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NGK Group

Sustainability Website Data
2025

Surprising Ceramics.

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Message from the President

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We will advance toward the goal of becoming a sustainable company that can solve issues facing society through our unique ceramic technologies.



President

Shigeru Kobayashi

In 2021, the NGK Group announced our NGK Group Vision: Road to 2050, as a medium- to long-term vision for reaching 2050. We envisioned what we want to be based on the NGK Group Philosophy of “Enriching Human Life by Adding New Value to Society.” and established Five Transformations for making this a reality. These Five Transformations are positioned at the core of our ESG management, as first stated in our commitment to ESG management that emphasizes Environmental, Social, and Governance.

To achieve what we must do as set forth in the NGK Group Vision, we have committed to New Value 1000 (NV1000). This sets a target of 100 billion yen or more in sales from newly commercialized products by 2030. It is an initiative for creating new businesses that will directly address social problems in the two areas of carbon neutrality (CN) and digital society (DS). We see potential on a scale of 200 billion yen, including development phase themes, and truly feel that we are making steady progress towards this target. In the domain of CN, we are focusing on research into technologies that are essential for a carbon neutral society, including direct air capture (DAC) ceramics, which directly absorb and recover carbon dioxide from the atmosphere, and sub-nano ceramic membranes, which separate specific gases and liquids from mixed gases and liquids at the molecular level. We expect substantial growth in demand for these technologies

towards the early 2030s, and see them as vital to the core of NV1000, under the assumption that needs will expand in the area of DS up until 2030, and in the area of CN as well from 2030 onwards.

In the spring of 2026, we will change our name to NGK Corporation. This is underpinned by our strong conviction in light of both NGK's present and future. At present, insulator products make up less than a tenth our overall sales, and we are in the midst of transforming our core business. Moreover, 70% of our sales come from outside Japan, and 60% of our employees hold citizenship in other countries. The NGK brand is already widely known overseas, and there are growing calls from both inside and outside of the company to make it the company name. This name change reflects our determination to move on to the next stage by transforming our business structure in-line with the NGK Group Vision, and increasing our corporate value in global markets.

We will continue striving to solve social challenges by drawing from our unique ceramic technologies. This fundamental stance will not change, even as the times bring great changes. Though some of our themes may be difficult to achieve, we will accept the challenge, continue to develop technologies, and create products which are truly valuable to society. Even under our new company name, by providing these kinds of products and services, we want to continue to be a company that is needed by society.

As president, my greatest goal is to build an NGK Group of which all stakeholders can be proud and continue to trust. To achieve this, we will continue to innovate and take on new challenges.

Sustainability Management

Basic Approach

Based on the NGK Group Philosophy of Enriching Human Life by Adding New Value to Society, we aim to provide new value through our unique ceramic technologies to contribute to the realization of a sustainable society and earn the trust of society by meeting its expectations toward us.

We have made this our basic philosophy with respect to the sustainability of the NGK Group. And in order to achieve the NGK Group Philosophy, we will contribute to bring about a carbon neutrality and digital society while keeping ESG (Environmental, Social, Governance) and the Sustainable Development Goals (SDGs) in mind. In this way, we aim to improve our sustainable value creation.

[NGK Group Basic Sustainability Policy](#) >

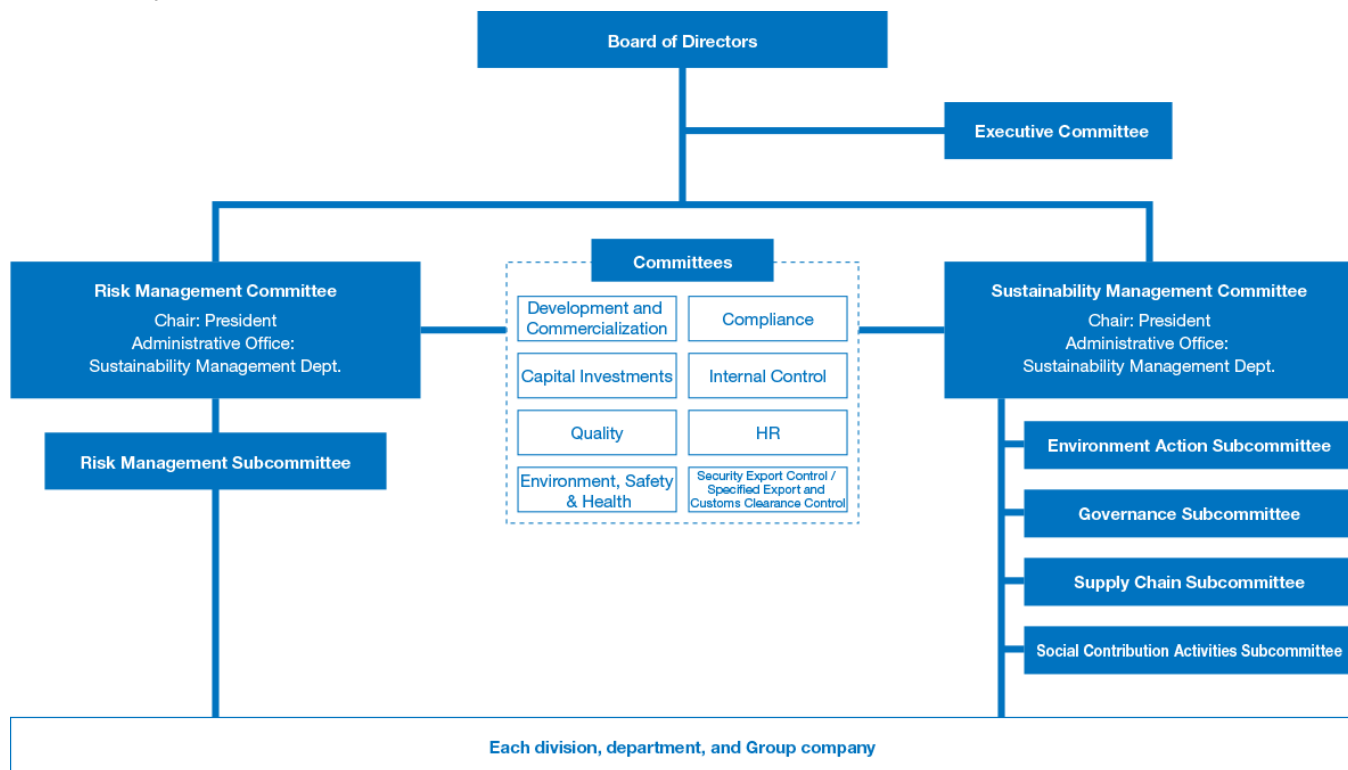
Governance

The NGK Group positions ESG at the center of our corporate management. Amidst ongoing overseas business expansion, we seek to ensure greater managerial transparency and autonomy in an environment which cultivates within every member of the NGK Group a sense of fairness accompanied by decision-making and action in accordance with international norms.

The risks and opportunities related to our Group's sustainability issues that include ESG elements, are collected and confirmed by the Sustainability Management Committee. The details of Sustainability Management Committee activities are then reported to the Board of Directors at least once a year, and necessary items are discussed and reported at meetings of the Board of Directors and the Executive Committee before being implemented as policies. In addition, the Risk Management Committee monitors the formulation of policies, development of frameworks, and status of execution relating to risk management. Various committees, etc. also perform risk management for individual risk items. The President serves as the chair of the Sustainability Management Committee and Risk Management Committee, and the executive officers and department managers in-charge of head office divisions and business divisions serve as its members.

[Risk Management](#) >

Sustainability Promotion Framework



FY2024 ESG Management Committee (currently Sustainability Management Committee) Achievements

Times	Date	Topics of discussion
1st	April 2024	- Awareness of sustainability issues facing the NGK Group - Annual action plans for each subcommittee
2nd	May 2024	- TNFD disclosure - Update on materiality disclosure
3rd	June 2024	- Deliberation on creation of NGK Group Supplier Code of Conduct - Achievements of 158th period and goals for 159th period of our fifth 5-Year Environmental Action Plan - Green finance reporting - Production status report on NGK Report 2024
4th	September 2024	- Environmental Value Acquisition Plan - Status of support for CSRD and ISSB (SSBJ) - Status of response to NGK Group ESG issues
5th	December 2024	- Status of response to external inquiries (from customers / ESG evaluation bodies) and our future response - Supply of low-carbon fuel
6th	March 2025	Environmental Value Acquisition Plan

Risk Management

The risks and opportunities related to the NGK Group's sustainability issues are identified and handled as important material items by the Board of Directors and the Executive Committee.

When identifying materiality, we evaluated various environmental and social issues that were candidates for materiality along the two axes of "impact on our business" and "demands and expectations of stakeholders/impact on people and the environment" then used this to create a materiality map. Based on this, the Sustainability Management Committee extracted materiality candidates, then the Board of Directors and the Executive Committee considered the risks, opportunities, and primary initiatives for each, and determined them to be material items.

These items are handled by each of the related committees, then brought together by the Sustainability Management Committee. Meanwhile the risks and opportunities are monitored, managed (governance), identified, and evaluated (risk management) through reports, etc. to the Board of Directors and the Executive Committee.

[Risk Management](#) >

[Materiality](#) >

Strategies, Indicators, and Objectives

We have set KPIs for all of our material items, and are pursuing relevant initiatives.

[Materiality](#) >

Core Themes of Sustainability Activities

We identify materiality based on the NGK Group Basic Sustainability Policy. And we work to enhance the effectiveness of governance to serve as the foundation of value creation as we promote environmental and societal initiatives.

NGK Group Basic Sustainability Policy

Materiality	
E (Environmental)	— Initiatives for climate change — Promotion of resource recycling — Prevention of environmental pollution — Conservation and restoration of biodiversity

NGK Group Basic Sustainability Policy

Materiality	
S (Social)	— Pursuit of quality and product safety — Contribution to digital social infrastructure — Enhancing value of human resource — Respecting human rights — Promotion of sustainable procurement
Foundation of Value Creation (Governance)	
G (Governance)	— Compliance — Risk management — Corporate governance

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Communication with Stakeholders

In addition to promoting understanding regarding the NGK Group among customers, suppliers, shareholders, investors, regional communities, governments, international organizations, universities, research institutes, and employees, we are continuously improving our activities and initiatives through dialogue with all of our stakeholders.



Basic Approach

In the NGK Group Corporate Business Principles and Code of Conduct, our commitment to Disclosure of Company Information and Accountability as a part of stakeholder communication is expressed through the following.

Disclosure of Company Information and Accountability



We will promote a healthy and transparent management by active disclosure of information and discussions with stakeholders.

- We will accurately and promptly disclose information required by society.
- We will take seriously the voices of our stakeholders and fulfill our obligation of accountability. We will also build relationships of trust through continuous dialog with stakeholders.

[NGK Group Corporate Business Principles and Code of Conduct](#) >

Stakeholder Engagement

Stakeholders	Approach	Communication (objectives)	Communication (methods)
Customers	To earn and maintain the trust of customers, we engage in the creation of new value through the provision of products and services realizing global environmental conservation and social safety and peace of mind from a long-term and global perspective.	— Enhancement of customer satisfaction — Quality improvement	— Official website — Contact desk — Participation in exhibitions — Open innovation
Suppliers	With Relationship with Society, Open and Fair, and Partnership at the core of its procurement activities, the NGK Group aims for mutual prosperity based on mutual trust with suppliers through open, fair, and equitable procurement practices that not only comply with laws but also take into consideration global environmental conservation, respect for human rights, and the working environment. We also established a supplier helpline to provide unwavering support for important inquiries in an effort to build and maintain fair supplier relationships.	— Realize fair, free, and transparent transactions — Exchange information with suppliers — Establish better supply chain	— Financial results presentations — Supplier helpline — Individual visits to suppliers in and outside Japan

Stakeholder Engagement

Stakeholders	Approach	Communication (objectives)	Communication (methods)
Shareholders and Investors	The NGK Group aims to meet expectations for enhanced corporate value through dialogues and efforts to disclose information pertaining to management, finance, products, and services in a timely and appropriate manner.	Enhancement of corporate value	- General Meeting of Shareholders - Financial results briefings - Individual visits and interviews - Participation in IR events - Responding to ESG investment - Official website
Employees	We will create the following kind of work environment as the stage upon which our personnel can demonstrate the abilities they possess. - Diverse and Inclusive Workplace - Enriched and Lively Workplace - Open Workplace that encourages challenges We also support the growth of human resources and fair treatment enabling each employee to maximize their skills.	- Respect for the human rights of employees - Development of safe and comfortable workplace environments - Conducting of surveys on workplace environment and employee satisfaction - Penetration of corporate philosophy and policies	- Company newsletter - Global MIZUHO English-version company newsletter - In-house video newsletter - Intranet - Labor-Management Advisory Board meetings, regular Labor-Management Council meetings - Survey on workplace vitality - Corporate Risk Survey (CRS) - Helpline - Hotline
Local Communities	We proactively engage in social contribution activities in response to community needs with the intent of becoming a corporate citizen trusted by society with concern for social issues in all countries and regions where we do business.	Contribution to local communities as a trusted corporate citizen	- Collaborative activities with NPOs, etc. - Volunteer activities by employees - Social contribution activities in cooperation with labor unions - Invitation to plant tours and events

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Stakeholder Engagement

Stakeholders	Approach	Communication (objectives)	Communication (methods)
Governments and International Organizations	We proactively participate in international initiatives and other activities in order to realize mutual cooperation as key actors seeking to resolve social issues.	Promotion of initiatives to resolve social issues	Participation in international initiatives
Universities and Research Institutes	Through research and educational activities based on industry-academia collaboration, we have been pushing forward with the development of scientific technologies and other technologies that will contribute to resolving social issues.	- Development of scientific technologies - Development of technologies that will contribute to solving social issues	Joint research

* Any report on potential concerns pertaining any of our business activities will be handled confidentially and will not lead to any negative consequences for anyone who wishes to make such a report

Endorsement and Participation in Initiatives

Based on our corporate policy, NGK is striving to provide better value through our business activities to help achieve a sustainable society. We are actively involved in international initiatives to help resolve global social challenges as a responsible corporate citizen.

NGK Group Signs UN Global Compact

The NGK Group is a signatory to the United Nations Global Compact, which advocates for independent action on the part of companies, endorsed by the United Nations. We believe that addressing a broad range of social problems through our business activities, while measuring progress against indicators such as the Sustainable Development Goals (SDGs), is an important corporate social responsibility.

[UN Global Compact](#) 

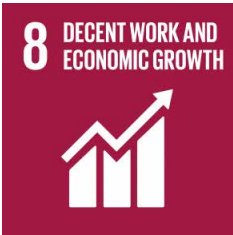


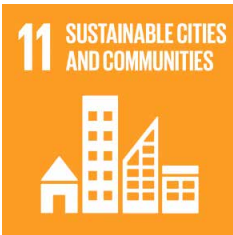
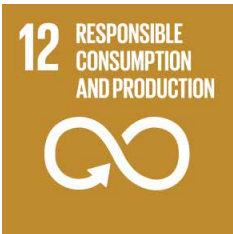
Position on SDGs

Ever since its foundation, the NGK Group has pursued business in the energy, ecology, and electronics sectors in an effort to keep nature's air and water clean and thus help people live a comfortable, healthy life. Many of our technologies and products contribute to the SDGs, and we will continue to provide new value by leveraging our unique ceramic technologies towards the realization of a sustainable society.



	Goals	Value provided by the NGK Group
	End poverty in all its forms everywhere	Creating appropriate employment helps to end poverty
	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	The social infrastructure created by the NGK Group's products helps secure equal access to work opportunities
	Ensure healthy lives and promote well-being for all at all ages	- Micro-lenses are increasingly used instead of mercury in UV LED light sources for applications such as the sterilization of water and air, thus contributing to reduced use of mercury - Ceramics for purifying automobile exhaust make exhaust gas clean
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Creating appropriate employment gives people the chance to have equal access to education

Goals		Value provided by the NGK Group
	Achieve gender equality and empower all women and girls	— The social infrastructure created by the NGK Group's products helps provide more opportunities for women to enhance their abilities — Securing equal opportunities for women to participate and be leaders in society
	Ensure availability and sustainable management of water and sanitation for all	— Ceramic membrane filters provide highly safe water — Ceramic membrane filters purify wastewater
	Ensure access to affordable, reliable, sustainable, and modern energy for all	— Insulators are indispensable to stable power supply — NAS batteries allow stable supply of renewable energy — Ceramics for purifying automobile exhaust make exhaust gas clean, thus enabling clean usage of fossil fuels — AMB and DCB substrates support stable power supply in EVs and renewable energy applications that use power modules
	Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all	— Creating appropriate employment and providing employees with a satisfying work environment contributes to economic growth
	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation	— Thin lithium-ion rechargeable batteries provide power for the new IoT generation — Ceramics used in electronics make ICT cheap and ubiquitous — Ceramics for semiconductor manufacturing equipment let the semiconductor industry be the foundation for modern daily life — Metal-related products are widely used in mobile phones, automobiles, industrial equipment, and other devices that undergird modern life

	Goals	Value provided by the NGK Group
	Reduce inequality within and among countries	— We prevent discrimination and take prompt and appropriate action when violations occur
	Make cities and human settlements inclusive, safe, resilient, and sustainable	— NAS batteries enable innovation in urban energy management for the creation of sustainable cities
	Ensure sustainable consumption and production patterns	— We efficiently use the natural resources used to make ceramics
	Take urgent action to combat climate change and its impacts	— NAS batteries aid in the fight against climate change by allowing stable supply of renewable energy — AMB and DCB substrates support stable power supply in renewable energy applications that use power modules
	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	— Ceramic membrane filters purify wastewater to prevent marine pollution
	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	— We protect biodiversity on land owned by the NGK Group

	Goals	Value provided by the NGK Group
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels	— We comply with the rules and regulations of the countries and regions in which we do business, and ensure respect for and strict compliance with international treaties
 17 PARTNERSHIPS FOR THE GOALS	Strengthen the means of implementation and revitalize the global partnership for sustainable development	— We encourage and promote effective partnerships among governments, corporations, and society as a whole

Materiality

As a corporate entity that contributes to the future of energy, protection of the global environment, and development of industries based on its unique ceramic technologies, the NGK Group identifies Materiality in order to become a company that we want to be based on the NGK Group Philosophy of “Enriching Human Life by Adding New Value to Society.”

Materiality Identification Process

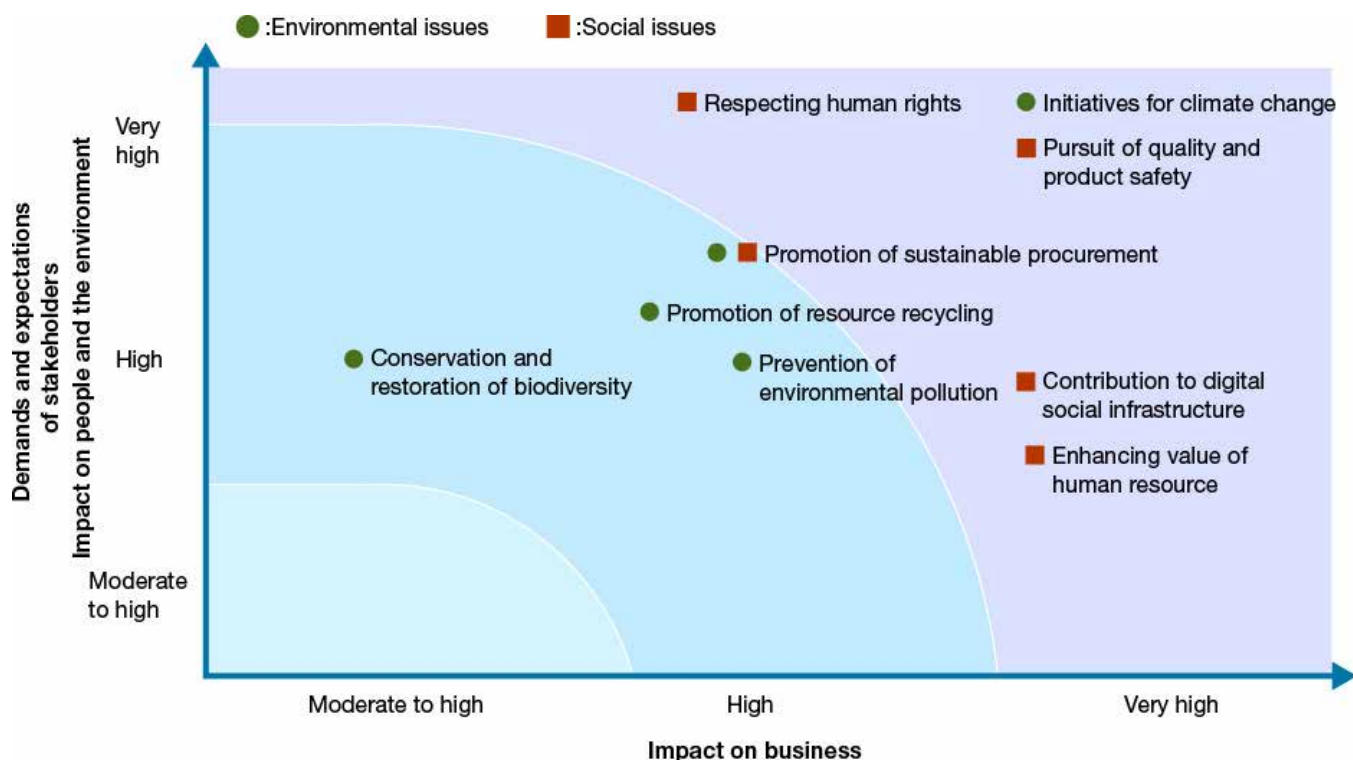
Materiality Identification Process

Step 1: Listing of issues

With reference to evaluations by ESG evaluation bodies, international frameworks and guidelines such as the GRI Standards and the SDGs, and other resources, we created a list of environmental, social, and governance issues. Of these, we listed those environmental and social issues that have a significant relevance to our Group's business, while excluding governance issues as items that should be addressed naturally as an organization.

Step 2: Evaluation of the importance of issues

We established a working group composed of representatives from different departments within the Company. The working group mapped the listed issues along two axes of “impact on business” and “demands and expectations of stakeholders/impact on people and the environment” and then conducted evaluations of the issues. (Evaluation of the latter axis included evaluation by outside experts.) Based on the evaluation results, the ESG Management Committee (currently Sustainability Management Committee) held deliberations and identified candidates for Materiality. For these candidates, the working group organized the risks and opportunities posed to the NGK Group, particularly those considered to possibly have a significant impact on business, and reviewed our major initiatives.



Step 3: Confirmation of validity and identification of Materiality

For all of the Materiality candidates, the working group discussed what sort of value the NGK Group wishes to bring to society by addressing the issues. To check for omissions in the scope of consideration as well as consistency with company-wide targets, the working group then laid out the relationships between the issues and our Group Vision, and prepared a draft version of the Materiality items.

Based on that draft, the items were discussed by the ESG Management Committee in terms of their validity, then discussed and decided on by the Board of Directors.

Step 4: Setting KPIs

Regarding Materiality management, we have set items to work on, KPIs, targets, and target achievement periods for each material issue. Following discussion by the ESG Management Committee, these were discussed and decided on by the Board of Directors.

Materiality System

[Materiality System](#)

Materiality for Realizing the NGK Group Vision

Overall Philosophy and Materiality System

Philosophy	Vision	Materiality	Value/Impact on Society	Risks	Opportunities	Contribution to SD Transformations				Main Initiatives	Action Plans	KPIs	Targets	Target Achievement Periods	FY2024 Results			
						SD	En	So	Co							R&D	DX	
Quality of Products, Business Changes and New Value Creation Quality of Management, Social Contribution Quality of People, Environmental Contribution Quality of Digital Society, Sustainable Contribution Quality of People, Business Changes and New Value Creation	Our vision is to realize a sustainable society through the development of products that contribute to the realization of a carbon-neutral society by 2050.	Our vision is to realize a sustainable society through the development of products that contribute to the realization of a carbon-neutral society by 2050.	Initiatives for climate change We will promote carbon neutrality throughout our value chain and aim for business activities that achieve net zero CO ₂ emissions. We will utilize data and digital technology to accelerate the development of products that contribute to the environment. We will develop and offer products and services centered on low-carbon energy technology to contribute to the realization of a carbon-neutral society by 2050.	Shifting of internal combustion engine-related markets Effects of natural disasters on operations Geographical risks Increases in costs due to greenhouse gas reduction and energy conversion Damage to brand reputation	Expansion of CO ₂ -related business opportunities Reduction of costs Enhancement of our brand reputation	●	●	●	●	●	●	Implementing measures to mitigate global warming Assessment and disclosure of emissions Offering products/services contributing to environmental protection Materiality and countermeasures based on climate science Utilization of sustainable financing Cooperation with external organizations	[SD100] Development of carbon-neutral-related products [Environmental Vision] Promoting Carbon Neutrality Strategic Roadmap	Rate of newly commercialized products CO ₂ emissions CO ₂ emissions reduction rate (compared to base year) Renewable electricity procurement rate Energy saving rate	100 billion yen (including digital security-related sales) 360,000 metric tons 30% 30% 210/year	FY2030 End of FY2028 End of FY2025 End of each FY	Currently rolling out various measures, development, and capital investment 540,000 metric tons 26% 26% 3%	
			Promotion of resource recycling By developing and providing resource-efficient products and services through means including the sustainable use of natural resources, the recycling of waste, and the utilization of alternative materials, we will contribute to the effective use of resources and to the promotion of resource recycling. Through the development and provision of products and services accompanied by water stress assessments at production sites and by highly efficient water use in production processes, we will also contribute to the effective use of water resources.	[Resource] Depletion of resources, price inflation Geographical risks Damage to reputation due to resource conservation and resource reuse Water pollution	[Resource] Expansion of business opportunities related to resource recycling Expansion of business opportunities associated with the depletion of rare metals, etc. Reduction of costs Water resource security Expansion of business opportunities for water treatment-related products (membranes, etc.)	●	●	●	●	●	●	Resource Reduction of emissions Development of resource recycling-oriented business Recycling technology development	[Environmental Vision] Respond to circular society (response to circular economy)	Emissions generated per unit of sales 30% reduction compared to FY2013 30% reduction compared to FY2013 Reduction rate of emissions compared to Base year (BAU) Water usage per unit of sales (domestic)	30% reduction compared to FY2013 30% reduction compared to FY2013 End of FY2025 End of FY2025 End of each FY	42% 33% 96.6% Maintained FY2019 level		
			Prevention of environmental pollution By developing and providing pollution prevention-related products and services using our unique scientific technologies, we will contribute to the management of chemicals and pollution prevention in our manufacturing processes, we will contribute to a safe and secure society.	Compliance Handling of air, water and wastes Leakage of chemical substances Impacts on local communities Shifting of internal combustion engine-related business	Expansion of exhaust gas-related business Expansion of air and water quality-related business Expansion of nuclear power-related waste treatment business	●	●	●	●	●	●	Management of chemicals Handling of exhausts and water Reduction of emissions Operation of environmental management system Offering products/services contributing to environmental protection Contribution to local communities	Zero legal non-compliance issues Education and coordination of understanding (complicated in FY2024) Enhance the database of applied facilities Zero serious accidents Prevention activities (business management system) Real-time status monitoring	Number of training participants Number of incomplete notifications All facilities (SD assessment, SD impacts assessment) (G companies) Number of status monitoring points	Training completed by all target personnel in each department 0 cases of incomplete notifications Each FY Each FY End of FY2025	Training completed by all target personnel (Pharmaceutical-related, waste-related: 7,500 people in total) 0 cases of incomplete notifications. Corrections began in July 2024 Active underway at all processing sites 1 site (China started SD site condition monitoring)		
			Conservation and restoration of biodiversity With all employees maintaining a mindset of environmental conservation, we will contribute to the conservation and restoration of biodiversity through the development and provision of products that contribute to environmental protection while minimizing environmental impacts on the ecosystem in our value chain.	Damage to brand reputation Impacts on operations Impacts on supply chains, etc.	Enhancement of our brand reputation Expansion of business opportunities Expansion of business and products with consideration of ecosystem	●	●	●	●	●	●	Participation in initiatives Cooperation with suppliers and customers Contribution through pollution prevention products and services Various activities and promotion of green spaces	[Environmental Vision] Promoting biodiversity TNR (Non-Targeted Related Financial Disclosure)	TNR disclosure (including TNR framework) Full disclosure of TNR framework	End of FY2026	Performed initial disclosure		
			Pursuit of quality and product safety By ensuring highest quality from the standpoint of our customers and by safely supplying safe and reliable products and services that exceed expectations, we will contribute to the creation of a safer society.	Damage to brand reputation Litigation risks	Enhancement of our brand reputation Expansion of business opportunities Expansion of business opportunities	●	●	●	●	●	●	Quality Activity System Initiatives to improve quality of operation Quality risk reduction activities (QMS) (Quality Risk Reduction Process activities) QRC (Quality Risk Reduction) activities Strengthening of quality management education Establishing a culture of quality to service philosophy Ensuring the safety of products and services	Activities to increase customer trust Improve work quality Reduce quality rate	Number of serious product-related incidents 0 cases	End of each FY	0		
			Contribution to digital social infrastructure We will establish strong information security to build our status as a member of a cultured and safe digital society. At the same time, we will apply products based on our unique ceramic technology to realize continuous contribution to digital society.	Damage to brand reputation Cyber attacks Information leaks Increases in the cost of security enhancement	Expansion of business opportunities related to digital society, etc. Enhancement of our brand reputation	●	●	●	●	●	●	Expansion of business opportunities related to digital society, etc. Sharing of policies and information Creation of an organization and implementation for information security Creation of an organization and implementation for information security	[SD100] Develop digital opportunities related to digital society, etc. [Digital Vision] IT security Personal information protection activities	Sales of newly commercialized products 100 billion yen (including carbon-neutral-related sales) 0 cases 0 cases	FY2023 End of each FY	Currently rolling out development, and capital investment 0 0		
			Enhancing value of human resource We will create prosperous and energetic workplaces across our entire value chain by enhancing human resources with diverse experiences and perspectives. We will offer society new value by encouraging each employee to proactively take on challenges and promoting mutual growth.	Compliance Damage to brand reputation Declining competitiveness of recruitment and outflow of personnel Human resource development Rigidity of internal systems	Recruitment and retention of personnel Active participation of diverse personnel by CSR promotion Growth through human resource development Productivity enhancement	●	●	●	●	●	●	Labor practices Review of personnel systems Providing Work-life balance Promoting Work-life management initiatives	Initiatives for reducing total working hours Promote paid leave acquisition (zero cost to annual leave)	Score of the survey on "work-life balance" (work-life balance) Paid leave utilization rate	3.5 or higher 100%	Each FY End of FY2026	3.61 83.2%	
			Diversity & Inclusion Systems and initiatives to support the active participation of diverse human resources															
			Approach to local recruitment Create a culture of valuing diversity, including systems															
			Human resource development Human resource development for employees															
Occupational safety and health Shifting of policies and fundamental stance Prevention of safety and health accidents																		
External certification of our occupational safety and health management system																		
Safety and health education																		
Health and productivity management Shifting of policies and fundamental stance Reduction of total working hours																		
Activities to promote mental and physical health The-based mental care education Promoting employee health																		
Respecting human rights We are committed to create a society that is free from human rights violations. We will offer society new value by encouraging each employee to proactively take on challenges and promoting mutual growth.	Damage to brand reputation Impacts on operations Impacts on supply chains, etc.	Enhancement of brand reputation Expansion of business opportunities Expansion of business opportunities	●	●	●	●	●	●	●	Sharing of policies and fundamental stance Conduct dialogue with internal and external stakeholders	Frequency of conducting dialogue with internal and external stakeholders	Conduct each year	End of each FY	Implemented				
Performing human rights due diligence																		
Human rights education																		
Promotion of sustainable procurement																		
Supplier assessment and monitoring of suppliers																		
Requests and demands toward suppliers																		
Support for suppliers' initiatives																		
Product design embedding sustainable procurement																		

*Items implemented by NGK alone

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NGK Group Environmental Vision / Environmental Policy

The NGK Group positions protecting the environment on Earth and in space, as a vital issue that all of humanity must face. So, we formulated our Core Policy on the Environment in 1996 to systematically promote efforts to bring about a sustainable society, and clearly defined concrete guidelines for action. Thereafter, we formulated the NGK Group Environmental Vision in 2021 to paint a picture of the future our Group aims to achieve from a more long-term and comprehensive point of view. We currently position the NGK Group Environmental Vision as a higher-level concept, and the specific policy and initiatives for achieving that vision are spelled out in the NGK Group Environmental Policy. In other words, the NGK Group Environmental Vision explains our principles and intentions with regards to the environment, and the NGK Group Environmental Policy explains the practical guidelines we should follow to implement these principles. In this way, the NGK Group Environmental Policy has been formulated and carried out based on the NGK Group Environmental Vision, and the two complement each other as important pillars supporting our Group's environmental management.

NGK Group Environmental Vision

The NGK Group will contribute to the realization of society's direction toward carbon neutrality, a recycling-oriented society, and harmony with nature through its business activities.

Toward carbon neutrality	Toward a recycling-oriented society	Toward harmony with nature
We will develop and provide products and services that contribute to the realization of a carbon-neutral society and apply them to our own business activities in order to achieve our goal of net zero CO ₂ emissions by 2050.	We will contribute to the realization of a recycling-oriented society by reducing our natural resource consumption and developing and providing resource-efficient products.	We will minimize our environmental impact on ecosystems and raise stakeholder awareness through educational activities in order to achieve harmony with nature.

NGK Group Environmental Policy

Basic Approach

The NGK Group recognizes that protecting the environment, on Earth and in space, is a vital issue that all of humanity must face. Therefore, to bring our business activities into harmony with the environment, guided by the NGK Group Environmental Vision, we will bring our core principles of carbon neutrality, a circular society, and harmony with nature to life by committing to achieve Net Zero, advance a Circular Economy, and foster a Nature-Positive world. We also work to

solve environmental issues with an awareness of the impact our business activities have on the environment and society, as well as the impacts the environment and society have on our business activities. Through initiatives like these, we strive to reduce the environmental impact of business activities and help protect the environment by developing products and technologies conducive to environmental conservation.

Main Focus

1. Strive to develop, design, and manufacture products that contribute to the environment and products with low environmental impact.
2. Work to reduce the environmental impact arising from business activities. Use tools such as design review to conduct a scientific investigation and evaluation of the impacts our business activities have on the environment.
 - Promote energy conservation measures and expand the use of renewable energy for all processes and facilities, and make efforts to reduce CO₂ emissions by reducing energy use and using energy efficiently.
 - Promote resource efficiency (including reduction of natural resources use) and expanded use of recycled materials, and reduce the generation of waste materials (including valuable materials).
 - Manage the risks of water resources, promote water saving and reuse, and strive to reduce the amount of water withdrawal in our business activities.
 - Through the appropriate use and control of chemical agents, work to reduce the risks inherent in toxic substances.
 - Give precedence to environmentally friendly materials, parts, products, and facilities in procurement and purchasing, strengthening cooperative alliances with our business partners.
 - Help to protect biodiversity by reducing our impact on the environment and developing/distributing eco-friendly products.
3. Enhance environmental management systems from a global perspective while continuously reducing our environmental impact. Carry out risk management based on scenario analysis in order to continue our operations while responding to environmental changes.
4. Work to prevent environmental pollution of the atmosphere, water, and land, and promote environmental conservation by abiding by environmental laws, regulations, and other requirements, and instituting our own voluntary standards. Also, strive to protect the environment so that our business activities will not prevent any local people from enjoying clean water resources.
5. Provide environmental information to the public at the appropriate time and pursue dialogue with all stakeholders. Proactively develop social action programs. Also, engage in education and publicity in order to improve employees' environmental consciousness.

[NGK Group Environmental Policy](#) >

Carbon Neutrality Strategic Roadmap and 5-Year Environmental Action Plan

Carbon Neutrality Strategic Roadmap

The NGK Group has drawn up its Carbon Neutrality Strategic Roadmap comprising four strategies as a guide to realizing the goals of the NGK Group Environmental Vision.

We have established a Group-wide target of net zero CO₂ emissions by 2050, with milestone targets along the way of 500,000 metric tons by FY2025 (32% reduction compared with the FY2013 base year) and 370,000 metric tons by FY2030 (50% reduction). In the future, we will consider advancing our efforts to achieve net zero ahead of schedule by promoting the development of related technologies such as hydrogen, CCU and CCS (carbon capture, use and storage). We set the target for FY2025 at 550,000 metric tons (25% reduction compared to the base year) when we first formulated the roadmap. However, we have revised that target to aim for a higher rate of reduction in CO₂.

Four Strategies of the Carbon Neutrality Strategic Roadmap

Strategy 1: Development and provision of carbon neutrality (CN)-related products/services

In addition to our existing carbon neutrality (CN)-related products, we will also work to commercialize new products under development as well as offer society NAS battery-driven renewable energy supply business and other relevant services.

Strategy 2: Top-down enhancement of energy-saving

We will work to further enhance our existing energy conservation activities, as well as introduce high efficiency equipment and facilities and more energy-efficient operations.

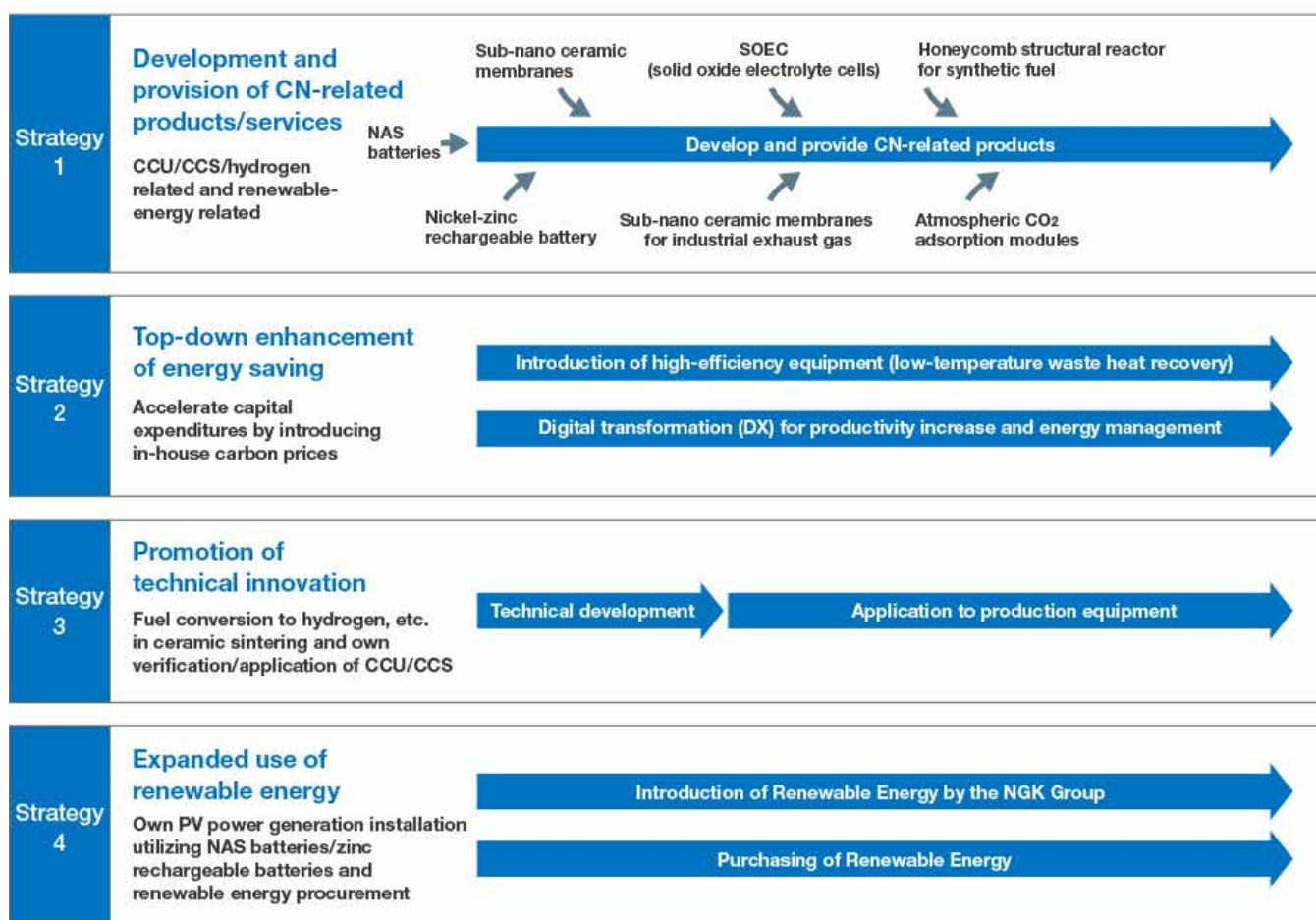
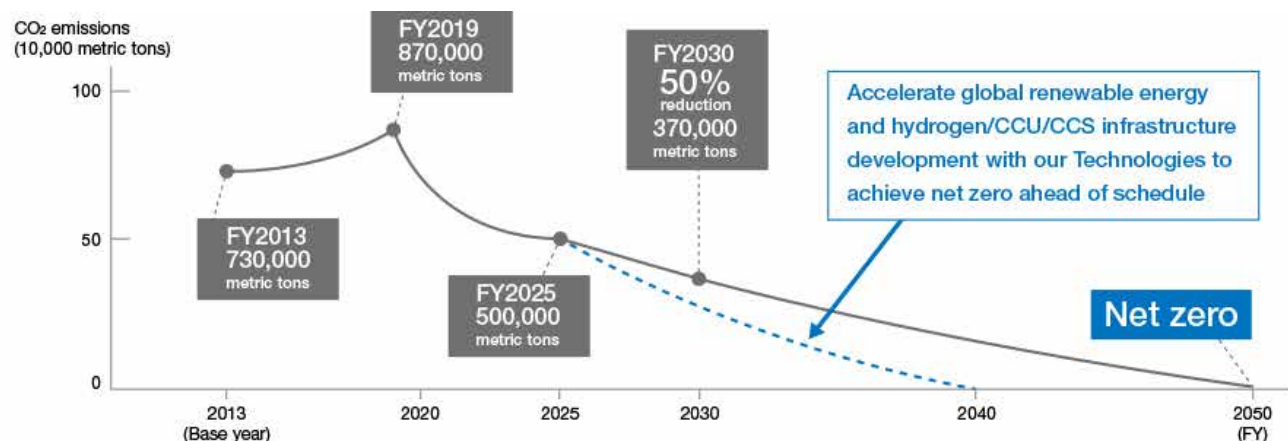
Strategy 3: Promotion of technical innovation

Although the ceramics firing process requires fossil fuel which is responsible for CO₂ emissions, we will work to switch over to hydrogen, ammonia and other fuels that will allow us to become fossil fuel-free.

Strategy 4: Expanded use of renewable energy

In addition to promoting various renewable energy procurement strategies both within Japan and overseas, we will install photovoltaic (PV) power generation systems at production sites within the NGK Group, and use them in conjunction with NAS batteries and zinc rechargeable batteries, to achieve demand control. We will use this as a model case in the NGK Group's renewable energy business, and work towards the goal of enabling all energy demand within the NGK Group to be met through renewable energy.

Carbon Neutrality Strategic Roadmap



5th 5-Year Environmental Action Plan (FY2021–2025)

In FY2021, we established the fifth 5-Year Environmental Action Plan, which encompasses our environmental action targets through FY2025.

This is the first five-year plan aimed at realizing the NGK Group Environmental Vision announced in April 2021, which

targets net zero CO₂ emissions by 2050. We aim to achieve our Environmental Vision by focusing on its key themes of carbon neutrality, a recycling-oriented society, and harmony with nature.

Reference Year, Target Year, Control Scope

- Reference Year: FY2013 (for some, FY2019)
- Target Year: FY2025
- Control Scope: Consolidated (for some, Japan)

Below are the results to date of this 5-Year Action Plan, the targets and results for FY2024, and the targets for the final year of this plan, in FY2025.

We have made progress on efforts to promote energy conservation activities and to expand the use of renewable energy. In response to that, we have revised our target for CO₂ emissions (consolidated) for FY2025 from the 550,000 metrics tons we initially set it at in 2021 to 500,000 metric tons.

Category	Item	KPI	FY2021	FY2022	FY2023	FY2024			FY2025 Target	Related SDGs
						Target	Result	Self-evaluation ^{*1}		
 Initiatives toward carbon neutrality	Reduce CO ₂ emitted by manufacturing activities	CO ₂ emissions (consolidated)	620,000 metric tons (Reduced by 15% from FY2013)	560,000 metric tons (Reduced by 23% from FY2013)	560,000 metric tons (Reduced by 23% from FY2013)	600,000 metric tons (Reduce by 18% from FY2013)	540,000 metric tons (Reduced by 26% from FY2013)	○	500,000 metric tons (Reduce by 32% from FY2013)	
	Rate of renewable energy usage (consolidated) ^{*2}		25%	27%	27%	25%	26%	○	50%	
	Reduce CO ₂ emissions across value chain	Plan progress	LCA: Calculated with NAS battery and HONEYCERAM	Scope3 consolidated disclosure Expand scope of LCA calculation	Scope3: SBT Plan LCA: 2 products completed	Scope3: SBT certification Expand LCA to divisions	Scope3: SBT certification Expanded LCA (developed products)	○	Expand scope of Scope3 calculation Life-cycle assessment (LCA) of major products	
 Initiatives for a recycling-oriented society	Reduce waste produced during production activities ^{*3}	Waste ^{*4} : Waste generated per unit of sales (consolidated)	Reduced by 44% from FY2013	Reduced by 55% from FY2013	Reduced by 53% from FY2013	Reduce by 50% from FY2013	Reduce by 62% from FY2013	○	Reduce by 50% from FY2013	
		Reduction rate against BAU ^{*4} for volume of waste ^{*5} (consolidated)	Reduced by 26% from FY2013	Reduced by 31% from FY2013	Reduced by 31% from FY2013	Reduce by 30% from FY2013	Reduce by 35% from FY2013	○	Reduce by 30% from FY2013	
	Promote resource recycling	Recycling rate (Japan)	99.5%	99.5%	99.5%	Maintain at least 99%	99.6%	○	Maintain at least 99%	
	Manage and respond to water resource risks	Water withdrawal per unit of sales (consolidated)	Maintained FY2019 level	Maintained FY2019 level	Maintained FY2019 level	Maintained FY2019 level	Maintained FY2019 level	○	Maintained FY2019 level	
 Initiatives toward harmony with nature	Promote biodiversity conservation	Plan progress	Participated in the Kaidanren Committee on Nature Conservation	Research on Japan and overseas trends	Considered roadmap Started TNFD	TNFD disclosure	Completed TNFD disclosure	○	Expand content of efforts in response to international initiatives ^{*6}	
 Contributions to environmental society	Develop and distribute products/services contributing to environmental protection	Number of registered products	No change in registered products	One additional (Abashiri Electric Power)	One additional (AMB substrates)	Increase registered products	One additional (Upgraded NAS battery NAS MODEL L24)	○	Expand content of efforts in response to international initiatives ^{*6}	
	Promote CSR procurement	Plan progress	Implemented supplier survey in Japan	Resumed visits to suppliers	Surveyed suppliers	Review SAQ ^{*5} based on the Supplier Code of Conduct	Reviewed SAQ	○	Register at least one product per fiscal year	
 Promotion of environmental communication	Contribute to local communities	Plan progress	Collaborated with Aichi Sustina Research Institute and EPOC	Collaboration with EPOC and Aichi Miral Forum	EPOC seminar planning	Collaboration with EPOC	EPOC seminar planning	○	Continually enhance actions partnering with local communities	
	Increase environmental awareness	Plan progress	Video streaming of briefing	Promoted energy conservation in office buildings	Published ESG features and serialized articles in the company newsletter Mizuho	Training about resource recycling and harmony with nature	Used internal presentations to promote awareness	○	Continually enhance environmental training and information disclosure	

^{*1} Self-evaluation standards for achievement level of fiscal year target: ○: Target achieved; ×: Target not achieved

^{*2} Ratio of electricity from renewable energy to total electricity consumption

^{*3} Substances, including valuable substances, other than products that are discharged from business sites

^{*4} Reduction rate compared to business as usual (the amount of waste generated if no improvements were made)

^{*5} Self-Assessment Questionnaire concerning corporate social responsibility

^{*6} We initially set the contents of our efforts based on the post-Aichi targets, but, with the adoption of the Kunming-Montreal Global Biodiversity Framework in 2022 and the subsequent transition to the new framework based on the international agreement, we have switched to using that framework

Results and Targets for the 5th 5-Year Environmental Action Plan

Results of the 5th 5-Year Environmental Action Plan in FY2024

We achieved all of our targets for FY2024.

We were able to achieve our target with our carbon neutrality efforts. We emitted 540,000 metric tons of CO₂ in contrast to our target of 600,000 metric tons by promoting energy conservation activities, expanding the use of renewable energy and taking other measures. In addition, the rate of the power we used derived from renewable energy was 26%. Thus, we also achieved this target.

We achieved our quantitative targets for the reduction of waste and the management of water withdrawal in our efforts toward a recycling-oriented society.

In terms of harmony with nature, we promoted an expansion in the content of our disclosures based on the Taskforce on Nature-related Financial Disclosures (TNFD). Furthermore, we newly registered a new NAS battery (NAS MODEL L24) as a product that contributes to the environment in our contributions to environmental society.

We contributed to local communities and raised environmental awareness by holding seminars with the Environmental Partnership Organizing Club (EPOC) and using in-house presentation meetings to promote environmental communication.

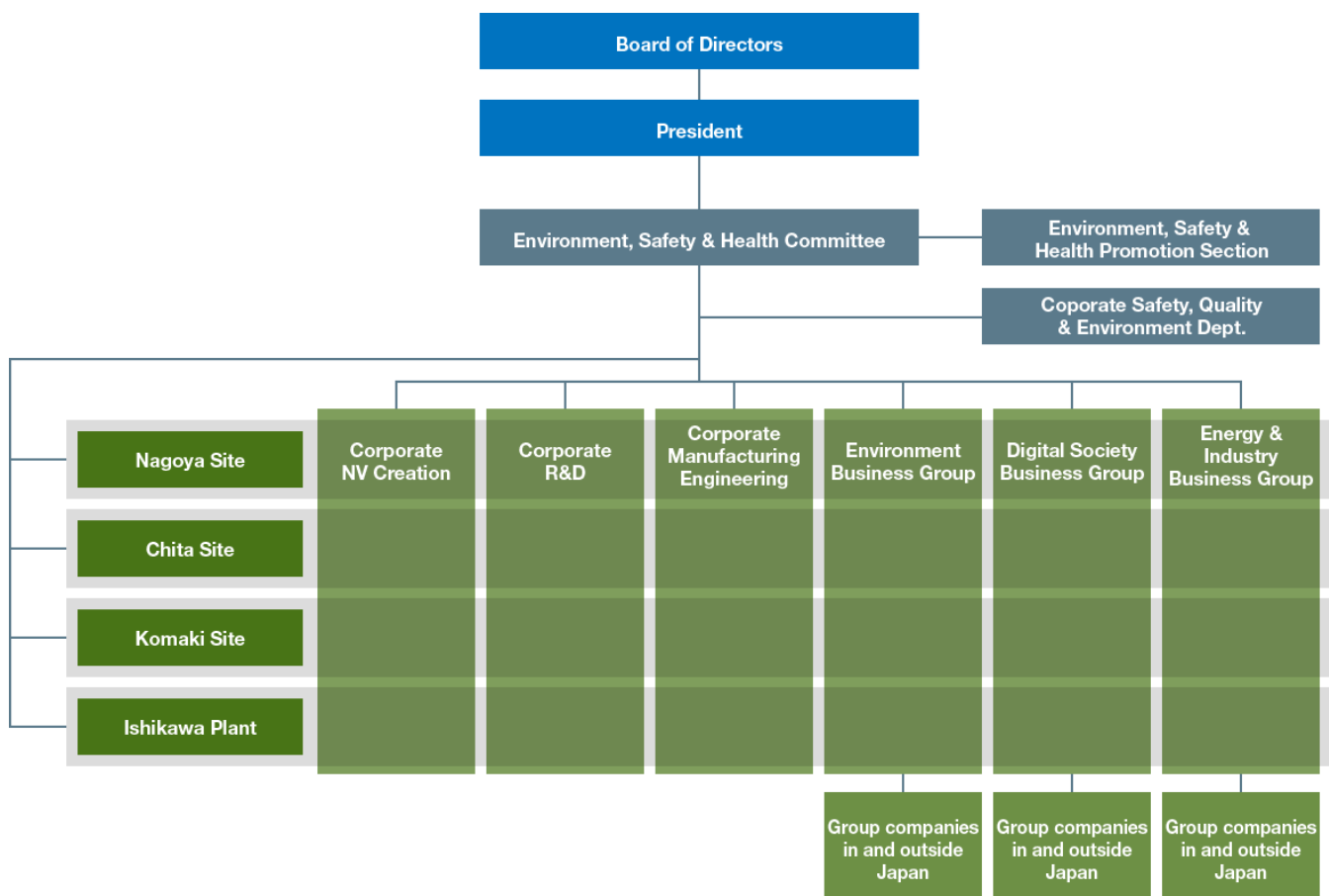
Environmental Management System (EMS)

The NGK Group promotes environmental conservation activities in accordance with our NGK Group Environmental Policy through initiatives pertaining to environmental management frameworks and the Environmental Management System (EMS) implemented by the entire Group working together.

Promotion System

In addition to NGK's environmental management systems at each site of Nagoya (headquarters, Atsuta/Mizuho), Chita, Komaki, and the Ishikawa Plant, we are promoting environmental management under the leadership of each business group to control environmental activities at all Group companies in and outside Japan. The decisions of the Environment, Safety and Health Committee are shared across the entire Group via the business groups so they can be incorporated into the business activities of each Group company. Annual liaison meetings are held for Group companies in Japan to promote unified environmental management for the entire Group. Meanwhile, personnel and business groups at headquarters cooperate to audit Group companies inside and outside Japan on a regular basis. Thus, we create interactive discussion and support opportunities to address issues facing each company.

Environmental Management Promotion System Diagram



Environment, Safety & Health Committee

The Environment, Safety & Health Committee handles both environmental management and safety and health management. Both kinds of management work are the same from the perspective of compliance, governance, and risk reduction, so we integrate their handling under a single committee. The committee is led by a Director and Managing Executive Officer, and meets at least twice a year. In addition, the chairperson may call ad-hoc meetings of the committee as necessary to make decisions on important matters. The details of committee meetings are also reported to the Board of Directors which provides oversight.

Governing Structure

Chair	President appoints the chair in light of Executive Committee deliberations
Vice Chair	Appointed by Committee Chair
Members	Executive Vice President; Administrative staff with jurisdiction; Group Executives; General Managers; Director of each site (General Manager of Pollution Control; General Safety and Health Manager); others designated by the Committee Chair

Environment, Safety & Health Promotion Section

Governing Structure

Committee Chair	General Manager of Safety, Quality & Environment Dept.
Vice Chair	General Manager of Environment Business Group Safety, Quality Assurance & Environment Div.; General Manager of Digital Society Business Group Safety, Quality Assurance & Environment Dept.; General Manager of Energy & Industry Business Group Safety, Quality Assurance & Environment Dept.; General Manager of R&D Planning Dept., Corporate R&D; General Manager of M&E Planning Dept., Corporate Manufacturing Engineering; others designated by the Committee Chair

Environmental Committees

In principle, committees of each NGK site (Nagoya Site [headquarters, Atsuta/Mizuho], Chita Site, Komaki Site, Ishikawa Plant) meet twice per year in each area. They thoroughly convey matters determined by the Environment, Safety & Health Committee, and communicate and discuss issues and topics in each area.

Environmental Management at Group Companies in and outside Japan

Business groups of NGK, including those at Group companies in and outside Japan, have environmental management systems for promoting environmental activities based on NGK Group Environmental Policy. NGK surveys environmental performance at Group companies and conducts audits to monitor their conformance to environmental laws and regulations. If problems are discovered, the causes and remedies are determined and disseminated throughout our Group companies. Moreover, at Group companies in Japan involved in manufacturing, annual liaison meetings are held in order to convey action policies and to share information on matters such as companies' environmental management status and effective environmental initiatives.

Strengthening Global Environmental Management

The NGK Group promotes corporate activities that are in harmony with the environment. We are also building and implementing an environmental management system from a global perspective in order to actively fulfill our responsibility to address various societal challenges. As we continue our efforts aimed at lessening the environmental impact of our business activities, we are also preparing a system for complying with environmental laws and regulations, and increasing our level of global environmental management.

Efforts to Mitigate Environmental Risks Throughout the Group

All NGK Group manufacturing bases in and outside Japan have completed acquisition of ISO 14001 or third-party certifications meeting this standard, and are implementing environmental management in accordance with our environmental management system. NGK also shares information regarding changes in domestic environmental laws and regulations with Group companies in Japan and has created and implemented a structure to ascertain the status of responses to these changes. NGK headquarters is enhancing its ability to regularly ascertain the status of responses and management in terms of important legal and regulatory system revision information in the countries and regions where overseas Group companies are located.

In order to lessen the risk of environmental accidents and compliance violations, we are also promoting a shift from reactive response and recurrence prevention to preventive activities. As a measure for preventing incidents such as exceeding standards or failure to implement measures against accidents, we re-inspected things that are thought to pose a high environmental risk including handling of hazardous substances, registered equipment related to water quality, and the like. We then took corrective measures to address defects. Again, in FY2024 we performed re-inspections related to waste management, and moved forward with countermeasures.

Acquisition of Environmental Management System Certification

The NGK Group encourages the acquisition of ISO 14001 or third-party certifications (such as Eco Stage 2 or Eco Action 21 in Japan) that meet this standard to systematically and continuously develop its environmental conservation activities in line with NGK Group Environmental Policy.

Under this initiative, all Group companies, including those outside Japan, as well as the Nagoya, Chita, Komaki sites and Ishikawa plant, have received third party certification of their environmental management systems.

Environmental Management System Certification Status

As of May 2025

Category		Number of manufacturing sites	Number of sites certified
NGK		4	4
Group companies in Japan	Environment Business Group	5	5
	Digital Society Business Group	9	9
	Energy & Industry Business Group	5	5
Group companies outside Japan	Environment Business Group	11	11
	Digital Society Business Group	4	4

Environmental Management System Certification Status

Category		Number of manufacturing sites	Number of sites certified
Group companies outside Japan	Energy & Industry Business Group	3	3

* New production sites operating for less than two years are not covered

Environmental Audits

Every year, NGK conducts internal audits and external audits (surveillance audits and review audits) of the environmental management system at all Group sites in Japan and overseas, including Nagoya, Chita, Komaki, and Ishikawa. In FY2024, there were no significant findings. In the event of a significant finding, the relevant department and Environment, Safety & Health Dept. work together to review and implement countermeasures, as well as inform the Environment, Safety & Health Committee in each area in an attempt to horizontally deploy these measures.

Significant Findings

[Environmental Data Collection](#) 

Environmental Risk Management

At the NGK Group, each manufacturing site has individually established environmental management systems, and strives to preserve the environment and reduce environmental risks. The business group which oversees Group companies joins together with the Environmental Management Department at NGK headquarters to conduct yearly environmental audits of Group company manufacturing sites and help improve the level of environmental management of the NGK Group as a whole.

Regulatory Compliance

NGK conducts monitoring and assessments as well as vigorous control of exhaust and wastewater produced from its sites, observing relevant regulations and environmental preservation-related and other agreements with control authorities.

Additionally, we organize environmental management specialist seminars on a regular basis for all Group companies in Japan to keep responsible persons updated on related topics, thereby enhancing our capabilities to prevent environmental pollution. In FY2024, there was a case in which slurry containing product raw materials was discharged into the storm drainage system by a Group company in Japan. On top of implementing measures to prevent recurrence, we will promote their deployment laterally across the Group by disseminating information through the Environment, Safety & Health Committee.

Major Violations

[Environmental Data Collection](#) 

Environmental Patrols and Emergency Response Drills

NGK implements environmental patrols in line with annual plans to prevent environmental pollution and conducts response drills based on emergency scenarios to minimize damage.

In FY2024, environmental patrols were conducted at the Nagoya, Chita, and Komaki sites and the Ishikawa Plant to prevent atmospheric and water pollution, ensure the appropriate management of chemical substances, and suppress noise and vibrations. Response drills based on emergency scenarios were also conducted at these four areas. Going forward, NGK will continue to proactively engage in patrols and drills in an attempt to improve operational methods and mitigate environmental risks.

Activities Conducted in FY2024

Environmental patrols

District	Air	Water	Noise/Vibration	Chemical substances
Nagoya	4	2	4	2
Chita	1	1	1	1
Komaki	2	2	1	1
Ishikawa	2	2	2	2

Emergency response drills

District	Air	Water	Noise/Vibration	Chemical substances
Nagoya	3	2	-	2
Chita	6	5	-	-
Komaki	8	16	-	-
Ishikawa	6	2	-	2

Note: "-" indicates emergency response drills were considered of low importance and not conducted.

Information Disclosure Based on TCFD Recommendations

In February 2020, the NGK Group announced our support for recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD) created by the Financial Stability Board (FSB). Since then, we have evaluated how to apply the TCFD framework towards resolving issues facing our Group operations, such as the risks and opportunities posed by climate change, and towards necessary information disclosure.

Below, we disclose information related to scenario-specific analyses conducted based on the four themes outlined in the TCFD recommendations: governance, strategy, risk management, and metrics and targets.

We will continue to expand analysis work and enhance information disclosure as part of our commitment to communicating with our stakeholders. We will accurately identify climate change-related influences on Group operations and implement response measures to promote sustainable growth for our business.



The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB). As of November 24, 2023, following the dissolution of the TCFD, 1,488 companies and organizations have expressed support for TCFD recommendations.

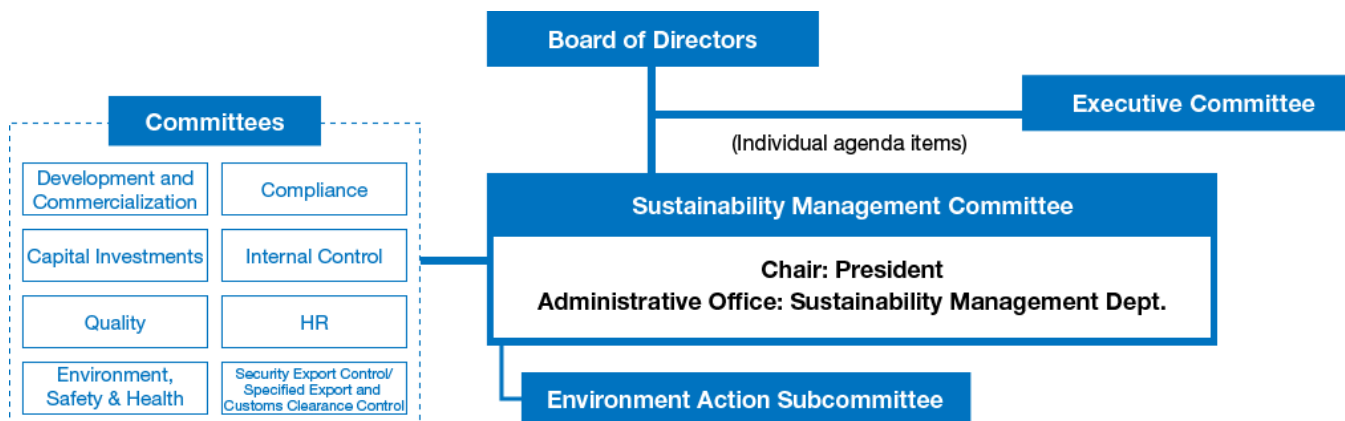
| Governance

In April 2021, we announced the NGK Group Vision: Road to 2050. In this Group Vision, we position responding to ESG issues as a core management theme and outline the goal of being a company that contributes to carbon neutrality and the digital society using our ceramic technologies. Recognizing climate change response as one of the highest-priority issues to achieving sustainability for our planet, we drafted the NGK Group Environmental Vision as an extension of the NGK Group Vision. In this Environmental Vision and our Carbon Neutrality Strategic Roadmap, we outline achieving net zero CO₂ emissions for our business activities by 2050. Specific activities include setting management metrics and goals for each fiscal year of our 5-Year Environmental Action Plan. Our Sustainability Management Committee chaired by the President deliberates on these metrics and goals at least once a year, and issues reports to our Board of Directors. We also have incentivized CO₂ emissions reduction by adding achievement benchmarks to the performance-linked bonus evaluation criteria for directors and executive officers. Members from relevant divisions participate in Environment Action Subcommittee within the Sustainability Management Committee to evaluate measures for information disclosure based on TCFD recommendations. The subcommittee's results are then deliberated by the Sustainability Management Committee before being reported to the Board of Directors. This subcommittee is also focused on achieving carbon neutral business activities by no later than 2050, one of the goals outlined in our Action Plan. The subcommittee works towards this goal by also promoting measures such as energy saving and furnace fuel conversion from fossil fuels to carbon-free fuel. The Sustainability Management Committee submits reports on its deliberations, including ESG issues such as our disclosure response for the CDP, to the Board of Directors at least once per year.

[NGK Group Vision >](#)

[NGK Group Environmental Vision >](#)

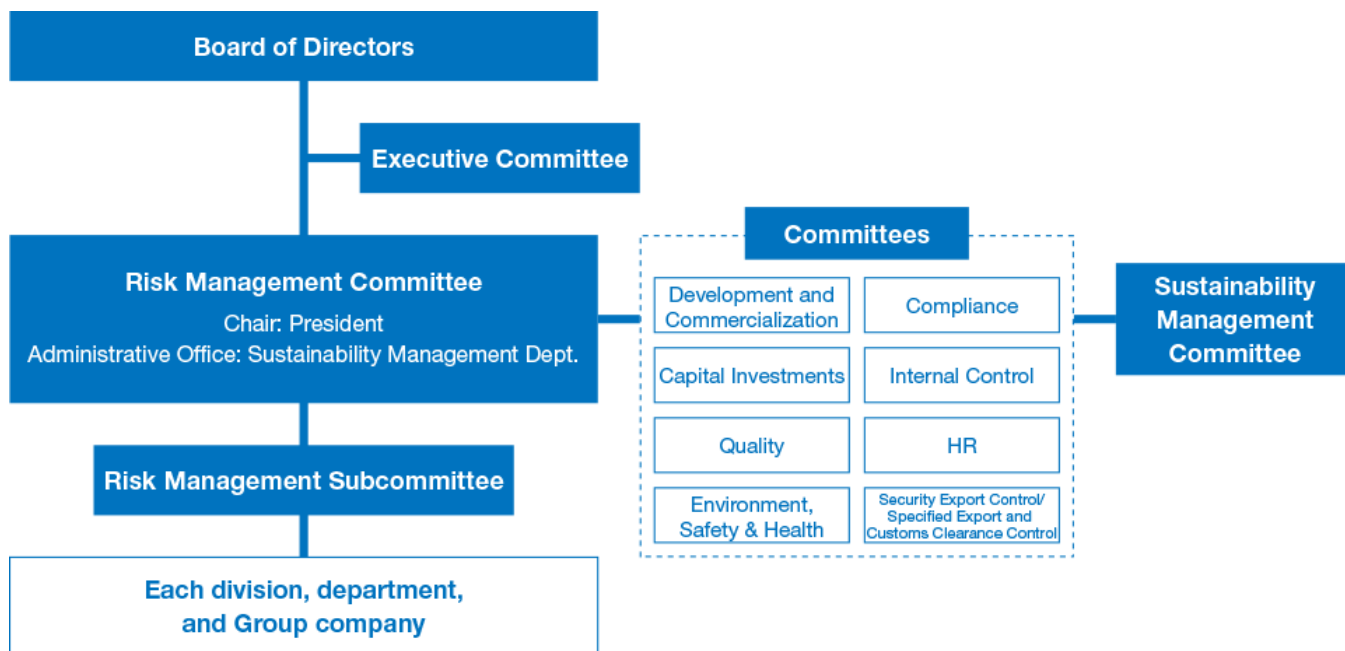
Framework Related to Climate Change Response



Risk Management

The Risk Management Committee handles NGK Group-wide risks, including risks related to climate change, by establishing policies, strategies, frameworks, measures, and annual plans for risk management. It also monitors the overall execution status of risk management and reports to the Board of Directors when appropriate. In addition, individual risk items are the responsibility of the head of the department or committee that should manage and monitor them, and are handled by the relevant department or committee. In the event that disasters or accidents occur, they are handled according to the Basic Rules of Crisis Management, by the department or committee specified by these rules. In cases of particularly serious risks, the Executive Officer in charge of the Sustainability Management Department may decide to convene a response committee, which includes participation by the President, to address said risks.

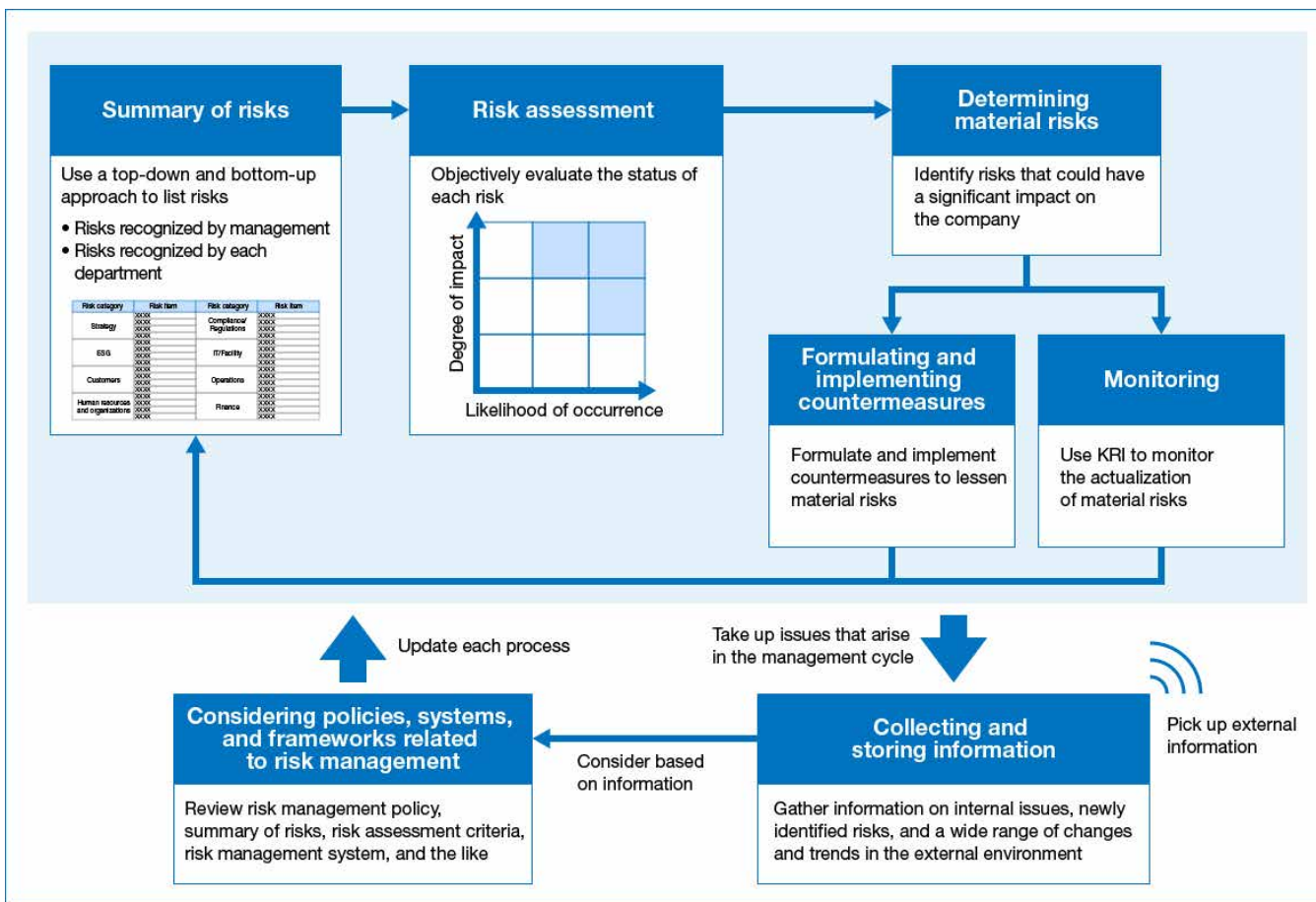
Risk Management Framework



Risk Management Process

In addition, for risks related to climate change, the Environment Action Subcommittee within the Sustainability Management Committee creates scenarios and conducts a scenario analysis to identify Materiality risks. Through this process, we extract risks and opportunities, and draft response strategies. These results are deliberated by the Sustainability Management Committee, then reported to the Board of Directors.

Materiality Risk Management Cycle



Strategy

Climate Change Risks and Opportunities

We have set time frames and scenarios to analyze the risks, opportunities, and magnitudes of the impact of climate change in relation to NGK Group business.

Scenario analysis is a method for postulating multiple future scenarios and ascertaining the impacts of the risks and opportunities posed by climate change on the NGK Group. The goal is to use the insights gained in considering future strategies and responses.

Assumptions

Timeframes

We set short-term, medium-term, and long-term timeframes for considering risks and opportunities.

Timeframe		Reason for setting
Short-term	FY2025	Final fiscal year of the fifth 5-Year Environmental Action Plan
Medium-term	FY2030	Interim goal year of the NGK Group Environmental Vision
Long-term	FY2050	Goal year of the NGK Group Vision and the NGK Group Environmental Vision

Scenarios

We have set 1.5°C and 4°C scenarios under which the risks and opportunities of transitioning to carbon neutrality, and the physical risks and opportunities of climate change, are each maximized.

Scenarios	Summary	Main external scenarios used as reference
1.5°C Scenarios	Rapid changes in policy, regulatory systems, and markets to aim for carbon neutrality by 2050 and limit the average global temperature increase to 1.5°C compared to pre-industrial revolution temperatures.	- International Energy Association (IEA) Net Zero by 2050 scenario - SSP1-2.6 scenario, etc.
4°C Scenarios	Lack of progress in government policy, regulatory systems, or social initiatives result in an average global temperature increase of 4°C compared to pre-industrial revolution temperatures. Massive impact from disasters and other events caused by climate change.	SSP5-8.5 scenario, etc.

Particularly Important Risks and Opportunities

We have identified risks and opportunities in line with the TCFD categories for each time frame and scenario. We conducted qualitative assessment of the magnitude of financial impact of each risk and opportunity with reference to the risk assessment criteria of all Group companies. We also quantified the financial impacts for some items that were thought to have a certain impact and could be quantitatively assessed based on these scenarios.

Furthermore, this scenario analysis is not a forecast of NGK Group performance, but rather analyzes the impacts of the risks and opportunities posed by climate change on the NGK Group under each scenario. It is intended to be used in considering strategies and responses from here on out. The information used to calculate these financial impacts is the information available at the time of the examination, and contains uncertainties and assumptions.

(1) Carbon Neutral Society Transition Risks and Opportunities (1.5°C scenario)

Category	Summary of assumed scenario	Business risks & opportunities	Details of risks & opportunities	Timeframe	Response strategy	Financial impacts
Policy/Legal	- Rapid reduction in emissions required to achieve carbon neutral by 2050. - Adoption of carbon pricing against CO₂ emissions of our company or our supply chain. 2030: 130\$/t- CO₂ 2050: 250\$/t- CO₂	Increased cost of responses to further reduce greenhouse gas emissions Increased costs due to adoption of carbon pricing	Risks Risks Incurring response costs related to equipment replacement and upgrades for energy saving, renewable energy procurement, electrification of energy sources, and energy conversion from natural gas as a furnace fuel to fuels sources such as hydrogen or ammonia. Costs increase due to adoption of carbon pricing on company emissions and emissions along the upstream of our supply chain	Short- to long-term	- Trend and prediction monitoring for the regulations and carbon pricing systems of various countries - Promote enhanced energy saving, technological innovation, and initiatives towards expanding the use of renewable energy in line with the NGK Group Environmental Vision and Carbon Neutrality Strategic Roadmap - Monitor supply status of fuels with low greenhouse gas emissions - Promote greenhouse gas emissions reductions in accordance with Supply-Chain CSR Guideline - Expand Scope 3 calculations and range of disclosure, conduct life cycle assessments (LCA) for major products to identify reduction targets	Financial impacts of energy conversion/carbon pricing (increased expense)*1 2025: - ¥2.0 bil 2030: - ¥5.8 bil 2050: - ¥12.3 bil (Reference: Impacts of carbon pricing without reductions: - ¥5.9 bil to - ¥17.7 bil)
Technology	Growing battery demand leading to decline in prices for rechargeable lithium-ion and other batteries. Also seeing the emergence and adoption of new battery technology with high added value. Rapid growth in CO₂ capture volume in various sectors, including fuel production, power generation, and industry.	Risks and opportunities associated with battery technology innovation and the emergence /adoption of new technology Market growth driven by widespread adoption of CCU/CCS (CO₂ capture, utilization, and storage)	Opportunities Risks Opportunities Increased competitiveness by advancing proprietary technology development Increased storage battery needs Competitiveness of our technologies will decline as competitors advance proprietary technology development Growth in CCU/CCS market will increase business opportunities for our ceramic products (subnano-ceramic membranes, etc.)	Medium- to long-term	- Monitoring of trends in technology innovation - R&D advancement - Monitoring of technology innovation and market trends - Business expansion in the CCU/CCS market, new product development promotion marketing, business schemes, promotion of New Value 1000 to accelerate new product development - Research, development, and provision of subnano-ceramic membranes, solid oxide electrolysis cells (SOEC), and the establishment of carbon cycles to use them.	We are currently carrying out qualitative studies due to the lack of quantitative indicators. Financial impacts of CCUS-related products*2 2025: + ¥0 bil 2030: + ¥14 bil 2050: + ¥270 bil
Market	- In the short-term, vehicle emissions restrictions will be stricter, increasing demand for improved fuel economy. - In the medium- to long term, the proportion of electric vehicles (EVs) and fuel cell vehicles (FCVs) in automobile sales will rise rapidly, and the proportion of internal combustion engine vehicles will decline. The capacity of power storage batteries and demand for lithium-ion rechargeable batteries for EVs will rapidly expand. Demand for semiconductors will increase with electrification in various fields such as industry and transportation.	Changes in demand for automotive parts Increased storage battery demand Growth in demand for semiconductor-related products	Opportunities Risks Opportunities In the short term, demand for catalyst substrates for controlling automotive emissions and NOx sensors will increase due to stricter exhaust gas regulations. In the medium- to long-term, demand for gallium nitride (GaN) wafers, AMB Substrates, and beryllium copper alloy for EVs will increase. Demand for products for internal combustion engine vehicles will decline over the medium- to long-term Increased demand for NAS batteries and Nickel-Zinc Rechargeable Battery Increased business opportunities in the heating and refractory business for lithium-ion rechargeable batteries Increased demand for parts for semiconductor manufacturing equipment and electronic parts / metals in the digital society business	Short- to long-term	- Monitoring of regulatory, market, and demand trends - Plan and implement production and capital expenditures in response to the plans of automobile manufacturers - Cover decline in demand for internal combustion engine vehicles due to tougher exhaust gas regulations by increasing the number of new products and high-performance products - Expand adoption of gallium nitride (GaN) wafers, beryllium copper alloy, and AMB Substrates for EVs and plug-in hybrid vehicles (PHEVs) - Develop and offer products for heat management in EVs, new products for synthetic fuels, etc. - Monitoring of power policies and customer trends in each country - Enhance production systems in response to growing demand - Provide new value through solutions services - Commercialize Nickel-Zinc Rechargeable Battery - Monitoring of demand trends - Enhance production systems in response to growing demand - Partner with semiconductor manufacturing equipment manufacturers, increase facility capacity, personnel, facility systems, etc. as necessary	Financial impacts of automotive-related products*2 2025: + ¥65 bil 2030: - ¥50 bil 2050: - ¥244 bil Financial impacts of battery-related products*2 2025: + ¥23 bil 2030: + ¥33 bil 2050: + ¥68 bil We are currently carrying out qualitative studies due to the lack of quantitative indicators.
Reputation	- Regular and growing trend of investors and financial institutions financing climate change risk into investment decisions and requiring lenders to set SBT*3. - Customers are increasingly demanding renewable energy adoption and reductions in CO₂ emissions.	Improving assessments by contributing to carbon neutrality Decline in trust from stakeholders due to delays in responding to climate change	Opportunities Risks Assessments by stakeholders can be improved by proactively responding to climate change and providing products and services that contribute to carbon neutrality. Delays in climate change measures will have a negative impact on brand, capital procurement, transactions, etc.	Short- to long-term	- Business structure conversion, one of the goals outlined in the NGK Group Vision - Promote measures to reduce greenhouse gas emissions - Conduct information disclosure in line with the TCFD framework - Ascertain customer demands and implement responses accordingly	We are currently carrying out qualitative studies due to the lack of quantitative indicators.

*1 We set certain assumptions and premises about things like future business expansion based on the parameters (carbon price, energy unit price, power source mix, etc.) of scenarios in the International Energy Agency (IEA) "Net Zero by 2050" report (2021 edition). Then we combined the costs of energy conversion and energy saving with carbon prices for greenhouse gases to calculate the amount of financial impact on profits.

*2 We used certain assumptions and premises to estimate our market share based on changes in the automobile, CCU/CCS, and battery markets according to scenarios in the International Energy Agency (IEA) "Net Zero by 2050" report (2021 edition). Then estimated the impact on sales of some products compared to the present to determine financial impacts.

*3 SBT: Abbreviation of Science-based Targets, which is an initiative that requires companies to set targets for reducing greenhouse gas emissions based on scientific evidence.

(2) Physical Risks and Opportunities Associated with Advancing Climate Change (mainly 4°C scenario)

Category	Summary of assumed scenario	Business risks & opportunities	Details of risks & opportunities	Timeframe	Response strategy	Financial impacts
Acute	- Frequency of flooding increasing in regions such as Japan and Asia. - The frequency of violent typhoons increasing.	Impact of wind and flood damage on factories and supply chains	Risks Increasing impact of factors such as property damage to facilities and machinery caused by wind and flooding, profit losses due to the suspension of business, and difficulty in employees coming to work. Supply chain disruption due to increased wind and flood damage	Short- to long-term	- Flood risk assessments for major sites including future climate - Create and promote BCP (Business Continuity Plan), including for supply chains - Create a structure that enables global substitutions by decentralizing sites - Prepare for supply chain disruption by evaluating alternative procurement methods in advance (focus on production areas with high disaster risks) - Evaluate the flood risk assessments of major suppliers	Changes in our company's financial impacts (expected value) due to floods and storm surges affecting our plants and suppliers* 2025: - ¥70 mil 2030: - ¥100 mil 2050: - ¥540 mil
Chronic	Sea levels continue to rise.	Impact of storm surge on coastal factories	Risks Increased storm surge risk, increased property damage and profit losses due to flood damage Costs incurred for measures such as height elevation and barriers and relocation	Medium- to long-term		

* Drawing on location information for our plants and major suppliers, we used a simulation that employed the Climate Score Global (CSG) model developed by Jupiter Intelligence in the United States to evaluate the inundation depths caused by flooded rivers and storm surges at a resolution of 90 m. Based on this evaluation, we calculated the expected amount of financial impact on profits by tallying up the value of losses to our company due to asset losses at our plants and losses due to shutdown of our plants and major suppliers. This expected value is an index calculated from the amount of losses due to floods and the probability of flood occurrence in a given year. The loss amount is estimated based on a uniform damage rate according to depth of inundation and does not reflect the disaster preparedness measures in place in the areas where sites are located.

Particularly Important Risks and Opportunities

[Sub-nano Ceramic Membranes >](#)

[Gallium Nitride \(GaN\) Wafer >](#)

[AMB Substrates >](#)

[Nickel-Zinc Rechargeable Battery >](#)

Strategy Based on the Risks and Opportunities of Climate Change

We will pay close attention to both societal and market trends, while recognizing the degree of impact of each of the risks and opportunities we have identified through scenario analysis. And we will take action according to the response strategies we have established for each item.

Among the transition risks are risks accompanying CO₂ emissions. We will mitigate these risks by promoting initiatives aimed at net-zero CO₂ emissions according to our Carbon Neutrality Strategic Roadmap. We are already implementing measures to deal with water-related disaster risks from the standpoint of business continuity planning (BCP). For instance, we are raising land in response to the frequent occurrence of heavy rainfall. With respect to further disasters, we are taking measures to prevent catastrophic damage, with protecting human life as our highest priority. We are aware of the future risks posed by climate change, including those posed by the worst-case scenario of a 4°C increase in temperature. To mitigate these risks, we will continue to evaluate risks while working to strengthen countermeasures such as BCP.

[NGK Group Environmental Vision >](#)

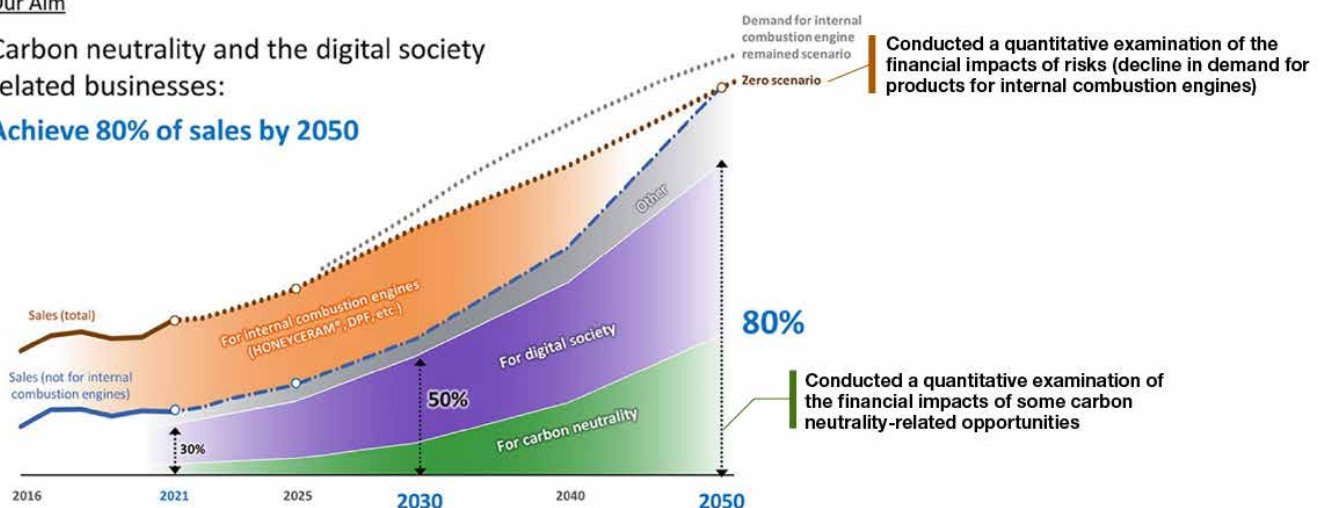
[Carbon Neutrality Strategy Roadmap >](#)

The NGK Group Vision defines our vision as A Company to Contribute to Carbon Neutrality and Digital Society with Our Unique Ceramic Technologies. It also sets a target for products related to these fields to make up 80% of sales by 2050. We used this scenario analysis to calculate the quantitative financial impact on parts of our business that can be assumed at present. This allows us to determine the business opportunities presented by realization of a carbon neutral society. We will continue working to develop new products related to carbon neutrality and digital society to achieve the NGK Group Vision, and aim to provide new value to society as we strive for sustainable growth.

Our Aim

Carbon neutrality and the digital society related businesses:

Achieve 80% of sales by 2050



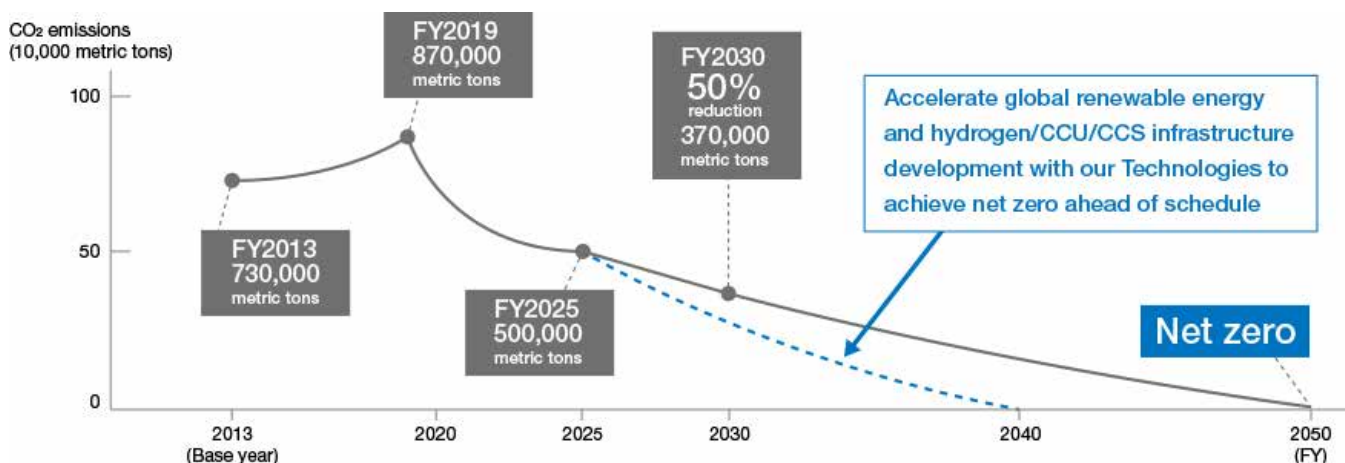
We intend to suitably enhance and deepen our scenario analysis by adding and updating various parameters and external reference scenarios depending on the state of new product development. And we will continue analyzing and considering responses to the impacts that the risks and opportunities posed by climate change can have on our business.

Metrics and Targets

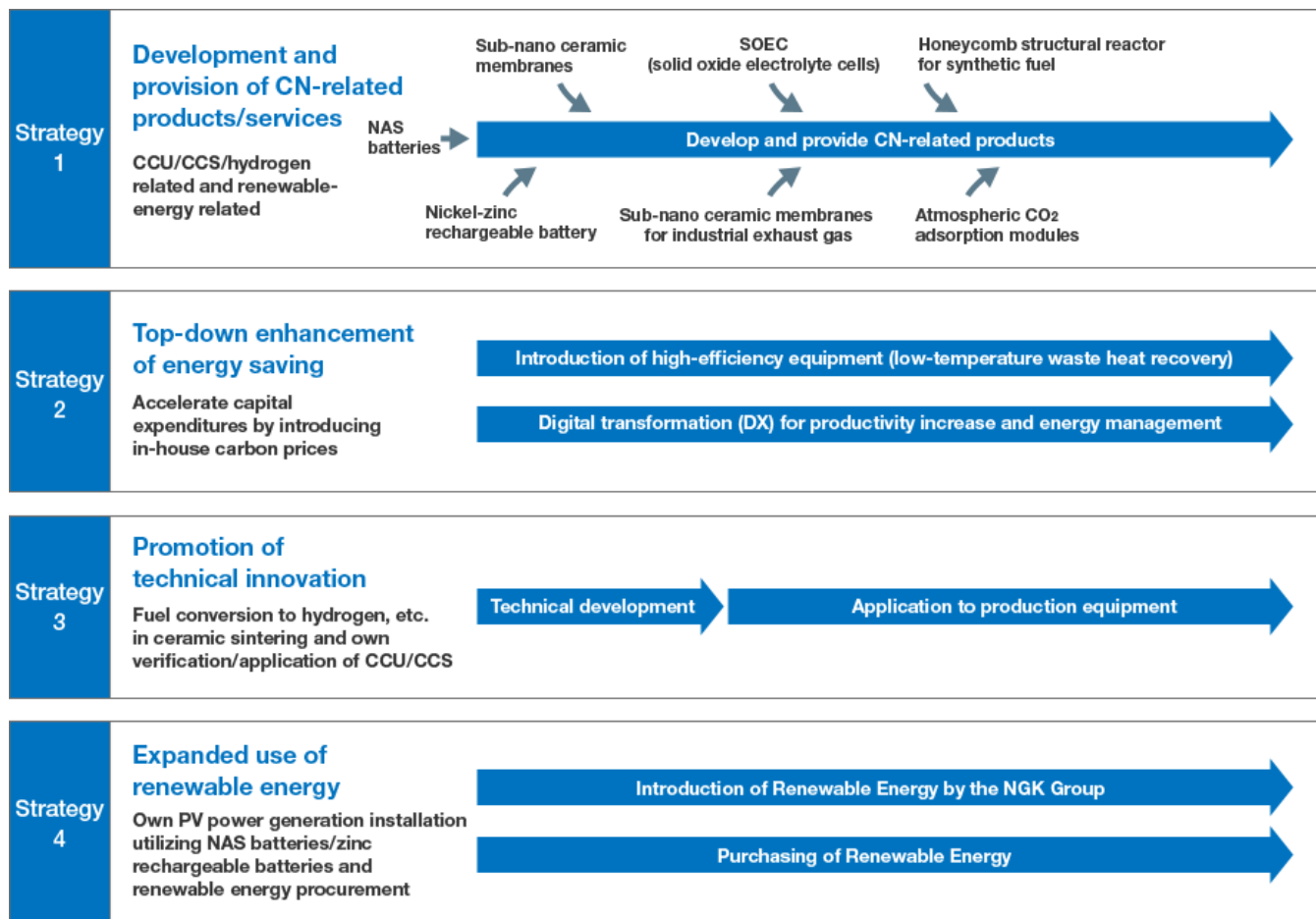
We drafted the Carbon Neutrality Strategic Roadmap to promote goal achievement that will enable us to realize the NGK Group Environmental Vision. We set milestone targets ahead of our 2050 goal of net zero CO₂ emissions for the entire Group. These milestone targets call for a 500,000 ton reduction in emissions by 2025 (32% reduction compared to 2013 (reference year)) and a 370,000 ton reduction by 2030 (50% reduction compared to 2013).

When the roadmap was first formulated, the target value for fiscal 2025 was set at 550,000 ton (25% reduction compared to 2013), but this was revised to aim for an even higher reduction rate.

Carbon Neutrality Strategic Roadmap



Four Strategies of the Carbon Neutrality Strategic Roadmap



[NGK Group Environmental Vision >](#)

We drafted our fifth 5-Year Environmental Action Plan to help realize the NGK Group Environmental Vision. This plan outlines targets for the environmental activities we will conduct between FY2021 and FY2025.

The objective of this Plan is to make it easy to understand our progress towards net zero by 2050 and our 2030 milestone target of a 50% reduction compared to 2013. As part of our initiatives to expand our use of renewable energy, we set new targets for renewable energy utilization rates that we apply to electricity consumption for the entire Group. We also set targets to increase the number of products registered as carbon neutral-related products.

[5-Year Environmental Action Plan >](#)

[CO₂ Emissions Scope 1, 2, 3](#)

(Disclosed in May 2023)

Initiatives toward Carbon Neutrality

| NGK Group Environmental Vision and Carbon Neutrality

The NGK Group considers tackling climate change to be one of our material issues. As such, we are promoting efforts to tackle climate change. We endorsed the Task Force on Climate-related Financial Disclosures (TCFD) in 2020. We are encouraging initiatives toward carbon neutrality throughout our entire value chain with the aim of achieving net-zero CO₂ emissions in our business activities. Furthermore, we formulated the NGK Environmental Vision in 2021. We are promoting activities aimed at achieving net-zero CO₂ emissions by 2050 in accordance with our Carbon Neutrality Strategic Roadmap, which consists of four strategies, and our 5-Year Environmental Action Plan.

[NGK Group Environmental Vision >](#)

[Carbon Neutrality Strategic Roadmap and 5-Year Environmental Action Plan >](#)

| Initiatives in Line with the Carbon Neutrality Strategic Roadmap

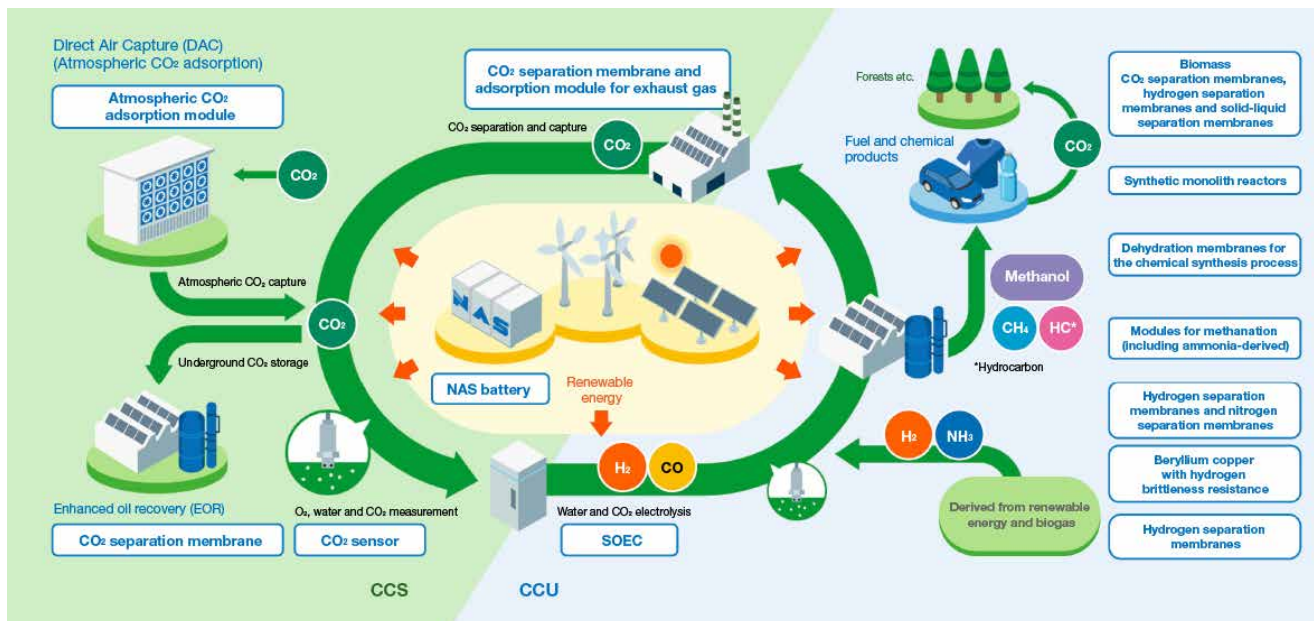
The NGK Group has identified the risks and opportunities associated with the transition to a carbon-neutral society in line with the TCFD recommendations. We have formulated the Carbon Neutrality Strategic Roadmap toward the realization of such a society. We are working to reduce risks and expand opportunities by promoting initiatives aimed at achieving net-zero CO₂ emissions for each strategy in the roadmap.

Strategy 1: Development and Provision of Carbon Neutrality-related Products/Services

The NGK Group is promoting the development of technologies relating to CCU/CCS (capture, utilization and storage of CO₂), hydrogen, methanation and other areas to contribute to the realization of carbon neutrality. We are also developing ceramic membranes that contribute to the separation of hydrogen and methane during hydrogen transportation and the reaction, separation, purification and other processes in CO₂-derived fuel synthesis (e-Fuel). In addition, we are developing DAC modules and other products which adsorb and capture the CO₂ that is released back into the atmosphere through ways such as the use of e-Fuel. We are promoting development with a focus on the technologies necessary to ensure the smooth circulation of carbon without stagnation to lead to the provision of carbon neutrality-related products/services.

[Research & Development >](#)

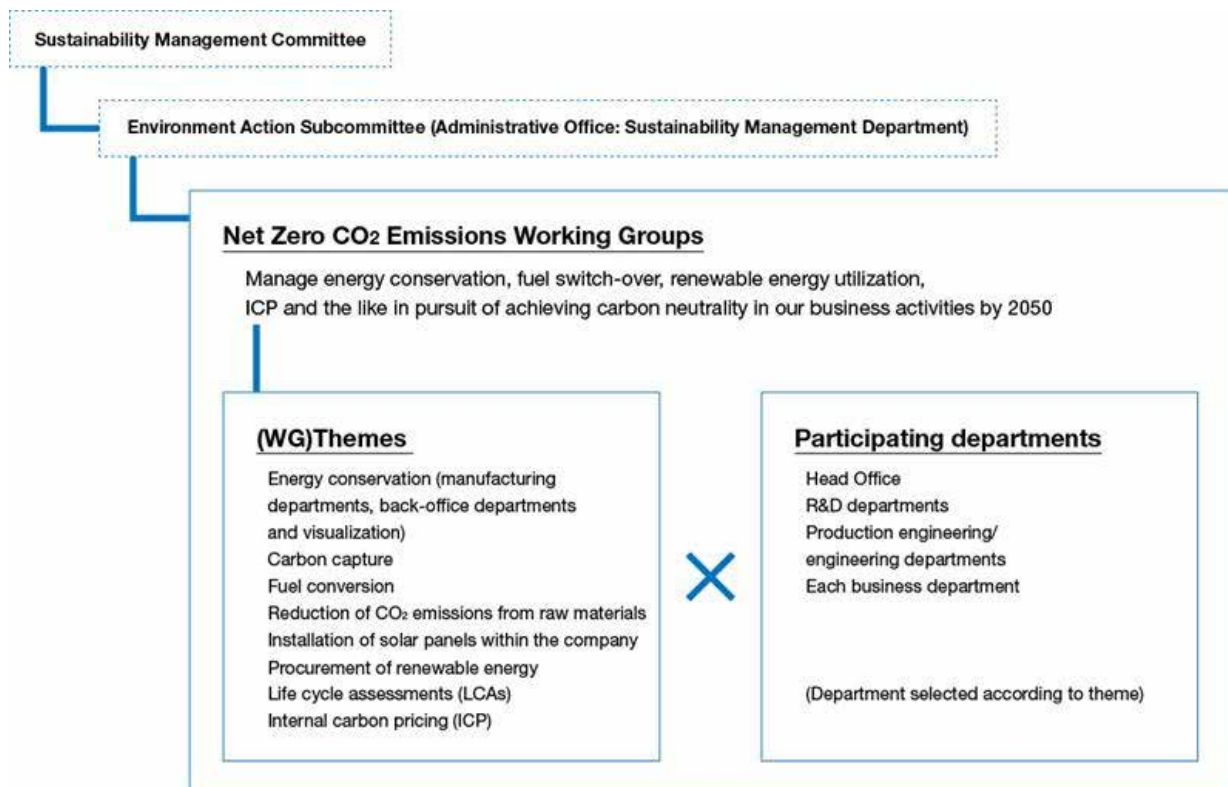
NGK Group's Technological Developments That Contribute to Carbon Neutrality



CO₂ Emissions Reduction Promotion Framework (Strategies 2 to 4)

Strategies 2 to 4 are initiatives aimed at reducing CO₂ emissions in the NGK Group. We believe it is important to set up a company-wide framework to work on these strategies. Therefore, we launched the Net Zero CO₂ Emissions Project to build a framework toward the realization of carbon neutrality from FY2021 to FY2023. We established working groups based on Strategies 2 to 4 in this project. These working groups then promoted initiatives including improving energy conservation efforts, introducing carbon pricing, developing fuel conversion technologies and installing photovoltaic power generation systems. Each group formulated a roadmap and then built a framework to be able to continue activities independently over a three-year period. Each group has been continuing to promote initiatives based on their respective roadmaps since FY2024.

Net Zero CO₂ Emissions Working Group Promotion Framework



Strategy 2: Top-Down Enhancement of Energy Saving (Energy Conservation (Manufacturing Departments and Back-office Departments) Working Group and ICP Working Group)

Top-Down Enhancement of Energy Saving

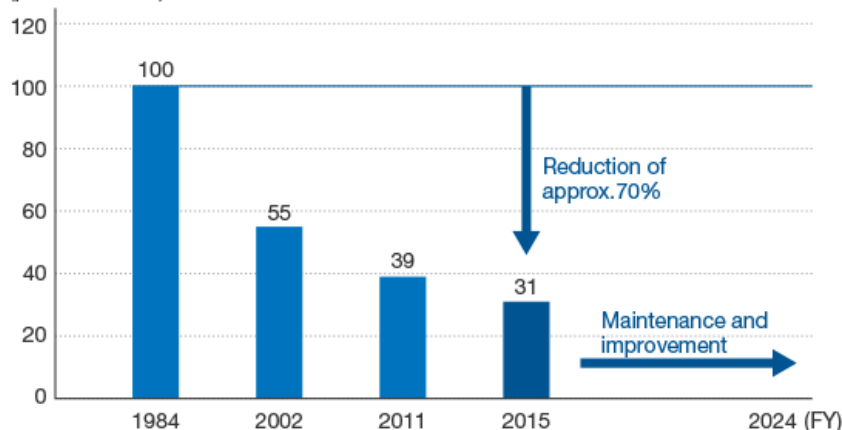
We believe it is important to first promote thorough energy conservation to reduce CO₂ emissions. Energy conservation also leads directly to cost reductions. Therefore, we have set up a framework in which the heads of each manufacturing department take the initiative in working on energy conservation. We have established the Energy Conservation Promotion Council. This council, led by the heads of the manufacturing departments, meets twice a year to share the energy conservation activities of their departments. This is an opportunity to learn from each other. Moreover, the Manufacturing Engineering Department in the Head Office play a central role in an activity called “energy conservation patrols” which involve conducting assessments and providing guidance. These patrols support energy conservation activities suitable for each department. While the contents of the activities differ by department, each department is steadily working on its own set reduction targets. As a result, we achieved a reduction in CO₂ emissions of 24,000 metric tons throughout the entire NGK Group in FY2024.

Increase in Efficiency of Manufacturing Processes

The NGK Group has been continuously working to increase the efficiency of manufacturing processes over many years starting with insulator manufacturing. We initially used coal or heavy oil as the fuel for the kilns used in the firing process essential to manufacturing ceramics. We have replaced this with natural gas and other energy sources. Together with this, we have switched from using conventional bricks to fibers for the kiln materials and updated the firing burners to

those with higher efficiency. We have achieved an approximately 70% reduction in CO₂ emissions from our continuous kilns over 30 years since the 1980s through those efforts. We are still now to this day maintaining and improving that level. In recent years, in addition to such large-scale improvements, we have been considering and promoting initiatives aiming for further increases in efficiency. These efforts include adjusting the air ratio during firing and effectively utilizing waste heat in drying furnaces and other equipment that uses a lot of energy.

Comparison of CO₂ Emissions from Continuous Kilns by Year of Introduction
(per unit of CO₂)



* Changes in per unit of CO₂ emissions from continuous kilns, a typical production facility

NGK Group Production Site Initiatives (Winner of the FY2024 Energy Conservation Grand Prize Award)

NGK ADREC won the Prize of Director General of Agency for Natural Resources and Energy (Industrial Field) in the Energy Conservation Best Practices Category at the FY2024 Energy Conservation Grand Prize Award sponsored by The Energy Conservation Center, Japan (ECCJ) as a result of its top-down energy conservation enhancement initiatives. Energy conservation patrols and energy conservation assessments provided the impetus for NGK ADREC to reduce its current waste, review its operating conditions and reorganize its equipment. Taking on these and other efforts led to an energy conservation effect that was then recognized by this award. We are aiming to roll out these efforts to other sites in the future.

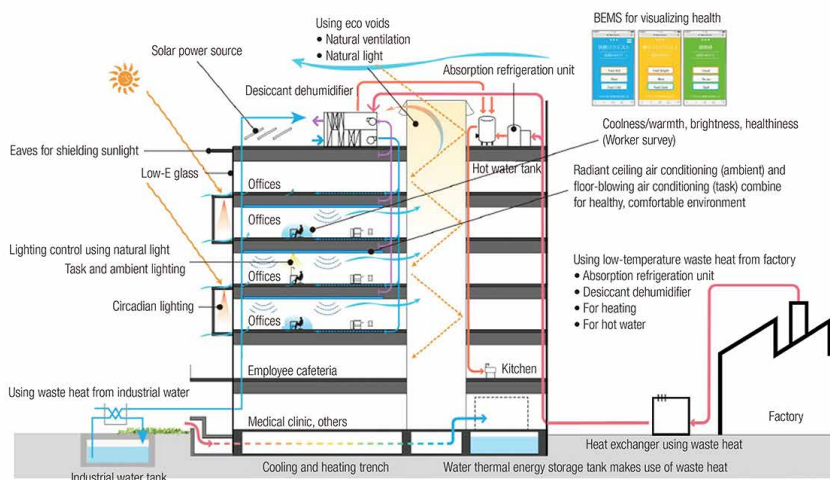
Energy Conservation of Buildings

— Construction of a Zero Energy Building (ZEB)-orientated Office Facility

The NGK Group is proactively promoting energy conservation when constructing or renovating buildings. Completed in 2020, our new administrative/welfare wing in Mizuho, Nagoya incorporates high-efficiency equipment and renewable energy. In addition, it achieves significant energy savings by taking measures which give consideration to the location and other conditions such as the effective utilization of low-temperature exhaust heat from our adjacent plant and the use of natural ventilation and natural lighting. We constructed it as a ZEB-oriented office that halves CO₂ emissions. It has been selected as one of the Ministry of Land, Infrastructure, Transport and Tourism's Leading Sustainable Building Project (CO₂ Reduction). Furthermore, this allowed us to achieve ZEB readiness in FY2022. In FY2023, it won the Prize of Director General of Agency for Natural Resources and Energy (Business Category) in the Best Practices Category at the FY2023 Energy Conservation Grand Prize Award sponsored by The Energy Conservation Center, Japan (ECCJ). We will continue to meet ZEB standards when constructing buildings in our group in the future.



New Administration/Welfare Wing



Energy Conservation Activities in Existing Buildings

In parallel with taking energy conservation measures when constructing or renovating buildings, we are also promoting energy conservation in our existing administrative facilities and offices. The main building in the Head Office district was completed in December 1992. It was originally designed as a facility with a high energy conservation performance level capable of high-precision air conditioning settings. Nevertheless, now that it has been in use for over 30 years, its energy-conservation effectiveness has gradually declined compared to more recent facilities. In light of this situation, the Back-office Department Energy Conservation Working Group launched an initiative aimed at further energy conservation effects in addition to existing management methods. First, we installed meters displaying the temperature, humidity and discomfort index in the offices on each floor. Furthermore, the top management personally sent a video message encouraging users of the facility to take actions with energy conservation in mind such as by regulating their body temperature with adjustments to their clothing. Moreover, facility managers now make fine adjustments to the air conditioning while checking the actual temperature and humidity. When requested by users to change the temperature, they respond appropriately upon checking the readings on the meters. As a result of these efforts, it was possible to reduce energy use by approximately 20% over three years from 2021 to 2024. We plan to continue and to improve upon these activities and to then roll them out to other buildings in the future.

Operation of Internal Carbon Pricing (ICP)

Internal carbon pricing (ICP) is a carbon price independently set and used within a company to promote decarbonization-focused investments and policies. The NGK Group began operating ICP in FY2022. We use it to evaluate the feasibility of introducing equipment. As in FY2023, we again set the ICP base price at 140 US dollars per metric ton of CO₂ in FY2024. This is the carbon price (for developed countries) in FY2030 as expected by the International Energy Agency (IEA) that we refer to in setting the ICP. We have applied ICP to investment return calculations for the installation of waste heat utilization and photovoltaic power generation systems to reduce CO₂ emissions. Going forward, we will pay attention to societal trends and start to consider further application of internal carbon charges.

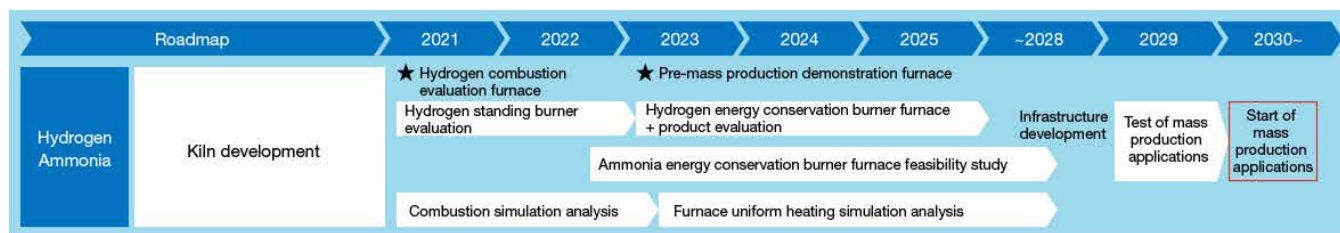
Strategy 3: Promoting Technological Innovation (Fuel Conversion Working Group and CO₂ Capture Working Group)

It is possible to reduce the CO₂ emissions that arise from the indirect use of power and other forms of energy by introducing renewable energy. On the other hand, the firing process is necessary to manufacture the ceramic products that are one of the strengths of our company. We mainly use natural gas as the fuel in that process. That means direct emissions are higher than those of other businesses. Therefore, in addition to electrification, we are developing fuel conversion technologies using hydrogen, ammonia and similar. Our aim is to eliminate CO₂ emissions from the fuels we use in the firing process.

Fuel Conversion Technology Development

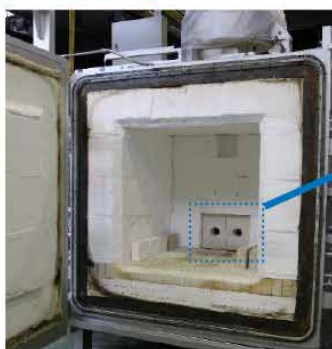
We installed a mass production demonstration furnace in FY2022 toward the practical application of a kiln using a hydrogen burner. We are currently verifying the burner durability, the temperature distribution within the furnace and other aspects in the mass production demonstration furnace. In addition, we are confirming the quality in prototypes toward application to products.

Roadmap for the Mass Production Applications of Hydrogen and Ammonia



Combustion and product evaluation

From 2021



Pre-mass production demonstration

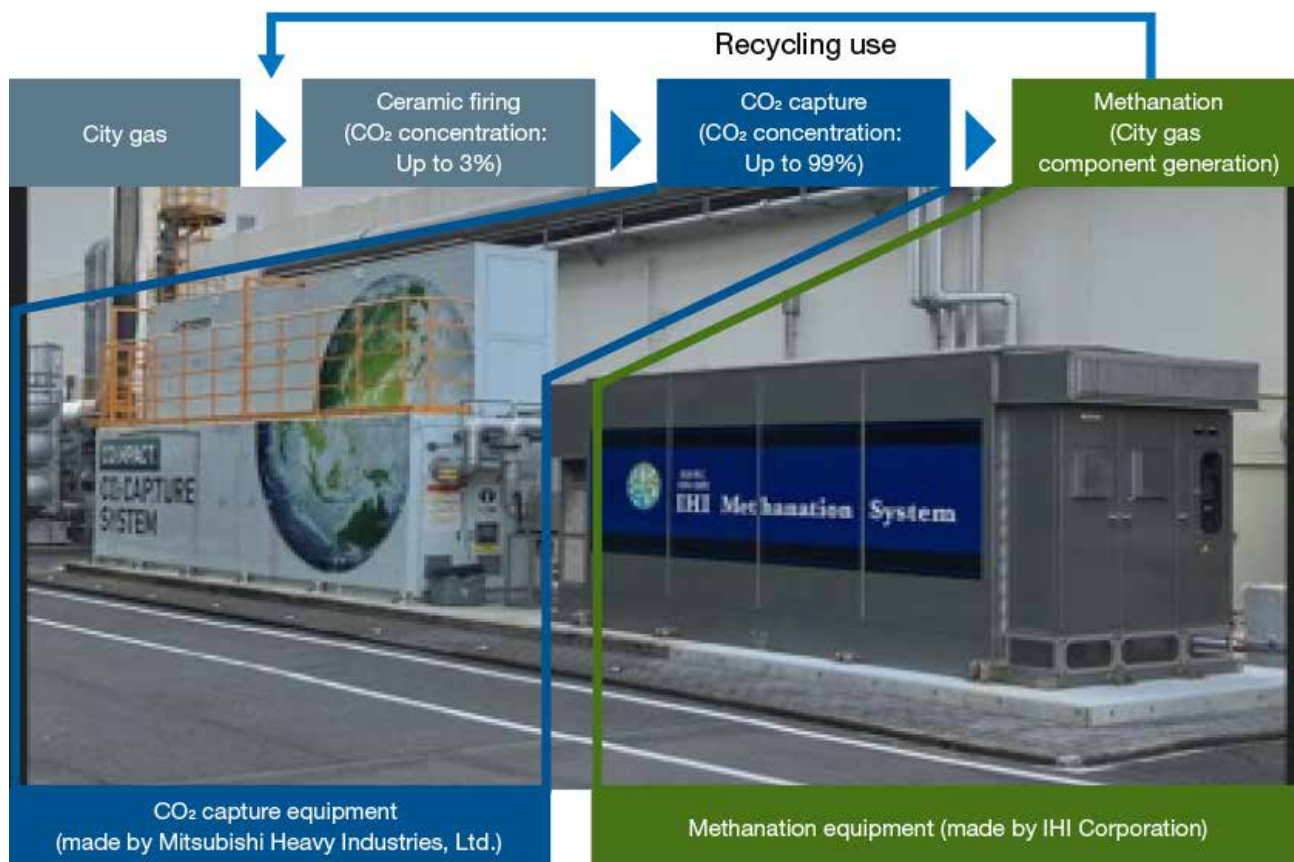
From 2023



Hydrogen energy conservation burner developed by NGK

CO₂ Capture Technology Development

We have introduced Carbon dioxide Capture, Utilization and Storage (CCUS) equipment to capture CO₂ from exhaust gas emitted by our plants and are proceeding with a demonstration of it in preparation for the progress of hydrogen and ammonia infrastructure development. We installed methanation equipment to synthesize captured CO₂ and hydrogen and then generate methane, the main component of city gas, in FY2024. We are currently working on a demonstration of this equipment. We have completed a fuel experiment in a deodorization furnace using synthesized methane (albeit mixed with the main fuel). We plan to begin using it in September 2025.

CO₂ Separation, Capture and Reuse Demonstration ExperimentNGK Begins CO₂ Capture Demonstration for CCUS

Capturing CO₂ from Exhaust Gas of Ceramics Firing Kiln to be Utilized for Methanation >

Strategy 4: Expanding Use of Renewable Energy (In-house Photovoltaic Installation Working Group and Renewable Energy Procurement Working Group)

The NGK Group joined RE100 (100% Renewable Electricity) in 2022. We have committed to using renewable energy for all the power we use in our business by 2040. To achieve this target, we are systemically promoting the introduction of renewable energy such as with the installation of photovoltaic power generation systems and the procurement of renewable energy with Green Power Certificates and similar while being cognizant of the associated costs.

The installation of photovoltaic power generation systems, the procurement of renewable energy and other measures led to a reduction in CO₂ by 7,000 metric tons in FY2024. In FY2025, we will continue to further promote initiatives to achieve a 50% renewable energy usage rate in the NGK Group.

In-house Photovoltaic Power Generation System Installation

We have promoted the installation of photovoltaic power generation systems in NGK CERAMIC DEVICE CO., LTD. (NCDK)'s Tajimi Plant, NGK CERAMICS SUZHOU CO., LTD. and other production sites in and outside Japan. We continued to install such systems at our Nagoya Site, NGK Ceramics Polska (ACP), one of our overseas production sites, and other locations in FY2024.

Demand Response Using NAS Batteries

Demand response is a mechanism in which consumers adjust their power usage to maintain a balance between supply and demand for power. NGK uses NAS batteries installed in its Nagoya, Chita, Komaki and other sites to release the power stored in storage batteries in line with the times when there is a lack of power of summer and winter. This contributes to alleviating the tight power supply-demand balance.

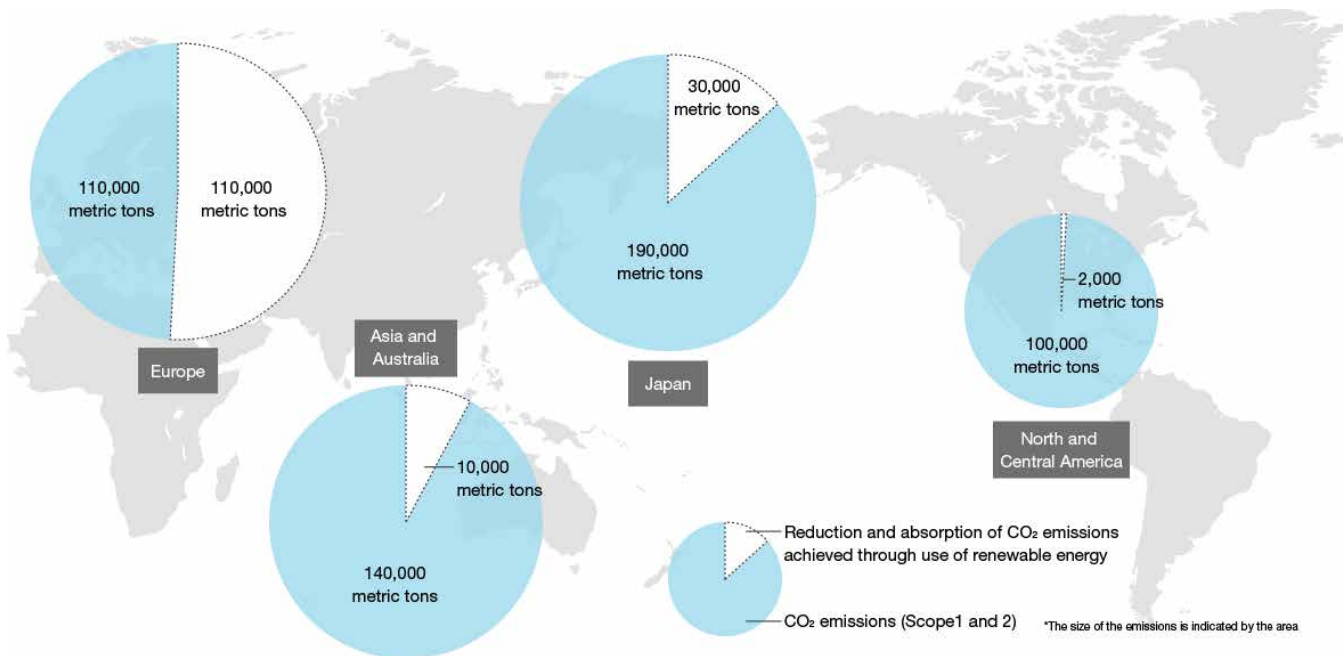
Procurement of Renewable Energy

Simply promoting energy conservation and introducing renewable energy within the NGK group is not sufficient to achieve our carbon neutrality targets. Accordingly, the NGK Group is promoting the procurement of renewable energy while comprehensively taking into consideration the local situation, costs and other factors. In addition to directly procuring energy from solar power plants, our procurement methods include those in which we acquire environmental value alone as Green Power Certificates separate to the power we use. As a part of these efforts, we first promoted procurement focused on our overseas production sites. We achieved 100% procurement of renewable energy-derived at all our manufacturing sites in Europe—NGK Ceramics Polska, NGK Ceramics Europe and NGK Berylco France—and our North American group company NGK-Locke, Inc. in FY2021.

Meanwhile, in terms of fuel, we are working to reduce our CO₂ emissions by using carbon credits such as carbon neutral LNG at NGK's Nagoya, Chita and Komaki sites as well as NGK CERAMIC DEVICE's head office.

Furthermore, NGK Ceramics Polska will begin procuring power under a Virtual Power Purchase Agreement (VPPA) in FY2026. The company plans to procure this power for 10 years from April 2026. This is expected to contribute to a reduction in carbon dioxide (CO₂) by approximately 940,000 metric tons over the 10 years of the agreement.

Status of the NGK Group's Expansion in Use of Renewable Energy in Each Region (FY2024 Results)

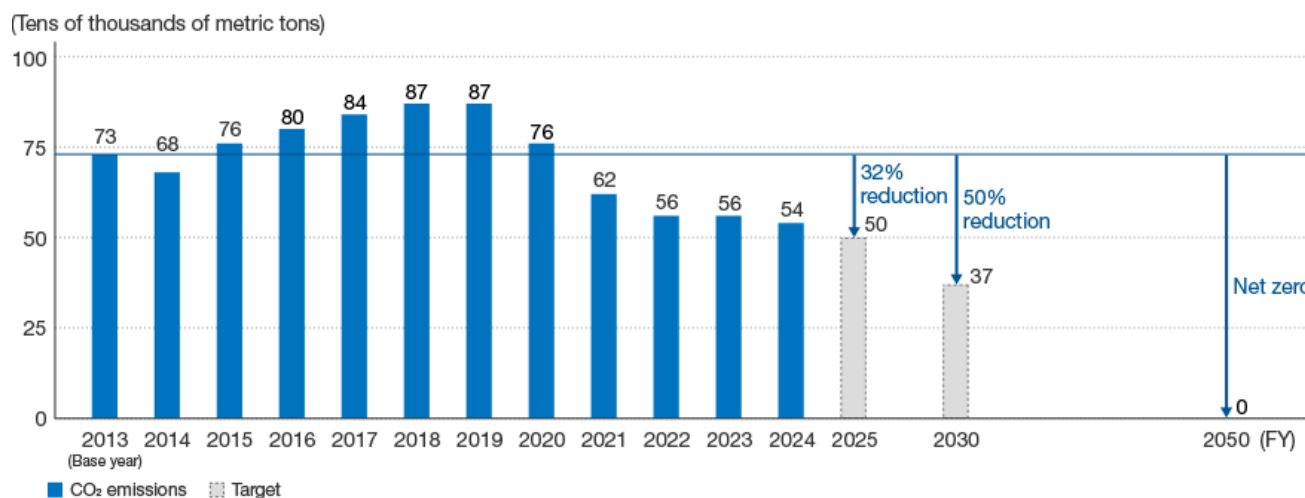


[NGK Group's Manufacturing Site in Poland Concludes First VPPA](#)

[Contribute toward Carbon Neutrality by Purchasing Environmental Value Derived from Renewable Energy](#) >

Targets and Achievements (Strategies 2 to 4)

We have worked to promote energy conservation activities, install photovoltaic power generation systems in the NGK Group, procure renewable energy, switch to carbon neutral LNG* and take other measures. As a result of these efforts, our actual CO₂ emissions (Scope1 and 2) in FY2024 were 540,000 metric tons. That means we achieved our target of having 600,000 metric tons or less of CO₂ emissions. We initially set a target of CO₂ emissions of 550,000 metric tons for the final year of the 5-Year Plan we formulated in 2021. However, in light of the progress of our initiatives toward carbon neutrality, we have lowered that target to 500,000 metric tons of CO₂ emissions. In FY2025, we will further promote the aforementioned initiatives as we did in FY2024.



* The numerical values in the graph include the effect of carbon neutral LNG. Carbon neutral LNG is LNG that has been offset with CO₂ credits and is considered to generate no CO₂. However, carbon neutral LNG is currently not eligible for credits under the Act on Rationalizing Energy Use and similar legislation.

Efforts to Achieve Carbon Neutrality throughout Our Entire Value Chain

In order to promote carbon neutrality, it is important to understand not only Scope1^{*1} and Scope2^{*2} CO₂ emissions, but the Scope3^{*3} CO₂ emissions in our value chain, and to work with suppliers and customers to reduce them. The NGK Group has acquired Science Based targets (SBT) certification for our targets to realize net-zero CO₂ emissions and is working to reduce our emissions.

Carbon Neutral Targets Based on SBT Certification

We have set targets based on the net-zero standards given by the SBT initiative and acquired certification for them in FY2024.

Scope 1 and 2 Targets

Year	Target
2050	Net zero
2030	50% reduction in CO ₂ emissions compared to FY2013

Scope3 Targets

Year	Target
2050	90% or more reduction in CO ₂ emissions compared to FY2022
2030	25% reduction in CO ₂ emissions compared to FY2022

* 1 Scope1: Greenhouse gases directly emitted by a company

* 2 Scope2: Indirect emissions from the use of power and similar purchased from other companies

* 3 Scope3: Other indirect emissions generated throughout the value chain

[NGK Acquires Certification under the Science Based Targets initiative \(SBTi\) Net-Zero Standard](#) >

Scope3 Reduction Initiatives

The NGK Group began tracking Scope3 CO₂ emissions throughout our entire group in FY2022. We confirmed our Scope 3 emissions were 3.75 million metric tons in FY2024. Category 1 (purchased products and services) in Scope3 accounted for the most of these emissions at 2.02 million metric tons. This was followed by Category 11 (use of sold products) at 1.37 million metric tons. Therefore, we believe it is important to prioritize reducing emissions from these categories.

In light of this background, we set emission reduction targets based on the SBT initiative's net-zero standards in FY2024. We are working to reduce emissions, including Scope3 emissions, throughout our entire value chain. The NGK Group places importance on cooperation with our suppliers. We began a survey concerning greenhouse gas emissions and reduction targets on 200 of our major suppliers in FY2024. We held a briefing session ahead of the survey to encourage the support and participation of as many suppliers as possible. We used the briefing session to share details of the NGK Group's climate change initiatives. Together with this, we requested the cooperation of our suppliers in initiatives to reduce emissions and to provide information. Moreover, we are also striving to deepen cooperation with our suppliers through communication with them. For example, we respond individually to inquiries from our suppliers and exchange opinions with them aimed at the continuation of activities.

Carbon Neutrality through Life Cycle Assessments (LCAs) (LCA Working Group)

The life cycle assessment (LCA) is a quantitative evaluation method for the environmental impacts of products and services throughout their entire lifecycle (resource extraction – raw material production – product manufacturing –

distribution/consumption – disposal/recycling). We believe it is important to track the CO₂ emissions (Carbon Footprint of Products; CFP) for each NGK Group product in addition to the total amount of Scope1, Scope2 and Scope3 emissions to promote CO₂ reduction throughout our entire value chain. The NGK Group set a target to calculate the CFP with LCAs for our main products in our fifth 5-year Environmental Action Plan. We started calculating the CFP based on ISO 14040 in FY2021. We identify processes with high CO₂ emissions for our main products and new products and then work to reduce those emissions. We have conducted LCAs on our main products to identify the processes with a high environmental impact and to understand the benefits of improvements. In addition, we conduct LCAs on development products and new products in the product planning and design stages to provide products with lower environmental impact and greater competitiveness compared to other products and our existing products. We have learned from the LCA results on our major products that approximately 20% of all CO₂ emissions occur during the raw material procurement stage, approximately 70% occur during the manufacturing stage and approximately 10% occur during the stage of transportation to our customers. Furthermore, approximately 50% of CO₂ emissions are derived from power while approximately 30% are derived from fuel in the manufacturing stage. That has made it possible to quantitatively grasp the reduction effect when eliminating CO₂ emissions from electricity and fuel.

Other Initiatives

100% Carbon-Neutral Performance Initiative

We helped to realize a 100% carbon-neutral performance held in Ena on December 3, 2024 by the Sukima Switch music unit. Ena Electric Power supplied CO₂-free power derived from solar and hydroelectric power generation. Power stored in NAS batteries was used in the performance from the evening onward. Furthermore, the CO₂ emissions from all the energy used in relation to the performance, including audience and staff transportation, accommodation, and merchandise manufacturing, were calculated based on an LCA and then offset using J-Credits derived from Ena Electric Power.



Participation in and Certification with Initiatives and External Organizations

Our Approach to Participation in External Organizations

The NGK Group is promoting efforts to realize net-zero CO₂ emissions by actively participating in industry associations and initiatives that match our approach and course of action on measures against climate change. Moreover, we carefully review our participation in these external organizations to make sure that there are no significant deviations from NGK Group policy. If we find that there are significant discrepancies with our course of action, we will consider revising the details of our participation or even withdrawing from that organization. The Sustainability Management Dept. plays a central role and works with our relevant internal departments to consider the response in such a case.

Support for and Participation in Initiatives

Task Force on Climate-related Financial Disclosures (TCFD)

The NGK Group expressed our endorsement of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which was established by the Financial Stability Board (FSB), in 2020. We had been considering using the TCFD framework to resolve issues such as the risks and opportunities posed by climate change to the NGK Group's business and to disclose the information necessary. We now disclose relevant information that we have analyzed based on scenarios in line with the four items recommended for disclosure by the TCFD: governance, strategy, risk management, and metrics and targets. We will continue to deepen our analysis and enhance information disclosures while promoting dialogue with stakeholders. Moreover, we will also clarify the climate change-related impact on our business. We will then take response strategies to ensure sustainable business growth.

[Information Disclosures Based on TCFD Recommendations >](#)



Science Based Targets initiative (SBTi)

The NGK Group has acquired certification from the Science Based Targets initiative, an international certification organization, according to its net-zero standards for our greenhouse gas emission reduction targets. We are aiming to reduce greenhouse gas emissions by at least 90% compared to FY2022, the base year, throughout our entire value chain by 2050. We will aim to reduce Scope3 emissions by 25% compared to the base year by 2030 as a step to achieving this target. As a result, our net-zero target has been certified by the SBT initiative.

[Science Based Targets initiative \(SBTi\) !\[\]\(28f72b996fc97883dfd9d4e8b1b16b4e_img.jpg\)](#)



RE100

RE100 (100% Renewable Electricity) is an international initiative comprised of companies aiming to cover the power they use in their business activities completely with renewable energy. The NGK Group joined RE100 in October 2022. The NGK Group has set carbon neutrality as one of the social issues we must address in our NGK Group Vision: Road to 2050. In the NGK Group Environmental Vision that we formulated together with the NGK Group Vision: Road to 2050, we have set a target of net-zero carbon dioxide (CO₂) emissions by 2050. We are working to expand the use of renewable energy as one of our strategies to realize that target.

[RE100](#) 



Other Initiatives We Are Participating In

[Japan Climate Leaders' Partnership \(JCLP\)](#) 

Waste Reduction and Effective Use of Resources

The NGK Group conducts business which utilizes natural resources primarily in the procurement of raw materials for ceramic products, and generates a considerable amount of waste in the process. Therefore, we believe that properly managing waste and resource use, and improving resource efficiency, will help to reduce the impact on the environment. In addition, we believe that increasing resource efficiency and appropriately responding to the shift to a recycling-oriented society will make NGK more competitive in terms of cost reduction and stable supply. Based on this line of thought, the NGK Group sees promoting resource recycling as an important issue in the environmental sector, and will advance relevant initiatives.

Targets and Achievements

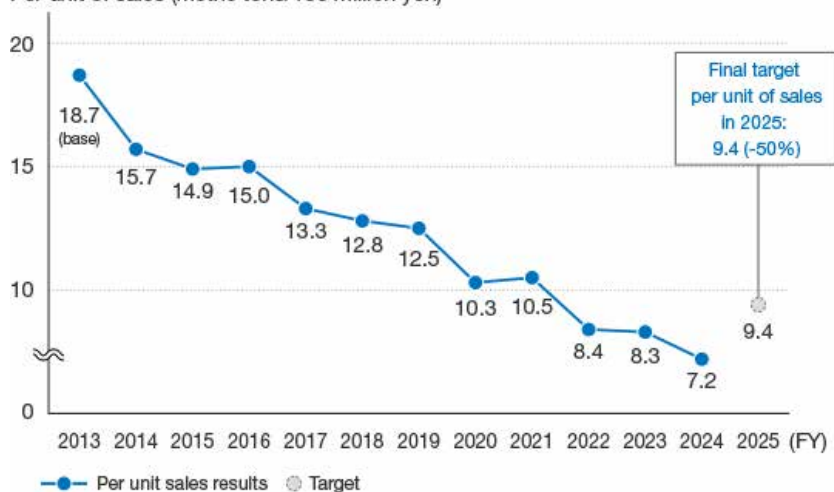
Reducing Waste

To meet our FY2025 target for reduction of waste, the NGK Group has formulated and is implementing an annual improvement plan, similar to that for CO₂ emissions, aimed at reducing the generation of waste materials. We achieved reduction rate of 62% per unit of sales in FY2024 compared to FY2013, achieving our annual target and even reaching our FY2025 target of 50% reduction. This is the result of continual improvement activities by the manufacturing department, including improving yield and raw material recovery rate in production sites. Our reduction rate against BAU, which indicates the improvement per unit of sales over FY2013, was 35%. So, we have achieved our annual target, as well as our target of 30% for FY2025. Looking towards the final year of our fifth 5-Year Environmental Action Plan, we will continue our waste reduction activities to maintain this progress.

* Ratio of actual waste generated to the amount of waste expected to be generated assuming production intensity has not changed from the base year.

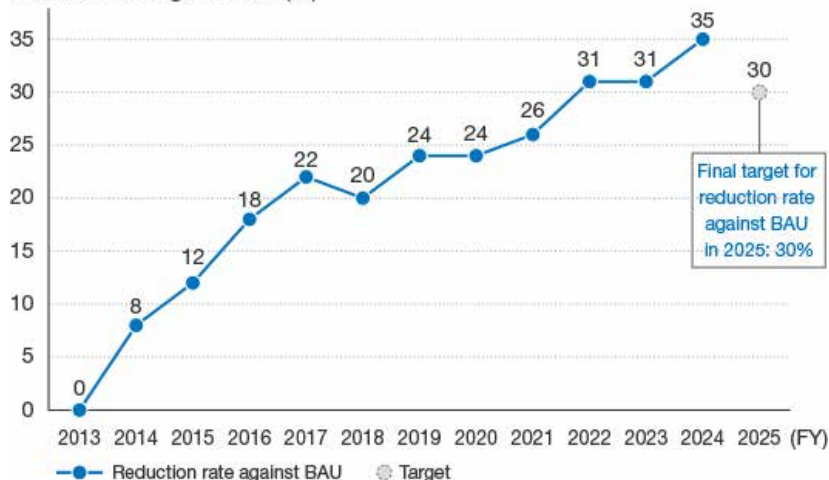
Waste Materials (all NGK Group production sites)

Per unit of sales (metric tons/100 million yen)



Reduction Rate against BAU (all NGK Group production sites)

Reduction rate against BAU (%)



Waste Recycling

The NGK Group is actively striving to promote waste recycling by thoroughly sorting materials and considering methods to recover resources from waste.

Since FY2017, we have shared methods to recover resources and information about waste disposal companies with all of our production sites in Japan. We are working to promote efficient and reliable resource recovery by selecting trustworthy disposal companies.

These continuing efforts have allowed us to maintain a continual domestic recycling rate of 99% or higher from FY2013 onward, as stated among the goals of our 5-year action plan. And we are recycling ceramic waste from the manufacturing process as raw materials for concrete, and other materials for use in roadbeds.

Because conditions vary by region outside Japan, we are setting target values which take into account the actual state of affairs in each country. We maintain an average recycling rate of roughly 90% for our 18 Group companies outside Japan that are engaged in manufacturing (excluding the three companies for which recycling is difficult).

Reducing Waste Plastics

Since FY2023, the NGK Group has disclosed the amount of waste plastic generated during production. 1,777 metric tons of plastic waste was generated in FY2024. From here on out, we will work to reduce the amount of plastic waste generated by reviewing the processes that use plastic and the sorting out of plastic when it is generated.

In addition, it had previously been difficult for NGK to recycle the plastic drums used to import raw materials after they had been used and worn out. However, through cooperation with a plastic recycling manufacturer, 100% of them are now recycled into the RePlagi series of industrial/construction materials developed and sold by that manufacturer. These are used as replacement square timbers, replacement plates for steel plates, etc.

Support for a Circular Economy

In Europe, new battery regulations and eco-design regulations are being formulated towards achieving a circular economy. The NGK Group will closely follow these trends, and respond appropriately to the demands of society. Going forward, we will put together and disclose examples of resource recycling in the NGK Group. At the same time, we will consider an action plan for bringing about a recycling-oriented society by 2030 as laid out in our NGK Group Environmental Vision. Moreover, we have begun to consider the possibility of recycling plastic materials generated as waste in our business sites. One example is how we created table tops and facility signs from waste plastic generated in our production process, and placed it in our Co-Creation Center “NGK Collaboration Square DIVERS”. In FY2024, we strove to spread awareness about sustainability by creating novelty items for employees using the same materials. We are also considering utilizing them for packaging materials and in our production sites.



Table tops and facility sign installed at NGK Collaboration Square DIVERS

Water Resource Conservation

Part of the NGK Group Environmental Vision is contributing to the establishment of a recycling-oriented society, and the NGK Group is promoting resource recycling in our business. We believe that promoting efficient utilization of the water needed for manufacturing in our primary business of ceramics can help to reduce the burden on the global environment. Moving forward, we will expand this to our supply chain and endeavor to further improve the efficiency of water utilization and reduce water risks.

| Targets and Achievements

Under the fifth 5-Year Environmental Action Plan which started in FY2021, we set water withdrawal per unit of sales for the entire Group as an indicator. We set a target of maintaining a level of 1,000 m³/100 million yen per unit of sales, which was the level in FY2019 before the drop in production due to impacts from the COVID-19 pandemic. In FY2024, we achieved this target at 650 m³/100 million yen. In FY2025, we will continue to maintain the FY2019 level of water withdrawal per unit of sales, and will also promote efforts to achieve an even lower level.

| Handling and Risk Management of Water Resources

The NGK Group strives for efficient utilization of water and management of risks related to water resources from the perspective of sustainability.

We are investigating water risks and environmental impacts at each of our locations, using the LEAP (Locate, Evaluate, Assess, Prepare) approach recommended by the Taskforce on Nature-related Financial Disclosures (TNFD).

In FY2024, there were no major violations of standards or regulations related to wastewater quality at any NGK Group locations in or outside of Japan.

Evaluation of Water Risks

With regards to all production sites both in and outside Japan, we use simple methods to assess the degree of water shortage at each site based on the amount of water supplied by rivers in the region where it is located. Meanwhile, we commission a detailed third-party analysis focusing on our overseas sites. In its assessment of water supply and demand risks, this detailed analysis forecasts future water supply and demand by evaluating water stress*, aquifer stress, seasonal variations in the volume of water supply, and the water storage capacity of dams. Aside from this, it also analyzes water disaster risks (floods and landslides) and water quality risks (sanitation and ecology), to provide a comprehensive risk assessment.

These efforts have enabled us to ascertain the water risks at all overseas production sites, and share this information with each site.

None of the sites currently faces serious water risks, but we continue to keep an eye on regulatory trends, and are working to improve water utilization efficiency as necessary.

We also use the analysis tool Aqueduct to assess water risks for our main suppliers with the goal of strengthening water risk management in our supply chain.

In addition, some of our sites in Asia, Europe, and North America are located in watersheds at risk for high water stress, and the volume of water withdrawal in these areas in FY2024 was 1,260,000 m³. This is roughly 31% of the water withdrawal of the entire NGK Group.

Number of Overseas Production Sites in Regions with Latent Water Risks

Region	Number of sites	Water supply and demand		Water disasters	Vulnerability to water pollution	
		Current	2040		Public health	Ecosystems
North America	5	0	1	0	0	0
Europe and other regions	4	1	0	0	2	3
China	2	0	0	0	0	0
Asia and Australia	6	0	4	0	1	1

* Water stress: A state in which demand for water is putting pressure on supply. Here we use the ratio of water withdrawal to water supply as an indicator to assess water stress.

Efficiency of Water Utilization at Group Companies

We created guidelines aimed at optimizing water use (implementation status checklist), and conduct current situation surveys which utilize them. Hereafter, we will work to flesh out these guidelines using the results of case research at each Group site, as well as other companies, and promote more efficient water use at each of our sites.

Utilization of Reclaimed Water at NGK CERAMIC DEVICE (NCDK)

The production process for bonded wafers for SAW filters, manufactured by our NCDK Komaki Plant, consumes large quantities of water. So we installed a system to utilize water reclaimed by filtration through ceramic membranes, and began using it in 2022. Adoption of this system has allowed us to supply approximately 28,000 m³ of reclaimed water, out of our approximately 150,000 m³ of water withdrawal during FY2024. Meanwhile, we have introduced an even higher capacity system at the NCDK Fujiyoshida Plant, which uses the same process. So, we are promoting more efficient water use even in Japan, where water supply and demand risks are comparatively low.



Water reclamation system in operation at NCDK Fujiyoshida Plant

Information Disclosure Based on TNFD Recommendations

Introduction

What is TNFD??



The Taskforce on Nature-related Financial Disclosures is a global initiative launched in 2021 amidst an international sense of crisis about environmental degradation and the increasing importance of restoring nature. Its aim is to construct a framework for risk management and disclosure of nature-related risks by companies. The taskforce presented its recommendations in September 2023, calling for companies to be aware that nature-related issues are related to strategic risks, and encouraging companies to identify and disclose the nature-related dependencies and impacts they have through their business, as well as the accompanying risks and opportunities.

In January 2024, the NGK Group declared we would shortly begin information disclosure under the TNFD framework as an TNFD Early Adopter^{*1}. We made our first disclosure in July 2024 and have now broadened the scope of our disclosure.

* 1. TNFD Early Adopter: Companies and organizations that will begin information disclosure by FY2025 (As of January 2024: 320 companies in 46 countries, 80 of them Japanese)

NGK Group Approach to Nature and Biodiversity

Our society and its economic activities depend on nature and its blessings. But nature is said to be in rapid decline worldwide due to the adverse impact of these activities. Amidst a growing sense of urgency and awareness of the importance of restoring nature, the Kunming-Montreal Global Biodiversity Framework (GBF) was adopted at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15) in 2022. It sets a common global goal of being "nature positive," which means taking action to stop and reverse the loss of biodiversity by 2030. In the NGK Group Environmental Vision, we set the idea of harmony with nature as one of our most important issues. And NGK aims to operate in harmony with nature by minimizing its environmental impact on ecosystems and raising awareness among each and every employee through awareness-raising activities. Since nature-related issues could impact our business, it is vital that we understand and manage how we are dependent on and how we impact nature throughout our entire value chain.

Objectives of Disclosure

Through proactive TNFD disclosure, the NGK Group will make clear the interface between our business and nature, ascertain the importance of our dependencies and impacts on nature, as well as related risks and opportunities, and meet the expectations of society and stakeholders. In addition, through disclosure the entire Group will promote nature-related initiatives, which will help to achieve the goal of coexistence with nature espoused in the NGK Group Environmental Vision and to bring about a sustainable society.

Overview of LEAP Approach

The TNFD recommendations endorse analysis based on the LEAP approach as a method for evaluating nature-related dependencies, impacts, risks, and opportunities. The LEAP approach consists of the processes: Locate, Evaluate, Assess, and Prepare, the details of which are shown in the table below.

Implementation Details of LEAP Approach

Locate the Interface with Nature	Evaluate Dependencies and Impacts	Assess Risks and Opportunities	Prepare to Respond & Report
- Consider areas in the value chain where dependencies and impacts on nature are important - Understand the activity locations and related ecosystems for areas in our business locations and value chain where dependencies and impacts on nature are important - Evaluate priority areas (ecologically sensitive areas, areas where dependencies and impacts are important)	- Identify the dependencies and impacts on ecological services at each place in our business locations or value chain - Evaluate and measure important dependencies and impacts	- Identify and evaluate the importance of nature-related risks and opportunities based on the details of our dependencies and impacts - Identify particularly high-priority risks and opportunities - Consider management process for risks and opportunities	- Consider handling strategy based on contents of evaluation - Consider method for setting targets - Consider details of information disclosure

TNFD Disclosure Recommendations and the Scope of Our Disclosure

Based on the TNFD disclosure recommendations, in FY2023, the NGK Group determined the interface between nature and our businesses and production sites. In FY2024, we assessed our dependencies and impacts at the production stage. We will now disclose the results of these exercises in accordance with the TNFD's general requirements and the four pillars (governance, strategy, risk and impact management, and metrics and targets) and with reference to the LEAP approach.

TNFD Disclosure Recommendations and the Scope of Our Disclosure

○ : Meet disclosure recommendations △ : Partially meet disclosure recommendations

TNFD disclosure recommendations		LEAP approach referenced			Current disclosure scope
Governance	A. Board of Directors oversight			P	○
	B. Role of executives			P	○
	C. Human rights policy with respect to stakeholders, engagement activity			P	○
Risk and impact management	A(i). Processes to identify, assess and prioritize dependencies and impacts, risks and opportunities in our own business	E	A		○
	A(ii). Processes to identify, assess and prioritize dependencies and impacts, risks and opportunities in our value chain	E	A		○
	B. Processes for managing dependencies and impacts, risks and opportunities	E	A		○
	C. Integration with our organization's risk management		A		○
Strategy	A. Identify dependencies and impacts, risks and opportunities	E	A		△*
	B. Impacts of dependencies and impacts, risks and opportunities on our business model, strategy and financial planning			P	△
	C. Resilience of our strategy in different scenarios		A	P	
	D. Locations of assets and/or activities that meet criteria for priority locations	L	E	A	△*
Metrics and targets	A. Metrics for measuring risks and opportunities		A		
	B. Metrics for measuring dependencies and impacts	E	A		○
	C. Targets and performance			P	○

* Only production sites in our primary value chain included in the Results of Assessment of Dependencies and Impacts on Nature in Primary Value Chain table

General Requirements

The TNFD recommendations include six general requirements applicable to all four disclosure pillars. The NGK Group's approach to these general requirements is as follows.

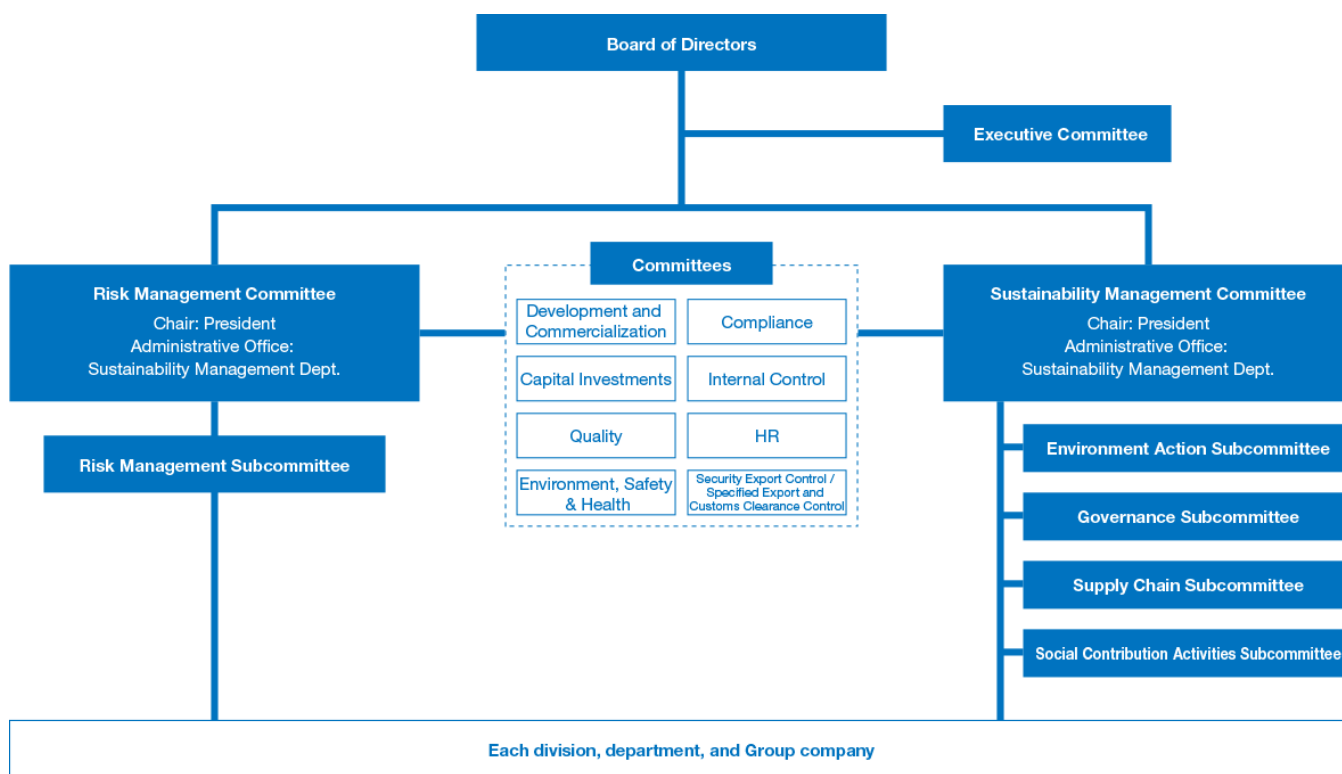
General requirement	NGK Group approach
Application of materiality	Based on the concept of double materiality, the NGK Group works to address environmental and social issues by making efficient and effective use of our limited management resources, and aims to maximize value creation for both the Group and our stakeholders. We use the double materiality approach in our TNFD-based assessment and disclosure.
Scope of disclosures	We analyze and disclose relationships with nature (dependencies and impacts, risks and opportunities) for the whole NGK Group business. We have carried out a detailed analysis of the Group's production sites taking account of the unique features of their locations. We have currently identified the broader picture for the rest of the value chain.
Location of nature-related issues	We have assessed whether the NGK Group's main production sites meet the TNFD criteria for a sensitive location based on the unique features of their locations and designated those that do as priority locations. We are prioritizing action for sites with dependencies and impacts for critical natural systems. We have conducted a detailed analysis for NGK CERAMICS MEXICO because we think water risk merits prioritization.
Integration with other sustainability-related disclosures	The NGK Group regards ESG management as crucial to our vision for 2050. To this end, key nature-related issues we must address are responding to climate change, promoting resource recycling, preventing environmental pollution, and conserving and restoring biodiversity. The Group has fully implemented TCFD recommendations-based disclosure and this disclosure references some of its results. There is some overlap between TCFD-based and TNFD-based disclosure. We will consider how to align these to provide integrated disclosure.
Time horizons considered	The time horizons in our TNFD disclosure are: near-term: next 2-3 years; mid-term: through 2030; long-term: through 2050.
Engagement with indigenous peoples, local communities and affected stakeholders	Our NGK Group Human Rights Policy applies to all NGK Group executives and employees and we also require our suppliers to abide by this policy. The NGK Group Code of Conduct and NGK Group Supplier Code of Conduct define our human rights-related obligations in order to avoid violating the rights of indigenous peoples, local communities and affected stakeholders. We recognize the importance of engaging with stakeholders in our human rights due diligence and in the formulation and implementation of remedial measures.

Governance

Board of Directors Supervision, Role of Executives

The NGK Group Environmental Vision, approved by the Board of Directors, calls for carbon neutrality, a recycling-oriented society and harmony with nature, and identifies the conservation and restoration of biodiversity as a Group materiality. The Sustainability Management Committee, chaired by the Representative Director and President and staffed by the committee chairs and Business Group Executives, formulates five-year environmental action plans and oversees progress towards management indicators and targets set each fiscal year. It also promotes activity throughout the value chain. The Committee reviews TNFD recommendations-based information disclosure and reports its findings to the Board of Directors. The Committee reports to the Board on this and its other activities at least once a year.

Sustainability Promotion Framework



Human Rights Policy with Respect to Stakeholders, and Engagement Activity

Respect for human rights within the NGK Group's corporate activity is mandated by the NGK Group Corporate Business Principles, the NGK Group Code of Conduct and the NGK Group Supplier Code of Conduct. We are also guided by our specific NGK Group Human Rights Policy. In accordance with this policy, we have instituted a human rights due diligence process and are implementing measures to identify, prevent and mitigate adverse impacts on human rights in our business activities. When adverse impacts have been found, or are suspected, to have occurred, we are committed to engage in sincere dialog with the involved parties and to the implementation of appropriate and effective remedial measures. The Directors responsible for the Human Resources Department and the Sustainability Management

Department, the General Managers of the Human Resources Department and the Sustainability Management Department, and the heads of business departments are responsible for implementing human rights measures in coordination and cooperation with related committees and departments, depending on the content and importance of individual measures. The Director responsible for the Human Resources Department regularly reports implementation progress to the Board for its oversight.

[Respecting Human Rights](#) >

[Supply Chain Management](#) >

Risk and Impact Management

Process for Identifying, Assessing and Prioritizing Dependencies and Impacts, and Risks and Opportunities

Below, we outline the process for identifying, assessing and prioritizing nature-related dependencies and impacts, and risks and opportunities in the NGK Group business value chain. We provide further detail about the processes listed below in the Strategy section of this disclosure.

Process	Content
Overviewing and identifying dependencies and impacts	- Overviewing dependencies and impacts in our business value chain - Identifying the major dependencies and impacts - Assessing and selecting activity sites that meet the criteria for a priority location - Overviewing the positive impacts of our products and services
Identifying critical nature-related risks and opportunities	- Critical nature-related risks - Critical nature-related opportunities

Processes for Managing Dependencies and Impacts, and Risks and Opportunities and Their Integration with Corporate Risk Management

The Sustainability Management Committee manages nature-related dependencies and impacts, and risks and opportunities in the NGK Group. It aligns the management of risks, in particular, with the risk management systems and processes determined by the Risk Management Committee for groupwide risk management.

[Risk Management](#) >

Strategy

This section provides a more detailed explanation of the processes for identifying, assessing and prioritizing the dependencies and impacts, and risks and opportunities outlined in the Risk and Impact Management section.

Overviewing and Identifying Dependencies and Impacts

Overviewing Dependencies and Impacts in our Business Value Chain

We used evaluation tool ENPRIMARY² to ascertain the dependencies and impacts on nature in the industries in which we engage. In analyzing the dependencies on nature that we deem crucial to our business, we extended the use of this tool to the supply of non-living resources. This enabled us to organize the dependencies and impacts for our primary business value chain (procurement, production, logistic) into different levels.

* 2: ENPRIMARY is a tool that helps financial institutions, business enterprises and other organizations to understand the significance of individual industries' dependencies and impacts on nature. It was developed by NGO Global Canopy, UNEP FI (United Nations Environment Programme Finance Initiative) and UNEP-WCMC (UN Environment Programme World Conservation Monitoring Centre).

Results of Assessment of Dependencies and Impacts on Nature in Primary Value Chain

(assessment of industrial fields similar to that of the NGK Group)

Dependencies on Nature

Primary value chain	Primary process	Supply service		Maintenance and restoration services									
		Water resources	Non-living resources	Pollution remediation				Water flow adjustment	Climate regulation Global climate engineering	Flood and storm mitigation			Soil and sediment retention
				Solid waste cleanup	Air and ecosystem dilution	Air filtration	Water purification			Flood control	Storm mitigation	Rainfall pattern adjustment	
Procurement	Metal mining & smelting	H	VH	L	M	M	VH	H	H	H	M	VH	M
	Nonmetallic minerals extraction	H	VH	L	M	VL	VH	H	H	H	M	VH	H
	Other raw materials production	M	VH	L	L	VL	M	M	VL	M	M	M	M
Production	Ceramic products manufacturing	M	H	M	L	VL	M	M	VL	M	M	L	L
	Metal processing & smelting	M	H	M	L	M	M	M	VL	M	M	M	L
	Battery & storage battery manufacturing	M	H	L	L	VL	M	M	VL	M	M	M	L
Logistics	Land, sea & air transportation	L	H	—	VL	VL	M	M	M	H	H	VH	L

VH

 Very High

H

 High

M

 Medium

L

 Low

VL

 Very Low

Negative Impacts on Nature

Primary value chain	Primary process	Effects on terrestrial, freshwater and marine ecosystems through use			Climate change	Resource use		Pollution					Invasive species
		Terrestrial ecosystem use	Freshwater ecosystem use	Marine ecosystem use	Greenhouse gas emissions	Water use	Non-living resource extraction	Solid waste	Air pollution other than greenhouse gasses	Soil and water contaminants	Soil and water nutrient pollution	Disruption	Non-native species introduction
Procurement	Metal mining & smelting	M	VH	VH	M	M	H	H	H	VH	M	VH	L
	Nonmetallic minerals extraction	M	H	H	H	M	VH	M	H	H	ND	H	VL
	Other raw materials production	L	—	—	M	H	—	M	M	VH	—	VH	—
Production	Ceramic products manufacturing	L	M	—	H	M	—	M	H	VH	M	M	—
	Metal processing & smelting	L	—	—	M	M	—	M	H	VH	M	VH	—
	Battery & storage battery manufacturing	L	—	—	VL	L	—	L	L	H	—	M	—
Logistics	Land, sea & air transportation	M	L	M	H	M	—	M	H	L	M	VH	VH

VH

 Very High

H

 High

M

 Medium

L

 Low

VL

 Very Low

Our key findings from this analysis are as follows.

Procurement:

Our major dependencies on nature in the metal mining and smelting, and nonmetallic minerals extraction processes are on supply services for water resources and non-living resources and on maintenance and restoration services, such as water purification and rainfall pattern adjustment. Our major adverse impacts on nature are our potential to cause effects on freshwater and marine ecosystems through their use and resource use, and to cause pollution through the discharge of soil or water contaminants and through disruption.

Production:

We have a slight dependency on supply services for water resources and non-living resources. Our major adverse impacts are our potential contributions to greenhouse gas emissions, causing climate change, and to pollution through the discharge of soil and water contaminants.

Logistics:

We are dependent on supply services for fuel and other non-living resources in the transportation of products and raw materials, and also on maintenance and restoration services, including transportation infrastructure provision, and flood control and storm mitigation services that mitigate disaster risk. Our major adverse impacts on nature are the potential for pollution caused by disruption and for the introduction of invasive non-native species.

Based on this understanding, we have specified the major dependencies and impacts of our production activities in the current disclosure.

Identifying Our Major Dependencies and Impacts

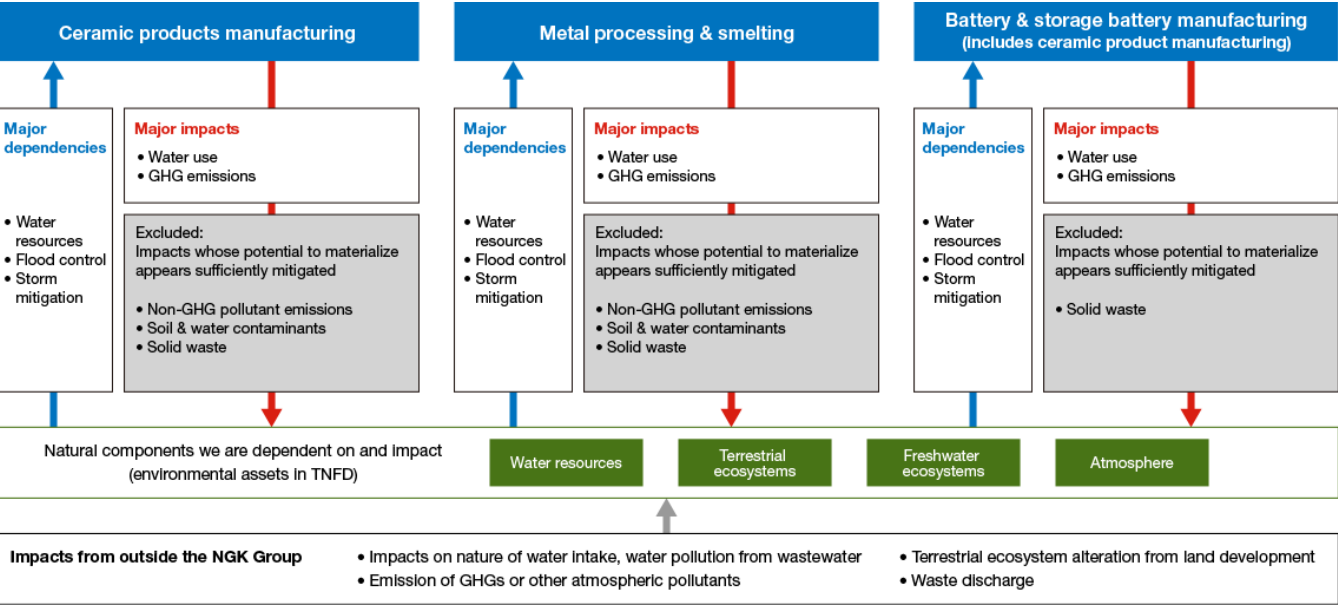
We undertook further analysis of the production dependencies and impacts rated VH, H or M in the production stage in the primary value chain to identify which are most significant in light of the NGK Group's business activities. We did this with reference to data from a range of reference literature⁽¹⁾, production site environmental data and countermeasures implemented by each business. Through this process we determined that those issues that appear less relevant given the nature of our business, or whose potential to materialize appears sufficiently ameliorated by existing

countermeasures, are less significant.

The figure below shows the relationships between the major dependencies, major impacts, related natural components (termed “environmental assets” by the TNFD) and impacts on these from outside the NGK Group for each business area.

(1) Reference literature
CDP Water Impact Index
World Bank Group, International Finance Corporation (IFC), Environmental, Health, and Safety (EHS) Guidelines
European Commission, Ecodesign for Sustainable Products Regulation - preliminary study on new product priorities
European Ceramic Industry Association (Cerame-Unie), Ceramic Roadmap to 2050

Major Dependencies and Actual and Potential Impacts on Nature, Related Natural and Environmental Assets and External Factors for the NGK Group’s Production Operations



The following major dependencies and major impacts at the production stage in the NGK Group value chain emerged as a result of this process.

Major dependencies

- Water resources
- Flood control and storm mitigation services

Major impacts

- Water use
- Greenhouse gas emissions

Assessment and Selection of Activity Locations that Meet the Criteria for a Priority Location

The TNFD recommendations categorize “sensitive locations” and “material locations” as “priority locations.” Sensitive locations are locations that are ecologically vulnerable to impact regardless of specific business dependencies or impacts. These include the habitats of rare or endemic species, pristine environments and areas with high water stress. Material locations are locations where an organization has major dependencies and/or impacts on nature and has a particularly strong relationship with the natural environment.

We determined our priority locations by assessing whether each of the NGK Group's 39 production sites in and outside Japan constitute a sensitive or a material location. We are prioritizing addressing issues at production sites in priority locations.

Sensitive Location Assessment

The TNFD recommendations cite areas “important for biodiversity” and/or “of high ecosystem integrity,” and/or “of rapid decline in ecosystem integrity,” and/or “of high physical water risks” as the criteria for sensitive locations. We used metrics relating to each of these criteria in assessing the status of our production sites.

Sensitive Location Criteria	Related Metric
Important for biodiversity/ high ecosystem integrity ^{*6}	- Within 500 m of a protected area^{*3} or KBA^{*4} - Conservation priority^{*5,(2)} - Biodiversity Intactness Index^{*7,(3)}
Rapid decline in ecosystem integrity	Change in human footprint^{*8(4)}
High physical water risks	- Level of water stress⁽⁵⁾ - Degree of water pollution (Surface Water Quality Index)⁽⁶⁾ - Flood risk⁽⁷⁾

* 3: Areas designated as protected areas by local or national governments or by international treaty

* 4: A KBA (Key Biodiversity Area) is an area important to the preservation of biodiversity selected using generally accepted scientific criteria and standards

* 5: Conservation priority is the indexed measure of the level of risk of species loss when an area undergoes development

* 6: Ecosystem integrity is a metric for ecosystem health; urbanized areas have low ecosystem integrity

* 7: The Biodiversity Intactness Index (BII) estimates how much of an ecosystem's natural biodiversity still remains despite human impacts

* 8: The human footprint is the total environmental impact of all human activities (urban development, agricultural development, transportation, etc.)

(2): Calculated based on the number of species and endangered species, and the size of each species' habitat, in an area using big data about species distribution from Think Nature Co., Ltd.

(3): Calculated by Think Nature Co., Ltd. using the IUCN's habitat map (showing the degree of nature loss due to land usage and change) and the distribution of natural forests

(4): Mu, H., Li, X., Wen, Y., Huang, J., Du, P., Su, W., ... & Gang, M. (2022). A global record of annual terrestrial Human Footprint dataset from 2000 to 2018. *Scientific Data*, 9(1), 176

(5): Aqueduct Baseline Water Stress indicator, World Resources Institute (WRI)

(6): Surface Water Quality Index component of the WWF Water Risk Filter

(7): Hazard map used during TCFD risks and opportunities assessment

■ Important for Biodiversity/High Ecosystem Integrity

Locations that are important for biodiversity are those that are valuable to biodiversity primarily because they contain a large number of rare or endemic species and constitute a healthy ecosystem. Locations with high ecosystem integrity are those that have experienced little man-made change and hence continue to constitute a healthy natural environment. We used the conservation priority index, based on the number of rare or endemic species, to assess importance for biodiversity, and the Biodiversity Intactness Index (BII) to assess ecosystem integrity. As a result, we categorized 38 production sites in areas with high conservation priority as sensitive locations important for biodiversity. These sensitive locations include six sites in Japan or Europe that are within 500 meters of a protected area (IUCN Category IV^{*9}: habitat or species management area) or an area important for biodiversity, and three in countries such as Mexico that are in regions with high ecosystem integrity.

These are areas in which our business activities could have a negative impact on the natural environment that threatens biodiversity or ecosystem health. However, we believe that the environmental measures the NGK Group is already taking in our business activities to counter the possibility of biodiversity impact from activity such as pollutant emission limit the adverse impact of our sensitive location sites on the surrounding natural environment.

* 9: IUCN Category IV: designation for the protection or restoration of globally, nationally or regionally important flora, fauna or habitats

■ Rapid Decline in Ecosystem Integrity

Areas experiencing rapid decline in ecosystem integrity are those whose natural environment has been degraded to the point that it is highly vulnerable and has little resilience to external pressures. Given the inexorable rise in human footprint indicators, which measure the impact of human activity on the natural environment, we believe that there has been great change in the natural environment and that ecosystem integrity is declining. After ascertaining change in the human footprint in areas around our production sites, we categorized 12 of them as sensitive locations with declining ecosystem integrity, most of which are in Asia, Europe and North America.

■ High Physical Water Risks

We assessed our water risks using three metrics: water stress, water pollution and flood risk.

- Areas with high water stress are those in which water demand exceeds water supply in the drainage basin. Insufficient water to meet an ecosystem's needs could result in severe change in the natural environment due to the drying up of rivers or wetlands or other deteriorations in natural organism habitats. After assessing water stress using the Aqueduct Baseline Water Stress indicator, we categorized 12 of our production sites as sensitive locations with high water stress, most of which are in Asia, Europe and North America.
- Deterioration in water quality could threaten ecosystems or human living conditions in areas with water pollution. We used the Biochemical Oxygen Demand (BOD) component of the Surface Water Quality Index to assess surface water pollution, and assessed electrical conductivity and the level of nutrients such as nitrogen. As a result, we categorized 26 of our production sites in mainly urban areas of Asia, Europe and North America as sensitive locations with water pollution. The NGK Group not only complies with all regional laws and regulations relating to the prevention of water pollution but we have also instituted our own even higher standards. Consequently, we believe that we cause little adverse impact in terms of water pollution.
- Areas with high flood risk are those at high risk of river overflow or high tides, which could cause soil runoff, deterioration in water quality or the destruction of natural habitats. After checking against the hazard map we used when we did our TCFD risks and opportunities assessment, with flood risk one of the physical risks due to climate change, we categorized eight of our production sites in Japan or the rest of Asia as sensitive locations with high flood risk.

Material Location Assessment

The TNFD recommendations define a material location as one in which an organization has major dependencies and impacts on nature in its business activities. The identification of our major dependencies and impacts determined that the NGK Group's major dependencies at the production stage are water resources, and flood control and storm mitigation services, while our major impacts are water use and greenhouse gas emissions.

We recognize that our dependency on water resources and the impact of our water use are high in areas with high water stress. We, therefore, categorized our 12 production sites in areas with high water stress as material locations for dependency on water resources and water use impact.

We regard our dependency on flood control and storm mitigation services as high in areas experiencing a decline in ecosystem integrity and/or with high flood risk. We, therefore, categorized our 19 production sites in such areas as material locations for dependency on flood control and storm mitigation services.

We regard the impact of our greenhouse gas emissions as a vital issue for all our production sites, wherever they are located. We have already been assessing and addressing this under our TCFD (Task Force on Climate-related Financial Disclosures) disclosure and have, therefore, omitted this from this TNFD disclosure.

Priority Location Assessment

We combined our sensitive locations and material locations assessments to determine our priority locations. This resulted in the identification of 22 production sites, mainly in Mexico, Belgium, China and Japan, where we need to address issues on a priority basis. We will now conduct an appropriately detailed investigation of these sites. We will discuss our water stress assessment at NGK CERAMICS MEXICO at the end of this disclosure as an early example of such an investigation.

Positive Impacts from Our Goods and Services

So far, our primary focus has been on the negative impacts on nature from the NGK Group's businesses and the nature of our production site locations. However, we believe that the Group's business also makes a positive contribution to nature. The table below summarizes the positive impacts of the NGK Group's primary products and services on nature, with reference to the causes of natural change in the TNFD recommendations.

Business content		Main products & services	Change in land use	Climate change	Resource use	Pollution			
			Terrestrial ecosystem use	GHG gas emissions	Non-living resource extraction	Solid waste	Non-GHG atmospheric pollution	Soil pollution	Water pollution
Environment Business Group	Automotive Ceramics Business	Ceramics for purifying auto exhaust			●	●	●	●	●
		NOx sensors	●		●	●	●	●	●
	Industrial Process Business	Industrial heating systems, refractory	●	●	●	●			

Business content		Main products & services	Change in land use	Climate change	Resource use	Pollution			
			Terrestrial ecosystem use	GHG gas emissions	Non-living resource extraction	Solid waste	Non-GHG atmospheric pollution	Soil pollution	Water pollution
Environment Business Group	Industrial Process Business	Membrane separating systems		●		●			●
		High-temperature dust collectors	●		●	●	●		
		Low-level radioactive waste treatment units		●		●	●		
Digital Society Business Group	High Performance Ceramics Business	Ceramics for semiconductor manufacturing equipment				●			
	Electronic Devices Business	EnerCera		●	●	●			
	Power Electronics Ceramics Business	AMB substrates		●		●			
	Specialty Metals & Molds Business	Special metals and mold products		●	●	●			
Energy & Industry Business Group	Energy Storage Business	NAS batteries	●	●	●	●			
	Insulator Business	Insulators	●	●	●	●			

Ceramic products are generally characterized by high heat resistance, corrosion resistance, and durability, which contribute to their long service life. Compared to other materials, they help reduce the consumption of raw materials and the generation of waste. Taking advantage of these characteristics, we expect that our Group's major products and services can contribute to mitigating our negative impact on nature.

For example, our ceramics for purifying automobile exhaust feature an ultra-thin wall structure that provides high performance. Compared to conventional products, our products are able to purify harmful substances contained in automobile exhaust gases more effectively.

[Products and Services Contributing to Environmental Protection >](#)

Identifying Our Major Nature-related Risks and Opportunities

Below, we summarize the risks and opportunities we currently envisage, with reference to the categorization of risks and opportunities in the TNFD recommendations.

For risks, we started by establishing assumptions for their likelihood and potential severity and then made a qualitative assessment of their priority order. We drew up a list of risks we deem most significant and the countermeasures we envisage based on the results of this process.

For opportunities, given the difficulty of anticipating what possibilities may arise, we drew up a list of opportunities we currently envisage based on inputs such as the positive impacts of our products and services. Since we have already delineated the risks and opportunities relating to greenhouse gas emissions under our TCFD disclosure, we have omitted this from this TNFD disclosure.

[Information Disclosure Based on TCFD Recommendations >](#)

Major Nature-related Risks

Risks		Dependencies/ impacts	Risk	Timeframe	Countermeasure
Transition	Govt. policy	Impact Water use in production process	Water price inflation or operational shutdown due to govt. policy or regulations restricting water use	Mid-term ~	- Monitor regulation - Measures for more efficient water use tailored to characteristics of location - Measures to rationalize water use based on guidelines
		Impact Impacts on terrestrial/ freshwater/marine ecosystems from mineral extraction/ mining operations	Nature conservation resulting in raw materials shortages/ price inflation due to restrictions on metal/ non-metal resource mining and development, and/or difficulty obtaining permits	Mid-term ~	Monitor relevant regulation and raw materials supply/ demand trends

Major Nature-related Risks

Risks		Dependencies/ impacts	Risk	Timeframe	Countermeasure
Transition	Market	Impact Raw materials production	Price inflation due to rising demand for sustainable materials (recycled materials, certified raw materials, etc.)	Near-term ~	Monitor raw materials markets and supply/demand trends
	Technology	Impact Resource use in production process	Cost increases due to adoption of technology/equipment for more efficient water use	Near-term ~	- Monitor technology trends - Measures for more efficient water use prioritized according to characteristics of location
	Reputation, liability	Impact Atmospheric pollutant emission during production process	- Local community criticism due to atmospheric pollutant release caused by e.g. an accident - Cost increases due to indemnity or other legal claim	Near-term ~	Law/regulation-based measurement, constant monitoring of vital issues, regulatory adherence
		Impact Water pollutant emission during production process	- Local community criticism due to water pollutant release caused by e.g. an accident - Cost increases due to indemnity or other legal claim	Near-term ~	Institution of own standards above legal wastewater standards, installation of alarms/automatic shutdown based on these standards
Physical	Acute	Dependency Water resource supply, flow adjustment in our production process	Acute water shortage, operational shutdown due to water pollution at supplier/drought	Near-term ~	- Measures for more efficient water use tailored to characteristics of location - Measures to rationalize water use based on guidelines
		Dependency Flood control/ storm mitigation in our production process	Floods/more severe storms due to degradation of local natural environment	Near-term ~	Assessment of current and future flood risk at primary locations, BCP

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Risks		Dependencies/ impacts	Risk	Timeframe	Countermeasure
Physical	Acute	Dependency Flood control/ storm mitigation, rainfall pattern adjustment in upstream supply chain	Floods/more severe storms due to degradation of local natural environment impacting our procurement network	Near-term ~	- Risk assessment for upstream supply chain, BCP encompassing supply chain - Seek alternate suppliers
	Chronic	Dependency Water resource supply, flow adjustment in our production process	Chronic water shortage, water price inflation, operational downsizing due to rising water demand resulting from local economic development or climate change impact	Mid-term ~	- Assessment of current and future water supply/demand risk - Measures for more efficient water use tailored to characteristics of location - Measures to rationalize water use based on guidelines
		Dependency Water resource supply, flow adjustment in upstream supply chain	Impacts on raw materials production from water shortages	Near-term ~	Assessment of water supply/demand risk in upstream supply chain

Major Nature-related Opportunities

Category	Positive impact	Opportunity	Timeframe
Market/ products & services	- Water/atmospheric pollutant emission reduction through wastewater/air discharge purification - Reduction in negative impact on nature from resource extraction due to more efficient resource use (rare metals recovery, yield improvement)	Higher demand for membrane separating systems (CO₂ separation), high-temperature dust collectors, refractory products	Mid-term ~
	Reduction in waste through longer product lifespan, more compact products, recycling	EnerCera (waste reduction through maintenance-free, compact products), rising SINSIC demand (waste reduction through longer product lifespan)	Mid-term ~
	Rare metal disuse resulting in lower mining volume and lower negative impact on natural environment from mining	Rising NAS battery demand (less rare metal content than LiB)	Mid-term ~

Major Nature-related Opportunities

Category	Positive impact	Opportunity	Timeframe
Resource efficiency/ reputation	Reduction in all negative impacts of production	Cost reduction and reputational gain from more efficient water use, measures to reduce waste/pollutant generation	Mid-term ~
Reputation	Lower impact from land alteration, pollution due to resource extraction	Reputational gain through lower negative impact from raw materials extraction/production due to use of recycled metals, certified raw materials	Mid-term ~
	Local nature/ecosystem conservation	Reputational gain from measures to protect ecosystems on our land, maintenance of green space to preserve ecosystems	Mid-term ~

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Metrics and Targets

The TNFD recommendations call on organizations to disclose the metrics and targets they use to assess and manage their nature-related dependencies and impacts, and risks and opportunities. Regarding metrics, the NGK Group analyzes and discloses a range of environmental data relating to our business activity. Regarding targets and performance, we are progressing our fifth 5-Year Environmental Action Plan to manage environmental targets in the period FY2021-25.

The table below is an up-to-date summary of the metrics we are using in alignment with The TNFD's core global metrics.

Metric no.	Driver of natural change	Indicator	Metric (as of Aug. 2025)
-	Climate change	GHG emissions	See Environmental Data Collection, GHG Emissions
C1.0	Land/freshwater/ ocean-use change	Total spatial footprint	Total surface area controlled/ managed by the organisation, where the organisation has control (km ²): 4.1 km ² (total site area managed by NGK Group)
C1.1		Extent of land/ freshwater/ ocean-use change	Area of land we are autonomously conserving: 0.1 km ² (area of NGK Minnano Mori Mizunami forest, designated a Nationally Certified Sustainably Managed Natural Site by the Ministry of the Environment)

Metric no.	Driver of natural change	Indicator	Metric (as of Aug, 2025)
C2.0	Pollution/pollution removal	Pollutants released to soil split by type	No soil contamination
C2.1		Wastewater discharged	See Environmental Data Collection, Conservation of Water Resources
C2.2		Waste generation and disposal	See Environmental Data Collection, Discarded Materials
C2.3		Plastic pollution	See Environmental Data Collection, Discarded Materials (plastic recycled + disposed of externally)
C2.4		Non-GHG air pollutants	See Environmental Data Collection, Chemical Management System (VOC, PRTR-listed substances (emissions into atmosphere))

[Environmental Data Collection >](#)

[Carbon Neutrality Strategic Roadmap and 5-Year Environmental Action Plan >](#)

Future Initiatives

As called for by the TNFD disclosure recommendations and noted earlier in this disclosure, we plan to conduct a detailed assessment of our dependence and impact on nature along the upstream of our value chain, including the extraction and mining of raw materials. We also plan to examine nature-related risks and opportunities using scenario analysis. For measurement metrics and targets, we will continue referring to global core disclosure metrics outlined in the TNFD recommendations while also expanding our evaluation of data collection and targets. At the same time, we will enhance our disclosure content as we aim to achieve disclosure for all items based on the TNFD recommendations.

Reference

Priority Location In-depth Assessment: Water Stress Assessment for NGK CERAMICS MEXICO

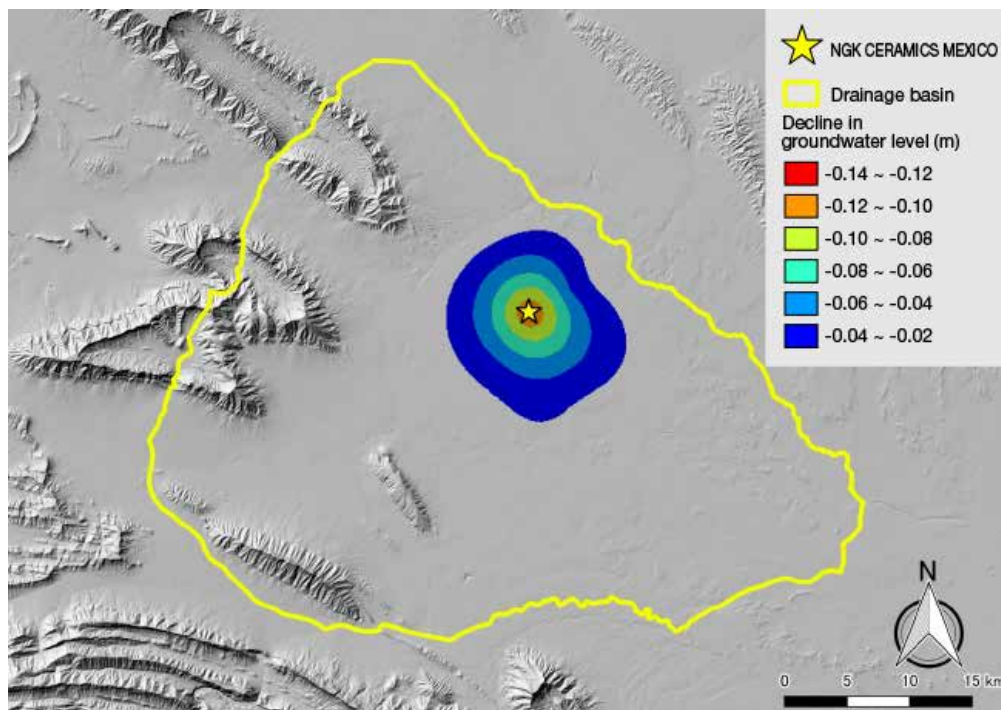
NGK CERAMICS MEXICO serves as a good example of an in-depth assessment of a production site we have identified as a priority location. It is located in an area with a high level of water stress and mainly uses groundwater. It is generally harder to ascertain information pertaining to the water source, such as water level fluctuation, for groundwater than for surface water. However, we used Geosphere Environmental Technology Corp.'s GETFLOWS water cycle simulation model to facilitate an assessment of conditions in the local drainage basin and impacts on the surrounding area from the production site's water use. We outline our in-depth assessment process in the table below. This includes our assessment of the impact of the site's water intake and of the level of water stress.

Assessment Process

Assessment process	Main actions
Build a water cycle model	Construct a water cycle simulation model using climate, terrain, land use and land cover, geological and water use data inputs
Identify drainage basin	Use the simulation to identify the catchment area for the groundwater intake and the area this impacts
Assess water intake impact	Assess the extent and amount of impact the groundwater intake has on the surrounding area
Assess water stress	Assess the level of stress on the water catchment area and drainage basin

Water Intake Impact Assessment for NGK CERAMICS MEXICO

To understand the impact NGK CERAMICS MEXICO's water intake has on the groundwater level in the surrounding area, we used the simulation to estimate the difference in groundwater level for two scenarios: the first with and the second without groundwater intake by the production site. This revealed a decline in the groundwater level of around 0.15 meters in the area immediately surrounding NGK CERAMICS MEXICO (location marked with a star on the map below) and a decline of around 0.1 meters in the area within a roughly one-kilometer radius of the plant. By comparison, groundwater level monitoring in the region shows a seasonal fluctuation of 2–6 meters. These results indicate that NGK CERAMICS MEXICO's water intake reduces the groundwater level by only a limited amount.



Change in groundwater levels in the surrounding area due to production site water intake

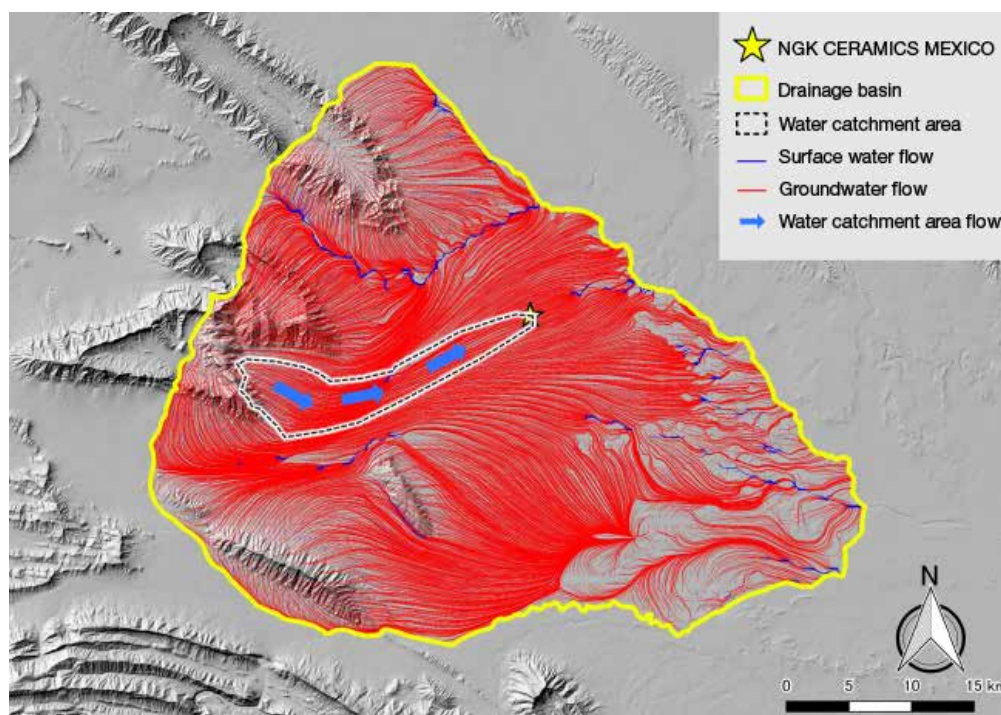
In-depth Water Stress Assessment for NGK CERAMICS MEXICO

The water intake impact assessment described above revealed that NGK CERAMICS MEXICO's water intake has only a limited impact on groundwater levels.

However, we carried out an in-depth assessment of the level of water stress to understand the necessity of water resource management to support the longer-term continuation of our business activities in this area. Our analysis also made use of literature about the levels of water demand and water resources in the area, both for the entire drainage basin and the plant's water catchment area. This assessment looked not at NGK CERAMICS MEXICO's actual water intake but at water resource conditions for the entire region in which the production site is located.

To ascertain the level of water stress in NGK CERAMICS MEXICO's water catchment area (the area inside the dotted line on the map below) and the entire drainage basin (the area inside the yellow line), we carried out a three-dimensional simulation of the groundwater and surface water flow paths. This revealed that the water taken in by the production site is water that permeates eastwards from the elevated area to its west, indicated by the blue arrows on the area inside the dotted line. Our assessment of water stress indicated that the severity of water stress is at the third level on a five-point scale (low; low-medium; medium-high; high; extremely high)*¹⁰ for the plant's water catchment area and at the fourth for the wider drainage basin that includes the production site and areas further downstream.

* 10: Water stress severity: Five-point scale in the World Resources Institute's Aqueduct Water Risk Atlas



Water flow for the production site's water catchment area and the drainage basin

The NGK Group has been assessing water risk at our main production sites since before we carried out this simulation. Consequently, we already understood that NGK CERAMICS MEXICO is in an area of high water stress and had already implemented countermeasures, such as water reuse, at the plant. However, in alignment with the recent trend for water resource management to become common practice, we will use the results of this assessment together with the plant's actual water intake data to inform the continued implementation of measures to reduce water stress in the plant's water catchment area and the wider drainage basin.

Protecting and Restoring Biodiversity

The Kunming-Montreal Global Biodiversity Framework (GBF) was adopted at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15) held in Montreal Canada in 2022. It set a goal of being Nature Positive, which means taking action to stop and reverse the loss of biodiversity by 2030. Moreover, the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) announced in 2023 call for companies to be aware that nature-related issues are related to strategic risks. They also encourage companies to identify and disclose their dependence and impacts on nature through their business, as well as the accompanying risks and opportunities. In light of these international trends, the NGK Group emphasizes our relationship with nature, and recognizes the importance of understanding the degree of dependence and impact that our entire value chain has on nature. We see protecting and restoring biodiversity as an important issue, and are promoting initiatives to bring about a sustainable society.

Targets and Achievements

In our NGK Group Environmental Vision, the NGK Group makes it clear that our goal is to help achieve coexistence with nature. To this end, we strive to live in harmony with nature by minimizing the environmental burden on ecosystems, and by raising the awareness of each employee through awareness-raising activities. Moreover, one of the themes of our fifth 5-Year Environmental Action Plan is promoting the conservation of biodiversity. In our FY2025 goal, we are promoting initiatives to expand and enhance actions aimed at Aichi Targets.

In FY2024, we investigated trends in and outside Japan to support TNFD disclosure. In addition to following the LEAP (Locate, Evaluate, Assess, Prepare) approach advocated by the TNFD to evaluate risks and opportunities, we assessed our entire value chain from the perspective of dependencies and impacts, and disclosed the results. Hereafter, we will maintain and enhance these initiatives, and work to further develop content for disclosure.

Registration as TNFD Early Adopter

The NGK Group has endorsed the efforts of the Taskforce on Nature-related Financial Disclosures (TNFD) and in January 2024, we also registered as a TNFD Early Adopter. Through this, we pledged to comprehensively disclose information related to nature in line with the 4 pillars (governance, strategy, risk and impact management, and measurement indices and targets) advocated by the TNFD by our 2026 disclosure.

However, we disclosed this information in a form compliant with the 4-pillars a year early in FY2025. This disclosure is primarily based on the manufacturing stage LEAP approach evaluation that we implemented during the previous fiscal year.

[Information Disclosure Based on TNFD Recommendations](#) >

Nature Conservation Activities for Biodiversity

Initiatives to Increase Environmental Awareness Through the Internal Best Practices Presentation

The NGK Group continually conducts environmental education and awareness activities for employees, while also disclosing information on nature conservation activities. At the internal best practices presentation “NGK-BOX 2024” held in October 2024, members of the ESG Promotion Department presented the NGK Group's objectives and approaches toward protecting and restoring biodiversity, using the results of an internal survey conducted beforehand. This presentation promoted employee understanding of biodiversity.



Presentation scene at “NGK-BOX 2024”

[October 2024 internal best practices presentation materials](#)

Survey of Organisms at NGK Sites and on Land Owned by NGK

The NGK Group believes that biological surveys are important for understanding the local ecosystem and building a foundation for conservation activities. Up until now, we have conducted biological surveys of plants, birds, insects, and other animals on several properties owned by NGK. We have been able to find a diverse array of organisms, and have not yet discovered any invasive species that would require swift action as the result of these surveys. This confirms that the land is being managed appropriately. We have also organized the survey results on panels and other media so that not just employees, but local stakeholders, will be aware of the importance of protecting biodiversity. In FY2024, we used a method known as environmental DNA to survey organisms in the Shinhori River which runs adjacent our headquarters. NGK does not use the Shinhori River for water intake or discharge, but we are considering whether the survey results can be useful for protecting the region's biodiversity. Hereafter, we plan to look into whether the environmental DNA method can be employed at our other sites as well.

FY2024 Survey Overview

1. Date: February 2025
2. Location: Shinhoru River (Near NGK's Nagoya Site)
3. Company contracted for research: Sunlit Seedlings Ltd.



Performing a biological survey in the Shinhoru River

Social Contribution Activities Related to the Environment

NGK Group sites in and outside Japan carry out social contribution activities in cooperation with local governments, NPOs, and companies. These activities are aimed at contributing to the community in the environmental field, protecting biodiversity, and raising the environmental awareness of employees.

Coastal Cleanup at NGK Ishikawa Plant and NGK CERAMIC DEVICE (NCDK) Ishikawa Plant

Our Ishikawa Plant and NCDK Ishikawa Plant have teamed up with Clean Beach Ishikawa, a shoreline protection campaign that cleans beaches all over Ishikawa Prefecture. Lately, environmental pollution from oceanic plastic waste has become a global concern, and its impact on ecosystems has become a grave problem. In 2024, approximately 80 employees and family members participated in activities to clean the Neagari coastline together with local residents. These activities have been conducted since 1995, with the goal of cleaning 583 km of coastline in Ishikawa Prefecture. Our Ishikawa Plant joined the activities in 2012, and our NCDK Ishikawa Plant joined in 2018.



Coastal cleanup

(NGK Ishikawa Plant and NDCK Ishikawa Plant)

Forest Conservation Activities of NGK FILTECH

Twenty-seven officers and employees of NGK FILTECH (Chigasaki, Kanagawa) and their family members carried out forest conservation activities in the Yadoriki Watershed Forest (Matsuda, Kanagawa) managed by Kanagawa Prefecture, as part of the Kanagawa Reforestation 50 Year Plan endorsed by NGK FILTECH.

In September 2022, NGK FILTECH signed a five-year agreement to be a reforestation partner and contribute to forest conservation and restoration efforts carried out by Kanagawa Prefecture. As such, it is providing support for forest

maintenance and other expenses. Under the guidance of instructors, participants listened to explanations about where to observe wildlife in the Yadoriki Watershed Forest, as well as about the plants and animals that live there, and learned about the importance of forest conservation and restoration.



Forestry Activities in the Yadoriki Watershed Forest (NGK FILTECH)

Cleaning Activities by Komaki Site and NGK CERAMIC DEVICE (NCDK)

NGK's Komaki Site and NCDK cooperated with the Oyama River Cleanup (sponsored by Komaki City) to clean the Oyama River which runs through the eastern side of the Tagami district where the Komaki Site is located. We have participated in the event since the first time it was held, and in FY2024 35 employees and family members took part.



Local cleanup activities (Komaki Site and NCDK)

Mangrove Planting by NGK CERAMICS (THAILAND) (ACT)

ACT planted mangroves in Chonburi Province in eastern Thailand. Mangroves not only absorb CO₂, but also protect biodiversity by acting as a habitat for various animals. Moreover, they help prevent coastal erosion, meaning that planting mangroves can help increase green areas.



Mangrove planting (ACT)

Greening Our Parking Lot

We have launched a green space trial activity using a parking lot at NGK headquarters. By planting seedlings of local native plant species, we aim to help restore local biodiversity.



Greening activities using parking lot (NGK Headquarters)

Participation in Initiatives Related to Biodiversity and Certification by External Organizations

NGK Minnano Mori Mizunami (Forest for Everyone in Mizunami) Certified by Ministry of the Environment as a Nationally Certified Sustainably Managed Natural Site

NGK Minnano Mori Mizunami is an NGK owned forest located near one of our Group companies. In March 2024, it was certified by the Ministry of the Environment as a Nationally Certified Sustainably Managed Natural Site. A Nationally Certified Sustainably Managed Natural Site, is an area certified by the government of Japan where biodiversity is being conserved through private sector initiatives.



[Reforestation Activities: NGK Minnano Mori Mizunami \(Environment, Community Relations\) >](#)

Certified as an Aichi Biodiversity Company

In November 2023, NGK was certified as an Aichi Biodiversity Company under the Aichi Biodiversity Company Certification Program (Aichi Prefecture). The Aichi Biodiversity Company Certification Program is a program run by Aichi Prefecture that seeks to promote corporate efforts to conserve biodiversity by certifying companies which are implementing excellent initiatives.



あいち生物多様性
認証企業

Endorsement of the Keidanren Initiative for Biodiversity Conservation

In January 2022, we endorsed the Keidanren Initiative for Biodiversity Conservation. The Keidanren Initiative for Biodiversity Conservation sets out a resolution and action guidelines for companies and organizations to protect biodiversity.



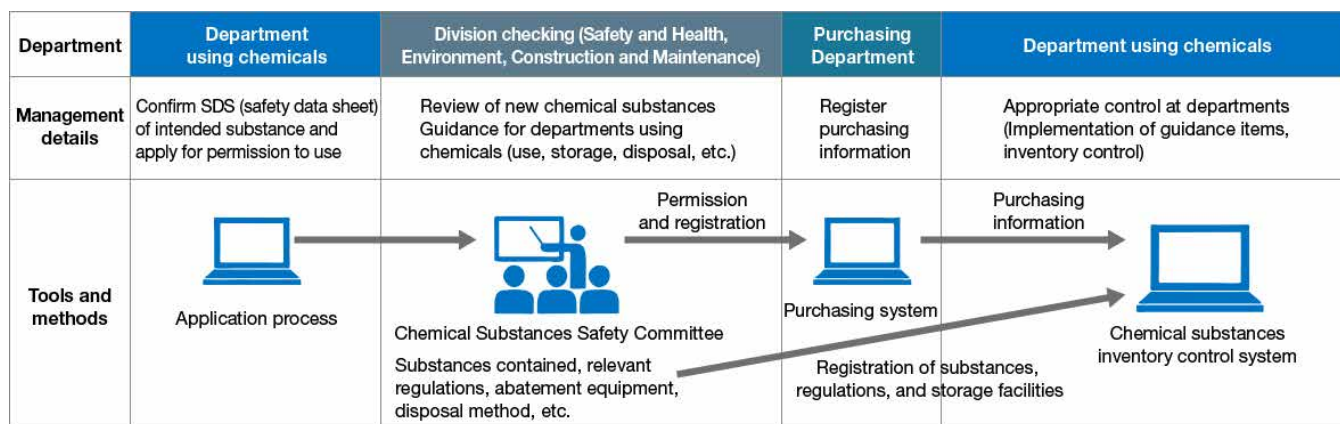
Environmental Pollution Prevention

Chemical Management

The NGK Group abides by laws, guidelines, and other rules on chemical substances by maintaining a proper level of management for chemicals, and constantly striving to improve this level. Before new chemicals are used by each department, the Chemical Substances Safety Committee determines the pros and cons of using these chemicals and provides confirmation and guidance concerning what precautions must be taken for their usage and disposal. For chemicals that have already been used in the department, the site's chemical substances committee and chemical substances patrol team determine and confirm the state of chemical management and provide necessary guidance. We also follow information regarding changes in chemical substance-related regulations and share this within the NGK Group to ensure proper chemical substance management policies are implemented.

Group companies in and outside Japan survey and understand regional rules and regulations so that chemical substances can be properly managed.

Chemical Management Flowchart



Commitment Concerning Hazardous Substances

The NGK Group aims to reduce the amount of hazardous substances used, in accordance with the NGK Group Environmental Policy. Regarding raw materials, we present our suppliers with a hazardous materials list, and require that they comply with the hazardous substances management stipulated by the NGK Group Supplier Code of Conduct and the NGK Group Green Procurement Standard.

[NGK Group Environmental Policy](#) >

[NGK Group Supplier Code of Conduct](#) 

[NGK Group's Green Procurement Standard](#) 

Reducing Emissions of Hazardous Waste

In order to comply with legal processing deadlines, we conduct thorough investigations into PCB-containing waste at NGK and our Group companies, then proceed sequentially with extraction, storage, and disposal. We outsource disposal to contractors who hold PCB disposal permits, and check to make sure disposal is handled properly.

| Atmospheric Emissions Management

NGK manages a database of approximately 7,000 pieces of equipment, in accordance with the Act on Rational Use and Appropriate Management of Fluorocarbons. And we curb undue emissions (improper emissions) by centralizing management information about things like simple inspections, periodic inspections, maintenance, and leaks. We comply with legal limits on soot emissions from facilities through voluntary management items and periodic measurement in accordance with items stipulated by laws and ordinances, and through constant monitoring of critical items. Moreover, NGK Group plants are registered as emergency cooperation plants under the Aichi Prefecture Emergency Handling Procedures for Photochemical Smog and the Ishikawa Prefecture Air Pollution Emergency Measures Implementation Outline. When elevated photochemical oxidant levels cause photochemical smog warnings to be issued, we cooperate with measures to reduce emissions in accordance with these guidelines through actions such as halting facilities that produce NOx.

| Wastewater Management

To avoid impacts on people's health and living environments, we have set voluntary standards with respect to wastewater to supplement the standard compliance values set by laws, ordinances, etc. These trigger alarms or shutoff at or below levels required by wastewater standards. Moreover, we perform management to ensure that even in cases of emergency, levels do not surpass regulatory standard values.

Products and Services Contributing to Environmental Protection

The NGK Group regards contributing to society through our business activities to be one of our most important missions. We leverage the technology we have cultivated for more than a century since our founding, to develop and provide products and technologies that contribute to the global environment.

Developing and Distributing Products/Services Contributing to Environmental Protection

The fifth 5-Year Environmental Action Plan, which began in FY2021, establishes a goal of increasing the number of registered carbon neutral products and services among our products contributing to environmental protection. In FY2022, we registered ABASHIRI ELECTRIC POWER, which have been using NAS batteries to provide stable renewable energy supply, as a service business company contributing to regional carbon neutrality. Moreover, we registered AMB substrates in FY2023, and our NAS MODEL L24 improved NAS battery in FY2024.

We now offer a lineup of 12 products/services contributing to environmental protection. Six of these are related to carbon neutrality. Going forward, we plan to follow up on our NAS batteries by focusing on developing new carbon neutral products and providing services, such as nickel-zinc rechargeable battery, and CO₂ separation membranes which are expected to contribute to Carbon Capture and Utilization/Carbon Capture and Storage (CCU/CCS). Moreover, in FY2024, we invested 0.66 billion yen in research and development for improving products related to preventing air pollution, and 0.03 billion yen in developing products related to protecting water resources.

FY2024 Products/Services Contributing to Environmental Protection

Sales ratio: 66%

Our Definition of Products/Services Contributing to Environmental Protection

We define products and services contributing to environmental protection as those that fulfill any of the following requirements.

- 1) Items recognized or certified by third party organizations
- 2) Items that help limit or reduce the impact on the Earth's environment
- 3) Items that help reduce the impact on the local environment

Development and Creation of Products/Services Contributing to Environmental Protection

Considering Sustainability When Designing Products

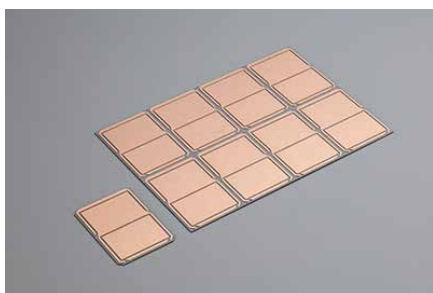
The NGK Group develops and designs our products and services in accordance with the NGK Group Corporate Business Principles and Code of Conduct. We also work to comply with the requirements of our customers. And in the NGK Group Environmental Policy, we clearly state that we promote the development and proliferation of products/services contributing to environmental protection as part of our environmental/social contribution. We confirm the progress of these initiatives through periodic internal audits and third-party audits of our environmental management system.

Contributing to Carbon Neutrality

AMB Substrates for Power Modules

(CN-related products)

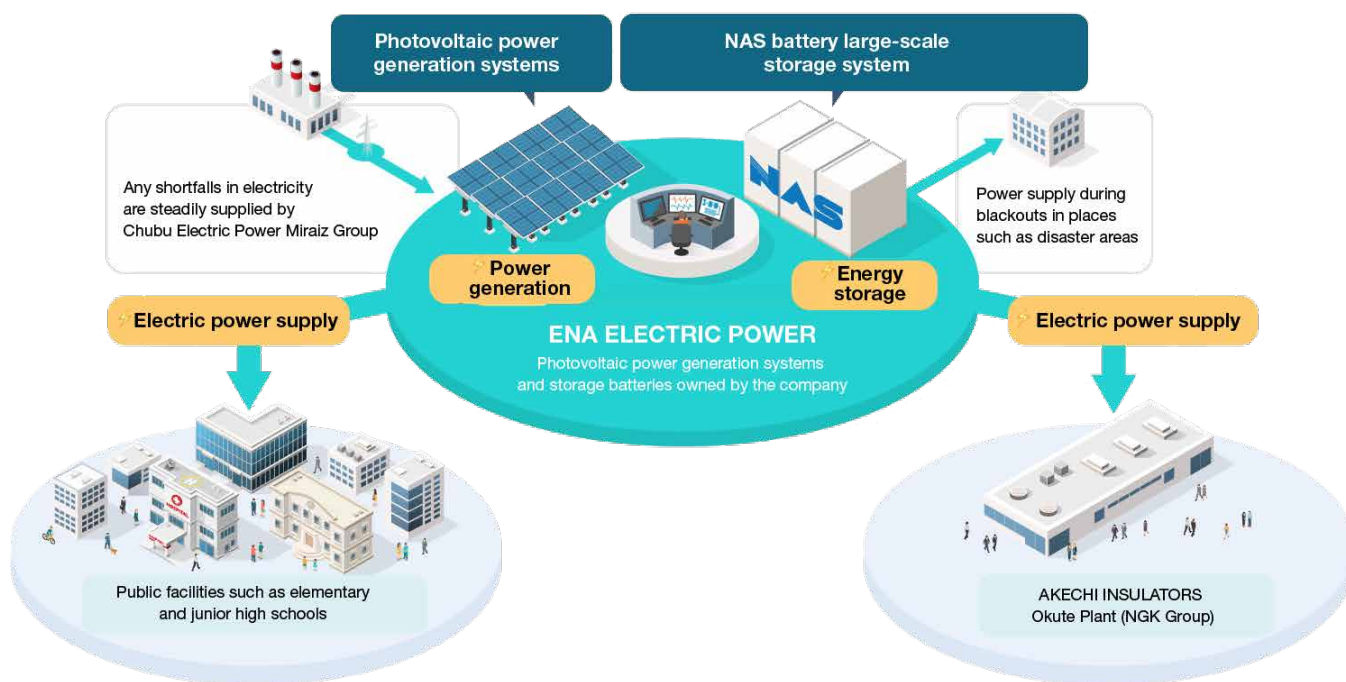
AMB substrates are products used in power modules for motor drive control and generator power conversion control. Their role is to dissipate heat generated by the semiconductor element by conveying it to the cooler. The NGK Group's AMB substrates for power modules achieve high reliability and excellent heat discharge characteristics, by means of our unique bonding technology. They maximize the performance of power semiconductors. As the switch to EVs makes progress worldwide, we expect this product to contribute to carbon neutrality through greater utilization in EVs and HEVs. We will help to solve societal issues through our unique ceramic technologies.



Local Renewable Energy Electric Power Supply Service by ENA ELECTRIC POWER and ABASHIRI ELECTRIC POWER

(CN-related services)

In 2021, the city of Ena, Chubu Electric Power Miraiz, and NGK established ENA ELECTRIC POWER. ENA ELECTRIC POWER installed photovoltaic power generation systems and NAS batteries in empty lots and the rooftops of public facilities in Ena. By supplying electricity to public facilities and AKECHI INSULATORS of the NGK Group, the systems are contributing to the energy independence and carbon neutrality of Ena. Moreover, in 2022, NGK and the city of Abashiri together established ABASHIRI ELECTRIC POWER to supply the same kind of locally produced renewable energy.



NAS Batteries

(CN-related products)

The widespread adoption of renewable energy sources that do not use fossil fuels or emit carbon dioxide (CO₂) is underway. Sodium Sulfur (NAS) Batteries can help stabilize the grid by charging and discharging to absorb the fluctuations in power output from wind and solar power generation due to natural phenomena.

In addition, as renewable energy use increases, it becomes more challenging to balance electrical supply with demand due to factors such as excess electrical power at different times or seasons. NAS batteries can use their large capacity to balance supply and demand by storing excess power, helping to support the expansion of renewable energy.



ENA ELECTRIC POWER, Yoshida Power Plant

Output: **740 MW** Discharge capacity: **5050 MWh** Operational record: more than **300** locations

NAS MODEL L24 Improved NAS Battery

(CN-related products)

In FY2024, we began international sales of our NAS MODEL L24 improved NAS battery, which builds on the performance of our existing container-type NAS batteries.

The NAS MODEL L24 can operate with fewer installed units than existing products, and helps to reduce the life cycle cost of customer storage battery systems by roughly 20%.



Wavelength Control Drying System

(CN-related services)

Our wavelength control drying system uses an original heating unit developed by NGK to accelerate solvent drying. This system uses the selective irradiation of specific infrared wavelengths effective for evaporation to dry materials in 1/2 to 1/3 the time required by conventional drying methods which use heat. Electricity consumption is also cut by 30 to 50%. Binder segregation, which indicates deviations in density due to the drying of the internal components of the coatings, is also curtailed by 30 to 40%.



Preventing Environmental Pollution

HONEYCERAM

HONEYCERAM are ceramic substrates for automotive catalytic converters for purifying automobile exhaust gases of hazardous constituents. They have a catalyst which detoxifies hazardous substances through a chemical reaction, and a honeycomb structure that improves their purifying abilities by ensuring a large contact area with exhaust gases. Since mass production began in 1976, we have produced a cumulative total of over 2.0 billion units. These ceramic

products have become indispensable to the purification of automotive exhaust gases.

The HONEYCERAM manufactured by the NGK Group can reduce nitrogen oxide (NOx)^{*1} emissions by 4 million metric tons per year. This is equivalent to roughly double the annual amount of NOx^{*2} emissions in Japan.

* 1 Assuming new cars not equipped with exhaust gas systems are equipped with the same systems

* 2 Source: OECD Environment Statistics (2012)



NOx reduction
of over **4** million
tons/year

Diesel Particulate Filters (DPFs)

DPFs are porous ceramic filters fitted to the exhaust systems of diesel vehicles. Using micropores to securely capture particulate matter (PM) purifies the exhaust gas of diesel vehicles and greatly contributes to reducing atmospheric pollution. The NGK Group is the only manufacturer who mass produces two types, cordierite and silicon carbide. And we are further developing our ceramic technologies for diesel vehicles.



Removes
up to **99%** of PM

Gasoline Particulate Filters (GPFs)

GPFs are ceramic filters that remove the particulate matter emitted by gasoline engines.

We have succeeded in developing GPFs based on the technology behind particulate matter (PM) removal filters for diesel engines (DPFs). We combined this technology with proprietary micropore creation and control technologies to achieve both high PM capture efficiency and low pressure loss (low fuel consumption and high power output). In 2012, we became the first in the world to put GPFs into practical use, and we began full-scale mass production in 2016. Going forward, we will work to meet the needs of society as automotive emissions regulations are strengthened worldwide.



In-Vehicle High-Precision NOx Sensors

The world's first in-vehicle sensor that can precisely measure nitrogen oxide (NOx) concentration in exhaust gases in real time. It measures the concentration of NOx in exhaust gasses at a ppm (parts per million) level, catching even minute amounts of NOx. It precisely controls the exhaust gas purification equipment in diesel vehicles to reduce the amount of NOx emitted, and promote the spread of clean diesel vehicles.



Low-Level Radioactive Waste Treatment Systems

The NGK Group produces various equipment that employs our proprietary processing technology and exhaust gas dust removal technology, using high performance filters, to safely process low-level radioactive waste generated by nuclear power facilities. We have delivered these to nuclear power stations and related research facilities all around Japan. Our broad engineering capabilities span design, manufacturing, and construction. These combined with long-term maintenance support, allow us to achieve stable, advanced radiation removal that contributes to the safe operation of nuclear facilities.

We are also working to develop systems for processing the various new waste generated as aging nuclear reactors are shut down and dismantled.



Importance of treating radioactive waste

When it comes to treating and disposing of the waste generated in the radiation control areas of nuclear power plants and the like, preventing the release or leakage of radioactive material is of the highest importance. It must be treated and disposed of in a different manner to general waste.

Micro-Lenses for Ultraviolet LEDs

Micro-lenses for ultraviolet LEDs are quartz glass lenses which the NGK Group has developed for use with the ultraviolet LEDs intended to replace mercury lamps. Ultraviolet light sources are seeing widespread use in applications such as sterilization of water and air. Currently, such applications use mercury lamps. But in light of new laws and regulations based on the Minamata Convention on Mercury, their use will be banned in the future. This is driving interest in ultraviolet LEDs, which do not use mercury. Our micro-lenses for ultraviolet LEDs feature a cavity (space) to hold the ultraviolet LED chip. This increases the efficiency of the ultraviolet LED while reducing its cost.



Environmental Labeling and Declarations

Since the NGK Group focuses mainly on B2B products, we do not presently conduct environmental labelling. However, we will respond appropriately if cases arise where such labeling is needed.

Environmental Education and Communication

Initiatives to Improve Environmental Awareness

In the NGK Group Environmental Policy, we have established priority initiatives for education and public relations activities, and conduct ongoing environmental education and awareness activities aimed at increasing employee environmental awareness. Our aim is to deepen the understanding of environmental problems among each employee to inculcate an awareness of environmental conservation activities. We also conduct environmental events and provide information to a wide range of stakeholders, including lectures at high schools and universities, to increase environmental awareness.

Guest Lectures at High Schools

At the request of Ai Chi Mirai Forum, an NPO that provides opportunities to learn about global problems such as environmental pollution, poverty, and war, employees regularly visit schools in Aichi Prefecture to give lectures. In such classes, we introduce corporate and sustainability initiatives, and give students an opportunity to think about themselves and the environment.



University Lectures

NGK employees visited universities to deliver undergraduate lectures as endowed BERC lecturers at the Business Ethics Research Center (BERC), a general incorporated association that supports the research and adoption of a wide array of business ethics, and to deliver graduate lectures as part-time lecturers. These lectures introduced the NGK Group's philosophy, corporate strategy, and efforts towards carbon neutrality to students.



Sharing Information with Other Companies

The Environmental Partnership Organizing Club (EPOC)* aims to build a circular economy and society by disseminating information related to the environment. The subcommittee led by NGK holds seminars and field trips several times a year on various themes related to corporate environmental management (such as decarbonization, resource recycling, biodiversity, water resources, and laws and regulations relating to the environment), and disseminates information to its members. In FY2024 we held three seminars and one study session.

* The EPOC: A voluntary organization consisting mainly of companies in the Chubu region of Japan, which was established in 2000. NGK has been involved in the planning and management of this organization since its establishment. EPOC currently has approximately 260 members. (As of May 9, 2025)

Employee Environmental Training and Skills Development

Environmental Expert Training

In striving to strengthen compliance related to environmental management, we conduct training using materials which can be accessed on-demand. In FY2024, around 1,500 people participated in training related to fluorocarbons, and around 5,500 in training related to waste materials.

Hereafter, we plan to roll this training out to contractors and subcontractors.

Special Environmental Training

Every year, we invite outside experts to explain and raise questions about the themes of carbon neutrality, resource recycling, and living in harmony with nature. We also introduce our employees to examples of corporate initiatives, and create opportunities to consider these issues together. In December 2024, we invited outside experts and held seminars and workshops about a circular economy as part of our resource recycling initiatives. These were targeted at employees in each business division and related departments at headquarters, and aimed to deepen their understanding of initiatives for contributing to a circular economy through seminars followed by workshops.



Promoting the Acquisition of Qualifications

To continue promoting environmental conservation activities in compliance with laws and regulations, we make an effort to increase the skills of managers engaged in pollution prevention required for the management of each site. We provide support as a company for acquisition of necessary legal qualifications, and promote systematic training and staffing. We systematically educate both Qualified Energy Managers in the Engineering Department, and Special Controlled Industrial Waste Managers and other waste-related managers in the Environmental Management Department and other business groups.

Qualifications Acquired as of March 31, 2025 (NGK)

Pollution Control Managers			Qualified Energy Managers	Special Controlled Industrial Waste Managers	Waste Disposal Facility Technical Managers
Air	Water	Noise/ Vibration			
111	126	35	41	28	14

Support for Acquisition of Eco Test Certification

With the aim of ensuring that each employee acquires a strong environmental awareness and a wide range of knowledge with respect to the environment, NGK supports employees in sitting the Eco Test* by lending them reference materials and subsidizing test-related expenses.

To date, a total of 871 people—approx. 20% of all NGK employees—have passed the test.

* The Eco Test is an environmental and social certification test administered by the Tokyo Chamber of Commerce and Industry focused on a wide-range of environmental issues.

Eco Test Certification

[Environmental Data Collection](#) 

NGK Eco Point System

NGK promotes its Eco Point System in an effort to contribute to regional environmental improvement. Employees earn points for environmental behavior conducted at work and in the home, a portion of which is converted into cash and donated to local government-managed funds (environmental funds).

In addition to NGK's three sites in Nagoya, Komaki and Chita, and the Ishikawa Plant, the system was introduced to the Tokyo Main Office and Osaka Branch and sales offices in FY2016.

Donation of NGK Eco Points

NGK Eco Points are earned by employees for their engagement in environmental activities during the previous fiscal year. Employees can opt either to exchange these points for eco goods or donate them to local funds. In recent years, the number of employees choosing donation has been growing, indicating increasing willingness to serve society. Their donations are used to purchase equipment for conducting ecological research at the waterfront, environmental education programs, and the like.



Mayor of Komaki-city in Aichi Prefecture with an NGK employee.



Environment Bureau Director of Nagoya, Aichi Pref. with NGK employees.

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Material Balance

Category	Substance	FY2020		FY2021		FY2022		FY2023		FY2024		Unit
		Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated	Consolidated	Non-consolidated	
INPUT	Electric power	0.88	0.22	0.98	0.23	0.94	0.23	0.95	0.22	0.92	0.21	TWh
	Gas	1.41	0.20	1.66	0.19	1.50	0.20	1.42	0.19	1.27	0.17	TWh
	Petroleum	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.01	0.00	TWh
	Raw materials	14	3	16	2	15	3	14	3	12	3	10 ⁴ metric tons
	Recycled materials	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	10 ⁴ metric tons
	PRTR-listed substances	506	188	447	186	511	160	963	176	1,001	297	Metric tons
	Water withdrawal	3.78	1.45	4.37	1.41	4.14	1.20	4.23	1.31	4.04	1.30	Million m ³
OUTPUT	Energy-origin CO ₂	76	13	63	12	59	13	59	14	56 (56☑)	12☑	10 ⁴ metric tons of CO ₂
	Energy-origin CO ₂ (including effects of CN LNG*)	-	-	62	10	56	10	56	11	54	10	10 ⁴ metric tons of CO ₂
	Other greenhouse gases	0	0	0	0	0	0	1	0	1	0	10 ⁴ metric tons of CO ₂
	CO ₂ (non-energy origin CO ₂)	0	0	0	0	0	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	CH ₄	0	0	0	0	0	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	N ₂ O	0	0	0	0	0	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	HFC	0	0	0	0	0	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	PFC	0	0	0	0	0	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	SF ₆	0	0	0	0	0	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	VOC	83	0	77	1	107	1	88	4	46	1	Metric tons
	PRTR-listed substances (emissions into atmosphere)	89	3	84	2	110	2	92	5	49	4	Metric tons
	Discarded materials	5	1	5	1	5	1	5	1	4	1	10 ⁴ metric tons
	Recycled	4	1	4	1	4	1	4	1	4	1	10 ⁴ metric tons
	Disposed of externally	1	0	1	0	1	0	1	0	1	0	10 ⁴ metric tons
	Water discharge	2.53	1.09	2.74	1.03	2.68	0.80	2.71	0.86	2.64	0.84	Million m ³
	PRTR-listed substances (discharge into bodies of water)	0	0	1	1	1	1	1	1	1	1	Metric tons
	Scope1 (energy-origin CO ₂)	26	4	31	4	28	4	27	4	24 (24☑)	3☑	10 ⁴ metric tons of CO ₂
	Scope1 (energy-origin CO ₂) (including effects of CN LNG*)	-	-	29	2	25	1	24	1	21	1	10 ⁴ metric tons of CO ₂
	Scope2 (energy-origin CO ₂)	49	10	33	9	31	9	32	10	33 (33☑)	9☑	10 ⁴ metric tons of CO ₂

☑ The consolidated production bases figures in the parentheses and the non-consolidated figures are values subject to third-party assurance by Deloitte Tohmatsu Sustainability Co., Ltd.

Note: The figures indicating environmental performance in this table have been rounded off for convenience, so the total may not equal the sum of the individual figures.

Note: Discarded materials indicates the sum total of industrial waste and valuable resources.

Note: The figures in the non-consolidated column are the data for NGK production locations (Head Office/Nagoya Site, Chita Site, Komaki Site, Ishikawa Plant).

* CN LNG (Carbon Neutral Liquid Natural Gas) is LNG that is offset with CO₂ credits, and thus considered to have no CO₂ emissions. However, we show it as a separate category because it does not qualify for credits under current energy conservation laws.

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Material Balance Calculation Basis

INPUT	1. Energy	Electric power Electric power consumption Gas Amount obtained by converting the consumption volume for each type of fuel into the heat value = Σ (consumption volume of each fuel $\times$ unit heating value of each fuel) $\div$ 3,600 MJ/MWh <Unit heating value of fuel> Natural gas : (China) 43.5/38.9/42.5 MJ/Nm³ *1, (outside China) 43.5/42.5 MJ/Nm³ *2, City gas: (NGK alone) 45 MJ/Nm³, (other than for NGK alone) 45/44.8/45 MJ/Nm³ *1, Others: according to the Act on Promotion of Global Warming Countermeasures Petroleum Amount obtained by converting the consumption volume for each type of fuel into the heat value = Σ (Consumption volume of each fuel $\times$ Unit heating value of each fuel) $\div$ 3,600 MJ/MWh <Unit heating value of fuel> According to the Act on Promotion of Global Warming Countermeasures *1 Data to left side of "/" is for FY2020, middle is for FY2021 to 2022, right is from FY2023 *2 Data to left side of "/" is for FY2020 to FY2022, right is from FY2023
	2. Water withdrawal	Total tap water, industrial water, groundwater, and rainwater
	3. PRTR-listed substances	Total quantity of Japan's PRTR Type 1 listed substances handled
	4. Raw materials	Total amount of raw materials used to manufacture products
OUTPUT	5. Energy-origin CO ₂ emission volume	Energy-origin CO₂ emission volume = Σ (Consumption of each type of energy $\times$ CO₂ conversion factor of each type of energy) <CO₂ conversion factor of energy> Electric power Japan: Adjusted emission factor values / basic emission factor values*1 for electric utilities in accordance with the Act on Promotion of Global Warming Countermeasures, US (excluding NMC, FMI California, and NL): Green-e values, US (NMC, FMI California, and NL): Green-e values/electric utility published values*2, Belgium and France: AIB values, Australia: Australian National Greenhouse Accounts values, Poland: AIB values / Polish National Centre for Emissions Management values*2, China: IEA values / Ministry of Ecology and Environment of the People's Republic of China values / IEA values*3, Other countries: IEA values Fuel Natural gas: (China) 2.22/2.16/2.17 kgCO₂/Nm³ *3, (Countries other than China) 2.22/2.17 kgCO₂/Nm³ *4, City gas: (NGK alone) 2.244/2.29/2.27 kgCO₂/Nm³ *3, (other than for NGK alone) 2.23/2.27 kgCO₂/Nm³ *4, Other fuels: According to the Act on Promotion of Global Warming Countermeasures *1 Data to left side of "/" is for FY2020 to FY2023, right is from FY2024 *2 Data to left side of "/" is for FY2020, right is from FY2021 *3 Data to left side of "/" is for FY2020, middle is for FY2021 to 2022, right is from FY2023 *4 Data to left side of "/" is for FY2020 to FY2022, right is from FY2023
	6. Emission volume of other greenhouse gases	Emission volume of other greenhouse gases (tCO ₂) = volume of activity $\times$ emission coefficient $\times$ Global warming potential <Global warming potential> According to the Act on Promotion of Global Warming Countermeasures
	7. Water discharge	Total volume of water discharged. However, this does not include the rainwater discharge volume.
	8. PRTR-listed substances	Discharge into bodies of water: Total amount of Japan's PRTR Type 1 listed substances discharged into public bodies of water Emissions into atmosphere: Total amount of Japan's PRTR Type 1 listed substances emitted into the atmosphere
	9. Total amount of discarded materials generated	Total amount of discarded materials generated = Externally disposed amount*1 + Externally recycled amount Recycled amount: Externally recycled amount = Paid disposal*2 + Valuable amount (selling off) *1 Externally disposed amount: Direct disposal by landfill, or simple incineration *2 Paid disposal: Outsourcing disposal and paying for recycling*
	10. Scope1 through 3	Scope1 Direct emissions of greenhouse gases by the reporting company (generated from industrial processes or the burning of fuel) Scope2 Indirect emissions of greenhouse gases by the reporting company resulting from the use of electricity, steam, or heat purchased from other companies Scope3 All other indirect emissions of greenhouse gases (not included in Scope1 or 2) that occur in the reporting company's value chain

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GHG Emissions

Item	Category	Division	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
GHG emissions (Scope1+2: Energy-origin CO ₂)* ¹	-	Including effects of CN LNG* ²	76	62	56	56	54	10 ⁴ metric tons of CO ₂
GHG emissions (Scope1: Energy-origin CO ₂)* ¹	-	Including effects of CN LNG* ²	26	29	25	24	21	10 ⁴ metric tons of CO ₂
GHG emissions (Scope2: Energy-origin CO ₂)* ¹	-	-	49	33	31	32	33	10 ⁴ metric tons of CO ₂
Basic unit per net sales (Scope1+2: Energy-origin CO ₂)* ¹	-	Including effects of CN LNG* ²	167	120	100	96	87	Metric tons of CO ₂ per 100 million yen
GHG emissions (Scope3) (FY2019-FY2020: Non-consolidated, FY2021-FY2023: Consolidated)	Total		89.3	344.9	351.9	327.0	375.3	10 ⁴ metric tons of CO ₂
	1	Purchased products and services	77.0	178.8	192.2	188.1	201.8	10 ⁴ metric tons of CO ₂
	2	Capital goods (capital investment)	9.0	13.4	13.9	15.7	16.4	10 ⁴ metric tons of CO ₂
	3	Fuel- and energy-related activities not included in Scope1 or Scope2	1.5	8.6	8.2	8.1	7.7	10 ⁴ metric tons of CO ₂
	4	Transport (upstream)	1.3	18.8	11.1	10.8	9.8	10 ⁴ metric tons of CO ₂
	5	Waste	0.2	1.2	1.0	1.0	0.8	10 ⁴ metric tons of CO ₂
	6	Business trips	0.1	0.3	0.3	0.3	0.3	10 ⁴ metric tons of CO ₂
	7	Employee commutes	0.2	0.9	0.9	0.8	1.0	10 ⁴ metric tons of CO ₂
	8	Leased assets (upstream)	-	-	-	-	-	10 ⁴ metric tons of CO ₂
	9	Transport (downstream)	-	-	-	-	-	10 ⁴ metric tons of CO ₂
	10	Processing of sold products	-	-	-	-	-	10 ⁴ metric tons of CO ₂
	11	Use of sold products	-	122.6	123.9	101.9	137.2	10 ⁴ metric tons of CO ₂
	12	End-of-life treatment of sold products	-	0.4	0.4	0.4	0.3	10 ⁴ metric tons of CO ₂
	13	Leased assets (downstream)	-	-	-	-	-	10 ⁴ metric tons of CO ₂
	14	Franchises	-	-	-	-	-	10 ⁴ metric tons of CO ₂
	15	Investment	-	-	-	-	-	10 ⁴ metric tons of CO ₂
Other GHG emissions* ¹	Total		0	0	0	1	1	10 ⁴ metric tons of CO ₂
	-	CO ₂ (non-energy origin CO ₂)	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	-	CH ₄	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	-	N ₂ O	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	-	HFC	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	-	PFC	0	0	0	0	0	10 ⁴ metric tons of CO ₂
	-	SF ₆	0	0	0	0	0	10 ⁴ metric tons of CO ₂

☒ The figures are values subject to third-party assurance by Deloitte Tohmatsu Sustainability Co., Ltd.
*1 The scope is consolidated.
*2 CN LNG (Carbon Neutral Liquid Natural Gas) is LNG that is offset with CO₂ credits, and thus considered to have no CO₂ emissions. However, we show it as a separate category because it does not qualify for credits under current energy conservation laws.

Method for calculating GHG emissions (Scope3)

Category	Division	Calculation method
1	Purchased products and services	Σ (purchase price of products and services × emissions intensity* ¹)
2	Capital goods (capital investment)	Capital investment × emissions intensity* ¹
3	Fuel- and energy-related activities not included in Scope1 or Scope2	Σ (energy consumption × emissions intensity* ¹)
4	Transport (upstream)	Σ (weight of transported goods × distance × emissions intensity* ²)
5	Waste	Σ (weight of waste materials × emissions intensity* ¹)
6	Business trips	number of employees × emissions intensity* ¹
7	Employee commutes	number of employees × number of work days per year × emissions intensity* ¹
8	Leased assets (upstream)	-
9	Transport (downstream)	-
10	Processing of sold products	-
11	Use of sold products	Σ (number of products sold × annual energy consumption × service life × CO ₂ emission factor* ³)
12	End-of-life treatment of sold products	Σ (number of products sold × product weight × emissions intensity* ¹)
13	Leased assets (downstream)	-
14	Franchises	-
15	Investments	-

*1 Value from Emission Factor Database Ver. 3.5 for use with the Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain
*2 Value from IDEA Database Ver. 2.3
*3 Value from Japan's Act on Promotion of Global Warming Countermeasures

Consumption of Each Energy

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Electric power	0.88	0.98	0.94	0.95	0.92	TWh
Gas	1.41	1.66	1.50	1.42	1.27	TWh
Petroleum	0.02	0.02	0.02	0.02	0.01	TWh
Basic unit per net sales	513	522	442	413	359	MWh per 100 million yen

The scope is consolidated.

Conservation of Water Resources

Item		FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Water withdrawal	Tap water/industrial water	3.135	3.720	3.494	3.616	3.396	Million m ³
	Groundwater	0.640	0.614	0.648	0.608	0.642	Million m ³
	Rainwater	0.002	0.002	0.001	0.002	0.01	Million m ³
	Total	3.777	4.336	4.143	4.226	4.038	Million m ³
Water discharge	Rivers	0.734	0.733	0.705	0.681	0.645	Million m ³
	Lakes	0.000	0.000	0.000	0.000	0.000	Million m ³
	Sea	1.201	1.218	1.152	1.238	1.188	Million m ³
	Sewerage	0.376	0.458	0.507	0.496	0.500	Million m ³
	Factory complex processing	0.207	0.238	0.233	0.243	0.235	Million m ³
	Other	0.017	0.057	0.079	0.054	0.074	Million m ³
	Total	2.534	2.704	2.677	2.712	2.642	Million m ³
Amount of water consumption		1.243	1.632	1.466	1.514	1.396	Million m ³
Volume recycled		0.066	0.063	0.077	0.102	0.102	Million m ³
Recycling rate*		1.7	1.5	1.9	2.4	2.5	%

The scope is consolidated.

* (Recycling rate) = (Volume recycled) / (Total water withdrawal)

Raw Materials

Item		FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Raw materials	Total	14	16	15	14	12	10 ⁴ metric tons
	Ceramic raw materials					8.7	10 ⁴ metric tons
	Metal materials					2.0	10 ⁴ metric tons
	Plastics					0.3	10 ⁴ metric tons
	Others (cement, rubber, etc.)					0.8	10 ⁴ metric tons
Recycled materials		0.4	0.4	0.5	0.4	0.4	10 ⁴ metric tons

The scope is consolidated.

Chemical Management System

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
VOC	83	77	107	88	46	Metric tons
PRTR-listed substances (emissions into atmosphere)	89	84	110	92	49	Metric tons
PRTR-listed substances (discharge into bodies of water)	0	1	1	1	1	Metric tons

The scope is consolidated.

Discarded Materials

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Discarded materials	5	5	5	5	4	10 ⁴ metric tons
Recycled	4	4	4	4	4	10 ⁴ metric tons
Disposed of externally	1	1	1	1	1	10 ⁴ metric tons
Plastic recycled + disposed of externally	-	-	-	0.1	0.2	10 ⁴ metric tons
Basic unit per net sales	10.3	10.5	8.4	8.3	7.2	Metric tons per 100 million yen
Reduction rate against BAU*	24	26	31	31	35	%

The scope is consolidated.

* This is the improvement rate in the basic unit for production output based on FY2013.

Toxic Materials

Item		FY2020	FY2021	FY2022	FY2023	FY2024	Unit
PCB waste	Considered to be disposed	166	39	179	104	32	Units
	Disposed amount	21,999	11,480	28,805	470	9,152	kg

The scope is consolidated.

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Products and Services Contributing to Environmental Protection

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Ratio of sales of products and services contributing to environmental protection of the sales of all products and services	57	59	59	64	66	%

The scope is consolidated.

Environmental Accounting

Item			FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Environmental conservation costs/Capital investment* ¹			26.8	9.4	19.4	28.6	15.9	100 million yen
Environmental conservation costs/Expenditures* ¹	Total		35.0	41.4	31.8	50.0	49.5	100 million yen
	Pollution prevention costs	Costs of managing and maintaining equipment for preventing pollution	9.7	8.1	8.3	13.2	11.8	100 million yen
	Global environmental conservation costs	Costs related to conservation of the global environment	5.4	6.2	4.3	8.5	13.6	100 million yen
	Costs related to resource recycling	Costs related to conserving resources, saving water, and disposing of waste, and other resource recycling	8.6	9.2	7.8	9.0	10.9	100 million yen
	Upstream and downstream costs	Costs for curtailing environmental impacts outside of our business areas (outside the company)	0.1	0.1	0.1	0.0	0.1	100 million yen
	Administrative costs	Costs for initiatives that indirectly contribute to curtailing environmental impacts	6.8	4.0	5.2	5.3	6.3	100 million yen
	Research and development costs	Cost of research and development for reducing environmental impacts	1.6	1.6	1.7	4.1	4.1	100 million yen
	Social activity costs	Costs related to environmental conservation and communication with society about the environment	2.7	2.2	2.3	2.4	2.5	100 million yen
	Environmental damage costs	Costs related to damage done to the environment	0.2	9.9	2.1	7.5	0.2	100 million yen
Economic benefits* ¹	Total		4.5	6.9	7.7	7.2	9.8	100 million yen
	Energy conservation	Effect of energy conservation activities	1.2	1.6	3.0	2.9	6.4	100 million yen
	Resource conservation (water)	Effect of water conservation	0.0	0.0	0.0	0.0	0.0	100 million yen
	Resource conservation (raw materials)	Effect of efficient use of resources	0.3	0.1	0.1	0.1	0.3	100 million yen
	Resource conservation (containers and packaging)	Effect of reuse of containers and packaging	0.0	0.0	0.0	0.0	0.0	100 million yen
	Resource conservation (reduced disposal)	Effect of reduced disposal as waste	1.2	1.7	1.7	1.2	1.0	100 million yen
	Resource conservation (gain on sale)	Effect of sales of valuables	1.7	3.5	2.8	3.0	2.1	100 million yen
Cost-effectiveness* ¹ * ²			12.9	16.7	24.1	14.4	19.8	%
CO ₂ eco-efficiency* ³ * ⁴ * ⁵			122	187	226	233	259	%
Discarded materials eco-efficiency* ³ * ⁴ * ⁶			176	172	216	217	253	%

*¹ The scope is NGK and domestic group companies

*² (Cost-effectiveness) = (Economic benefits) / (Expenditures)

*³ The scope is consolidated.

*⁴ FY2013 = 100%

*⁵ (CO₂ eco-efficiency) = (Net sales) / (CO₂ emissions)

*⁶ (Discarded materials eco-efficiency) = (Net sales) / (Amount of discarded materials)

Environmental Management System

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
NGK	4	4	4	4	4	Number of bases certified
Domestic Group	18	19	19	19	19	Number of bases certified
Overseas Group	21	21	21	21	18	Number of bases certified

New manufacturing sites that have been in operation for less than two years are excluded.

Environmental Audits

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Significant findings	0	0	0	0	0	Cases

The scope is consolidated.

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Environmental Risk Management

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Major violations	0	0	1	1	0	Cases

The scope is consolidated.

External Recognition of Environmental Performance

Item	FY2020	FY2021	FY2022	FY2023	FY2024
CDP-Climate Change	B	B	A-	A-	B
CDP-Water Security	B	B	A-	B	A
CDP-Supplier Engagement	B	A	A-	B	A

The scope is consolidated.

Eco Test Certification

Item	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of successful examinees	73	44	29	43	49	Persons

The scope is NGK only.

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Respecting Human Rights

Basic Approach

Concerning respect for human rights within NGK Group business activities, our relationship with employees has been governed by the NGK Group Corporate Business Principles and Code of Conduct, and our relationship with suppliers has been governed by the NGK Group Supplier Code of Conduct. In April 2021 we established the NGK Group Human Rights Policy as a separate policy on human rights. This not only clarifies our messaging both inside and outside of the NGK Group, but promotes our efforts to respect human rights.

[NGK Group Human Rights Policy](#) >

[NGK Group Corporate Business Principles](#) >

[NGK Group Supplier Code of Conduct](#) 

Related Policies and Approaches

Statement on the UK Modern Slavery Act

We have disclosed our UK Modern Slavery Act Statement based on the Modern Slavery Act passed by the United Kingdom in 2015.

[UK Modern Slavery Act Statement](#) >

Respect for the Human Rights of Children

The NGK Group is aware that there are a variety of impacts that corporations can have on children. In addition to signing the UN Global Compact, we support the Children's Rights and Business Principles, respect the rights of children through our business activities, and engage in social contribution activities and other efforts to promote children's rights.

[Social Contribution Activities](#) >

Compliance with Local Labor Laws

The NGK Group complies with the laws of each country and region concerning labor and occupational safety and health. We have also established a reporting mechanism for whistleblowing and consultation to handle possible violations. Regarding child labor and forced labor, we use sources such as official public documents to confirm the age of candidates before they are hired. And we do not impose unreasonable restrictions on the access to workplaces and other facilities, such as dormitories and residences, provided by the company, as well as the freedom of movement within such facilities.

To date, we have found no cases of child labor or forced labor through the regular surveys.

NGK Group Supplier Code of Conduct

The NGK Group respects the human rights of all stakeholders affected by our business activities. In addition to education and training for our employees, we also communicate this commitment to all stakeholders, seeking their understanding and cooperation. Specifically, regarding respect for human rights in our supply chains, we expect our suppliers to comply with our human rights policy and thoroughly implement the NGK Group Supplier Code of Conduct. This code outlines specific measures related to human rights, including the prohibition of discrimination, forced labor, and child labor, as well as considerations for appropriate wages and working hours.

We periodically request our primary suppliers to consent to compliance with this code when initiating new transactions or continuing existing ones.

[Supply Chain Management](#) >

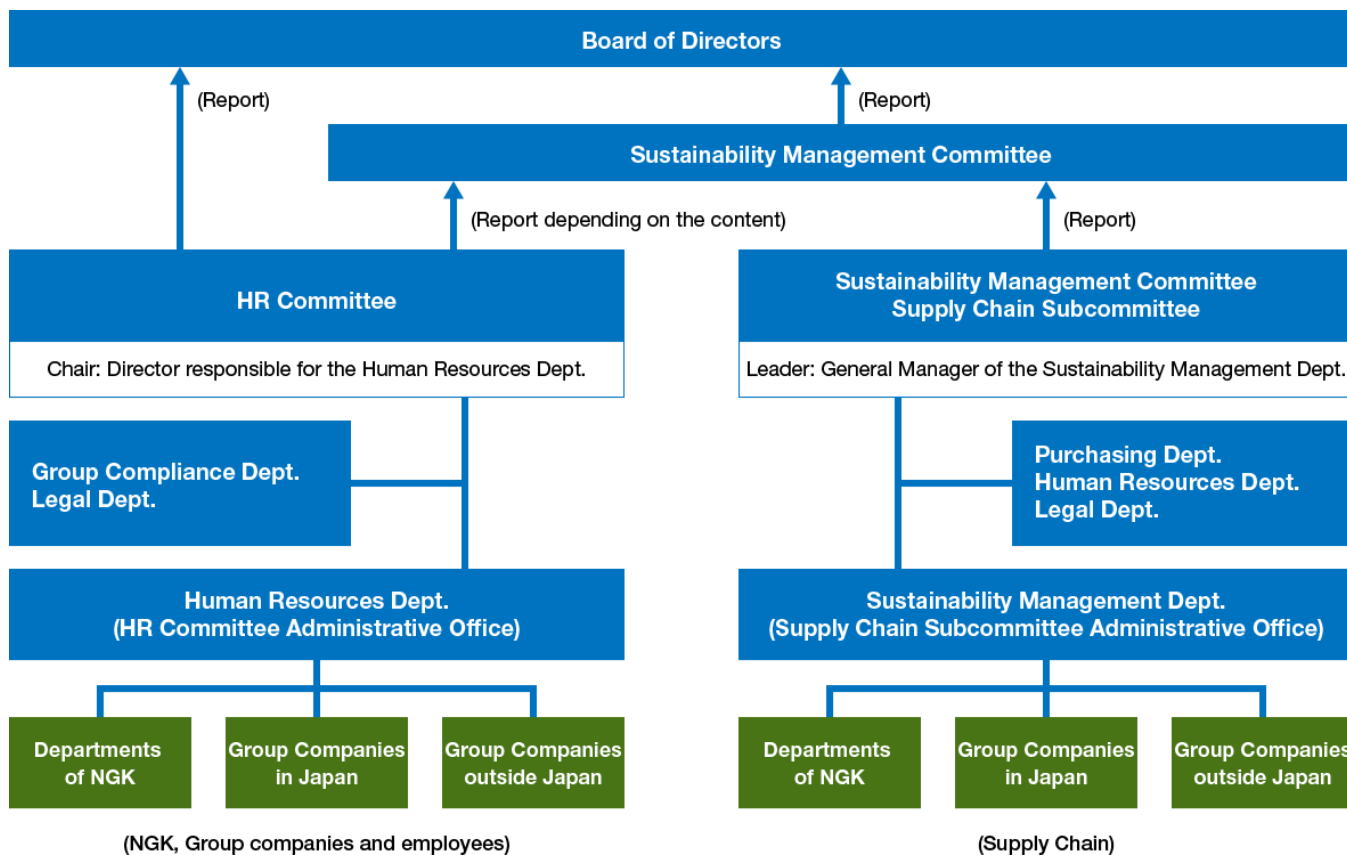
[NGK Group Supplier Code of Conduct](#) 

| Management Framework

In April 2020, we established the HR Committee as a cross-sectoral, deliberative body chaired by the Director responsible for the Human Resources Department and tasked with ensuring that corporate activities have a stronger focus on human rights and that important personnel issues are addressed by the NGK Group as a whole.

The Director responsible for the Human Resources Department, Director responsible for the Sustainability Management Department, General Manager of the Human Resources Department, the General Manager of the Sustainability Management Department, and the managers of each department work to promote initiatives that ensure respect for human rights. They coordinate and cooperate with related committees and departments on such initiatives, according to their content and importance. Meanwhile, the director responsible for the HR department regularly reports to the Board of Directors concerning the status of their implementation, and the Board of Directors oversees the status of implementation.

Organizational Structure Chart



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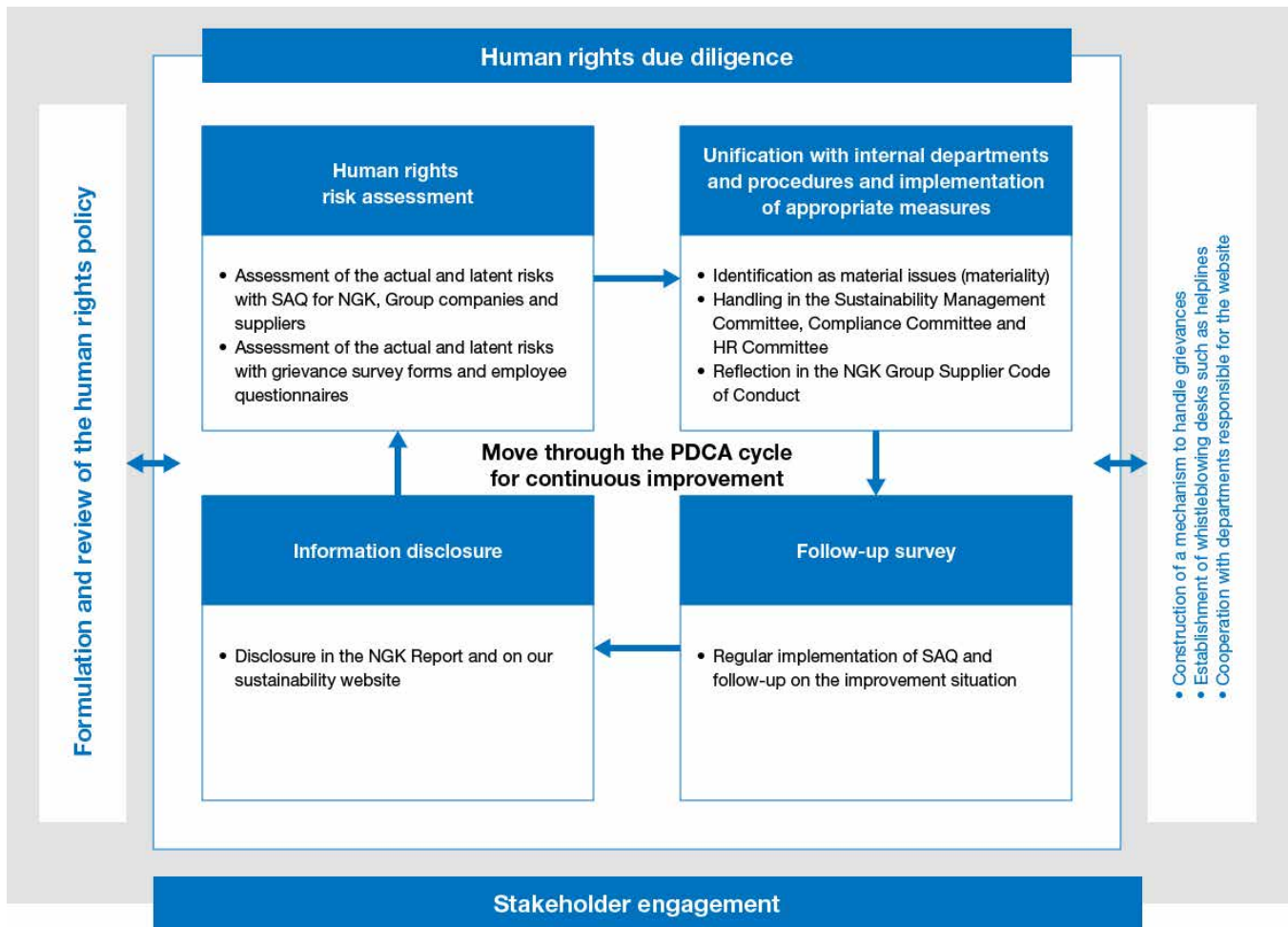
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Overall Picture of Initiatives for Respect for Human Rights



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FY2024 Activities

In FY2024, we focused on the following human rights initiatives.

Implementation Timing	Details of Implementation
April to June	Investigated human rights related grievances in all Group companies in and outside Japan during the second half of FY2023 (human rights related grievances at NGK headquarters are investigated and recorded on a case-by-case basis)
September	Disclosed Statement on the UK Modern Slavery Act (fiscal year ended March 31, 2024)
October to November	Investigated human rights-related grievances at Group companies in and outside Japan during the first half of FY2024 (human rights related grievances at NGK headquarters are investigated and recorded on a case-by-case basis)
December 2024 to March 2025	Conducted human rights due diligence surveys (SAQ*) for all of NGK and our Group companies in and outside Japan

In FY2024, we focused on the following human rights initiatives.

Implementation Timing	Details of Implementation
March 2025	Conducted e-learning program on the subject of the “NGK Group Code of Conduct Guidebook ‘2. Respecting Human Rights’” Carried out stakeholder engagement with foreign employees of Group companies in Japan (both full-time and temporary employees)

* Self-Assessment Questionnaire concerning corporate social responsibility

Human Rights Due Diligence

Human Rights Risks Accompanying Group Business Activities

NGK regularly conducts a self-assessment survey based on the RBA* Code of Conduct on ourselves and our Group companies in and outside of Japan. In FY2024, a total of 38 companies including NGK underwent the self-assessment survey with a total of 55 questions in the three categories of labor, health and safety, and ethics. Conducting this survey gives us a comprehensive overview of the business activities in our group and identifies human rights issues.

As a result, no violations of the laws or regulations of each country were found. On the other hand, we confirmed multiple instances of issues which, while legal, do not comply with the RBA Code of Conduct. Based on these results, we revised our work regulations in FY2024 and deleted “reduction of salary” from the types of penalties listed. Going forward, we will consider our response while taking into account the laws/ordinances, customs and practices of each country.

* Responsible Business Alliance: Focusing primarily on the electronic equipment industry, the RBA establishes standards and conducts audits with the aim of promoting safe working environments, worker protection, and environmental responsibility.

Human Rights Risks to Employees

Concerning human rights risks to employees, we accept reports and queries about human rights through our internal whistleblowing desk, and receive reports from Group companies once every 6 months through the Human Rights Grievance Survey or the Legal Risk Management Report. In FY2024, we received 42 reports related to human rights (harassment, labor-related, etc.) from the entire NGK Group. We are handling these with fact-finding investigations, rectification, instruction, and warnings. Once every two years we also conduct a Corporate Risk Survey (CRS) to identify latent risks.

Human Rights Risks to Supply Chain

We periodically request our primary suppliers to comply with the NGK Group Supplier Code of Conduct when initiating new transactions or continuing existing ones.

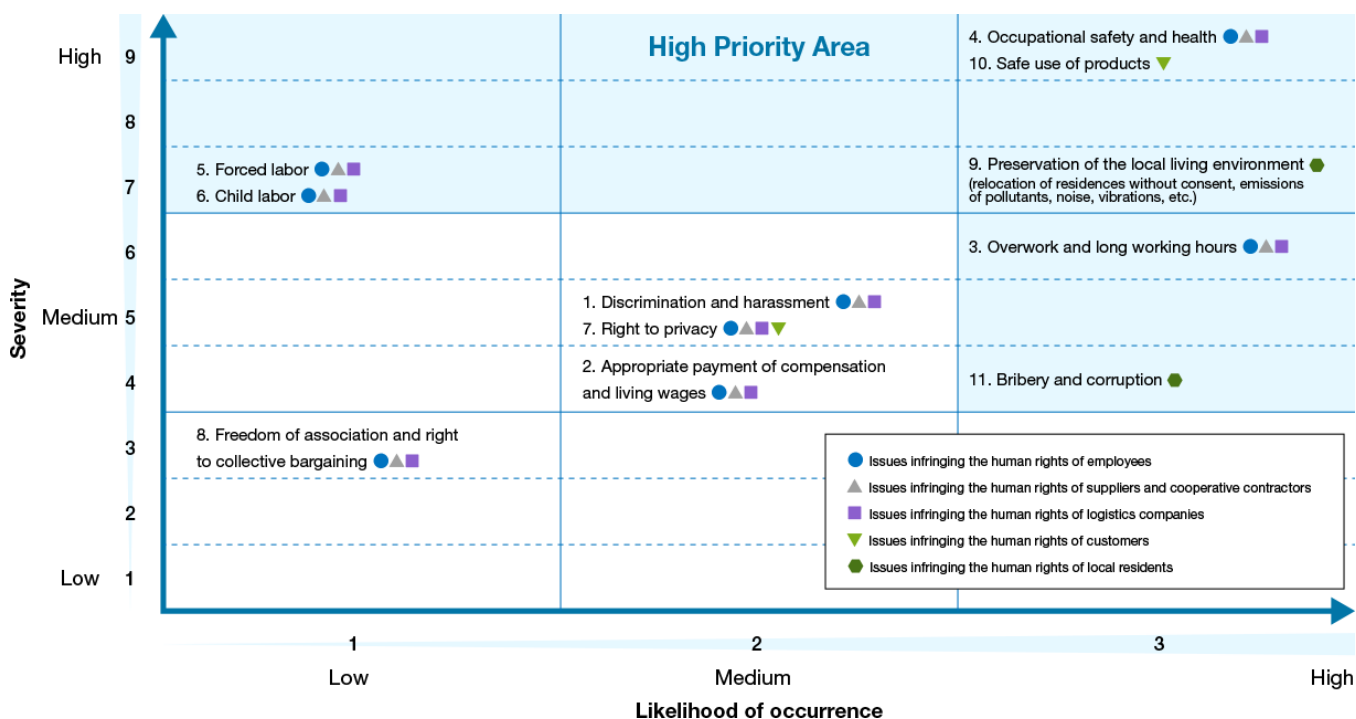
[NGK Group Supplier Code of Conduct](#) 

[Supplier Assessment](#) >

Human Rights Issues Requiring Our Attention

We drafted a long list based on the basic human rights that the UN Guiding Principles say are the responsibility of companies to respect, organized our value chain, and identified human rights issues related to our business. In addition to investigating human rights incidents that have manifested in our industry, we conducted country risk investigations to ascertain latent risks related to our business. Next, in line with the concepts laid out in OECD Due Diligence Guidance for Responsible Business Conduct (RBC), we assessed importance along the two axes of “severity” and “likelihood of occurrence.” We then plotted these human rights issues on a risk map for each stakeholder through interviews with representatives of our business divisions. Moreover, we identified the human rights issues that we should tackle first through discussion between related parties and a report by the HR Committee. We are prioritizing handling of these human rights issues, and working to prevent and correct such human rights issues. We also consider changes in the business environment and the opinions of stakeholders, and continually revise our human rights risk map.

- Overwork and long working hours
- Occupational safety and health
- Forced labor
- Child labor
- Preservation of the local living environment (relocation of residences without consent, emissions of pollutants, noise, vibrations, etc.)
- Safe use of products
- Bribery and corruption



Engaging with Stakeholders

The NGK Group has identified human rights risks in our business activities, organized the stakeholders in our value chain, and selected those to prioritize engaging with in order to properly handle these risks. In FY2024, we ascertained the state of our business, and interviewed one full-time employee and one temporary employee who have foreign citizenship from one of our Group companies in Japan. As a result, we found that the Group company in question has been striving to create an environment that is safe and easy to work in, and while there is room for improvement, there were no major issues directly related to human rights risks.



Interview with full-time and temporary employees with foreign citizenship

Grievance Mechanisms

NGK has established a whistleblowing desk (helpline) which can be used by everyone who works at NGK, our Group companies in Japan, and each of our sites. Our internal and external help desks are able to accept anonymous inquiries and reports. At the same time, we are striving to protect those who make inquiries and whistleblowers so that they are not treated unfavorably as a result of making an inquiry or report. We are establishing effective whistleblowing structures in our Group companies outside Japan. For example, our Group companies are establishing mechanisms to receive inquiries and reports which can be used by everyone working there to suit the actual circumstances in their countries. Moreover, we have established the Supplier Helpline to accept inquiries and reports from suppliers. Together with this, we are capable of receiving inquiries and reports from all our stakeholders through the Contact page on the NGK website.

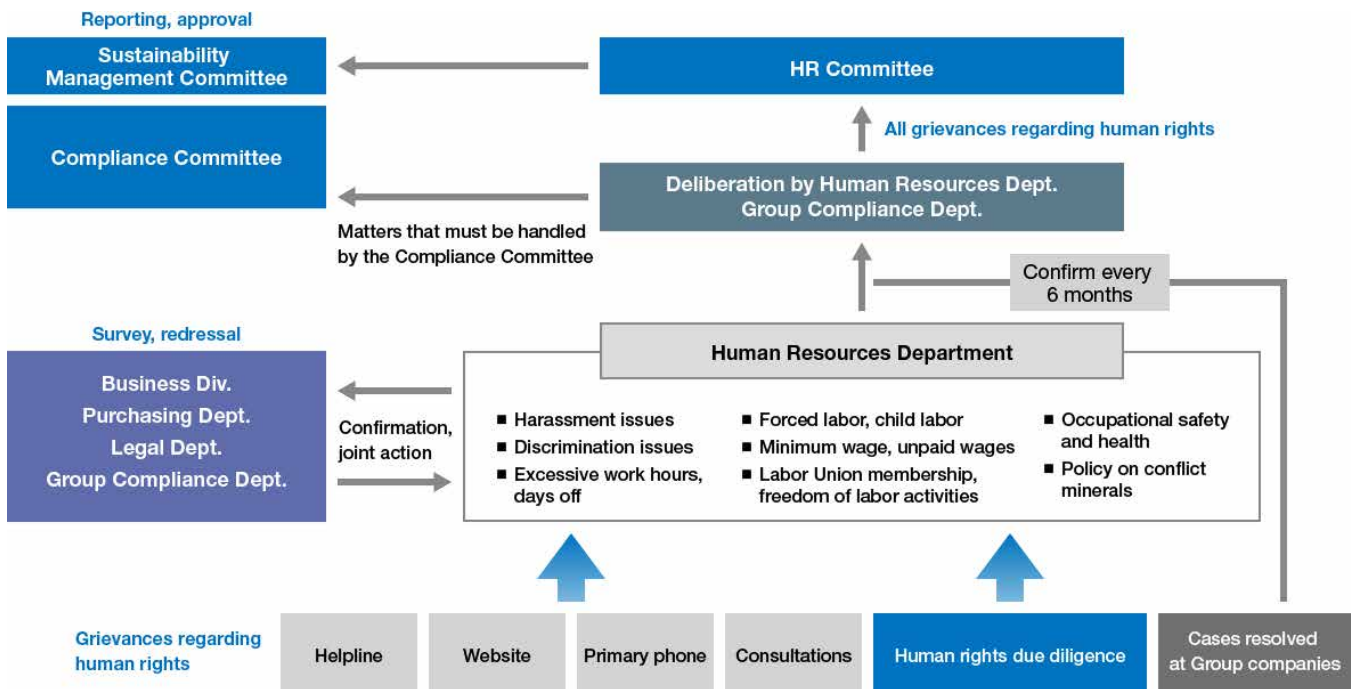
[Whistleblowing System >](#)

[Supplier Helpline >](#)

[Contact Page on the NGK Website >](#)

When we receive an inquiry or report relating to human rights, the Human Resources Department provides remedies for the affected parties if we confirm human rights have been affected upon discussions with the Group Compliance Department and other related departments. Together with this, the Human Resources Department takes corrective and preventative measures. It then makes reports to the Compliance Committee, HR Committee and Sustainability Management Committee as necessary depending on the degree of importance about our response to those issues.

Grievance Mechanisms and Remediation / Remedy Framework



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Education Concerning Human Rights

NGK conducts various types of training, through seminars and e-learning, for executives and all employees, with the goal of improving their level of understanding for respecting human rights in our corporate activities.

Category	Theme	Participants / Applicable Range	Number of Participants	Implementation Timing
Human rights in general	“NGK Group Code of Conduct Guidebook ‘2. Respecting Human Rights’” e-learning program Corporate responsibility to respect human rights, human rights related risks	All officers and employees working at NGK, and our Group companies in and outside Japan (including contract employees, re-hired employees, re-contracted employees, temporary employees, subcontractors, employees seconded from Group companies and part-time employees)	Survey replies: 4,619	April 2024
Human rights in general	Respect for human rights, NGK’s initiatives, and ESG risks and opportunities	Newly appointed managers, those promoted within managerial positions, career recruits in managerial positions	133	December 2024

Category	Theme	Participants / Applicable Range	Number of Participants	Implementation Timing
Human rights in general	NGK Group Corporate Business Principles Realization of a sustainable society through business activities, respect for human rights, and thorough compliance	Employees promoted as those in general positions, career recruits with eligible qualifications, new employees	571	April 2024 to March 2025
LGBT	“Introduction to LGBT: Aiming for a Worker-friendly Workplace” Basic LGBT knowledge and internal initiatives	New employees	175	April 2024
Harassment	Definitions of workplace bullying and sexual harassment, concrete examples, treatment in workplace regulations, helpline introduction, and promotion of understanding through case studies	New employees, employees promoted as those in general positions, and mid-career recruits with the eligible qualifications	571	April 2024 to March 2025
Harassment	Compliance, workplace bullying and sexual harassment in manufacturing sites	New section chief training	20	July to December 2024
Harassment	Lawyer-led seminar “Understanding and techniques for preventing harassment—For better communication—”	Officers and employees of NGK and Group companies in Japan	504	August to December 2024

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Supply Chain Management

Basic Approach

Our policy is based on the three principles of Openness and Fairness, Partnership, and Relationship with Society. In line with this, the NGK Group has established a policy for promoting fair and honest business transactions and helping to ensure prosperous relationships with the suppliers in our supply chain. The NGK Group Procurement Policy codifies the essentials and concrete initiatives.

In 2021 we submitted a Declaration of Partnership Building as advanced by the Cabinet Office Small and Medium Enterprise Agency. We continue to promote partnership with our suppliers as well as fair and honest dealing.

[NGK Group Procurement Policy](#) >

Supply Chain Management Promotion Framework

At NGK, the Purchasing Department is responsible for managing primary suppliers. It also manages secondary suppliers and beyond who provide critical items such as raw materials. We manage approximately 800 suppliers in line with NGK's Supplier Management Regulations. NGK's supply chain management initiatives are advanced by the Sustainability Management Committee Supply Chain Subcommittee through coordination and collaboration with related committees and departments in accordance with their details and importance. The Sustainability Management Committee also regularly reports committee meeting details to the Board of Directors.

Promoting CSR Procurement

In response to growing societal demands for CSR in the supply chain, the NGK Group is promoting sustainable procurement. We select suppliers which have CSR initiatives and ESG Management. And we procure materials and services which consider environmental and social impacts.

History of Sustainable Procurement



Supplier Code of Conduct

In FY2010, the NGK Group established the NGK Group's Supply-Chain CSR Procurement Guidelines which cover the entire Group.

These guidelines not only clarify NGK's own social responsibilities, but make clear what social responsibilities our suppliers should fulfill. This includes wording about reducing greenhouse gas emissions in the environmental dimension. In FY2013, we integrated the NGK Group Green Procurement Standard, which calls for prioritizing procurement of products and services with a low environmental impact. Thereafter, we added items based on societal changes and new global issues, and in July 2024, we conducted a complete review of the contents and reworked it into the NGK Group Supplier Code of Conduct.

We periodically ask our major suppliers to comply with this code of conduct when starting new projects or continuing current ones.

[NGK Group Supplier Code of Conduct](#)

Enhancement of Group-Wide Cooperation and Procurement Capabilities

Within the NGK Group, we work to strengthen the procurement capabilities and ensure good governance for the Group as a whole through a number of approaches, including sharing information among Group companies and undertaking joint initiatives aimed at various procurement matters. Based on each company's purchasing system and transaction situation, we clarify issues and provide support and reinforcement, such as collective purchasing of common materials, sharing cost and supplier information, and introducing domestic supplier management methods to Group companies. We will continue expanding the use of collective purchasing, standardizing supplier management methods, and developing other approaches that will contribute to improved procurement functions Group-wide, both in terms of cost and governance.



NGK Group Purchasing Liaison Meeting

Introduction of General Indirect Materials Purchasing System

Typically, each department has performed general indirect materials purchasing, using a piecemeal approach of email, physical mail, and verbal interaction. However, in 2021 we introduced a global transaction network system to centrally integrate indirect materials spending and make it more transparent.

In addition to an expenditure check conducted by the Purchasing Department, we review the supplier, specification, and other details for large-scale expenses based on the available data on a daily basis.

In FY2024, we expanded the scope of this review to the outsourcing of highly specialized work, and are further strengthening management and purchasing.

Supplier Assessment

Identifying Important Suppliers

NGK identifies important suppliers from the following points of view.

- Handling of important items: Raw materials and molding molds for main production items* are considered critical items
- Transaction volume: Accounts for 80% or more of raw materials and molds supply for main production items
- BCP: single company supply ratio of 70% or more

As of March 2025, 37 companies (22 Tier 1 companies, 15 Tier 2 companies) are considered important suppliers.

* Main production items: ceramics for purifying automobile exhaust, insulators and related devices for electric power, ceramics for electronic and electrical devices and ceramics for semiconductor manufacturing equipment

New Supplier Assessment

When NGK starts working with new suppliers, we rate them from the perspective of QCD (quality, cost, delivery) and stable procurement based on the principles laid out in our Group Procurement Policy of open, fair, and equitable procurement. In order to fulfill our social responsibilities throughout our entire supply chain, we consider an understanding of and agreement with the essential tenets of the NGK Group Supplier Code of Conduct, which includes ESG elements as a requirement for selection as a new supplier.

Existing Supplier Assessment

NGK periodically asks existing suppliers to submit written consent to comply with our NGK Supplier Code of Conduct. Since FY2021 we have conducted fact-finding surveys consisting of 114 questions across nine topics, including human rights, labor, and the environment. This allows us to perform a detailed CSR assessment of each supplier and assess risk according to transaction details. From the perspective of impact on our business, we first conducted these surveys for direct suppliers of NGK. Now we are gradually expanding them to the main suppliers of our Group companies in and outside Japan. In FY2025, we plan to conduct a full review of the survey contents before conducting the survey.

Main Items in the Assessment

Main Items	Details
Corporate Governance	Promotion framework, internal control, BCP framework, internal whistleblower system, information dissemination both internally and externally
Human Rights/Labor	Basic stance; respect for human rights; prohibition and prevention of discrimination/violation; provision of equal opportunities for hiring, training, and career advancement; fair wages, fair implementation of hours and leave; prohibition of forced or child labor; health and safety/health management; freedom of association
Environment	Basic stance; chemical substance management; waste reduction; effective resource utilization (water recycling, raw materials recycling) and preservation; prevention of global warming; biodiversity
Fair Business Practices	Basic stance; appropriate relationship with government and public officials; preventing inappropriate sharing of benefits with related parties; preventing violations of competition law; elimination of relationships with anti-social organizations; protecting intellectual property and copyrights; relief system; prohibition of insider trading and conflict of interest
Quality/Safety	Basic stance; ensuring quality and safety of products and services; appropriate handling of accidents and defective products
Information Security	Basic stance; defending against cyber threats; protecting individual data and privacy; preventing unauthorized use of confidential information
Co-existence of Supply Chain with Local Communities	Basic stance; initiatives concerning conflict minerals; reducing negative influence on local society; initiatives in cooperation with local society towards sustainable development

Communication Activities with Procurement Partners

Explanation of Earnings to Suppliers

We hold annual briefing sessions on business performance and policy for our main suppliers, with the goal of facilitating communication. Through these, we explain the state of NGK Group business, our management policy, annual business plan, procurement policy, etc. to our suppliers. In FY2024, 116 supplier companies participated on-site, and approximately 90 companies participated online. We also shared information and goals meant to facilitate the continuation and expansion of business throughout our entire supply chain.

Review and Strengthen Communication with Suppliers

NGK is working to strengthen and improve communication in various points throughout the entire supply chain. This includes requesting regular price negotiations to bring about appropriate price pass-through, and reviewing the methods by which emails are sent and received to improve PPAP issues* in IT security. Moreover, we regularly exchange opinions with suppliers and introduce them to initiatives on themes such as handling problems with harassment, constructing BCP systems, and IT security. In addition, we are working to discover and resolve problems in the supply chain early on by establishing a supplier helpline system that allows us to field consultations from both in and outside Japan.

* One problem is that the practice of sending and receiving emails with password protected zip files attached is a hotbed for targeted attacks which exploit email.

[Supplier Helpline](#) >

Visiting and Monitoring Suppliers

In order to ensure procurement from the most appropriate suppliers, NGK visits individual suppliers in and outside Japan to conduct on-site audits and evaluate their QCD (quality, cost, and delivery) performance in a fair and equitable manner. In FY2024, we conducted quality audits at 31 of our existing suppliers, including 11 of our most important suppliers. Not only did we provide feedback and assessments during these audits, but we also used visits for other objectives such as surveying plants and adjusting delivery times as opportunities to listen to a wide variety of feedback concerning suppliers' QCD management frameworks, CSR approach, and the state of their organization. In addition to this kind of direct communication with suppliers, we communicate through the web as well to build and strengthen better relationships of mutual trust.

Supplier Training-Driven Support Efforts

The NGK Safety Cooperation Conference hosts meetings for facilities and equipment construction-related supplier members. These meetings are used as opportunities to share accident and disaster case studies, as well as to provide safety-related lectures.

The FY2024 meeting was attended by 89 people from 55 conference member companies. The keynote address was on the topic of safety and good teamwork.

| Procuring Resources and Raw Materials Responsibly

The NGK Group conducts procurement activities that consider impacts on regional communities stemming from the use of raw materials (e.g. conflict minerals) with the potential to cause social issues such as human rights violations and poverty, and takes steps to avoid using such materials.

Additionally, in response to requests from customers, we investigate suppliers regarding their responsible procurement of resources and raw materials.

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Pursuing Quality for Products and Services

Basic Approach

Guided by the Corporate Philosophy, which puts customers first, the NGK Group considers the provision of products and services that contribute to a better social environment to be one of its most important missions in attempting to create quality from the customer's perspective. We position the pursuit of safety in our products and services as one of our key material issues.

The NGK Group defines Quality Objectives each year in accordance with the Quality Policy based on the NGK Group Corporate Business Principles and Code of Conduct. This policy is focused on working to improve the quality of our operations* and reduce quality risks as our primary activities to increase customer trust. Moreover, we enhance our activities to increase customer trust by carrying them out in tandem with quality improvement activities.

* Quality of operation: Quality of the operations that are in place to ensure that promises made to customers are fulfilled

[Materiality >](#)

[NGK Group Corporate Business Principles and Code of Conduct >](#)

[Quality Policy >](#)

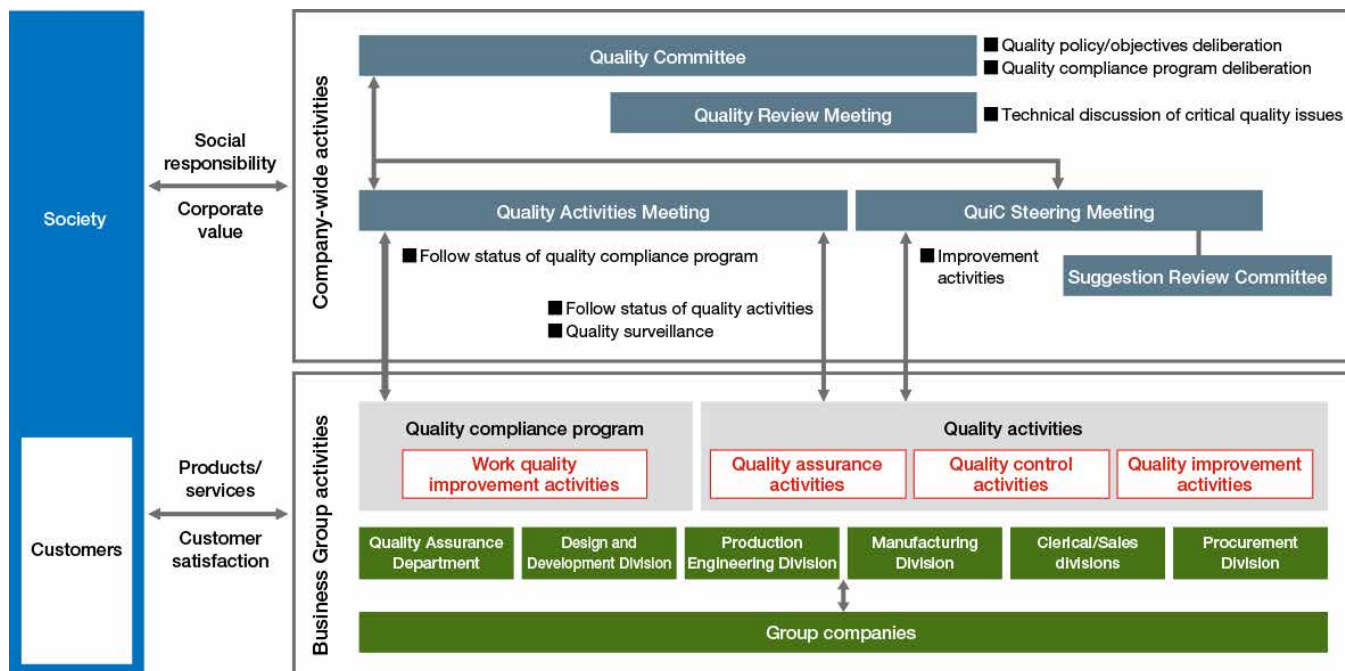
Quality Objectives FY2025

Everyone from management to frontline workers in the field thoroughly discusses overburden, waste, and unevenness in our operations, and works to improve them.

Quality Activity System

The NGK Group quality activity system consists of a company-wide system, led by the Quality Committee Chair (Director and Managing Executive Officer), and business division internal activity systems, led by the heads of each business group. In terms of company-wide activities, the Quality Committee was established to function as a deliberative body assisting the Quality Committee Chair, while business division internal activity systems were put in place for each business division, creating appropriate quality systems for each. Quality assurance, quality control, quality improvements, and quality education activities are promoted by the acquisition of ISO 9001 or IATF 16949 certification. Each business group maintains a point of contact with customers, and works to further increase customer satisfaction by reflecting customer demands and things learned from quality problems in the market in our products and services.

Quality Activity System



Quality Control Systems Outside Japan

From their inception, production bases outside Japan have created quality systems appropriate to their situations and acquired ISO 9001 or IATF 16949 certification.

Monthly reports from each base regarding customer complaints and the status of manufacturing quality are discussed at Quality Activity Meetings, enabling the entire NGK Group to evaluate the quality status in a timely manner. Moreover, quality activity rules and annual quality objectives are distributed group-wide in an attempt to develop and enhance quality activities.

Acquisition of ISO 9001 or IATF 16949 Certification

All of NGK's production sites, supporting functions and locations, and those of its Group companies in and outside Japan, have acquired ISO 9001 or IATF 16949 certification.

[Social Data Collection](#)

Activities to Increase Customer Trust

Improving Quality of Operations

We have continued to work on the initiative to improve quality of operation, which we started in FY2018, as our company-wide quality compliance program. These include declarations of intent from management, establishing rules and regulations, conducting training, audits and monitoring, and preventative activities. In FY2023, through our efforts to

prevent overburden and ambiguity in operations, ensure thorough communication, and educate staff about our frontline workers reporting system, we reviewed workloads and work rules, and made progress on the understanding and dissemination of quality compliance in our workplaces and the frontline workers of operations at Group companies. In FY2024 we further expanded our activities to include holding executive lectures for successorship, distributing educational videos for all people in management positions, and having members consider the risks of their own involvement. We have seen that everyone from directors and members of management to the frontline workers are increasingly taking ownership of quality compliance thanks to the activities we undertook up until FY2023, as well as the three activities we focused on in FY2024. In FY2025, we will encourage members to transfer this awareness into the ordinary course of business, and work to make our departments even more independent.

Reducing Quality Risks

4 Rules for Quality Activities

The NGK Group promotes restructuring of its quality activities to respond more precisely to increasing and diversifying quality demands from customers in different target markets. We have formulated these quality activity rules particularly to enhance the elimination of quality risks in the market, and are promoting their adoption and improved effectiveness.

Quality confirmation rule

Establish milestones, from development to start of production, and confirm conformance with six quality items when production processes change.

DR* function strengthening rule

Register DR plans with quality risks of medium or high level as important DR subjects with participation of company-wide DR reviewers. The General Manager of the Corporate Quality Management Dept. holds company-wide DRs for cases with a particularly high risk level.

Quality monitoring rule

Monitor and share information company-wide with respect to quality status changes or problems concerning manufacturing or markets. Manufacturing defects and customer complaints are shared company-wide every month through reports to the Corporate Quality Management Dept., and the appropriateness of countermeasures is discussed.

Rule for handling major customer complaints

In the event of a serious customer complaint, including a potential complaint, the situation is promptly reported to the Quality Committee Chair to formulate company-wide countermeasures.

* DR: Design Review

QRE-P Activities

We have been promoting QRE-P activities* throughout the NGK Group since FY2017. Through these activities, we can identify business procedures that reveal the mindset and method for developing products and services in order to eliminate quality risks while improving quality. We have worked to incorporate the QRE-P concept into quality systems in each department, and have focused on providing practical training using development projects as examples.

In FY2024, together with departments we analyzed the business procedures that were causes of problems in the market, as we began doing in FY2023. Sharing points that can be improved has allowed departments to implement initiatives to improve their own systems and aim to more effectively and efficiently eliminate quality risks in development projects. At the same time, we continued to join the research and development departments in considering quality risks in accordance with QRE-P from an early stage in development before commercialization. In addition, we continued to roll out QRE-P activities not just to Group companies inside Japan, but outside Japan as well. As a result, staff understanding of the QRE-P concept is spreading.

In FY2025, we plan to narrow the targets of our business procedure analysis support and focus on these to make them more effective. At the same time, we will promote the further adoption of these concepts by continuing to roll out our QRE-P activities to development departments and Group companies. As a new initiative, we will take a customer perspective and begin focusing on the value of the experiences and inspiration that can be gained through the use of products and services, as opposed to the products and services themselves. As we do so, we will analyze the quality risks this entails as well. Moreover, we will continue our regular QRE-P activities for pursuing safety for products and services.

* QRE-P (Quality Risk Elimination Process): An operational protocol intended to more effectively eliminate quality-related risks at every stage when bringing products to market, from product planning to mass production.

[Pursuing Safety for Products and Services >](#)

Activities to Strengthen DR Functions

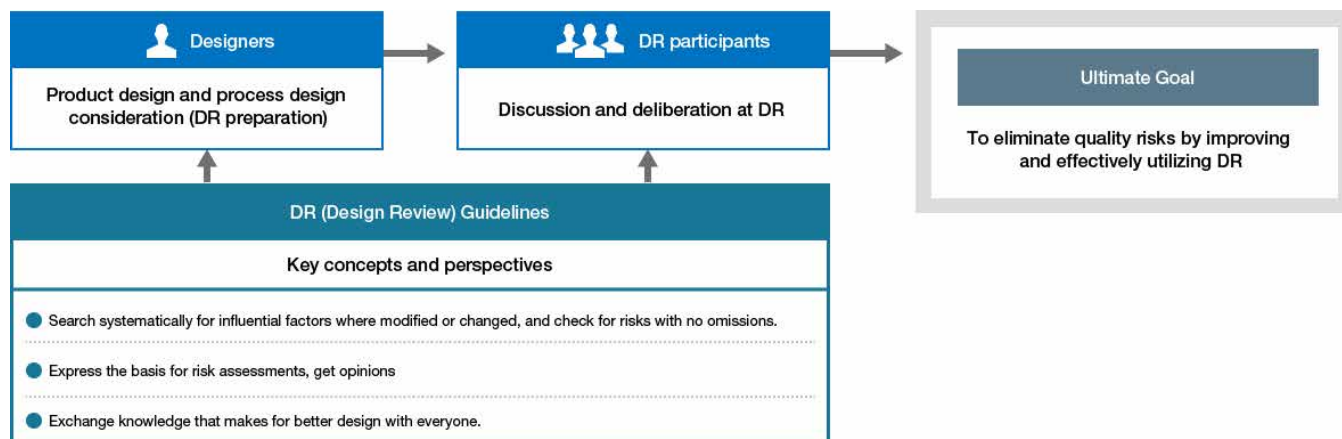
The increasing and diversifying quality demands from customers call for the integration of knowledge among various members throughout the development process, not only from the design department but also from the manufacturing and production engineering departments. For this reason, the NGK Group considers DRs to be the most critical activity. DRs are conducted when development milestones are reached or when production processes change. Critical DRs are conducted by reviewers from throughout the company to support the elimination of quality risks.

The DR Guidelines were created to promote DR discussions and to thoroughly eliminate quality risks. We are constantly enhancing the effectiveness of DRs through efforts to spread these guidelines company-wide, including awareness and review of each DR.

Furthermore, NGK organizes a company-wide DR (quality review meeting) for quality issues that are difficult to solve by one department. At this meeting, relevant engineers and experts from across the company discuss broad aspects of issues related to the reliability and safety of products.

We are also deploying the above-mentioned QRE-P approach to facilitate improvement of design level at the pre-DR period as well as to ensure the more effective utilization of organizational knowledge and experience from DRs.

Flow of DR Activities



System for Considering ESG During Product Design

We design and develop products and services in accordance with the NGK Group Corporate Business Principles and Code of Conduct. As we strive to comply with the requirements of our customers and supply chain, we consider ESG by designing and developing quality management systems in accordance with the concept of QRE-P and the requirements of international standards (ISO 9001, IATF 16949, etc.). Output which takes into account QRE-P concepts like QFD and FMEA is shared and deliberated through DRs and other examinations by those involved at the appropriate stage of development. In addition, we check implementation status through periodic internal audits of our quality management systems, and with audits conducted by our customers, supply chain, and certification authorities.

Quality Improvement Activities

QuiC Activities

Since FY2003, the NGK Group has held QuiC (Quality up innovation Challenge) quality improvement activities in which all employees participate. These activities consist of quality improvement activities by small groups or individuals and suggestions that strive to enhance the quality of products, services, and work; best practices are then shared by the entire NGK Group. Every July, NGK holds a company-wide contest at its headquarters to highlight examples of outstanding improvement activities with the intent of horizontal expansion throughout the company. Plus, since FY2021, we have revised our proposal evaluation methods to prioritize content in addition to quantity. In July of FY2024, we held the Company-wide QuiC Activities Contest. In October we held the NGK-BOX/Surprising Challenges! best practices presentation. The NGK-BOX/Surprising Challenges!, which we started in FY2021, provides a company-wide forum for laterally sharing reform examples and model initiatives in order to boost employee motivation and invigorate the workplace. So we held the event in FY2024 as well. Holding this event both online and in-person promoted communication between participants and helped to further increase motivation.

In FY2025, we will continue these activities, and pursue further quality promotion activities that all employees will take part in.

Suggestion Activity Participation Rate

	FY2021	FY2022	FY2023	FY2024
Manufacturing Department	82%	89%	88%	85%
Non-manufacturing Department	71%	76%	69%	45%
Clerical Department	25%	27%	26%	11%
Number of suggestions	Approx. 16,400	Approx. 15,600	Approx. 14,500	Approx. 10,800
Excellent Proposal Ratio	18.2%	20.7%	24.5%	30.7%



Company-wide QuiC Activities Contest



NGK-BOX/Surprising Challenges! best practices presentation

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External Improvement Case Study Symposiums

We shared examples of quality improvement activities we have engaged in at four conventions outside the company: The QC Circle Case Study Symposium and the Business Improvement Case Study Symposium sponsored by the Central Japan Quality Control Association, the Central Japan Improvement and Proposal Activities Convention sponsored by the Nippon Omni-Management Association, and the Japan Management Association Gathering of Frontline Supervisors. Our hope was that they might be useful in future activities.

Quality-Related Education

Strengthening Quality-Related Education

The NGK Group aims to provide customers with products and services at a quality that exceeds expectations. Hence, we are continually working to improve the quality-related education that is given to all employees to ensure they are equipped with quality-related skills and greater quality-related awareness.

The primary educational activities include e-learning, classes conducted both online and face-to-face on themes such as level-based training for new and promoted employees, education in a wide range of fields from quality fundamentals to practical application, individual training on the themes of work issues and departmental needs, and basic statistical training to facilitate data utilization in collaboration with the Digital Transformation & Innovation Dept. We believe that training on quality management systems (QMS) involved in improving work quality and reducing quality risks, and reliability training depending on business details are important. And we aim to help employees acquire this experience through role playing and group discussions. We also try to support employment of statistical methods utilizing practical data. In FY2024 we strengthened the following three kinds of training: (1) Utilization of inverse learning through a video-based seminar course in statistical quality control aimed at improving the data analysis capabilities of employees, (2) Why-Why analysis training as a method for analyzing the causes of failures, and (3) Training to raise awareness of product safety within NGK. In FY2020, we began support activities for those taking QC tests, and the number of employees taking advantage of them has surpassed 1,500.

Quality-Related Education in FY2024

Training name	Number of participants	Objectives and key characteristics
Individual Training	17 sessions	- Skills development support for statistical analysis skills on the theme of operational challenges - Quality Education which reflects the needs of supporting departments with the trainee's superior
QC Methodology Practice	63 participants	Introduce and practice using the seven QC tools for summarizing data (Q7) and other QC methods necessary for problem solving.

Quality-Related Education in FY2024

Training name	Number of participants	Objectives and key characteristics
SQC (Statistical Quality Control) Methods Video-based Seminar	A total of 305 participants	- Learn statistical quality control methods - All 15 lectures were e-learning - All lectures were available to attend at any time
SQC (Statistical Quality Control) Methods Seminar	A total of 136 participants	- A seminar-based course on statistical quality control methods - Improve skills through inverse learning using a video-based course on SQC methods
Why-Why Analysis	73 participants	- Strengthen analysis of the causes of failure - Improve level of mastery through explanations and group work
Reliability Basics Training	Reliability Basics Training 1: 64 participants	Learn about design reliability, the physics of failure, and methods of analyzing reliability data
	Reliability Basics Training 2: 54 participants	- Understand and learn methods of prevention, QFD, FTA, FMEA, DR, and QRE-P at NGK - Foster ability to discover hidden problems through FTA/FMEA group seminars
Study of Failure and Methodology of Creation	Analysis training session: 88 participants Training course: A total of 16 participants	Improve analytical and developmental skills through direct training analyzing our own examples of failure
QMS Training	ISO/IATF standards interpretation: 852 participants	Understand the intent and requirements of standards
	ISO/IATF Internal Quality Auditor training: 201 participants	Internal quality auditor training and accreditation
	VDA 6.3 Process Auditing Seminar: 38 participants	Understand process auditing requirements for VDA standards
Product Safety Training	103 participants	- Learn the basic concepts for product safety - Foster the ability to notice danger through group seminars

Raising the Level of Autonomous Maintenance Activities

With the aim of achieving a higher standard for maintenance activities and of improving productivity, a number of NGK Group employees in FY2024 took on the challenge of the Autonomous Maintenance Certification Exam (Japan Institute of Plant Maintenance). This qualification is given to those who possess a broad range of necessary knowledge and skills concerning quality management, safety, and machinery maintenance, and are recognized as having the ability to plan and implement autonomous maintenance activities and provide instruction.

The NGK Group will continue encouraging employees to take the Autonomous Maintenance Certification Exam as well as cultivate autonomous maintenance activities and stimulate greater employee motivation.

* Voluntary maintenance activities: Activities which have the personnel who use the equipment perform their own preventative measures to maintain equipment condition and safety

Number of Employees Who Passed the Self-Maintenance Expert Test

Company name	Number of Level 1 examinees	Number of employees who passed Level 1 (pass rate)	Number of Level 2 examinees	Number of employees who passed Level 2 (pass rate)
NGK	29	15 (52%)	44	32 (73%)
NGK CERAMIC DEVICE	18	6 (33%)	74	53 (72%)
NGK ELECTRONICS DEVICES	27	14 (52%)	-	-

Pursuing Safety for Products and Services

Basic Approach

The NGK Group positions the pursuit of quality and product safety as one of our key material issues. We pursue safety for our products and services through quality activities that follow our quality policy based on the NGK Group Corporate Business Principles and Code of Conduct.

[Materiality](#) >

[NGK Group Corporate Business Principles and Code of Conduct](#) >

[Pursuing Quality for Products and Services](#) >

Activity System

NGK's Quality Activity System consists of a Group-wide system led by the Quality Committee Chair (Director and Managing Executive Officer), and activity systems within each business division led by the heads of each business group. We promote activities for pursuing safety of products and services within this Quality Activity System. The Quality Committee Chair also periodically reports on the contents of these activities to the Board of Directors.

To learn more about NGK's Quality Activity System, refer to the [Quality Activity System](#) > section.

Risk Assessment

We mainly carry out the following activities to assess safety risks concerning our products and services.

- We position the safety of products and services as one of our six quality items requiring conformance under our quality assurance rules. The system is designed to implement and verify these rules through QRE-P Activities^{*1}. Moreover, we have established companywide guidelines based on ISO/IEC Guide 51:2014, a basic international standard concerning safety. These serve as the guiding principles for the activities of our business divisions and development divisions.
- We investigate the safety of products and services through a product development DR^{*2} based on the requirements of IATF 16949/ISO 9001 and IEC QC 080000. We also use internal and external audits to assess risk and correct deficiencies in the work process. The Corporate Quality Management Department

participates in the business division DR and Product Quality Assurance Review Meeting for newly developed products to confirm/support the risk evaluations from each department.

- This activity system ensures that in the event of an emergency related to the safety of products and services, or when a particular incident is recognized, the company will be able to take action based on our Basic Rules of Crisis Management.
- We conduct customer satisfaction surveys after products are shipped. Meanwhile, we monitor products in the market or periodically sample products from the market and take necessary corrective measures with respect to product safety.

* 1 QRE-P (Quality Risk Elimination Process): An operational protocol intended to more effectively eliminate quality-related risks at every stage when bringing products to market, from product planning to mass production.

* 2 DR: Design Review

In FY2024, we implemented necessary corrections and enhancements, while encouraging the concepts of our company-wide guidelines to take root through discussions with business divisions. We also reconfirmed that our system is capable of quickly notifying and warning customers when risks are detected after a business division creates or commercializes a product.

Communicating with Customers

In the NGK Group Corporate Business Principles and Code of Conduct, the NGK Group states that we will accurately and promptly disclose information required by society. We will also provide appropriate information about our products and services. We introduce products and disclose information related to product handling through the product information on our website, and provide handling precautions for each specific case. And we are working to strengthen our system for providing information related to the safety of products and services. When developing products, we check the regulations of the destination country or region to ensure safety in compliance with those regulations. Depending on customer request, the Quality Assurance Department in each business group takes the lead in cooperating with surveys of chemical substances contained in our products, as well as disclosing Material Safety Data Sheets (MSDS). In addition, the NGK Group Environmental Policy, Procurement Information, and NGK Group Supplier Code of Conduct stipulate that we will implement initiatives together with our suppliers which include the safety of products and services. Therefore, our product stewardship activities include prioritizing procurement of environmentally friendly materials, parts, products, and equipment, as well as working to ensure proper management of the chemical substances contained within our products.

[Products >](#)

[NGK Group Environmental Policy >](#)

[Procurement Information >](#)

[NGK Group Supplier Code of Conduct !\[\]\(4fe57c3593bf1b21d272ae7ac8dfaf77_img.jpg\)](#)

Employee Training and Education

NGK, and our Group companies in Japan, invest in systematic human resources development across all job areas from the time an employee joins the NGK Group, and at every stage in their advancement. Our company-wide training includes content related to the safety of products and services. Specifically, we provide training on IATF 16949/ISO 9000, as well as study sessions on the safety of products and services with regards to the Product Liability Act. In FY2024, we expanded the education focused on the safety of products and services that we started in FY2023. 103 primarily technical employees attended a total of four training courses. In FY2025, we will continue such education and further promote widespread understanding of these concepts among employees.

Please refer to our [FY2025 Company-wide Talent Development Structure Chart](#) > for more information on company-wide training.

Please refer to [Pursuing Quality for Products and Services](#) > for more information on quality education.

Improving Customer Satisfaction

Basic Approach

One of the focuses of the NGK Group Corporate Business Principles is to contribute to the “Realization of a Sustainable Society” through the products and services that we supply, and towards that end we have resolved to do the following.

Realization of a Sustainable Society



We will create new value through the provision of products and services that contribute to society, protect the world environment, and strive to realize a sustainable society.

- We will provide products and services that contribute to carbon neutrality and the digital community through technological innovation and face challenges to society through our business.
- We will openly respond to new demands or requests for improvement from our customers and society by developing and improving products and services.
- By providing high quality products and services whereby safety is a main consideration and which comply with environmental rules, we can earn the trust of customers and the community.

Disclosure of Company Information and Accountability



We will promote a healthy and transparent management by active disclosure of information and discussions with stakeholders.

- We will accurately and promptly disclose information required by society.
- We will pay close attention to the views of our stakeholders and fulfill our obligation to be accountable. We will build mutual trust with our stakeholders through continuous dialogue.

Customer Satisfaction Survey

In order to reflect customer feedback in our products and services, each of NGK's business groups independently develops and conducts surveys aimed at facilitating greater customer satisfaction.

Results of the Environment Business Group's* Customer Satisfaction Survey

2020	2021	2022	2023	2024
100%	100%	100%	100%	100%

Note: Calculation method

Participants were asked to respond to survey questions by providing a rating from one to ten, with responses of six or higher counted as "Satisfied."

The customers included in this survey account for 51% of total sales.

Human Capital Management

Basic Approach

The NGK Group is reforming our business structure by establishing Five Transformations we must implement to realize what we want to be in 2050 “a company to contribute to carbon neutrality and digital society with our unique ceramic technologies.” Among these Five Transformations, we have placed our response to ESG issues at the core of our management. We recognize that human resources are a form of capital instead of a cost. Based on this recognition, we believe that maximizing the value of our human resources by linking our management strategies and human resource strategies will lead to an improvement in our enterprise value and growth.

We formulated the NGK Group Human Capital Management Policy, as well as the Human Resource Development Policy and Workplace Development Policy which embody it, based on the NGK Group Vision.

It is none other than each one of our employees who will create new value for a sustainable society by implementing the Five Transformations to realize the NGK Group Vision: Road to 2050. We will maximize the abilities of our employees by providing rich and vibrant workplace environments to boost the human resources who will take on the challenge of transforming the NGK Group.

[NGK Group Human Capital Management Policy >](#)

Human Resource Development Policy

The NGK Group develops personnel with the following abilities and mindset required to realize the Five Transformations.

- Personnel who cultivate advanced knowledge, skills, and abilities, and take a proactive approach to problems
- Personnel who demonstrate teamwork and persistently lead to results
- Personnel who autonomously grow and continuously change themselves and the company

We recognize that to rapidly respond to changes in the business environment and maximize the value we provide, we need personnel who possess a high degree of knowledge, skills, and abilities, can work as part of a team, and will take swift action on their own initiative. In order to secure and cultivate these kinds of personnel, we offer a variety of career paths and educational programs for each person to pursue according to their desires, aptitudes, and job type. We are also striving to create a system and culture that allow employees to develop proactively so they can contribute to business in each environment.

[Human Resource Development >](#)

[Fair Treatment and Evaluation >](#)

Workplace Development Policy

The NGK Group develops the following workplace environment where each employee can perform at their full potential.

- **Diverse and Inclusive Workplace**
A workplace where everyone is acknowledged and respected, regardless of external attributes such as race, nationality, gender, and age, as well as internal attributes such as religion, beliefs, experiences, and values.
- **Enriched and Lively Workplace**
A workplace where diverse personnel can feel rewarded, stay healthy both physically and mentally, have colleagues we respect and enjoy working with, and maintain a good work-life balance.
- **Open Workplace that encourages challenges**
A workplace with open communication and psychological safety, that embraces courageous challenges for growth.

In order to achieve our Five Transformations, it is crucial to have personnel who stimulate the new ideas and creativity that lead to innovation, as well as the differing perspectives and approaches of personnel with various backgrounds and experiences. The NGK Group employs a diverse workforce under the basic policy of stable employment and equal opportunity, without respect to race, nationality, sex, sexual orientation, gender identity, age, religion, beliefs, or disability. We not only promote initiatives for diversity and inclusion, such as supporting work-life balance, hiring those with disabilities and conducting educational activities that promote understanding of diversity, but offer flexible working styles by using things like telecommuting. We are focusing our efforts on creating a workplace environment that allows employees to fully exercise the abilities they possess. To create an environment in which employees can work easily and feel satisfaction in their work, we conduct an annual survey on workplace vitality to ascertain the opinions and desires of employees, and identify problems and the need for improvement.

[Diversity and Inclusion >](#)

[Health Management >](#)

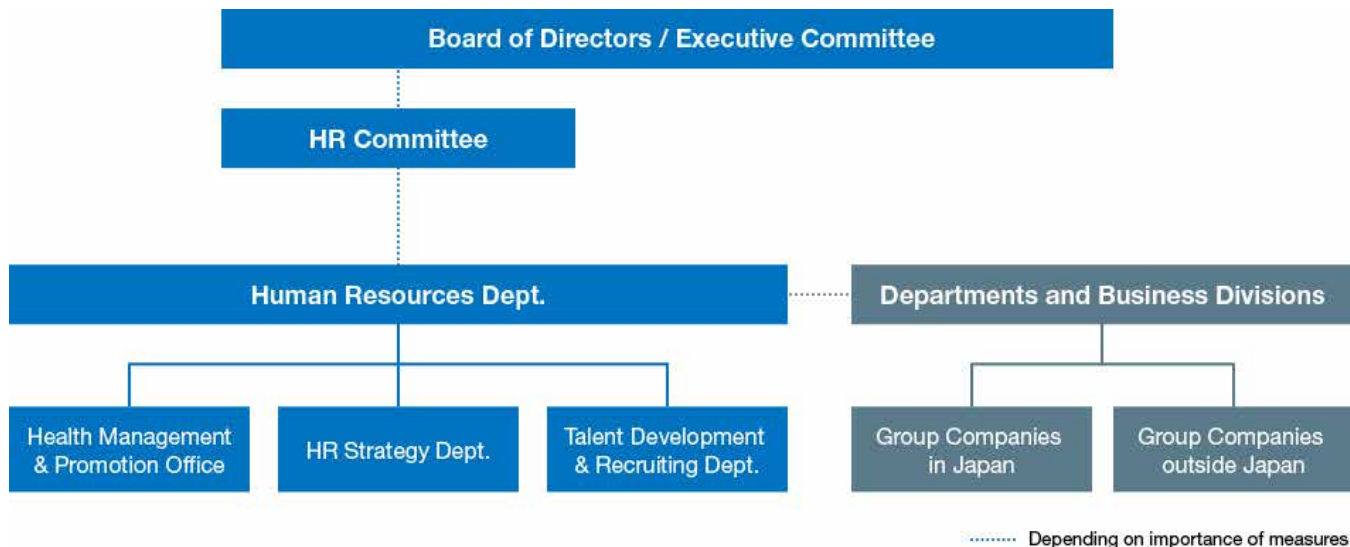
[Communication with Employees >](#)

Promotion Framework

The NGK Group shares the NGK Group Human Capital Management Policy as a group-wide guideline and promotes human capital management over our entire group. The HR Committee deliberates various personnel policies based on the NGK Group Human Capital Management Policy. It then reports to the Board of Directors at least once a year on the matters it has determined to be important among those it has reached a decision on upon its deliberations and results in the fiscal year.

The NGK Group has sites around the world. Accordingly, we believe it is important from the perspective of effectiveness to formulate and operate strategies and policies to realize our Human Capital Management Policy in line with the situation and sense of issues faced in each of our group companies. We will continue to ensure the instillation of our Human Capital Management Policy by carefully communicating with the personnel departments at each of our sites about the policies and activities to suit each of them in the future.

Promotion Framework Chart



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Initiatives to Disseminate Human Capital Management Policy

In FY2024, to ensure dissemination of our Human Capital Management Policy, the president's message to employees at the start of the term introduced the background and intentions behind the policy, as well as an overview of the policy and its initiatives. We explained this policy to NGK employees again during position-based training for new hires, newly promoted employees, etc.

The Human Resources Dept. also visited our 3 Group companies in Europe, 6 in North and Central America, and 5 in Asia to engage in dialogue with the human resource officers of each company about our Human Capital Management Policy. Through these efforts, they gained a shared understanding that the key point was to create an organization and environment that encourage employees to want to continue to grow and flourish, and do so in a manner adapted to the situation of each Group company. They also confirmed that, while the skills and expertise required of each job differ, the basic mindset needed is the same regardless of role or position. In the future, we hope to visit our Group companies in and outside Japan again and create opportunities to share our policies in order to deepen understanding of them through dialog with employees, and to entrench this as part of our corporate culture. We also intend to strengthen internal communication through dissemination events, information distribution, and the like. By spreading understanding of these policies throughout the Group, we will increase employee engagement, improve corporate value, and bring about sustainable growth.

Labor Practices

Basic Approach

The NGK Group strives to create a rich, vibrant and open workplace environment supportive of those taking on challenges where diversity is respected and where various people can play a role. We implement a human resource system which enables every employee to perform at their full potential under fair treatment.

Fair Treatment and Evaluation

Qualification Definitions

In order to ensure that educational background and age are not limiting factors for employees' careers, NGK maintains a merit-based qualification system for job promotion and grade transfer. By clarifying qualification-specific role differences, we are making it easier for employees to be aware of what is required for higher level qualifications and more readily attempt higher level job duties. This system aims to reward the efforts of employees with the will and ambition to move to a higher grade, as well as to facilitate each employee's journey along his or her career path.

NGK Qualification Definitions

Job Grade	Job Grade Definition
Key personnel	Key personnel are expected to demonstrate performance in the achievement of organizational results based on upper-level policies and the promotion of reforms for the sustainable growth of businesses and organizations by leading individuals and groups.
Group S	Group S employees are human resources who manage at the level of sections/teams or advanced specialist human resources. They are expected to improve the productivity of their section/team and to produce results by connecting and leading their section/team with their supervisors and related departments. Alternatively, they are expected to bear responsibility for important issues and operations as specialists in specific fields.
Group M	Group M employees are human resources at the center of practical operations and on-site leaders. They are expected to assist in the smooth promotion of overall team operations and to serve as on-site role models by supporting their supervisors and members with their techniques, skills, knowledge and experience as experts in specialist fields.
Group J	Group J employees are human resources who can think and work by themselves as those in charge of practical operations. They can understand the purposes and flow of overall operations and promote and accomplish the daily operations in general they have been assigned with the cooperation of those around them. They are expected to autonomously improve their techniques, skills, knowledge and abilities to play an active role in the workplace.

Human Resource System for Group S/M/J Employees

NGK's human resource system for Group S/M/J employees is one which enables all employees, from the young to the experienced, to work with enjoyment and fulfillment. As NGK develops its businesses globally and promotes the creation of new products and businesses, it is essential to motivate young and middle-level employees who will take on future key roles and encourage them to demonstrate their full potential. We are aiming to create an environment that makes these possible.

Key Points of the System

Qualifications

- Developing a mechanism whereby all employees can take on the challenge to qualify for a higher job grade
- Clarifying the definition of each qualification

Evaluation

- Shifting to evaluation that better reflects the efforts and accomplishments of each individual

Retirement at Age 65

- Maintaining the same level of salary after age 60

Key Personnel System

Revision of Key Personnel System

In April 2025, NGK revised its personnel system for key personnel (managerial personnel) to promote full utilization of and autonomous action by various human resources. We encourage personnel to innovate and take on challenges, by treating employees according to their job description, without respect to their age or number of years at the company. And we are moving forward with our transition to a business structure based on fields related to carbon neutrality and digital society, as laid out in the NGK Group Vision.

Overview of New Key Personnel System

System	Summary
Grade rating system	— Grades are determined not by past performance, but based on the duties to be assumed. — Grades are multi-faceted and their divisions are made clear so that diverse personnel can play to their strengths.

System	Summary
Types of grades	- Management: Responsible for organizational management and organizational results as officers - Senior professionals: Play a central role in carrying out operations by deploying their expertise and leading groups - Experts: Play a central role in carrying out operations by deploying their extremely high level of expertise
Evaluation system	- Each year's evaluation is reflected in the salary for the following year. - In addition to evaluating their performance to date, we introduced a system to evaluate the conduct required of key personnel.
Internal job application / scouting system	- Established a new in-house scouting system by which employees are directly scouted by other departments, and are given the opportunity to advance in the selection process on their own accord. - Expanded the internal job application system, by which employees are recruited by other departments and advance in the selection process on their own accord, to all key personnel.

Evaluation System

NGK uses the following evaluation systems when determining individual compensation to maintain fairness in treatment, to thoroughly evaluate each individual's efforts and achievements each time, and to allow employees to feel their own growth.

Evaluation System	Content	Ratio of Applicable Employees
Performance evaluations (group S/M/J Employees) Results evaluations (Key personnel)	We evaluate the level of achievement and process of targets set at the beginning of the term as results. We evaluate to what extent employees have tackled work other than the targets they have been set. Conducted twice per year.	100%
Conduct evaluations (Key personnel only)	We evaluate the conduct required of key personnel throughout the year. Conducted once per year.	100%
Role evaluations (group S/M/J employees only)	We evaluate to what extent employees have fulfilled the roles expected of them (qualification definition) with the elements stipulated for each qualification.	100%
Evaluation interviews	Employees have an interview with their supervisors about the setting of targets at the beginning of the term, improvement in the persuasiveness of the evaluation results with feedback at the end of the term, results in the applicable fiscal year, issues for the following fiscal year, and medium- to long-term career plans.	100%

Fair and Equitable Compensation

NGK and the Labor Union have signed an agreement that sets out original in-house minimum wages, which are fixed at a rate above the minimum wages by region and industry stipulated by the Minimum Wage Act. Through this agreement, we strive to improve employees' working conditions and avoid violation of relevant laws.

We also apply a system that provides the same wages for the same qualifications, irrespective of sex.

Difference in Wages Between Male and Female Workers in FY2024

[Social Data Collection](#) 

Communication with Employees

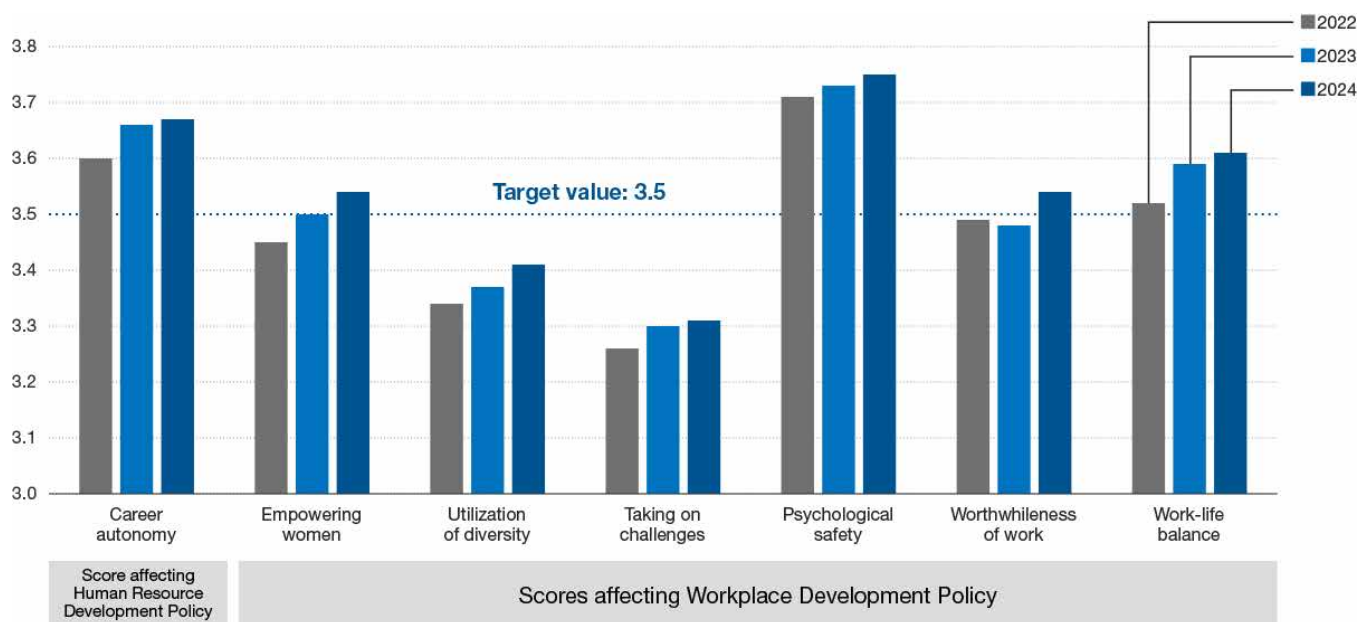
Employee Engagement

Every year, NGK carries out an employee engagement survey. This survey makes visible the vitality level of employees and the organization based on various factors such as job, workplace, and supervisor.

For the survey carried out in FY2024, a total of 5,089 people took part (men: 4,432; women: 657). The results showed an improvement for all items compared to the previous year. In particular, the item of "worthwhileness of work" reached our target score of 3.5 for the first time. We believe this is the result of the various initiatives we carried out, including workshops aimed at invigorating workplaces. In contrast, the items of "taking on challenges" and "diversity" did not reach our targets. We will support employees taking on challenges and further promote the creation of a workplace environment where diverse personnel realize their full potential.

These survey results will be utilized as basic data for use in developing human resource measures focused on creating an organization that is more worker-friendly and offers employees a sense of challenge. The workplace-specific results will also be provided as feedback to supervisors, thereby contributing to improvement in the daily workplace environment.

Scores for Survey on Workplace Vitality



* Scores are shown on a scale of 1 to 5 points, and the closer the score is to 5 points, the higher the employee's level of satisfaction with regards to that question. Our target is 3.5 points or above, and the majority of our employees had a satisfaction level of 4 or above.

Employee turnover Rate

Voluntary Resignation Rate

[Social Data Collection](#)

Labor-Management Initiatives

Freedom of Association

NGK respects workers' rights, including the right to collective bargaining, and strives to build healthy labor-management relations. As of March 31, 2025, 4,106 employees belonged to the Labor Union.

Labor Union Membership Rate

[Social Data Collection](#)

Protecting the Right to Collective Bargaining

NGK and the Labor Union have signed a labor agreement as equal partners. The agreement specifies that both parties shall respect each other's rights and take responsibility for the exercising of their own rights. The two sides regularly hold Labor-Management Advisory Board meetings to exchange information and promote mutual understanding. They also maintain healthy labor-management relations by exchanging opinions on issues such as management policies, financial conditions, and activities of the Labor Union.

Collective bargaining sessions are held in an orderly manner, with both parties striving in good faith to resolve issues peacefully and promptly.

Communication Between Labor and Management

NGK makes an effort to build labor-management relations founded on mutual trust through communication with various consultative bodies, such as the Labor-Management Advisory Board, the Worksite Advisory Board, and the Regular Labor-Management Council.

NGK and the Labor Union hold Labor-Management Advisory Board meetings to talk about business conditions and performance, and Worksite Advisory Board meetings to share issues pertaining to manufacturing, work systems, and workplace environments from each worksite. In addition, labor and management also proactively exchange opinions at Regular Labor-Management Council meetings.

Notification of Transfers due to Business Necessity

NGK stipulates in the labor agreement we have entered into with the NGK Labor Union to determine any transfers due to business necessity upon considering the abilities, health and family circumstances of the employees in question. In addition, we have adopted rules to inform the individuals to be transferred at least three weeks in advance in principle. In particular, we have stipulated in the labor agreement that we will consult with the union in advance when collectively transferring employees or other matters judged to have a major impact on union activities.

Labor-Management Consultations in FY2024

Regular Labor-Management Council meeting:
held twice

Labor-Management Advisory Board meeting:
held twice

Other bargaining and consultations

- Consultation on overtime work and work on days off
- Discussions about labor-management in the workplace

Diversity and Inclusion

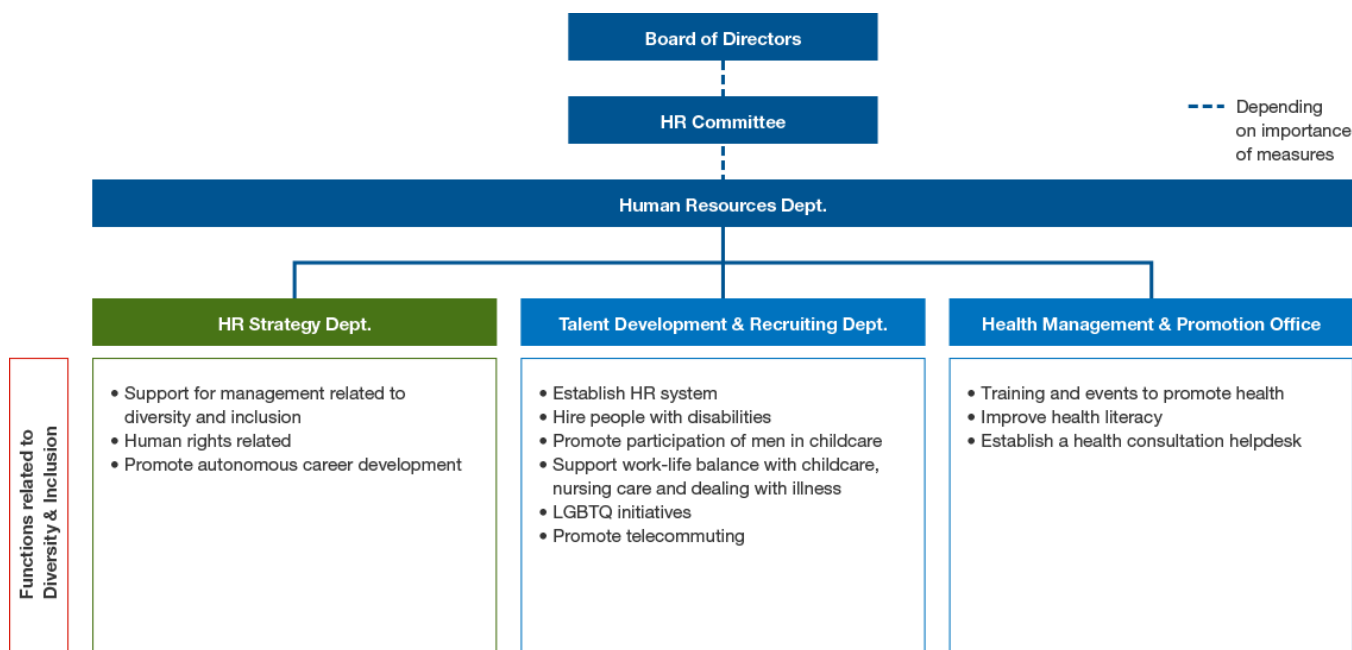
Basic Approach

The policy of the NGK Group is to provide stable and equal employment opportunities to people possessing a diverse range of attributes, regardless of race, national origins, gender, sexual orientation and gender identity, age, religion, belief, existence of disabilities or any other aspect. We promote even greater efforts to achieve diversity through educational activities to support work-life balance, employ people with disabilities, and advance understanding of diversity and inclusion. In addition to this, we also maintain an environment that enables diverse human resources to enjoy a wide range of work styles by utilizing telecommuting, providing other flexible work styles, and offering a wide range of career paths that each employee can pursue individually, according to personal inclination, suitability, and type of work.

Approach to Local Hiring

Of the roughly 12,000 employees at NGK Group sites outside of Japan, more than 98% were hired locally. We recognize that it is the responsibility of companies that operate in each country and region to contribute to the development of the local economy and society, to and actively hire local people at each of our sites.

Framework to Promote Diversity and Inclusion



Systems and Initiatives to Support the Active Participation of Diverse Personnel

NGK is promoting various measures for personnel transfer, career development, follow-up, support for early return from leave, flexible work styles, and the like, to create an environment that makes it possible for employees to take full advantage of their individuality and skills in various aspects and situations.

Human Resource Utilization Systems Aligned with Employee Individuality and Skills

To open the way for employees to take full advantage of their individuality and skills, NGK adopts an internal job application system in which open positions are announced internally and eligible applicants are appointed. There is also an FA (free agent) system that allows employees to register their personal aspirations and preference of jobs within the company.

Starting in FY2025, we have established a new in-house scouting system by which employees are directly scouted by other departments for management roles, and are given the opportunity to advance in the selection process on their own accord.

Internal Job Application System

[Social Data Collection](#) 

System for the Regular Appointment of Fixed-Term Manufacturing Contract Employees

NGK established a system for appointing fixed-term manufacturing contract employees to regular employment, and 13 employees were appointed in FY2024.

Appointment from Fixed-Term Contract Manufacturing Workers to Regular Employees

[Social Data Collection](#) 

Operating Follow-up System to Fit Young Employees in the Workplace

We follow up on younger employees in different ways after they have been placed. We conduct surveys for career-track and production engineering employees about their jobs and work environment during their second year of employment. We then conduct interviews with all production engineering employees, and any career-track employees who so desire, and the head of each department provides feedback to those who want it.

Initiatives for Employees to Chart Their Own Career Path

Concept

Since 2021 NGK has been implementing initiatives under our employee Career Autonomy policy.

Policy

Support autonomous career development within the company

Career Autonomy E-Learning

Since FY2022, we have conducted e-learning aimed at all employees, and more than 4,000 employees have participated thus far. They studied the following topics as the basic knowledge necessary for thinking about their own career independently.

1. Career ownership and careers in an era of 100-year life expectancy
2. How to approach your career (two types/two aspects/three factors)
3. Things that are necessary for enhancing your career (Will/Can/Must)
4. Career plan concept

Career Planning Training for Third-Year Regular-Position Employees

Once employees have been with NGK for three years, we ask them to reflect on their growth over the last few years and think about how they will approach internal staff rotation from their fourth year onward. Our goal has been to support them in creating a concrete action plan towards this end. This has become an opportunity for employees to think about their career going forward through group discussion with more senior employees who have experience with rotation. Once the training is complete, participants also meet with their supervisors to share their career plan.

Career Planning and Leadership Training for Newly Promoted Employees

We provided career planning and leadership training for newly promoted employees. The purpose of this training was to deepen employees' self-understanding and to promote career planning as an opportunity to think about future work styles as they are undergoing a career change such as a promotion. Participants prepare to start a new path as human resources who can fulfill their roles by learning about the expectations in them, the concept of the career necessary for their roles and knowledge in this training. Moreover, we provided this training among those promoted to the supervisor class in the same fiscal year. The aim of this was to allow participants to acquire the necessary practical communication skills to lead their teams.

Career Design Seminar for Employees in their 40's and 50's

We held a Career Design Seminar for Employees in their 40's and 50's targeting key personnel and general employees. We ask participants to reflect on their own past and present in order to maintain motivation and work with energy. Through work and discussion, they confirm their own characteristics, abilities, and values in search of a proactive work style that suits them and will allow them to prepare for future changes in their environment. Participants have told us that they deepened their understanding of their own characteristics and values and that it gave them an opportunity to think about their lifetime career.

Career Consultation Helpdesk

At the helpdesk, certified career consultants provide career formation support and consultation services to employees, while strictly observing confidentiality. In FY2022, we established a helpdesk which also allows employees to consult with external career consultants.

Come-Back System

Since FY2016, NGK has had its Come-Back System to rehire people who had left our company for various reasons (e.g., job change, studying abroad, job transfer of a spouse, etc.) as mid-career employees. As of FY2024, there have been three employees rehired through the Come-Back System.

[Come-Back System \(Japanese\) >](#)

Conducting E-learning to Promote the Active Participation of Women

Women's active participation e-learning was carried out in FY2020 with the aim of promoting proper understanding and cooperation among all employees and not just a targeted segment of participants. Easy-to-understand videos were streamed, which featured messages aimed at female employees, supervisors, and colleagues and which sought to raise awareness about unconscious bias and other topics.

New Initiatives for Achieving Our Action Plan for Promoting Women's Active Workplace Participation (MHLW)

In March 2023 in accordance with the Act on Advancement of Measures to Support Raising Next-Generation Children and the Promotion of Women's Participation and Advancement in the Workplace, NGK submitted a general employer action plan to the Aichi Labor Bureau, which is overseen by the Ministry of Health, Labour and Welfare (MHLW).

Ministry of Health, Labour and Welfare: General Employer Action Plan

Purpose

We will promote the enhancement of the work-life balance starting with the participation of men in childcare. We will create an employment environment where all our employees can demonstrate their abilities to the maximum possible extent. In addition, we have formulated the following action plan with the aim of increasing the number of women in managerial positions by taking initiatives relating to the advancement of women in the workplace.

Period of the Plan

April 1, 2023 to March 31, 2026

Target 1: Take-up rate of childcare leave* by male employees of 100% [Next-generation and Female Advancement]

* This is the take-up rate of long-term childcare leave and leave for childcare purposes

Details of the initiative:

- We will instill within our company the promotion of male childcare by our top management with our declaration to achieve 100% of eligible male employees taking childcare leave (2023).
- We will improve our Intranet to make it even more informative and easier to use. Moreover, we will publish introductions to male employees on childcare leave on the Intranet. That will allow employees to feel more familiar with male childcare leave (2024).
- We will ascertain the actual number of male employees taking childcare leave. We will then consider and implement the measures necessary (from 2025).

Target 2: Reduce total working hours to enhance the work-life balance of all employees [Next-generation]

Details of the initiative:

- We will hold no-overtime days.
- Top management within the company will make family-friendly boss declarations.
- Labor and management will regularly exchange opinions about overtime hours and the paid leave take-up rate.
- We will strive to encourage employees to take leave and to change employee's awareness toward leave to raise the number of employees taking paid leave. We will achieve these aims by creating a workplace environment where it is easy to take leave and by raising awareness among both those in managerial positions and employees.
- We will set upper limits for overtime hours by department. If we anticipate those limits will be exceeded, labor and management will hold talks to analyze the causes and to consider measures to reduce long working hours.

Target 3: Raise the ratio of women in managerial positions to 5% [Female Advancement]

Details of the initiative:

- We will increase the ratio of women among new graduate recruits to 40% for sales and management-related and 20% for engineering-related (from 2023).
- We will place half of new graduate female employees to business groups because the placement of female employees is biased toward headquarters and research departments (from 2023).
- We will provide seminars after employees return to work from childcare leave (ongoing program).
- We will introduce training to develop women who have converted to career-track positions into senior staff level (2024).

Number of Key Personnel (Managers)

NGK is aiming to increase the rate of female managers from 4% in FY2024 to about 10% by 2030 and to more than 20% by 2050.

Number of female key personnel (managers) as of March 31, 2025

[Social Data Collection](#) 

| Supporting the Active Participation of Diverse Personnel**LGBTQ Initiatives**

In order to promote understanding of sexual minorities such as LGBTQ for the sake of fostering greater diversity in workplace participation, we provide education and hold awareness raising activities such as video-based training for employees. In FY2021, we began working to allow same-sex partners recognized by External Partner Organizations to utilize our internal service and benefit program.

Employment of People with Disabilities

NGK undertakes a variety of initiatives aimed at employing people with disabilities, such as accepting students from special-needs schools as trainees, and a framework for employing people with disabilities. NGK hired one mid-career employee in FY2024. In addition, nine new employees have been hired by NGK YU-SERVICE CO., LTD., which is our special subsidiary for promoting the employment of those with disabilities. These hiring activities led to a hiring rate of 2.83% as of the end of FY2024.

NGK YU-SERVICE CO., LTD. was awarded the grand prize in the 2024 Nagoya City Award for Excellence in Employment of Persons with Disabilities.

The NGK Group recruits people with disabilities according to their skills and the characteristics of each business to work at our special subsidiary and other companies in and outside Japan. Such employees receive reasonable accommodations and serve actively as members of the Group. Going forward we will expand our efforts to employ people with disabilities.

Systems and Initiatives to Support Diverse Working Styles

Promoting Work-Life Balance

NGK strives to promote a work-life balance and reduce long working hours.

We keep track of social changes, such as changing attitudes toward work as well as legislative amendments, and strive to respond to these changes flexibly and properly by improving systems and revising operations.

8 rules for promoting work-life balance

1. No more than 70 hours of overtime work per month
2. Overtime work exceeding 45 hours per month limited to six months each year
3. Employees must take a minimum of 10 days of annual paid leave a year
4. No more than 300 hours of overtime work per six months
5. In principle, there will be no overtime work on refresh days (Wednesdays and Fridays)
If overtime is necessary, a prior permit application must be submitted
6. In principle, work must not be performed for more than seven days straight
If work in excess of seven days straight is necessary, a prior permit application must be submitted
7. Written applications must be submitted in advance when requesting employees to work on holidays or late at night
8. There must be an interval period of at least 10 hours between shifts of late-night work

Initiatives to Shorten Total Hours Worked

[Health Management: Initiatives to Shorten Total Hours Worked >](#)

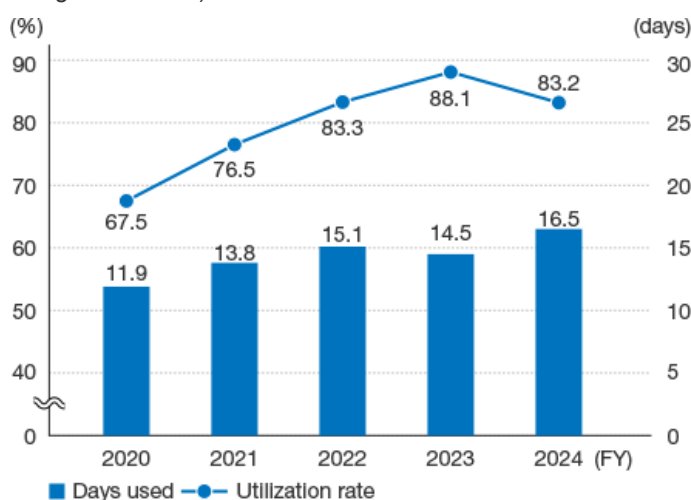
Initiatives to Promote Use of Paid Leave

In FY2024, we revised our system to make it easier for employees who have been working for fewer years to take paid leave. We also increased the number of paid leave days to 20 days* for both new and experienced employees. We set the minimum number of paid leave days to be taken by all employees at 10, and worked to increase the number of paid leave days taken.

Hereafter, we will continually implement initiatives to promote a good work-life balance.

* Adjusted based on the month an employee entered the company

Paid Leave: Number of Days Used, Utilization Rate (NGK Union members; excluding outside employees temporarily assigned to NGK)



Establishing a Diverse Work-Style Support Website on Our Company Intranet

We have a site on diverse work styles on the company intranet to widely announce our measures to support a work-life balance. This site's user-friendly features include, for example, an online handbook on childcare and nursing care.

Initiatives to Support Work-Life Balance

NGK offers flexible systems to help employees maintain a balance between work and family life. To support childcare and nursing care, we are enhancing financial support by providing a babysitter expense subsidy system, and a lump-sum payment system for nursing care support. And in consideration of the working environment, we offer support through shortened working hours, flex time, and remote work. Further, we continue to enhance the soft infrastructure NGK has in place to support these employees. For employees seeking to balance their career with childcare, we offer pre-maternity leave interviews, pre-reinstatement interviews during the long-term childcare leave period, career consultations, and other consultation resources. For employees undertaking nursing care, we offer nursing care-related information sessions and distribute nursing care handbooks, as well as facilitate consultation services which make use of outside specialist organizations.

Enhancement of Work-Life Balance Systems

NGK has been expanding our work-life balance systems while taking the needs of employees into consideration. Thanks to initiatives such as these, over 90% of male employees* took childcare leave in FY2024.

* Total percentage of male workers whose spouses gave birth in the fiscal year preceding disclosure, who took long-term childcare leave or used leave for childcare purposes that year. (fiscal year: April 1, 2024 to March 31, 2025)

2010	Significant revisions to personnel system
2017	NGK established a new early reinstatement lump-sum system for employees who return to work early from childcare leave following maternity leave (before the child turns 11 months old). We also started a non-registered daycare subsidy system to partially cover the cost of non-registered daycare centers, and began initiatives to provide career support to employees after they return to

2017	work. And, in addition to childcare and nursing care, we have established a system that allows for flexible work styles so that employees with illnesses which require repeated or continuous treatment can balance treatment and work without having to resign.
2018	NGK encouraged employees to exercise their abilities and achieve work-life balance by providing flexible work styles and environments, unconstrained by time or place. We also promoted the development of a work environment that boosts operational efficiency and productivity. In concrete terms, this meant considering and expanding telecommuting options.
2019	NGK introduced postpartum support leave for male employees. Employees can use accumulated leave (expired annual paid leave from previous years) instead of paid leave, and it can be taken in day-by-day increments which do not need to be consecutive. This has led to more male employees taking childcare leave than before the system was introduced.
2020	NGK officially introduced a telecommuting system to increase productivity and help balance work with childcare.
2022	NGK increased our special paid leave, for when a spouse gives birth, from two days to five days. We also included an explanation of the system for both those who will give birth and those who have a spouse who is scheduled to give birth in the Handbook to Support the Balance of Work and Childcare and on our internal website. And we established a point of contact for consultations relating to work-life balance to reduce anxieties among employees. Moreover, we have made it obligatory to hold an interview using the Request Sheet for Scheduled Childcare Leave. We held a talk for managers on the theme of Promoting the Take-up of Childcare Leave by Male Employees in NGK (FY2021). In addition, we informed all employees about the key points on the revisions to the Child Care and Family Care Leave Act and the changes to the operation of the system. As a countermeasure against the "first grade wall" [whereby mothers often quit their jobs when their children enter elementary school] we introduced a five-hour working day. This is even shorter than our previous reduced working hours. We increased the period of time in which parents can utilize reduced working hours, from until the child enters the fourth grade, to until the child graduates from junior high school.
2023	NGK created a guidebook for employees who are pregnant or have given birth, employees who have stated their spouse is pregnant or has given birth, and their supervisors. We also posted examples of best practices within NGK taken from our Questionnaire on the Division of Duties When a Subordinate Takes Childcare Leave to our website.
2024	NGK conducted online training for employees returning from childcare leave and their supervisors. Since the number of male employees taking childcare leave has increased, we split the Handbook to Support the Balance of Work and Childcare into versions targeting men and women, made the complex system of childcare leave for male employees easier to understand, and changed it to support system utilization. We expanded the period and number of days of accumulated leave that can be used for childcare*, and also expanded the scope of Sick/Injured Childcare Leave to greater than that required by law (up until March 31st of the child's sixth grade year of elementary school)*. We eliminated the limit on the number of times that employees can utilize partial telecommuting, which combines office and remote work. For nursing care, we set up an internal website where we post related information so that employees can get timely access to information*.

* These systems went into operation in April 2025.

Message from
the President

Sustainability
Management

Materiality

Environmental

Social

Governance

Basic Sustainability
Information

System to Support Employees to Balance Work and Childcare at Each Stage

		Interview (employee, supervisor, and HR)		Interview (employee, supervisor, and HR)	
		During pregnancy	Before/after birth	During childcare leave	Balancing work and care
Work systems		Measures on health management Overtime work exemption Late-night working hours exemption Flex time system	Time off before/after birth Special paid leave when a spouse gives birth Childcare leave (using accumulated vacation days)	Paternity childcare leave Childcare leave Continuing the childcare leave Post-maternity support leave (for male employees)	Shortened working hours Flex time system Unscheduled work exemption Overtime work exemption Late-night working hours exemption Half-day paid leave Caring for a family member (using accumulated vacation days) Caring for a child Lump-sum payment for early return
Other systems			Childcare Concierge (for those living in the Tokyo metropolitan area)		Priority use of commuter parking lots (Nagoya area) Non-registered daycare expense subsidy
Financial support systems	Family Fund		Maternity gift		Babysitter expense subsidy Elementary school enrollment gift
	Health Insurance		Lump-sum birth allowance		
	Employment Insurance			Childcare leave benefits	
Salary			Paid 2/3 standard daily wages during time off before and after birth	Unpaid	Lump-sum payment made six months after returning to work (330,000 yen) *Applied to salary for month following the month elapsed
Bonus			Paid a bonus calculated for a 2/3 attendance rate during time off before and after birth	Unpaid	

Systems to Support Early Return from Parental Leave

NGK has systems to encourage and support employees who have taken maternity and childcare leave so that they can return to their careers at an early stage.

These systems are aimed at developing workplaces that support female employees in particular, with the expectation of promoting their active participation.

Systems to Support Early Return from Parental Leave

- Lump-sum payment for early return
- Non-registered daycare center expense subsidy
- Childcare Concierge
- Five-hour shifts
- Paid leave provided to employees who return early from parental leave
- Measures to promote the use of telecommuting

Overview of Childcare Support Measures and Users

Systems beyond Legal Requirements

System Name	Details of the System
Childcare leave	Can be utilized until the day on which the employee's child reaches one year old in principle. When there are certain circumstances, such as not being able to get into a daycare center, leave is available until the child turns two years old. * It is possible to use accumulated leave (expired paid leave from previous years).
Shortened working hours	Six or seven hours per day for employees until the fiscal year when their children start fourth grade in elementary school.

Social Data Collection

NGK Unique System

System Name	Details of the System
Return to work after childbirth lump-sum payment	Lump-sum payment is paid six months after returning to work from maternity leave and childcare leave
System for annual paid leave in hourly increments (for employees working shortened hours)	Paid leave (five days a year) can be taken in hourly increments by employees working shortened hours
Postpartum support leave	It is possible to use accumulated leave (expired paid leave from previous years) for leave for childcare purposes
Pre-maternity leave interview	Interview is attended by employee, HR, and supervisor to provide the employee with peace of mind while on maternity leave and ensures both sides have proper understanding of procedures related to systems supporting childcare and work (it is also possible for the spouse to attend in the case of marriage between NGK employees)
Interview before returning to work	Supports smooth transition back to work through consultation on work details and work style
Leave for accompanying a spouse on overseas assignment	Enables employees to take a leave of up to five years while accompanying a spouse (including a non-NGK employee) posted overseas for work, and allows employees to continue their career path, which was difficult to do prior to the establishment of this system
Maternity gift	50,000 yen gift when a child is born

NGK Unique System

System Name	Details of the System
Babysitter expense subsidy	Provides up to 100,000 yen per year for employees who must pay for a babysitter or daycare due to working hours
Childcare Concierge (available to those who live in the Tokyo metropolitan area)	Support to facilitate the process of putting a child in daycare and returning to work
Priority parking spaces to support childcare	Priority parking spaces available at a commuter parking lot
Lump-sum payment for early return	We pay 100,000 yen as a lump-sum payment when an employee returns to work by the day on which their child reaches 11 months old after maternity and childcare leave

[Social Data Collection](#) 

Helping Male Employees Have Greater Involvement in Childcare

We are working to encourage our male employees to take childcare leave. Our aim is to create an environment where husbands and wives raise their children together while respecting each other's careers and where it is possible for employees to balance work and life in the workplace regardless of their gender or whether or not they have children. We have revised the Handbook to Support the Balance of Work and Childcare which previously mainly described the systems for female employees. We now explain in more easy-to-understand terms the systems for male employees. Moreover, we have been holding pre-maternity leave interviews not just with female employees but also their spouses in the case of marriage between employees in our company since FY2022. Holding interviews between supervisors and male employees who have a spouse about to give birth lowers a consciousness to divide roles by gender in the home and at work. It encourages employees to balance their lives and work utilizing the available systems. We are promoting the creation of an environment where everyone can easily use these systems by asking supervisors to also promote the coordination of work so that employees can actually take leave and to foment understanding among those around them. Furthermore, we established the Consultation Helpdesk for Anything Related to the Work-Life Balance in FY2022. Those in charge of the helpdesk in the HR Department carefully respond to inquiries about the information and systems necessary to balance both work and childcare. In FY2024, in addition to inquiries related to the content of the systems we have available, there were inquiries about the childcare leave period from employees themselves and questions about smooth workplace management from supervisors with subordinates planning to take childcare leave.

Seminars for Employees Returning from Childcare Leave

Training was provided for female employees returning after the end of their designated childcare leave period, as well as for their supervisors, their spouses (when their spouse also works for NGK) and their spouses' supervisors. During this training, spouses were encouraged to take ownership of childcare so that the responsibility for housework and childcare is not disproportionately borne by women. Participants were also offered advice on how to orient their focus and coordinate their schedule in balancing work and family responsibilities, as well as how to go about developing a medium-to-long-term career plan after returning to work. Despite being from different departments, all of the participants were alike in that they are balancing work and raising children, and through their interactions with one another, they were able to share their stories, their struggles, and their advice.

Enhancement of Nursing Care Support System

In line with revisions made in January 2017 to the Child Care and Family Care Leave Act, we made revisions to our own system, such as enabling employees to divide their one-year nursing care leave into three blocks.

In April 2022, we relaxed the requirements for employees with a fixed term employment contract to receive this support, so that even employees with less than a year of continuous service can claim nursing care leave. In this way, we are working to enhance our nursing care support system.

Moreover, since April 2025, we have put together an interview flow for employees dealing with nursing care that we use to confirm circumstances and explain individual systems so that various systems can be appropriately utilized.

Systems to Support Nursing Care

Working hours	Time off	Financial support
1. Shortened working hours 2. Working three days a week 3. Flex time system (for employees at departments to which the regular flex time system does not apply) 4. Limitation on overtime work 5. Unscheduled work exemption 6. Late-night working hours exemption	7. Caring for a family member using accumulated vacation days 8. Unpaid days off to provide care	10. Care leave benefits 11. Care leave support fund 12. Lump-sum care allowance
	Leave of absence	
	9. Care leave	

External Recognition

Certified as an L-boshi Company for Excellence in Promoting Women's Active Participation

In March 2017, NGK was certified as an L-boshi company by the Minister of Health, Labour and Welfare (MHLW). This certification is granted to companies that have done excellent jobs in accordance with the Act on Promotion of Women's Participation and Advancement in the Workplace.

Each applicant for the certification is evaluated on five criteria: recruitment, employment continuity, working hours, percentage of female managers, and diverse career paths. In September 2019, NGK satisfied all five criteria and received certification for level three, the highest certification level.



Ministry of Health, Labour and
Welfare

L-boshi certification of corporate
excellence in the promotion of
women's active participation

Certification level 3

Acquired Platinum Kurumin Certification as a Company Supporting Childcare

In 2012, NGK was certified as a Childcare Support Company based on the Act on Advancement of Measures to Support Raising Next-Generation Children. In 2023, we acquired Platinum Kurumin certification for being a superior Childcare Support Company that is carrying out initiatives at a high level.



Ministry of Health, Labour and
Welfare

Next-generation support certification
logo

Platinum Kurumin

Selected by METI and the Tokyo Stock Exchange as Next Nadeshiko: Companies Supporting Dual-career and Co-parenting

In FY2024, for the second time, NGK was selected by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange as one of the Next Nadeshiko: Companies Supporting Dual-career and Co-parenting which was newly established in FY2023. Companies are selected for being particularly outstanding based on their efforts to support both men and women in striking a balance between empowerment in the workplace and child rearing (i.e. dual-career and co-parenting).

Since NGK expanded our work-life balance support systems in step with the revision of the Child Care and Family Care Leave Act in 2009, we have continued to promote the creation of an environment in which everyone can work comfortably and improve their work-life balance. This includes enabling women to remain employed and actively participate in the workplace, and encouraging male participation in childcare. The participation of men in childcare is directly linked to promoting the active participation of women in the workforce. NGK recognizes that this is essential for creating a workplace that respects the diversity we aim for—where a variety of people can play an active role, and where everyone is recognized and respected. So we are working to support this. Going forward, we will continue to create an employment environment in which all employees can fully demonstrate their abilities.



Human Resource Development

Basic Approach

We have positioned “Quality of People: Embrace challenges and teamwork” as the top value in Our Values and “Enriching human life by adding new value to society” as our Mission in the NGK Group Philosophy. In addition to providing educational programs, we also work with superiors and create a workplace environment where each employee can take the initiative in their own growth. The goal of this is to enable employees to contribute to the business in the environment in which they work.

Skills Development for Employees

In our policy, the NGK Group has set the goal of cultivating people with the following kinds of abilities and mindsets in order to implement the five transformations described in our Group Vision. To this end, relevant departments are working in cooperation to strengthen this initiative.

1. Cultivate advanced knowledge, skills, abilities or their combination, and proactively approach problems
2. Demonstrate teamwork and persistently lead to results
3. Autonomously grow and continuously change oneself and the company



Message from the President

Sustainability Management

Materiality

Environmental

Social

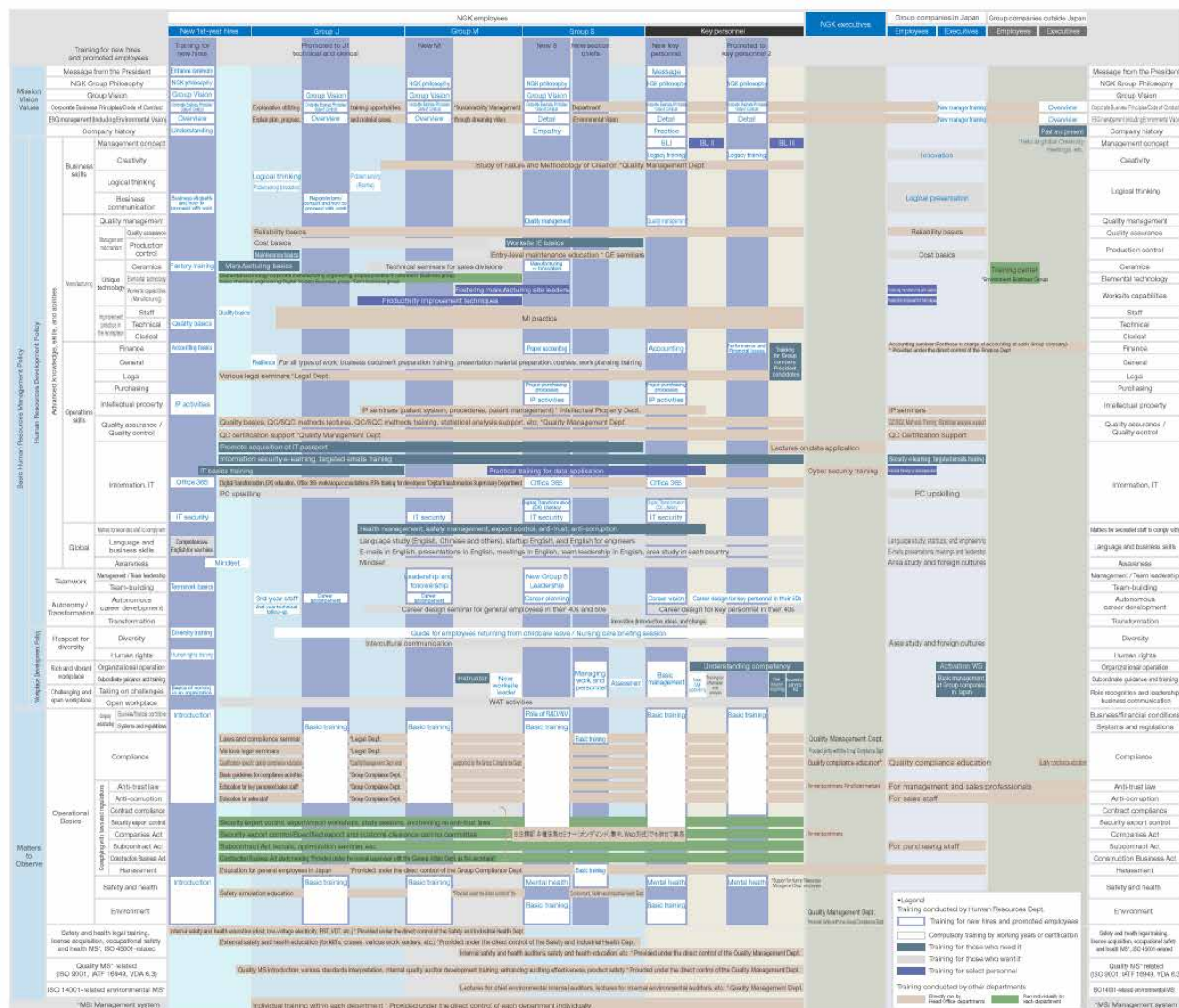
Governance

Basic Sustainability Information

FY2025 Company-Wide Personnel Development Framework Chart

NGK conducts systematic personnel development for all job types in all Group companies in Japan, both when an employee enters the company and at milestones in their career, such as promotion to a new role.

In recent years, as we strive to promote autonomous career development, we have increased selective training for those who volunteer in addition to the training mentioned above.



FY2025 Company-Wide Personnel Development Framework Chart

Key Personnel Competencies

In order to make a greater call to action for things which are needed to achieve the NGK Group Vision, such as taking on the challenge of innovating and utilizing diversity, we have defined “key personnel competencies (behavioral traits)” based on the NGK Group Human Capital Management Policy.

These key personnel competencies are utilized in our action assessments and 360-degree survey.

Training Programs by Objective

Cultivate advanced knowledge, skills, abilities or their combination, and proactively approach to problems

We carry out education and training designed to equip employees with the mindset, expertise, and skills they need to carry out their jobs. To ensure that the skills employees acquire are applicable to the work that they perform, we provide coaching in cooperation with the participants’ supervisors and training programs for handling challenges directly relevant to their own departments. This gives employees practical skills instead of just knowledge, and allows them to acquire the basic capacity to proactively approach problems.

Demonstrate teamwork and persistently lead to results

We make sure NGK employees have a deep understanding of the NGK Group Philosophy, Vision, and Corporate Business Principles. This not only empowers them to achieve their business targets, but also to consider for themselves the significance of their work and basis for making judgments, and to incorporate it into their own actions with a sense of consent. Smooth communication and cooperative relationships within the workplace are essential for fostering a sense of unity within NGK and allowing each employee to feel satisfaction with their work. This is why we conduct communication training when employees join NGK or are promoted.

We have also redefined the expected roles of management grade personnel by revising our Key Personnel System. We have reduced player work as much as possible, and made it clear that these personnel are responsible for the management and performance of the organization. Based on our redefined expected roles, we are working to improve and enhance an education framework which further strengthens the capabilities of management. At present, we are conducting training in accordance with the new system for senior managers on down, to ensure the penetration and establishment of our new key personnel system. In doing so, we foster the ability to lead teams toward demonstrating teamwork from various perspectives.

Autonomously grow and continuously change oneself and the company

We aim for the NGK to grow further by having each employee think and act on their own, take on challenges, and play an active role. To this end, we provide training that supports employee motivation and career development. The environment in which we work today is changing drastically. So, we implement training that helps employees to understand their own values, characteristics, and skills, to consider what they believe their own role should be, and encourages them to take on new challenges, take up new tasks, and work positively toward growth. This includes training and seminars addressing career design for those being promoted, as well as those in their 40s or 50s. In addition to this mandatory training, we are also expanding our online education and career counseling.

[Initiatives for Employees to Chart Their Own Career Path >](#)

Reskilling and Recurrent Training

To achieve the NGK Group Vision, we increasingly need skills (including digital skills) that allow us to play an active part in growth fields such as Carbon Neutrality (CN) and Digital Society (DS). As the required skills become more advanced and personalized, we need to provide opportunities to acquire them in a timely manner. We have introduced e-learning courses containing over 10,000 lessons in total, with the aim of helping employees to improve themselves. We also provide licenses to employees who want to learn on their own. To date, more than 700 employees have used e-learning courses for reskilling.

In FY2024, we also introduced and began to operate a learning management system (LMS). We carry out a diverse array of educational activities, including mandatory training, voluntary training, learning materials, and e-learning. By integrating these into an LMS, we can achieve shared education for NGK Group employees, and we are aiming to construct an educational infrastructure that promotes further autonomous learning.

Compliance Requirements in Job Performance

We provide employees with training that communicates to them the responsibilities, which NGK bears as a corporate citizen, as well as what this requires of them as employees of NGK. This training seeks to instill a strong sense of ethics and a commitment to doing what is right.

The fundamentals of NGK business—safety, quality, environment, and CSR—are inculcated from the time an employee joins NGK to every time they receive a promotion so that knowledge ends up being reliably translated into action.

Manufacturing Training

We pursue training aimed at conveying the central importance of safety, the environment, quality, timely delivery, and cost in manufacturing while passing on the traditions and spirit of NGK manufacturing. This training also aims to grow employees into individuals who can support the creation of new value.

Towards this end, we provide training in unique technologies that will deepen employees' understanding of NGK products and technologies, as well as provide training in administrative and improvement techniques that will equip employees with the mindset and means to improve their workplaces.

Of our training on NGK's unique technologies, the training for our ceramic technologies follows a program tied to the actual manufacturing process. It involves teaching participants about ceramic technologies and manufacturing in general at NGK so that they will develop a broad perspective, which they can apply in their work.

For manufacturing sites, we cultivate human resources capable of making managerial contributions as manufacturing worksite leaders and give supervisor-level Production Dept. employees a chance to learn the skills needed to improve workplace culture and productivity.

Technical training on management and improvement cultivates human resources who autonomously pursue improvement through basic education about QC, statistics, reliability, cost price, and maintenance.

Developing Digitally Proficient Human Resources

Based on the NGK Group Digital Vision, we will educate all employees including those at the management grade, in digital transformation (DX), and will develop human resources who are skilled in the use of data (1,000 people by 2030) and human resources to bridge the gap to DX. We provide training by grade level, according to experience and the role served. In the business units, training is segmented into levels such as "Leaders" to drive the pursuit of DX, "Supporters" who assist the leaders, and "Beginners" who learn how to view and process data.

Examples of development measures

- In the “Leaders” development program, employees leave the department they are affiliated with and participate in an internal internship in a specialist division for one year to concentrate on learning data analysis and digital technology.
- New employees learn IT skills through e-learning during the first year after they join NGK.

[NGK Group Digital Vision](#) >

Innovation Training

The aim of innovation training is to backcast from the SDGs and social challenges in an environment that is changing drastically, to discover what points to consider with new businesses and the creative thinking that spawns innovation. In the program for young employees with leadership potential, participants learn methods for working with employees from other companies who have different experiences and value, and overcome these barriers to create and achieve goals together.

It also aims to foster flexible thinking skills and outside-the-box thinking that avoids being trapped by existing ways of thought. Through workshops, participants learn methods and ideas that serve to broaden their minds. We are also linking themes which arise during innovation training to our in-house proposal system to ensure that they can actually be developed into new businesses.

Position-Based Training for Corporate Philosophy Education

We conduct training and workshops for all employees at milestones in their career such as hiring and promotion. This is to ensure that everyone working in the NGK Group understands and agrees with the NGK Group Philosophy, and can incorporate it into their various actions and decisions. In FY2024, 530 employees attended courses: from new college graduates, to mid-career hires, and people who receive a promotion or have been recruited from fixed-term manufacturing contract employees to full-time employees.

Company History Training

This training program looks at the history of NGK in order to reexamine the origins of the corporate activities built up by our predecessors, to reinforce our shared values, and then to prompt participants to think about how this impacts the way they go about their jobs.

The program for Group S (section chiefs) uses videos to encourage participants to deeply consider what makes up the essence of NGK, with a focus on themes such as quality and globalization.

English language videos are being developed, and programs geared towards Group companies outside Japan are being introduced.

English Training for New Employees

Since FY2011, we have been providing global training courses for all new career-track employees with the goal of rapidly cultivating globally capable human resources.

These courses first train participants in developing global mindset and English ability, which aim to help them form a

concrete image of what it means to work globally and help them acquire the communication methods and intercultural understanding necessary in global setting. Then, we conduct English language training for those who request it which, in addition to English ability, helps participants cultivate practical business skills like giving presentations in classes whose composition facilitates effective learning at each level.

Maximum time spent studying English per new career-track hire (FY2024 results)

88 hours per year

* Of the 123 new career-track employees, 114 spent the maximum amount of time studying

Practical Overseas Training / Global Seminars

NGK conducts practical training over a period of six months at Group companies outside Japan with the aim of developing globally competent personnel. The training focuses on developing practical business and communication skills in a cross-cultural environment targeting young employees who are future candidates for overseas postings. In addition, we also conduct a wide variety of global training aimed at employees engaged in overseas work, including future candidates for overseas postings. This training covers themes such as language acquisition training, studies on individual areas, and acquisition of global standard communication and management skills based on intercultural understandings.

FY2024 Training Outcomes

Training Participant Summary (total number of people)

Average Annual Hours Spent for Training per Full-Time Employee

Average Annual Cost of Training per Full-Time Employee

[Social Data Collection](#) 

Support for Obtaining Qualifications and Degrees

We have adopted a system for supporting the acquisition of qualifications and academic degrees in order to encourage the ambition of employees to develop new capabilities and pursue autonomous learning for self-development. We actively support personnel in striving to obtain new skills, such as qualifications related to their current work, qualifications needed to reach the next step in their careers, and qualifications that lead to developing capabilities in areas they are interested in.

This applies to more than 500 various qualifications for occupations such as lawyers, certified public accountants, patent attorneys, architects, as well as qualifications related to the environment, health and safety, quality control, technology, various specialties, languages, and IT. It also includes doctoral degrees related to an employee's work as well as master's in business administration (MBA) degrees. Not only do we subsidize examination fees and transportation costs, but we offer lump-sum payments of up to 100,000 yen for qualifications that are particularly difficult and useful, and provide assistance with the costs of maintaining the qualifications. For high-level qualifications and academic degrees, we subsidize half of the cost of tuition (up to 2 million yen).

Health Management

Basic Approach

The NGK Group strives to promote employees' health through the NGK Group Health Declaration: Developing dynamic, people-friendly work environments and a health-conscious corporate culture.

Health Declaration of the NGK Group

At NGK, we consider employee health and safety to be of fundamental importance to the company's operation and are, therefore, proactive about developing dynamic, people-friendly work environments and a health-conscious corporate culture, which contribute to better health for each and every employee.

- Provide a workspace that is both people-friendly and work-friendly
- Cultivate a health-conscious corporate culture for executives, employees, and their families
- Promote early detection and early intervention for health concerns
- Offer support for mental health and wellbeing

NGK Insulators, Ltd.

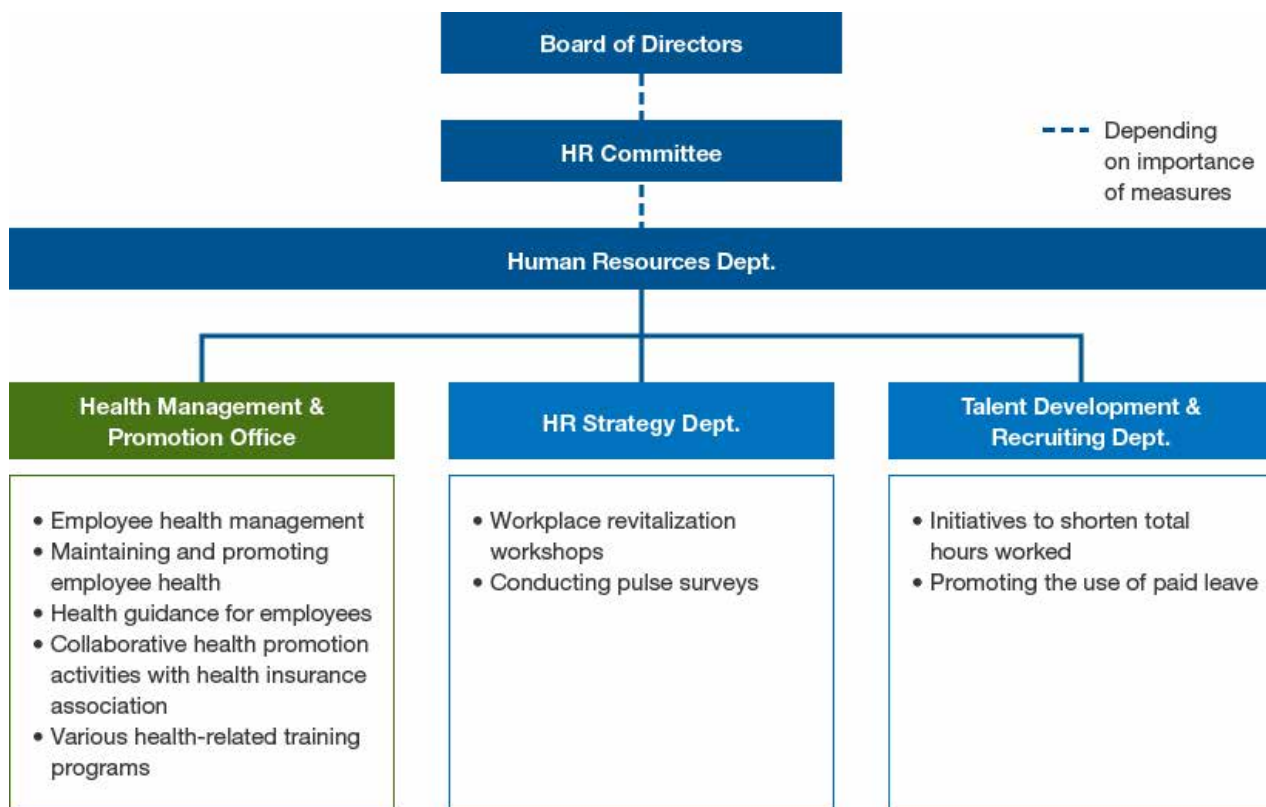
President

Shigeru Kobayashi

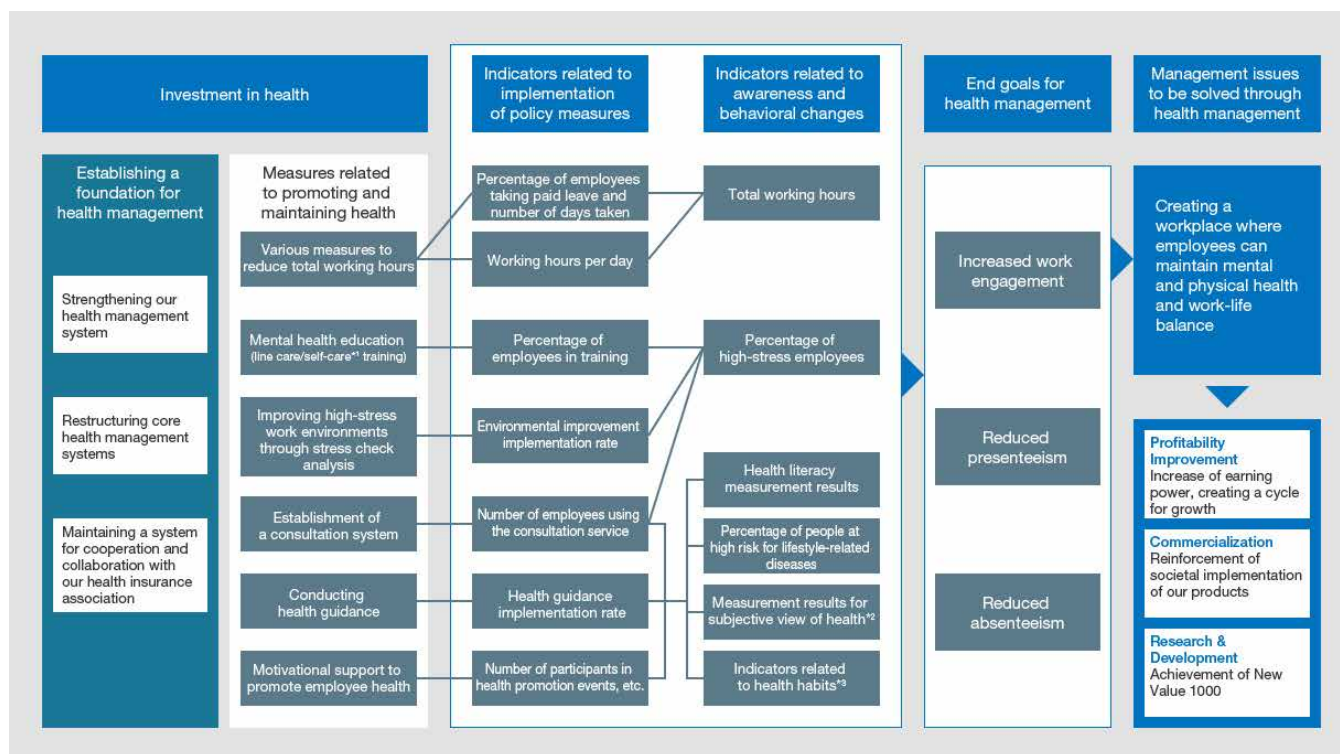
Health Management Promotion Framework

Medical professionals, such as chief industrial physicians and industrial health nurses under the Health Management & Promotion Office, and the Health Management Secretariat collaborate with the labor union and the health insurance association to promote health management at NGK. This is overseen by the director responsible for the Human Resources Department.

Health Management Promotion Framework Chart



Health Management Strategy Map



* 1 Line care: Managers and supervisors improve the workplace environment and provide counseling related to the mental health of their subordinates
Self-care: Understanding your own stress and mental health, and preventing, reducing, or dealing with your own stress

* 2 Measurement results for subjective view of health: Self-assessed health status

* 3 Indicators related to health habits: Percentage of people who exercise regularly, smoke, drink responsibly, and get a satisfactory amount of sleep

Initiatives to Shorten Total Hours Worked

Reducing Long Work Hours

In July 2016, NGK lowered the maximum amount of overtime work to 70 hours per month (with an upper limit of 300 hours per half-year). To this end, employees are, as a rule, not allowed to work for more than seven days straight and are not allowed to do overtime on their twice-a-week refresh days. If either of these are necessary, they must get permission from their bosses beforehand. To prevent employees from working excessively long hours, there must be an interval period of at least 10 hours between shifts of late-night work.

In FY2024, there were 30 cases of overtime work exceeding our upper limit, but no cases which violated legal regulations (Full year results excluding seconded employees).

- Exceeded 70 hours: 3 cases (including 1 general employee) *Statutory limits not exceeded
- Exceeded 300 hours: 27 cases (including 15 general employees) *Statutory limits not exceeded

Response to Increase in Overtime Work

Every year, NGK discloses actual working hours and leave taken to the labor union. We then exchange ideas and discuss what measures to take.

If it appears that the amount of overtime worked is going to exceed 45 hours, we will first hold a labor-management meeting to determine the reason for the increase in overtime, then implement measures such as evening out work periods and workloads or adding additional workers.

Whenever it is determined that employees are actually working long hours, we discuss countermeasures for each worksite with the labor union.

For employees temporarily stationed overseas, as soon as it is discovered that they are working long hours, they are required to submit a written reason and undergo a health examination. This not only serves to maintain the health of employees temporarily stationed overseas, but allows us to determine the cause of the long working hours from the written report, and implement countermeasures to correct the situation.

Hours / Overtime Hours Worked

[Social Data Collection](#) 

Following Up on Employees Working Long Hours

NGK provides employees working long hours, including non-regular and part-time employees, with ongoing opportunities to meet with industrial physicians for health consultations and exams. The results are reported at monthly Safety and Health Committee meetings at each worksite to thoroughly promote the reduction of overtime work.

Number of Employees Having Consultation about Long Work Hours

[Social Data Collection](#) 

Note: Based on the check, the number of employees having consultations about long work hours in FY2020 was revised to 67

Promoting Activities Supporting Mental and Physical Health

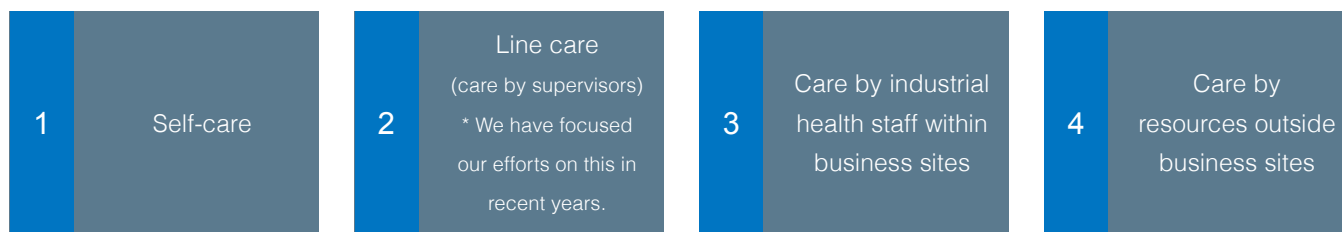
4 Types of Care for Mental Health

NGK facilitates the widespread implementation of ongoing mental and physical health promotion activities, centering on the four types of care for mental health promoted by the Ministry of Health, Labour and Welfare (MHLW).

In FY2024, we carried out stress checks.

Actual test results were sent to each department as a Group analysis report. Based on the results of this analysis, we conducted training through e-learning about self-care and line care, and workshops related to mental health for each manager for improving the work environment in their own workplace.

4 Types of Care



Percentage of Employees Taking Stress Checks

Percentage of Employees with High Stress

[Social Data Collection](#)

Position-Based Mental Healthcare Education

We strive to deepen understanding of mental health through education that emphasizes self-care for new and young employees, and education that combines self-care and line care for new supervisors and key personnel.

We provide training for key personnel in areas with high occurrences of employee mental health problems with the goal of detecting and treating problems early on and putting these employees on the road to early recovery.

Number of Participants in Position-Based Mental Care Education

[Social Data Collection](#)

Promoting Better Health and Wellbeing Among Employees

In addition to annual health exams, NGK holds collaborative health promotion activities* with the health insurance association in efforts to promote better health and physical strength among employees. These activities include health declaration challenges, the use of smartphone health app for individuals (kencom), recreational walks, online seminars, distribution of online videos (about fitness, lifestyle improvement, etc.), and a campaign to quit smoking.

* An initiative in which health insurance associations work closely with companies and use their respective strengths to create a positive work environment by efficiently and effectively promoting the health and wellbeing of employees and their families

Rate of Employees Taking Regular Health Exams

Rate of Employees taking Specific Health Checkups

Rate of Employees Eligible for Specific Health Guidance

Rate of Employees Who Completed Specific Health Guidance

Number of Participants in Health Promotion Initiatives

Smoking Rate

[Social Data Collection](#) 

Health Management when Stationed Overseas and Response to Infectious Diseases

There are approximately 470 NGK employees and family members posted overseas, and a total of 500 employees go abroad on business trips each year. We support the health and safety of these members so that they are able to conduct their lives and business. We support the health of travelers by providing them with health management training by physicians with expertise in travel medicine that teaches precautions for diet and lifestyle, the fundamentals of infectious diseases, recommendations for immunization shots, and ways to avoid contracting Infectious diseases such as HIV/AIDS, malaria, and tuberculosis.

Moreover, we have engaged external medical consultants for business travelers and those posted overseas. They provide medical consultations while overseas and interpreting at local medical facilities, and even handle emergency medical transport. This creates an environment in which employees can live abroad worry-free.

In addition, we send periodic emails with health information to travelers, and make it possible for them to have direct medical consultations, including for mental health.

We also promote health management for those posted overseas by setting the same upper limit of 70 overtime hours per month as we set for employees in Japan. This is regardless of whether the employees are key personnel or S/M/J employees. If an employee surpasses this limit, we have them complete a questionnaire and — depending on their response — attend an interview with one of our industrial physicians.

Through this kind of health management framework, NGK supports safe and secure work and lifestyles for employees abroad.

KENKO Investment for Health

Since 2019, NGK has been continuously included in the large enterprise category of the Certified KENKO Investment for Health Outstanding Organizations Recognition Program jointly promoted by the Ministry of Economy, Trade and Industry (METI) and the Nippon Kenko Kaigi (Japan Health Council).

In addition, the NGK Health Insurance Association has also been continuously included in the SME category of the Certified KENKO Investment for Health Outstanding Organizations Recognition Program. In 2025, it was also included as a Next Bright 1000 company.



Aichi Prefecture Advanced Health Management Company

NGK and the NGK Health Insurance Association have earned a designation as an Advanced Health Management Company by the Aichi prefectural government. The aim of this program is to recognize companies and organizations that aggressively pursue health management, in the process increasing the number of companies taking action towards a healthy workforce and increasing the healthy life expectancy of the prefecture's citizens.

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Occupational Safety and Health

Basic Approach

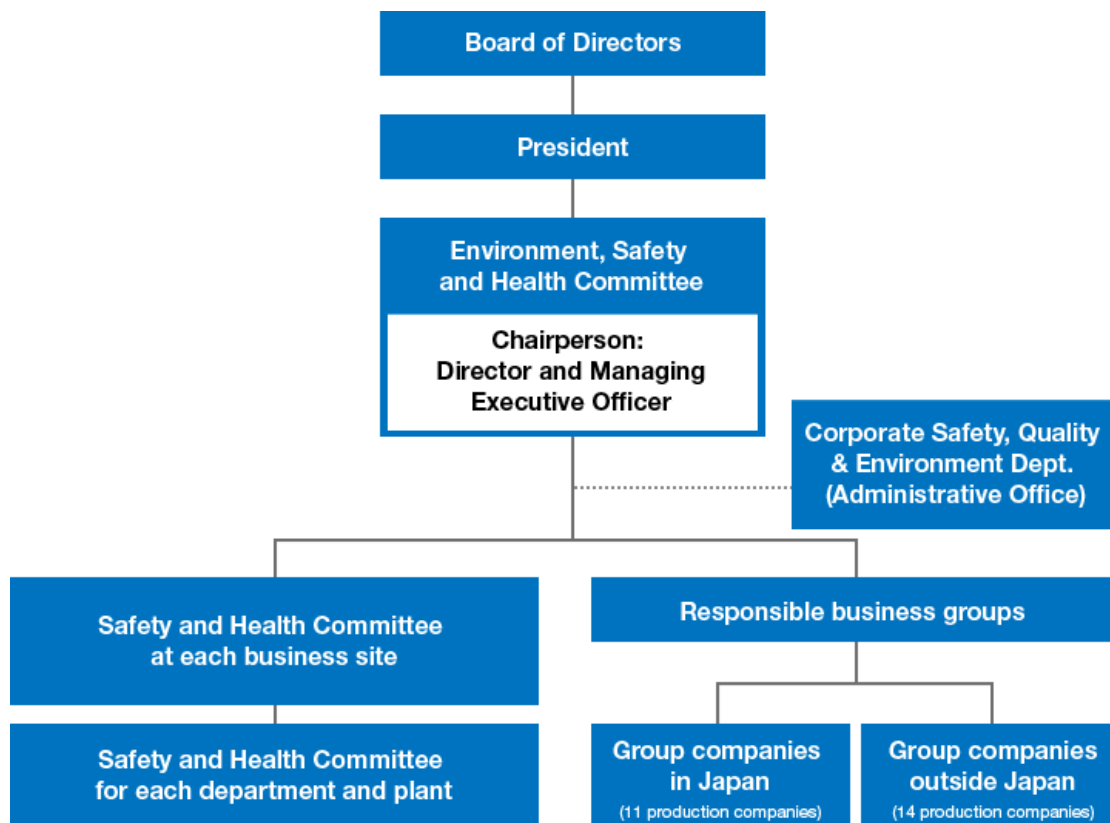
The NGK Group operates an ISO 45001-certified Occupational Safety and Health Management System (OSHMS) in line with its Safety and Health Policy. The OSHMS serves as a mechanism for the ongoing, systematic achievement of worker safety and health initiatives. By strictly implementing this system and conducting risk assessment-based safety measures, we strive to raise the level of occupational safety and health throughout the entire Group, including for contractors on-premises.

[Safety and Health Policy](#) >

Safety and Health Management Promotion Framework

NGK has made the chairperson of the Environment, Safety and Health Committee the person responsible for overseeing safety and health in order to raise the level of safety and health for the entire Group. This committee is chaired by the Director and Managing Executive Officer and meets at least biannually to deliberate and determine the Group's initiatives and action plan as well as monitor the results of activities, situation of work-related accidents and countermeasures. The committee reports to the Board of Directors which also monitors its activities. Moreover, every business site holds Business Site-Specific Safety and Health Committee meetings monthly led by relevant labor representatives of every department and attended by General Safety and Health Manager (directors of each site/executive officers). In addition to promoting awareness of Group activities and action plans, the committees and deliberate important matters related to safety and health unique to each business site, and ensure findings are made known throughout each workplace by its Safety and Health Committee members.

Safety and Health Management Organizational Chart



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Enhancing Safety and Health Activities

NGK views the enhancement of safety and health activities as one of its top priorities. In addition to rigorous operation of our occupational safety and health management system, we developed our third three-year action plan to start from FY2023. It is built around the key themes of compliance, governance, and risk reduction. We are promoting safety and health activities with our action policies defined as ensuring thorough legal compliance, further enhancing our Group governance structure, and preventing serious accidents and disasters. Concerning preventing serious accidents and disasters, in addition to comprehensive risk assessments covering existing facilities and operations, when introducing new facilities or operations or modifying operations, we conduct a thorough risk assessment in advance to eliminate risks or reduce them to an acceptable level.

Results of FY2024 Activities

Medium-Term Action Plan	Fiscal year implementation items	Key Activities
Compliance	Strengthen mechanisms for compliance with laws and regulations	We carried out training for managers/representatives, in addition to conducting general surveys and corrective action at all business units including Group companies concerning compliance with laws and regulations related to safety and health. Moreover, we have put internal regulations in place to prevent non-compliance with laws and regulations, such as failure to report to the

Results of FY2024 Activities

Medium-Term Action Plan	Fiscal year implementation items	Key Activities
Compliance	Strengthen mechanisms for compliance with laws and regulations	government. At the same time, we are building a database that will allow us to respond to all legal requirements related to safety and health.
Group Governance	Strengthen safety and health functions in each business group	We have clarified the division of roles between the department which oversees safety and health at the head office, and the safety and health departments in each business group. We have largely finished setting up an autonomous structure that enables the safety and health departments at each business group to manage/promote safety and health at plants and group companies under their jurisdiction.
Risk reduction	Reduce the risk of serious accidents or injuries	We comprehensively extracted and identified high severity risks related to getting caught and entangled in rotating machinery, electric shock and explosion for equipment at all production sites, including those outside Japan. We implemented operational solutions for curtailing risks (administrative measures) and completed equipment countermeasures (upgrades and modifications). We continue to implement risk assessment training aimed at improving our ability to extract the sources of risks.

Numerical Targets

NGK has set the following numerical targets for 2025.

- Zero fatal or serious accidents throughout the Group
- Group-wide lost-worktime accident severity rate of 0.010 or less

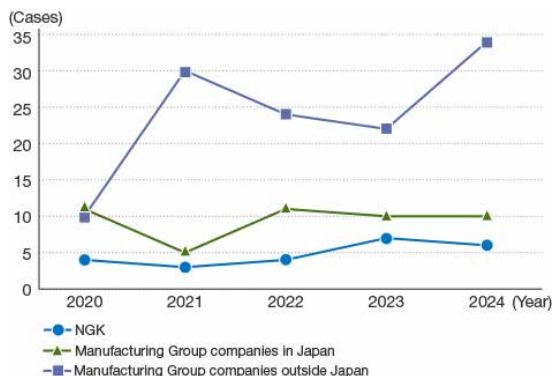
In 2024, we achieved zero fatal or serious accidents throughout the Group. On the other hand, the group-wide lost-worktime accident severity rate climbed to 0.015, failing to meet our target value of 0.010 or less.

Work-Related Fatalities

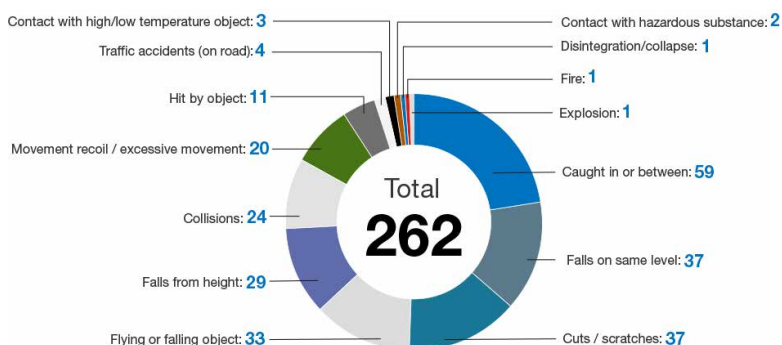
Work-Related Accidents

[Social Data Collection](#) 

Trends in Work-Related Accidents



Non-lost Worktime and Lost Worktime Accidents by Type (past 7 years; NGK Group consolidated)



Response to Work-Related Accidents

In the event of a work-related accident, following the NGK Group's rules, we promptly notify relevant departments and convene committees such as the Work-Related Accident Deliberation Committee pursuant to the regulations of each company. This ensures that we are able to thoroughly identify the cause and implement countermeasures against future recurrence.

In 2024, there were 50 non-lost worktime and lost worktime accidents Groupwide. Broken down, these included six at NGK, 10 at manufacturing Group companies in Japan, and 34 at manufacturing Group companies outside Japan. The number of minor accidents at Group companies outside Japan increased, causing group-wide accidents to rise 30% over last year. However, we have strengthened our risk management and equipment measures in order to prevent serious accidents. And because we have continued our risk assessment training for personnel in charge of manufacturing sites (training to discover potential hazards), accidents with a severity of serious injury or higher have significantly decreased. Furthermore, accidents involving getting caught in rotating machinery, electric shock, or explosion (which we addressed as priority activities) did not occur.

Number of Contractor Accidents Severe Enough to Result in Lost Worktime

Number of Contractor Deaths

Severity Rate (Number of Lost Workdays per 1,000 Hours Worked)

Lost Time Injury Frequency Rate (Employees)

Occupational Illness Frequency Rate

[Social Data Collection](#)

External Certification of Occupational Safety and Health Management System

To continuously raise the level of occupational safety and health in workplaces, we encourage companies in the NGK Group to acquire international certification for occupational safety and health management systems.

In 2017, NGK's Nagoya Site received the first ISO 45001 private certification in Japan. In 2018, all other NGK sites and plants in Japan received ISO 45001 certification and JIS Q 45100 certification.

As of June 2021, all 26 manufacturing Group companies in Japan and overseas have completed the acquisition of ISO 45001.

Acquisition of Occupational Safety and Health Management System Certification

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Safety and Health Training

NGK provides training to employees and assists with their acquisition of qualifications/licenses required under safety and health laws and regulations. Our training includes various in-house programs on safety and health along with curriculum sourced from outside NGK. In FY2024, a total of 2,217 employees received in-house group training concerning safety and health. The breakdown includes rank-based training/training for newly-promoted employees (670), danger prediction training (1,478), and ISO 45001 internal auditor training (69). This excludes training conducted by each department such as worker training, job rotation training, risk assessment training, external training for crane operators and the like, safety officer training, and safety assessor training.

Main Training Programs

Training programs	Training curriculum
Legal training	Group training mainly for managers through videos that provide a summary of safety and health related laws and regulations
Internal safety and health training	In-house group training required of employees, including training on dust, KYT (hazard prediction training), risk assessment, etc.
External safety and health training	Training conducted offsite required of employees, including for workplace supervisors, low-voltage electricity, organic solvents, and for information equipment workers, lift/crane operators and various operation chiefs
New employee training	Group training for new graduate hires and individual training provided to newly assigned employees including temporary employees
Job rotation training	Training conducted by each department for employee transfers and work changes
Stratified education /Promotion training	Training provided at the time of promotion, including new promotions as well as newly appointed assistant managers, managers, general managers, and directors of business sites Stratified education training is provided to new graduate hires, mid-career hires, and workers promoted to regular employee status
Internal auditor training	Group training for the purpose of developing and improving the level of ISO 45001 internal auditors
Worker training	Training and exercises for frontline work are conducted to evaluate skill level and certification of work proficiency
Frontline management training (safety officers)	(See below)
Danger-Prediction Training Center	(See below)

Acquisition of Safety Officer Qualification

To increase their managerial skills related to safety, under our 3-year plan from FY2021 to FY2023, we trained all managers, plant managers, and general managers of manufacturing, technical, and R&D divisions to become Safety Officers through e-learning and encouraged them to obtain Safety Officer Qualification*. We also encouraged engineers of design and maintenance departments for in-house equipment and production engineers at our plants to obtain Safety Assessor Qualification*.

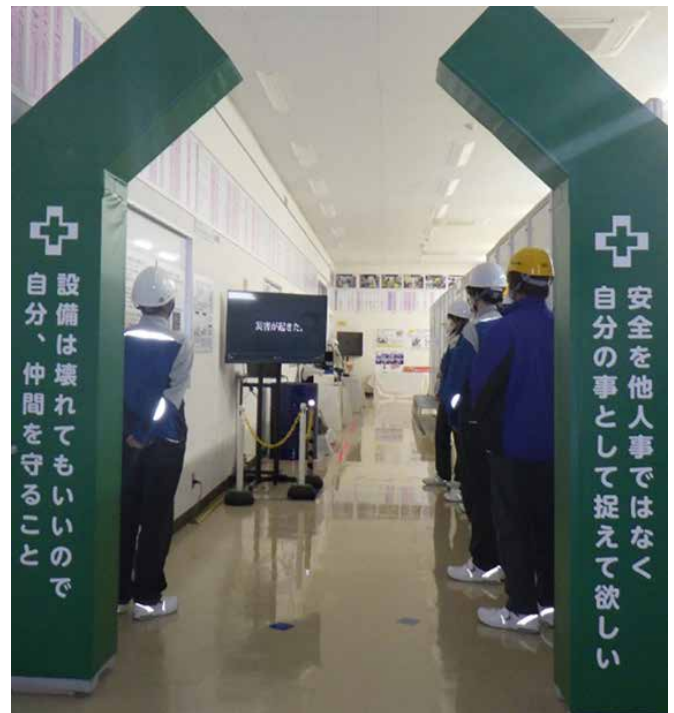
* Safety Officer Qualification / Safety Assessor Qualification: Qualifications established and administered by The Institute of Global Safety Promotion (IGSAP). The qualifications certify that an individual possesses understanding and knowledge of safety or knowledge and skills of machinery based on international safety standards, respectively

New Expansion of Danger-Prediction Training Center

To prevent injuries mainly among young workers and inexperienced workers, in 2018 NGK established the Danger-Prediction Training Center at our Chita Site.

The training center features equipment that enables employees to safely experience work-related injuries that have occurred in the past including being caught in equipment or rotating machinery and work-related accidents such as electric shock or explosions. Combined with classroom learning using computer graphics, the training center offers practical programs taught by specialized personnel.

In 2020, we introduced a virtual reality system for experiencing dangers and rolled out a training program that allows participants to refine their sensitivities toward dangers in a more practical manner. In 2024, we also renovated our dojo, adding theme-based zones, and making efforts to make it more immersive and realistic. Moreover, we added videos and exhibits related to actual accidents to get participants to see accidents as something they need to take responsibility to avoid. This training program was rolled out to employees at Group companies in Japan as well, and as of FY2024, a cumulative total of 10,909 people have participated.



Social Contribution Activities

Basic Approach

The NGK Group has established the NGK Group Social Contribution Activities Policy and will actively engage in various activities to realize a sustainable society.

We will help to solve social issues through our business activities in various regions across the globe. In addition, as a member of society, with the aim of being a corporate citizen trusted by local communities, we will strive to cooperate and collaborate with diverse partners and undertake social contribution activities in response to needs in each region.

The NGK Group's social contribution activities are promoted by establishing the Social Contribution Subcommittee under the Sustainability Management Committee, and the General Affairs Department plays a central role in carrying them out.

NGK collects reports from Group companies in and outside Japan on the social contribution activities they have conducted in various places. In FY2024, a total of 40 reports were received.

[NGK Group Social Contribution Activities Policy](#) >

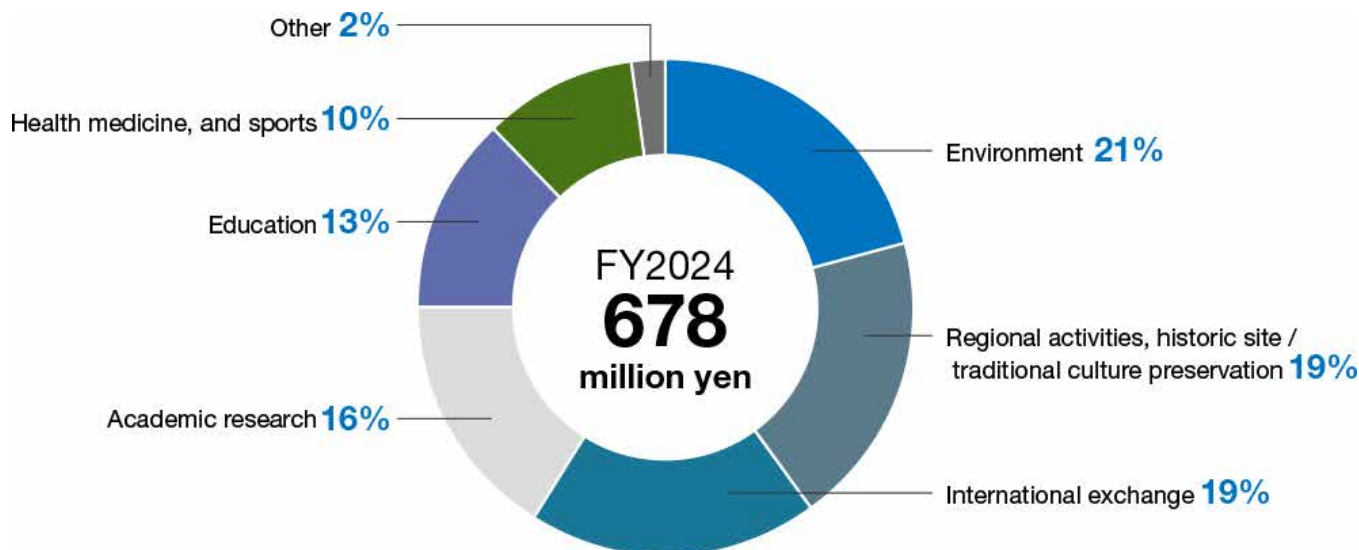
Social contribution expenditures

Number of social contribution programs

Number of collaborations with NPOs/NGOs

[Social Data Collection](#) 

Breakdown of Activities



NGK's Social Contribution Activities

Providing Assistance to International Students (People, Education, and Community Relations)

In 1998, NGK established the NGK Foundation for International Students to contribute to the development of global human resources. Through the Foundation, NGK continues to provide assistance with housing and scholarships to students visiting from overseas.

The impetus for the Foundation's establishment stems from gratitude for the warm community support and hospitality shown to NGK's first employees and families posted overseas after we established branch offices and representative offices back in the 1930s, as well as when we later expanded production and sales sites overseas. Our activities are conducted in the hope that the students will feel glad that they came to Japan and develop a fondness for the country. In April 2022, this Foundation became a Public Interest Incorporated Foundation through deliberation by the Aichi Council for the Authorization of Public Interest Corporations. In FY2024, we provided housing to 35 students from nine countries, and scholarships (non-repayable) to 20 students from seven countries.

[The NGK Foundation for International Students >](#)



Exchange Between Supported Students, Local Residents, and Employees

To advance international relations between supported students, local residents, and employees, since the year 2000, we have held annual exchange meetings where international students introduce their native languages and cultures. In FY2024 we held six exchange meetings at our dormitory and Ishiki Cosmos Futaebori Class (a Japanese class for foreign children living in Komaki, Aichi Prefecture and housed in one of the rooms of the NGK company dormitory). A total of 34 people participated, including residents living near the dormitory, and students and teachers from our Ishiki Cosmos Futaebori Class. Intercultural exchange meetings were held five times at our dormitory, and participants in the Ishiki Cosmos Futaebori Class were introduced to Chinese culture. As of FY2024 a cumulative total of 1,116 people have participated in such exchange meetings.

Communication After Support Ends

In FY2024, we distributed NGK International Friendship Club Members Cards to international students whose support had ended. In addition, to maintain relationships with international students who received support, every year we send New Year's cards with updates on the Foundation and NGK to around 320 exchange students and alumni even after support ended.

Japanese Language Learning Support for Foreign Children Living in Japan (People, Education, and Community Relations)

Since 2022 NGK has been providing support for foreign children to learn Japanese. We are working in coordination with the Aichi Employers' Association and Central Japan Economic Federation. And we allow the private organization Ishiki Cosmos Support Study Group, based in Komaki City, Aichi Prefecture, and the MIRAI Project based in Handa City, Aichi Prefecture, to use our company facilities.

In addition, employees utilize our volunteer annual paid leave system to work as teaching assistants.

FY2024 Results

Classroom		Location	Activity Time	Number of Children	Number of NGK Registered Assistants	Number of Times Held
Ishiki Cosmos Futaebori Class		NGK Komaki Dormitory	Every Wednesday and Friday, 5:00 pm to 7:30 pm	14	21	95
Local Japanese Classes	MIRAI Project	NGK Chita Kosei Hall	Every Thursday, 4:00 pm to 6:00 pm	10	10	45
	AiueOguchi in Oguchi-town, Aichi Minato Japanese School in Nagoya-city, Aichi Children's Japanese in Nagakute-city, Aichi Kodomo nihongo hiroba in Higashiura-town, Aichi	Differs for each class	Differs for each class	Differs for each class	5	-



Support for Wheelchair Tennis (People, Education, and Community Relations)

NGK supports wheelchair tennis as part of our support for persons with disabilities and for local sports. We assist six wheelchair tennis athletes based in Aichi Prefecture in various ways, such as helping to fund their travel in and outside Japan. From FY2020 to FY2022, we established a new hard court and clay court and renovated the clubhouse and outdoor restrooms at the NGK Group company-operated Moronoki Tennis Club (located in Midori-ku in Nagoya City) to make them wheelchair-friendly, since the facilities are open to wheelchair tennis athletes and aficionados alike. We also built an indoor court for the club in FY2024 to provide a place to practice anytime, regardless of the weather. Moreover, NGK has signed an official supporter agreement with the Japan Wheelchair Tennis Association (JWTA), with whom we work to sponsor annual events, competitions, and other opportunities for expanding and developing the sport of wheelchair tennis. In FY2024, we cooperated in the Wheelchair Tennis Experience Program organized by the Social Welfare Corporation Nagoya City Rehabilitation Agency, held an opening event for our indoor court, and held an exchange event for “new mixed doubles*” athletes.

* NGK's exchange event for Moronoki Tennis Club school students, general users, and the wheelchair tennis athletes we support.



Reforestation Activities: NGK Minnano Mori Mizunami (Environment, Community Relations)

NGK carries out reforestation activities in the “NGK Minnano Mori Mizunami” forest (17 ha) owned by NGK in Mizunami City, Gifu Prefecture. We carry out these reforestation activities with the aim of contributing to regional development. In 2022, we signed an afforestation agreement with the Tono Seibu Beekeeping Association: Mizunami City, Gifu Prefecture

and established the Western Tono Beekeeping and Forestry Cooperation Promotion Roundtable to promote this initiative. Through these activities, we hope to create a rich natural environment, promote beekeeping which is one of the local industries in the Tono region, and create opportunities to interact with local residents and learn about the natural environment.

In March 2024, part of the “NGK Minnano Mori Mizunami”—an area of approximately 5.6 ha which includes spring-fed wetlands and hardwood forests of local origin—was designated a Nationally Certified Sustainably Managed Natural Site by the Ministry of the Environment. In FY2024, we continued to fell hazardous trees, protect wetlands, take countermeasures against animal damage to preserve biodiversity, and create rich and healthy forest resources. Also, we partnered with beekeeping operations to promote local industry, and aimed to raise environmental awareness through contact with the natural environment. To these ends, we conducted activities in cooperation with the Gifu Prefecture program “Creating forests in collaboration with companies” which included forest workshops, exchange events with the residents of Hiyoshi-cho, and the like. In addition, we cooperated with the local beekeeping association to collect honey from the apiary we maintain in “Minnano Mori Mizunami.”



Promoting Social Contribution Activities by Employees

Volunteer Annual Leave System

In April 2024, NGK established the volunteer annual leave system with the aim of supporting participation in volunteer activities by employees to promote their growth through social contributions and various experience. In FY2024, 27 people used the system, and spent a cumulative total of 309 hours on volunteer activities.

Social Data Collection

Basic Information on Employees

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of employees* ¹	NGK	-	4,316	4,382	4,547	4,775	4,876	Persons
	NGK Group	-	19,695	20,099	20,077	19,540	19,931	Persons
Number of employees by gender	NGK* ²	Total	4,650	4,745	4,877	5,086	5,236	Persons
		Male	4,046	4,132	4,258	4,427	4,544	Persons
		Female	604	613	619	659	692	Persons
	NGK Group	Total	20,195	20,656	20,450	19,533	19,892	Persons
		Male	15,920	16,393	16,074	15,486	15,698	Persons
		Female	4,275	4,263	4,376	4,047	4,194	Persons
Number of employees by employment type	NGK	Full-time employee	4,650	4,745	4,877	5,086	5,236	Persons
		Contract employee	287	272	280	206	140	Persons
		Temporary employee	302	372	491	477	471	Persons
Employee composition by region	NGK Group	Japan	37	37	38	39.9	40.1	%
		Europe	25	25	24	24.3	24.0	%
		North and Central America	15	15	16	15.1	15.8	%
		Asia	22	22	21	20.4	19.9	%
		Other	1	1	1	0.4	0.2	%
Retention rate of new hires after 3 years	NGK	Total	92.8	90.3	88.7	97.1	95.7	%
		Male	92.7	91.0	90.7	96.6	96.7	%
		Female	93.3	87.9	81.8	100	88	%
Average age	NGK	Total	39.2	40.0	39.7	40.2	40.5	Years old
		Male	39.3	40.1	39.9	40.3	40.7	Years old
		Female	38.6	39.6	39.4	39.5	39.5	Years old
Average length of service	NGK	Total	14.3	15.6	15.5	15.0	15.3	Years
		Male	14.3	15.6	15.5	15.1	15.4	Years
		Female	14.1	15.6	15.5	14.6	14.5	Years
Average salary	NGK	-	7,635,830	7,696,997	8,240,174	8,553,909	8,453,574	Yen
Labor union membership rate* ³	NGK	-	98	98	98	98	97	%
Employee turnover rate (Full-time employees only, excluding retiring employees)	NGK	Total	1.3	1.3	1.7	1.4	1.5	%
		Male	1.2	1.1	1.5	1.2	1.4	%
		Female	1.7	2.0	2.9	2.7	2.2	%
Voluntary resignation rate (Full-time employees only, excluding retiring employees)* ⁴	NGK	Total	1.2	1.2	1.5	1.2	1.4	%
		Male	1.1	1.0	1.3	1.0	1.3	%
		Female	1.6	2.0	2.7	2.3	2.0	%
	NGK Group	-	-	-	-	-	6.3	%

Employee Engagement

Satisfaction the Survey on Workplace Vitality* ⁵	NGK	-	59.3	-	59.4	59.4	60.6	%
Survey on Workplace Vitality: career autonomy score	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	-	-	3.60	3.66	3.67	points
Survey on Workplace Vitality: advancement of women in the workplace score	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	-	-	3.45	3.50	3.54	points
Survey on Workplace Vitality: score related to utilization of diversity	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	-	-	3.34	3.37	3.41	points
Survey on Workplace Vitality: score related to opportunities to take on challenges	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	-	-	3.26	3.30	3.31	points
Survey on Workplace Vitality: score related to psychological safety	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	-	-	3.71	3.73	3.75	points
Survey on Workplace Vitality: score related to worthwhileness of work	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	3.49	-	3.49	3.48	3.54	points
Survey on Workplace Vitality: score related to work-life balance	NGK	Target	-	-	3.5 or more	3.5 or more	3.5 or more	points
		Result	3.53	-	3.52	3.59	3.61	points

*1 Includes employees from outside companies who have been temporarily assigned to the NGK Group, but excludes employees from the NGK Group who have been temporarily assigned to outside companies

*2 Excludes employees from NGK Group companies or outside companies who have been temporarily assigned to NGK, but includes employees from NGK who have been temporarily assigned to NGK Group companies or outside companies

*3 Number of union members / Number of employees in NGK excluding managers (both include manufacturing contract employees)

*4 The figures for voluntary resignation rate are calculated from the number of people resigning due to personal circumstances in one year / total number of employees

*5 This is the ratio of employees who answered positively (5 or 4 points on a 5-point scale evaluation) to the "worthwhileness of work" question

Work-Life Balance

Childcare Support Measures

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of childcare leave takers	NGK	Total	64	79	157	172	201	Persons
		Male	35	56	127	143	115	Persons
		Female	29	23	30	29	28	Persons
Rate of employees that return to work after childcare leave	NGK	Total	100	99	100	100	100	%
Shortened working hours during childrearing	NGK	Number of leave takers	62	79	69	76	84	Persons

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Rate of employees taking child care leave	NGK	Male* ²	-	-	91	98	97	%
		Female* ³	-	-	103	87	104	%

*1 Fiscal year preceding disclosure : The fiscal year immediately preceding the fiscal year in which the announcement is made (Fiscal year)

*2 Total percentage of male workers whose spouses gave birth in the fiscal year preceding disclosure, who took long-term childcare leave or used leave for childcare purposes that year

*3 Percentage of female workers who gave birth in the fiscal year preceding disclosure, who took childcare leave that year

*4 The rate of female childcare leave take-up is the ratio (b/a) of employees who took childcare leave for the first time during the fiscal year prior to the disclosure to the number of employees who had children born during the same fiscal year (a). (b) may exceed 100% because it includes employees who had children born in the fiscal year prior to the disclosure but did not take childcare leave during the fiscal year prior to the disclosure, but instead took childcare leave the following fiscal year

*5 "-" indicates that the percentage was not calculated before the mandatory disclosure of childcare leave status

NGK Unique System

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Return to work after childbirth lump-sum payment	NGK	26	38	19	21	26	Persons
System for taking annual paid leave in hourly increments (for employees working shortened hours)	NGK	58	73	68	76	103	Persons
Support Leave for Return to Work after Childbirth Lump-Sum Payment	NGK	16	15	34	37	31	Persons
Childcare leave for fathers using accumulated vacation days	NGK	54	53	100	102	92	Persons
Pre-maternity leave interview	NGK	20	31	29	30	34	Persons
Interview before returning to work	NGK	25	32	27	24	36	Persons
Leave for accompanying a spouse's overseas assignment	NGK	0	1	4	3	5	Persons
Maternity gift	NGK	260	223	224	245	219	Persons
Babysitter expense subsidy	NGK	31	28	43	46	43	Persons
Childcare Concierge (available to those who live in the Tokyo metropolitan area)	NGK	0	0	0	0	0	Persons
Priority parking spaces to support childcare	NGK	40	41	37	46	47	Persons
Lump-sum payment for early return	NGK	3	4	4	4	6	Persons

Nursing Care Support

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of employees taking long-term nursing care leave	NGK	Total	1	1	3	2	4	Persons
	NGK	Male	0	0	2	0	1	Persons
	NGK	Female	1	1	1	2	3	Persons
Number of employees taking nursing care leave	NGK	Total	0	34	17	5	6	Persons
	NGK	Male	0	23	13	4	3	Persons
	NGK	Female	0	11	4	1	3	Persons

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Diversity & Inclusion

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
New graduate hires* ¹	NGK	Total	141	105	139	168	175	Persons
		Male	108	89	123	134	146	Persons
		Female	33	16	16	34	29	Persons
Rate of female employees among new graduate hires* ²	NGK	Total	34	17	14	23	20	%
		Sales and management-related; target 40%	52	33	29	50	42	%
		Engineering-related; target 20%	27	13	11	17	14	%
Mid-career hires	NGK	Total	26	37	109	118	99	Persons
		Male	20	34	95	99	74	Persons
		Female	6	3	14	19	25	Persons
Number of manufacturing contract employees promoted to being regular employees	NGK	Total	15	18	16	18	13	Persons
Rate of mid-career hires	NGK	Total	23	34	47	45	39	%
Rate of female employees* ³	NGK	-	13.0	12.9	12.7	13.0	13.2	%
	NGK Group	-	21.2	20.6	21.3	20.7	21.1	%
Number of key personnel (managers)	NGK	Total	969	1,028	1,085	1,150	1,206	Persons
		Male	940	993	1,044	1,107	1,158	Persons
		Female	29	35	41	43	48	Persons
		Dept. managers or higher	1	4	4	4	5	Persons
		Rate of female employees	3.0	3.4	3.8	3.7	4.0	%
	Group companies outside Japan	Rate of female employees	23.1	23.1	19.4	21.3	20.5	%
Female Directors	NGK	Total	9	9	9	9	10	Persons
		Female	1	1	1	1	3	Persons
		Rate	11.1	11.1	11.1	11.1	30.0	%
Rate of employees with disabilities	NGK, NGK YU-Service, NGK Ceramic Device	Number of people	145	155	160	172	195	Persons
		Employment rate	2.35	2.46	2.43	2.55	2.83	%

*1 Note: Excluding new graduate temp-to-perm employees

*2 Applies to regular-position employees

*3 Rate among all employees

Number of Female Key Personnel (Managers) as of March 31, 2025

Item	Category	NGK	Group companies in Japan	Group companies outside Japan	Total	Unit
Number of female key personnel (employees in managerial positions)	Total	1,206	303	639	2,148	Persons
	Male	1,158	298	508	1,964	Persons
	Female	48	5	131	184	Persons
	Rate of female employees	4.0	1.7	20.5	8.6	%

Wage Gap between Male and Female Employees in FY2024

Item	Scope	Category	FY2024	Unit
Wage gap between male and female employees	NGK	All employees	79.5	%
		Regular employment employees	79.5	%
		Part-time and fixed-term employees	95.5	%

Item	Scope	Category	Average salary for men	Average salary for women	FY2024	Unit
Wage gap between male and female employees (by manager level and non-manager level)	NGK	Manager level (basic salary only)	6,982,136 yen	6,721,675 yen	96.3	%
		Manager level (basic salary + other financial incentives)	11,995,456 yen	11,205,652 yen	93.4	%
		Non-manager level (basic salary only) *counting for full-time employees only	4,193,096 yen	4,018,306 yen	95.8	%
		Non-manager level (basic salary + other financial incentives) *counting for full-time employees only	7,559,992 yen	6,565,227 yen	86.8	%

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Internal Job Application System

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Job application system	NGK	Number of jobs posted	9	59	80	77	63	Cases
		Number of recruits	13	86	108	87	94	Persons
		Number of applicants	15	50	56	60	42	Persons
		Number of successful applications	6	17	25	30	18	Persons

Human Resource Development

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Training participant summary (total number of people)	NGK	Total	2,527	8,201	6,377	4,760	7,171	Persons
		Key personnel	480	665	719	902	1,356	Persons
		General employees	2,047	7,536	5,658	3,858	5,815	Persons
Total		6.0	28.0	18.0	11.4	11.7	Hours	
Key personnel		4.2	18.0	11.0	9.9	11.6	Hours	
General employees		6.4	31.0	20.0	11.7	11.7	Hours	
Average annual cost of training per full-time employee		-	22,000	29,522	31,138	39,498	45,712	Yen

Occupational Safety and Health

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of work-related fatalities	NGK	-	0	0	0	0	0	Persons
	Manufacturing Group companies in Japan	-	0	0	0	0	0	Persons
	Manufacturing Group companies outside Japan	-	0	0	0	0	0	Persons
	Group total	-	0	0	0	0	0	Persons
Number of work-related accidents	NGK	Lost worktime accidents	1	2	3	3	2	Cases
		Non-lost worktime accidents	3	1	1	4	4	Cases
		Total	4	3	4	7	6	Cases
	Manufacturing Group companies in Japan	Lost worktime accidents	3	3	9	3	4	Cases
		Non-lost worktime accidents	8	2	2	7	6	Cases
		Total	11	5	11	10	10	Cases
	Manufacturing Group companies outside Japan	Lost worktime accidents	8	24	21	16	24	Cases
		Non-lost worktime accidents	2	6	3	6	10	Cases
		Total	10	30	24	22	34	Cases
	Group total	-	25	38	39	39	50	Cases
Number of work-related accidents at the level of lost worktime accidents and more serious in contractors	NGK	-	1	0	0	0	3	Cases
	Manufacturing Group companies in Japan	-	0	0	0	0	1	Cases
	Manufacturing Group companies outside Japan	-	1	1	2	3	3	Cases
	Group total	-	2	2	2	4	7	Cases
Number of fatalities in contractors	NGK	-	0	0	0	0	0	Persons
	Manufacturing Group companies in Japan	-	0	0	0	0	0	Persons
	Manufacturing Group companies outside Japan	-	0	0	0	0	0	Persons
	Group total	-	0	0	0	0	0	Persons
Severity rate (number of lost workdays per 1,000 hours worked)	NGK Group	-	0.004	0.111	0.025	0.010	0.015	Days/hours x 1,000
	NGK	-	0.002	0.387	0.019	0.012	0.002	Days/hours x 1,000
	Manufacturing Group companies in Japan	-	0.003	0.003	0.026	0.001	0.004	Days/hours x 1,000
	Manufacturing Group companies outside Japan	-	0.005	0.029	0.028	0.013	0.026	Days/hours x 1,000
	All industries (Japan, sites with 1,000 or more employees)*1	-	0.03	0.04	0.03	0.02	0.03	Days/hours x 1,000
	Manufacturing industry (Japan, sites with 1,000 or more employees)*1	-	0.03	0.03	0.02	0.02	0.04	Days/hours x 1,000
Lost time injury frequency rate (Number of injuries resulting in lost worktime accident per million working hours)	NGK Group	-	0.31	0.67	0.79	0.55	0.73	Persons/hours x 1,000,000
	NGK	-	0.10	0.19	0.28	0.28	0.18	Persons/hours x 1,000,000
	Manufacturing Group companies in Japan	-	0.46	0.43	1.27	0.42	0.50	Persons/hours x 1,000,000
	Manufacturing Group companies outside Japan	-	0.36	0.93	0.86	0.72	1.09	Persons/hours x 1,000,000
	All industries (Japan, sites with 1,000 or more employees)*1	-	0.69	0.69	0.62	0.56	0.59	Persons/hours x 1,000,000
	Manufacturing industry (Japan, sites with 1,000 or more employees)*1	-	0.28	0.31	0.30	0.32	0.33	Persons/hours x 1,000,000
Occupational illness frequency rate (n/million work hours)	NGK	-	0.00	0.00	0.00	0.00	0.00	%
Acquisition of occupational safety and health management system certification*2	NGK	ISO 45001 and JIS Q 45100	100	100	100	100	100	%
	11 manufacturing Group companies in Japan	ISO 45001 and JIS Q 45100	100	100	100	100	100	%
	14 manufacturing Group companies outside Japan	ISO 45001	93	100	100	100	100	%

*1 Statistics on work-related accidents from Japan's Ministry of Health, Labour and Welfare

*2 Nagoya Site, Chita Site, Komaki Site, Ishikawa Plant, Mitake Plant

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Mental and Physical Health Promotion

Item	Scope	Category	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Hours / overtime hours worked (Annual fixed working hours: 1,919 hours)	NGK general employees	Annual actual working hours	2,044	2,044	2,016	1,999	1,971	Hours
		Average overtime work per month	21.6	23.4	22.8	20.8	20.2	Hours
	NGK general employees	Average overtime work per month	2,057	2,059	2,029	2,013	1,985	Hours
		Average overtime work per month	22.0	23.8	23.2	21.0	20.3	Hours
	NGK manufacturing divisions	Average overtime work per month	2,061	2,056	2,024	2,006	1,976	Hours
		Average overtime work per month	22.8	24.1	23.2	20.9	20.5	Hours
	NGK non-manufacturing divisions	Average overtime work per month	2,037	2,038	2,011	1,997	1,969	Hours
		Average overtime work per month	21.1	23.1	22.6	20.7	20.1	Hours
Paid leave: number of days used, utilization rate	NGK	Average overtime work per month	11.9	13.8	15.1	14.5	16.5	Days
		Utilization rate	67.5	76.5	83.3	88.1	83.2	%
Number of employees having consultations about long work hours*1	NGK	All	67	37	27	37	20	Persons
Rate of employees taking stress checks	NGK	-	94.1	95.3	95.4	96.4	95.9	%
Rate of employees taking stress checks	NGK	-	9.9	9.0	9.5	7.9	6.8	%
Rate of employees taking stress checks	NGK	All	585	517	565	583	603	Persons
		New hires	140	105	139	168	175	Persons
		General employees	362	307	311	287	295	Persons
		Key personnel	83	105	115	128	133	Persons
Regular health exams*2	NGK	Total target employees	4,894	4,728	4,910	5,138	5,284	Persons
		Total target employees	4,894	4,728	4,910	5,138	5,284	Persons
		Total target employees	100	100	100	100	100	%
Rate of taking specific health checkups*3	NGK employees and families	-	85.7	88.7	89.7	89.3	-	%
Rate of recipients of specific health guidance*3		-	15.6	13.3	14.0	14.5	-	%
Rate of completion of specific health guidance*3		-	57.5	59.1	57.5	87.5	-	%
Number of participants in health lectures*4	NGK employees and families	-	1,560	1,505	865	938	508	Persons
Number of participants in smartphone health apps*4	NGK employees and families	-	1,134	1,511	1,703	1,917	2,066	Persons
Number of participants in recreational walks*4	NGK employees and families	-	-	-	-	356	553	Persons
Online seminars	NGK employees and families	-	146	1,002	436	386	294	Persons
Smoking rate	NGK	-	23.6	21.9	21.9	21.6	19.5	%

*1 Numbers of people shown are cumulative totals. They also include people who only underwent a health exam

*2 Including chest X-rays to catch the early signs of tuberculosis

*3 The FY2024 figures will be released around January 2026

*4 Initiatives marked with a "-" in a fiscal year were not implemented in that fiscal year

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Quality Management System

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Acquisition of ISO 9001 or IATF 16949 certification/percentage	NGK Group	100	100	100	100	100	%

NGK and the all Business Group production sites, supporting functions, and locations at Group companies in and outside Japan have acquired ISO 9001 or IATF 16949 certificatio

Social Contribution Activities

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Social contribution expenditures	NGK Group	2.96	5.33	7.54	6.41	6.78	100 million yen
Number of social contribution programs		10	16	10	10	10	Cases
Number of collaborations with NPOs/NGOs		4	3	2	2	8	Cases

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Sustainability in the NGK Group

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Corporate Governance System

Basic Approach

NGK Group's basic policy on corporate governance is to ensure legality in business activities and transparency in management. NGK Group has established a structure that can respond swiftly to changes in the business environment and built and maintains shareholder-focused system to ensure fair management.

To put this policy into practice, NGK has chosen the governance structure of a company with an Audit & Supervisory Board. We have established a corporate governance system that increases the effectiveness of corporate governance through debate and deliberation on important matters. This was accomplished by establishing the Executive Committee, Sustainability Management Committee, Risk Management Committee and various other committees to support the president in making decisions, in addition to the General Meeting of Shareholders, Board of Directors, and Audit & Supervisory Board.

NGK recognizes the need for swift, optimal decision-making and execution to respond to changes in the business environment. We have therefore introduced an executive officer system to segregate the management decision-making and supervisory function from the business execution function to clearly define the roles of and strengthen each function. To strengthen the supervisory and oversight function of the Board of Directors, we have mandated reporting to Board of Directors from the key committees among committees that handle various risks surrounding NGK. To ensure that the objectives of the Corporate Governance Code are thoroughly implemented, we established the Nomination and Compensation Advisory Committee, Corporate Council, Conference of Outside Directors and Outside Audit & Supervisory Board Members, the Business Ethics Committee, and other committees.

In addition, we have established the NGK Group Corporate Business Principles and NGK Group Code of Conduct to stipulate how everyone working for the NGK Group should execute their jobs so that they abide by society's laws and NGK Group's Articles of Incorporation and comply with corporate ethics. All executives and employees are well versed in the code and are obligated to abide by it.

[Corporate Governance Report](#) 

Internal Control Systems

The NGK Board of Directors has established the following systems to ensure that directors comply with laws and regulations and NGK's Articles of Incorporation in the execution of their duties. This includes the systems deemed necessary to ensure the appropriateness of NGK's business operations as well as the operations of the NGK Group consisting of NGK and its subsidiaries. The business execution organizational bodies that report to the president are responsible for operating these systems.

[Basic Views on Internal Controls System and Status of Development](#) 

Steps Taken to Strengthen Corporate Governance

We continue to strengthen the corporate governance system. Enhancements include introducing an executive officer system to improve the management supervision and monitoring functions and other functions, and to provide suggestions on all aspects of management.

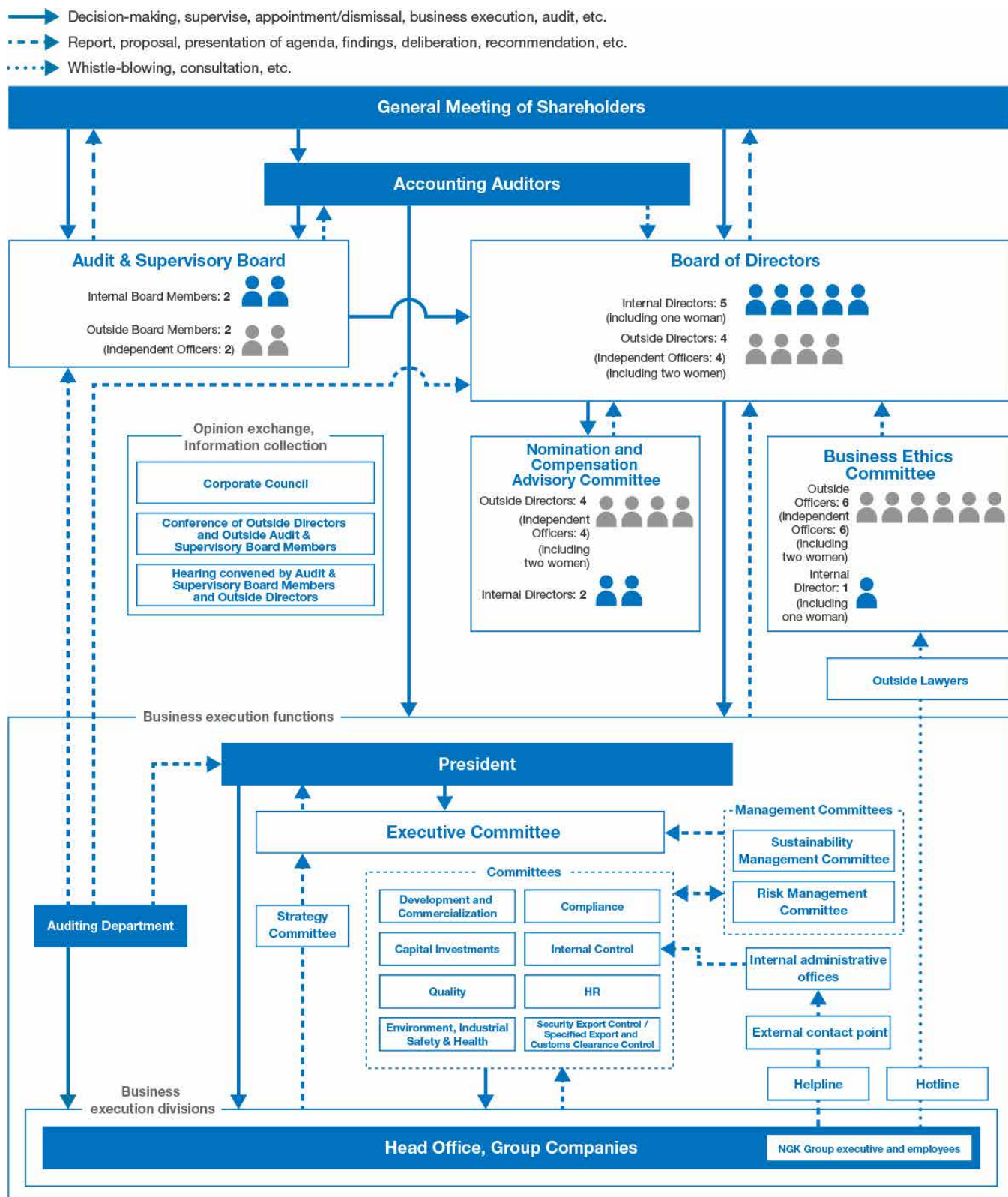
April 1999	Established the NGK Corporate Business Principles
April 2003	Revised guidelines into the NGK Group Corporate Business Principles
June 2005	Introduced an executive officer system
	Introduced a stock option
	Introduced an outside officer system
July 2005	Established the CSR Committee
June 2010	Appointed independent officers
July 2011	Revised the NGK Group Corporate Business Principles
April 2015	Signed on to the UN Global Compact
June 2015	Established the Global Compliance Office
December 2015	Established the Nomination and Compensation Advisory Committee, Corporate Council, Conference of Outside Directors and Outside Audit & Supervisory Board Members, and Business Ethics Committee
June 2017	Appointed one additional outside director
October 2018	Appointed a Chief Compliance Officer
January 2019	Revised the NGK Group Corporate Business Principles

April 2019	Established the ESG Committee
April 2020	Established the Compliance Committee
	Established the HR Committee
April 2021	Formulated the NGK Group Vision
	Formulated the NGK Group Human Rights Policy
	Established the NGK Group Basic Guidelines for Compliance Activities
June 2021	Outside directors increased to 1/3rd of Board of Directors
	An outside director made the chair of the Nomination and Compensation Advisory Committee
April 2022	Established the ESG Management Committee
June 2022	Introduced a Restricted Share Compensation Plan
April 2023	Established the Risk Management Committee
	Formulated the NGK Group Basic Sustainability Policy
July 2023	Revised the NGK Group Corporate Business Principles Established the NGK Group Code of Conduct
June 2024	Increased ratio of female directors to 30%
April 2025	The ESG Management Committee was renamed the Sustainability Management Committee

Corporate Governance System

We have established the following system to ensure legality in business activities and transparency in management. This system makes it possible to respond swiftly to changes in the business environment and maintains a shareholder-focused system to ensure fair management.

Corporate Governance Organizational Chart



State of Each Organization

Board of Directors

Composition of Board of Directors (As of September, 2025)

[Directors >](#)

Director Attributes and Committee Membership (as of September, 2025)

Name	Age	Stocks held etc.		Meeting attendance record		
		Number of shares of the Company held	Number of stock acquisition rights owned (Equivalent number of shares)	Board of Directors	Nomination and Compensation Advisory Committee	Business Ethics Committee
Taku Oshima	68	40,000	66,000	◎ 100% (16/16)	100% (3/3)	
Shigeru Kobayashi	64	40,126	21,000	100% (16/16)	100% (3/3)	
Hideaki Shindo	60	19,500	10,000	100% (16/16)		
Jun Mori	61	16,090	8,000	-		
Mayumi Inagaki	61	13,741	5,000	100% (12/12)*		100% (4/4)*
Emiko Hamada	66	5,000	-	100% (16/16)	◎ 100% (3/3)	◎ 100% (5/5)
Hiroshi Sakuma	69	-	-	100% (12/12)*	100% (3/3)	100% (4/4)*
Noriko Kawakami	66	3,000	-	100% (12/12)*	100% (3/3)	100% (4/4)*
Kengo Miyamoto	57	3,000	-	100% (12/12)*	100% (3/3)	100% (4/4)*

Notes: 1. ◎ indicates chair or committee chair

2. Meeting attendance shown is for FY2024

* Applies to meetings of the Board of Directors and Business Ethics Committee held after they assumed office on June 26, 2024

Ratio of Independent Outside Directors

Target ratio of Independent Outside Directors	Result	Name
One-third of the Board of Directors	1/3 or more	Emiko Hamada, Hiroshi Sakuma, Noriko Kawakami, Kengo Miyamoto

Ratio of Female Directors

Target ratio of female Directors	Result	Name
30% of Directors	33%	Mayumi Inagaki, Emiko Hamada, Noriko Kawakami

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Director/Audit and Supervisory Board Member Skill Matrix and Reasons for Item Selection

Name Position	Attributes			Field of experience							Specialized knowledge			Main reasons for marking "○" (experience, qualifications, etc.)
	Period in office	Gender	Independent officer	Corporate management	Sustainability	Overseas business international experience	Marketing	Manufacturing technology R&D	Carbon neutrality	Digital	Finance	Legal compliance	HR/Labor	
Taku Oshima Representative Director and Chairman	11 years	Male		○	○	○		○	○				○	●Representative Director and President of NGK ●NGK Manufacturing Engineering department (including experience as an overseas representative), other business divisions (including knowledge concerning carbon neutrality) ●Chairman of a local employers' association, Outside Director at major financial and infrastructure business
Shigeru Kobayashi Representative Director and President	5 years	Male		○	○	○	○		○					●NGK Business divisions (including experience in management of overseas subsidiary and knowledge concerning carbon neutrality) ●NGK Sustainability Management Committee Chair
Hideaki Shindo Director and Managing Executive Officer	4 years	Male			○	○	○				○			●Officer in-charge of NGK Finance and Accounting department and Sustainability Management department ●NGK Business divisions (including experience in management of overseas subsidiary) ●General Manager of Corporate Planning Office at NGK
Jun Mori Director and Managing Executive Officer	—	Male			○	○	○	○	○					●NGK Business divisions (including planning, technology development, experience in management of overseas subsidiary and knowledge concerning carbon neutrality)
Mayumi Inagaki Director and Senior Executive Officer	1 years	Female			○							○	○	●Executive officer in-charge of NGK HR, General Affairs, Auditing, Group Compliance, and Legal departments
Emiko Hamada Outside Director	8 years	Female	○	○	○	○		○	○	○				●R&D department and business divisions (including experience in international standardization and knowledge concerning carbon neutrality and digital technology) at major electronic component company, Outside Director at the same company ●Professor at national university graduate school (engineering), research project manager at national research and development agency ●Ph.D. (engineering), MBA
Hiroshi Sakuma Outside Director	1 years	Male	○	○	○	○	○		○		○		○	●CEO of business group for major trading company (including experience in M&A, and expertise in management accounting analysis) ●Manager of global company (including expertise related to carbon neutrality)
Noriko Kawakami Outside Director	1 years	Female	○		○	○		○	○	○				●Product Development department at major industrial plant business (including expertise in carbon neutrality and digital technology) ●Ph.D. (Engineering), Bachelor of Engineering (electrical and Electronics), and fellow of the American Institute of Electrical and Electronics Engineers (IEEE)
Kengo Miyamoto Outside Director	1 years	Male	○		○	○						○	○	●Lawyer (Japan, New York, U.S.A., and New South Wales, Australia)
Naoya Yagi Audit & Supervisory Board Member	2 year	Male			○	○	○				○	○		●NGK General Manager of Auditing Department, Corporate Planning department, Finance & Accounting department (including experience as an overseas representative)
Koji Hasegawa Audit & Supervisory Board Member	—	Male			○	○	○				○			●NGK Finance & Accounting department (including experience stationed overseas) ●NGK Business divisions (including experience in planning, and management of overseas subsidiary)
Masayoshi Sakaguchi Outside Audit & Supervisory Board Member	6 year	Male	○	○	○							○	○	●Chief executive of administrative organ (Commissioner-general of National Police Agency) ●Chair of large-scale foundation
Takashi Kimura Outside Audit & Supervisory Board Member	3 year	Male	○	○	○					○	○	○	○	●Executive at major financial institution and IT company ●Outside Audit & Supervisory Board Member of listed company (Full-time)

Director/Audit and Supervisory Board Member Skill Matrix and Reasons for Item Selection 

Reasons for selection as field of experience/specialized knowledge

Corporate management	We believe that experience in and knowledge about corporate management in particular are essential to ensure legality in business activities and transparency in management, as well as promote healthy risk-taking and effectively supervise appropriate decisionmaking and business execution.
Sustainability	Our management is centered on ESG (Environmental, Social, Governance) to realize the NGK Group Vision. We believe that experience and knowledge in the sustainability field in particular are essential to correctly recognize the ESG factors and other sustainability issues of the NGK Group and to connect these to the enhancement of our medium- to long-term corporate value by appropriately supervising and addressing initiatives aimed at sustainability issues.
Overseas business/ International experience	We believe that experience in overseas business or other international experience in particular are essential to provide appropriate advice and effectively supervise business execution in the business of the NGK Group supplying materials such as ceramics and related products to a wide range of areas including overseas.
Marketing	Reinforcing societal implementation of our technologies and thereby commercializing products are indispensable for the realization of the NGK Group Vision. We believe that experience and knowledge gained through work including marketing in the sales or planning field in particular are essential to provide appropriate advice to the above activities and effectively supervise business execution.
Manufacturing technology R&D	Creating new businesses early and encouraging innovation in production processes are indispensable for the achievement of New Value 1000 (aiming to attain 100.0 billion yen of sales in newly launched businesses in 2030) laid out in the NGK Group Vision. We believe that experience and knowledge in the manufacturing technology or R&D field in particular are essential to provide appropriate advice to the above activities and effectively supervise business execution.
Carbon neutrality	We have formulated the NGK Group Environmental Vision, aiming to build a main business in the field related to carbon neutrality (CN) through the transformation of our business structure, which is set forth in the NGK Group Vision, and aiming to contribute to the realization of "CN," a "recycling-oriented society," and "harmony with nature," which are required by society, through our business activities. We believe that experience and knowledge regarding carbon neutrality in particular are essential to provide appropriate advice to, manage, and effectively supervise business strategies for achieving these objectives.
Digital	We have formulated the NGK Group Digital Vision, aiming to build a main business in the field related to digital society (DS) through the transformation of our business structure, which is set forth in the NGK Group Vision, and aiming to become a company where the use of data and digital technology will be commonplace in 2030, by positioning digital transformation (DX) as the driving force for our business transformation and accelerating DX throughout the NGK Group. We believe that experience and knowledge regarding digital technology in particular are essential to provide appropriate advice to, manage, and effectively supervise business strategies for achieving these objectives.

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Reasons for selection as field of experience/specialized knowledge

Finance	The NGK Group will strive to enhance its enterprise value by accelerating the transformation of its business portfolio through the proper allocation of management resources as well as promoting three initiatives: enhanced profitability of capital, secured growth, and the enhancement of non-financial value. We believe that specialized knowledge in finance in particular is essential to provide appropriate advice to, manage, and effectively supervise financial strategies for promoting and achieving these objectives.
Legal compliance	We have established the NGK Group Corporate Business Principles and NGK Group Code of Conduct to stipulate how everyone working for the NGK Group should execute their jobs so that they abide by society's laws and the Company's Articles of Incorporation and comply with corporate ethics. It is the Board of Directors' responsibility to ensure appropriate management by monitoring the status of compliance with these laws and ethics. The Board of Directors is also required to identify a number of risks that can occur in daily business activities and appropriately manage such risks. Therefore, we believe that specialized knowledge in legal compliance in particular is essential.
HR/Labor	The NGK Group aims to add new value to society by developing an enriched and lively workplace environment where personnel with diverse experiences and values can play active roles, and each personnel autonomously embraces challenges and elevate each other. In addition, we have established the NGK Group Human Rights Policy to ensure that the human rights of all people affected by the NGK Group's business activities will not be violated, promoting initiatives for respect for human rights. We believe that specialized knowledge regarding human resources and labor in particular is essential to provide appropriate advice to, manage, and effectively supervise human resources strategies for promoting and achieving these objectives.

[Nomination and Compensation for Directors and Audit & Supervisory Board Members](#) >

Board of Directors Diversity Policy

The Articles of Incorporation specify a maximum of 15 directors on the NGK Board of Directors. NGK does not discriminate on the basis of gender, age, nationality, and race. Based on this policy, NGK strives to enhance diversity in both gender and internationality of the Board of Directors by electing women directors and directors who possess experience in the management of overseas subsidiaries. NGK also strives to ensure the independence of the Board of Directors by specifying that one-third or more of directors be independent outside directors.

NGK deems the following director skills necessary: Practical experience and demonstration of leadership in areas in which the NGK Group operates its business; professional expertise in finance, legal affairs, human resources and labor, information and communications, and other areas. We also think it is necessary to have highly independent outside directors who possess a high degree of expertise in legal affairs or corporate finance, or who possess knowledge of international affairs, trends in technology, and corporate management. The skill matrix (expertise) of the current Board of Directors is shown above.

Activities of Board of Directors

Number of members: 9; Convened 16 times in FY2024

The Board of Directors is composed of nine directors (six males, three females; one-third or more of directors are outside directors). It discusses and votes on matters designated under the Companies Act, NGK's Articles of Incorporation and Rules for the Board of Directors (These matters include company-wide unified budgeting, strategic planning such as dissolution, mergers, and alliances of the company, appointing and dismissing representative directors, and authorizing business reports and financial statements etc., the disposal and acceptance of transfer of important assets, the appointment and removal of important employees, etc.). The Board also monitors the job performance of all company directors. The chair of the Board of Directors is a non-executive director. In addition, both the full-time and outside members of the Audit & Supervisory Board attend meetings of the Board of Directors and provide their opinions when necessary.

The key topics and time allocated for each category in FY2024 were as follows.

[Medium- to Long-Term Issues and Group Vision]

- Formulation of materiality action plans and KPI
- Initiatives for new business creation (Progress report on New Value 1000)
- Initiatives concerning business portfolio
- Determining key risks to follow-up on

[Financial Results, Budget, and Finances]

- Budget and financial results
- Sale of long-term shareholdings
- IR/SR activities report

[Environmental, Social, Governance (ESG)]

- Progress report on fifth 5-Year Environmental Action Plan
- Information disclosure based on TNFD
- Formulation of competition laws compliance program
- Renewable electricity procurement

[Committee Report]

- Report on principal committee activities

[Personnel/Human Resources]

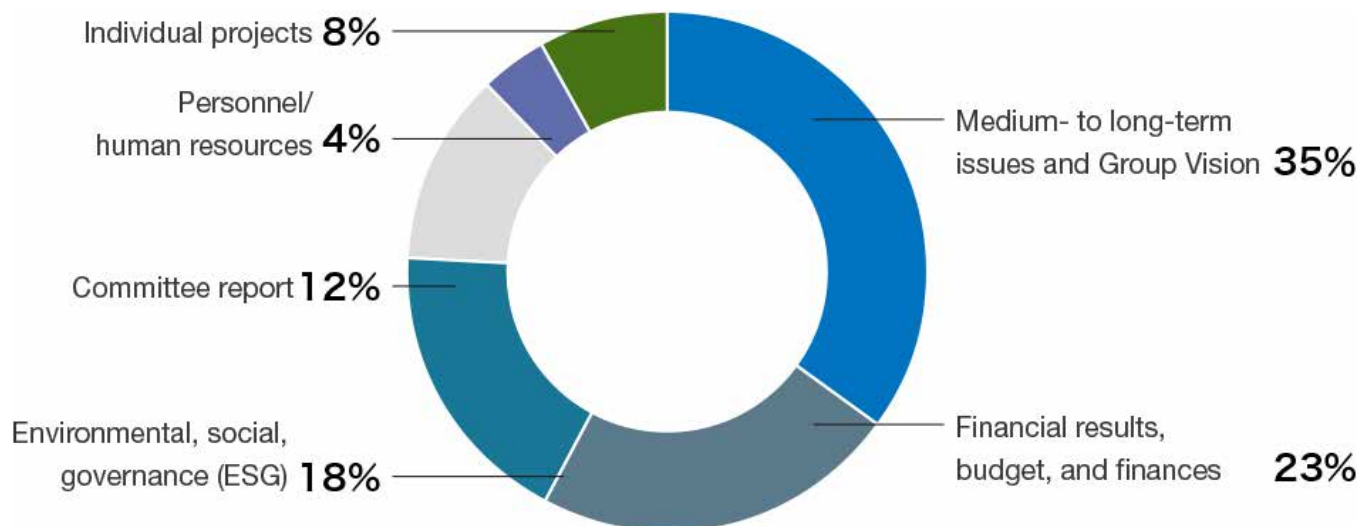
- Organization and Personnel
- Deployment of senior management
- Revision of human resources system for key personnel

[Individual Projects]

— Investment in production facilities, R&D, etc.

— Change to trade name

Time Allocated to Key Topics



Audit & Supervisory Board / Audits

Composition of the Audit & Supervisory Board (As of June 30, 2025)

Name	Age	Number of shares of the Company held	Number of stock acquisition rights owned (Equivalent number of shares)	Board of Directors	Audit & Supervisory Board meeting	Nomination and Compensation Advisory Committee	Business Ethics Committee
Naoya Yagi	60	4,306	-	100% (16/16)	◎ 100% (13/13)	-	-
Koji Hasegawa	61	1,040	-	-	-	-	-
Masayoshi Sakaguchi	67	-	-	100% (16/16)	100% (13/13)	◇ 100% (3/3)	100% (5/5)
Takashi Kimura	70	-	-	100% (16/16)	100% (13/13)	-	100% (5/5)

Notes: 1. ◎ indicates the chair

2. ◇ indicates attendance as an observer

3. Meeting attendance shown is for FY2024

Audit Policy and Audit Plan

At the beginning of each fiscal year, the Audit & Supervisory Board formulates an audit policy and audit plan, and sets key audit items. For FY2025, these are as follows.

[Audit Policy]

The Audit & Supervisory Board and each of its members focus on monitoring management risks to ensure that NGK's internal control systems function properly in light of the business environment and other conditions, and that the entire group can be maintained in good health. This includes checking our crisis management systems for handling natural disasters as well as various other risk cases. We believe that it is vital to check on the progress and permeation of the NGK Group Vision both inside and outside the company.

We base our audits on managing risks during the execution of day-to-day business and confirming the rationality of management decisions. Where necessary, we conduct investigations into individual matters, and work to improve governance.

[Important Audit Items]

(1) NGK Group Vision

1. The status of ESG-related initiative penetration
2. The progress of new business, business restructuring, etc.
3. Business-specific risk awareness and reasonableness of the management decision-making process

(2) Confirm framework for handling risk management and readiness to face future changes

Status of Audits by Audit & Supervisory Board Members

Number of members: 4; Convened 13 times in FY2024

The Audit & Supervisory Board is composed of four Audit & Supervisory Board members (all male). Audit & Supervisory Board members supervise directors' decision-making process and job performance, by attending meetings of the Board of Directors and other important meetings, receiving reports from directors, employees, etc. and requesting explanations where necessary. In addition, they review the establishment and operation of so-called internal control systems, and confirm the appropriateness of accounting auditors' auditing methods and results.

The major resolutions and matters reported in FY2024 were as follows.

[Resolutions]

- Audit & Supervisory Board members' audit policy and audit plans, and audit reports of the Audit & Supervisory Board
- Consent to compensation for Audit & Supervisory Board members
- Confirmation of proposals and documents to be submitted to the General Meeting of Shareholders
- Formulation of criteria for Audit & Supervisory Board member candidates
- Consent to the comprehensive advance agreement for non-assured engagement that was provided by the auditing firm to which the accounting auditors belong, as well as its network firm

[Reports]

- Report on audit activities by full-time Audit & Supervisory Board members
- Audit plan by the Accounting Auditor
- Financial audit report by the Accounting Auditor
- Report on Financial Results by the Finance & Accounting Department
- Report on the results of internal audits by the Auditing Department
- Confirmation of the Convocation notice of the annual shareholder's meeting

Internal Audits

The Internal Auditing Department has established an Auditing Department (20 members: as of March 31, 2025), and the general manager of the Auditing Department is a member of the Internal Control Committee. The Auditing Department audits the status of business execution in NGK and each domestic and overseas Group company based on audit plans approved by resolution of the Board of Directors, and reports the results of audits to the President, Board of Directors, and Audit & Supervisory Board.

While internal audits are conducted independently of Audit & Supervisory Board audits and accounting audits, the Auditing Department regularly discusses audit policy, plans, and results with Audit & Supervisory Board members and the accounting auditor to improve the effectiveness and efficiency of audits. It also compiles the results of individual audits and reports them to the President and Audit & Supervisory Board members whenever necessary. Moreover, because audits in areas such as quality, environment, and safety and health require specialized knowledge, the dedicated departments serving as secretariats of the committees involved with each area perform internal group audits. They report the results of these audits within each committee and report the committee summaries to the Board of Directors.

Accounting Audits

Accounting audits are performed by an auditing firm and include financial statement and internal control auditing carried out in line with the Financial Instruments and Exchange Act and auditing carried out in line with the Companies Act. Selection of the auditing firm to perform accounting audits was carried out by the Audit & Supervisory Board according to a variety of criteria. Among the key criteria were whether the firm maintains systems and structures in line with the Regulation on Corporate Accounting ("Matters Related to the Performance of Duties of Financial Auditor(s)"); whether it possesses professional expertise and can carry out appropriate auditing while maintaining a position of independence; and whether there are any grounds for dismissal of financial auditors, as per the Companies Act. Based on the results of this confirmation, NGK selected Deloitte Touche Tohmatsu LLC as the current accounting auditor.

In addition to the above criteria for the selection of the accounting auditor, Audit & Supervisory Board members and Audit & Supervisory Board also evaluated the suitability of the accounting auditor from the perspective of whether it communicates with management, Audit & Supervisory Board members, the Finance Department, and Internal Auditing Department, performs Groupwide audits, and addresses risk of fraud appropriately, through the daily audit activities. Based on this, Deloitte Touche Tohmatsu LLC ("Deloitte") has been determined to be qualified to serve as the accounting auditor for NGK.

Board of Directors Audit Advisory Committee

Nomination and Compensation Advisory Committee

Number of members: 6; Convened 3 times in FY2024

The Nomination and Compensation Advisory Committee was established in order to ensure fairness and enhance transparency in officers' personnel matters, the determination of compensation, and other matters as an advisory body to the Board of Directors. The committee receives inquiries from the Board of Directors and then deliberates on personnel matters for directors and the Audit & Supervisory Board members (including handling by the Chief Executive Officer during states of emergency), matters relating to compensation for directors and executive officers, upper limits on the total compensation amount for directors and Audit & Supervisory Board members, and a succession plan for the Chief Executive Officer (formulation and revision of succession plan, progress on developing potential successors, and determination of successor candidates), etc. The committee reports its results to the Board of Directors. The committee (4 male members and 2 female members) consists of a majority of independent outside directors and a committee chairperson who is selected from among the independent outside directors. The chair and members are selected by the Board of Directors. In addition, one outside Audit & Supervisory Board member attends committee meetings as an observer to confirm the appropriateness of the deliberation process.

The major matters discussed by the committee in FY2024 were as follows.

- Appointment of directors, representative directors, directors in key positions, and Audit & Supervisory Board members
- Compensation (cash and stock-related compensation) commensurate with the position of each individual director and executive officer
- Amount of performance-linked bonuses paid to each individual director this fiscal year
- Progress on development of successors to the Chief Executive Officer

Other Various Types of Meeting Bodies

Business Ethics Committee

Number of members: 7; Convened 5 times in FY2024

The Business Ethics Committee is comprised of outside officers and internal directors who are in charge of compliance (4 male and 3 female). The committee conducts necessary investigations into fraudulent acts and violations of laws and regulations involving corporate officers and employees and advises the Board of Directors on how to prevent recurrence. To ensure compliance with competition laws and the Foreign Corrupt Practices Act, the committee works on building a compliance system and considering compliance activities, and makes recommendations to the Board of Directors. The Committee strives to strengthen the compliance system by establishing, in addition to the current Helpline System, a whistle-blowing system (hotline), which is directly linked to the Business Ethics Committee, as a mechanism to prevent any such fraudulent act or violation of laws and regulations.

Corporate Council

Number of members: 11; Convened 2 times in FY2024

The Corporate Council is a council where outside officers and internal directors, and others can exchange opinions. It provides an opportunity for management to actively seek advice from outside officers on various issues concerning management. The council is composed of eight male members and three female members.

Conference of Outside Directors and Outside Audit & Supervisory Board Members

Number of members: 6; Convened 2 times in FY2024

This conference consists only of outside officers and is a conference where outside officers can exchange opinions concerning corporate management issues and other matters to actively contribute to discussions in Board of Directors meetings. The committee is composed of four male members and two female members.

Hearing Convened by Audit & Supervisory Board Members and Outside Directors

Number of members: 8; Convened 14 times in FY2024

Hearings consist of Audit & Supervisory Board members and outside directors. The purpose of these hearings is to collect information from relevant internal personnel concerning the corporate business environment and company issues. The hearing is composed of six male members and two female members.

Business Execution System

Executive Committee

Number of members: 16; Convened 23 times in FY2024

The Executive Committee is the body that deliberates necessary matters to assist the president in making decisions. It consists of the president, executive vice presidents, group executives of each business group, the group executive of Corporate NV Creation, the group executive of Corporate R&D, the group executive of Corporate Manufacturing Engineering, directors in charge of each department, and full-time Audit & Supervisory Board members, as well as corporate officers, committee chairs, general managers and division heads designated by the president. Fifteen committee members are male and one is female.

Other Bodies *The number of times held refers to the cumulative total from April 2024 to March 2025

Strategy Committee
Convened: 16 times

This committee conducts a broad range of discussions aimed at discovering problems and considering solutions concerning issues important to business management, strategy and policy planning, and reporting on the execution status and progress of various businesses and projects.

Other Bodies *The number of times held refers to the cumulative total from April 2024 to March 2025

Sustainability Management Committee Convened: 6 times	This body assists the president, who is the Sustainability Management Committee chairperson, in decision-making about strategy, action plans, and important issues related to NGK Group sustainability (medium-to-long-term), as well as Environmental, Social, and Governance, and Sustainable Development Goals. It also performs deliberation for the presentation of agenda items deemed important to the Board of Directors or the Executive Committee. Note: In April 2022, we renamed the former "ESG Committee" to the "ESG Management Committee." The Committee will more proactively address the NGK Group's sustainability issues and the activities will be appropriately supervised by the Board of Directors.
Risk Management Committee Convened: 3 times	This is a body established to report important matters relating to risk management to the Board of Directors and Executive Committee, to assist the Board of Directors in supervising the Group's risk management, and to contribute to increasing the sophistication of risk management.
Development and Commercialization Committee Convened: 4 times	This body deliberates items necessary to assist the decision-making of the president and Development and Commercialization Committee chair regarding policies, evaluations, budgets, major individual planning, and commercialization projects related to development and commercialization.
Capital Investments Committee Convened: 10 times (Not including joint meetings with the Development and Commercialization Committee)	This body deliberates items necessary to assist the decision-making of the president and Capital Investments Committee chair regarding the examination and evaluation of policies, budgets, performance, and major individual planning related to capital expenditure and information systems.
Quality Committee Convened: 2 times (Not including joint meetings with the Development and Commercialization Committee)	Aiming to increase customer satisfaction and trust by realizing even higher-quality products and services, this body deliberates the matters necessary to help the president and the Quality Committee chair with decision-making regarding the following items. 1. Determination, revision, or abolition of Quality Policy and Objectives 2. Items pertaining to the prevention of serious quality defects in the market and technological responses after occurrence 3. Items pertaining to the quality assurance framework and avoidance of quality risks in the commercialization of developed products 4. Other quality-related matters determined to be important
Safety and Health Committee Convened: 2 times	This body performs overall management of the environment, safety and health for the NGK Group by regularly ascertaining overall conditions, and carrying out the necessary deliberations for making decisions on important policies, formulating action plans, and handling important matters.
Compliance Committee Convened: 3 times	This body assists the president and Compliance Committee chair with decision-making by deliberating essential matters pertaining to the following. 1. Observance of laws, regulations, and corporate ethics 1.1. Determination, revision, or abolition of basic policies related to the observance of laws, regulations, and corporate ethics Note: Deliberation items for Board of Directors meetings

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Compliance Committee Convened: 3 times	1.2. Determination of systems, structures, and strict observance of important activities pertaining to laws, regulations, and corporate ethics 1.3. Handling of Helpline matters 1.4. Determination, revision, or abolition of risk management structures pertaining to laws, regulations, and corporate ethics 2. Response to the matters, incidents, or accidents related to laws, regulations, or corporate ethics that are special crisis management matters 3. Other compliance-related issues deemed important by the committee chair
Internal Controls Committee Convened: 3 times	This body deliberates matters necessary to help the president and Internal Controls Committee chair with decision-making regarding internal controls system assessment and reporting related to financial reporting based on the Financial Instruments and Exchange Act. 1. Determines the scope of reporting for each fiscal year, assessment and reporting schedules, standards to assess internal controls, and other basic matters 2. Summarizes internal controls assessment and drafts internal controls report
HR Committee Convened: 7 times	This body assists the president with decision-making by examining issue presentation, research reporting, solution development, and other essential matters related to corporate obligations in respecting human rights (issue handling) and the important personnel policies within the NGK Group. 1. Matters related to the determination, revision, or abolition of basic policy on human rights 2. Matters related to raising human rights awareness among Group companies and implementing human rights due diligence 3. Matters related to important personnel policies whose impact may potentially extend to Group companies 4. Other human rights and personnel policy-related matters deemed serious by the committee chair
BCP Countermeasures Headquarters Convened: 1 time	Aimed at ensuring business continuity in critical situations such as disasters, terrorism, or systems failure, this body executes the operation and maintenance of business continuity plans (BCP) in normal times as well as gives instructions on and support to restoration systems, and prioritizes restoration orders when BCP is in effect.
Central Disaster Prevention and Control Headquarters Convened: 1 time	This body executes requisite duties under commands from the Head and deliberates items necessary to assist the decision-making of the president and Head of this body regarding items related to earthquakes, storm and flood damage, fires, and explosions that threaten or significantly impact the company.

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Security Export Control /
Specified Export and Customs
Clearance Control Committee
Convened: 1 time

This body deliberates and determines items necessary for guidance for subsidiaries and affiliates, legal compliance and the improvement of other internal systems with respect to security export controls, specified export declaration systems, and the management of customs clearance operations.

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Effectiveness of Board of Directors

Evaluation on the effectiveness of the Board of Directors

Analysis and Evaluation Results concerning the Effectiveness of Board of Directors

NGK's Board of Directors conducts a survey of directors and Audit & Supervisory Board members at the close of each fiscal year on the effectiveness of Board of Directors meetings. The Board entrusts analysis and evaluation of the responses to an external organization, which reports the results to the Board of Directors. NGK continually strives to improve effectiveness through such means as considering the importance and necessity of each issue identified and reinforcing efforts in Board of Directors meetings during the next fiscal year.

1. Policy on Initiatives and Main Initiatives for FY2024, Based on the Effectiveness Evaluation Covering FY2023

(1) Board of Directors policy on initiatives

- The following items should continue to be monitored and regularly reported to the Board of Directors in order to achieve the NGK Group Vision
 - Status of the business portfolio revision
 - Progress of the New Value 1000 (aiming for sales of 100 billion yen from new commercialized products by 2030)
 - Progress of various committee activities and company-wide projects
 - Progress of human resources strategy
 - Status of company-wide risk management
 - IR and SR activities

[Primary Initiatives]

We also established multiple reporting periods for each of the annual agenda items above, and reported to the Board of Directors. Concerning our human resources strategy, above all, we discussed the ideal form of personnel system for key personnel (managers) and resolved to revise our Key Personnel System in order to promote maximum utilization of and autonomous action by diverse personnel.

- Identify issues that should be given priority for discussion, and deepen discussion of long-term management plans and business strategies (including group companies)
 - [Primary Initiatives]
 - Continuing from FY2023, the energy storage business, and Group subsidiary strategy were discussed intensively at the expansion strategy meeting, which was held twice and also attended by outside officers.
- Work to enhance opportunities for dialogue between senior management and outside officers, while deepening discussions on succession plans and training senior management

[Primary Initiatives]

Lunch meetings between senior management and outside officers were held once a month with participants sitting wherever they liked. We also promoted more vigorous and substantial exchange of opinions by setting up interviews between outside directors and executive officers. Meanwhile, senior management attended hearings convened by Audit & Supervisory Board members and outside directors, and reported on the general state of the business.

- Strive to further enhance provision of information to outside officers

[Primary Initiatives]

Concerning items on the agenda for the Board of Directors, we strove to further enhance opportunities for individual explanations according to department in charge, etc. At the same time, we put in place a framework that provides outside officers with constant access to materials related to the execution of business and used by the Executive Committee, Strategy Committee, and various other committees.

(2) Policy on initiatives for the Nomination and Compensation Advisory Committee

- Continue striving to further share the state of committee discussions with the Board of Directors

[Primary Initiatives]

The state and content of committee discussions were carefully shared with the Board of Directors using committee materials. In addition, intentions regarding the deployment of senior management were reported to the Board of Directors by the President when decisions were made concerning the organization or personnel.

- Continue striving to further enhance provision of information to the Nomination and Compensation Advisory Committee

[Primary Initiatives]

More detailed data about the personal history, skills, and expected roles of new directorial candidates and Audit & Supervisory Board members was provided to each committee member by the committee secretariat.

2-1. Methods of Effectiveness Evaluation for FY2024

- (1) A survey comprising a total of 30 questions, 6 questions evaluating the initiatives for FY2024, and two free-response entries was conducted on all directors (10 members) and all Audit & Supervisory Board members (4 members) at the beginning of April 2025, and the analysis and evaluation of the responses were entrusted to an external organization. The survey questions are also periodically reviewed in light of changes to the current environment.
- (2) In addition, as part of the effectiveness evaluation of the Board of Directors, the Nomination and Compensation Advisory Committee has conducted a questionnaire to its members (chairperson, members, and observers), and entrusted the analysis and evaluation of the responses to an external organization.

2-2. Summary of Evaluation Results for FY2024

- (1) A summary of the evaluation results was reported to the Board of Directors at its meeting on June 6, 2025.
- (2) Based on the results of the questionnaire, the external evaluation of the effectiveness of the Board of Directors (including the Nomination and Compensation Advisory Committee) was high overall, and stated that the Board of Directors is operating appropriately.
- (3) Overall comments from external organizations are as follows.
 - The NGK Board of Directors has an appropriate member composition and suitably comprises elements that form the foundation necessary as a Board of Directors, including the commitment of each member and a healthy culture. These have been maintained as strengths based on the results of the past few years.

- The Nomination and Compensation Advisory Committee conducts practical discussions and evaluates whether it has properly shared the details of these with the Board of Directors.
- The policies for initiatives in FY2024 were drawn up based on the results of the effectiveness evaluation for the previous fiscal year. In response, they set up opportunities for discussion about business strategy, expanded the information shared with outside directors, and strove to broaden the content of reports from the Nomination and Compensation Advisory Committee. These efforts have plainly helped to enhance the effectiveness of the Board of Directors.
- Although a certain amount of progress was observed on discussions about business strategy, it is important to continue to deepen such discussions. In order to achieve the Group Vision and further enhance its effectiveness, it is recognized that this must also lead to formulating specific policy measures, which include optimizing the business portfolio and discussing unprofitable businesses.
- The identification and narrowing-down of the issues to be placed on the agenda for the Board of Directors is an ongoing challenge for appropriately conducting such discussions.
- It has been pointed out that, to deepen discussions, appropriately reviewing past management decisions, and connecting this to future action, are crucial.
- The further enhancement of initiatives for succession planning and training, and the performance evaluation, treatment, etc. of senior management, are thought to be ongoing challenges for discussions of the Board of Directors.

3. Policy for Initiatives for FY2025 to Further Improve Effectiveness

Based on the results of the evaluation in FY2024 and discussions by the Board of Directors, we have formulated the following policies for initiatives for FY2025.

We will strive to improve the effectiveness of the Board of Directors and the Nomination and Compensation Advisory Committee through continuous efforts.

(1) Policies for initiatives of the Board of Directors

- To realize the NGK Group Vision, the following items shall continue to be regularly reported to, discussed, and monitored by the Board of Directors.
 - Overall progress of the medium-term management plan
 - Initiatives for transforming our business portfolio
 - Progress of New Value 1000 (aiming for sales of 100 billion yen from new commercialized products by 2030)
 - Status of company-wide risk management
 - IR and SR activities and various committee activities
- Identify issues that should be given priority for discussion, and deepen discussion of business strategies (including for group companies), then connect this to monitoring unprofitable businesses and formulating specific policy measures
- Further enhance opportunities for dialogue between senior management and outside officers, while deepening discussions on succession planning, senior management development, treatment of senior management, etc.
- Policies for initiatives of the Nomination and Compensation Advisory Committee

- Work to further share the status of discussions from the committee to the Board of Directors, while further ensuring the appropriateness of the committee's discussion process
- Work to further enhance the information provided to the committee related to compensation and nomination

Training Policies for Officers

Directors and Audit & Supervisory Board members have been tasked with the responsibility of exercising the due care of a good manager. NGK therefore has established a training policy of providing the following types of opportunities to sharpen skills and knowledge so that they can fully execute their duties as experts in various kinds of management or as supervisors of business execution.

1. For internal officers: Training on the Companies Act, the Financial Instruments and Exchange Act, competition laws, and other aspects of corporate governance and compliance
2. For outside officers: Mainly providing separate explanations from the department in charge concerning items on the agenda of the Board of Directors and regularly providing information on the business environment and issues as well as opportunities for exchanging opinions

The results for each in FY2024 are as follows.

1. Training on the Companies Act, competition laws, etc. by invited lecturers (2 times in total)
2. Outside officers visit to factories (5 times in total, Nagoya Site, Chita Site, Komaki Site, Ishikawa Plant, R&D facilities)
Briefings before meetings of the Board of Directors and business explanations (14 times in total)

Interviews with executive departments by Audit & Supervisory Board members and outside directors (14 times in total)

Nomination and Compensation for Directors and Audit & Supervisory Board Members

Matters Related to Nomination, Appointment and Dismissal

Policy on Nomination, Appointment, and Dismissal

The NGK Group is mainly engaged in the business of manufacturing materials such as ceramics and related products for supply to a wide range of areas, including overseas. The executive management, including representative directors, directors with special titles, directors in charge of business execution, and corporate officers is appointed without regard to gender, age, nationality, or race. They are required to make management decisions and other decisions based on their detailed knowledge of business in each NGK Group business area, specialized knowledge of manufacturing technology and R&D, and knowledge of finance, legal affairs, labor, and other areas. Full-time Audit & Supervisory Board members must also perform audit responsibilities based on professional expertise in finance and other areas, and knowledge gained from individual business experience. For these reasons, we focus on two kinds of expertise when nominating candidates for the positions of director and full-time Audit & Supervisory Board member. One is practical experience and leadership in manufacturing technology, R&D, sales, planning, overseas business, and other business areas. The other is expertise in finance, legal affairs, labor, information and telecommunications, and other subjects. For outside directors and outside Audit & Supervisory Board members, we nominate candidates from among a pool of human resources who possess professional expertise in legal affairs, corporate finance, or other areas, or discernment into international affairs, social and economic trends, trends in technology, and corporate management.

When selecting candidates for the positions of representative director and director with a special title, we focus on candidates who possess insight into NGK Group issues and the ability to formulate corrective measures, and who possess the leadership to express the vision of the NGK Group and drive the organization. When a member of executive management has committed a serious violation of local/national laws and regulations, the Articles of Incorporation, and other NGK Group rules, or has engaged in acts that seriously affect business execution, NGK will dismiss that individual upon receiving a recommendation that dismissal is appropriate from the Nomination and Compensation Advisory Committee and obtaining approval by resolution of the Board of Directors.

The Nomination and Compensation Advisory Committee, which has independent directors as a majority of its members, deliberates on this policy and reports its conclusions to the Board of Directors.

Procedures for Nomination, Appointment, and Dismissal

When nominating candidates for the positions of director and Audit & Supervisory Board member, all representative directors discuss each candidate and obtain consent from the Audit & Supervisory Board for Audit & Supervisory Board member candidates. In addition to this, NGK strives to ensure fairness, transparency, and timeliness in the process of nomination, appointment, and dismissal. This is accomplished through deliberation on the nomination of each candidate for director and Audit & Supervisory Board member, and appointment and dismissal of representative directors and directors with special titles by the Nomination and Compensation Advisory Committee, which has independent outside directors as a majority of its members. The committee then reports its detailed conclusions to the Board of Directors. After the Board of Directors has sufficiently considered the conclusions of the committee, the Board elects candidates for the positions of director and Audit & Supervisory Board member, and approves this as an agenda item (resolution) for the General Meeting of Shareholders. After directors are elected by the General Meeting of Shareholders, the Board of

Directors appoints representative directors and directors with special titles, based on the report by the Nomination and Compensation Advisory Committee.

Conclusion of Limited Liability Contract

At the 140th Ordinary General Meeting of Shareholders held on June 29, 2006, NGK amended its Articles of Incorporation to allow outside directors and Outside Audit & Supervisory Board members to enter into limited liability contracts so as to more fully carry out their expected roles.

The following provides an overview of the contents of the limited liability contract that NGK has concluded with all outside directors and outside Audit & Supervisory Board members in accordance with our Articles of Incorporation.

(Overview of Limited Liability Contract for Outside Directors and Outside Audit & Supervisory Board Members)

Concerning the liability as set forth in Article 423, paragraph 1 of the Companies Act, upon entering into this contract, outside directors and Outside Audit & Supervisory Board members must bear only the minimum liability stipulated by Article 425, Paragraph 1 of the Companies Act, provided that they have performed their duties in good faith and without gross negligence.

Even after entering into this contract, outside directors and Outside Audit & Supervisory Board members shall carry out their duties objectively and from a neutral standpoint.

State of D&O Liability Insurance

NGK has entered into a D&O liability insurance agreement with directors and other personnel. The details are as follows. The Board of Directors will reach a resolution concerning conclusion of the current contract on June 26, 2025.

- Scope of Persons Insured
All NGK directors, Audit & Supervisory Board members, and executive officers
- Summary of Insurance Policy Contents
This policy provides compensation for damages and dispute expenses incurred by the insured person due to claims for damages that result from actions (including omissions) performed by the insured person in connection with their duties as an officer of NGK. However, we have taken measures to ensure the actions taken by officers and other personnel in the service of their duties are appropriate. Thus it does not provide compensation for damages caused by the illegal acquisition of personal profits or benefits, criminal actions, or actions taken with the knowledge that they are illegal. All insurance premiums are borne by NGK.

Criteria for Determining Independence of Outside Officers

Outside Directors

In addition to the requirements for an outside director under the Companies Act and for an independent director specified by the Tokyo Stock Exchange, NGK may not designate a person who falls under any of the following items as an outside director with independence (hereinafter referred to as the "Independent Outside Director"). Even if a person falls under one or more of these items, NGK may make an exception and deem a person suitable for serving as an Independent Outside Director of NGK in light of his or her character, knowledge, and other attributes. However, the person must still meet the requirements of the Companies Act and Tokyo Stock Exchange and the Company must

provide an external explanation of why such person is suitable to serve as an Independent Outside Director of NGK. In these standards for determining independence, a business executive refers to an executive director, executive officer, corporate officer or other employee, and the NGK Group refers to NGK and its subsidiaries or affiliates.

1. A major shareholder who holds 10% or more of current voting rights in NGK, or who was a business executive of the corporation if the major shareholder is a corporation during the past three fiscal years, including the most recent fiscal year.
2. A current business executive of a business partner of the Company which has engaged in transactions with the NGK Group totaling 2% or more of consolidated net sales for either party in any of the last three fiscal years, including the most recent fiscal year.
3. A person who was a business executive in a corporation that is a financial institution or other major creditor which is absolutely essential in financing the NGK Group and for which no alternatives exist, during the past three fiscal years, including the most recent fiscal year.
4. A current director or officer of an organization that has received donations or grants totaling 10 million yen/year or 30% of total average annual expenses of the organization, whichever is greater, from the NGK Group in any of the past three fiscal years, including the most recent fiscal year.
5. A certified public accountant (CPA) or tax accountant, or a current employee of an accounting firm or tax accounting firm who served as an accounting auditor or accounting advisor of the NGK Group during the past three years, including the most recent fiscal year.
6. An attorney, certified public accountant, tax accountant, or other consultant who does not correspond to any of the individuals mentioned above in 5, who received 10 million yen/year or more in cash and other assets in addition to officer compensation from NGK Group during the past three years, including the most recent fiscal year, or who does not correspond to any of the individuals mentioned above in 5 and is a current employee, etc. of a law firm, accounting firm, tax accounting firm, consulting firm, or other organization that provides expert advice, and that organization has received payments from the NGK Group totaling 2% or more of total consolidated net sales in any of the past three fiscal years, including the most recent fiscal year.
7. A person who was a business executive in a company in which NGK is currently a major shareholder, during the past three fiscal years, including the most recent fiscal year.
8. A spouse or relative within the second degree of kinship of anyone to whom the preceding items 1 through 7 apply.

Outside Audit & Supervisory Board Members

In order to ensure that outside Audit & Supervisory Board members are impartial and that there is no conflict of interest with our general shareholders, NGK makes comprehensive decisions based on the Securities Listing Regulations of the Tokyo Stock Exchange.

Reasons for Individual Appointments

Outside Directors

Name	Reasons for appointment
Emiko Hamada	Ms. Emiko Hamada has made remarkable achievements such as leading the invention and the world's first commercialization of the CD-R (recordable CD) while working for Taiyo Yuden Co., Ltd. Since then, she has been engaged in research activities mainly through industry-

Outside Directors

Name	Reasons for appointment
Emiko Hamada	academia-government collaborations as Professor at Nagoya Institute of Technology and Visiting Professor at Nagoya University. The Company expects her to oversee the management of the Company from an independent, objective standpoint based mainly on the perspective of research, development, and product commercialization, by utilizing the insights she has developed through her career. In addition, she has been appropriately fulfilling her duties as an Outside Director of the Company by giving her opinion in terms of ways to proceed with product development and new business and also on human resources measures, as well as offering suggestions to the Company's business operation and overseeing the management of the Company, therefore we renominated her as a candidate for Outside Director.
Hiroshi Sakuma	Mr. Hiroshi Sakuma has extensive knowledge of energy fields including carbon neutrality, as well as experience leading large organizations, through his work in important positions at Mitsubishi Corporation such as Division COO of New Energy & Power Generation Div. and subsequently Executive Vice President, Group CEO of Global Environmental & Infrastructure Business Group, as well as Member of the Management Board and Chief Cooperation & International Officer of N.V. Eneco*. The Company expects him to oversee the management of the Company as an Outside Director and a management specialist from an independent, objective standpoint, by utilizing those insights and experience. In addition, he has been appropriately fulfilling his duties as an Outside Director of the Company by giving his opinions on management decisions and overall business activities from an investor's perspective, as well as offering suggestions to the Company's business operation and overseeing the management of the Company, therefore we renominated him as a candidate for Outside Director. * A comprehensive energy company that engages in business in Europe and that was acquired by Mitsubishi Corporation and Chubu Electric Power Co., Inc. through Diamond Chubu Europe B.V., which was jointly established by them.
Noriko Kawakami	Ms. Noriko Kawakami has long engaged in product development in the power electronics field at Tokyo Shibaura Electric Co., Ltd. (currently Toshiba Corporation) and Toshiba Mitsubishi-Electric Industrial Systems Corporation (currently TMEIC Corporation) and possesses extensive knowledge and ample work experience in the energy and digital fields, such as leading the development and commercialization of large-capacity power converters applied to power grids and infrastructure facilities that use renewable energy and so forth. She was awarded the title of fellow from the IEEE* for her contributions to the development and commercialization of this technology. The Company expects her to offer suggestions to the Company's business operation from a practical perspective and oversee the management of the Company from an independent, objective standpoint as an Outside Director, by utilizing those insights and experience. In addition, she has been appropriately fulfilling her duties as an Outside Director of the Company by giving her opinion in terms of ways to proceed with supply chain development and cost reduction methods and also on intellectual property strategies, as well as offering suggestions to the Company's business operation and overseeing the management of the Company, therefore we renominated her as a candidate for Outside Director. * The Institute of Electrical and Electronics Engineers, Inc. (IEEE) headquartered in the U.S., the IEEE is the world's leading association for electrical and electronic engineering technologies. It has over 400,000 members in more than 190 countries around the world.

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Name	Reasons for appointment
Kengo Miyamoto	Having long engaged in legal practice domestically and internationally as an attorney-at-law, Mr. Kengo Miyamoto possesses a wealth of work experience and specialized knowledge, including providing a wide range of advice to a number of Japanese and international companies in various fields such as manufacturing, service, transportation, and IT. The Company expects him to oversee the management of the Company as an Outside Director from an independent, objective standpoint based mainly on the perspective of compliance, by utilizing those insights and experience. In addition, he has been appropriately fulfilling his duties as an Outside Director of the Company by giving his opinion on matters such as legal strategies and improving the effectiveness of the internal reporting system, as well as offering suggestions to the Company's business operation and overseeing the management of the Company, therefore we renominated him as a candidate for Outside Director.

Outside Audit & Supervisory Board Members

Name	Reasons for appointment
Masayoshi Sakaguchi	Mr. Sakaguchi has a wealth of experience in the administrative sector and a proven track record in managing large organizations. He was chief of the Osaka Prefectural Police Headquarters, chief of the Commissioner-General's Secretariat (National Police Agency), and commissioner-general of the National Police Agency. We have determined he can contribute to improving NGK's corporate value such as by making use of this experience to express his opinions on the impact of the international situation on business activities, and strengthening our risk management structure as an NGK Outside Audit & Supervisory Board member from the viewpoint of the legality of business and risk management. We have therefore elected him to the position of outside Audit & Supervisory Board member. Mr. Sakaguchi has no personal, financial, or important business relationship with, nor other vested interest in, NGK. He has served as executive advisor to Nippon Life Insurance Company, which is both an NGK shareholder and a source of financing for NGK. However, at the end of FY2024, the Nippon Life Insurance Company's holdings did not exceed more than 1.03% of total NGK shares. Moreover, with regard to the financing received, NGK has business transactions with numerous financial institutions, and the nature of the financing secured from Nippon Life Insurance Company is not such that NGK is in any way beholden to it. Therefore, we deem the shareholding and financial borrowing relationship between NGK and Nippon Life Insurance Company to be one which would not impact NGK's management decision-making. Moreover, the total amount of NGK payments to Nippon Life of management fees for corporate pension plans is less than 0.1% of consolidated operating expenses and, thus, does not create a conflict of interest with our general shareholders. Concurrent with his work with NGK, Mr. Sakaguchi serves in a variety of roles, including as president of the Japan Automobile Federation. However, no personal, financial, or important business relationship, nor other vested interest, exists between NGK and the organizations with which he currently works.
Takashi Kimura	Mr. Kimura possesses many years of experience in managing companies through his service as a Managing Executive Officer at The Bank of Tokyo-Mitsubishi UFJ, Ltd. (now, MUFG Bank, Ltd.), as President and Representative Director of Mitsubishi Research Institute DCS Co., Ltd. In addition to his experience and knowledge in finance and corporate governance gained throughout his career, Mr. Kimura also served as a full-time Audit & Supervisory Board

Outside Audit & Supervisory Board Members

Name	Reasons for appointment
Takashi Kimura	member of MITSUBISHI GAS CHEMICAL COMPANY, INC. and possesses extensive experience and expertise as an auditor of listed companies. We consider him capable of utilizing his broad experience and wide-ranging insight to provide opinions on financial management, governance systems (including those of subsidiaries), and the nature of decision-making to contribute to enhancing the corporate value of NGK, and have therefore elected him as an outside Audit & Supervisory Board member. Mr. Kimura has no personal, financial, or important business relationship with, nor other vested interest in, NGK. Mr. Kimura comes from the Bank of Tokyo-Mitsubishi UFJ (now MUFG Bank), which is both an NGK shareholder and a source of financing for NGK. However, at the end of FY2024, MUFG Bank's holdings did not exceed more than 2.45% of total NGK shares, and, with regard to the financing received, NGK has business transactions with numerous financial institutions, and the nature of the financing secured from MUFG Bank is not such that NGK is in any way beholden to it. Moreover, given that 15 years have already passed since he left the Bank of Tokyo-Mitsubishi UFJ (now MUFG Bank), we do not believe his decisions are affected by the wishes of MUFG Bank in any way that would constitute a conflict of interest with our general shareholders. Also, no personal, financial, or important business relationship, nor other vested interest, exists between NGK and the organizations with which he is or has been involved.

NGK has submitted written notification to the Tokyo Stock Exchange and Nagoya Stock Exchange of the appointment as independent officers of the above six individuals.

CEO Succession Planning

The revised NGK Group Chief Executive Officer Succession Plan was approved by resolution of the Board of Directors in April 2023. This succession plan establishes the required qualities, development policies, selection procedures, and other actions for developing chief executive officer successors. Based on this, the president provides the Nomination and Compensation Advisory Committee with a progress report on the plan each year, and the committee reviews the appropriateness of the plan.

Matters Related to Compensation

Policy for Determining Compensation

Basic Concept

The compensation system for NGK directors and others has been established for the purpose of contributing to the Group's sustainable growth and the enhancement of its medium-to-long-term corporate value by practicing the NGK

Group Philosophy and realizing the NGK Group Vision. We reassess whether the level and composition of compensation is appropriate in light of those objectives and revise it as appropriate. The Company also strives to ensure transparency and fairness in governance of compensation.

[Policies on Determining the Details of Compensation for Directors and Others](#) 

General Meeting of Shareholders Resolutions on Compensation

General Meeting of Shareholders' resolutions on officer compensation and the details of compensation

Persons eligible for payment	Date and details of the resolution	Number of persons eligible for payment at the time of resolution	Reference: Type of compensation
Directors	June 28, 2007 Amount of compensation etc.: 800 million yen or less in an annual amount	14 (including 2 outside directors)	Basic compensation and performance-linked bonuses (excluding outside directors)
	June 29, 2017 Of the above, the amount of compensation limit for outside directors was revised from 30 million yen or less to 60 million yen or less in annual amount	13 (including 3 outside directors)	
Directors (excluding outside directors)	June 27, 2022 Total amount of monetary claims to be paid as compensation for the grant of restricted shares: 200 million yen or less in annual amount	6	Restricted share compensation
Audit & Supervisory Board Members	June 26, 2023 Amount of compensation etc.: 150 million yen or less in annual amount	4	Basic compensation

Composition of compensation for Directors, Audit & Supervisory Board Members and Executive Officers

Basic compensation Fixed annual compensation corresponding to position	+	Performance-linked bonus Bonus corresponding to annual business performance	+	Restricted shares compensation Same benefits and risks as shareholders
Directors: 800 million yen or less in an annual amount (Including an annual amount of 60 million yen or less as the compensation limit for outside directors)			Directors: Annual amount not exceeding 200 million yen	
Audit & Supervisory Board members: 150 million yen or less in annual amount				

Composition Ratio of Compensation for Directors and Audit & Supervisory Board Members in FY2024

Composition of compensation	Fixed/Variable		Fixed compensation	Variable compensation	
	Type of incentive		-	Short/Medium-term	Long-term
	Type of compensation		Basic compensation	Performance-linked bonuses	Restricted share compensation*
Eligible for compensation	Directors	Representative directors	48%	38%	14%
		Directors (excluding representative directors)	56%	28%	16%
		Outside Directors	100%	-	-
	Audit & Supervisory Board members		100%	-	-

* Restricted share compensation is a mechanism which assumes that shares will be held long-term until the director steps down, and which is indirectly linked to company performance through stock price.

Items Related to Performance-linked Compensation, etc.

Details of Performance Indicators and Reasons for their Selection Based on Calculation of Performance-linked Compensation Amount

NGK pays its directors (excluding outside directors) and executive officers performance-linked bonuses as performance-linked compensation. These are calculated using the following indicators.

We have adopted the following consolidated performance figures as short-term indicators that emphasize achieving performance goals and annual growth, while taking into account the perspective of capital efficiency.

- Percent change in net sales, operating income, and net income for the current fiscal year compared to the previous fiscal year
- Targets and percent change for return on invested capital (ROIC)* set at the beginning of (or during) the period

* Using NGK ROIC (calculated based on operating income, accounts receivable, inventories, and fixed assets).

Moreover, we emphasize medium-term growth, and the degree to which we attain our targets for the following material issues in each fiscal year serves as an indicator of the extent to which we have achieved the NGK Group Vision from the perspective of ESG (Environmental, Social, Governance).

- Percent change in operating income attained for medium-to long-term performance targets in the NGK Group Vision
- Rate of achievement of Keep Up 30* for new products and new business creation
- Rate of achievement of single-year CO₂ emissions reduction targets

* A target of 30% or higher net sales from new products (as defined by NGK)

Method for Calculating Performance-linked Compensation

We follow the method below to determine the amount of performance-linked bonus paid to each individual.

- (a) Set a base bonus amount calculated for each position.
- (b) Apportion the base bonus amount among each performance indicator. Allocate a higher percentage to items that take a medium-to- long-term perspective than to those that take a short-term perspective. Then include the representative director's evaluation of the individual performance of each other director and executive officer in the allocation items.
- (c) Evaluate each allocation item over a scale of -100% to +100%, and calculate the appraised value for each item.
- (d) Sum up these amounts to calculate the amount of performance-linked bonus

As a result, the actual performance-linked bonus paid will vary from -100% to +100% of the base bonus amount.

Percent Allocated per Item for Performance-linked Bonuses and Performance Appraisal Indicators (Excluding Individual Appraisals) and Results for Main Indicators Used to Calculate Performance-linked Bonuses in FY2024

Item	Percent Allocated	Evaluation Coefficient Variance Ratio	Performance Appraisal Indicators (Calculated in practice by replacing each indicator with the variance ratio and evaluating it.)
Short-term Indicators	40%	-100% to +100%	Consolidated results (net sales / operating income / net income) — Actual values for previous period (FY2023): ¥578.9 billion / ¥66.3 billion / ¥40.5 billion — Actual values for current period (FY2024): ¥619.5 billion / ¥81.2 billion / ¥54.9 billion — Percent change: +7% / +22% / +35%*
		-100% to +100%	Return on invested capital — Target value at beginning of period (FY2024): 11.0% — Actual value for current period (FY2024): 12.1% — Percent change: +1.1%*
Medium- to long-term Indicators	60%	-100% to +100%	Medium- to long-term performance targets (operating income) — Target value for current period (FY2024): ¥77.5 billion — Actual value for current period (FY2024): ¥81.2 billion — Percent change: +4.8%

Percent Allocated per Item for Performance-linked Bonuses and Performance Appraisal Indicators (Excluding Individual Appraisals) and Results for Main Indicators Used to Calculate Performance-linked Bonuses in FY2024

Item	Percent Allocated	Evaluation Coefficient Variance Ratio	Performance Appraisal Indicators (Calculated in practice by replacing each indicator with the variance ratio and evaluating it.)
Medium- to long-term Indicators	60%	-100% to +100%	Rate of achievement of material issues (important items listed below) - Keep Up 30* for new products and new business creation: Not achieved - Single-year CO₂ emissions reduction targets: 600,000 tons achieved - Other items (Progress of internal projects, etc.)

Non-monetary Compensation etc.

Restricted Shares Compensation

NGK grants restricted share compensation to directors (excluding outside directors) and executive officers (excluding executive officers who are overseas residents on a non-temporary basis) in order to increase their sensitivity to stock price, to further share with shareholders the benefits and risks associated with stock price fluctuations, and to motivate them to improve corporate value over the medium to long-term. Since stock price fluctuations are directly related to its value, the amount of restricted shares is not fixed, but the number of shares granted is fixed in accordance with the position.

The following is an overview of the restricted share compensation we granted in FY2024.

Overview of restricted share compensation	
Class and number of shares to be issued	NGK common stock: 126,500 shares
Issue price	2,082 yen per share
Aggregate issue amount	263,373,000 yen
Persons eligible for the allotment of the shares and the number thereof, as well as the number of shares to be allotted	NGK directors (excluding outside directors): 6 people, 45,500 shares executive officers who do not concurrently serve as NGK directors: 24 people, 81,000 shares (excluding executive officers who are overseas residents on a non-temporary basis)

* Period of the transfer restriction stipulated in the restricted share allotment agreement (hereinafter "the Allotment Agreement"):

The allottees must not transfer, establish as security interests or otherwise dispose of NGK's ordinary shares allotted to them according to the Allotment Agreement from the date on which they receive their allotment according to the Allotment Agreement to the point in time directly after retiring from the position determined in advance by NGK's Board of Directors from among the positions of NGK's officers and employees.

Claw Back Clause

NGK has a provision to acquire all of the accumulated allotted stocks without compensation in the event that the allottee of the restricted shares violates laws and regulations during the period of the transfer restriction, or in the event that certain other conditions stipulated in the allotment agreement are met.

Stock Holding Guideline for Directors and Executive Officers

In order to foster a sense of shared value between directors and executive officers and shareholders, and to contribute to the sustainable growth of the NGK Group and the enhancement of its corporate value over the medium to long-term, NGK has established guidelines for holding its own stock, etc.*¹ and in principle, within three years of assuming office, directors and executive officers shall endeavor to hold company stock, etc. equivalent to the following values.

* 1 Includes stock compensation-type stock options that have not yet reached the exercise commencement date.

Persons eligible	
Directors (Chairman and President)	150% or more of basic compensation (annual amount)
Directors* ² and Executive Officers* ³	100% or more of basic compensation (annual amount)

* 2 Excluding Chairman, President, and outside directors

* 3 Excluding executive officers who are overseas residents on a non-temporary basis

Amount of Compensation for Directors and Audit & Supervisory Board Members

Total Compensation for Directors and Auditor & Supervisory Board Members (FY2024)

Director category	Total compensation (million yen)	Total compensation by type (million yen)			Applicable officers (people)
		Fixed Compensation	Performance-linked compensation	Restricted share compensation	
Directors (excluding Outside Directors)	610	303	217	89	7
Outside Directors	53	53	—	—	6
Audit & Supervisory Board Members (excluding Outside Audit & Supervisory Board Members)	72	72	—	—	2

Total Compensation for Directors and Auditor & Supervisory Board Members (FY2024)

Director category	Total compensation (million yen)	Total compensation by type (million yen)			Applicable officers (people)
		Fixed Compensation	Performance-linked compensation	Restricted share compensation	
Outside Audit & Supervisory Board Member	28	28	–	–	2

Notes: 1. The total amount of compensation for directors (excluding outside directors), the total amount of compensation by type, and the number of directors receiving compensation as noted above, includes one director who resigned from their position on June 26, 2024 and the amount of compensation they received.

2. The total amount of compensation for outside directors, the total amount of compensation by type, and the number of directors receiving compensation as noted above, includes two outside directors who resigned from their positions on June 26, 2024 and the amount of compensation they received.

Compensation of Directors Receiving Total Compensation of ¥100 Million or More (FY2024)

Name	Officers category	Company category	Total compensation by type (million yen)			Total compensation (million yen)
			Fixed compensation	Performance-linked compensation	Restricted share compensation	
Taku Oshima	Director	Submitting company	67	54	19	141
Shigeru Kobayashi	Director	Submitting company	67	52	19	140

Average Employee Compensation and President Compensation

The compensation of the Representative Director and President in FY2024 was 16.6 times the average compensation of employees at NGK.

(FY2024)

Compensation of Representative Director and President: 140,000,000 yen

Average Compensation of Employees: 8,453,574 yen

Policy on Cross-Shareholdings

NGK maintains cross-shareholding of listed stock that contribute to the long-term business development of our group for the primary purpose of maintaining and strengthening business relationships. Moreover, we maintain strategic cross-shareholding with each company in the Morimura Group, with which we share a founder. Since the Group brand forms a part of our corporate value through its history and philosophy, this arrangement aims to enhance the quality of management for both sides. As part of our portfolio of assets, these all provide the supplemental liquidity deemed necessary by our business plan. While we are always looking to reduce the scope of our cross-shareholding in the interest of asset efficiency, it may fluctuate due to factors including overall business trends, changes in risks, financial conditions, and business relationships with individual parties. Moreover, for stocks, the Board of Directors not only considers the significance of holdings from the perspective of business relationships, but periodically confirms the appropriateness of continued holdings, the safety of ratings, and the efficiency of dividend yields, together with capital policy. Meanwhile, when comparing our capital costs, we do not evaluate stocks alone, but manage return on invested capital (NGK ROIC) for each business with differing risks and expected returns. And we include our cross-shareholding valuations in the balance sheet of each business. We exercise voting rights accompanying cross-shareholdings from the perspective of whether the content of a proposal would be detrimental to shareholder interests. We also pay attention to whether the company whose shares we hold is managed with an emphasis on increasing corporate value and shareholder profits. We sold 5,159 million yen in four specified investment stocks in FY2024 as a result of this verification.

Number of Stocks and Balance Sheet Amount (March 31, 2025)

	Number of stocks	Total balance sheet amount (million yen)
Unlisted shares	41	3,264
Shares other than unlisted shares	38	62,820

Stocks for Which Number of Shares Increased in FY2024

	Number of stocks	Total acquisition amount for increase in number of shares (million yen)	Reason for increase in number of shares
Unlisted shares	2	1,629	Due to new investments in companies contributing to the creation of our new products and businesses
Shares other than unlisted shares	-	-	-

Stocks for Which Number of Shares Decreased in FY2024

	Number of stocks	Total acquisition amount for decrease in number of shares (million yen)
Unlisted shares	-	-
Shares other than unlisted shares	4	5,159

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Compliance Promotion Structure

| NGK Group Corporate Business Principles and Code of Conduct

The NGK Group Corporate Business Principles expresses our basic way of thinking for carrying our corporate activities. The NGK Group Code of Conduct sets forth the items that our officers and employees should comply with. All NGK Group employees will act with high ethical standards according to these principles and norms as they fulfill their social responsibilities throughout the entire supply chain to build societal trust in the NGK Group. These have been translated into 13 languages, including English and Chinese. At the beginning of each fiscal year, we provide notifications to ensure each and every member of the NGK Group is aware of and thoroughly understands these documents.

We also began using the company intranet to show popup notifications about the Corporate Business Principles on the computers of all employees at NGK and Group companies in Japan.

The NGK Group checks for violations of the NGK Group Corporate Business Principles, NGK Group Code of Conduct, relevant laws and regulations, etc., through internal audits, our whistleblower system, compliance awareness surveys, and the like. Moreover, we periodically review the effectiveness of these guidelines and norms through reporting to and discussion by the Compliance Committee, and make relevant improvements.

[NGK Group Corporate Business Principles and Code of Conduct](#) >

Scope of Application

The NGK Group Corporate Business Principles apply to all employees and suppliers of the NGK Group. Employees are provided with training and the NGK Group Code of Conduct guidebook upon joining the NGK Group to familiarize them with these principles. They also receive job grade-specific training and other instruction.

Non-Compliance Incident Reports

In FY2024, there were no incidents of serious non-compliance in the NGK Group.

Number of Compliance Violations

[Governance Data Collection](#) 

| NGK Group Basic Guidelines for Compliance Activities

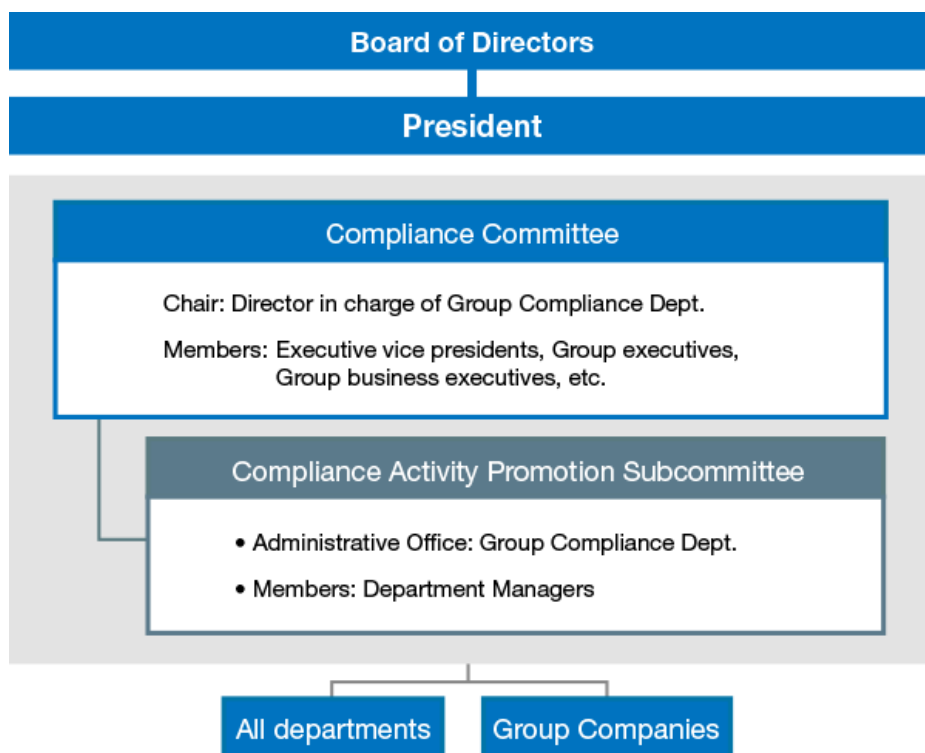
The idea of what constitutes good compliance activities continues to evolve worldwide amidst a changing social and legal landscape, and the NGK Group requires mechanisms for objectively evaluating and verifying, as well as continually improving, its own activities in light of international norms. It is also important that compliance-related activities as a whole be improved qualitatively by ensuring that compliance-related ideals and values be standardized not only in areas of legal compliance but also in areas such as safety, the environment, and quality. Thus, in FY2021, it was in this context that the new NGK Group Basic Guidelines for Compliance Activities were created in order to codify in writing the NGK

Group's basic stance on, and approach to, compliance activities. And we are making sure that all employees in and outside Japan are aware of and understand them. Based on our NGK Group Basic Guidelines for Compliance Activities, related business groups and departments are working together to qualitatively improve compliance activities with regard to safety, the environment, quality, exports, human rights, competition laws, and the like, so that they are more effective.

Compliance Promotion Structure

The NGK Group has established a Compliance Committee, which reports directly to the president. A Compliance Activity Promotion Subcommittee was established as part of the Compliance Committee to ensure proper execution of the Committee's work. The Compliance Committee regularly reports the matters it handles to the Board of Directors, and the Board of Directors supervises the activities of the Compliance Committee.

Compliance Promotion Structure Chart



Since FY2021, we have asked Group companies to select compliance administrators and compliance officers and have begun discussions with them to establish the foundations of an effective and efficient compliance structure for the entire NGK Group. The Group Compliance Department is also leading the introduction of innovative training formats in each company using hybrid communication that includes group discussions as well as online and in-person meetings in an effort to enhance learning through interactive education. We have participants fill out questionnaires after they complete the training to gauge their level of understanding and consider improvements for the next round of training. The goal of pursuing these efforts is to make sure that each NGK Group company will be able to independently formulate, implement, confirm effectiveness, and improve compliance measures in the future.

Mission of the Group Compliance Department

- Embed the idea of “compliance first” within the corporate culture across the NGK Group
- Ensure thorough compliance throughout the NGK Group by promoting compliance activities, which meet international norms and establish mechanisms for ongoing improvement
- As for Group companies outside Japan, promote compliance for our globalized operations by obtaining the most up-to-date information regarding applicable laws and social demands in each region

Mission Achievement-Focused Initiatives of FY2024

- At the beginning of the year, the president shares a message about compliance being our top priority (continued from previous years)
- During Compliance Strengthening Month in October, we shared the President's message and put up educational posters
- Promoting awareness of NGK Basic Guidelines for Compliance Activities and providing examples of its utilization in department work
- Risk-based compliance education (NGK and Group companies in and outside Japan) with a focus on effectiveness
- Adapting to global laws and regulations (competition laws, anti-bribery laws, etc.)
- Operation and maintenance of a whistleblowing system (In Japan: Check operational status of revised Whistleblower Protection Act, Outside Japan: Adapt to EU Directive on the Protection of Whistleblowers, and review each company's regulations)

Interaction with Suppliers

We ask all of our suppliers to comply with the NGK Group Supplier Code of Conduct. This code of conduct stipulates specific initiatives related to ethics and compliance, including comprehensive measures for anti-corruption, intellectual property protection, and fair trading. We ask all our suppliers to consent to compliance with this code once a year. We also ask suppliers to consent to compliance with this code when starting new transactions.

Whistleblowing System

The NGK Group has established various whistleblowing systems to detect compliance violations early and to promote the organization's self-purification function.

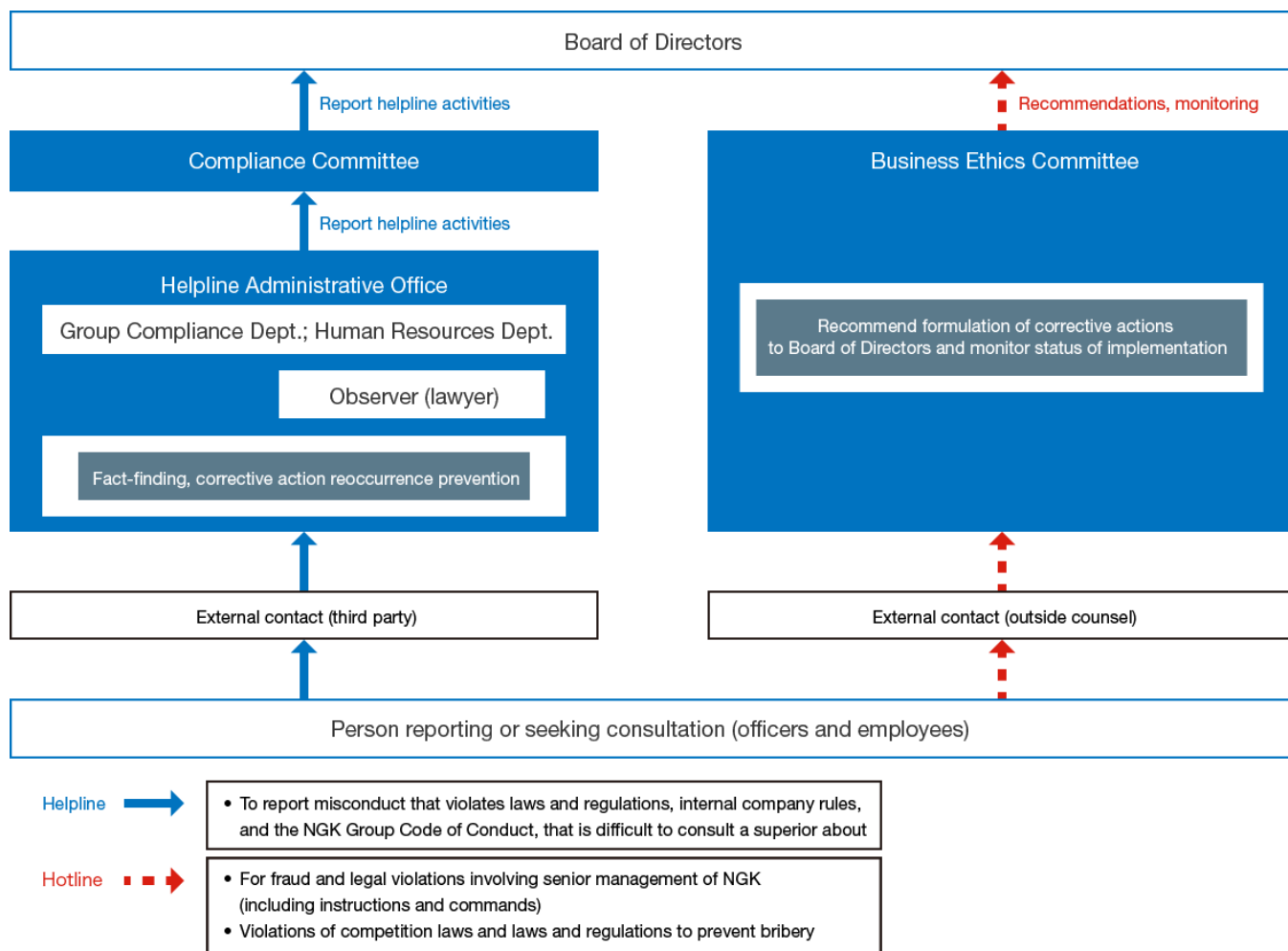
The Helpline and Hotline are internal reporting systems that comply with the Whistleblower Protection Act and other relevant laws and regulations. These systems can be used by everyone who works at NGK and every Group company location. This includes officers, employees, employees dispatched on external assignments, advisors, contract employees, temporary employees based on a temporary employment agreement, resident employees accompanying a service contract, and those who have left the company within the last year.

Reports and consultations are generally accepted by an external contact operated by a third party via telephone or the internet. The systems handle consultations and reports not only in Japanese but also in English. Additionally, if the reporter or consulters prefers not to disclose their name or affiliation to the reception window or company (anonymity), their reports and consultations will be accepted anonymously.

Our internal regulations guarantee protection of those seeking advice or reporting issues, and the NGK Group Code of Conduct prohibits retaliation against those who make reports. Moreover, only workers who have received instruction based on the Whistleblower Protection Act can handle consultations and reports. The workers also undergo regular training as stipulated by our internal regulations. Upon receiving a report or consultation, we will carry out the response process from investigation to corrective actions under the advice of external independent lawyers and all the processes will be conducted in a fair, impartial and honest manner. If the investigation reveals misconduct or a violation of the law, NGK will impose penalties on those involved in accordance with our employment regulations.

In addition, we have established a system to receive reports from all stakeholders involved in the business activities of the NGK Group (such as suppliers, customers, and local residents) through contact points such as the supplier helpline and our website.

Organization of Whistleblowing System



Helpline

We have established a helpline to receive inquiries and reports from employees aimed at curtailing and preventing activities contrary to the spirit of the NGK Group Corporate Business Principles and Code of Conduct and to facilitate quick resolution when issues occur. Each Group company outside Japan has its own helpline.

Senior management officers and managers undergo training regularly conducted by external lawyers about how to handle consultations, investigation of the facts, matters to bear in mind concerning corrective action, and specific case studies on reports of incidents including harassment and how to deal with it. In FY2024, this training included examples of fraudulent case, in addition to power harassment case.

Number of Helpline Consultation / Reporting Cases

[Governance Data Collection](#) 

In FY2024, there were a total of 42 consultations and reports. Each case was handled carefully following the process from receipt, investigation, judgment, and corrective measures in consultation with third-party outside lawyers. Although none of the details of the whistleblowing had an impact on company operations, compliance violations were confirmed in 5 cases, and corrective measures were promptly taken. We continue to periodically evaluate and improve the effectiveness of the NGK Group Corporate Business Principles and Code of Conduct, and our compliance measures based on the content of these reports and consultations.

Hotline

We have established a hotline as a whistleblowing system for responding to fraud and legal infractions committed by senior management of NGK, and all violations related to competition laws and anti-corruption laws. Outside lawyers manage the hotline and the Business Ethics Committee, which consists mainly of outside directors, handles issues. The Committee reports these issues to the Board of Directors and takes corrective steps.

We have set up similar hotlines for all Group companies outside Japan. We are working to appropriately operate these hotlines through the support and supervision of the Group Compliance Dept.

Communication with Stakeholders

The NGK Group has established contact points not only for employees working within the group but also for a wide range of stakeholders to provide information on compliance violations in order to ensure the early detection of compliance violations and to further promote the organization's self-purification function.

The website contact accepts reports from all stakeholders who have some form of interest in the NGK Group, including customers, shareholders, and local residents.

Additionally, for stakeholders who are suppliers from whom the NGK Group directly procures goods and services, we have established a dedicated contact point, the Supplier Helpline.

[Supplier Helpline](#) >

Anti-Corruption Structure

Assessing Risk and Dealing With Corruption

The NGK Group carries out risk management for major compliance risks, including corruption, by considering them from a management-level perspective. We then sort those deemed important risks into the categories of business environment, strategy, and internal factors, and continually review them. The Compliance Committee and other committees and responsible departments take a leading role in working to avoid and prevent risks in each business by conducting risk analysis through surveys and the evaluation of special risks in internal control processes.

Compliance Education

Compliance Education for Employees

Compliance training and awareness among corporate officers and employees is driven primarily by the Group Compliance Department and the Legal Department. In addition to career training and training for employees to be posted overseas, we provide Laws and Compliance Seminars to explain laws and regulations and to introduce case studies. Since FY2018, we have included quality compliance and contract observance as part of our career education courses.

Compliance Education Conducted in FY2024 (Overall)

Name	Target	Content	Instruction format	Number of sessions
Career education	New hires	Compliance, competition laws, anti-bribery regulations	Seminar by in-house instructor	1
	Promoted or career-change employees	Compliance, Corporate Business Principles / Code of Conduct (Honest Business Activities)	Video presentation	2
	Mid-career hires	Compliance, competition laws, anti-bribery regulations, Corporate Business Principles / Code of Conduct (Honest Business Activities)	Seminar by in-house instructor / Video presentation	1
	Newly appointed supervisors	Compliance, competition laws, anti-bribery regulations, quality compliance, contract observance, security export control, Corporate Business Principles / Code of Conduct (Honest Business Activities)	Seminar by in-house instructor / Video presentation	1

Compliance Education Conducted in FY2024 (Overall)

Name	Target	Content	Instruction format	Number of sessions
Career education	Newly appointed managers	Compliance, competition laws, anti-bribery regulations, quality compliance, contract observance, security export control	Seminar by in-house instructor	1
	Managers promoted to second grade	Compliance, quality compliance	Seminar by in-house instructor	1
Training for employees scheduled for postings abroad (global training)	Employees scheduled for postings abroad	Competition laws, anti-bribery regulations, security export control	Video presentation	1
Compliance education	Managers and sales staff of Group companies outside Japan	Compliance, competition laws, anti-bribery regulations	Lecture provided by lawyer and e-learning	19 (24 sites)
	General employees of NGK and Group companies in Japan	Compliance, harassment prevention, whistleblowing system	Video presentation	1
	Sales staff of NGK and Group companies in and outside Japan	Anti-bribery regulations	Lawyer-led seminar	4
	Executive officers	Competition laws	Lawyer-led seminar	1
	Newly appointed executive officers	Companies Act and competition laws	Lawyer-led seminar	1
	Managers and sales staff of NGK and Group companies in Japan	Competition laws	Lawyer-led seminar / video presentation	1
	People responsible for Competition Law Practice, etc.	Oral training on competition law	Seminar by the Compliance Department	2
Laws and Compliance Seminars	Managers and other targets depending on content	May About damage compensation	Seminar by in-house instructor / video presentation	1
		July Best practices for preventing bribery — Bribery laws and regulations and international business—	Seminar by outside lawyer / video presentation	1

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Compliance Education Conducted in FY2024 (Overall)

Name	Target	Content	Instruction format	Number of sessions
Laws and Compliance Seminars	Managers and other targets depending on content	September About the Freelance Act	Seminar by in-house instructor / video presentation	1
		November Trends in harassment as seen in court cases —Along with how to use the whistleblower system —	Seminar by outside lawyer / video presentation	1
		January Latest trends in insider trading regulations	Seminar by in-house instructor / video presentation	1
		March Practical considerations related to copyright	Seminar by in-house instructor / video presentation	1

Competition Law Education Conducted in FY2024

Name	Target	Content	Number of sessions
Training for newly appointed directors	Newly appointed directors and executive officers	Live seminar by outside lawyer	1
Competition law compliance lectures	All directors, managers, and sales staff of NGK and its Group companies in Japan	Streamed video of live seminar by outside lawyer	2
Compliance training for Group companies outside Japan	Managers and sales staff of Group companies outside Japan	Lawyer-led live seminar; e-learning; seminar conducted by an in-house instructor	19 (24 sites)
Training on competition laws by internal lecturer	Targets depend on content	Department-requested on-site training	2

Anti-Bribery Training Conducted in FY2024

Name	Target	Content	Number of sessions
Training for sales staff	Sales staff in Japan and some Heads of Group companies outside Japan	Anti-bribery regulations	4
Legal Compliance Seminars	Managers of NGK	Anti-bribery regulations	1
Compliance education	Managers and sales staff of Group companies outside Japan	Live seminar by outside lawyer and online seminar; seminar conducted by an in-house instructor; conducted using paper-based resources	19 (24 sites)

Conducting Anti-Bribery Training

In addition to having in-house lecturers provide job grade-specific training to NGK employees, in FY2019 we began conducting training for sales department employees that incorporates interactive lectures by outside lawyers and group discussion of case studies relevant to participants' work. We also arrange lawyer-led seminars and other training at all Group companies. In addition, starting in FY2023, we have expanded the scope of training from just the sales department to include other departments that are exploring new businesses.

Other Dissemination Activities

Compliance Newsletter

Once a month we publish a Compliance Newsletter to the company intranet that uses four-frame cartoons to allow readers to learn about topics relevant to them in an easy-to-understand manner. We use examples to explain in detail what readers should learn.

コンプライアンス便り Vol.106

今回のテーマ：違法な時間外労働をさせていませんか？

**長時間残業や休日出勤が不要な職場、
活力のある働きやすい職場を目指しましょう。**

ある日、Aさんの会社に、事前の連絡なしで労働基準監督署から労働基準監督官がやってきた。Aさんが応対したところ、監督官は、「36協定に違反していますね？」と調査を始めた。

Aさんの会社は、従業員に36協定を超える長時間の時間外労働をさせ、労働基準法違反で摘発されたのだ。この件は翌朝の新聞で大きく報道され、Aさんは、「大騒ぎになってしまった……どうなるんだろう」と不安を感じていた。

会社には朝から問い合わせや苦情の電話がひっきりなしにかかってきたため、Aさんも電話への対応に追われることになった。Aさんの会社に就職が内定している学生からは、内定を辞退したい旨の申し出もあった。インターネット上で「ブラック企業」という悪評が立ち、就職活動中の人から忌避されるようになってしまったためである。

このような状況は、社内の雰囲気にも影響していた。「ネットじゃウチはブラックって言われているし、やる気も出ないよ」「新入社員もゼロかぁ……」「俺、辞めようかなぁ……」等々……すっかり活力が失われてしまった職場に、Aさんは頭を抱えてしまった。

この事例はフィクションです。

Note: Provided by "Compro Custom" compliance training tools service

Themes Covered in the Compliance Newsletter in FY2023

April	Why are we working towards SDGs?
May	What if someone has trouble communicating?
June	What if you illegally take customer information out of the company?
July	Can we omit inspections if we are not going to make our delivery deadline?
August	What if you use a company phone for personal matters?
September	What is integrity?
October	Compliance Strengthening Month
November	What if I experience same-sex sexual harassment?
December	Human Rights Week
January	Do you have healthy relationships with your business partners?
February	What is disguised contracting?
March	Are you making workers work illegal overtime?

Compliance Strengthening Month

Since FY2017, we have declared October to be Compliance Strengthening Month, and take actions such as sharing the President's message, putting up educational posters, and making sure employees know about the internal whistleblowing hotline. In FY2024, we distributed a video message from the President to NGK and our Group companies both inside and outside of Japan.

Compliance Award

In FY2021, we launched the Compliance Activities Award System. This system recognizes particularly outstanding activities, among the initiatives pursued by each department and Group company inside and outside of Japan, that demonstrate qualities such as autonomy and originality. We also publicize them within the NGK Group as good examples. In FY2024, we recognized the Digital Society Business Group for their organizational vitalization through exchange activities and improvements to the workplace environment. We also presented certificates of commendation from the Compliance Committee Chair, and exchanged opinions with members of the award-winning divisions.

Initiatives to Ensure Thorough Compliance

Compliance with Competition Laws

Observing Competition Laws on an International Level

In addition to mandating compliance with competition laws in the NGK Group Corporate Business Principles and Code of Conduct, we have established Competition Laws Compliance Rules, which have been set forth to comply with international standards. These standards are strictly enforced by the NGK Group both inside and outside of Japan. We have established these policies and procedures to eradicate unfair actions and business practices, and work to maintain fair and equitable business relationships with our business partners.

We have also compiled basic items related to compliance with competition laws into our Competition Laws Compliance Handbook, and are promoting its utilization in our operations. We reviewed our internal rules in March of 2024, before publishing the 4th edition.

We have published these rules, our Handbook, operations manuals, and other educational materials on our Competition Laws Compliance Website so that everyone within the NGK Group can easily access them.

Strengthening Our Compliance System in Relation to Competition Laws

Year conducted	Regulation development	Creation of internal systems	Education
FY1997	Formulated guidebook and briefing document for the Anti-Monopoly Act	Required each headquarters to submit a Compliance Status Report on the Anti-Monopoly Act	Lectures on competition laws by outside instructors (lawyers)*
FY2011	Formulated Competition Laws Compliance Rules		
FY2012	- Created and distributed the Competition Laws Compliance Handbook - Created and distributed an Appendix to the Competition Laws Compliance Handbook	Established an independent committee	- In-house training led by Legal Department staff - Lectures by local lawyers held at Group companies outside Japan
FY2013			- Conducted briefing on the Competition Laws Compliance Handbook - Invited U.S. lawyers to lecture on competition laws

Strengthening Our Compliance System in Relation to Competition Laws

Year conducted	Regulation development	Creation of internal systems	Education
FY2014	- Revised Competition Laws Compliance Rules - Launched operation of a database for advanced notifications and participation reports pertaining to meetings - Launched operation of an e-mail monitoring system - Revised Competition Laws Compliance Rules at North American sales subsidiaries	- Introduced company-wide centralized supervision and reporting structures led by the Board of Directors (independent of the President) - Appointed company-wide competition laws supervisory managers - Enhanced the helpline	Conducted study meetings for newly appointed directors on competition laws and the Companies Act by Japanese and U.S. lawyers*
FY2015	- Competition Laws Compliance Rules of all NGK Group companies inside and outside Japan were revised to ensure that the NGK Group's compliance system meets global standards - Revised the Competition Laws Compliance Handbook	- The Competition Laws Compliance Program was resolved by the Board of Directors - Established the Global Compliance Office - Contracted Pricewaterhouse Coopers to conduct an unbiased expert review of the implementation status of the NGK Group's Competition Laws Compliance Program and assess the overall oversight and reporting structures in place for NGK Group companies	- Conducted study meetings on competition laws for new employees - Distributed a DVD on competition laws to Group companies in Japan - Upgraded training on compliance with competition laws provided in and outside Japan
FY2016	The U.S. version and Chinese version of the Competition Laws Compliance Handbook were created and distributed to Group companies in the U.S. and China	- Progress status of the Competition Laws Compliance Program was quarterly reported to the Business Ethics Committee, which is composed mainly of outside directors. The program was promoted based on suggestions received from the Committee. - Retained PwC Advisory to assess the status of competition law compliance	- Expanded seminars led by lawyers in Asia - Prepared online-based training aimed at realizing broader training programs (implemented in FY2017 in Japan)

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Strengthening Our Compliance System in Relation to Competition Laws

Year conducted	Regulation development	Creation of internal systems	Education
FY2017	Created an operating manual for database used to document competition law compliance	Top management of headquarters, business groups, and Group companies provided notifications about compliance with competition laws at beginning of term	Online seminars provided to 861 employees in Japan
FY2018	- Clarified items that should be reported to the hotline when there were violations or fear of violation of competition laws, and revised Competition Laws Compliance Rules - Created a working manual for compliance with competition laws		
FY2019	Revised Competition Laws Compliance Rules at NGK Electronics Devices, Inc. to strengthen that subsidiary's competition laws compliance system		Information session provided regarding the Competition Laws Compliance Handbook's key points (on competitor information when creating email and documentation)
FY2020	Established the Competition Laws Compliance Activities Portal Site	Top management of headquarters, business groups, and Group companies provided notifications about compliance with competition laws*	
FY2021	Revised the Competition Laws Compliance Handbook		Conducted legacy training for all NGK directors and general managers about past violations of competition laws at NGK
FY2022		Added the Corporate NV Creation as the headquarters responsible for things such as implementing a Competition Laws Compliance Program	Conducted legacy training for managers in sales positions at NGK about past violations of competition laws at NGK

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Strengthening Our Compliance System in Relation to Competition Laws

Year conducted	Regulation development	Creation of internal systems	Education
FY2023	Revised the Competition Laws Compliance Handbook		- Compliance with domestic competition laws - Conducted comprehensive training about violations of competition laws at NGK for those responsible and in charge of operations.
FY2024	- Reviewed the definition of competitors, scope of meetings, etc. for which notification procedures are required, from a risk-based point of view - Promoted revisions of Competition Law Compliance Rules at Group companies in and outside Japan - Promoted establishment of Competition Law Compliance Rules at overseas sub-subsidiaries		- Performed comprehensive training about competition law violations at NGK targeting managers responsible for competition law compliance and the management of Group companies in the Asian region - Created educational videos about NGK competition law violation examples

* These items continue every year

Review of Competition Laws Compliance Program Based on Advice from External Specialist

Starting in FY2015, NGK contracted an external compliance specialist to review the operation of our Competition Laws Compliance Program based on the Competition Law Compliance Rules, as well as the NGK Group's unified supervision and reporting system including for group companies inside and outside Japan. This continued every year until FY2023. Since FY2021, we have been receiving advice on improving our Competition Laws Compliance Program. In FY2024, we began considering improvements based on this advice, and have incorporated these improvements into our Competition Laws Compliance Program for FY2025. In FY2025, we will put even more highly effective activities into practice through the operation of this program.

Instances of Anticompetitive Behavior

In FY2024, no instances of anticompetitive behavior were observed within the NGK Group.

Instances of Anticompetitive Behavior

[Governance Data Collection](#) 

Export/Import Transaction Management

Strict Adherence to Laws and Regulations Relating to Export/Import Management

As part of its full compliance efforts, NGK is engaged in strictly observing and enforcing laws and regulations related to export and import control. Based on the NGK Group Corporate Business Principles and Code of Conduct, we stipulate abidance with laws and regulations related to secure export control, and we carry out export control and employee training in accordance with internal rules and the Export/Import Handbook.

Using Export Control System to Conduct Comprehensive Inspections and Customs Management

In response to the Foreign Exchange and Foreign Trade Act and other export control-related laws and regulations, NGK screens exports to determine whether export licenses are required and performs management via a security export control system (TTP). Furthermore, export management with respect to the export of certain products is conducted under the Japanese government's AEO (authorized economic operator) Program.

For export and import results, we use the security export control system (TTP) shipment ledger to track and record exports, and an import cargo management ledger for imports. Each department performs voluntary inspections of export and import under the AEO Program at the start of the fiscal year.

In addition, we use NACCS data (Nippon Automated Cargo and Port Consolidated System) to verify the completeness of import cargo management ledgers and shipment ledgers. We have achieved nearly 100% completeness for both export and import.

Familiarization with the Export/Import Handbook

NGK also makes efforts toward thorough compliance with the Export/Import Handbook, in use since FY2021 and revised in FY2022, that summarizes items for the observance of export/import customs clearance regulations. In addition to publishing this handbook on the company intranet where it can be viewed throughout the entire company, we provide training to spread awareness of the content of the handbook through study meetings related to export/import management conducted in each department.

When appropriate, study meetings on the AEO Program and export/import management are held targeting relevant staff in departments responsible for export and import activities. From FY2024, videos about our export and import system have been published on our logistics website, and we have launched an easy course that employees can do in their spare time.

Anti-Harassment Prevention

NGK conducts annual position-based training as part of our efforts to prevent harassment. In FY2022, we also began training courses on the prevention of workplace bullying which are taught by experts such as lawyers, and employed a group discussion format utilizing specific case studies. This training boosts the effectiveness of our education by using small group discussions about sexual harassment and workplace bullying from a position of power to promote proper understanding and awareness by participants of the problem of power harassment. In FY2024, 504 employees from five

companies and five locations attended. They hailed primarily from the management ranks of our Group companies in Japan. In addition, we distributed learning materials throughout the NGK Group for use as part of self-study and harassment prevention training by each department, based on the results of the compliance awareness survey conducted in FY2023. These were viewed more than 9,000 times in the first year of distribution. We are improving our training content based on the results of surveys we conduct after the training is complete. We continue working to prevent harassment before it occurs and further improve the workplace environment by providing more effective training content.

Number of Lawyer-Led Harassment Prevention Training Sessions / Number of Participants

[Governance Data Collection](#) 

Compliance Awareness Survey

In FY2023, as part of our efforts to strengthen the NGK Group compliance structure, we conducted our fourth Compliance Awareness Survey for employees working at NGK and Group companies in Japan. Therein, we identified risks that have become apparent, and asked respondents what they thought about their impacts, etc. Each department and company is now formulating initiatives and working to reduce risks based on the results.

Anti-Corruption

| Basic Approach

As laid out in the NGK Group Corporate Business Principles, the NGK Group has declared our commitment to working to bring about a sustainable society, respect human rights, conduct business activities that are fair, transparent, and sound, and strive to comprehensively prevent corruption as called for in the NGK Group Code of Conduct. Corruption is contrary to the NGK Group Corporate Business Principles and Code of Conduct, and cannot be tolerated. It not only impedes the realization of a sustainable society, but leads to human rights violations. We comply with applicable laws and regulations, prohibit direct or indirect involvement in corruption, and strive to prevent corruption in all of our business activities. We established the NGK Group Anti-Corruption Policy to earn the trust of stakeholders and bring about a sustainable society.

Examples of Corruption

In FY2024, there were no confirmed incidents of corruption in the NGK Group.

Examples of Corruption/Bribery

[Governance Data Collection](#) 

| Bribery, Conflicts of Interest, Money Laundering, Insider Trading

NGK Group executives and employees are prohibited from engaging or participating in corrupt practices such as bribery, embezzlement, conflicts of interest, money laundering, insider trading, obstruction of justice, or the abuse of their own or another person's authority or position for the benefit of an individual or organization.

Bribery

The NGK Group prohibits bribery, which is the giving of money, gifts, entertainment, etc., to another person for the purpose of obtaining an improper advantage, or receiving such benefits (bribes) from another person. To prevent such actions, we will maintain sound relationships with stakeholders, including public officials and government officials, in the countries and regions in which we operate. And we will not accept these kinds of benefits from others. We will only provide gifts and entertainment when there is a justifiable business reason for doing so, and within the scope of socially accepted norms. We will not provide gifts or entertainment on a habitual basis. Moreover, we will properly manage company assets such as cash, equipment, software, and vehicles, and use them only for legitimate business purposes. We will not use them for ourselves or other people.

Conflict of Interest

The NGK Group prohibits conflicts of interest in which NGK's interests are sacrificed to obtain personal gain, or to provide benefits to third parties such as relatives and friends. This can include selecting someone with whom you have a personal interest as a business partner, engaging in a business which competes with the company business, or the like. See the link below for more information on our approach to conflicts of interest.

[Approach to Conflicts of Interest](#) >

Money Laundering

NGK Group executives and employees are prohibited from engaging in money laundering to conceal or disguise funds obtained through illegal activities such as tax evasion and fraudulent settlement of accounts.

Insider Trading

NGK Group executives and employees are prohibited from engaging in insider trading, which entails buying and selling securities such as stocks based on important undisclosed information about a company or its business partners. One of our initiatives is to distribute educational videos to NGK Group members every year covering the latest trends, etc. concerning insider training.

| Anti-Corruption Initiatives

To ensure thorough compliance with relevant laws and regulations, the NGK Group takes a risk-based approach in implementing anti-corruption measures for our employees, consultants, agents, distributors, and other business partners. First, NGK has formulated internal Anti-Bribery Regulations in order to ensure compliance with anti-bribery laws as well as ethical standards for business conduct. These prohibit all acts of bribery (entertainment, gifts of money and goods), regardless of whether or not the other party is a public official, or whether the acts are committed directly or indirectly (including with the involvement of third parties such as company's representatives and other business partners). These regulations also stipulate the actions that NGK should take to reduce bribery risks. As part of these efforts, when appointing business partners such as new representatives, etc., we perform due diligence (by checking for the existence of items defined by us as suspicious signs), and make it mandatory for contracts to include a clause about complying with laws and regulations related to preventing corruption.

For transactions that typically entail a high risk of bribery (foreign remittances, entertainment, commission payments to agents, etc.), we regularly conduct audits of transaction status and remittance records. We also conduct periodic audits, education, and training focused on Group companies thought to have a high risk in light of various indicators such as CPI (Corruption Perceptions Index). In this way, we are working to comprehensively prevent corrupt actions throughout the entire Group.

Moreover, the NGK Group receives reports of violation or possible violation of relevant laws or regulations and the Anti-Bribery Regulations via our hotline. If we receive such a report, we investigate and examine the facts with the advice of external experts (lawyers, etc.), and determine the appropriate response. We maintain appropriate handling and independence, by having the Business Ethics Committee, which is composed primarily of outside officers, be involved in the process of investigation and review.

Anti-Corruption Training

In our NGK Group Corporate Business Principles, NGK Group Code of Conduct, and NGK Group Anti-Corruption Policy, the NGK Group forbids employees from participating in all corrupt practices, including bribery, conflict of interest, and money laundering. We are making these policies well known by all employees of NGK and our Group companies in and outside Japan, through various compliance training, our code of conduct guidebook, and other efforts.

Specifically, NGK conducts yearly anti-corruption education, including level-specific small group training taught by in-house instructors and lawyers, and biannually checks for violations or signs of violations in the workplace with a compliance awareness survey of all Group employees in Japan.

Number of Sessions and Participants in Anti-corruption Training by Lawyers

[Governance Data Collection](#) 

Responsible Political Involvement

Donations to Political Parties and Political Fund Raising Organizations

The NGK Group strives to maintain transparent, sound, normal relationships with political and administrative bodies. We make political contributions and donations in accordance with the laws and regulations of each country and region, and do not engage in actions that may lead to suspicion or distrust from society.

When making political donations, we follow the procedures stipulated by our internal regulations, while fully complying with the Political Funds Control Act, the Public Offices Election Act, and other relevant laws and regulations.

We made no political donations in FY2024.

Tax Transparency

The NGK Group complies with international standards, the laws and regulations of each country and region and conducts all of our corporate activities with fairness and transparency. With respect to tax matters, we have established the NGK Group Tax Policy and will continue to maintain and improve our tax compliance.

[NGK Group Tax Policy](#) >

Amount of Tax Paid by Country

NGK Group (Fiscal Year Ended March 31, 2024)

(billions of yen)

	Amount of Tax Paid
Japan	11.36
China	3.02
Germany	1.16
Poland	0.92
USA	0.52
Indonesia	0.37
Australia	0.17
Others	0.14
Total	17.66

* The above amounts are based on the "Country-by-Country Report" submitted to the tax authorities in Japan.

Risk Management

Basic Approach

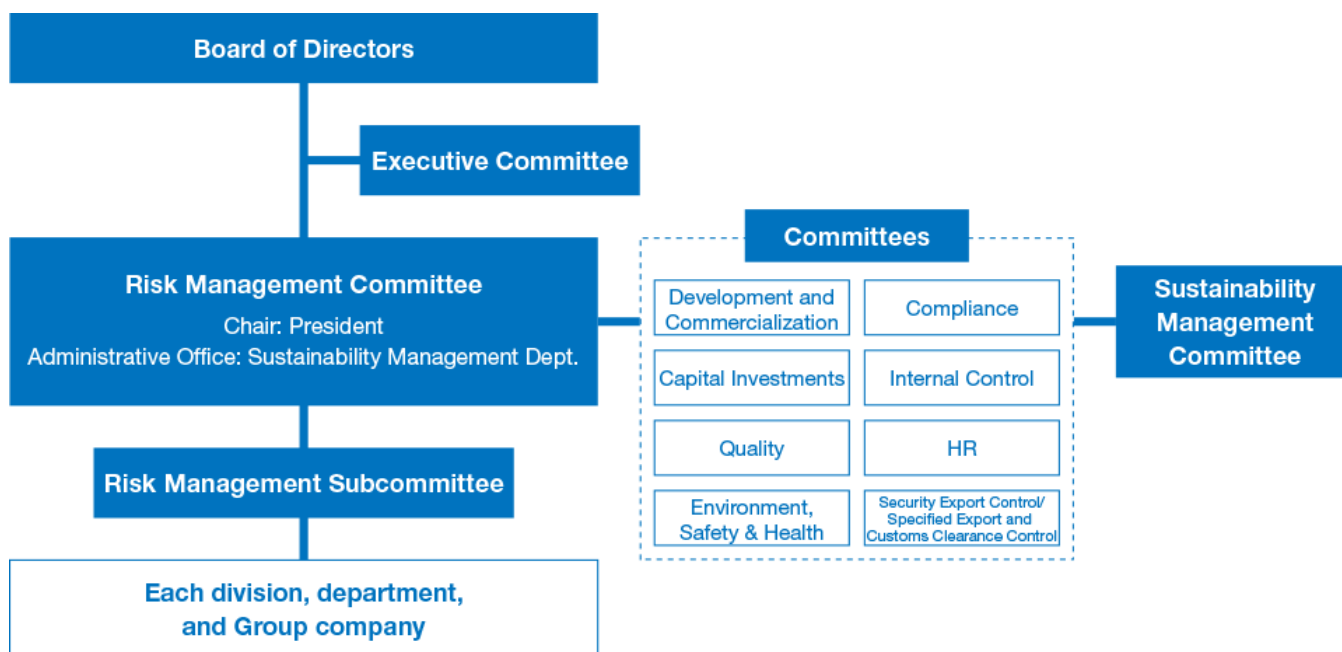
The NGK Group considers uncertainties which may affect achievement of the Group Vision to be risks. We have established an approach of handling risks according to their type, which enables us to control these risks by appropriately recognizing and preventing them, and to minimize losses caused by risks that do materialize. Moreover, when risks that have a big impact on management occur, the committee tasked with handling the risk according to the Basic Rules of Crisis Management will lead the way in collecting information and ascertaining the situation. The NGK Group will then work to minimize the negative impacts, analyze the causes, and prevent recurrence. For extremely serious risks, the executive officer in charge of the Sustainability Management Dept. will convene a response meeting attended by the President to respond to the risk.

[Approaches to Risk Management >](#)

Risk Management Structure

In FY2023, the NGK Group established a new Risk Management Committee chaired by the President, and is comprehensively managing the Group's significant risk issues under the supervision of the Board of Directors in accordance with the risk management process described below. Risk Management Committee members perform management activities which include providing direction and support to each division and department for handling risks in the area they are responsible for. In addition to crafting and carrying out risk countermeasures, each business group and division also constantly monitors the materialization of risks and reports these results to the Risk Management Committee. At least once a year, the Risk Management Committee reports to the Board of Directors about risk management activities. Through this, the Board of Directors is able to supervise these efforts and verify the effectiveness of the risk management structure. The risk management structure in question, is managed independently of the Audit & Supervisory Board.

Risk Management Structure



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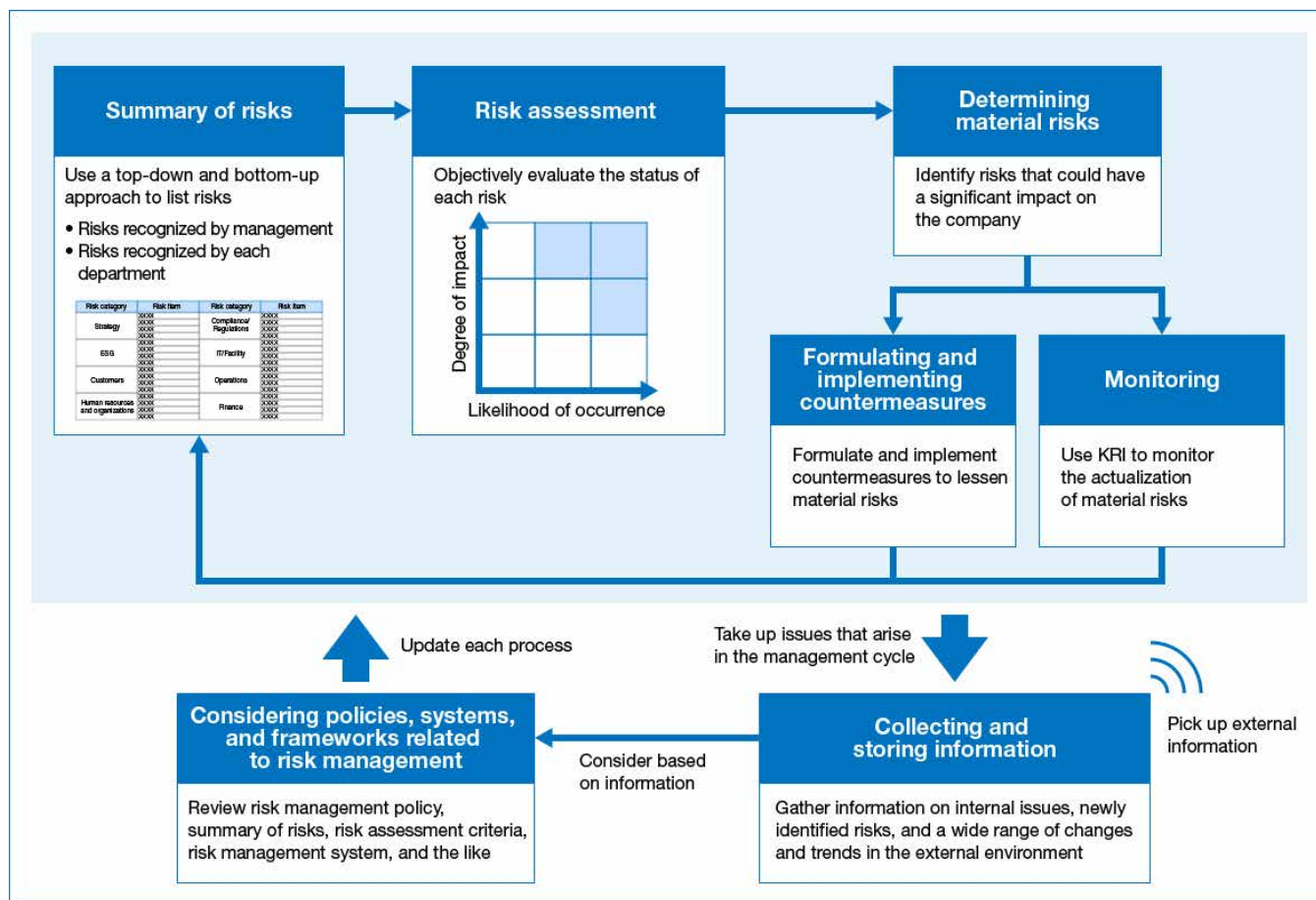
Risk Management Process

The Board of Directors views uncertainty that affects the achievement of the NGK Group Vision as risk, and has decided on a concept of risk management to serve as our policy concerning risk management. It determines the approach to take on initiatives depending on the classification of risks as “risks NGK should take” or “risks NGK should avoid.” Under this approach, the Risk Management Committee periodically analyzes and evaluates risks, then identifies and reviews the material risks that should be managed based on changes in the internal and external environment, with reference to the COSO-ERM Framework*. It has also established a risk management structure and method for formulating and implementing countermeasures against risk and monitoring the manifestation of risks via the committees and departments in charge of managing risks. Once a year, we identify the risk factors impacting our business operations in both a top-down manner by management, and a bottom-up manner by each department, in order to identify and review critical risks. We check the level of impact of each risk, changes in the likelihood of their occurrence, and whether we are aware of new risks, then review our risk assessment. Through these efforts, the Risk Management Committee manages the risks facing the NGK Group in an interdisciplinary manner, and reports to the Board of Directors.

In order to flexibly address risks that have suddenly increased in importance due to abrupt changes in the internal and external environment, we make sure we are able to respond by adding them in a timely manner to the list of targets to be handled by the Risk Management Committee. Following the change of administration in the United States in FY2024, we held discussions focused on tariff policy and its impact on our business with outside experts at Risk Management Committee meetings.

* COSO-ERM: An international framework created by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the USA, that aims to manage the risks facing businesses and integrate strategy and performance.

Material Risk Management Cycle



Risks, Summary, Response

All operations	
1. Business operation risks	Risk summary Changes in things such as the politics of each country or region, the stability of their feelings towards Japan, laws, regulations, tax systems, infrastructure, tariffs, and incentives, which are the underlying assumptions for each business
	Response Construct alternative systems that are distributed globally among sites
	Residual risk Decline in revenue due to unforeseen matters impacting underlying assumptions, such as social unrest due to demonstrations, terrorism, war, infectious disease, and natural disasters
Environment Business	
	Risk summary - Changes linked to decline in demand for internal combustion engine vehicles - Decline in demand due to changes in consumer values and business model Drop in market share due to rising competition from Chinese market - Drop in market share due to increased competition in kilns for lithium-ion battery cathode materials and electronic components

1. Business operation risks

Environment Business
Response - Develop and launch new and high-performance products according to changes in demand - Support flexible production by monitoring trends in demand - Strengthen competitiveness in the Chinese market via technical responsiveness that anticipates environmental regulations, and via capacity to ensure stable supply - Maintain and improve competitiveness by monitoring the competitive situation with regards to industrial equipment products
Residual risk Negative impact on performance and financial situation caused by greater than expected changes in demand, delays in responding to environmental regulations, and short-term decline in demand due to downturn in business
Digital Society Business
Risk summary - Decline in demand due to the state of supply and demand for semiconductors, regulation changes in each country, and technological innovation - Drop in market share due to delayed responsiveness to customer needs - Failure to achieve expected level of growth from significant changes in semiconductor manufacturing processes due to innovative inventions - Negative impact on business due to delay in responding to the increasing complexity of export restrictions on semiconductors from various countries - Decreased demand for final consumer goods and decreased investment in mobile phone base stations and data centers
Response - Carefully monitor customer trends and demand information, and revise equipment capacity, personnel systems, and production systems where appropriate to ensure quick response to changes in demand - Maintain our industry-leading position by improving our unique product responsiveness and product supply capacity - Carefully monitor regulatory trends, share information with related departments, and prepare necessary rules and manuals
Residual risk Negative impact on performance and financial situation due to weak sales and inventory burden accompanying a larger than expected decline in demand
Energy & Industry Business
Risk summary - Expanding market share of competitors' products, such as lithium-ion batteries - Destabilization of demand for NAS batteries due to sluggish market development for the long service time applications to which these batteries are suited - Adoption of polymer insulators in the Japanese market - Decline in revenue due to the impact of electric power policy and competition in overseas markets

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1. Business operation risks	Energy & Industry Business
	Response - Strengthen partnerships with leading overseas companies - Utilize government support measures to stimulate and incorporate steady needs, and reduce costs - Maintain adoption by appealing to reliability based on utilization track record - Ensure demand by maintaining quality and improving cost competitiveness Residual risk - Worsening performance and financial situation caused by sluggish demand and drop in value due to further delay in expansions of market for long service time applications and the expansion of applications for lithium-ion batteries - Negative impact on performance and financial situation due to a larger than expected decline in demand
2. R&D-related risks	Risk summary Failure to achieve New Value 1000* due to inability to fit the market, and sluggish creation and commercialization of new products * New Value 1000: A target of reaching 100 billion yen in sales from new products and new businesses by 2030
	Response - Promote the creation and commercialization of new products through collaboration between Corporate NV Creation, Corporate R&D, and Corporate Manufacturing Engineering, while actively adopting technologies and solutions from outside the company as well - Review the distribution of research and development resources in the Development and Commercialization Committee
	Residual risk Negative impact on performance because of the inability to achieve adequate results with the input received due to increasingly complicated technological competition
3. Personnel Risks	Securing and managing personnel
	Risk summary - Opportunity loss and negative impact on important decision-making because hiring and training desired personnel does not go as planned (global personnel, personnel for digital transformation, and people with a mindset to take on challenges without fear of failure) Response - Diversify and optimize hiring methods to acquire personnel in line with our business strategy - Expand mechanisms and systems to secure and develop global personnel and personnel for digital transformation - Establish an internal environment that encourages employees—including those in key management positions—to take on challenges

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3. Personnel Risks	Securing and managing personnel
	Residual risk — If hiring and training personnel does not go as planned, we will not attain our business goals due to failure to improve business execution capabilities
	Support diversity and inclusion
	Risk summary — Loss of opportunities for innovation due to continued homogeneity of personnel — Decreased competitiveness in recruiting due to being seen as a company that is reluctant to promote diversity and inclusion
	Response — Check the progress of implementation of personnel measures based on the NGK Group Human Capital Management Policy, and promote the construction of a framework for achieving our vision — Promote personnel policies that encourage the hiring and training of diverse personnel
4. Legal compliance, human rights and safety, and quality-related risks	Residual risk — Failure to achieve business targets and negative impact on performance and financial situation due to a stagnation in creating innovation that comes from being slow to promote diversity and inclusion
	Legal compliance-related risks
	Risk summary — Negative impact on operating revenue and decline in our reputation, due to violations of laws and regulations, human rights violations, and conduct that violates social norms such as contract compliance
	Response — Utilize employee training, handbook distribution, etc. to ensure employees are familiar with relevant laws and regulations and have a more compliance-focused mindset — Establishment of the NGK Group Basic Guidelines for Compliance Activities in accordance with international standards — The Business Ethics Committee, which comprises outside directors and compliance officers, watches out for critical improprieties or legal/regulatory violations — Reduce the possibility of compliance violations through a whistleblowing system
	Residual risk — Negative impact on performance due to occurrence of unexpected problems
	Human rights and safety-related risks
	Risk summary — Occurrence of employment injuries and decline in reputation due to failure to comply with rules and insufficient awareness of risks — Personnel shortages and stagnant performance caused by declines in the mental health of employees — Human rights violations in the Group's business activities

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4. Legal compliance, human rights and safety, and quality-related risks	Human rights and safety-related risks
	Response — In accordance with the NGK Safety and Health Policy, identify serious hazard risks and use risk assessment to facilitate strengthening of preventative measures — Follow up on employees who work long hours, and conduct job grade-specific mental health education — Formulate NGK Group Human Rights Policy — Conduct various types of education aimed at improving employee understanding of human rights — Prevent and reduce human rights violation risks through compliance with international norms related to human rights — Have Group companies perform self-checks, and request that our main suppliers comply with the NGK Group Supplier Code of Conduct
	Residual risk — Negative impact on performance due to the occurrence of unexpected problems
	Quality and product safety-related risks
	Risk summary — Damage to NGK's brand reputation, lawsuits, etc. due to business deficiencies such as serious market complaints and breaches of contract
	Response — Have Quality Management Department perform monitoring of each business group's quality activities, in line with the NGK Quality Policy — Convene quality review meetings in order to quickly find a solution to serious issues — Improve work quality through company-wide quality compliance programs — Promote activities from the management level to the worksite which encourage employees to see compliance as their responsibility and reduce overburden, waste, and unevenness in operations — Improve quality by formulating rules for quality activities and stipulating the kind of quality that should be preserved, as well as expanding effective approaches and methods for eliminating quality risks throughout the entire company — Correct the causes of market defects, ensure the safety of products and services, and focus on analyzing quality risks in the intangible goods business — Enhance confirmation of warranty details and specifications requested by customers, and create a rapid notification system for when quality and safety risks occur
	Residual risk — Negative impact on performance due to occurrence of quality issues that exceed expectations
	Risk summary — Negative impact on societal trust or business continuity due to shutdown of data processing, or to theft, destruction, manipulation, loss, etc., of data, following external cyber-attack or unauthorized system access, or after unexpected system failure or security issue
5. Information systems-related risks	

5. Information systems-related risks	Quality and product safety-related risks
	Response - Regularly share efforts taken by each Group company to raise the level of our Group-wide IT security system and measures based on the NGK Group Information Security Policy - Prevent security incidents through application and appropriate management of internal information assets and external cloud services - Conduct periodic information security training for employees to prevent information leaks and ensure appropriate use of software - Implement a security incident handling framework and prepare a manual to strengthen our response when incidents occur, and conduct response training for managers
	Residual risk Negative impact on societal trust, business continuity, or performance due to cyber-attacks that increase in severity and sophistication every year
6. Currency exchange, capital, and procurement-related risks	Risk summary - Decreased sales and profits and deterioration of business performance due to strong yen - Negative impact on operations, performance, and financial situation as a result of financing difficulties for activities such as capital investment stemming from financial crises and other factors - Negative impact on performance due to rise in price of materials and energy procurement and logistics costs - Delays in materials procurement and backlogged shipments to customers due to supply chain disruptions and lateness in responding to changing laws and regulations in Japan and supplier countries - Decline in our reputation and negative impact on operating revenue due to delays in the supply of certain materials and equipment, and violations of laws and regulations
	Response - Keep production close to local demand centers, perform financing in local currency, and optimize purchasing according to currency exchange situation - Hedge risks with forward foreign exchange contracts and other financial instruments for handling short-term fluctuations - Appropriately reflect the rise in costs for materials and energy in sale price, and reduce costs through competitive purchasing, design revisions, and other means - Reduce risks in the supply chain by collecting information and monitoring conditions through overseas locations in an effort to diversify suppliers and optimize inventory control
	Residual risk Negative impact on operations, performance, and financial situation in the event that financing and material procurement become difficult due to unexpected situations or fluctuations in exchange rates that are much larger than expected

7. Climate change and disaster-related risks	Climate change-related risks
	Risk summary — Risks identified in time frames and scenarios based on the framework established by the Task Force on Climate-related Financial Disclosures (TCFD) (risks for transitioning to a carbon neutral society, physical risks manifest due to climate change)
	Response — Analyze the scale of impact from risks identified based on the framework established by the Task Force on Climate-related Financial Disclosures (TCFD), and formulate a response strategy — Development and introduction of products and services that contribute to the realization of a carbon-neutral society — Formulate a roadmap for reaching net zero CO₂ emissions by 2050
	Residual risk — Worsening performance due to additional costs incurred in the event that phenomena occur other than the scenarios forecast by the Task Force on Climate-related Financial Disclosures (TCFD) — Decline in reputation with stakeholders, damage to brand, and loss of business opportunities due to failure to achieve climate change response targets
	Large-scale disaster and infectious disease-related risks
	Risk summary — Sites find it difficult to maintain operations due to large-scale earthquakes, fires, wind and flood damage, etc. — Negative impact on manufacturing and sales due to emergence and spread of a major infectious disease
	Response — Promote business continuity plan (BCP) for entire Group by drawing up related rules, conducting drills, etc. — Deploy various countermeasures to decentralize production sites for main businesses, increase the number of suppliers, reduce the susceptibility of buildings and facilities to natural disasters, guarantee the safety of employees, etc.
	Residual risk — Negative impact on performance and financial situation accompanying the halting of manufacturing activities for a considerable period of time because of serious damage to facilities at production bases due to events beyond expectation, or long-term supply difficulties due to impacts on the local infrastructure

Legal Risk Management in Overseas Subsidiaries

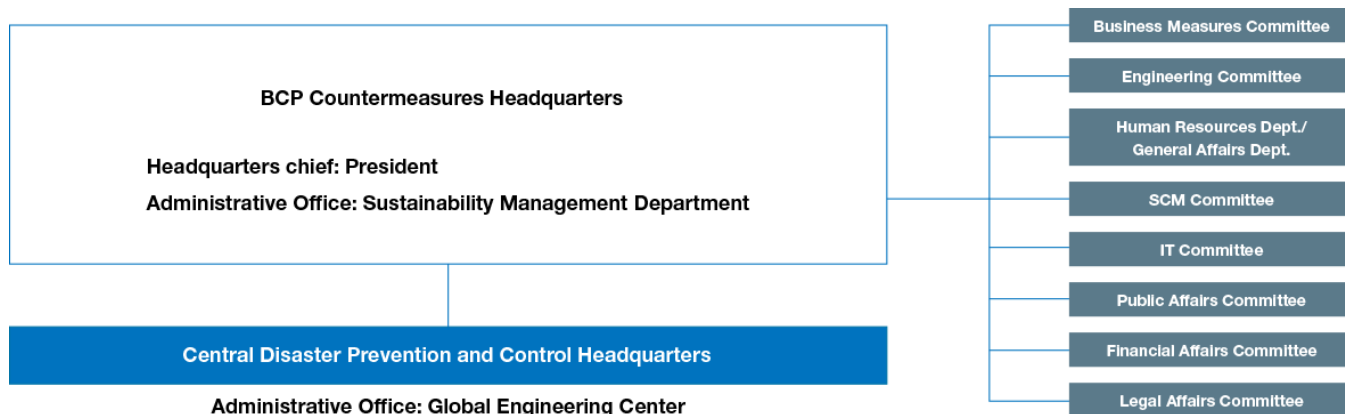
The NGK Group is working on understanding better legal risk management by overseas subsidiaries to minimize risks which become global and varied due to overseas business expansion.

We ask all overseas subsidiaries to report information pertaining to the status of lawsuits, legal affairs and consultation with lawyers twice a year, and whistleblowing system usage, export controls and access to legal-related information once a year. Major issues mentioned in such reports are reported to and shared at the Compliance Committee. Consultations from overseas subsidiaries are handled by the legal department and by lawyers, if necessary, to avoid risks.

Business Continuity Plan (BCP) Initiatives

At NGK, we have established the BCP Countermeasures Headquarters under the direction of the President as an organization to carry out operation and maintenance of our business continuity plan, with the aim of respecting human life and cooperating with the local community. It promotes our business continuity plan (BCP) throughout the entire NGK Group. Measures taken in preparation for putting our BCP into operation include the establishment of multiple manufacturing bases and procurement sources, damage mitigation measures related to buildings and equipment, and employee safety assurance. We also conduct emergency drills based on scenario plans presuming a major disaster such as a large earthquake in the Nankai Trough with the aim of enhancing our ability to cope with a crisis in the event a disaster occurs. During these drills, participants are instructed to take real action according to the plan. This helps us to identify even small issues with each process and procedure and use our findings to improve the BCP. In addition, the BCP Secretariat leads the way in working to ensure business continuity by collecting information early on and implementing countermeasures in response to procurement difficulties stemming from the spread of infectious disease or changes in the global situation.

BCP Organizational Structure



* In the event of an emergency or disaster, the Central Disaster Prevention and Control Headquarters will switch over to the Central Disaster Control Headquarters to respond to the disaster.

FY2024 Initiatives

- | | | |
|-----------|---|---|
| Education |  | — Conduct regular lifesaving seminars |
| Awareness |  | — Send out newsletters related to fire prevention and disaster preparedness |
| Training |  | — Conduct highly effective training through both face-to-face and online training sessions |
| Other |  | — Revised the action plan based on insights gleaned from the prior fiscal year's practical BCP activities |

Future Initiatives

- Improve the effectiveness of BCP by raising the level of training further (e.g., hold BCP training for operational units)
- Ongoing support for home disaster prevention initiatives (dealing with those who are unable to return home after a disaster and providing drills for returning home in an emergency, etc.) from the perspective of respect for human life, which is the top priority of BCP
- Continue to hold education, training, and disaster preparedness events with the aim of improving the BCP/ disaster prevention awareness of each and every employee

Information Security

Basic Approach

As our information-communication society grows ever more sophisticated, it has become necessary to safeguard the various information assets we possess. In response to growing global information security risks, the NGK Group will fulfill our responsibility as a member of a cultured and safe digital society by establishing robust information security. At the same time, we aim to continue contributing to the global development of digital technologies by supplying products based on our original ceramic technologies.

In addition, the NGK Group is working to safeguard the information assets we possess as stipulated in the Basic NGK Group Information Security Policy.

[Basic NGK Group Information Security Policy >](#)

Information Security Measures

Within the NGK Group, proper management and operation of information assets is a collaborative effort carried out by the General Affairs Department and ICT Department, in conjunction with other relevant administrative departments and in line with the Basic NGK Group Information Security Policy.

Every employee who handles electronic data is provided with our Electronic Information Security Handbook and is trained in the proper use of data, as well as made aware of the need to contact the General Affairs Department and ICT Department if their devices are lost, infected with a computer virus, or otherwise compromised. Also, under the rules of employment, employees are subject to disciplinary action if their improper use of information devices results in the leaking of confidential information or some other result that significantly impacts the company.

Meanwhile, personnel from NGK's ICT Department visit several Group companies each year to conduct on-site checks into the status of IT security measures and to provide guidance on their implementation.

In FY2024, we conducted visits to our Group companies outside Japan in the USA and China. We also held IT Global Meetings two times for all overseas Group companies in the regions of North and Central America, Europe and Africa, China, and Asia Pacific both in-person and online. Group companies in each region discussed IT security operations and conducted training on how to handle security incidents.

IT Security Management Framework

The rapid advance in information communication technologies and devices has made the quest for consistent IT security on a Group-wide level an urgent concern. Therefore, in FY2010, we formulated the NGK Group IT Security Standards with the goal of developing an IT security structure based on commonly shared Group standards and raising the bar when it comes to IT security.

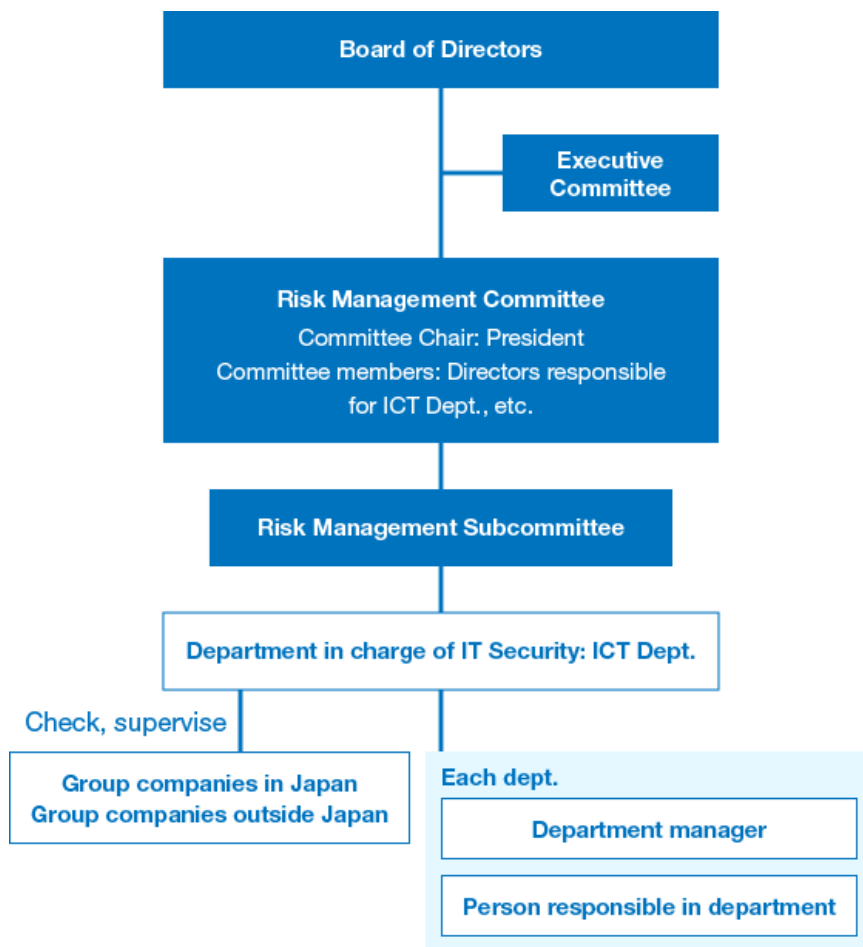
We update these standards every year in response to societal changes and trends, and work to standardize the level of IT security in our Group by sharing them with each group company. In FY2024 we put procedures in place for managing the use of cloud services.

Every year, each Group company drafts action plans for the enactment of countermeasures in an attempt to

systematically strengthen security. Via these action plans, NGK confirms initiatives at each Group company and provides guidance as necessary.

During normal times we define the role of our IT security management framework as that of a subdivision. Risks related to IT security are handled by the Risk Management Committee and reported to the Board of Directors at least once per year. Concerning our emergency response framework for things such as the occurrence of security incidents for critical systems, we will strengthen and work to integrate our internal systems for managing risk.

IT Security Management Framework Chart



* When security incidents impacting critical systems occur, our response is based on the Basic Rules of Crisis Management

Information Security Training

We conduct training sessions throughout the year to ensure strict adherence to information security among all employees.

We offer training for newly hired employees and newly promoted supervisors and managers to NGK employees while e-learning is offered to NGK employees and employees of some Group companies in Japan.

Training Summary

Item	Participants	Participation rate
Training for newly hired employees	176	100%
Training for newly promoted supervisors	178	100%
Training for newly promoted managers	99	100%
E-learning	7,146	98.8%

Note: Excluding employees who were away on maternity leave, childcare leave, long-term business trips, etc.

Ensure IT Security Against Cyberattacks

As a countermeasure against cyberattacks, NGK is strengthening each category of protection, detection, response, and recovery from cyberattacks following the cybersecurity framework announced by the National Institute of Standards and Technology (NIST) of the USA.

In FY2024, we also carried out incident response training for officers, and training for all members of our headquarters and Group companies in Japan concerning email spoofing.

By getting them to recognize the threats close at hand, we hope to improve their awareness of security. No security incidents occurred in the NGK Group in FY2024 that would affect our business activities.

Personal Information Management

The NGK Group has established Personal Information Management Regulations in addition to maintaining privacy policies and regulations in accordance with the laws and regulations of each country regarding personal information. We take painstaking care in our protection, management, and handling of customer information.

[Personal Data Protection Basic Policy](#) >

Intellectual Property Management

The NGK Group positions intellectual property as an important management resource.

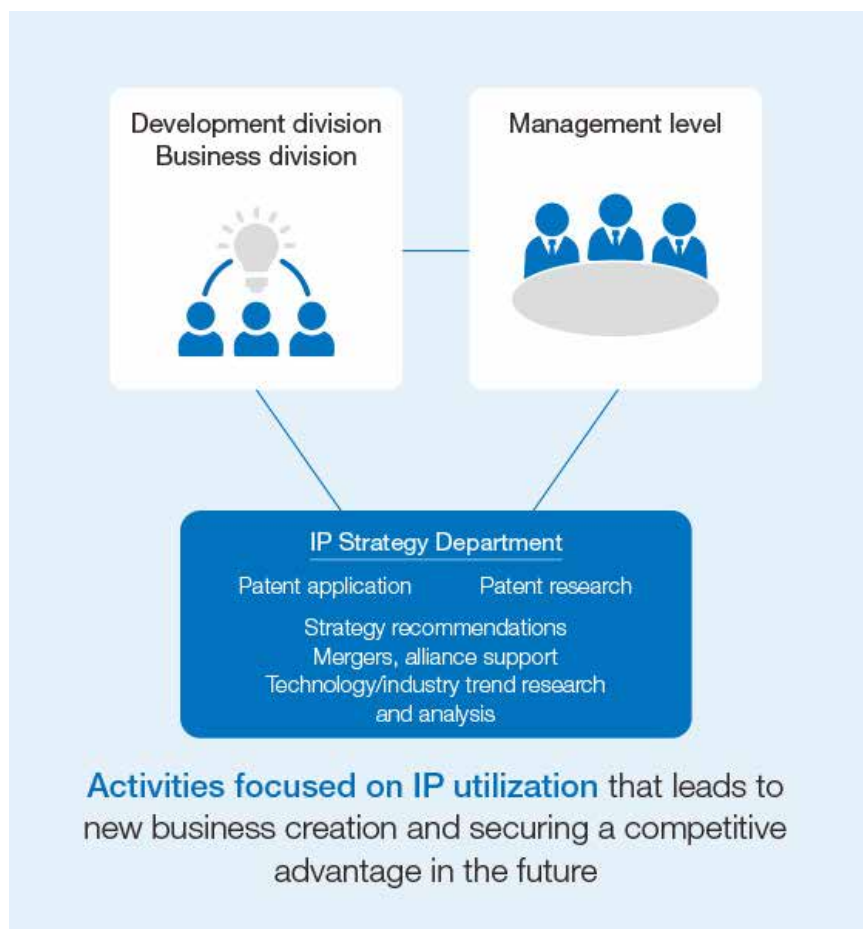
Through our intellectual property strategy, we are aiming to expand business and increase profitability. We work to maximize the utilization of retained intellectual property while also promoting intellectual property activities that contribute to our management strategy. We also strive to link intellectual property to creating new businesses and enhancing the competitiveness of existing business.

What We Aim for in 2030

The NGK Group positions intellectual property (IP) as an important management resource. Thus far, we have supported business through IP activities focused on securing global patent rights. Recent years have seen ever greater importance placed on investing in and utilizing intangible assets. In addition to conventional activities focused on patent prosecution, we must also invest in intellectual property that is aligned with our management strategy. Through these activities, we must create new businesses, strengthen the competitiveness of existing businesses, and achieve the NGK Group Vision. To this end, we have set forth what we aim for in 2030, clarified our intellectual property activity goals, and are advancing initiatives.

- 1) Three-pronged promotion of business strategy, development strategy, and IP strategy
- 2) Implement IP activities that will lead to management and business success.

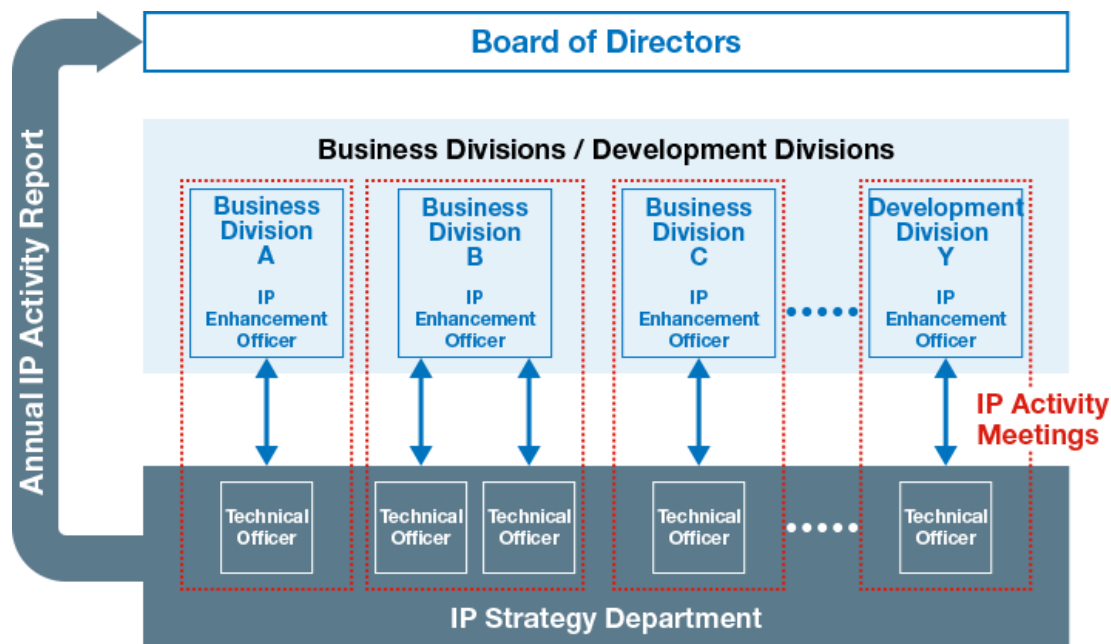
What We Aim for



Intellectual Property Promotion Framework

Our business divisions, development divisions, and the IP Strategy Department come together to hold IP activity meetings twice a year as part of our efforts to maximize our corporate value through the strategic use of intellectual property. This allows us to consider and share strategies concerning the creation, protection, and utilization of intellectual property, while strengthening coordination between each department. Once a year, the Board of Directors also receives reports on the status of IP activities throughout the entire company. This report ensures that the progress and results of IP activities are shared among the Board of Directors, and allows them to work toward appropriate supervision and improvements.

Company-wide IP Activity Promotion Framework

Message from
the PresidentSustainability
Management

Materiality

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Four Key Issues Towards Achieving What We Aim for in 2030

The NGK Group has analyzed the external environment in 2030 and the current conditions within the company, and come up with a vision of what it will look like for us to achieve what we aim for in 2030. In FY2023, we have identified four key issues for closing the gap between the current state of things and that vision. We have created a roadmap for these four issues that starts in FY2024 and continues for the next three years. Using this roadmap, we aim to steadily advance activities to achieve what we aim for in 2030.

Four Key Issues Towards Achieving What We Aim for in 2030

Key issue	FY2024 measures addressing issue
1) Foster an IP mindset throughout the entire company	Held the NGK Intellectual Property Forum
2) Strengthen IP activities framework	Held IP activity meetings
3) Improve IP skills	Revised IP education program
4) Strengthen functions of IP Strategy Department	Actively employed external research and analytic consultants

Holding the NGK Intellectual Property Forum

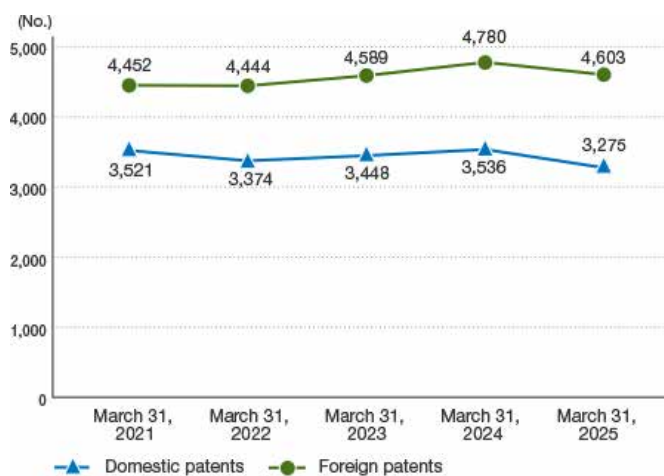
In FY2024, we held our first NGK Intellectual Property Forum with the aim of promoting an understanding of the importance of IP activities among NGK Group employees. Around 200 employees from a variety of positions attended, including engineers, salespeople, and office staff. The event included lectures by visiting lecturers, case studies in each business area of IP activities, trademark protection, and more, as well as exhibits on topics related to the intellectual property that surrounds us, designs and trademarks, and examples of the activities of the IP Strategy Department. We also held demos and seminars on the latest tools employing generative AI to easily investigate and analyze patents. Participants and intellectual property staff all engaged in vigorous discussions.



Holding IP Activity Meetings

The IP Strategy Department coordinates with business divisions and development divisions to hold IP activity meetings on each existing business and important development theme twice a year at the beginning and middle of the term. In these meetings, related personnel from multiple departments meet for interdisciplinary discussion on the IP strategies we should pursue based on analysis of the market and competitive situation, and to formulate an implementation plan. They formulate an IP activity policy linked to each business and development strategy, and follow up on the progress of activities every six months. For example, they use the IP landscape to visualize technological trends and competitive patents. And they engage in decision-making concerning R&D and alliances, with an eye to obtaining technologies we lack and licensing our own patents. In FY2024, we held IP activity meetings about more than 30 technological fields. To promote effective IP activities, we have also enhanced our awards system for recognizing excellent inventions, and we encourage the creation of intellectual property.

Number of Patents Held



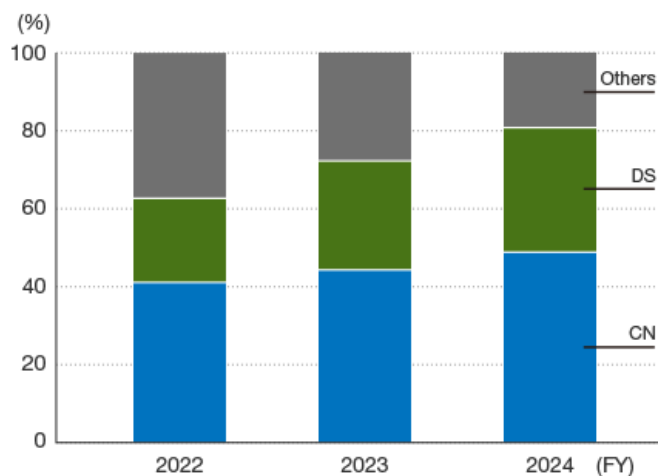
Number of Patents Held as of March 31, 2025

Domestic patents **3,275**Foreign patents **4,603**

Accelerating R&D for Achieving NGK Group Vision

In FY2024, the combined ratio of NGK Group patent applications in the fields of carbon neutrality (CN) and digital society (DS) reached 80% for the first time. Going forward, we will accelerate research and development into the fields of CN and DS, and aim to achieve the NGK Group Vision.

Ratio of Patents Filed in Fields of CN and DS



[IP Landscape Example]

Search for New Applications for NGK's Retained Technology

The figure below is a visualization of the distribution of all NGK Group patent applications. Red colored regions indicate that numerous applications have been filed. Utilizing this data allows us to engage in strategic IP activities by recognizing strengths and weaknesses in our own patents and those of our competitors.

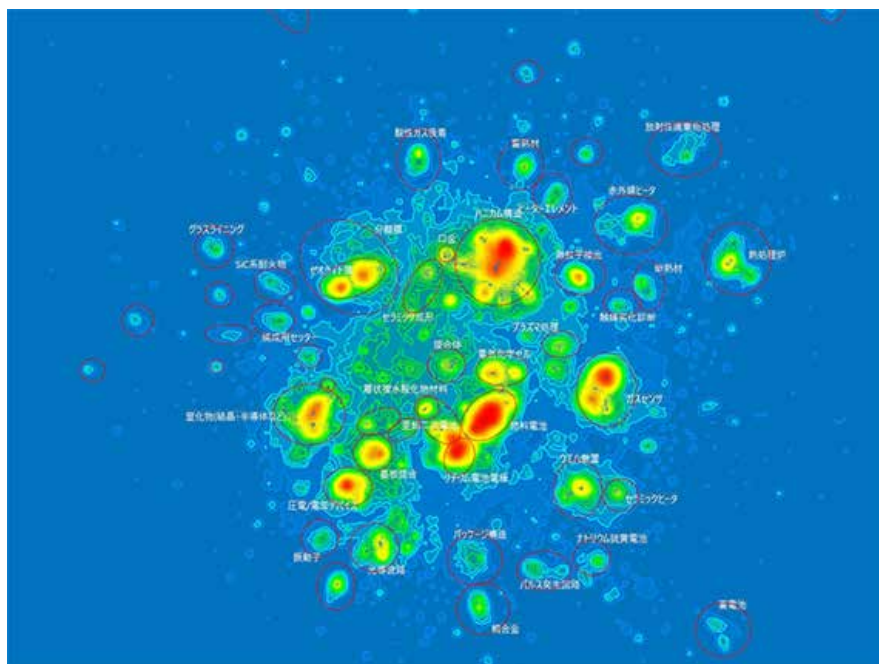


Photo credit: VALUENEX Japan Inc.

Governance Data Collection

Board of Directors

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Unit
Number of directors	NGK	13	9	9	9	10	9	Persons
Number of outside directors		3	3	3	3	4	4	Persons
Number of Board of Directors meeting held		14	13	14	15	16	-	Times

Audit & Supervisory Board

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Unit
Number of Audit & Supervisory Board members	NGK	4	4	4	4	4	4	Persons
Number of outside Audit & Supervisory Board members		2	2	2	2	2	2	Persons
Number of Audit & Supervisory Board meeting held		14	14	14	14	13	-	Times

Executive Officers

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Unit
Number of executive officers (excluding those also serving as directors)	NGK	15	22	22	25	25	25	Persons
Male		14	21	21	24	25	24	Persons
Female		1	1	1	1	0	1	Persons

Compensation for Directors and Audit & Supervisory Board Members

Item	Scope		FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Compensation for directors and Audit & Supervisory Board members	NGK	Directors (excluding outside directors)	591	685	539	526	610	Million yen
		Audit & Supervisory Board members (excluding outside Audit & Supervisory Board members)	59	67	69	71	72	Million yen
		Outside officers	66	68	70	70	81	Million yen

Measures for Returning Profits to Shareholders

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Dividends per share	NGK	30	63	66	50	60	Yen
Return on equity (ROE)		7.9	12.9	9.0	6.1	7.8	%

Intellectual Property Management

Item	Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of patents held (Japan)	NGK	3,521	3,374	3,448	3,536	3,275	Cases
Number of patents held (Overseas)		4,452	4,444	4,589	4,780	4,603	Cases

Message from the President

Sustainability Management

Materiality

Environmental

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Governance

Basic Sustainability Information

Number of Compliance Violations

Item		Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of Significant Compliance Violations (Total)		NGK Group	0	0	0	0	0	Cases
(Breakdown)	Instances of Anticompetitive Behavior	NGK Group	0	0	0	0	0	Cases
	Examples of Corruption/Bribery	NGK Group	0	0	0	0	0	Cases
	Other Examples of Legal Violations	NGK Group	0	0	0	0	0	Cases

Operational Status of Whistleblowing System

Item		Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Number of Helpline Consultation/Reporting Cases		NGK Group	28	43	38	35	42	Cases
*Number of Recognized Violations therein		NGK Group	5	19	5	8	5	Cases

*Indicates items from helpline consultations and reports for which some corrective action has been taken as the result of fact-finding by the administrative office

Progress of Anti-corruption Training Conducted by Lawyers

Item		Scope	FY2020	FY2021	FY2022	FY2023	FY2024	Unit
Training on competition laws	Number of Sessions	NGK Group	2	2	2	2	2	Times
	Number of Participants	NGK Group	1,548	1,768	1,733	1,812	1,826	Persons
Anti-Corruption Training	Number of Sessions	NGK Group	3	2	1	1	4	Times
	Number of Participants	NGK Group	90	50	24	24	74	Persons
Harassment Prevention Training	Number of Sessions	NGK Group	(*)	(*)	5	5	5	Times
	Number of Participants	NGK Group	(*)	(*)	178	757	504	Persons

*Due to the COVID-19 pandemic, this has been substituted with viewing an educational video supervised by a lawyer

Policies and Approaches

The NGK Group defines specific Policies and Approaches of business activities based on 'NGK Group Corporate Business Principles.'

Policies

NGK Group Basic Sustainability Policy

1. Basic approach

By providing new value through our unique ceramic technologies under the NGK Group Philosophy of "Enriching Human Life by Adding New Value to Society," NGK Insulators, Ltd. and its Group companies (hereinafter, the "NGK Group") hope to contribute to the achievement of a sustainable society and earn the trust of society by meeting its expectations toward us. Setting this as the NGK Group's basic approach to sustainability, and keeping Environment, Society, and Governance (ESG) and the Sustainable Development Goals (SDGs) at the forefront in realizing the NGK Group Philosophy, we aim to contribute to the achievement of carbon neutrality and a digital society as we continuously enhance our corporate value.

2. Identification of material issues (Materiality) and promotion of initiatives

For the realization of the NGK Group Philosophy and for the sustainable advancement of society and the NGK Group, we will identify material issues faced by the NGK Group and our stakeholders as Materiality, and will address these in accordance with the NGK Group Code of Conduct as a guideline for our actions.

3. Responsibilities of the Board of Directors

The Board of Directors seeks to correctly recognize the ESG factors and other sustainability issues of the NGK Group and to connect these to the enhancement of our medium- to long-term corporate value by appropriately supervising and addressing initiatives aimed at sustainability issues. The Board of Directors also engages in appropriate disclosure of information and, based on insights gained through valuable dialogue with diverse stakeholders, strives to improve our management and to live up to the trust and expectations of society.

April 2023 Resolution of the NGK Insulators, Ltd. Board of Directors

NGK Group Environmental Policy

Basic Approach

The NGK Group recognizes that protecting the environment, on Earth and in space, is a vital issue that all of humanity must face. Therefore, to bring our business activities into harmony with the environment, guided by the NGK Group Environmental Vision, we will bring our core principles of carbon neutrality, a circular society, and harmony with nature to life by committing to achieve Net Zero, advance a Circular Economy, and foster a Nature-Positive world. We also work to solve environmental issues with an awareness of the impact our business activities have on the environment and society, as well as the impacts the environment and society have on our business activities. Through initiatives like these, we strive to reduce the environmental impact of business activities and help protect the environment by developing products and technologies conducive to environmental conservation.

Main Focus

1. Strive to develop, design, and manufacture products that contribute to the environment and products with low environmental impact.
2. Work to reduce the environmental impact arising from business activities. Use tools such as design review to conduct a scientific investigation and evaluation of the impacts our business activities have on the environment.
 - Promote energy conservation measures and expand the use of renewable energy for all processes and facilities, and make efforts to reduce CO₂ emissions by reducing energy use and using energy efficiently.
 - Promote resource efficiency (including reduction of natural resources use) and expanded use of recycled materials, and reduce the generation of waste materials (including valuable materials).
 - Manage the risks of water resources, promote water saving and reuse, and strive to reduce the amount of water withdrawal in our business activities.
 - Through the appropriate use and control of chemical agents, work to reduce the risks inherent in toxic substances.
 - Give precedence to environmentally friendly materials, parts, products, and facilities in procurement and purchasing, strengthening cooperative alliances with our business partners.
 - Help to protect biodiversity by reducing our impact on the environment and developing/distributing eco-friendly products.

3. Enhance environmental management systems from a global perspective while continuously reducing our environmental impact. Carry out risk management based on scenario analysis in order to continue our operations while responding to environmental changes.
4. Work to prevent environmental pollution of the atmosphere, water, and land, and promote environmental conservation by abiding by environmental laws, regulations, and other requirements, and instituting our own voluntary standards. Also, strive to protect the environment so that our business activities will not prevent any local people from enjoying clean water resources.
5. Provide environmental information to the public at the appropriate time and pursue dialogue with all stakeholders. Proactively develop social action programs. Also, engage in education and publicity in order to improve employees' environmental consciousness.

Quality Policy

NGK is dedicated to quality and committed to providing valuable products and services that are trusted by our customers and respected by society

NGK Group Human Rights Policy

The NGK Group hereby establishes this "NGK Group Human Rights Policy" (this "Policy") based on the "United Nations Guiding Principles on Business and Human Rights" and will promote initiatives to respect human rights to prevent violation or abuse of human rights of anyone impacted by the NGK Group's business operations.

1. Basic Approach to Human Rights

The NGK Group supports and respects the "International Bill of Human Rights" adopted by the United Nations (consisting of the Universal Declaration of Human Rights and the International Covenants on Human Rights), the "ILO Declaration on Fundamental Principles and Rights at Work", the "OECD Guidelines for Multinational Enterprises" and other international norms.

With NGK INSULATORS, LTD. ("NGK") signed up to the United Nations Global Compact, the NGK Group supports and respects the Ten Principles of the United Nations Global Compact.

2. Applicable Laws and Regulations

The NGK Group will comply with laws and regulations (the "Legislation") of each of the countries and regions where it operates. In case of any conflict between internationally accepted principles of human rights and the Legislation of any country or region, the NGK Group will seek ways to respect the internationally accepted principles of human rights to the utmost extent.

3. Scope of Application

This Policy applies to all directors, officers and employees of the NGK Group (the "Directors and Employees"). The NGK Group expects that its suppliers will also comply with this Policy.

4. Education and Training

The NGK Group will provide the Directors and Employees with appropriate education and training to effectively implement this Policy throughout its group-wide business operations.

5. Main Focus of the Group's Commitment to Human Rights

The NGK Group will:

- Comply with international norms on human rights and respect diversity of people;
- Respect human rights and undertake business activities without the use of forced labor or child labor; Provide young workers with fair working conditions that strictly comply with the Legislation of each country and region.
- Respect the individuality and independence of each employee and not engage in discrimination on the basis of race, citizenship, gender, age, religion, belief, existence of handicaps, sexual diversity or any other aspect; and
- Prevent the occurrence of harassment in the workplace and take prompt and appropriate action in the case where it occurs.

The NGK Group will:

- Strictly comply with the Legislation of each country and region relating to safety and sanitation, provide a safe and enjoyable work environment that is comfortable for everyone to work in for all;
- Strictly comply with the Legislation of each country and region relating to labor, safety and sanitation, we provide fair working conditions such as working hours, holidays, vacations, wages, and welfare programs.
- Respect employees' right of freedom of association and of collective bargaining in accordance with the Legislation of each of countries and regions where it operates.

- Aim to harmonize work and life, and support a variety of working styles;
- Build up a relationship of trust through sincere debate and discussion with employees;
- Give educational opportunities to employees and provide opportunities to stretch their motivation and abilities; and
- Encourage free and open discussions and aim to create a corporate culture conducive to active communication.

6. Human Rights Due Diligence

The NGK Group will establish a system of human rights due diligence, and will implement processes to identify, prevent and mitigate adverse human rights impacts that the NGK Group's business operations may cause.

7. Remedy

If it is revealed or suspected that the NGK Group has caused adverse human rights impacts (whether directly through its business operations, or through its suppliers), the NGK Group will endeavor to deliver appropriate and effective remedy through good-faith dialogue with related parties.

8. Dialogues and Discussions

In the process of implementation of this Policy, the NGK Group will earnestly engage in dialogue and discussions with stakeholders, acquiring and drawing on independent external expertise on human rights.

9. Information Disclosure

NGK will disclose the status and results of implementation of this Policy on its website and integrated reports or through other channels.

10. Responsible Persons

NGK will designate the director in charge of the personnel division as the director responsible for the implementation of this Policy. The Board of Directors will oversee the status of implementation of this Policy by having the director regularly report the implementation status to the Board of Directors.

This Policy has been approved by NGK's Board of Directors and signed by NGK's Representative Director and President.

NGK Insulators, Ltd.

President

Shigeru Kobayashi

UK Modern Slavery Act Statement for the year ended March 2024

This statement ("Statement") is made pursuant to Section 54 (Part 6) of the Modern Slavery Act 2015 of the United Kingdom to describe the policies and efforts of NGK Insulators, Ltd. and its affiliated companies (hereinafter, the "NGK Group") to prevent the occurrence of modern slavery and human trafficking for the fiscal year ending March 31, 2024. Among the entities in the NGK Group, NGK Insulators, Ltd. and NGK Europe GmbH are subject to the reporting obligations under the Modern Slavery Act 2015 (United Kingdom); NGK Insulators, Ltd., as the parent company of these reporting entities, discloses this Statement as a joint statement to cover both entities.

1. Organization and supply chains

NGK Group engages mainly in the supply and development of products that support social infrastructure and contribute to environmental conservation, such as ceramic parts for automobiles, insulator products for electric power, electronic parts, and industrial equipment and devices with ceramic technology as its core technology. The NGK Group is headquartered in Aichi Prefecture, Japan, and has 47 consolidated subsidiaries in 20 countries and regions (including the United Kingdom and the United States), doing business with about 20,000 employees. In addition, materials and parts of NGK Group products are procured from procurement partners inside and outside the NGK Group around the world. Please refer to the following URL for details on these companies and businesses.

2. Policies to prevent occurrence of modern slavery and human trafficking

NGK Group has established the "NGK Group Corporate Business Principles and Code of Conduct" and the "NGK Group Human Rights Policy", which stipulate the attitudes and matters to be respected in conducting business activities. The code and policy, with the approval of the Board of Directors, declare that the NGK Group excludes forced labor, child labor, human trafficking, and all other acts that lead to human rights violations. With the "NGK Group's Supply-Chain CSR Guideline", the NGK Group requests its supply chain to understand and support the avoidance of the use of conflict minerals that can cause human rights violations and poverty, and the prohibition of forced labor and child labor. The NGK Group and its entire supply chain have made a clear commitment to prevent the occurrence of modern slavery and human trafficking. In addition, we are preparing to revise the current "NGK Group's Supply-Chain CSR Guideline" into a "Supplier Code of Conduct", which will specifically define the code of conduct for suppliers based on the NGK Group's various policies, guidelines, and codes of conduct.

3. Due diligence process

4. Risk assessment and management

5. Performance indicators

The NGK Group conducts surveys using a self-assessment questionnaire with reference to the RBA Code of Conduct. The assessment includes many aspects that are related to human rights, such as "identifying forced labor, child labor, and human trafficking," "working hours, wages, and welfare," "occupational safety and health," and "responsible mineral procurement." Through this survey, the NGK Group looks for, and could gather details on, any human rights risks in its business operations.

In the fiscal year ending March 31, 2024, based on the above due diligence process, we conducted surveys using a self-assessment questionnaire in NGK and its 39 Japan domestic and overseas group companies, to confirm the existence and level of risks.

Additionally, the NGK Group has been establishing whistleblowing systems effective to apply in accordance with circumstances of country or region where each group company locates, such as reporting mechanism available to all employees at respective group companies.

The NGK Group found no cases of forced labor, child labor, or human trafficking in the survey for the fiscal year ending March 31, 2024, thorough the above surveys and whistleblowing systems.

In terms of supply chains, we annually request our suppliers, including new suppliers, agree to comply with "NGK Group's Supply-Chain CSR Guideline". In the fiscal year ending March 31, 2024, we newly conducted a self-assessment surveys of about 70 suppliers of overseas group companies, using a self-assessment questionnaire to ascertain their level of understanding of CSR procurement and status of their activities. The NGK Group also operates a supplier helpline, where the NGK Group can accept reports on risks of human rights violations, including slavery.

The NGK Group found no cases of forced labor, child labor, or human trafficking in the survey for the fiscal year ending March 31, 2024, thorough the above surveys and whistleblowing systems.

The NGK Group has set up an HR Committee chaired by the Director in charge of the Human Resources Management Department at NGK Insulators, Ltd. The committee manages, shares, and evaluates various human rights risks collected based on the due diligence process, and establishes countermeasures, if necessary.

The NGK Group will continuously improve the effectiveness of the survey by enhancing the assessment scope and contents to find and establish a fair performance indicator for the fiscal year ending March 31, 2025, and thereafter.

6. Educations

The NGK Group issues notifications, distributes guidebooks, posts posters, and conducts on-site education regarding the "NGK Group Corporate Business Principles". In addition, in the fiscal year ending March 31, 2024, the NGK Group conducted e-learning for "NGK Group Human Rights Policy".

Regarding its supply chain, the NGK Group requests its business partners to comply with the above-mentioned "NGK Group's Supply-Chain CSR Guideline" and request them to submit written consent every year.

This statement was approved by ;

(i) the Board of Directors of NGK Insulators, Ltd. on September 24, 2024

(ii) all the directors of NGK Europe GmbH on September 24, 2024

NGK Insulators, Ltd.

President

Shigeru Kobayashi

NGK Europe GmbH

Managing Director

[Signature]

Message from
the President

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Safety and Health Policy

'Maintaining the safety and health of each employee constitutes a basis for a company's operation and existence'

1. Comply with Occupational Safety and Health Law and Company Regulations.
2. Engage in activities in line with the OSHMS* to continuously raise the safety and health standards.
3. Promote safety and health activities under enough education & training and good communication with employees.
4. Reduce the risks of hazards and toxicity and prevent accidents to provide a comfortable work environment.
5. Prevent employees' health hazards and enhance health promoting activities.

* OSHMS:Occupational Safety and Health Management System

NGK Group Human Capital Management Policy

NGK Group defines "People who embrace challenges and teamwork" as one of Our Values of NGK Group Philosophy, and we are committed to realize Our Mission: Enriching Human Life by Adding New Value to Society. NGK Group is committed to drive the Five Transformations to realize the NGK Group Vision, and we believe that the active engagement of each personnel is crucial for accomplishing the Five Transformations. We define the core of the Group's human capital management as hiring and developing personnel to enrich team members dedicated to the Five Transformations, and establishing an environment where each personnel can perform at full potential. Building upon this core belief, we establish the "Human Resource Development Policy" and "Workplace Development Policy" as follows.

Human Resource Development Policy

NGK Group develops personnel with the following abilities and mindset required to realize the Five Transformations.

- Cultivate advanced knowledge, skills, abilities or their combination, and proactively approach to problems
- Demonstrate teamwork and persistently lead to results
- Autonomously grow and continuously change oneself and the company

Workplace Development Policy

NGK Group develops the following workplace environment where each personnel can perform at full potential.

- **Diverse and Inclusive Workplace**
A workplace where everyone is acknowledged and respected, regardless of external attributes such as race, nationality, gender, and age, as well as internal attributes such as religion, beliefs, experiences, and values.
- **Enriched and Lively Workplace**
A workplace where diverse personnel can feel rewarded, stay healthy both physically and mentally, have colleagues we respect and enjoy working with, and maintain a good work-life balance.
- **Open Workplace that encourages challenges**
A workplace with open communication and psychological safety, that embraces courageous challenges for growth.

Basic NGK Group Information Security Policy

As our information-communication society grows ever more sophisticated, the NGK Group has come to handle much more in the way of information assets, and is aggressively pursuing the safekeeping of any and all information assets it retains. While it is essential to share these assets in order to conduct business in a smooth and efficient manner, establishing a system for information security likewise becomes a necessity. For this reason, the NGK group has set forth this basic policy regarding information security and will work to safeguard the information assets in its possession.

- In order to ensure the safety of retained information assets, which includes information retained in the course of business activities, as well as any devices, facilities, or services necessary to handle said information, we will establish an information security management system to prevent unauthorized intrusion, loss, theft, leaks, modification, damage, denial-of-service attacks, and any other threat.
- All individuals who work at any office of NGK or its group companies and who make use of information assets will be subject to ongoing information security education and training for an increased awareness of security issues. Actions in violation of this Policy may be subject to legal penalties, as well as reprimands set forth in labor regulations, contracts, and/or other binding documents.

- Should a security issue arise concerning information assets, we will promptly investigate the cause and work to keep any damage to a minimum.
- We will comply with all laws and social norms with regard to information security, as well as any such contractual requirements and duties entered into with a customer.
- NGK will strive to continuously review and revise the activities noted herein.

Personal Data Protection Basic Policy

NGK Insulators, Ltd. and NGK group companies in Japan (hereinafter referred to as “NGK” or “we”) have established the following principles to process personal data we collect.

- (1) We handle personal data in accordance with applicable laws and regulations on the protection of personal data.
- (2) We collect personal data in a lawful and fair manner.
- (3) We use personal data within the scope of the purposes specified in advance.
- (4) We don't provide personal data to third parties unless otherwise permitted by applicable laws and regulations on the protection of personal data or without consent from the data subject.
- (5) We aim for thorough personal data management by implementing internal rules and organizational structures to protect against personal data breaches, leaks, or loss, and by providing education to our employees.

NGK Group Procurement Policy

1. Basic Approach

With “relationship with society”, “open and fair,” and “partnership” at the core of its procurement activities, the NGK Group aims for mutual prosperity based on mutual trust with suppliers through open, fair, and equitable procurement practices that not only comply with laws but also take into consideration global environmental conservation, respect for human rights, and the working environment.

Through these series of actions and activities, we will promote sustainable procurement and provide valuable products and services to society as a whole.

2. Applicable Laws and Regulations

The NGK Group complies with the laws and regulations of the respective countries or regions in which it conducts its procurement activities.

3. Scope

This policy applies to the procurement practices of all officers and employees of the NGK Group. The NGK Group also requires its suppliers to comply with this policy and its objectives.

4. Priority Initiatives

The NGK Group will:

- Comply with necessary laws, regulations and international norms, and conduct procurement activities that meet the demands of society as a whole, including respect for human rights, environmental conservation, and coexistence with regional communities;
- Offer open entry opportunities to all suppliers, regardless of location, size, or business track record;
- Select suppliers fairly and impartially, considering aspects such as quality, technology, price, delivery time, and ESG factors;
- Build respectful and equal relationships with all suppliers, as they are important partners in creating market value together;
- Make every effort to seek and achieve procurement activities throughout the supply chain that are in line with our Group's policies, guidelines, and norms;
- Pursue responsible raw material procurement throughout the supply chain, conducting procurement activities that take into account the impact on regional communities, including avoiding the use of conflict minerals; and
- Strive to conserve the global environment and biodiversity by introducing clean energy and reducing greenhouse gas emissions throughout the supply chain.

5. Correction and Improvement

If a violation of this policy or priority initiatives arises in our procurement activities through the NGK Group or its suppliers, or if concerns about such a violation become apparent, we will work with the relevant parties to correct and improve the situation appropriately and effectively.

NGK Group Anti-corruption Policy

The NGK Group has declared in the NGK Group Corporate Business Principles that it will strive to realize a sustainable society, respect human rights, and conduct fair and transparent business activities with integrity, and that pursuant to the NGK Group Code of Conduct it will strive for the comprehensive prevention of corruption. Corruption hinders the realization of a sustainable society and causes human rights violations, which violates the NGK Group Corporate Business Principles and the NGK Group Code of Conduct, and it cannot be tolerated.

We have established this "NGK Group Anti-corruption Policy" (this "Policy") in order to comply with applicable laws and regulations, prohibit any direct or indirect involvement in corrupt practices, and strive to promote anti-corruption in all of our business activities, live up to our stakeholders' trust and realize a sustainable society.

1. Compliance with Applicable Laws and Regulations

The NGK Group will comply with applicable anti-corruption laws and regulations in the countries and regions in which we conduct our business activities.

2. Prohibition of Corrupt Practices

The NGK Group will:

- Prohibit its officers and employees from conducting or engaging in corrupt practices, such as bribery, embezzlement, situations whereby there are any breaches of trust, conflicts-of-interest, insider trading, money laundering, obstructions of justice and any other abuses of their own or a third party's authority or position for personal or organizational gain; and
- Prohibit its officers and employees from engaging in corrupt practices through any third parties, such as agents or consultants. We will implement necessary measures, such as strictly managing contracts with third parties and regularly checking transaction statuses.

3. Establishing an Anti-corruption System

The NGK Group will:

- Develop internal rules and organizational structures to raise awareness and promote this Policy;
- Assess corruption risks in the countries and regions where we conduct business, and implement risk countermeasures, focusing on high-risk business activities; and
- Establish a whistleblowing system that allows officers and employees to report any corrupt practices that they become aware of. We will maintain the confidentiality of reports, and prohibit the disadvantageous treatment of whistleblowers.

The implementation status of this Policy and related measures will be reported to NGK Insulators' Board of Directors and reviewed as necessary.

4. Education

The NGK Group will regularly educate its officers and employees about this Policy and related actions and procedures.

5. Proper Accounting Procedures

The NGK Group will execute accurate accounting procedures in accordance with laws, regulations, and internal rules, and properly record and maintain its accounting books.

6. Records and Storage

The NGK Group will keep accurate business records and properly manage and store them.

7. Audits and Monitoring

The NGK Group will:

- Conduct internal audits of the implementation status of this Policy and promptly take corrective measures against any issues that are discovered; and
- Verify the effectiveness of internal audits and other measures and strive for continuous improvement.

8. Information Disclosure

The NGK Group will strive to disclose the status of its efforts to prevent corruption.

9. Response to Violations, etc.

The NGK Group will:

- Promptly address any actual or potential violations, make necessary corrections, and also take thorough measures to prevent any recurrences; and
- If our officers or employees violate any laws or regulations, the NGK Group Code of Conduct or our internal rules, we will take fair and strict actions in accordance with the internal rules.

10. Top Commitment

Top management will:

- Raise the awareness of this Policy within the NGK Group, allocate the necessary resources for its implementation, and maintain the system; and
- In the event of any violation of this Policy, proactively respond to the situation, including resolving the issue, investigating the causes, and working to prevent the issue from recurring.

This Policy has been signed by the President of NGK Insulators, Ltd.

NGK Insulators, Ltd.

President

Shigeru Kobayashi

NGK Group Tax Policy

The NGK Group regards compliance as an essential factor in gaining the trust of all of our stakeholders and defines it as the foundation of sustainability. In order to maintain and improve our tax compliance, we will work to maintain tax transparency and enhance awareness among our employees while also building the necessary framework to ensure compliance with laws and regulations and prevent corruption.

1.Compliance

The NGK Group ensures thorough compliance in accordance with the NGK Group Code of Conduct by complying with the tax laws of each country and region and the international agreements that apply to the NGK Group and respecting the spirit of taxation laws.

2.Tax Governance

NGK has established the NGK Group Tax Policy and will ensure compliance with the said policy. We gather and confirm information related to the tax position and tax governance system of our Group companies to help the NGK Board of Directors fulfill its responsibility of overseeing group tax risks. The day-to-day financial accounting and tax activities of the Group companies are managed by the financial managers of each Group company, with the involvement of the president of respective companies. They also report important tax matters to the head of their NGK business group and the NGK Board of Directors in an appropriate manner.

3.Risk Management

The NGK Group considers compliance to be an important aspect of risk management. We always act with integrity, minimizing our tax risks through compliance with applicable tax laws, regulations, rules, international agreements and commercial practices, and our own internal regulations. The NGK Group pays taxes in the appropriate jurisdictions in accordance with the state of our revenue-generating activities without engaging in aggressive tax saving schemes. When dealing with non-routine tax issues, we consult external experts for advice where necessary.

4.Optimization of Tax Burden

The NGK Group does not establish artificial business structures for the purpose of reducing its tax burden. We use available tax incentives to the extent that they fall within the scope of our business objectives. We work to eliminate double taxation where it occurs. Cross-border transactions among Group companies are carried out in accordance with OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations.

5. Relationship with Tax Authorities

The NGK Group acts with good faith and transparency and responds promptly to requests for information from tax authorities of each country and region. We intend to develop long-term, amicable relationships with tax authorities based on mutual trust and respect.

NGK Group Social Contribution Activities Policy

The NGK Group establishes herein the NGK Group Social Contribution Activities Policy and will actively engage in various activities to realize a sustainable society.

1. Basic Approach to Social Contribution Activities

We will help to solve social issues through our business activities in various regions across the globe. In addition, as a member of society, with the aim of being a corporate citizen trusted by local communities, we will strive to cooperate and collaborate with diverse partners and undertake social contribution activities in response to needs in each region.

2. Main Focus

Based on the NGK Group Philosophy and Vision, we will work on the following areas as the focuses of activity for social contribution.

People and Education

Not only will we convey the joy of monozukuri (manufacturing) to children who will define the future but we will also support educational activities that can develop local communities.

Environment

Based on the NGK Group Environmental Vision, we will proactively engage in harmony with nature, thereby contributing to the preservation of the global environment.

Community Relations

We take an interest in social issues and advance activities aimed at achieving coexistence with local communities as a trusted corporate citizen.

Additionally, the NGK Group will participate in efforts to develop appealing communities mainly in countries and regions in which the NGK Group has business sites.

For the purpose of enhancing sensitivity to matters in society, and furthering understanding of diversity and such like, we will encourage all of our employees to take part in social contribution activities and support them by offering them opportunities to experience activities and gain hands-on knowledge.

3.Information Disclosure

We will regularly distribute information on activities to help all employees working in the NGK Group understand the objective of these activities.

Simultaneously, we will disclose information on our initiatives on our website and other media in order to deepen relationships of trust with stakeholders.

| Approaches

Approaches to Risk Management

NGK Group recognizes uncertainties that can affect the realization of its Group Vision as risks. The Group aims to control these risks by appropriately identifying them and taking preventive measures to minimize potential losses caused by risks that materialize. The Group has established the following approaches to address risks based on their types.

Approach to Risks associated with Business Transformation

We will continue to proactively create business opportunities and challenge ourselves to drive business transformation by taking appropriate risks in order to provide new values in carbon neutrality and the digital society.

Approach to Risks in Corporate Operations

We will appropriately control material risks that impede the continuity of business operations, achievement of management goals and sustainable growth by establishing countermeasures with timely capturing internal and external environmental changes including supply chain and continuously monitoring the possibility of risk materialization and changes in the degree of impact.

Approaches to Risks Related to Relationships with Stakeholders

- We will strive to eliminate risks that hinder the assurance of the quality and safety of the products and services we provide.
- With regard to risks related to sustainability issues including human rights and climate change, we will work throughout our supply chain to meet societal expectations and contribute to realization of a sustainable society.
- With regard to risks related to compliance, we will endeavor to act in a sincere and responsible manner in accordance with international norms and thoroughly eliminate actions that are inconsistent with being a member of the international community including fraudulent behavior.

Accurate Records

In order to disclose information in a timely and appropriate manner, we will comply with applicable laws, regulations, and internal rules, establish an internal control system, and operate it appropriately. We will create and report accurate records of financial information and other information.

Conflicting Interests

All business decisions made by the NGK Group are made fairly and appropriately in anticipation of the best interests of the Group. All persons engaged in the NGK Group's business will, with a high sense of ethics, pay close attention to their interactions with current and future customers, suppliers, subcontractors, competitors, and other third parties, and respond in good faith, avoiding the construction of situations or relationships that may lead to conflicts of interest as a result of non-business relationships with other companies or individuals.

Based on this philosophy, NGK Group will continue to manage situations that may cause conflicting interests; for example, an employee has a close personal interest in the business of third parties relevant to NGK Group, employs or manages relatives or close friends for lucrative positions, or uses company resources for private endeavors. We have been establishing management system to take necessary measures in a timely manner.

Counterfeits Parts

In addition to respecting the intellectual property (IP) rights of others as recited in the NGK Group Code of Conduct, we encourage the creation activities of IP rights and work to ensure proper protection and use of IP rights, create new value through the provision of products and services that contribute to society, and strive to realize a sustainable society. Counterfeits parts may threaten the value of the products and services created by our creative activities. Therefore, based on market investigation, etc., we will take necessary and appropriate measures to eliminate them.

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GRI content index

Statement of use	The NGK Group has reported the information cited in this GRI content index for the period from April 1, 2023 to March 31, 2024 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021
Applicable standards by GRI sector	None

GRI 2: General Disclosures 2021

Disclosure		Location
The organization and its reporting practices		
2-1	Organizational details	- Corporate Outline - Network
2-2	Entities included in the organization's sustainability reporting	Editorial Policy of Sustainability Website > Target Organization
2-3	Reporting period, frequency and contact point	- Editorial Policy of Sustainability Website - Inquiries about Sustainability
2-4	Restatements of information	No applicable cases were found.
2-5	External assurance	- Editorial Policy of Sustainability Website > Third-Party Assurance - External Recognition of the NGK Group > Inclusion of the NGK Group in Major Indices
Activities and workers		
2-6	Activities, value chain and other business relationships	- Corporate Outline - Supply Chain Management > Supplier Assessment - Annual Securities Report (FYE March 31, 2025) > p.6 Overview of Business (Japanese) 📄
2-7	Employees	- Social Data Collection > Basic Information on Employees 📄 - Annual Securities Report (FYE March 31, 2025) > p.12 Overview of Employees (Japanese) 📄

Disclosure		Location
2-8	Workers who are not employees	-
Governance		
2-9	Governance structure and composition	- Corporate Governance System - Annual Securities Report (FYE March 31, 2025) > p.83 Overview of Corporate Governance (Japanese) 📄 - Corporate Governance Report 📄
2-10	Nomination and selection of the highest governance body	Nomination and Compensation for Directors and Audit & Supervisory Board Members
2-11	Chair of the highest governance body	State of Each Organization > Board of Directors
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability Management > Governance
2-13	Delegation of responsibility for managing impacts	Sustainability Management > Governance
2-14	Role of the highest governance body in sustainability reporting	Sustainability Management > Governance
2-15	Conflicts of interest	- Nomination and Compensation for Directors and Audit & Supervisory Board Members > Matters Related to Nomination, Appointment and Dismissal - Annual Securities Report (FYE March 31, 2025) > p.83 Overview of Corporate Governance (Japanese) 📄
2-16	Communication of critical concerns	- Compliance Promotion Structure > Whistleblowing System - Risk Management > Risk Management Process
2-17	Collective knowledge of the highest governance body	State of Each Organization > Board of Directors
2-18	Evaluation of the performance of the highest governance body	State of Each Organization > Effectiveness of Board of Directors
2-19	Remuneration policies	Nomination and Compensation for Directors and Audit & Supervisory Board Members > Matters Related to Compensation
2-20	Process to determine remuneration	- Nomination and Compensation for Directors and Audit & Supervisory Board Members > Matters Related to Compensation - Annual Securities Report (FYE March 31, 2025) > p.83 Overview of Corporate Governance (Japanese) 📄

Disclosure		Location
2-21	Annual total compensation ratio	Nomination and Compensation for Directors and Audit & Supervisory Board Members > Matters Related to Compensation
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	Message from the President
2-23	Policy commitments	- Policies and Approaches - NGK Group Basic Sustainability Policy - NGK Group Environmental Vision / Environmental Policy > NGK Group Environmental Policy - Respect for Human Rights > Basic Approach - Respect for Human Rights > Related Policies and Approaches
2-24	Embedding policy commitments	- Sustainability Management > Governance - Carbon Neutrality Strategic Roadmap and 5-Year Environmental Action Plan > Carbon Neutrality Strategic Roadmap - Environmental Management System (EMS) - Respect for Human Rights > Human Rights Due Diligence - Respect for Human Rights > Management System - Supply Chain Management > Supplier Assessment
2-25	Processes to remediate negative impacts	- Respect for Human Rights > Human Rights Due Diligence - Respect for Human Rights > Grievance Mechanisms - Supply Chain Management > Communication Activities with Procurement Partners
2-26	Mechanisms for seeking advice and raising concerns	- Respect for Human Rights > Grievance Mechanisms - Compliance Promotion Structure > Whistleblowing System
2-27	Compliance with laws and regulations	- Environmental Management System (EMS) > Environmental Risk Management - Compliance Promotion Structure > NGK Group Corporate Business Principles and Code of Conduct

Disclosure		Location
2-28	Membership associations	— Sustainability Management > Endorsement and Participation in Initiatives — Information Disclosure Based on TCFD Recommendations — Initiatives toward Carbon Neutrality > Participation in Initiatives Related to Carbon Neutrality and Certification by External Organizations — Protecting and Restoring Biodiversity > Participation in Initiatives Related to Biodiversity and Certification by External Organizations
Stakeholder engagement		
2-29	Approach to stakeholder engagement	— Sustainability Management > Communication with Stakeholders
2-30	Collective bargaining agreements	— Labor Practices > Communication with Employees

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GRI 3: Material Topics 2021

Disclosure		Location
Material topics		
3-1	Process to determine material topics	— Materiality > Materiality Identification Process — Sustainability Management > Risk Management
3-2	List of material topics	— Materiality > Materiality System  — Sustainability Management > Strategies, Indicators, and Objectives
3-3	Management of material topics	— Materiality > Materiality for Realizing the NGK Group Vision — Sustainability Management > Risk Management

200: Economic

Disclosure		Location
GRI 201: Economic Performance 2016		
201-1	Direct economic value generated and distributed	Annual Securities Report (FYE March 31, 2025) > p.2 Corporate Overview (Japanese) 📄
201-2	Financial implications and other risks and opportunities due to climate change	- Information Disclosure Based on TCFD Recommendations > Strategy - Information Disclosure Based on TCFD Recommendations > Strategy - Risk Management
201-3	Defined benefit plan obligations and other retirement plans	Annual Securities Report (FYE March 31, 2025) > pp.154-156 Defined Benefit System (Japanese) 📄
201-4	Financial assistance received from government	Annual Securities Report (FYE March 31, 2025) > p.122 Consolidated Income Statement (Japanese) 📄
GRI 202: Market Presence 2016		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	-
202-2	Proportion of senior management hired from the local community	-
GRI 203: Indirect Economic Impacts 2016		
203-1	Infrastructure investments and services supported	Social Contribution Activities
203-2	Significant indirect economic impacts	Annual Securities Report (FYE March 31, 2025) > p.14 State of Business (Japanese) 📄
GRI 204: Procurement Practices 2016		
204-1	Proportion of spending on local suppliers	-
GRI 205: Anti-corruption 2016		
205-1	Operations assessed for risks related to corruption	Corruption Prevention Structure
205-2	Communication and training about anti-corruption policies and procedures	- Corruption Prevention Structure - Compliance Promotion Structure > Corruption Prevention Structure, Compliance Education
205-3	Confirmed incidents of corruption and actions taken	N/A

Disclosure		Location
GRI 206: Anti-competitive Behavior 2016		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Initiatives to Ensure Thorough Compliance > Compliance with Competition Laws
GRI 207: Tax 2019		
207-1	Approach to tax	NGK Group Tax Policy
207-2	Tax governance, control, and risk management	NGK Group Tax Policy
207-3	Stakeholder engagement and management of concerns related to tax	NGK Group Tax Policy
207-4	Country-by-country reporting	Tax Transparency

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300: Environmental

Disclosure		Location
GRI 301: Materials 2016		
301-1	Materials used by weight or volume	Environmental Data Collection > Material Balance, Raw Materials 
301-2	Recycled input materials used	Environmental Data Collection > Material Balance, Raw Materials 
301-3	Reclaimed products and their packaging materials	-
GRI 302: Energy 2016		
302-1	Energy consumption within the organization	Environmental Data Collection > Material Balance, Consumption of Each Energy 
302-2	Energy consumption outside of the organization	-
302-3	Energy intensity	Environmental Data Collection > Consumption of Each Energy 
302-4	Reduction of energy consumption	- Carbon Neutrality Strategic Roadmap and 5-Year Environmental Action Plan > Results of the 5th 5-Year Environmental Action Plan in FY2024 - Initiatives toward Carbon Neutrality - Environmental Data Collection > Consumption of Each Energy 
302-5	Reductions in energy requirements of products and services	-

Disclosure		Location
GRI 303: Water and Effluents 2018		
303-1	Interactions with water as a shared resource	- Initiatives for a Recycling-Oriented Society > Water Resource Conservation - Initiatives for Harmony with Nature > Information Disclosure Based on TNFD Recommendations
303-2	Management of water discharge-related impacts	Initiatives for a Recycling-Oriented Society > Water Resource Conservation
303-3	Water withdrawal	Environmental Data Collection > Conservation of Water Resources 
303-4	Water discharge	Environmental Data Collection > Conservation of Water Resources 
303-5	Water consumption	Environmental Data Collection > Conservation of Water Resources 
GRI 304: Biodiversity 2016		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	- Initiatives for Harmony with Nature > Protecting and Restoring Biodiversity - Initiatives for Harmony with Nature > Information Disclosure Based on TNFD Recommendations
304-2	Significant impacts of activities, products and services on biodiversity	Initiatives for Harmony with Nature > Information Disclosure Based on TNFD Recommendations
304-3	Habitats protected or restored	Initiatives for Harmony with Nature > Protecting and Restoring Biodiversity
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	-
GRI 305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	Environmental Data Collection > GHG Emissions 
305-2	Energy indirect (Scope 2) GHG emissions	Environmental Data Collection > GHG Emissions 
305-3	Other indirect (Scope 3) GHG emissions	Environmental Data Collection > GHG Emissions 
305-4	GHG emissions intensity	Environmental Data Collection > GHG Emissions 

Disclosure		Location
GRI 305: Emissions 2016		
305-5	Reduction of GHG emissions	- Carbon Neutrality Strategic Roadmap and 5-Year Environmental Action Plan > Results of the 5th 5-Year Environmental Action Plan in FY2024 - Initiatives toward Carbon Neutrality - Environmental Data Collection > GHG Emissions 
305-6	Emissions of ozone-depleting substances (ODS)	-
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environmental Data Collection > Chemical Management System 
GRI 306: Waste 2020		
306-1	Waste generation and significant waste-related impacts	- Environmental Data Collection > Material Balance  - Initiatives for a Recycling-Oriented Society > Waste Reduction and Effective Use of Resources
306-2	Management of significant waste-related impacts	Initiatives for a Recycling-Oriented Society > Waste Reduction and Effective Use of Resources
306-3	Waste generated	Environmental Data Collection > Discarded Materials 
306-4	Waste diverted from disposal	Environmental Data Collection > Discarded Materials 
306-5	Waste directed to disposal	- Environmental Data Collection > Discarded Materials  - Environmental Data Collection > Toxic Materials 
GRI 308: Supplier Environmental Assessment 2016		
308-1	New suppliers that were screened using environmental criteria	Supply Chain Management > Supplier Assessment
308-2	Negative environmental impacts in the supply chain and actions taken	-

400: Social

Disclosure		Location
GRI 401: Employment 2016		
401-1	New employee hires and employee turnover	— Social Data Collection > Basic Information on Employees  — Social Data Collection > Diversity & Inclusion 
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	— Diversity and Inclusion > Systems and Initiatives to Support Diverse Working Styles
401-3	Parental leave	— Diversity and Inclusion > Systems and Initiatives to Support Diverse Working Styles
GRI 402: Labor/Management Relations 2016		
402-1	Minimum notice periods regarding operational changes	— Labor Practices > Communication with Employees
GRI 403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	— Occupational Safety and Health > Basic Approach
403-2	Hazard identification, risk assessment, and incident investigation	— Occupational Safety and Health > Safety and Health Management Promotion Framework — Occupational Safety and Health > Enhancing Safety and Health Activities
403-3	Occupational health services	— Occupational Safety and Health > Safety and Health Management Promotion Framework — Occupational Safety and Health > Enhancing Safety and Health Activities
403-4	Worker participation, consultation, and communication on occupational health and safety	— Occupational Safety and Health > Safety and Health Management Promotion Framework — Occupational Safety and Health > Enhancing Safety and Health Activities
403-5	Worker training on occupational health and safety	— Occupational Safety and Health > Safety and Health Training
403-6	Promotion of worker health	— Health Management
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	— Occupational Safety and Health > Enhancing Safety and Health Activities
403-8	Workers covered by an occupational health and safety management system	— Occupational Safety and Health > Enhancing Safety and Health Activities — Social Data Collection > Occupational Safety and Health 

Disclosure		Location
GRI 403: Occupational Health and Safety 2018		
403-9	Work-related injuries	- Occupational Safety and Health > Enhancing Safety and Health Activities - Social Data Collection > Occupational Safety and Health 📄
403-10	Work-related ill health	- Occupational Safety and Health > Enhancing Safety and Health Activities - Social Data Collection > Occupational Safety and Health 📄
GRI 404: Training and Education 2016		
404-1	Average hours of training per year per employee	- Human Resource Development > Skills Development for Employees - Social Data Collection > Human Resource Development 📄
404-2	Programs for upgrading employee skills and transition assistance programs	Human Resource Development > Skills Development for Employees
404-3	Percentage of employees receiving regular performance and career development reviews	Labor Practices > Fair Treatment and Evaluation
GRI 405: Diversity and Equal Opportunity 2016		
405-1	Diversity of governance bodies and employees	- Social Data Collection > Diversity & Inclusion 📄 - Annual Securities Report (FYE March 31, 2025) > p.83 Overview of Corporate Governance (Japanese) 📄
405-2	Ratio of basic salary and remuneration of women to men	Social Data Collection > Diversity & Inclusion 📄
GRI 406: Non-discrimination 2016		
406-1	Incidents of discrimination and corrective actions taken	Respecting Human Rights > Human Rights Due Diligence
GRI 407: Freedom of Association and Collective Bargaining 2016		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	- Respect for Human Rights > Human Rights Due Diligence - Supply Chain Management > Supplier Assessment
GRI 408: Child Labor 2016		
408-1	Operations and suppliers at significant risk for incidents of child labor	- Respect for Human Rights > Human Rights Due Diligence - Supply Chain Management > Supplier Assessment

Disclosure		Location
GRI 409: Forced or Compulsory Labor 2016		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	- Respect for Human Rights > Human Rights Due Diligence - Supply Chain Management > Supplier Assessment
GRI 410: Security Practices 2016		
410-1	Security personnel trained in human rights policies or procedures	-
GRI 411: Rights of Indigenous Peoples 2016		
411-1	Incidents of violations involving rights of indigenous peoples	-
GRI 413: Local Communities 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	- Respect for Human Rights > Human Rights Due Diligence - Supply Chain Management > Supplier Assessment
413-2	Operations with significant actual and potential negative impacts on local communities	- Respect for Human Rights > Human Rights Due Diligence - Supply Chain Management > Supplier Assessment
GRI 414: Supplier Social Assessment 2016		
414-1	New suppliers that were screened using social criteria	Supply Chain Management > Supplier Assessment
414-2	New suppliers that were screened using social criteria	-
GRI 415: Public Policy 2016		
415-1	Political contributions	Corruption Prevention Structure > Responsible Political Involvement
GRI 416: Customer Health and Safety 2016		
416-1	Assessment of the health and safety impacts of product and service categories	- Pursuing Quality for Products and Services - Pursuing Safety for Products and Services > Risk Assessment
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	N/A
GRI 417: Marketing and Labeling 2016		
417-1	Requirements for product and service information and labeling	-

Disclosure		Location
GRI 417: Marketing and Labeling 2016		
417-2	Incidents of non-compliance concerning product and service information and labeling	N/A
417-3	Incidents of non-compliance concerning marketing communications	N/A
GRI 418: Customer Privacy 2016		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	N/A

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Core Subjects	Issues	Corresponding items
Organizational Governance	Organizational Governance	- Message from the President - Sustainability Management - Materiality - Corporate Governance (General) - Compliance (General) - Risk Management (General) - NGK Group Philosophy - NGK Group Corporate Business Principles and Code of Conduct - Policies and Approaches
Human Rights	1. Due diligence 2. Human rights risk situations 3. Avoidance of complicity 4. Resolving grievances 5. Discrimination and vulnerable groups 6. Civil and political rights 7. Economic, social and cultural rights 8. Fundamental principles and rights at work	- Sustainability Management - Materiality - Respect for Human Rights - Supply Chain Management - Social Contribution Activities - Labor Practices - Diversity and Inclusion - Health Management - Occupational Safety and Health - Compliance Promotion Structure - Initiatives to Ensure Thorough Compliance - NGK Group Corporate Business Principles and Code of Conduct - Policies and Approaches - Procurement Information - UK Modern Slavery Act Statement
Labor Practices	1. Employment and employment relationships 2. Conditions of work and social protection 3. Social dialogue 4. Health and safety at work 5. Human development and training in the workplace	- Sustainability Management - Materiality - Respect for Human Rights - Supply Chain Management - Human Capital Management - Labor Practices - Diversity and Inclusion - Human Resource Development - Health Management - Occupational Safety and Health

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Environmental

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Core Subjects	Issues	Corresponding items
Environment	1. Prevention of pollution 2. Sustainable resource use 3. Climate change mitigation and adaptation 4. Protection of the environment, biodiversity and restoration of natural habitats	— Message from the President — Sustainability Management — Environmental Management (General) — Approach to Climate Change (Initiatives toward Carbon Neutrality) (General) — Initiatives for a Recycling-Oriented Society (General) — Initiatives for Harmony with Nature (General) — Environmental Pollution Prevention — Products and Services Contributing to Environmental Protection — NGK Group Corporate Business Principles and Code of Conduct — NGK Group Vision
Fair Operating Practices	1. Anti-corruption 2. Responsible political involvement 3. Fair competition 4. Promoting social responsibility in the value chain 5. Respect for property rights	— Sustainability Management — Materiality — Compliance (General) — Risk Management (General) — Intellectual Property Management — Supply Chain Management — NGK Group Corporate Business Principles and Code of Conduct — Policies and Approaches
Consumer Issues	1. Fair marketing, factual and unbiased information and fair contractual practices 2. Protecting consumers' health and safety 3. Sustainable consumption 4. Consumer service, support, and complaint and dispute resolution 5. Consumer data protection and privacy 6. Access to essential services 7. Training and awareness-raising	— Sustainability Management — Materiality — Products and Services Contributing to Environmental Protection — Improving Customer Satisfaction (General) — Information Security — Privacy Policy — NGK Group Corporate Business Principles and Code of Conduct — Policies and Approaches
Community Involvement and Development	1. Community involvement 2. Training and culture 3. Employment creation and skills development	— Message from the President — Sustainability Management — Initiatives for Harmony with Nature (General)

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Core Subjects	Issues	Corresponding items
Community Involvement and Development	4. Technology development and access 5. Wealth and income creation 6. Health 7. Social investment	■ Tax Transparency ■ Social Contribution Activities ■ NGK Foundation for International Students ■ NGK Group Corporate Business Principles and Code of Conduct

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External Recognition of the NGK Group

| Inclusion of the NGK Group in Major Indices

Dow Jones Best-in-Class Asia Pacific Index

We have been selected to the Dow Jones Best-in-Class Asia Pacific Index. This index is one of the leading indices for socially responsible investment.

FTSE4Good Index Series



FTSE4Good

The FTSE4Good Index Series is an ESG investment index created by FTSE Russell. Companies recognized for being excellent from environmental, social and governance perspectives are selected to be composite stocks.

[FTSE4Good Index Series](#)

FTSE Blossom Japan Index



**FTSE Blossom
Japan Index**

The FTSE Blossom Japan Index targets Japanese companies. It is an index adopted by the Government Pension Investment Fund (GPIF) at the time of ESG investment.

[FTSE Blossom Japan Index Series](#) | [FTSE Russell](#)

FTSE Blossom Japan Sector Relative Index



**FTSE Blossom
Japan Sector
Relative Index**

The FTSE Blossom Japan Sector Relative Index is widely used to create and assess sustainable investment funds and other financial products.

[FTSE Blossom Japan Index Series](#) | [FTSE Russell](#)

MSCI Japan Empowering Women Index (WIN)

2025 CONSTITUENT MSCI JAPAN EMPOWERING WOMEN INDEX (WIN)

THE INCLUSION OF NGK INSULATORS IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF NGK INSULATORS BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

We have been selected to the MSCI Japan Empowering Women Index (WIN) adopted by the Government Pension Investment Fund (GPIF) for operation. The index is composed of companies that excel in gender diversity.

MSCI Japan ESG Select Leaders Index

2025 CONSTITUENT MSCI NIHONKABU ESG SELECT LEADERS INDEX

THE INCLUSION OF NGK INSULATORS IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF NGK INSULATORS BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

We have been selected to the MSCI Japan ESG Select Leaders Index, which has been created by selecting companies with excellent ESG ratings, and adopted by the Government Pension Investment Fund (GPIF) for investment targets.

S&P/JPX Carbon Efficient Index



The S&P/JPX Carbon Efficient Index is an ESG index jointly developed by the S&P Dow Jones Indices (S&P) and the Tokyo Stock Exchange of the Japan Exchange Group (JPX). We have received a rating of 9 in the decile classification and an evaluation of discloses information for our information disclosure.

Morningstar Japan ex-REIT Gender Diversity Tilt Index

NGK has been selected for inclusion in this index, established by Morningstar, which is designed to emphasize companies in the Japanese market that have strong gender diversity policies embedded in their corporate culture and that ensure equal opportunities to employees, irrespective of their gender. The Government Pension Investment Fund (GPIF) has adopted this as an ESG index.

ESG-Related External Recognition

CDP



The CDP is an international non-profit organization. It engages in activities to request from companies the disclosure of environmental-related information such as on greenhouse gas emissions and climate change initiatives. We have received a B for Climate Change, and an A for Water Security and Supplier Engagement Rating.

Next Nadeshiko: Companies Supporting Dual-Career and Co-parenting



Companies jointly selected by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange for the Next Nadeshiko: Companies Supporting Dual-Career and Co-parenting list, which was newly established in FY2023, are recognized for being particularly outstanding in terms of supporting dual-careers and co-parenting regardless of gender. NGK was selected for the second consecutive time in FY2024.

L-Boshi



We acquired level 3 certification, the highest rank, of L-Boshi from the Ministry of Health, Labour and Welfare in August 2019. This serves as proof that we are an excellent company in terms of the initiatives we are undertaking to advance women in the workplace.

Platinum Kurumin



We were certified as a childcare support company based on the Act on Advancement of Measures to Support Raising Next-Generation Children in 2012. We have acquired the next-generation certification mark Platinum Kurumin in 2023.

KENKO Investment for Health



Since 2019, NGK has been continuously included in the large enterprise category of the Certified KENKO Investment for Health Outstanding Organizations Recognition Program jointly promoted by the Ministry of Economy, Trade and Industry (METI) and the Nippon Kenko Kaigi (Japan Health Council).

In addition, the NGK Health Insurance Association has also been continuously included in the SME category of the Certified KENKO Investment for Health Outstanding Organizations Recognition Program. In 2025, it was also included as a Next Bright 1000 company.

Corporate Outline/NGK Group Website (As of March 31, 2025)

Corporate Outline

Company name	NGK INSULATORS, LTD.	Consolidated subsidiaries	46
Address	2-56 Suda-cho, Mizuho, Nagoya 467-8530, Japan Telephone + (81) 52-872-7181	Equity-method affiliates	1
Established	May 5, 1919	Employees	NGK 4,876 Consolidated 19,931
Paid-in capital	70.1 billion yen	Stock exchange code	5333
Net sales	619.5 billion yen (consolidated, for FY2024)		

NGK Group Website

This booklet is an archive of our sustainability initiatives as of the end of August 2025 under the title of the NGK Sustainability Website Data 2025 (PDF). Our website also has sustainability information, in addition to detailed corporate information and investor relations.



Sustainability

<https://www.ngk-insulators.com/en/sustainability/>



NGK REPORT 2025

https://www.ngk.co.jp/en/sustainability/pdf/2025/ngk_index_en.pdf



Company Information

<https://www.ngk-insulators.com/en/info/>



Investor Relations

<https://www.ngk-insulators.com/en/ir/>

Group Companies/Editorial Policy (As of March 31, 2025)

NGK Group Locations

NGK Headquarters, Sites, Branches, and Sales Offices

Headquarters/Nagoya Site

Chita Site/Komaki Site/Ishikawa Plant

Tokyo Main Office/Osaka Branch/Sapporo Sales Office/Sendai Sales Office/Hokuriku Sales Office/

Hiroshima Sales Office/Takamatsu Sales Office/Fukuoka Sales Office

NGK Group

JAPAN

ENERGY SUPPORT CORPORATION
KANSAI ENERGYS CORPORATION
KYUSHU ENERGYS CO., LTD.
HOKURIKU ENERGYS CORPORATION
ENERGYS SANGYO CORPORATION
AKECHI INSULATORS, LTD.
NGK OKHOTSK, LTD.
NGK ELECTRONICS DEVICES, INC.
NGK CERAMIC DEVICE CO., LTD.
NGK METEX CORPORATION
NGK FINE MOLDS, LTD.
NGK CHEMITECH, LTD.
NGK FILTECH, LTD.
NGK ADREC CO., LTD.
NGK KILNTECH CORPORATION
NGK LIFE CO., LTD.
NGK YU-SERVICE CO., LTD.
ENA ELECTRIC POWER Co., Ltd.
ABASHIRI ELECTRIC POWER Co., Ltd.
NR-Power Lab Co., Ltd.

NORTH AND CENTRAL AMERICA

NGK-LOCKE, INC.
NGK CERAMICS USA, INC.
NGK AUTOMOTIVE CERAMICS USA, INC.
NGK METALS CORPORATION
FM INDUSTRIES, INC.
NGK ELECTRONICS USA, INC.
NGK CERAMICS MEXICO, S. DE R.L. DE C.V.

EUROPE

NGK BERYLCO U.K. LTD.
NGK CERAMICS EUROPE S.A.
NGK EUROPE GMBH
NGK DEUTSCHE BERYLCO GMBH
NGK BERYLCO FRANCE
NGK CERAMICS POLSKA SP. Z O.O.

ASIA, OCEANIA

NGK (CHINA) INVESTMENT CO., LTD.
NGK CERAMICS SUZHOU CO., LTD.
NGK TECHNOCERA SUZHOU CO., LTD.
NGK AUTOMOTIVE CERAMICS KOREA CO., LTD.
P.T. NGK CERAMICS INDONESIA
SIAM NGK TECHNOCERA CO., LTD.
NGK CERAMICS (THAILAND) CO., LTD.
NGK TECHNOLOGIES INDIA PVT. LTD.
NGK STANGER PTY LTD.

Editorial Policy

NGK has created a dedicated sustainability section on its corporate website in order to deliver information about the NGK Group's environmental, social and governance (ESG) initiatives for a sustainable society to a broad range of stakeholders in a timely manner.

We have archived our initiatives as of the end of August 2025 under the title of the NGK Group Sustainability Website Data 2025 (PDF). Plus, we have collected data on each initiative over time in our ESG Data Collection (Environmental) (Social) (Governance).

We also publish the NGK Report which conveys financial and non-financial information together with business strategies in a concise and clear manner to foster greater understanding of the NGK Group's corporate value and vision.

■Reporting Boundary

NGK and its related subsidiaries (both domestic and international).

The relevant reporting boundary is indicated in each data disclosure.

■Target Period

April 1, 2024 to March 31, 2025; however, information on new initiatives is updated as needed.

■Forward-Looking Statements

This website contains forward-looking statements including performance forecasts. These statements are based on information available at present and on certain assumptions judged to be rational. Actual results may differ due to a number of factors.

Third-Party Assurance

Deloitte.

デロイト トーマツ

(TRANSLATION)

Independent Practitioner's Assurance Report

September 17, 2025

Mr. Shigeru Kobayashi
President,
NGK Insulators, Ltd.

Tomoharu Hase
Representative Director
Deloitte Tohmatsu Sustainability Co., Ltd.
3-2-3, Marunouchi, Chiyoda-ku, Tokyo

We have undertaken a limited assurance engagement of the consolidated production bases and non-consolidated energy-origin CO₂ emissions (Scope 1 and 2) and GHG emissions (Scope 3 category 2, 3, 6, 7, 11, 12) indicated with ☒ for the year ended March 31, 2025 (the "GHG Information") included in the "NGK Group Sustainability Website Data 2025 (PDF)" (the "Report") of NGK Insulators, Ltd. (the "Company").

The Company's Responsibility

The Company is responsible for the preparation of the GHG Information in accordance with the calculation and reporting criteria adopted by the Company (stated in the Report, Material Balance Calculation Basis and Method for calculating GHG emissions (Scope3)). Greenhouse gas quantification is subject to inherent uncertainty for reasons such as incomplete scientific knowledge used to determine emissions factors and numerical data needed to combine emissions of different gases.

Our Independence and Quality Management

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. We apply International Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, and accordingly maintain a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the GHG Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board ("IAASB"), ISAE 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the IAASB and the *Practical Guideline for the Assurance of Sustainability Information*, issued by the Japanese Association of Assurance Organizations for Sustainability Information.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. These procedures also included the following:

- Evaluating whether the Company's methods for estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or reperforming the estimates.
- Undertaking site visits to assess the completeness of the data, data collection methods, source data and relevant assumptions applicable to the sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the GHG Information is not prepared, in all material respects, in accordance with the calculation and reporting criteria adopted by the Company.

The above represents a translation, for convenience only, of the original Independent Practitioner's Assurance report issued in the Japanese language.

Member of
Deloitte Touche Tohmatsu Limited

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NGK INSULATORS, LTD.

NGK Group Sustainability Website Data 2025

■ For more information:
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NGK Insulators, Ltd.
Sustainability Management Department
E-mail: pr-office@ngk.co.jp

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