant), which represents 8.0% decrease compared to fiscal 2018. In addition, landfill waste in fiscal 2020 amounted to 323 tons, which was less than 40% on the previous year, and the zero emission rate was 1.4%, a decrease of 2.2 points from the previous year. As a result, we achieved our 2020 mid-term environmental targets not only for the amount of waste generated but also for the zero emission rate.

The zero emission rate was 13.1% in fiscal 2011 when the mid-term environmental targets began, but this has improved significantly in the last 10 years up to fiscal 2020. In particular, the zero emission rate has been greatly improved by promoting the recycling of waste that had been landfilled at the Fukuyama and Asa Plants.

Going forward, we will continue to reduce waste while making constant efforts toward the 2020 target while monitoring production volumes at each plant.



Fukuyama Plant

Fukuyama Plant Achieved Zero Net Emissions through Changes to its Sludge Treatment Process

Many types of wastes are produced during the Fukuyama Plant's production activities. Sludge that occurs from the treatment of waste liquids accounts for a considerably large portion of these wastes.

This sludge is difficult to dispose of because it contains moisture. In the past, this sludge was disposed of in landfills after undergoing appropriate treatment, but after examining whether this sludge could be recycled to reduce environmental impacts, the Fukuyama Plant found that it could be utilized as fuel for adjusting the heat used in waste incineration plants. Also, our waste disposal vender now has a source of recycled fuel, so both it and the Fukuyama Plant are able to utilize this sludge more effectively.

As a result, the Fukuyama Plant was able to reach its zero emission rate target (less than 1%) for the portion of its waste disposed of in landfills. Not only this, but it was also able to increase the recycling rate of waste and lower disposal costs.

Joetsu Plant Efforts to Reduce Industrial Waste

At the Joetsu Plant, industrial waste such as waste plastic, resin, and liquid is generated from many processes related to the production of our mainstay polarizing plates. In continued efforts to reduce and recycle these types of waste, we have formed an Industrial Waste Reduction Subcommittee to minimize the impact on the global environment.

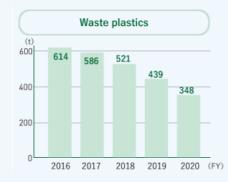


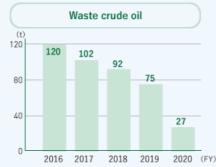
The Industrial Waste Reduction Subcommittee promotes reductions in industrial waste by

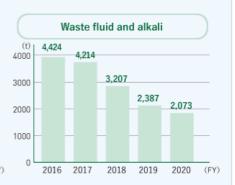
checking on the progress of reduction themes set for each fiscal year as well as affirming, by members appointed from within the Joetsu Plant, the amount of industrial waste produced every month. Since fiscal 2016, we have reduced the amount of waste plastics and liquids by normalizing bulk production through the review of production plans by reconsidering small-lot, high-mix products. Recycling facilities have been installed and went on line in fiscal 2018 significantly reducing waste liquid, and recycling equipment is operating stably. In fiscal 2020, we standardized the optimum amount of resin produced according to the length of film inserted, helping to reduce excess resin and consequently the amount of waste resin generated.

With new reduction themes in 2021, we will continue to promote sustainable production activities that contribute to society while aiming to reduce industrial waste and zero emissions in order to help protect the global environment.

Joetsu Plant - Amount of waste generation Result of FY2016-FY2020







Kayaku Safety Systems de Mexico, S.A. de C.V. (KSM) Waste management: an approach to life cycle

KSM works to recycle solid waste, such as wood, cardboard, ferrous metals, aluminum and plastics by finding external suppliers which can re-use those wastes. After collecting those wastes from production sites, we store them in the plant until the certified waste collect suppliers to come pick them up. Those suppliers use woods to manufacture wood pallets, cardboard and plastic are recycled, aluminum and ferrous metals are used to generate new raw materials. This program extends to the non-productive areas such as rest areas, our collaborators classify waste like aluminum cans and plastic bottles for recycling, and we also classify organic and inorganic waste for proper disposal.





Biodiversity / Noise and Odor Prevention

These days, efforts to address biodiversity is an important environmental issue around the world, and the Nippon Kayaku Group also highlights its impact on ecosystems as stated in its Responsible Care Policy. Environmental pollution and deforestation are major factors in the loss of biodiversity and so the Nippon Kayaku Group is working to prevent water pollution as a means to combat pollution to the environment.

Preventing Water Pollution

For details, see Response to Water Risks

Furthermore, Nippon Kayaku conducts business with a conscious effort toward minimizing noise and odor pollution in areas surrounding its plants. As well as regularly measuring noise levels around our factories, we are making every effort to be positive members of the local community by treating any feedback or requests received from local residents, from such things as the odor monitor system and community round-tables, with the utmost priority. We also conduct regular work environment measurements in the factory, striving to improve the place of work to protect our employees from excessive noise and other hazardous substances.

Environmental Accounting

Nippon Kayaku has tracked and shared all cost data associated with its environmental protection initiatives since fiscal 2000. Also, from fiscal 2003, we began calculating the returns from our environmental protection initiatives. Calculation of environmental costs and returns are made according to Environmental Accounting Guidelines (2005 Version) published by the Ministry of the Environment of Japan, and Environmental Accounting Guidelines for Chemical Companies published by the Japan Chemical Industry Association.

	Category		Investment	Total	Main Activities
		Air Pollution Prevention	20.9	97.0	Upgraded dust collection facilities, boilers, etc.
	Pollution Prevention	Water Pollution Prevention	109.7	174.8	Expanded waste liquid treatment facilities and upgraded equipment, etc.
	Cost	Underground seepage prevention	5.5	3.7	Moved pits and pipelines above ground, etc.
Cost Incurred in the Workplace		Noise and Vibration Prevention	17.2	6.2	Noise abatement measures for scrubber towers, etc.
		Other		435.0	Disposal costs of facilities and pollution charges
	Global Environment Cost	Global Warming Prevention and Energy Conservation	172.6	100.4	Remodeled high-efficiency equipment and pumps, improved A/C energy usage, etc.
	Resource Recycling Cost	Waste treatment	106.6	709.8	In-house processing costs and processing outsourcing costs
Up- / Down- Stream Cost Container Recycling Outsourcing				0.4	Contracting to the Japan Containers and Packaging Recycling Association, etc.
Stream Cost	Sewage Processing Cost			78.7	Sewerage treatment costs Tank dredging costs
	System Maintenance and Operation		-	105.3	Internal auditor development cost and ISO14001 renewal costs
	Environmental Stress Monitoring		-	42.5	Analysis costs and outsourcing costs
Management Activity Cost	Information Disclosure		-	6.3	Outsourcing costs for preparing information disclosure documents on the environment
	Education, Training and Other		-	59.4	Outside lectures, workplace training,etc.
	Greening			70.0	Added plants and improved some greenery along the roadway Outsourcing costs
R&D Cost			-	57.2	Environmentally friendly R&D costs and wastewater treatment technology development costs
Social Activity Cost			-	8.9	Plant tours, community event sponsorship, responsible care, ICCA special committee, LRI research meeting costs
Environmental Damage Cost			-	0.0	
Total			432.5	1,955.5	

Return from Environmental Protection Initiatives (Fiscal 2020)

(Millions of yen)

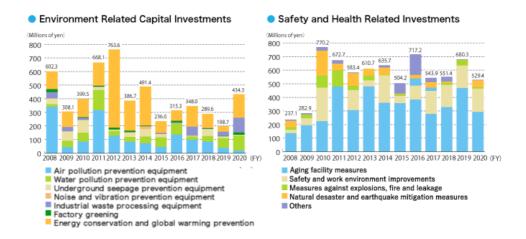
	Sources of Return	1	Cost Reduction Return	Main Activities
		Air Pollution Prevention	0.0	Renewed air conditioners at guard stations (relating to the Fluorocarbon Act), and replaced hot air generator fuels at catalyst factory
Pollution Prevention Return	Prevention	Water Pollution Prevention	0.0	Renewed drainage facilities and pipes at catalyst factory, repaired effluent wall surfaces, and duplicated wastewater pits, etc.
	Return	Pollution Load Levy Reduction	0.4	
	Noise and Vibration Prevention	0.0	Renewed heat source equipment, and soundproofed outdoor equipment ducts	
		Global Warming Prevention and Energy Conservation	112.8	Installed efficient flooring, installed decompression device vacuum pump ejector, and LED lighting, etc.
	Resource recycling	Reduction of Waste	9.5	Recovery and reuse of solutions, in-house treatment of waste solvents, and renewed compressed packaging equipment
	return	Sale of Recycled Resources	12.9	Collected valuables and metals, and sold waste plastics outside the Group, etc.
Up- / Down- Stream	Container Recycling		73.6	Cleaned and reused SUS drums and plastic drums, and reused other containers
Others	Others		0.0	Implemented greening activities
Total			206.8	

- Scope: Nippon Kayaku (non-consolidated)
- Investments: Aggregate of all orders placed in fiscal year 2019(April 2019 to March 2020) Capital expenditure: Compilation of capital appropriated for orders in April 2018 to March 2019
- Management cost: Any cost increase resulting from change in fuel type or change in waste processing method that are deemed appropriate from an environmental perspective are recorded under this category each year for a period of five years from the date the change is first administered.
- From a financial accounting standpoint, earnings realized from environmental protection initiatives are recorded in the fiscal year in which such earnings are realized.
- Earnings such as expense reduction and environmental impact reduction that are not considered from a financial accounting standpoint are reported for five years from the date it is first realized.

Investments Related to the Environment, Health and Safety

The Nippon Kayaku Group makes well planned and continual investments in environment, safety and health related projects. In fiscal 2020, environment–related capital investment totaled 434 million yen, an increase of about 120% compared to the previous year. In particular, industrial waste treatment equipment increased from 31 million yen to 107 million yen (up approx. 240%), and equipment related to energy saving and global warming prevention increased from 40 million yen to 173 million yen (up approx. 330%).

In addition, capital investment related to health and safety totaled 529 million yen in fiscal 2020, a decrease of about 22% compared to fiscal 2019. Out of that, investments in equipment renewals accounted for 55% of the total.



Environment related datalist

	Nippon Kay Consol		Domesti	c group	Oversea	s group	То	tal
fiscal	2019	2020	2019	2020	2019	2020	2019	2020
Global warming								
Energy input (Crude oil equivalent)	34,939	38,700	4,721	-	-	-	-	-
CO ₂ (ton)	69,241	69,903	9,693	30	45,111	44,072	124,045	114,005
Non-energy origin CO ₂ (ton)	2,371	2,301	0	0	12	39	2,383	2,340
GHG : Green house gas (ton) Other GHG (ton)	520	194	38	0	206	381	764	575
Emission to air								
NOx (ton)	9.1	7.5	0.0	0.0	0.9	0.7	10.0	8.2
SOx (ton)	1.3	1.0	0.0	0.0	0.0	0.0	1.3	1.0
Dish dust (ton)	0.9	0.5	0.0	0.0	3.3	2.0	4.2	2.5
PRTR substance (Emission to air; ton)	18.9	16.8	-	_	_	-	-	_
Emission to water area								
Water resource input (thousand m ³)	10,160	10,092	216	5	2,506	2,518	12,882	12,615
Amount of drainage (thousand m ³)	10,577	9,919	213	5	1,513	1,389	12,303	11,313
COD (ton)	145.2	122.6	0.0	0.0	62.2	67.6	207.4	190.2

	Nippon Kay Consol		Domestic group Overseas group		Total			
fiscal	2019	2020	2019	2020	2019	2020	2019	2020
Nitrogen (ton)	72.0	83.2	-	-	-	-	-	_
Phosphorus (ton)	4.1	3.2	_	_	-	_	-	_
PRTR substance (Emission to water area; ton)	13.3	9.1	-	-	-	-	-	-
Waste								
Amount of waste (ton)	23,204	25,331	3,240	43	674	1,046	27,118	26,420
Landfill waste (ton)	844	404	34	2	20	113	898	519
Zero emission (%)	3.6	1.6	1.0	5.4	3.0	10.8	3.3	2.0
Recycle rate (%)	84.4	81.3	-	-	-	-	-	-

From 2020, Nippon Kayaku (non-consolidated) will include the Joetsu Plant. Polatechno Co., Ltd. is not included in the domestic Group.



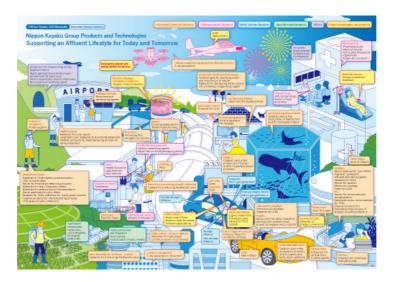
HOME > Sustainability > CSR Activities That Fulfill Our Social Responsibilities > CSR activity through economic responsibility and business



CSR activity through economic responsibility and business

Current Nippon Kayaku Group Products and Future Technologies and Products Supporting an Affluent Lifestyle

The Nippon Kayaku Group has adopted a corporate slogan called Global "sukima" ideas and is striving to develop Nippon Kayaku into a company that the world truly needs, by developing high value added products with unique technologies that stand out in niche markets and elsewhere.



> View larger image 🔀

The Nippon Kayaku Group's Businesses

This section will take a closer look at the 4 core businesses of the Nippon Kayaku Group as well as products that they developed with unique technologies that contribute to the betterment of society.

We aim to contribute to society through improved medical care by promoting innovations in our proprietary technologies and by providing a stable supply of and information about high-quality pharmaceutical products.

We contribute to the creation of an ultra-smart society and the realization of the SDGs by applying our core resin, colorant, catalyst and optical processing technologies to provide functional chemicals that offer special characteristics for the fields of information and communications, digital printing and energy and resource conservation and sensing.

Functional Chemicals Business



Safeguarding life and health

Smart Chemicals Company®

Supporting a comfortable life

Safety Systems Business

Applying the technology we have cultivated in the automotive safety components field, we aim to provide more people around the world with safety by developing new safety components that are compatible with evolving mobility technology.

We will contribute to society through the development and manufacture of smart chemicals with consideration given to the environment and safety

Agrochemicals Business

We will continue playing a role in the development of sustainable agriculture and in maintaining the food supply by providing high-quality, environmentally friendly agrochemicals, as well as agrochemical technologies and services.

Functional Chemicals
Business

Pharmaceuticals Business

Safety Systems Business

Agrochemicals Business

Functional Chemicals Business

We will contribute to society by supplying unique functional chemicals for the IT, ICT and resource conservation fields

The Functional Chemicals Business Group provides environmentally–friendly products utilizing our technologies in resins, pigments, catalysts, optical processing and X–rays to numerous fields such as ICT, digital printing, energy and resource conservation, and sensing. while also actively working to reduce CO₂ emissions and its impact on the environment. We will continue to make contributions to achieving the SDGs and a realizing a super–smart society by supporting the IoT and diverse mobility ensuring a safe and secure life for people , and providing distinctive functional chemicals that can meet the needs of our customers and society.



> Functional Chemicals Business

Pharmaceuticals Business

■ We are contributing to society through improved medical care by promoting innovations in our proprietary technologies and by providing a stable supply of and information about high-quality pharmaceutical products.

The Pharmaceuticals Business is engaged in drug discovery research and development using biotechnology and polymer technology. In addition, we are advancing research and development focusing on biosimilar monoclonal antibodies and generic pharmaceuticals in the cancer field.

We aim to contribute to society through improved medical care by promoting innovations in our proprietary technologies and by providing a stable supply of and information about high-quality pharmaceutical products.



> Pharmaceuticals Business 🗐

Safety Systems Business

Through explosives technology applications, we help protect lives during auto collisions throughout the world

Global vehicle production is expected to continue to grow. In addition, safety components that protect passengers and pedestrians involved in auto collisions are rapidly spreading beyond the developed countries to the developing countries as well. The Safety Systems Business manufactures and marketsuses explosives technology, on which the Company was founded, in its automotive safety components, providing such product that employ explosives technology as inflators and micro gas generators, which are incorporated in such automotive safety components as air bags, seatbelt pretensioners, and hood-opening devices that protect pedestrians. The Safety Systems Business's products are manufactured not only in Japan, but also in the Czech Republic, China, Mexico, and Malaysia, and are used by auto manufacturers almost worldwide. The Safety Systems Business's products are helping to save people's lives in auto accidents everywhere.



> Safety Systems Business 🗇

Agrochemicals Business

■ We will contribute to society by supplying safe agrochemical preparations technology that are compatible with the environment and indispensable to stable food production

The environment surrounding agriculture is becoming more severe with each passing year, marked by food supply issues caused by the rising world population, issues with food self-sufficiency rate, and increasing crop damage from disease and pests. Such an environment requires that safe and secure agricultural crops be grown consistently and brought to market in a stable manner.



In June 2018, we launched our new insecticide, FINESAVE®. It is receiving rave reviews from the market as an insecticide that works on thrips and other pesticide–resistant insects, along with our spiracle–blocking agent, Fumon®, which is effective in overall pest control and does not rely only on a chemical pesticide.

> Agrochemicals Business 🗐

Interns from Overseas

Nippon Kayaku hosts interns from both domestic and overseas universities. Interns engage in various activities at Nippon Kayaku's laboratories with a focus on research and development, while also learning about corporate activities and Japanese culture. At the same time our employees receive a boost in terms of motivation and stimulation by working together with these young interns. Going forward, through these internships, we will continue to globalize our corporate culture and contribute to international exchange for people of Japan.



Exchange within the Nippon Kayaku Group

Meeting of the Movement of Tomorrow

The 61st Meeting of the Movement of Tomorrow, scheduled to take place in 2020, was postponed in view of the rapid spread of the coronavirus from the end of last year.

As a result of exploring whether the entire Nippon Kayaku Group could work on something at a time when it was difficult to hold an event with large numbers of people both in Japan and overseas, we produced a summary of our response to COVID-19 and created videos which introduced the business sites. Both this summary and videos were sent out to all business sites.



The summary outlines how each business site is carrying out necessary measures to prevent coronavirus infections and how they are continuing to work. It also serves as a good reference as it shows those business sites which are taking extremely good measures. The video shows how people are working in their respective locations and environment. It is hoped that it will attract interest in other departments which in turn will help

motivate employees and produce better lines of communication. As such, the videos which were produced at each business site have been put onto a DVD and sent out to other locations within the Group.

We are looking at ways to put on next year's meeting, and we sincerely hope that it can go ahead as a place where Nippon Kayaku Group employees can come together as soon as possible.



KAYAKU spirit Dream and Drive("Kaizen")Activities * The exchange meeting

This year's Dream and Drive (D&D) exchange meeting was scheduled to be held in February 2021 but as with the Meeting of the Movement of Tomorrow it was postponed owing to the pandemic.

The purpose of the D&D exchange meeting is to give a rough idea of people's thoughts and concerns about D&D activities in the workplace. As such, it is a small-scale meeting mainly for the plant departments where all participants can talk honestly and openly. Participants particularly like the fact that they can easily exchange opinions and share information as they can easily talk in small groups. In 2020, it became difficult to hold the event as usual, so we considered holding it online. However, we decided to cancel it as we thought that the benefits that come from the face-to-face meeting could not be realized online. We would like to hold the exchange meeting in 2021 and make it so that the session will be a more active D&D activity.





* KAYAKU spirit Dream and Drive is an improvement activity that focuses on the ingenuity and innovation of all employees to resolve issues in the workplace independently under the banner of CSR management.



HOME > Sustainability > CSR Activities That Fulfill Our Social Responsibilities > With Our Employees



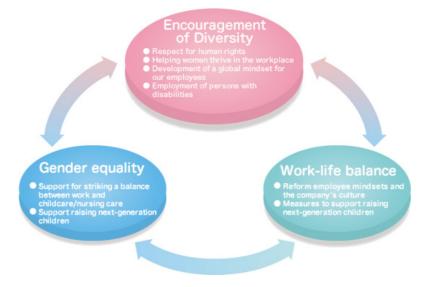
With Our Employees

A company is nothing without its people. Nippon Kayaku respects the human rights of each and every employee, and strives to offer a workplace environment that offers peace of mind to employees. Our goal is to be a company where employees can grow personally and professionally through work and feel a sense of motivation in what they do.



Message from the Head of Administration Group

We aim to be a company where people are the main actors of our corporate activities, where the human rights of each employee are respected, where employees can work with peace of mind in their workplaces and can grow through their work. The Nippon Kayaku Group aims to realize the KAYAKU spirit and wants to be a company where all our employees can feel well-being through their work. We will constantly revise our human resource systems to achieve a real sense of well-being and suitable deployment and treatment of our employees through everyone being able to be fairly challenged and able to take on challenges as well as for the results of which to be fairly assessed. We aim for an organizational culture that values diversity while ensuring psychological safety, and one that is highly productive and flexible. We believe that being such an organization will be a source of competitiveness and foster innovation. In future, in addition to all employees rapidly responding to changes in our corporate environment, we will continue revising our organizational culture.



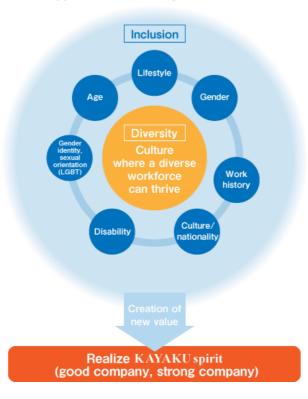
Initiatives for Achieving SDGs Approach to Diversity & Inclusion

The Nippon Kayaku Group aims to be a company with a work environment and atmosphere that can maximize people with differing personalities and values and where every employee can work enthusiastically with a feeling of fulfillment and that work is a worthy pursuit.

This means bringing about the sustainable growth of CSR management (i.e., the KAYAKU spirit) by creating a virtuous cycle of productivity improvement through human resource development and the creation of new corporate value through SDGs for our business.

Diversity and inclusion means a revolution in the way we work. With these initiatives as an impetus, we will succeed in becoming a company that is trusted by society and a company that is strong and good.

Approach to Diversity and Inclusion



Encouraging Diversity

Nippon Kayaku Group's Personnel System

We have adopted the position class system, which is a human resources system whereby employees can obtain job assignments and compensation that are not tied to their age, gender, career background, or educational background, and we are improving it in response to the historical background and the demands of society. This system, which is based on individual roles and responsibilities, is also offered to management-class employees. Therefore, promotions to the managerial level can be achieved regardless of age, gender, academic history or career. As a result, the number of female managers continues to grow with each passing year.

Helping Women Thrive in the Workplace

The appointment of female managers is one aspect of the results of our initiatives to encourage diversity in the workplace. The ratio of our female managers increased to 8.6% as of the end of March, 2021 (8.4% in

previous year). Our goal is to have 10% of our managerial positions filled by women by the end of fiscal 2024. We will continue with our efforts to encourage the greater involvement of women in the workplace.



Percentage of female managers (*Nippon Kayaku non-consolidated basis; excluding seconded employees)





Finding a work style that each person can enjoy will lead to diversity

After working on pharmaceutical testing methods at the research lab, I transferred to the head office in 1999. At that time, the head office had almost no women in management positions, but the number of women has increased over time, so I feel the company has changed. In the Quality and Pharmacovigilance Division, to which I belong, currently half (four) of the eight department and office managers are women. Also, our company has a good childcare leave and work system, which I myself used. In my opinion, having experience bringing up children adds to one's managerial skills. Before I had children, I thought that I would always be rewarded if I try hard, but babies have no consideration of one's efforts, so things did not go the way I wanted. In the meantime, while I was trying to find out what would make my child happy or have fun, to my surprise, I suddenly found that my child was growing. In management as well,



Yuko Nagai Pharmaceuticals Group General Manager of the Quality and Pharmacovigilance Division and Marketing Supervisor-General

it seems that when I am with an employee worrying about what will make them happy (what their strengths are), a good outcome will suddenly crop up. It may be that women are good at this type of management.

I think it is natural that everyone has their own personality and skills. I believe that finding a work style that each person can enjoy will lead to diversity.

Employment of Persons with Disabilities

Nippon Kayaku employs people with disabilities. As of the end of March, 2021, 49 people * with disabilities are working with us (1.90% of total employees). Society demands that we move swifter in hiring persons with disabilities and so in the future we will strengthen our efforts and continue to actively hire persons with intellectual disabilities wherever possible.

* One part time employee is included.

Since April 2006, we have adopted the Nippon Kayaku Senior Partner System as a way to rehire employees who reached their mandatory retirement age. This system is intended to provide a place of work after retirement for former employees who are in good mental and physical health, are motivated to continue their career, and who can contribute their past career experiences and know-how. Participants are asked about their requested workplace, work duties and employment format, and since adopting this system we have been able to meet the requests of nearly 100% of participants who are rehired. Most of these participants continue on working until the age of 65. There are 136 reemployed persons working for Nippon Kayaku as of March 31, 2021.

Development of Global Human Resources

As one of our efforts to promote diversity, we provide employees in Japan as well as at our overseas group companies with opportunities to thrive in a global environment We also strive to develop our employees' language abilities by offering study-abroad programs, short-term intensive English programs and company-wide TOEIC test. Moreover, we provide employees assigned overseas as expatriates with training programs on various subjects including cross-culture training. In addition to the training programs, we will keep making efforts to develop global talent by means of promoting personal interactions between business units in Japan and overseas group companies and also enhancing our support to experience various cultures and business environments.

More active role for women in the workplace

I joined Kayaku Safety Systems Europe a. s. as an HR Specialist in 2000. At that time, KSE* had 107 employees, and there were only two female managers at the company. The company currently employs 1,076 people, of whom 539 are women, and 4 women are in management positions, including me. In addition to these management positions, 10 women hold Group Leader positions in Administrative Division and Team Leader positions in the production department. The diversity of the work teams is key to the balance and healthy development of the company.



Kayaku Safety Systems Europe a. s. Jitka Simarova

We know that working in the production area with continuous shift operations is strenuous for women; however, we regularly hear from our women that they value the stability and personal development care that our company offers. What our female employees mainly want are good working conditions and work-life balance. In HR, we support the integration of women returning to work from maternity leave, so we currently offer part-time positions at selected workplaces for women with young children.

Personally, I think that there are still not enough women in leadership positions. That is why I am pleased every time one of my female colleagues is promoted to a leadership position.

The world is full of strong and independent women who motivate us. In my opinion, being strong does not mean being flawless, unafraid, and without any self-doubt. I think it means being able to deal with and accept one's own shortcomings and being aware of one's own value and expectations of life.

* KSE: Kayaku Safety Systems Europe a.s.

Global exchanges

After my involvement in setting up the plant of Kayaku Safety Systems de Mexico., S.A. de C.V. (KSM), I spent ten years on continual improvement activities with regards to quality and manufacturing. In June 2017, I took a position at Nippon Kayaku's head office as a member of the Global Quality Project team led by the Safety Systems Group's Quality Assurance Division, and then I later transferred to Himeji.



Jorge Montes, Safety Systems Group

Outside of work, my family and I have opened our hearts to the totally new world of Japan and its completely different living environment. We are learning Japanese as well as visiting various places, and our interactions with people's kindness along the way is an experience we cherish above all else.

I'm often asked, "What is your staple food? Can you buy it in Japan?" I always answer "Tortillas, and yes I can buy them in Japan."

In closing, we have the chance to make the Nippon Kayaku Group better on a daily basis. Let's be drivers behind change in each of our positions under the motto, "Everyone has a place in the driver's seat *."

* "Everyone has a place in the driver's seat": take the lead in taking action from the driver's seat(D-seat)

Expanding Programs for Gender Equality

The Nippon Kayaku Group is expanding in-house programs for gender equality and encouraging their utilization. In terms of our Next Generation Childcare Support measures, we have rolled out various programs that exceed legal requirements, beginning with our childcare leave program. While percentage of childcare leave use for female employees was 100%(29 employees), that for male employees was 88.5% (31employees) from April 1, 2019 to March 31, 2020.

Also, percentage of reinstatement after childcare leave was 100% for both male and female employees, we will seek to develop a workplace culture that encourages male employees to participate in childcare.

Special Paid Leave System

The Special Paid Leave System is a system whereby, in accordance with the Labor Standards Act, employees accrue special annual paid leave days that expire after two years and can use these days for such purposes as caring for a family member, nursing care for a child, participating in training, volunteering, getting infertility treatments, or donating bone marrow. No complicated procedures are required to use this program, as employees simply have to apply by providing supporting proof for their activity. In addition, even after using the program once, employees can continue to accumulate paid leave to the maximum number of days for employees' convenience.

Also, starting this fiscal year, in response to childcare and nursing care needs, employees are now allowed to take half-day leave as part of nursing care leave for adults or children.

Special Paid Leave Program			
Applicable Uses	No. of Days Allowed		
To receive treatment of an injury or illness that requires at least 4 consecutive days of care To receive outpatient services for rehabilitation or aftercare (within the stated period on the physician-issued medical certificate)	Up to 60 days		
To provide nursing care to an immediate family member, aunt or uncle	60 days		
To participate in a training program or volunteer activities	30 days		
Leave in conjunction with the use of active points from the Nippon Kayaku Cafeteria Plan	5 days		
To take leave in order to receive a vaccination or medical exam for a child of preschool age	5 days		
To receive fertility treatments	60 days		
To allocate additional days to childcare leave	10 days		
To provide nursing care for a child of preschool age	10 days		

Work-life Balance

Better Management of Employee Work Hours

With regards to compliance and mental health, the Nippon Kayaku Group strives to properly ascertain employee work hours and conditions, to take action where needed, and to manage working time properly by cooperation between employees and management. Additionally, from the perspective of enhancing work-life balance, starting last fiscal year we have reduced the total working hours by 7.5 hours and implemented work-style innovations to change the way employees think in an effort to increase productivity and create added value. We will now look to further reduce overtime hours and increase the percentage of paid leave taken.

To increase the rate at which paid leave is taken, we have established the new anniversary paid leave system and taken other measures to encourage employees to use their paid leave days. To reduce overtime, we need to change our workplace culture and change the way employees think (work-style innovation). As a result, we are improving work-life balance along with aiming to increase operational productivity and create added value. Additionally, the Nippon Kayaku Group employs workers in various formats, including rehired seniors (senior partners), contract workers, and part-time workers. We are now working to develop various training and systems for these different formats in response to the growing diversity of our workforce.

●Work-life balance (Nippon Kayaku non-consolidated basis)								
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020		
Total working hours	1852.25	1844.75	1844.75	1844.75	1844.75	1844.7		
Overtime hours *Average monthly hours per employee	12.4	12.3	12.8	13.3	12.7	11.		
Number of paid leave days taken	10.6	11.5	11.0	11.3	11.1	12.		
Ratio of paid leave days taken	58.6%	62.7%	59.2%	61.1%	60.1%	65.8%		
Employees taking childcare leave (males)	0	4	4	17	22	3		
Employees taking childcare leave (females)	20	27	26	20	26	2		

Taking childcare Leave

Being able to share with my wife time to focus on raising our boys is the reason I could also make the most of it afterwards

When my wife gave birth to our second child, I naturally thought of taking childcare leave. I believe a major reason for this is because this is not just a system but a culture within which it is easy to take childcare leave as a male and from several years ago there has been a growing number of men around me taking childcare leave. I strongly feel this is a change in environment over the last two to three years, because, when my oldest son was born four years ago, I did not think of taking childcare leave.



Yuki Kobayashi Nonclinical Research Group Pharmaceutical Research Laboratories Pharmaceuticals Group

While on childcare leave, I got to feel the daily changes and growth of my second son while also getting the chance to talk and play with my eldest son after he got home from daycare. It was a very fruitful childcare leave and my wife has said it enabled her to get into the rhythm of life.

There were times that did not go well and times when I got frustrated, but my wife and I could get through it calmly by talking and sharing the load. A major joy I got from the childcare leave was being able to get a real sense of this kind of joy in seeing our boys grow, as well as the tough aspects of raising children, and being able to share it with my wife. While this is merely my perspective, I feel this experience has enabled me to participate in raising our boys with an understanding of what my wife is going through without forgetting my appreciation toward my family after going back to work.

Lastly, I would like to thank my colleagues for all their help while I was on childcare leave, even though it came at a tough time.

Taking Childcare Leave I want to continue working in my own way even if my lifestyle changes

I gave birth in 2016 and 2019 and took childcare leave both times. I have wanted to keep working at this company and make the most of my knowledge and experience, from when I started, got married, through to after having children. I was able to take childcare leave in a completely supportive workplace that respects this desire.



Erika Shibata General Affairs Management Department Tokyo Plant

While I was on childcare leave with my second child the COVID-19 pandemic spread globally and we had to refrain from taking our eldest child to nursery school, and I felt uncertain about the future. However, despite this my husband and I had precious times working together in

housework and raising our children and had deeper experiences and precious time with them. Returning to work also went smoothly through communication with my superiors and colleagues about the current situation of the company and the work I would undertake from there.

Having to take time off work is common to everyone, not just after giving birth. I was personally reminded of how reassuring it is for myself and family, in such situations, to be working in an environment with understanding colleagues and with a great system in place.

I am very thankful to and will do my best to requital of a favor my colleagues who backup me in balancing work and raising my children.

Development of Human Resource

Training Programs

Various training programs are provided to employees according to their jobs positions. These comprehensive training programs are conducted so as to develop the skilled workforce that will lead Nippon Kayaku in the next generation.



Training programs

Mandatory Programs

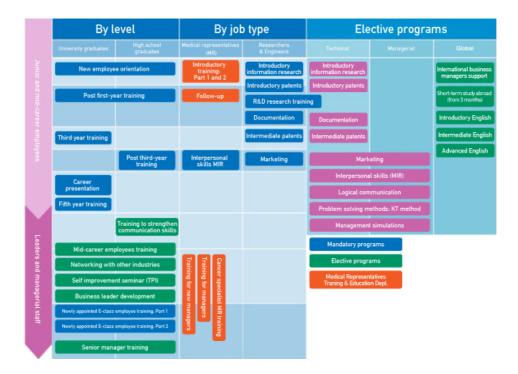
We offer training programs for new hires, after employees' first and third years at the company, and in their fifth year of service, and for mid-level employees in accordance with their job types and positions. We support our employees to make new steps forward to develop practical skills based on the changes of their roles and competences.

Voluntary Programs

A wide array of voluntary training programs is also available. These voluntary programs are tailored to specific employee characteristics and jobs. They facilitate self-improvement and boost the job-related problem-solving abilities and business skills of the employees.

Selective Program

A program providing special leadership and management training is also available for the next generation promising candidates who are recommended by the superiors.



Fukuyama Plant Basic training that is unique to a Fukuyama Plant

The Fukuyama Plant manufactures functional materials and color materials. The years following 2013 have seen the retirement of many senior employees such as those reaching retirement age and senior partners. It was expected technologies—including plant safety—may be at risk not being passed down in this period. Therefore, it was planned to employ many new staff including career employees. We implemented training in 43 categories of basic skills necessary to nurture employees of Fukuyama Plant to ensure the passing down of skills and technology without accident or major mishap during this period. As for points to be considered in implementing these 43 categories, the passing down of technology is a passing down from senior to junior, therefore it must be in conjunction with a nurturing of a training culture. To this end, leaders from section heads upward made the training curriculum for each basic skill considering the content to nurture their subordinates, while utilizing their horizontal connections. Leaders from



section heads upward were the instructors, teaching a wide range of skills and knowledge to mostly newly hired employees over the six years from 2014 to 2019.

While the technological transfer to new employees from those reaching retirement age and senior partner retirees over this six-year period has come to a more settled state, from 2020 the plant training program changed to a basic training program limited to development of new employees. Specifically, we reviewed basic training to fill gaps considering all training undertaken throughout Nippon Kayaku and third-party training undertaken various departments. We are maintaining an effective organizational structure throughout our plants, based on the experiences of this six-year period, the accumulated training materials, the revision of these materials through cross-departmental working groups, and with the help of the lecturers. Section heads, team leaders and other mid-career employees headed up efforts to create the curriculum and are teaching the newly hired employees the necessary information and knowledge.

The training is currently being undertaken with thorough precautions to prevent the spread of COVID-19 under pandemic restrictions on in-person training in large numbers. The training involves sharing information to achieve synergy between the organizational and human resource strengths of the plant. All new hires start with the same foundational basic training. This promotes the formation of a corporate culture whereby unity can be fostered. The training also involves IT skills to improve efficiency of tasks.

Joetsu Plant Training related to IATF 16949 and customers' requirements to in-vehicle products

ISO/TS 16949, the international quality management system standard in the automobile industry, was replaced with IATF 16949 in 2016, and we have been requested to comply with the standard by customers more than ever. Furthermore, in order to expand our sales of in-vehicle products (meters, center information displays, head-up displays <HUD>), it is also required to deepen our understanding for the standard IATF 16949 as a result.

However, to incorporate the new standard into our existing quality management systems and operate it, it is necessary to enhance the awareness of IATF 16949 internally first, and indispensable for our employees in charge of the development and production of in-vehicle products to apprehend it. Therefore, we have concluded to conduct training relating to IATF 16949 and customers' requirements to in-vehicle products.

When selecting employees to be trained, we picked up not all employees but those who wanted to be involved; however, with a higher interest than anticipated, a total of 150 employees have participated in the training over two years. Thus, in the future, we will plan to introduce a core-tool training system that would lead to a quality improvement by applying the system for our practices.

Himeji Plant Nurturing Young Employees and Improving Quality at the Himeji Plant

The Himeji Plant is the domestic production site and the parent plant for our overseas sites for automotive safety components handled by the Safety Systems Group. This plant continues to grow as our global business expands, so that it now has most employees of any of Nippon Kayaku's domestic plants.

Because of this, the number of young employees at the plant has been increasing rapidly due to new hires, and training them is a key issue. We therefore designed a systematic educational program geared toward young employees, launching it in fiscal 2019. This program seeks to upgrade employees' skills so that we can improve the quality of our products and our operations. This program develops human resources in tandem with our product quality education for midlevel employees, which was launched in fiscal 2018.

The program offers not just classroom learning but practical learning as well. Examples include education on the effectiveness of Kanban production that mimics the manufacture of toy blocks and sessions that teach employees the proper way to handle explosives using actual products, as



An educational program at the Himeji

the Himeji Plant handles dangerous explosives. The program is reevaluated every year, so we plan to make more enhancements next year.

Kayaku Safety Systems de Mexico, S.A. de C.V. (KSM) COE 3rd Generation* (Change from Operator to Employee)

In KSM we have different programs for development of our collaborators, COE is a program that involves training operator level employees to become supervisors. We already finished the 2nd generation program and had a graduation ceremony on September 2019 with the 4 collaborators that accomplished the program with good performances.

The 3rd Generation program started in 2020 with 13 collaborators. It is planned for the collaborators to learn leadership skills, teamwork and problem-solving skills until their graduation in September 2021.



* COE 3rd Generation Program participants

COE: change from operator to employee

Operator (day worker; format of employment in Mexico)

Employee (monthly worker; format of employment in Mexico)

	Presencial Training	
	Fresencial Training	
	Online Training	
	Technician Training	
perator	Mentoring from Manager or coordinator	Sta
Study	a technical career (duration from one year to a year and	d halfl

General Business Operator Action Program under the Act for Measures to Support the Development of the Next Generation

We submitted our Action Plan for Measures to support the Development of the Next Generation action plan (from April 1, 2020 to March 31, 2021) to the Tokyo Labor Bureau for approval on April 1, 2020. We will now work to obtain Platinum Kurumin certification as quickly as possible.



Kurumin logo

Encouraging and Rewarding the Creation of Intellectual Property

Encouraging the Creation of Intellectual Property

Nippon Kayaku develops its businesses and contributes to society by producing useful products through the creation and utilization of intellectual properties. To encourage the creation of intellectual property, we have established several programs to reward employee inventions, with both monetary awards and commendations.



■ 1. Performance Award Program and Invention Award Program

Our performance award program provides remuneration to employee patents that have contributed to sales. This program was initiated under the company's rule on the handling of employee inventions first prepared in 1963. This rule was created based on the provision of Japan's Patent Act and hence has been changed over the years with each modification to this law regarding workplace inventions. Inventors receive a certain percentage of the sales and licensing fees in each business year and, not only current employees, but retired employees are also eligible for such payments. Employees responsible for inventions or patents which including utility models and design patents that contribute particularly to sales are eligible to receive a lump sum payment in addition to the performance award, which incentivizes the creation of intellectual property.



2. Early Performance Contributions

Even for patents pending, if an invention has already made contributions to the performance of the Nippon Kayaku Group, the employee can receive remuneration known as an early performance contribution. This particular program was initiated in 2005 to properly recognize product inventions with a comparatively shorter lifecycle. This program serves to complement the previously mentioned Performance Award Program that covers patents after registration, and the fact that employees are eligible to receive payments based on sales for pending patent applications that are not yet registered makes for a very socially advanced program.

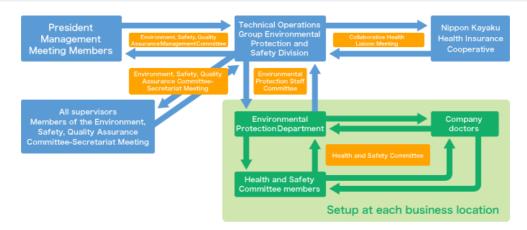
3. In-house Commendation for Excellent Technologies

At the Company-wide Research Presentation Conference held every year, a commendation ceremony is held for employee inventions that have been patented or are patent pending during which time talented inventors are presented with monetary prizes and awards. These awards include the R&D Director's Award, presented at the recommendation of each laboratory head, Patent Pending Award, for inventors with many patents pending, and the Best Invention Award, recognizing highly advanced technological innovations. Moreover, as a way of encouraging employee invention, lectures by award recipients are also held.

Promoting Health Management

The Nippon Kayaku Group reviewed its Declaration on Environment, Health and Safety, and Quality in 2017 and as a result, decided to add an item on health. Employee health is an essential element in any company's prosperity and helps to enhance stakeholder satisfaction at the same time. For this reason, we are implementing various activities for not only preventing exposure to chemical substances handled during work, but also aimed at mental health care and reducing lifestyle diseases.

Health management system



All employees of the Nippon Kayaku Group receive regular health exams, which form the basis for the health and productivity management. After undergoing an exam, employees meet with an industrial physician to receive advice and guidance on how to manage their health.

In addition, employees who handle designated chemical substances receive special health exams. Furthermore, we have created a database of hazardous chemical substances handled in the workplace, which is utilized to help prevent occupational diseases. Each workplace implements a THP* for building mental and physical health in order to maintain and improve employee health. The goal is to encourage employees to review their lifestyle habits and promote continuous and systematic health improvement from a young age to ensure a healthier lifestyle. Specifically, physical fitness measurement, health management contests, walk rallies, hiking and other programs are being organized.

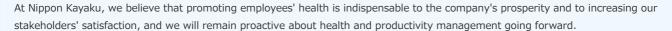
In March 2021, Nippon Kayaku was recognized for its efforts to improve the health of its employees, and was certified as a "Corporate Excellence Program 2021 for Health and Productivity Management" by a large company.

* Total Health Promotion Plan (THP) is a program that utilizes that P-D-C-A cycle involving "health promotion plan," "health assessment," "health advice," "practical activities" and "improving lifestyle habit and invigorating the workplace."

Recognition as a 2021 Certified Health & Productivity Management Outstanding Organization (large enterprise category)

Nippon Kayaku was recognized as a 2021 Certified Health & Productivity Management Outstanding Organization (large enterprise category)*. This recognition is based on the evaluation of the Ministry of Economy, Trade and Industry of Japan and the Nippon Kenko Kaigi that Nippon Kayaku is a company that takes strategic initiatives for managing employee's health from a business standpoint.

Nippon Kayaku has traditionally offered many programs to maintain and promote employees' health, including stress checks, training sessions on mental health, and maintaining 100% participation in health exams. For this recognition, the Company was evaluated for having implemented as many health promotion programs as possible, including how it determines which initiatives to take, its initiatives for improving the results of health examinations, measures dealing with passive smoking, and health promotion events for all employees—while also taking into consideration preventing the spread of COVID-19.



* Corporate Excellence Program 2020 on Health and Productivity Management for large-scale corporate division: A nickname that refers to a certified corporation in the large-scale corporate sector for large-scale corporations and medical corporations among the "health management excellent corporations" established by METI in 2016.

Mental Health Initiatives

To balance improvements in operational productivity with the creation of added value, employees need to have workplaces where they can thrive and also be in good mental and physical health.

The President of Nippon Kayaku issued a Mental Health Declaration in 2005 and since then we have provided thorough guidance to managers on the subject. Mental health care requires that all employees have the correct knowledge and understanding to ensure they can prevent or detect mental health issues at an early stage. We focus the greatest efforts on mental health issue prevention.

As a concrete example, we invited a speaker from our contract EAP* to lead a mental health care training program, which was started in fiscal 2005, and has been held on a three-year plan basis since fiscal 2006, to enable all employees to take part. Currently, we are in the midst of a new three-year training plan started in fiscal 2018. In fiscal 2020, to prevent the spread of the COVID-19 pandemic, we have avoided training using mass gatherings. We have held online self-care programs for all employees in response to environmental changes such as the COVID-19 pandemic, as well as online "line-care" programs for business site managers where work-from-home initiatives are being undertaken.

Meanwhile, regarding the return to work of employees who needed to take time off to recover for mental health reasons, we have established a Return-to-Work Program. This program supports a smooth return to work, with prevention of recurrence in mind, through collaboration between the employee's superior (the Company), an occupational health physician and a counsellor. In addition, we hold stress checks every year in line with our obligations under the "Stress Check System" of the Occupational Safety and Health Act enacted on December 1, 2015.



Health Improvement Initiatives at Business Sites

Responses at Business Sites without a Statutory Industrial Physician

Nippon Kayaku employee working at branches and business offices not required to appoint an industrial physician * were unable to receive follow-up by an industrial physician after undergoing statutory health exams or adult disease exams of the KAYAKU Health Insurance Association administered at the main business hub for each region. As a result, in fiscal 2013, after examining how to provide follow-up at branches and business offices without an appointed industrial physician, we decided to dispatch the industrial physician of the head office to meet with these employees directly. Starting from fiscal 2014, the head office's industrial physician began annual visits to branches and business offices nationwide, from Sapporo in the North to Fukuoka in the south. The industrial physician reviewed the results of health exams before visiting and then selected certain employees for follow-up interviews. These employees meet with the industrial physician at a nearby location or by telephone conference. Because one year was spent covering all of Japan, on some occasions the health exam results of the previous year were used as a basis for interviews, instead of the results of the health exam taken in the same fiscal year of the visit. As a result, we determined an annual itinerary for industrial physician interviews and adjusted the timing of health exams accordingly to ensure that interviews are based on the latest health exam results.



* Branches and business offices not required to appoint an industrial physician: Business sites that employ less than 50 workers are not required to appoint an industrial physician as per the provisions of Article 13 of the Industrial Safety and Health Act and Article 5 of the Order for Enforcement of the Industrial Safety and Health Act.

Kayaku Safety Systems de Mexco, S.A. de C.V.(KSM*) Bájale 1kilo menos: Weight Loss Program

KSM started the program "Bájale 1 kilo menos" in 2014, due to the "Chécate, Mídete, Muévete" campaign promoted by the Mexican Social Security Institute, which promoted physical activity and balanced nutrition to avoid overweight, obesity and other health problems.

The "Bájale 1 kilo menos" program promotes a healthier lifestyle in eating. The 11th edition was held during 2019, with the proposal to improve the lifestyle of our collaborators. The objective is to change eating habits according to the physiological and metabolic state of each, in order to lead a healthier and healthier life.





	20	17	2018	2019	
"1 Kilo Menos" Program	8th Feb – Jun	9th Aug – Nov	10th Feb – Jun	l l th Feb – Jun	
Target weight (kg)	629.4	573.4	678.5	573.8	
Number of participants (persons)	100	91	91	63	
Participation rate (%)	25%	22%	22%	1 5%	
Number achieving target (persons)	7	12	10	12	
Participant achievement rate (%)	7%	13%	11%	19%	
Total weight loss (kg)	141.2	98.3	115.0	103.7	
Total waist loss (cm)	497.75	89.10	545.30	256.4	

* KSM: based on Mexico, supply of the automotive and automotive components

KAYAKU CHEMICAL (WUXI) CO., LTD. (KCW) Health Checkup Seminar

₩

Initiatives for Health and Safety

The Nippon Kayaku Group is committed to promoting initiatives for occupational health and safety aimed at completely eliminating accidents and injuries in the workplace. This includes developing a system for safety training, implementing safety training on a company-wide scale, preventing accidents and injuries before they happen, and conducting health promotion programs.

Safety Performance (targets and results)

The Nippon Kayaku Group sets targets for safety performance based on the following categories: serious accidents and injuries, serious environmental incidents, lost worktime accidents, non-lost worktime accidents, motor vehicle accidents, and non-injury related accidents. With regard to motor vehicle accidents, starting in fiscal 2016, we have subdivided this category further to set targets in the following sub-categories: serious accidents, personal injuries, property damage, and self-inflicted injuries for incidents counted with a separate target per subcategory, in order to analyze incidents and facilitate preventive measures.

1. Safety Performance (results)

The safety performance of Nippon Kayaku business sites as well as all Group companies inside and outside Japan during fiscal 2020 is presented below.

There were no major injuries or accidents in fiscal 2020, in continuation from fiscal 2019. There were two lost worktime accidents within the Nippon Kayaku Group in fiscal 2020, which is also unchanged from fiscal 2019. The number of accidents not accompanied by lost worktime (minor injury accidents) was five, one more than fiscal 2019. Additionally, the number of non-injury related accidents was also one in fiscal 2020.

There was again no serious automobile accidents—either by MRs on work-related trips or during employee commutes—the same as fiscal 2019. Moreover, the total number of work-related automobile collisions decreased significantly to six in fiscal 2020, from 34 in fiscal 2019.

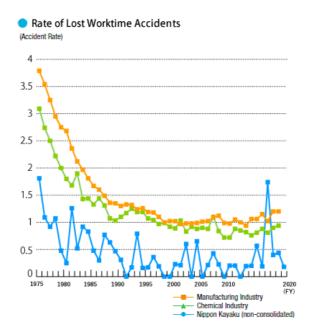
FY 2020 Safety Performance								
		FY 2019			FY 2020			
		Actual	Group		Actual	Group		
Major injury / accidents		0	0	0	0	0	0	
Serious environmental accidents		0	0	0	0	0	0	
Lost worktime accidents		2	0	2	1	1	2	
Accidents not accompanied by lost worktime (minor injury)		3	1	4	3	2	5	
Non-injury related accidents		0	0	0	1	0	1	
	Serious accidents	0			0			
MR work-related / commuting automobile accidents*	Personal injuries	3			0			
	Property Damage	14			4			
	Self inflicted	17			2			
	Total	34			6			

* MR work-related / commuting automobile accidents: Only applicable to MRs using company-owned vehicles belonging to the Pharmaceuticals Group.

2. Graph Comparison of frequency rate of Lost Worktime Accidents

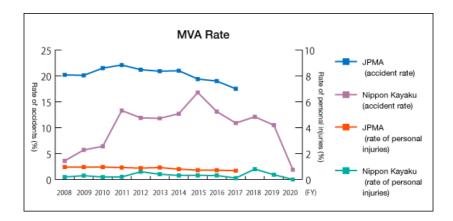
The frequency rate of lost worktime accidents at Nippon Kayaku in fiscal 2020 has maintained the same low rate since fiscal 2018 compared to the rate observed by the manufacturing industry and chemicals industry.

The rate at Nippon Kayaku suddenly increased in fiscal 2017, and greatly exceeded the rate observed by the manufacturing industry and chemicals industry. As a result, we undertook an investigation of lost worktime accidents in fiscal 2017 and found that many were the result of non-regular work. Therefore, we have included in our safety activities 30-second workplace patrol activities and fixed-point observations with the goal of pointing out unsafe actions in order to prevent accidents and injuries during non-regular work since fiscal 2018.



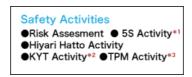
3. Efforts to Prevent MVA

While the rate of motor vehicle accidents at the Nippon Kayaku Group is lower than that of the Japan Pharmaceutical Manufacturers Association each year, our rate has remained somewhat elevated since fiscal 2011. However, in fiscal 2020, partly as an impact of the COVID-19 pandemic, the rate of accidents decreased significantly to a very low rate of six cases. Going forward, we aim to further reduce motor vehicle accidents.



Health and Safety Activities at Each Business Site

We define the health and safety policy and targets, and we are undertaking a wide range of health and safety activities at our business sites.



- *1 5S Activity: An acronym of five Japanese words phonetically starting with the letter "S".
- *2 Kiken Yochi Training (KYT): Danger Prediction Training.
- *3 Total Productive Maintenance (TPM): Activities that maintain equipment and facilities in good working order to ensure safety and maintain productivity.

■ 1. Conducting Safety Assessments (Risk assessment, understanding potential risk factors)

Each of our business sites performs safety reviews for new processes and facilities and whenever changes are made to existing processes and facilities. And we implements "Risk Assessments" in order to prevent business sites accidents, injuries, environmental accidents, complaints and quality issues. Risk factors in chemical reactions are analyzed primarily based on HAZOP.*

* HAZOP: Hazard and Operability Study. A safety evaluation methodology used at chemical plants. Potential hazards associated with chemical reactions can be comprehensively extracted for evaluation.

2. Elimination of Shortcuts and Omissions

Accidents that have occurred within the Nippon Kayaku Group in recent years have tended to result from shortcuts or omissions. As a result, the Nippon Kayaku Group is working to share safety awareness across different workplaces by distributing work flow checklists to help eliminate shortcuts or omissions, having employees issue a safety declaration to prevent shortcuts and omissions, as well as displaying this safety declaration clearly in each workplace.

3. Traffic Safety Initiatives

Many Nippon Kayaku Group employees drive a car as part of their work duties or to commute to work. We perform safe driving reviews using a camera-equipped drive recorder *1. And using the driving aptitude test approved by the National Police Agency *2. From now on, we will further strengthen the education of new employees in practical skills and engage in reducing traffic accidents.

- *1 Camera-equipped drive recorder: A recorder that can analyze bad driving habits, such as sudden acceleration, sudden braking, and sudden turns using sensors for front/back and right/left acceleration, gyrocompass and GPS system.
- *2 Driving aptitude test approved by the National Police Agency: An exam that measures the aptitude of driving based on seven written questions covering 11 topics, including decision making skills, ability to prevent collisions, and mental stability test.

4. Deployment of AEDs

Driving aptitude test approved by the National Police Agency: A driving aptitude test that measures driving ability based on responses to seven questions covering 11 items including situational awareness, collision prevention ability, and mental stability, among others.



AED training

5. Fire Response

Each business location is equipped with a fire truck, fire hydrant, and fire extinguisher for chemical substances in preparation for potential fire hazards. In addition to holding onsite training, employees also participate in local fire fighting competitions at which they have achieved strong results.

> Related Articles



Firefighting training

6. Natural Disaster Response

As a precaution for earthquakes and other natural disasters at each business sites, we have compiled the Employee's Handbook of Disaster (Earthquake) Prevention and distribute it to each and every employee. This handbook contains instructions on emergency response when an earthquake occurs, how to make contact and confirm one's safety, and alternative methods to reach home when public transportation is unavailable.

Employee safety during a disaster is monitored by a safety reporting and communication system that uses email. As an earthquake strikes, the disaster response headquarters will send out an instruction by email to all employees. Employees can reply to the email by a simple touch of a button, which allows data to be collected. This system will be used to confirm employee safety during an earthquake of a seismic intensity of 6 or higher in Japan.

Kashima Plant Recipient of Second Year of Reiwa Prime Minister's Commendation to Distinguished Service in Safety

The Kashima Plant was awarded the Second Year of Reiwa Prime Minister's Commendation to Significant Distinguished Services in the field. This recognition was for its contribution to the prevention of accidents and raising the level of industrial safety for 37 consecutive years without an accident since the start of its operations in 1982. This award is a commendation from the Prime Minister of Japan, awarded on July 1 every year on Japan's National Safety Day to individuals and organizations that have made a distinguished service to maintaining the safety of citizens such as through traffic safety or fire prevention.

This award is the culmination of the plant safety and operation efforts both past and present by former generations of workers and the current generation. March 31, 2021, was the 14,000th consecutive day with no accidents at the plant, however, is merely a milestone and not the end point of this record. The smallest thing could set off an accident and break this impressive record. We will continue to work to





Kashima Plant Improving Operator Skills through the Forklift Certification Program

prevent accidents and disasters through operational safety efforts as one united workforce.

There was a time when there were frequent occurrences of near misses involving forklifts at the Kashima Plant. The following initiatives were undertaken in an effort to prevent accidents before they happened with the goal of improving the skills of forklift operators.



(1)Initiatives for improving skills

All forklift operators were required to take a practical skills short course led by an outside instructor covering the basics of forklift operations and approaches to operator skills and educational guidelines.

(2) Introduction of operator certification program

Only those who passed the certification exam are allowed to operate forklifts (certification lasts for six months).

(3) Environmental improvements

A permanent training course was set up so that operators can practice and take practical exams at any time.

(4) Analysis of driver techniques

An omnidirectional driving recorder was installed on all forklifts to analyze operator conditions and habits using video footage.

These initiatives have helped to drastically reduce the number of near misses involving forklifts. The Kashima Plant will continue to use this certification program in order to prevent accidents before they occur.

Joetsu Plant Safety training that simulates the situation where a hand is caught in a machine (hereinafter; a simulation machine) at Joetsu Plant

Until 2017, the Joetsu Plant had minor work-related injuries including getting caught in roll machines almost every year. When analyzing the causes of the injuries (or accidents), we found that nearly 80% of them occurred among new comers, who have been less than three years in the company. Then, we reviewed our education structures aiming at eradicating such the work-related juries. In particular, we have strengthened safety training for employees up to the third year after joining the company to prevent accidents that occur after they are used to a task. The safety training is conducted to bottom up safety activities by our in-house instructors with the main theme for "5S / Awareness" in the first year of joining the company, "KYT" in the second year, and "Near-Miss incidents" (hereinafter; Hiyari-Hatto) in the third year. In this safety training, we utilize the simulation machine introduced in 2012 to provide the simulation training

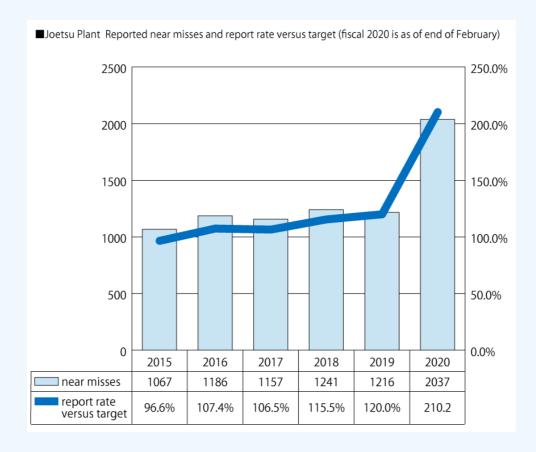




on "getting-caught into machines" using photocell sensors, emergency stop buttons, rope switch activation operations, proximity sensor functions as well. We also focus on the "hiyari-hatto" activities with the aim of preventing work-related injuries by enhancing the "improvement of awareness", "mutual attention" by employees. The target is that the employees submit three or

more "hiyari-hatto" reports per year per person, and in our Manufacturing Department, the activities are particularly strongly promoted.

Work-related injuries occurred almost every year up to 2017; however, through the activities mentioned above, there have been no work-related injuries consecutively since 2018, and the number of consecutive days of non-employee injuries has reached 1280 days (at March 6, 2021). We will continue to utilize PDCA to foster a corporate culture with a high level safety awareness based on our corporate activities.



KSE Kayaku Safety Systems Europe a.s.

The occupational health and safety of KSE employees is an indispensable element of all activities and a top priority of the company. A safe and healthy workplace is not only a fundamental right of workers, it also represents one aspect of KSE's daily operations. Therefore, KSE carries our regular training for confirming whether the optimal conditions are met with regards to employees' work. The company also carries out emergency training (hazardous chemical spills, etc.) and evacuation training to prepare for fires or explosions.

A great deal of attention is also paid to health in the workplace. In accordance with its occupational health and safety screening system, KSE carefully screens employees' aptitude for specific jobs. We carry out multiple checks on the work environment in order to monitor risk factors in each workplace. Based on the results, technical and organizational measures are proposed in order to eliminate jobs with latent hazards. For example, a gas extractor unit is installed on worktables where organic solvents are handled. These units ensure the thorough management of chemical substances in the work environment and eliminate hazardous jobs.

In this manner, KSE will continue to promote preventive measures and have employees propose ways to prevent close calls and actively participate in improvements in occupational health and safety.

Labor Union/Management-Labor Relations

On June 1, 1998, Nippon Kayaku Co., Ltd. and the Nippon Kayaku labor union entered into a labor agreement "based on good faith and trust, in order to acknowledge the social significance and responsibilities of industry and labor, to mutually respect the each other's rights

based on the spirit of the labor laws, and to establish stable and peaceful relations between management and labor." Since then, this agreement has been renewed eight times in accordance with its purpose, so that today we maintain sound relations based on mutual trust between management and labor. Because the Company has a union shop system, with the exception of certain managerial and contract employees, union participation is 100%.

The Company and the union engage in active discussions, and the Company's policy regarding these discussions is to be candid while disclosing as much information as possible. Also, the Central-Management-Labor Liaison Committee meets three times a year, at which the executive team communicates the Company's management policies as soon as the annual business plan, mid-term business plan, and health and safety policy are firmed up. A central management roundtable is held monthly to deepen mutual understanding, to share information about the status of the Company, and to discuss how to solve problems. Also, we are making efforts to promptly communicate the outcome of these management-labor discussions to employees throughout the Company.

The labor agreement clearly states stipulations concerning discussions and negotiations. If there are major business-related changes that may have a profound impact on employees, employees and the employee representative are notified in advance. For example, notification of transfers requiring a change in residence are generally made at least one month in advance. Depending on the particulars, notifications and discussions occur even further in advance.

At the same time, with respect to issues faced by individual offices, we hold monthly business site management roundtables to obtain a shared recognition through discussions and opinion exchanges and to bring about a labor environment where it is easy to work.

Environment, Health and Safety (Integrated) Review with The labor union of Nippon Kayaku

The Environment, Health and Safety Review is conducted together with the Quality Review in an integrated review of Nippon Kayaku's business sites and certain Group companies based on the annual plan. This review process also involves the labor union of Nippon Kayaku.



During the review, the progress of the environment, health and safety policy and plan of the business sites and Group companies being reviewed is checked and results of activities are identified through meetings, documents and onsite audits. The labor union is also given the opportunity to point out issues, as part of efforts to increase the level of safety and health at the company-wide level.

In fiscal 2020, however, to prevent the spread of the COVID-19 pandemic, there were no physical inspections conducted at business sites being reviewed, while a documentation inspection was conducted using a responsible care progress confirmation sheet compiled by the Environmental Protection & Safety Division.

Safety and Health Initiatives with the Labor Union

The Nippon Kayaku labor union conducts health and safety training, titled the Level-Up Seminar (Health & Safety), which is co-hosted by the Company. The Nippon Kayaku labor union puts safety at the top of its action policy and holds this training annually over two days. The first day involves interactive safety training by a third-party specialist organization to experience and learn about actual dangers firsthand and why we follow rules, including getting caught in machinery or hanging from a safety harness. On day two, members of the Environmental Protection & Safety Division led a lecture entitled, "About learning safety measures from past accidents of Nippon Kayaku" and "How to strengthen safety awareness." Also, the labor union held a lecture called "Safety initiatives as a labor union," which explained the importance of a labor union tackling safety issues.

After the lecture, a group discussion was held to pick up and share valuable health and safety lessons and issues from each business site and each local branch of the union. This also focused on thinking about how to utilize and develop on these lessons learned and improve health and safety awareness at the participants' workplaces. While the seminar was cancelled in fiscal 2020 due to the COVID-19 pandemic, we plan to continue this initiative in future.

In addition, labor and management are collaborating toward developing workplaces where employees can work safely and maintain good mental and physical health through Environment, Health and Safety Reviews, elimination of harassment, and measures for mental healthcare.

	2018		2019			2020				
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Unit
Number Of Permanent employees (consolidated)	5,814			5,769			5,664			Persons
Percentage of pamanent employees (consolidated)										%
Number of permanent employees (Japan)	2,079	_	_	2,053	1,730	323	2,077	1,751	326	Persons
Number of permanent employees (consolidated)										Persons
Number of contract employees (consolidated)	_	_	_	_	_	_				Persons
Percentage of contract employees (consolidated)										%
Number of contract employees (Japan)	642	437	205	662	450	212	629	434	195	Persons
Percentage of contract employees(JAPAN)	23.59			24.38	20.64	39.62	23.24	19.86	37.43	%
Employment rate of persons with disabilities (annual average)	1.82			1.97			1.90			%
Rehiring rate of retired employees	62.74	58.69 (*)	100.00	70.58	68.75 (*)	100.00	84.1	82.5 (*)	100.00	%
Employee turnover rate	2.18	2.14	2.42	1.75	1.5	3.09	1.82	1.77	2.14	%
Average age of employees	40.29	40.03	41.67	41.04	39.75	42.33	40.31	39.87	42.63	Age
Average length of service	14.65	14.45	15.68	15.2	14.19	16.21	14.62	14.27	16.53	Years
Number of employees who are new graduates	64	60	4	57	49	8	48	41	7	Persons
Number of managerial employees (Japan)	494	456	38	499	457	42	512	468	44	Persons
Number of managerial employees (consolidated)										Persons

	2018		2019			2020			1111	
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Unit
Percentage of available annual leave taken	61.1	56.7	81.6	60.1	56.8	75.9	65.8	63.9	74.8	%
Percentage of available childcare leave taken		39.5	100		52.4	100		88.6	100	%
Number of employees taking childcare leave	37	17	20	48	22	26	60	31	29	Persons
Return/retention rate for pregnancy and childcare leave	100	100	100	100	100	100	100	100	100	%
Use of nursing- care leave system	1	0	1	0	0	0	0	0	0	Persons
Use of shortened work hours system for childcare	21	2	26	33	2	31	43	0	43	Persons
Health check-up rate	100	100	100	100	100	100	100	100	100	%
		Manufacturing industry average (2018)			Manufacturing industry average (2019)		Manufacturing industry average (2020)			
Workplace accident frequency rate	0.43	1.2		0.44	1.2		0.18	1.2		Frequency
Workplace accident severity rate	0.012	0.1		0.034	0.1		0.000	0.1		Severity rate
		I	I	I	I	I	I	I	ı	ı
Number of union member	1,762			1,871			1,753			Persons
	University degree	High school degree		University degree	High school degree		University degree	High school degree		
Starting salary	226,000	174,200		226,000	174,200		229,500	177,700		Yen
		2018			2019			2020		
Average number of hours of training per permanent employee each year (Japan)		-			-		41.07			Hours

 $[\]ensuremath{\textcolor{red}{\star}}$ The re-employment rate for retirees desiring re-employment has reached 100%



HOME > Sustainability > CSR Activities That Fulfill Our Social Responsibilities > With Our Customers



With Our Customers

The Nippon Kayaku Group conducts company–wide quality activities under its quality system in order to supply the best products to customers. We are mindful that product quality improvements, safety and reliability, as well as the provision of technical services and information are paramount to improving customer satisfaction.

Quality Initiatives

The Nippon Kayaku Group has established a basic policy called The Declaration on Environment, Health and Safety, and Quality and has built a quality management system to continually deliver the best products that satisfy customers. We deploy various initiatives for quality across the entire company and work on quality assurance and quality improvement activities to increase customer satisfaction.

The Declaration on Environment, Health and Safety, and Quality

The Nippon Kayaku Group, under the spirit of its CSR philosophy and Responsible Care, has formulated The Declaration on Environment, Health and Safety, and Quality, in order to maintain and enhance its environmental protection, health and safety and quality assurance practices. We are also implementing this declaration using organized activities.

The Declaration on Environment, Health and Safety, and Quality

Enacted November 7, 1995 Amended May 22, 2017

The Nippon Kayaku Group, under its corporate motto of "KAYAKU spirit", which calls for continuously providing society with the best products through ceaseless progress and the combined forces of our consciences, we will contribute to the realization of a sustainable society that safeguards the life and health of consumers, and supports a comfortable life.

Fundamental Policies

- We will strive to maintain and improve the environment, people's health and safety across the entire product lifecycle, from R&D to production, distribution, sales, recycling, and disposal.
- 2. We will strive to conserve the environment by introducing and developing technologies that are useful toward reducing waste, carrying out the appropriate disposal of waste, conserving resources, conserving energy, and implementing global warming prevention measures.
- We will actively provide business partners with information needed for the safe usage and handling of our products and for conserving the environment.
- We will enhance the quality of not only products, but operating processes as well, and also work to enhance customer satisfaction.
- We will heighten employee knowledge and skills through education and training and achieve our goal of zero pollution, zero injuries, zero accidents and enhanced quality.
- We will disclose information so that stakeholders correctly understand our business activities and also strive to engage in dialogue with local communities and government authorities.

June 25, 2019

President & Representative Director Nippon Kayaku Co., Ltd.

aturio Lesemeto

Quality Assurance System

Quality assurance at the Nippon Kayaku Group is carried out through a control system headed by the Environment, Safety, and Quality Assurance Management Committee, which is chaired by Nippon Kayaku's President.

This committee deliberates and makes decisions on problems and countermeasures regarding the quality assurance policy and quality activity status.

Furthermore, each business division has established a quality assurance department, which is the cornerstone of quality assurance for each business, and has strengthened the quality assurance system.

Quality Assurance and Quality Improvement Activities

The Quality Management Division of the Technical Operations Group heads up the Nippon Kayaku Group's quality assurance and quality improvement activities.

As a quality improvement activity, we are enhancing quality education by promoting in-house training for managers and practitioners of quality risk management and attending external quality training, and carry out various training to enhance and reinforce quality control skills in order to stabilize quality. To verify that the Nippon Kayaku Group's quality management system is operating effectively, we conduct quality assessments of business sites in Japan and group companies, including those outside Japan.



A photo of the "5-Whys Analysis Practical Training" online workshop which connected all domestic business sites online. Participants learnt some "5-Whys Analysis" practice methods, doing exercises on examples in their own workplaces to deepen their understanding of analysis methods.

Quality Assurance and Quality Improvement Activities at each business site

Each business site of the Nippon Kayaku Group deploys various types of quality assurance activities. Also, we are building a database of quality process mishaps so that it can be shared horizontally at other business sites as well.



Quality improvement activities Quality risk assessments Improvement of design and development capabilities Statistical analysis method ("Field Data Analysis – Learning Through Experience") Activities to prevent reoccurrences of quality troubles (why-why analysis, etc.)

Quality Risk Assessments

Whenever changes are made to production process, such as the installation of a new machine that will take the place of a new worker, for example, (whenever so-called 4M changes are made), we conduct a quality risk assessment to prevent quality troubles before they occur. The 4M change is associated with the four acronyms M: "Man", "Machine", "Material", and "Method".

The educational activities for the quality assurance and the quality improvement

As the educational activities for the quality assurance, We offer "Field Data Analysis – Learning Through Experience" program geared toward researchers and developers and plant employees for practical training on statistical analysis methods, send employees to take part in outside quality training, and provide outreach teaching at plants as part of internal auditor training.

Here, we will take a look at measures to reduce customer complaints and curb quality process failures.

Group training could not take place in person at the Training Center "Hisho" in fiscal 2020 due to the pandemic but the with the help of online video conferencing we were able to connect all domestic business sites to hold training on measures against human error and practical training on the "5-Whys Analysis". Given the advantages of holding the events online without the need for travel or accommodation, many people were able to join making the training a big success.

At each of our plants, we utilize quality control methods such as management diagrams as well as carry out quality patrols and QYT activities (quality hazard detection training), as part of our daily quality control activities.

Activities to prevent recurrence of customer complaints and quality process abnormalities

For customer complaints and quality process failures we encourage the use of why-why analysis by the workplace using Nippon Kayaku's why-why analysis manual in order to reinforce preventive measures. In addition, we have published English and Chinese versions of this manual, and are conducting "5-Whys Analysis" for overseas Group companies of Nippon Kayaku.

Published the "5-Whys Analysis" manual of Nippon Kayaku Group

The Quality Management Promotion Department analyzed that there were many similar cases when analyzing quality abnormalities that occurred in the past, so we analyzed that there is insufficient ability to investigate what is at the root of the cause. Therefore, we have introduced the "5-Whys Analysis" with the aim of accurately understanding the relationship between the cause and effect, identifying the underlying "root cause", and preventing the recurrence of similar cases. The first edition of the "5-Whys Analysis" manual was created in Japanese by members gathered from each factory and the manual has now been put into English and Chinese in an effort to promote further afield to overseas Group companies.



Quality Improvement Promotion Activities

Nippon Kayaku's initiatives for improving quality began with the voluntary introduction of statistical approaches to QC* activities by plant engineers in 1948.

After receiving the Deming Prize in 1963, Nippon Kayaku organized its very first In-house QC Circle Conference in 1966 as a venue to present the results of its QC activities. Since then, we have expanded the scope of these activities into "Small Group Activity Meetings" open for all employees, with this name later changed to the "Meeting of the Movement for Tomorrow." The scope of these activities has expanded from quality improvement to operational reform, cost reductions, 5S activities, next-generation development, energy conservation, health and safety improvement, and environmental conservation.

Starting in 2014, these small group activities were revamped exclusively for Nippon Kayaku with a focus not only on improvement, but also on human resources development and CSR activities.

Global Quality Control and Human Resources Development within the Safety Systems Group

The safety systems group supplies automotive safety components to customers around the world. This requires that it provide and guarantee the same standard of quality. The group has production facilities worldwide and so the Himeji mother plant has implemented the Robust design* resilient in the face of numerous variations given the requirements of differing production sites in terms of culture, language and technologies. This approach has enabled it to provide the same level of quality worldwide.



Technical interns from Malaysia and members of the Himeji Plant's Quality Assurance Department

At its global production sites, locally hired managers and line workers are selected to take part in extended trainings at the mother plant to obtain essential knowledge and skills. After completing their training, they return to their workplaces and serve as instructors to pass on their knowledge and skills to others.

* Robust design: A design in which product performance and quality does not vary and is not affected by interference or measurement errors.

Aiming to Create Products that Satisfy Customers

The Nippon Kayaku Group is undertaking various research and development for new products and services in order to supply products that support the enriched and healthy lifestyle of its customers.

Head-up display related products for automobiles (under development)

Nippon Kayaku is developing products that can contribute to the safe driving support systems. Head-up displays, which display information on the windshield or clear screen of cars, allow the driver to access information without averting their line of sight. These displays are anticipated to become more popular going forward in place of conventional car navigation systems.



HUD using Freelux® HUF

However, as windshields are made up of two plates of glass, there is the issue with head-up displays showing double images if simply projecting an image onto the glasses, while the display is difficult to see when wearing polarized sunglasses.

To address this issue, we developed a new product called Freelux® HUF* using our proprietary optical design expertise.

Freelux® HUF is a breakthrough film that eliminates double image of a projected image as well as allows images to show up vividly to the eyes even when wearing polarizing sunglasses by inserting this film between the two plates of glass of a windshield. This was exhibited as a conceptual sample at the 2017 Highly–functional FILM EXPO, which attracted many visitors who were able to experience its effects. Currently, we are working on development aimed at commercialization.

Together with our group companies, we will continue to propose new products with features that will contribute to the "Environment, Energy Conservation, and Safety."

* [Freelux® HUF] Light control film for head-up displays.

Medical Information Service Center and Securing Customer Trust

The Medical Information Service Center receives toll free calls from patients and medical professionals with various questions relating to our pharmaceuticals and medical devices, such as anti-cancer drugs, treatments for autoimmune diseases and intravascular embolic materials. Staff at the Medical Information Service Center carefully and accurately respond to each inquiry to ensure that all of the products supplied by Nippon Kayaku are of the highest possible quality. We also conduct surveys to check whether our response meets the expectations of the customer as part of our continual improvement initiatives. Additionally, staff work with medical representatives (MRs) that visit medical facilities to ensure they can provide information that is beneficial to patients, while customer requests and opinions are proposed and reported to each relevant department in charge within the company. The Medical Information Service Center is committed to improving medical care under the slogan "provide proper usage information and improve customer satisfaction in all situations."



Medical Information Service Center

Information Site

We have prepared websites which are useful for patients and their families.

■ 「Note on Fibroids」

This is a comprehensive information site on uterine fibroids for the general public. Filled with helpful information on what Uterine Fibroids are and their symptoms and treatment, the site provides easy-to-understand information for women who are busy with work, child-reading, caregiving, hobbies, and the like.



■ 「IBD-INFO」

This is an information site for IBD patients.

IBD stands for Inflammatory Bowel Disease. Generally, IBD refers to Ulcerative Colitis and Crohn's Disease. The microsite IBD-INFO provides easy-to-understand commentary from a healthcare professional about the symptoms of Ulcerative Colitis and Crohn's disease as well as exams, diagnosis, treatment and daily care, among other topics.

The microsite features a host of different content about causes and symptoms, treatment methods, daily care, and public subsidies for defraying healthcare costs, so as to provide patients with an extensive resource of need-to-know information. Additionally, articles on the latest in IBD treatment and care featuring interviews with specialist physicians are regularly published on the microsite as well. The goal of this microsite is to broaden patient understanding and empower them with the correct knowledge so that they will be more motivated during the treatment process.



> IBD-INFO 🗐

■ 「RHEUMATISM RA·RA·RA」

The microsite "RHEUMATISM RA \cdot RA \cdot RA" was launched in February 2015 to educate people living with Rheumatoid arthritis. This site was created with a commitment to serve as a close, everyday partner for people with Rheumatoid arthritis by providing emotional support.

The site, which is also compatible with smartphones, offers an easy-to-use platform that is user friendly, including oversized icons that are easy to touch. The site offers various content covering the topics that patients want to know about, including the causes of Rheumatoid arthritis, symptoms, and treatment options, a long with medical costs involved, care services and a hospital search function. Additionally, the site provides information about Japan's high cost medical care benefit system accessible for the treatment of Rheumatoid arthritis and also a medical cost reimbursement calculator. The video collection of exercises for Rheumatoid arteritis patients selected by the editorial supervisor, who is a specialist in rheumatology, can be watched at home where patients can also try them out at their convenience.

The phrase "Feeling Happy" and the four leaf clover mark form the logo used by Nippon Kayaku's immunology business. Like a four leaf clover, we hope to play an integral role in patient's lives and provide emotional support. New perspectives play an important role in the treatment process and making life more enjoyable. Our hope is to contribute to each and every patient "Feeling Happy."



> RHEUMATISM RA · RA · RA 🗇

■ 「Breast Cancer Info Navi」

Breast Cancer Info Navi was launched in 2006 as an informative website for breast cancer patients. This Navi aims to provide information from specialist physicians and pharmacists to all women, not just breast cancer patients and their families.





Initiatives at the Himeji Plant

New Dojo Set up as an Education and Training Venue

In fiscal 2018, the Safety Systems Group started offering education at the Himeji Plant's new Dojo (Educational Center), which will serve as an educational and training venue for employees. The Dojo is divided into zones for educating new hires about the Company's safety and quality rules and prohibitions (dos and don'ts) in an easy-to-understand format and zones for providing hands-on experience. Also, incorrect judgments made during emergencies by plant or research lab on-site supervisors will result in a spate of defective products. We have therefore launched courses about our products and processes and that review past problems with products and processes, which are led by veteran employees selected from the plant and research groups to enhance the skill levels of mid-range employees (120 people).



Training taking place in fiscal 2019

Furthermore, the Safety Systems Group's overseas subsidiaries are also setting up Dojos to offer similar education.

Agrochemical Business Initiatives

Contributing to Agricultural Production with Our New Insecticide (FINESAVE®)

Launched in June 2018, FINESAVE® is new type of insecticide that is highly effective in killing thrips, silverleaf whiteflies, rust mites, cabbage moths, and other pests that plague leeks, onions, tomatoes, strawberries, white radishes, cabbage, and other types of produce.

Because FINESAVE® is a new kind of agent that does minimal harm to useful insects and the natural enemies of these pests, it can be used during the growing season, when the use of agricultural chemicals had to be restricted in the past. We are holding discussions with local instructional organizations regarding crop systems, usage of agrochemicals, etc., so that we can suggest ways to use this product efficiently and skillfully while taking maximum advantage of its attributes. We are working so that this agent can contribute to actual agricultural production in the future.



Initiatives for Improving Crop Quality

For higher-quality crops and the production of safer crops, the Agrochemicals Division is proposing ways to use our existing products, Leaf Guard® and Fumon®, along with our new product, FINESAVE®, which went on the market in June 2018 and is effective in killing such pests as thrips, rust mites, and cabbage moths.

We are conducting marketing and sales promotion activities that propose using FINESAVE® with Leaf Guard® (which is effective on a broad range of eggs, larvae, and adult insects) on such major cabbage and Chinese cabbage pests as cabbage moths, which have thus far been fairly resistant to existing agrochemicals, and that propose using FINESAVE® with Fumon® (which has the capabilities of spiracle-blocking agents plus spreading agents and is safe enough to use over and over until harvest time) on strawberries and the like.

We will continue our untiring efforts to improve crop quality in the future.

> Agrochemicals Business





HOME > Sustainability > CSR Activities That Fulfill Our Social Responsibilities > With Our Business Partners



With Our Business Partners

The Nippon Kayaku Group engages in proactive communication with all of its business partners.

Supply Chain Management

The Nippon Kayaku Group has formulated its Basic Procurement Principles and Basic Procurement Policy so that its purchasing activities will be consistent with CSR management. We practice CSR with all of our suppliers.

Initiatives for CSR Procurement

The Nippon Kayaku Group is working with every member of its supply chain to bring about a sustainable society, so its procurement activities consider such aspects of CSR as respect for human rights, protection of the environment, occupational health and safety, compliance with laws and regulations, and fair business dealings. We formulated our Basic Procurement Principles and Basic Procurement Policy in order to engage in procurement activities that are appropriate for CSR management. Our procurement activities therefore follow these guidelines.

Basic Procurement Principles

In order to realize the KAYAKU spirit, Nippon Kayaku Group will pursue mutual and sustainable growth with suppliers based on the understanding they are important business partners who help us produce products of the best quality.

Based on our basic procurement policy, we Nippon Kayaku and our affiliates conduct our transactions with fair, just and sincere attitude following with the laws and the social norms all the time.

Basic Procurement Policies

At Nippon Kayaku Group, all procurement operations will be carried out in accordance with the Basic Procurement Policies as set out below.

Compliance with Relevant Laws, Social Norms, and the Nippon Kayaku Group Charter of Conduct

- We will comply with all relevant laws and regulations when conducting procurement operations.
- 2.We will judge the propriety of procurement activities based on Nippon Kayaku Group Charter of Conduct and the Nippon Kayaku Group Code of Conduct and Group Action Guidelines.

Open-door Policy, Fairness, Impartiality, and Transparency in Business Transactions

- 3.We will conduct procurement-related business transactions in a fair, impartial, and transparent manner, and follow an open-door policy with respect to businesses at home and abroad.
- 4.In order to ensure transparency in all our procurement activities, we will undertake due procedures based on written documentation or electronic purchasing systems in accordance with the procurement operations standards.

Partnerships with our business partners

5.We will build partnerships with suppliers based on mutual understanding and trust, and pursue mutual sustainable growth.

Protection of Information

6.We will protect supplier-related information obtained in the course of our operations, and strive to prevent any information leakage.

Concern for the Environment

7.We will promote the procurement of eco-friendly goods and materials.

Basic Criteria for Selecting Suppliers

- 8.When selecting goods and materials, we will give due consideration to economic factors such as quality, price, and date of delivery. We will also consider other factors such as the supplier's operating foundations, technological competitiveness, and stability of supply.
- 9.When selecting suppliers, we will give due consideration to their commitment to corporate social responsibility (CSR), including their observance of relevant laws and regulations, respect for human rights, concern for the working environment, disaster preparedness and safety measures, efforts toward environmental conservation, and other efforts designed to fulfill their CSR.
- 10.In addition to the above, we will give due consideration to whether or not the potential supplier has a risk management system such as BCP (Business Continuity Plan).

Initiatives for CSR Procurement

The Nippon Kayaku Group is working to obtain the support of all our suppliers in its goal of bringing about a sustainable society by publishing its guidelines in the CSR Procurement Guidebook, which includes the Nippon Kayaku Group Charter of Conduct, Basic Procurement Principles, and Basic Procurement Policy.

We are advocating CSR procurement practices in which we and all of the business partners in our supply chain—from R&D, to procurement of raw materials, to manufacturing, sales, and distribution—take respect for human rights into consideration, as well as environmental protection, occupational health and safety, legal compliance, and fair business dealings.

Our efforts to obtain our suppliers' understanding of our CSR Procurement Policy include briefings, ordinary communications, and business meetings.

We will continue to exercise our social responsibilities vis- \grave{a} -vis the entire supply chain and will strive to strengthen our ties with all of our business partners so that we will gain their respect and admiration as we realize a sustainable society.

Environmental and Social Assessment of Our Business Partners

Following on from fiscal 2019, in fiscal 2020 we conducted a CSR survey of our business partners with a trading volume over a certain amount (about 850 companies). The questionnaire verified what our business partners are doing with respect to environmental protection, and we found that none of those who responded 281 companies) were negatively impacting the environment. We also determined that among their social initiatives, there were no instance of harassment, discrimination, forced labor, inappropriate work hours or wages, or other antisocial behavior. We plan to continue these initiatives going forward as part of our risk management.

Initiatives Toward a Business Continuity Plan (BCP)

Nippon Kayaku always tries to obtain up-to-date information on disasters and accidents in its supply chain. When we receive such information, we share it by immediately entering it into our in-house data base. We also promptly compile a list of the raw materials produced by the affected countries of origin and manufacturers and check the impact on our procurement and inventories, the status of restarting plant operations, and the impact on production. Although we have diversified our procurement sources for many items in line with our BCP program, we are working to strengthen these efforts so that we will be able to deal with any situation.

Safety Systems Group Annual Purchasing Conference

The Safety Systems Group organizes annual purchasing conference for its key suppliers. At these meetings, we provide information on our earnings forecast for the current fiscal year; business plan for subsequent fiscal years; status of the production system; development plan; medium—to long term business vision; as well as Basic Procurement Policies with the interest of helping our partners formulate their business plans.



The Purchasing Conference in fiscal 2019

Also, we presented one partner company which responded to our quality, costs, and delivery requirements in a model manner with Outstanding Partner Company Award.

Functional Chemical Group First Online Exhibition

The Functional Chemicals Group exhibited its products at the "Chemical Material Japan 2020 – ONLINE" event held from October 19 to November 18, 2020. This event is the only general exhibition in Japan for the chemical industry, being held every year at the Pacifico Yokohama venue.

Products showcased at the exhibition, held online in fiscal 2020 due to the coronavirus pandemic, included epoxy, maleimide, and acrylate resins, photobase generators, MEMS products, resin compounds, and wet chemical products by the Functional Materials Division, as well as transparent heat insulating films and hollow titanium oxide developed by the New Business Development Center.

As a result, nearly 2,000 people visited our booth with more than half downloading our materials. We received many inquiries regarding the products exhibited, making the event a good opportunity for a large number of customers to find out more about our Company and our products.

The Functional Materials Division and the Planning & Coordination Division of the Functional Chemicals Group have begun digital transformations so that more customers can use our products.

As a result, it has been possible to narrow down potential customers even from the many people who visited our booth at the exhibition, allowing for more efficient sales activities.



Responding to Emergencies

Reporting Drills

Our Agrochemicals Business handles such substances as Kayaku Chloropicrin, Dojo Picrin, and Chlopic Flow, which have chloropicrin as their active ingredient and are used in fumigating soil to protect crops from diseases and insect pests when growing vegetables.

In November 2020, we conducted a Chloropicrin Distribution Accident Emergency Response Dispatch Reporting Drill enacting a scenario where a truck loaded with Dojo Picrin had overturn on the highway spilling its contents. Participants swiftly contacted the companies and business sites with which we have agreements, investigated the site of the accident, sent faxes, and arranged for emergency vehicles, and an emergency dispatch team loaded equipment onto the emergency vehicles.

> The Nippon Kayaku Group's BCP Initiatives





Scenes from a reporting drill



HOME > Sustainability > CSR Activities That Fulfill Our Social Responsibilities > With Our Shareholders and Investors



With Our Shareholders and Investors

Nippon Kayaku strives to earn the trust of all stakeholders and to continue to be an essential part of society. In order to achieve that, we have established Disclosure Policy and are disclosing information to our shareholders, investors and other stakeholders in a timely, fair and equitable manner.

> Disclosure Policy

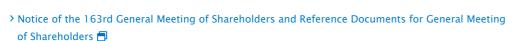
Communicating with Investors

The Nippon Kayaku Group holds its ordinary general meeting of shareholders every year in June as a venue for communicating with its shareholders.

To provide our shareholders with business reports and voting resolutions in a more timely and easy to understand fashion, we are digitizing meeting notices and providing English-language meeting notices on our Company website, and are moving up the dates that we send out meeting notices and provide electronic disclosure.

Also, we are trying to make it easier for our shareholders to exercise their voting rights by installing an electronic voting system whereby shareholders may cast their votes on smartphones and the internet if they are not submitting a voting form.

We send out a business report every six months so that our shareholders can stay informed about our businesses and other topics.





General meeting of shareholders

Communication with Institutional Investors and Securities Analysts

Holding IR meetings and telephone conferences about financial results

Nippon Kayaku Group holds IR meetings and telephone conferences about financial results for institutional investors and securities analysts. President and all Managing Director attend IR meetings, which are held after the second quarter and annual financial results, to explain our financial results and forecasts, as well as the policies and progress of our Mid-term business plan. In addition, telephone conferences are held during the first and third quarters of the fiscal year to explain business conditions and answer questions from guests.



Earnings Presentations in fiscal 2019

> IR calendar 🗐

One-on-one Meetings

We hold one-on-one meetings to communicate directly with institutional investors and securities analysts.

Open House Tours at Plants and Round-table Conferences with Investors

Nippon Kayaku host open house tours of our plants and round-table conferences for institutional investors and securities analysts every year, to promote better understanding of Nippon Kayaku's business activities.

Website development

The Nippon Kayaku website has business and solution, product, IR information, CSR information, company information, etc. We quickly post information especially about investor relations, including management policy, financial, quarterly financial results briefings, integrated reports for our shareholders and investors 's solid understanding.

> Investor relations

Copyright © Nippon Kayaku Co.,Ltd. All Rights Reserved.



HOME > Sustainability > CSR Activities That Fulfill Our Social Responsibilities > With Our Local Communities



With Our Local Communities

The Nippon Kayaku Group aims to be a company closely rooted in communities through its involvement at the local level, proactive engagement with all stakeholders and support for the educational needs of the next generation.

For society built on a healthy and productive life

Asunaro House - Let's Assist Children with Intractable Diseases and Their Families

The Nippon Kayaku Group, as part of commemorative projects marking its 80th anniversary and under the motto of "Let's assist children with intractable diseases and their families," owns and operates Asunaro House. Located near central Saitama City, Saitama Prefecture, this is an extended-stay facility for children undergoing hospitalization and treatment of illnesses and for accompanying family members.

With 10 private rooms of about 18 square meters able to accommodate two adults and a child, along with a large dining room and kitchen, the facility serves as a comfortable "home away from home."

Current and former employees of Nippon Kayaku and its affiliates regularly perform volunteer cleaning and yard work at Asunaro House so that families can enjoy a pleasant stay.

Our goal is to offer a facility that provides networking opportunities for the families of sick children and helps alleviate the mental and financial burden on these families while safeguarding their privacy.







Current and former employees volunteering in cleaning and vard work

Message

Since its founding 23 years ago, Asunaro House has hosted 71,021 persons from 3,638 families. From all across Japan, more and more families are coming to us to receive expert and advanced treatments at nearby medical institutions offering pediatric care, including Saitama Children's Medical Center, NAGATA Microtia and Reconstructive Plastic Surgery Clinic, and Yamato Acupuncture Clinic.



The number of staying families decreased last year due to the COVID-19 pandemic, but we continue hosting families daily while

enacting anti-contagion measures.

Since accepting the position of House Manager in 2017, I've sought to give the premises a sense of the seasons through decorations and to incorporate new things I've learned through information exchanges with similar facilities nationwide, to make Asunaro House home for those who stay here.

We'll continue efforts every day to make this a "home away from home" where children battling intractable illness and their families can stay in safety, ease, and comfort.

We cherish the "thank you" that we hear from children who leave the hospital to head for their real homes with family.

Yamaji, House Manager

Providing Support for LRI Activities

The Long-range Research Initiative (LRI) is a joint initiative of the chemical industries of Japan, the United States and Europe. Part of the voluntary activities of International Council of Chemical Associations (ICCA), LRI supports long-term research into the effects of chemicals on human health and the environment, with focus on endocrine disrupting effects, neurotoxicity, chemical carcinogenesis, immunotoxicity and elaborating risk factors.

Nippon Kayaku has actively supported LRI from its start in 1999 by offering financial support for LRI activities. and attending the committee.

Sports promotion

Nippon Kayaku engages in activities to support sports activities and in-house health promotion events.

We will continue to advance a variety of social contribution activities to realize our Corporate Philosophy of safeguarding life and health and supporting comfortable lives.

T.League Official Sponsor

We endorse and support the T.League philosophy of enriching lives through the world of table tennis. Along with our support for the league, we will work to fulfill Nippon Kayaku's Corporate Philosophy of safeguarding life and health and supporting comfortable lives.



> T.League website (Japanese)

V League: Gold Partner, Wolfdogs Nagoya

Volleyball is a sport that connects players through play. We endorse and support the activities of Wolfdogs Nagoya, a team active under the idea of connecting people.

> Wolfdogs Nagoya website (Japanese)



Participation in the Scrum Japan Program as a supporter

We serve as a supporter of Scrum Japan, a program launched by the Japan Rugby Football Union to carry out rugby-based activities to nurture and educate the children and adolescents who will shoulder our future.

Endorsing the program's aims, we will participate as a supporting member and provide support as a part of our social contribution activities.



> Scrum Japan Program website (Japanese)



Nippon Kayaku head office Certified as a 2020 Tokyo Metropolitan Government Sports Promotion Company

Nippon Kayaku was certified by the Bureau of Olympic and Paralympic Games Tokyo 2020 Preparation as a 2020 Tokyo Metropolitan Government Sports Promotion Company. Under the certification system for this program, the Tokyo Metropolitan Government recognizes companies that demonstrate outstanding efforts in promoting employees' sports activities and social contribution activities in the field of sports.



Nippon Kayaku will continue engaging in health promotion events and actively working to improve our employees' health.

> Tokyo Metropolitan Government Sports Promotion Company Certification System 🗇

Supporting the Development of the Next Generation

CSR Educational Initiatives

Four approaches including outreach classes, Learning collaboration-oriented, events, and site visits. In FY2020, due to the COVID-19 pandemic, we cancelled, postponed, or switched to holding events remotely.

Outreach Class

Outreach classes are developed based on our own educational program that are in line with elementary schools' guidelines with and implemented in schools around plants.

Outreach class: "Discovering the body! Mechanisms of the body and its relationship to medicine"

A curriculum to learn the following four concepts through experimentation developed based on "Constitutions of the Human Body and Functions" as a science subject related to the pharmaceutical business.

- (1)How are nutrients absorbed into the bloodstream after being digested; how do they circulate throughout the body?
- (2) How do medicinal ingredients become absorbed into the bloodstream from the small intestine; how do they circulate throughout the body?
- (3)The deep relationship between the efficacy of medicines and the body's mechanisms.
- $(4) Pharmaceutical\ companies\ making\ various\ efforts.$

Takasaki Plant

Class for Grade 6 students at Takasaki Municipal Iwahana Elementary School

An outreach class was hosted for grade six students at Takasaki Municipal Iwahana Elementary School on June 2019. Employees from the Takasaki Plant with highly specialized knowledge acted as the teacher and teaching assistants. While these teachers were somewhat nervous, they strived to get closer to the students to promote clear understanding and share their advice. We will continue to hold outreach classes like this one in order to instill interest in chemistry among school children and enable them to feel more comfortable as a member of society.



Training taking place in fiscal 2019

Tokyo R&D Administration Office

Class for Grade 6 students at Kita Ward Nadeshiko Elementary School

An outreach class was hosted for grade six students at Kita Ward Nadeshiko Elementary School on July 2019. Researchers from the Pharmaceuticals Research Laboratories and Functional Chemicals

R&D Laboratories served as teacher and teaching assistants. The students were captivated by the experiments held in class and gave their undivided attention. The outreach class experience was also appreciated by the school teachers. Through this event, students were encouraged to learn more about chemistry as well as to understand more about Nippon Kayaku.



Training taking place in fiscal 2019

Learning collaboration-oriented

Nippon Kayaku head office Collaborating on learning with Kudan Secondary School in Chiyoda-ku

Nippon Kayaku collaborates with Kudan Secondary School, located in the company's previous head office area of Chiyoda-ku, Tokyo, to hold classes for learning about the local area during the school's comprehensive learning period. We continue contributing to the community even after relocating to the Marunouchi area in 2014. Every year, we invite students to Nippon Kayaku for an introduction to the company, a lesson on advertisement production, an explanation of an assignment, a company tour, and other activities, with students presenting us with the outcome of their assignment at a later date.



Assignment: "Think about an advertisement unique to Nippon Kayaku that would attract people's interest!"

The event this year took place via teleconferencing due to the COVID-19 pandemic. A Public Relations Department employee who creates ads delivered a class on the topic, discussing "what, how, and to whom" an ad should communicate to be effective. Students put forth ideas and deepened discussions in groups. They delivered an interim report one month later, then a final report using PowerPoint after another month.

We will continue this effort as an aid to students' learning.

Site Visits

Himeji Plant

Initiatives to Cultivate the Next Generation

We invited 6th-grade students from a nearby elementary school for a workshop to create fizzy tablets that resemble the gas forming agents produced at our Himeji Plant.

The children watched a video on the importance of airbags and the combustion of gunpowder, and experienced component and product quality inspections at our "dojo" facility for in-house hands-on education.

This year marked the fifth year of the program. We hope to continue making refinements to communicate the fascination of science and the enjoyment of creating things.





Training taking place in fiscal 2018

Event-based Educational CSR

Asa Plant

Science Expo hosted by the City of Sanyo-Onoda "Using Chromatography to Make Round Fans" event for elementary and junior high school students

As a Plant has participated in the annual Science Expo hosted by the City of Sanyo-Onoda. Under this year's theme, "Let's Play with Color," we held chromatography experiments and had students experience the world's only round fan making event.

Children were able to get a sense of the wonders of science as we explained how to use color separation when making the fans.



Training taking place in fiscal 2019

Kashima Plant

Customer living expo as Kamisu Festa hosted by the City of Kamisu in Ibaraki Prefecture

Experience-based Event for Elementary School Students

Kashima Plant and Agrochemicals research laboratories participate in Customer living expo as Kamisu Festa hosted by the City of Kamisu in Ibaraki every year in October with the goal of giving back to the local community by conveying and fostering interest in science and chemistry among youth.

The Nippon Kayaku booth hosted a hands-on event called "Let's play by making bead-like capsules," which utilizes the technology and products of Kashima Plant and the Agrochemicals Laboratories. Students took part in the simple chemical experiment of creating artificial salmon roe.



Training taking place in fiscal 2019

Tokyo R&D Administration Office

Held class for elementary school children during summer vacation

A summertime class for elementary school students between grades three and six was held at Tokyo's Kita Ward Nadeshiko Elementary School on August 2019.

Members of our Tokyo R&D Administration Office and our other research laboratories collaborated in holding experiments using acrylic resins, which are photo-setting resins. The children were excited to see liquid acrylic resin become solid when exposed to light. Going forward the Tokyo Business Office will continue to host events such as this for students to engage their interest in chemistry while learning more about Nippon Kayaku.



Tokyo R&D Administration Office Head office

Hosted by Japan Chemical Industry Association (JCIA)

~The Summer Children's Science Experiment Show~ Experience-based Classroom

Nippon Kayaku participated in the Summer Children's Science Experiment Show for elementary school students held for two days between August 3 and 4 at the Science Museum (Kudanshita, Tokyo) and more than 200 children took part.

With the theme, "A Shiny Key Holder Made of Resin: The Riddle of a Strange Liquid That Hardens in the Light," we made objects using acrylic resin for photo-setting. This was the first time we made photo-setting resin our theme for the Summer Children's Science Experiment Show. The children had fun and cheered when they finished making unique key holders using shiny beads and a decal of Kayakuma the Bear.





Training taking place in fiscal 2019

Joetsu Plant

Joetsu Science Museum in Joetsu City, Niigata Prefecture Held a science class using polarizing film

The Joetsu Science Museum in Joetsu City, Niigata Prefecture is hosting an exhibit where patrons can experience and enjoy the themes of human science and the science of snow through nine zones involving seeing, touching and checking. During this event, we provided polarizing film so children could enjoy science handicrafts at its paper cup kaleidoscope booth as part of the Science Plaza held in May 2016.



KSM

Continuing Education Support at KSM

KSM* has been offering an educational support program for the children of employees since 2014 because it is committed to the welfare of its employees. In August 2019, the company held an event to aid the education of 29 children of employees.

Each child participating in the event drew a picture containing Nippon Kayaku's mascot, Kayakuma the Bear, on such themes as "Safety First," "Superior Quality," "The KAYAKU spirit, the Nippon Kayaku Group's corporate vision," and "Care for the Global Environment." Then, at the end of the event, we gave the children backpacks containing a set of necessary school supplies to reduce the burden on their caretakers when they go to school.

* KSM is a group company in Mexico that manufactures automotive safety components.



Group photo of everyone holding their school supply presents(2019)





Initiatives in Local Communities

The Nippon Kayaku Group strives to foster understanding of its business activities in local communities through festivals and open houses at its plants and facilities, educational programs, donations and other forms of support, blood drives, pink ribbon campaigns, clean-up campaigns, and round-table discussions.

Going forward, we will organize various platforms to proactively engage with the local residents as part of our goal of becoming a company that is closely rooted in the local community.

Nippon Kayaku's Agreements with Local Authorities

Business Site	Agreement	Local Authority		
Fukuyama Plant	Agreement on environmental pollution control	Hiroshima Prefecture and Fukuyama City		
Asa Plant	Agreement on water pollution control	Yamaguchi Prefectural Fisheries Cooperative		
	Agreement on environmental protection	Sanyo-Onoda City		
Tokyo Plant	Green agreement	Adachi City		

Business Site	Agreement	Local Authority			
	Agreement on establishing Colored Effluent Issue Council	Tokyo Metropolitan Bureau of Sewerage No. 2 Control Office			
	Agreement on mutual disaster relief support in case of an earthquake	Shinden Neighborhood Association and Shinden 1– chome Residents' Association in Adachi City			
	Agreement to provide the general public with access to a small water pump storage facility	Senju Fire Department			
Tokyo Business Office	Provision of fire fighting facilities 1. Provision of water for firefighting 2. Deployment of a boat for rescues 3. Fire fighting group cooperation site 4. Use of rooftop as a lookout	Tokyo Fire Department Akabane Fire Station			
Takasaki Plant	Agreement on assistance from voluntary fire fighting brigade	Regional fire departments including Takasaki City			
Himeji Plant	Memorandum on effluent control	Himeji City			
Kashima Plant	Agreement on environmental pollution control	Ibaraki Prefecture, Kashima City, Kamisu City			

Piece of our activities

Asa Plant

Praying for the end of the COVID-19 pandemic and giving thanks to Health care workers

Fireworks launch at the Asa Plant

Amid the cancellation of numerous events due to the COVID-19 pandemic, the Asa Plant also canceled its "Wasshoi! Kayaku Festival." Following repeated consideration of whether some event could be held to vitalize the community, the plant decided on a fireworks launch at two locations in the Asa and Koyo districts, incorporating a message of gratitude toward health care workers and the local community.



A heavy rain fell from the morning on the launch day of July 23, but the rain eased off just before the launch, which went off without trouble. A total of 75 fireworks of 5.6cm and 12.0cm diameters were launched in the 3-minute display. We believe the fireworks project was a success, as spectators expressed words of gratitude and reported being cheered up. It is said that fireworks originally expressed wishes for the ending of plagues. We pray that the pandemic will subside as quickly as possible so that we will return to our pre-COVID-19 normal.

Fukuyama Plant About Fukuyama, the City of Roses

Fukuyama-shi,located in the mid center of Inland Sea of Seto. The city of Fukuyama was a center of culture and industry for the Fukuyama feudal clan during the Edo period. The city encompasses areas including Tomonoura, which flourished since ancient times as a p harbor of waiting for a tides chance, and Kusado Sengen, which prospered as a temple town of Myouou Temple during the Kamakura period. However, the great air raid of August 8, 1945 burned down about 80% of the city and took many lives. Around 1956, as post-war turmoil continued, residents near Minami Park (now Rose Park) planted 1,000 rose bush seedlings and launched Fukuyama's history as the "City of Roses." The local government is currently working hand in hand with a citizen, groups, and an enterpriser present to develop activities such as the Fukuyama Rose Festival, aiming to create a "City of Roses" to show off to the world. The city hopes to nurture a "rose mind," a mindset of compassion, kindness, and mutual aid through roses.

The Fukuyama Plant currently cares for 300 rose bushes on the plant grounds. When the Fukuyama Rose Festival was canceled in 2020 due to the COVID-19 pandemic, roses were used to decorate counters at city hall, health centers, hospitals, and other places frequently visited by citizens. The Fukuyama Plant provided roses for these efforts.





Kayaku Safety Systems Europe a.s.(KSE) 6th Pink Ribbon Day

KSE* planned activities for the 6th year of its Pink Ribbon Day in 2020, including a public meeting at a local library with a breast surgeon from Vsetin Hospital and a physician from the hospital's Mammography Center, and a lecture by KSE employees inside the company with a demonstration of breast self-examination using a scale model.

Unfortunately, all of the activities were discontinued due to the COVID-19 pandemic. However, KSE was able to distribute educational leaflets to hospital waiting rooms and local pharmacies. KSE expects to hold an unrestricted Pink Ribbon Day in 2021.

* Kayaku Safety Systems Europe a.s. (KSE), located in the Czech Republic, engages in the manufacture and sale of automobile safety components



KSE employees wore pink to show support for the campaign.

Kayaku Safety Systems de Mexico, S.A. de C.V.(KSM) Pink Ribbon Campaign activities

While many activities were restricted by the COVID-19 pandemic, KSM* carried out Pink Ribbon Campaign activities in October 2020.

In fiscal 2019, KSM invited a lecturer from the Red Cross to deliver a lecture on the importance of early detection of breast cancer and how to perform self–examination. Under the pandemic in fiscal 2020, instead of a lecture KSM distributed pink masks and pamphlets containing important information on the detection and prevention of breast cancer to all employees, enabling the sharing of information with family members through the employees.

 $f{*}$ KSM is a group company in Mexico that manufactures automotive safety components.







KSE

Making the Czech Republic beautiful!

On October 18, 2020, KSE took part in the "Clean Up the World, Clean Up the Czech Republic Day" project. As an event organizer, KSE invited not only employees but also volunteers from the surrounding community to help collect trash.

A total of 24 people attended, including KSE executives and the deputy mayor of Vsetín city hall. Volunteers split into teams to clean up around KSE's operating areas of Bobrky, Jasenice, and Jablůnka.

Garbage was picked up from roads, sidewalks, bike paths, and the adjacent forest. Thanks to the enthusiastic participants, KSE was able to collect a total of 880 kg of general trash, 20 kg of recyclable plastic waste, and a number of tires.





Copyright © Nippon Kayaku Co.,Ltd. All Rights Reserved.