

## Corporate Strategy



### R&D and Marketing Strategy

Create new products and businesses to meet customer needs and wants via R&D and marketing based on Mega Trends, as well as collaborating with the incubation function of new businesses.

#### Long-Term Business Goals

- Options for business development are presented via R&D based on Mega Trends, and the incubation function for new businesses is actively utilized
- Marketing cooperates with research and development to create new products, businesses, and business models to meet customer needs and wants

#### Long-Term Strategy Goals

The following missions have been set in key fields.

- Carbon recycler for decarbonization
- Creator of IoT social infrastructure
- Supplier of lightweight/composite/advanced materials
- No.1 recycler of urban-mine resources

The Group will match core technologies with information collecting that gains an overview of Mega Trends, customer needs, and technology trends, and thereby creates new value. We will rejuvenate businesses and promote the optimization of its business portfolio. We will also enhance cooperation within the Group, promote marketing activities in promising new business domains, create new products and businesses, and maintain intellectual property.

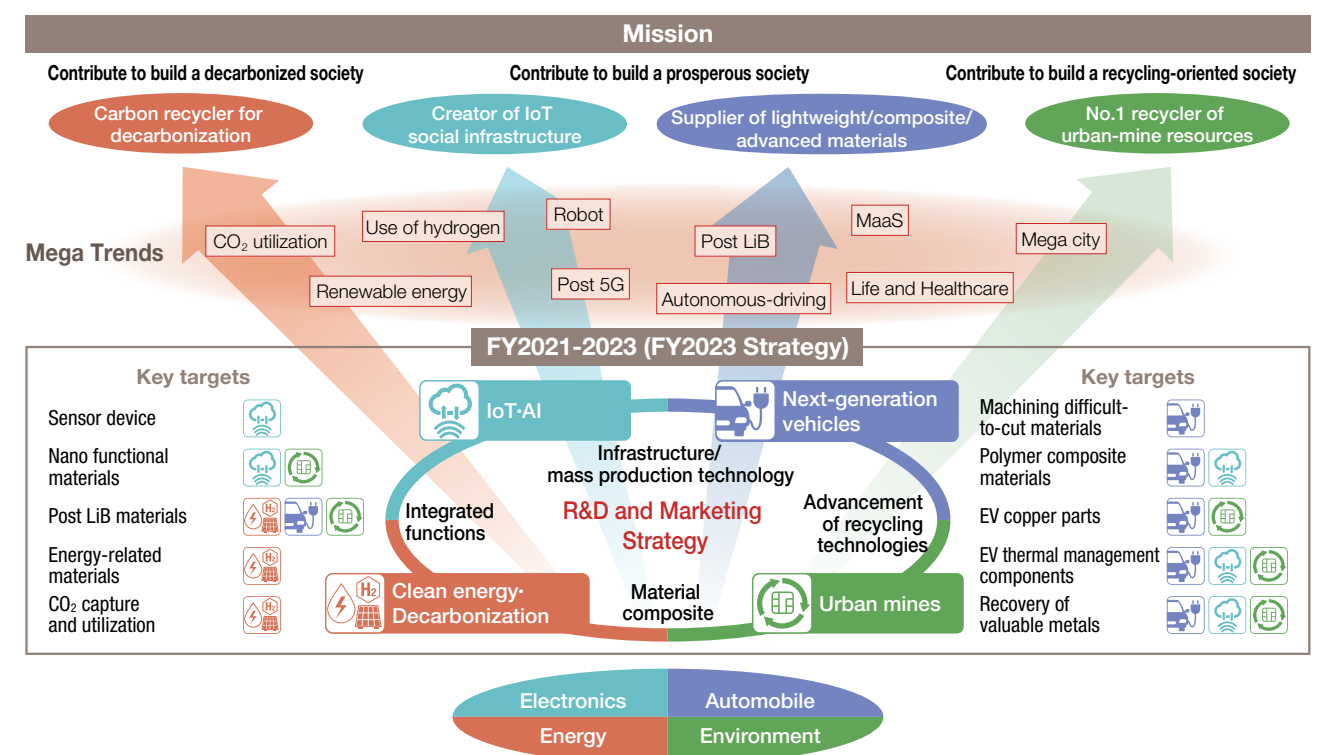
#### Projected Achievements at the End of Fiscal 2023

At the end of fiscal 2023, the results of organizational reform at the Central Research Institute will have been solidified, and we will be creating intellectual property related to new products and technologies via the generation of ideas, the implementation of systematic R&D, and advanced technical development. We will also build and promote a R&D/marketing system that has been expanded to cover new business domains and the peripheral fields of existing business domains.

#### Specific Measures for Fiscal 2021 to 2023 Medium-Term Management Plan

The Central Research Institute will promote the development of future businesses and the R&D of fundamental technologies across the Group. We will utilize basic technologies such as analysis/characterization and simulation, as well as material technologies centering on thin films and interfaces, metalworking and reaction processes, in order to develop new products and technologies ahead of changes to global needs and promote the creation of new businesses. We will also increase the frequency of patent applications, press releases, and conferences/academic paper publication.

The establishment of a new marketing department in the Corporate Strategy Dept. will enhance marketing functions, and aims to create new businesses in market domains seen as promising in the medium to long-term. The department will cooperate with new business divisions and business departments, define the direction of our medium to long-term business development, and aim for the efficient creation of new products and businesses.



## Corporate Strategy



## Manufacturing Excellence Strategy

Business divisions formulate a vision based on a business strategy and maximize utilization of the Group assistance function of corporate divisions to raise manufacturing capability to the next level.

## Long-Term Business Goals

Business divisions will constantly develop a vision for raising manufacturing capability and we will make the most of the Group assistance function of corporate divisions to achieve that vision.

## Long-Term Strategy Goals

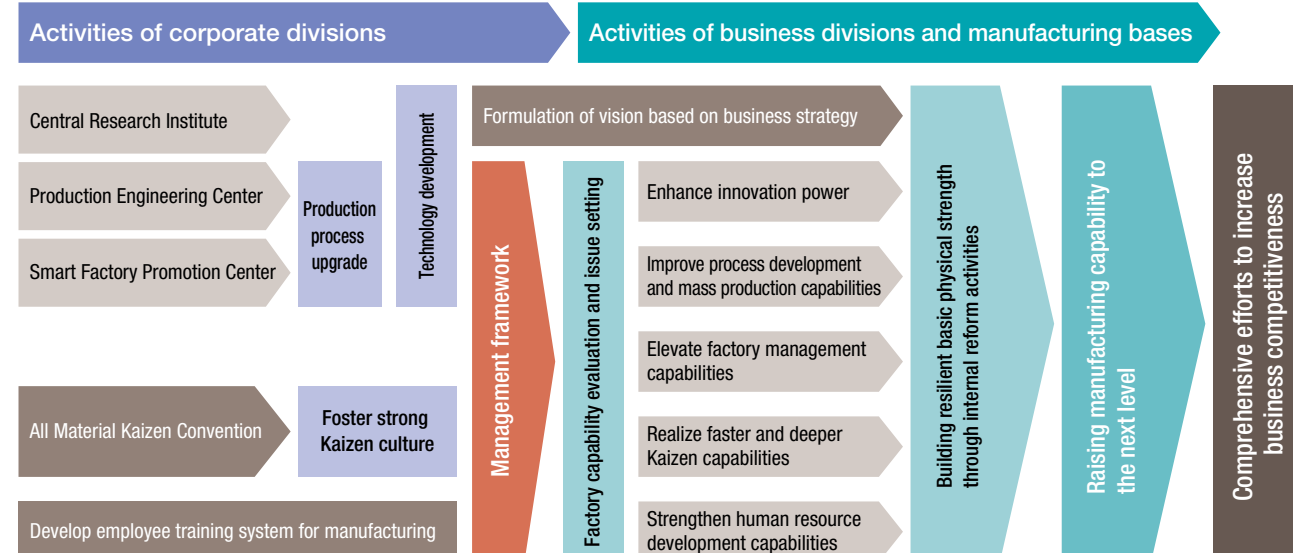
Business divisions will continuously develop a vision for raising manufacturing capability to the next level and make the most of the group assistance function of corporate divisions to achieve that vision. This will enable us to create manufacturing capabilities that are clearly distinct from competitor companies by utilizing our talent and technical resources both inside and outside the Group to swiftly solve problems.

## Projected Achievements at the End of Fiscal 2023

We will finish building resilient basic physical strength through internal reform activities and formulating a vision for raising manufacturing capability to the next level at our main plants, and steadily proceed with improvements. We also aim to finish enhancing the group assistance function of corporate divisions for material issues, lead multiple projects to success, and complete the provision of an environment that improves the problem solving ability of individuals.

## Raise manufacturing capability to the next level

- Formulation and realization of the factory vision based on its business strategy
- Enhancement of production process
- Proactive utilization of external knowledge

Specific Measures for Fiscal 2022  
Medium-Term Management Plan

We will establish a refined factory vision and goals that will guarantee effectiveness in achieving the medium- to long-term business goals. We will comprehensively review our manufacturing capabilities based on a company-wide unified management framework. Furthermore, we will continuously identify issues to achieve the goals to implement improvements, eventually aiming to raise our manufacturing capability to the next level. Regarding the advanced production technology development necessary for that purpose, we will utilize resources across divisions to promote early realization.

In addition, at the Smart Factory Promotion Center, which was established in 2019, we will focus on the development of image inspection equipment that uses AI to improve inspection accuracy and productivity. Furthermore, we are promoting a training program for young engineers to solve difficult problems in the field using a quantitative problem solving approach. We are also expanding the target employees to accelerate the development of human resources with a high level of problem solving ability.

## Corporate Strategy



## Quality Management Strategy

Establish “quality excellence” as corporate brand equity of the Group via “proactive quality management” initiatives to earn a good reputation from customers.

## Long-Term Business Goals

Establish “quality excellence” as corporate brand equity of the Group

- Optimization of the designs, machines, and manufacturing processes for more competitive process capability\* to raise the product quality level
- A good quality reputation for our products contributes to corporate differentiation and competitiveness

\*Process capability: The performance quality delivered by a production line/ process

## Long-Term Strategy Goals

The Group strives to establish “quality excellence” as brand equity of the Group as a long-term strategy. To do so, we will optimize the designs, machines, and manufacturing processes to raise our process capability and product quality in “proactive quality management” initiatives, by materializing designs, machines, and manufacturing processes which never cause non-conforming products, or in other words, shifting focus from resultant-factor control, which is based on the inspection result of finished products, to causal-factor control, which focuses on how to manufacture.

We believe that a good reputation for our products, which the initiatives will deliver, leads to differentiation and competitiveness for our business.

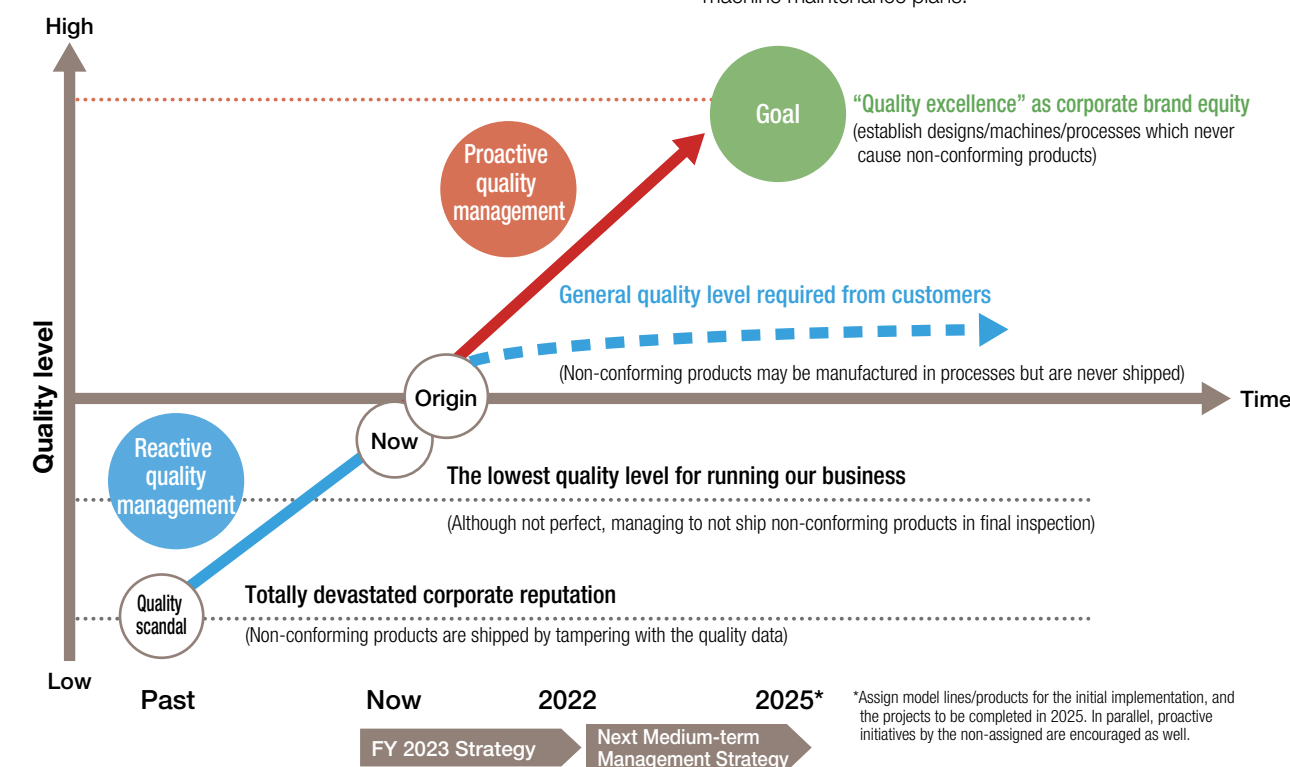
## Projected Achievements at the End of Fiscal 2023

By the end of fiscal 2023, we will complete the establishment of “reactive quality management” (resultant-factor control) and enhance initiatives that focus on “proactive quality management (causal-factor management).”

Specific Measures for the Fiscal 2021 to 2023  
Medium-Term Management Strategy

The fiscal 2021 to 2023 Medium-Term Management Plan aims to create a system that will robustly prevent the release of non-conforming products by first implementing “reactive quality management.” To clarify the normal conditions for manufacturing, and to improve and maintain quality, we will review standardization. We will also review standards and principles of manufacturing technologies, clarify the rationales for specifications, and set values to optimize them. Additionally, in order to mitigate potential quality risks, we will review control for changes of human resources, machines, materials, and methods, and build a framework for monitoring quality trends and taking appropriate action before quality issues occur.

Next, in “proactive quality management” initiatives, we will work group-wide to materialize designs, machines, and manufacturing processes which never cause non-conforming products. This involves collecting data from the machines and manufacturing processes and finished product quality, and enhancing understanding on the capturing of process capability via a high-precision monitoring system that offers data visualization. Furthermore, in order to improve the overall process capability, we will utilize IoT and AI to understand the relationship between causal and resultant factors in data, and thereby maintain process capability and optimize product/process design and machine maintenance plans.



\*Assign model lines/products for the initial implementation, and the projects to be completed in 2025. In parallel, proactive initiatives by the non-assigned are encouraged as well.

## Corporate Strategy

## Digital Transformation (DX) Strategy

The Group will use Digital Transformation (DX) to strengthen three key pillars of business, which are “Business added-value,” “Business operations competitiveness” and “Management speed,” and thereby realize its goal of being a “leading company.”

### Long-Term Business Goal

A leading company that provides high value-added products and services via DX

### Long-Term Strategy Goals

We will actively promote DX and realize the following three pillars in order to provide services that further increase customer value based on market intelligence, in order to become a leading company that provides high value-added products and services.

- **Business added-value**  
Strengthen links with customers, enhance cooperation between manufacturing and sales, and achieve high-speed development and market release.
- **Business operation competitiveness**  
Utilize digital technologies such as IoT and AI to achieve proactive quality management and next-level manufacturing capability.
- **Management speed**  
Achieve both rapid management and governance enhancement via data sharing and utilization based on thorough digital transformation.

### Projected Achievements at the End of Fiscal 2023

We aim for data infrastructure to be ready for the entire Group and for data to be shared and utilized by the end of fiscal 2023. We also aim for core work to be made efficient and to achieve an organization that is heading towards total digital transformation.

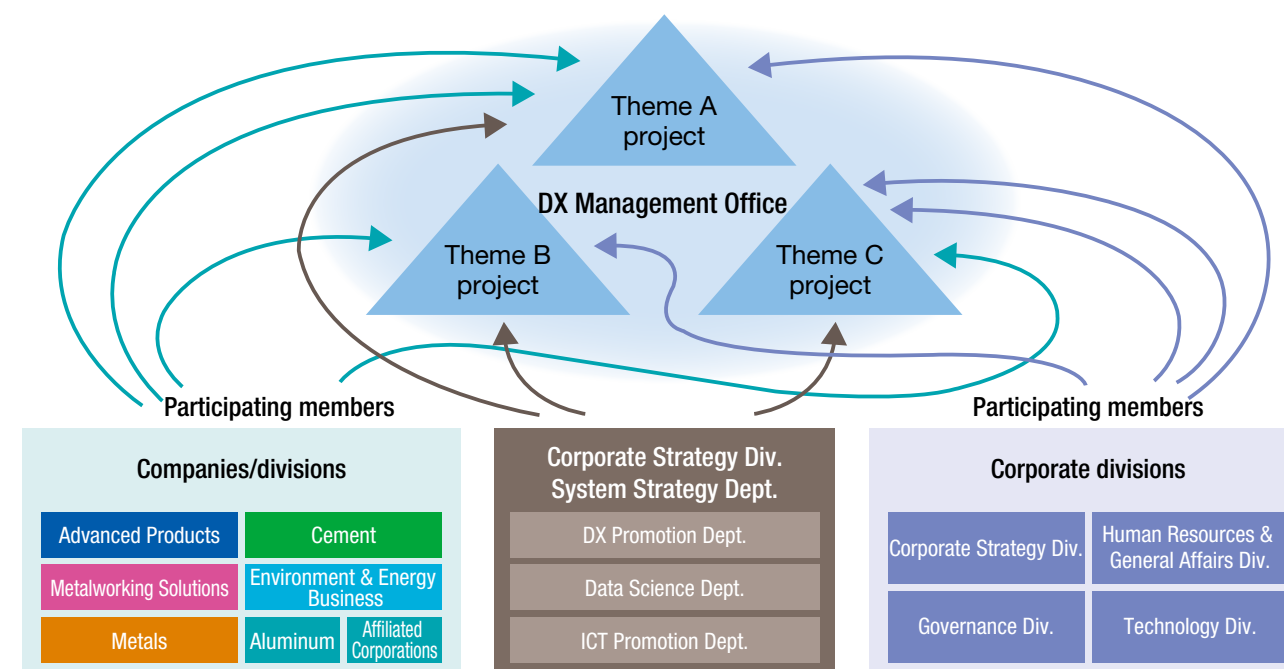
### Specific Measures for Fiscal 2021 to 2023 Medium-Term Management Plan

In order to achieve the projected achievements at the end of fiscal 2023, we will establish a Digital Transformation Management Office, appoint a Chief Digital Officer (CDO), and powerfully promote various measures. We will invest approximately 30 billion yen in the next five years, cultivate about 100 employees that specialize in digital transformation, and realize the DX implementation plan while considering a concept for data infrastructure.

We will also proceed with efforts to strengthen market intelligence and link manufacturing and sales, and promote the construction of data infrastructure and core work efficiency required to do so.

We plans to achieve corporate culture reform by continuing to promote measures for “Manufacturing Excellence” and “Quality Management Governance Enhancement,” as well as efforts for improving “Business added-value” according to the characteristics of the business.

### DX Management Office



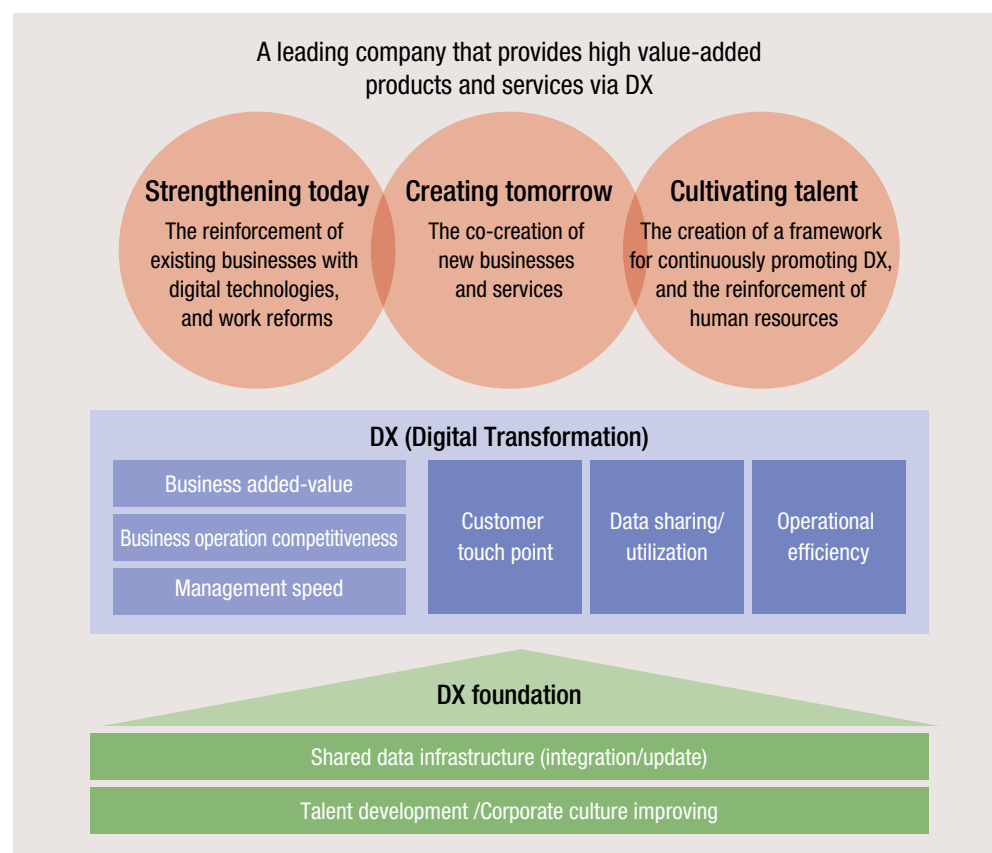
• Approx. 30 billion yen investment over the next five years • Approx. 100 digital professionals

### Long-Term Business Goal

A leading company that provides high value-added products and services via DX

### Mission of Digital Transformation Management Office

### Goals of DX



### Priority Areas for DX Initiatives

Mission	Aim	Priority areas (under consideration)
Strengthening today	Operational competitiveness	<ul style="list-style-type: none"> <li>Enhancement of market intelligence</li> <li>Agile development via the utilization of customer/sales data</li> <li>Digital marketing</li> <li>Enhancement of supply and demand management system</li> <li>Quality control/safety management</li> </ul>
	Management speed Improved Business efficiency	<ul style="list-style-type: none"> <li>Constant monitoring of management indicators</li> <li>Improvement of enterprise system</li> <li>Business efficiency</li> <li>Business standardization and digitization of manuals, etc.</li> </ul>
	Improved data infrastructure Data sharing / utilization	<ul style="list-style-type: none"> <li>Business intelligence and improved data infrastructure</li> <li>Promotion of existing data utilization</li> <li>Improved data analysis capability</li> </ul>
Creating tomorrow	Business added-value	<ul style="list-style-type: none"> <li>Enhancement of solution proposal capability</li> <li>Swift development of new materials/products</li> <li>Physical + digital services</li> <li>Enhancement of recycling business</li> </ul>
Cultivating talent	Talent development / Corporate culture improving	<ul style="list-style-type: none"> <li>Cultivation of DX human resources</li> <li>Digital mindset and improved literacy</li> <li>Visualization and utilization of human resources portfolio</li> </ul>

2020-2022  
DX Implementation  
Plan  
Formulated in  
the first half of 2020



## Corporate Strategy

## Human Resources Strategy

Based on the idea that human resources are the source of business competitiveness, the Group will focus on cultivating and utilizing human resources to aim to become a company where each and every employee can respond to change and experience growth and self-realization, while also forming a sound organizational culture that contributes to stronger Group management.

### Long-Term Business Goals

#### Talent:

The required human resources are secured and cultivated, the status of developing employee ability is visualized, and employee compensation is provided according to specialized ability and performance

#### Organization:

Group human resources strategies have infiltrated all Group companies and the Group considers human resource measures according to business characteristics and plans

#### Corporate culture:

Employees independently make decisions in their work and find their job worthwhile

#### Social value:

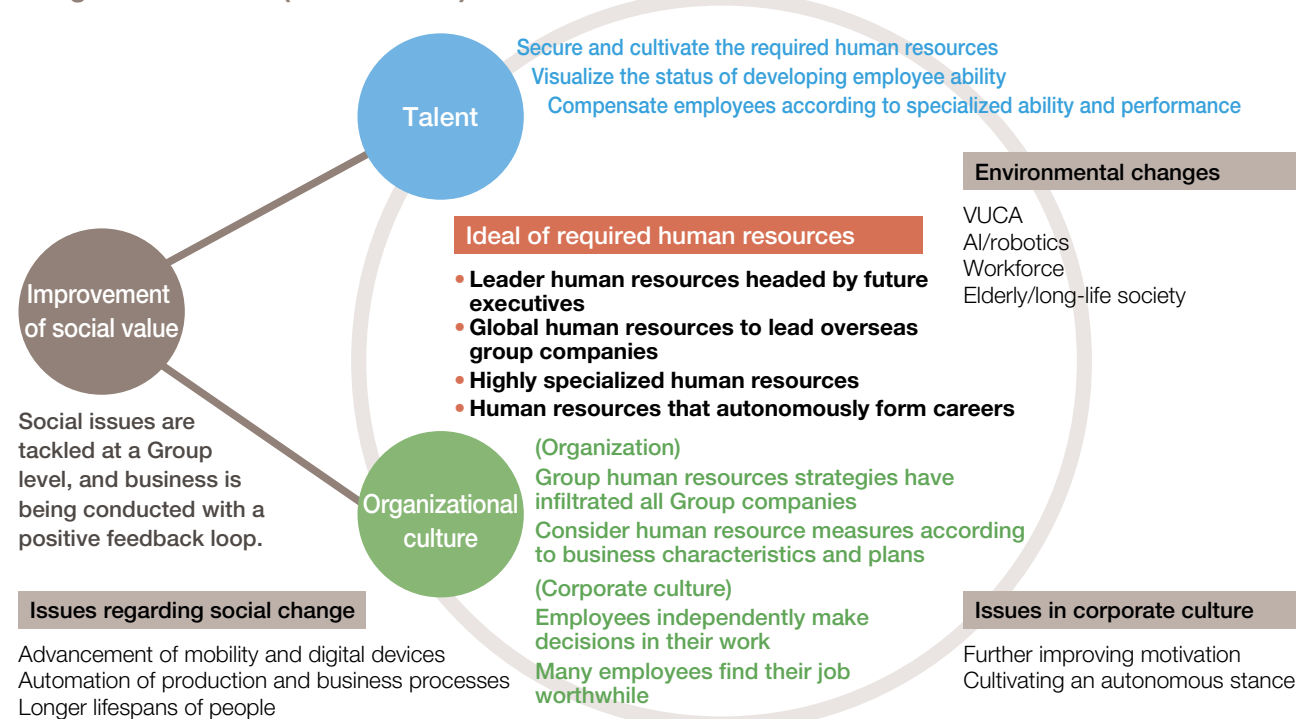
Initiatives are implemented at a Group level, and business is being conducted with a positive feedback loop

### Long-Term Strategy Goals

The Group will strengthen its management by securing and cultivating human resources that can respond to change and forming a sound organizational culture, while promoting continuous growth by deploying measures for the improvement of social value.

These measures will enable us to achieve our long-term business goals of talent, Organization, Corporate culture, and Social value.

### Long-term mission (2030 to 2050)



## Strengthening the Foundation

## Workplace Safety and Hygiene (Occupational Safety and Health)

### Safety & Health are given the first priority in business decisions made at the Mitsubishi Materials Group.

The MMC Group Code of Conduct states in Article 2: "We are committed to providing a safe and healthy environment for all our stakeholders." This commitment reflects our realization that we must preserve our employees' safety and health to enable them to provide their families with secure and happy lives, and to contribute to our effective operation and continued development as a company. In our SCQDE order of priority in business decisions, "S" (Safety & Health) is given the first priority.

### MMC Group Basic Policy on Safety and Health Management

- 1) We will carry out safety and health activities based on full participation from all employees, underpinned by leadership and initiative from the President and other managing personnel.
- 2) We will ensure that all employees comply with the Industrial Safety and Health Act and other applicable legislation, manuals and operating procedures, and establish a workplace culture whereby everyone follows the rules and ensures that others do too.
- 3) We will make every effort to create pleasant workplaces that are healthy for both body and mind, for all employees, through activities aimed at creating open workplaces and promoting health.
- 4) We will take preventive measures in accordance with Ministry of Health, Labour and Welfare guidelines on the prevention of work-related traffic accidents and improve road etiquette amongst all employees, in order to eliminate traffic accidents based on our commitment to promoting road safety activities as an example to society as a whole.

### Promotion of Safety and Health Activities

In 2014, an explosion at the Yokkaichi Plant took the lives of five employees of MMC and partner companies. Based on a strong determination to never allow such an accident to occur again, the Group launched the Zero Occupational Accident Project in 2014 for the goal of eliminating all serious accidents, and is now expanding and building a safety management system for the entire Group.

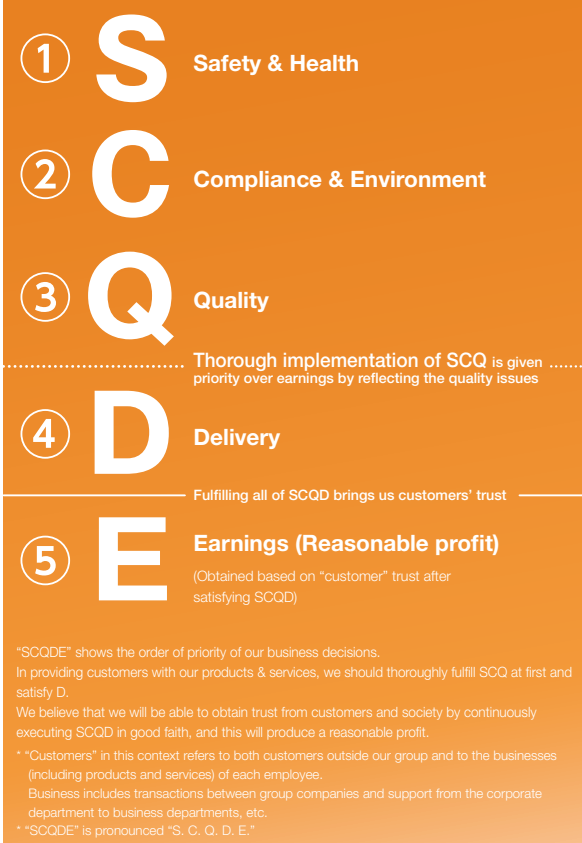
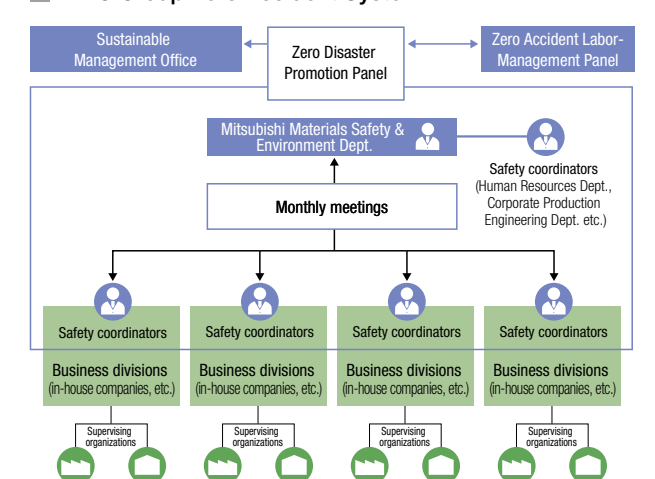
### Hazard Sensitivity Education

At the Occupational Safety and Health Education Center, Midori-kan located at the site of our Saitama Office (Saitama, Saitama Prefecture), we provide hazard sensitivity training (50 types of simulation equipment) and safety and health education. Portable virtual reality (VR) hazard simulation systems are also used to improve hazard sensitivity at the various business sites of the Group.

### Improving Employee Health Awareness

The Group promotes the enhancement of a company-wide health management system, based on the concept of health and productivity management, which considers employee health to be an essential management resource. We are creating mentally and physically pleasant workplaces by enhancing mental healthcare initiatives, preventing occupational diseases by improving the workplace environment, and promoting measures for maintaining and improving employee health.

### MMC Group Zero Accident System



## Strengthening the Foundation

### Compliance

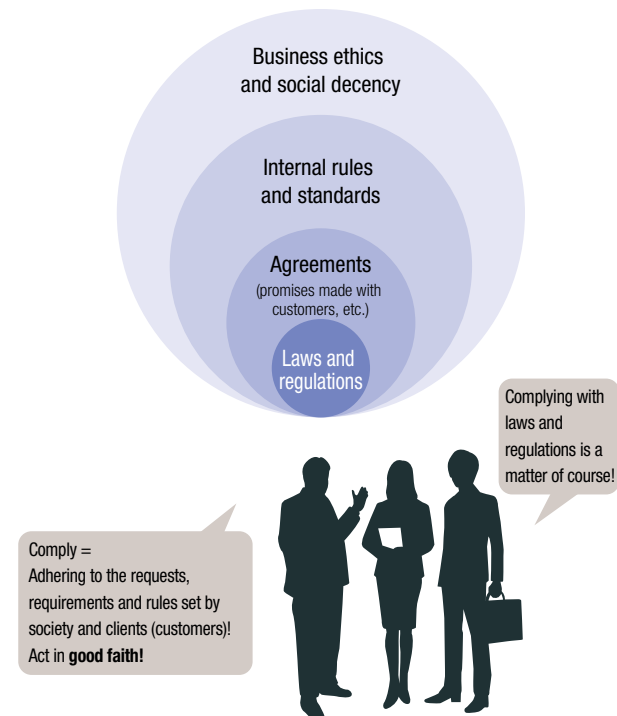
“Compliance” serves as a vital component of a company as the foundation for achieving sustainable development. Mitsubishi Materials implements measures for spreading and establishing an awareness of “compliance” as a means to fostering an ethical corporate and organizational culture.

#### Spreading and Establishing an Awareness of Compliance

Our broad view of compliance encompasses such elements as corporate ethics and social norms in addition to legal compliance, reflecting our sincere determination to live up to our stakeholders' expectations.

We are continually implementing new measures to enhance our Group-wide compliance framework, including domestic and overseas training aimed at realizing our steadfast commitment to improving compliance awareness among individual Group employees. We will strive to continue these initiatives in an aim to further spread and establish an awareness of compliance.

#### ■ Approach to compliance in the Mitsubishi Materials Group



#### Activities Conducted to Raise Compliance Awareness.

Since 2006, the Mitsubishi Materials Group has recognized October as **Corporate Ethics Month**. During this month each year, a message from the President is posted on the Company intranet, and the various facilities and Group companies plan and conduct unique activities.

Recognizing the importance of establishing the Corporate Philosophy system among all our employees, we produce and distribute **booklets, posters, cards, Handbook for our group employees** and **collections of case studies** concerning compliance issues. The booklets, posters, Handbook for our group employees and cards are produced in 22 languages for sharing with employees worldwide.

The “**SCQDE**” was established in fiscal 2019 as a measure towards enhancing Group governance. SCQDE stands for “Safety & Health (S), Compliance & Environment (C), Quality (Q), Delivery (D) and Earnings (E).” Although each element is important in its own right, SCQDE outlines an order of priority for making decisions when executing business tasks, and is positioned as a supplemental policy to the Code of Conduct. We are working to spread awareness of the SCQDE through CSR training and communication workshops held by Managing Executive Officers, and by preparing and distributing posters and cards, etc.

We see our efforts toward building an organizational culture with good and healthy communication where employees have unrestricted communication as further enhancing Group governance, and preventing compliance violations. To this end, we are working to strengthen communication through the holding of dialog-based workshops and trainings.

We share the Group's sense of crisis through small group compliance activities, moreover, in viewing all issues that arise as our own problems, we engage in opinion exchanges to raise compliance awareness and improve workplace communication.



Communication workshop held by the Managing Executive Officer

#### ■ Order of priority in SCQDE business decisions



An **investigation regarding corporate culture and compliance awareness** covering all employees was held in fiscal 2019, which will be continued on an annual basis as part of efforts to promote and monitor compliance-related initiatives.

#### ■ Results of the 4th investigation regarding compliance awareness, etc. (held in December 2019)

Points clarified with the 1st investigation	Points further clarified with the 4th investigation
While compliance awareness is on the rise, further work is needed in establishing specific rules and procedures, and making the employees aware of such	<ul style="list-style-type: none"> <li>• Almost all employees are constantly aware of the need for compliance in their work, and also understand rules inside and outside the company</li> <li>• A majority of employees feel that management efforts for enhancing compliance and training on CSR and compliance are sufficient</li> </ul>
While there was a sufficient level of understanding on the need to report and share information on compliance-related matters, many employees felt a degree of uncertainty and hesitation on this subject	<ul style="list-style-type: none"> <li>• Almost all employees understand the importance of reporting and sharing information on compliance</li> <li>• On the other hand, around half of the employee base continues to feel uncertainty and hesitation about reporting and sharing information</li> </ul>
There is a need for further improvements to workplace management and communication, in addition to measures for enhancing compliance already in place through office organizations	<ul style="list-style-type: none"> <li>• A majority of employees feel that their workplace has an atmosphere that makes it easy to ask questions and think that communication is sufficient</li> <li>• Many employees feel that their superior understands their own work, but many others still feel that there is work in the workplace that is only understood by the specific people in charge of it</li> <li>• Overall, respondents not in management positions had a higher rate of negative responses, suggesting that penetration is insufficient among such employees</li> </ul>

[Investigation respondents] All employees of Mitsubishi Materials Corporation and 69 Group companies  
[Response rate] 87%

#### Expanding and Reinforcing Compliance Education

We provide CSR education and training with a special emphasis on compliance for Mitsubishi Materials Group employees in Japan and overseas.

We have constructed a framework that enables every employee in every domestic Group company to participate in CSR training once a year. To accomplish this, we have been training instructors to provide CSR training for both our Corporate and Group companies since 2012. Employees responsible for promoting CSR activities at our individual facilities and Group companies serve as instructors for the training.

We invite outside experts to give lectures on CSR and compliance to members of management in the Group. Since 2018, Company management has been providing training to members of management at Group companies to help them understanding the responsibilities, duties and roles that executives must fulfill in relation to governance and compliance, and to foster an awareness and acquire the means to achieve this.

We are reviewing the content of overseas CSR education and training while taking into account the circumstances at hand in each region, and in fiscal 2019 we introduced online “WEBINAR” training courses in addition to group training at overseas management companies, streamlining training over a wide range of regions. Special preliminary and global human resources training courses are organized to provide employees assigned overseas with training in CSR-related issues, including conflict minerals, human rights in emerging countries (such as child and forced labor), regulations concerning competition in the respective countries and overseas anticorruption measures.

We make proactive use of visiting instructors and e-learning in our training programs organized to enhance compliance awareness among employees both in Japan and overseas.

#### In-House Reporting System

We established an Internal Contact Office in December 2002 in Japan as a consultation service to handle reports and inquiries from employees of Mitsubishi Materials Corporation and its Group companies. Since January 2020, we have contracted an external vendor to run the “Mitsubishi Materials Group Employee Hotline” for reports and inquiries, as well as preparing a response system at Group companies to ensure that we can appropriately respond to reports and inquiries and strengthen our ability to respond. We also established a contact office for Members of the Audit Committee in June 2018 to contribute to work performed by the members of the Audit Committee in detecting incidents, such as the series of quality issues, and initiating corrective measures at an early stage. Contact information for these reporting systems is printed on cards for employees of the Mitsubishi Materials Group to keep on their person and made available on our Group newsletter and through our CSR education and training activities. Steps are also being taken toward introducing an Overseas In-House Reporting System to aid in promoting a sound governance and compliance framework by contributing to the early detection of embezzlement, law violations and other illicit activities, or activities thought of as such, at overseas Group companies.

#### ■ Numbers of reports and inquiries received through the In-house reporting system (FY)

2015	2016	2017	2018	2019	2020
24	33	38	41	61	58



## Strengthening the Foundation

### Risk Management

We are working to improve our sensitivity to risk and our risk control capabilities to ensure the stable operation of business. Further, as part of efforts to enhance the Group governance system, we are reviewing conventional risk management mechanisms to build a new risk management system that achieves better effectiveness and more reliable results, which is applied in efforts to reduce risk at Group business sites both in Japan and abroad.

#### Risk Management Activities

##### Basic Perspective

The Group conducts risk management activities aimed at controlling factors that could exert a negative impact on our business performance and providing steady support for sound business operations throughout the Mitsubishi Materials Group. To assure achievement of these goals, we are conducting activities under the following three basic policies:

##### Basic Risk Management Policies and Objectives

- |                                       |  |
|---------------------------------------|--|
| 1. Responding to high priority risks: | Prioritizing risks and implementing measures accordingly                         |
| 2. Identifying unrecognized risks:    | Using risk management records to establish a comprehensive overview of all risks |
| 3. Sharing risk information:          | Disclosing the details of Group risks to all concerned parties                   |

##### Implementation Structure

While critical risks inherent to each field of business are identified by individual business divisions, the Group identifies serious, high priority risks at a management level which share a high degree of commonality and priority across the Group, and are thought to have a severe impact on the business management of the Group.

The matters and plan for addressing critical risks given priority across the whole Group, and critical risks tackled by each business division, are discussed at length by the Company's Sustainable Management Office, Executive Officers' Meeting and Board of Directors, and set on an annual basis. Each business site formulates activity implementation plans in accordance with this, which then undergo review by the Governance Deliberative Council, before being applied as part of measures to reduce risk.

A structure is in place by which the content of these activities is shared with members of management and corporate divisions, and the progress of which is monitored on a regular basis by the Sustainable Management Office, Executive Officers' Meeting, the Board of Directors, internal audits and the Committee for Monitoring of Measures to Enhance Governance, which is comprised of External Directors. Additionally, information on risks identified as part of risk management activities is provided as materials for internal audits, and a system is in place to have risks indicated through audits, etc. added as needed as subjects for risk management, making for a strict PDCA management system on the whole.

With regard to training, we are striving to boost our sensitivity to risk and enhance and raise the bar concerning our risk control capabilities by implementing training sessions featuring both internal and external consultants that are held both in Japan and abroad.

#### New Risk Management System

##### Points of Improvement

As part of Group Governance Framework Enhancement Measures in fiscal 2019, we reviewed conventional risk management mechanisms in order to further improve risk management effectiveness, building a new, enhanced risk management system that is being rolled out across the Group both in Japan and abroad in fiscal 2020 onwards. From fiscal 2021, we are improving the convenience of functions for visualizing risk information and making improvements for smoother communication between the parent and subsidiaries.

##### Main areas of improvement in the new risk management system

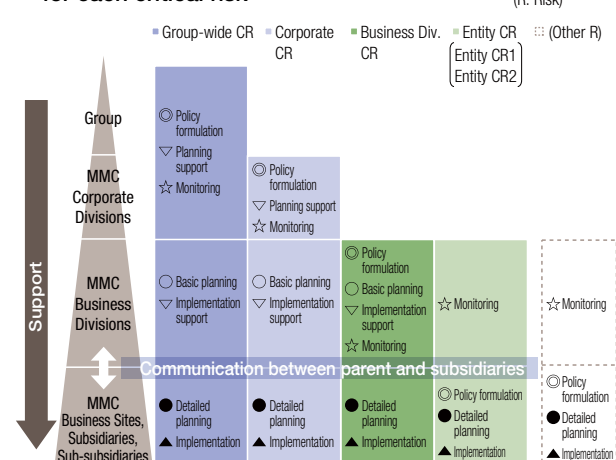
- (1) Identifies critical risks without fail, and facilitates the implementation of focused measures
- (2) Visualizes the state of risks Group-wide, and enhances risk portfolio management and monitoring
- (3) Clarifies the roles and responsibilities of core management, corporate divisions and companies and other business divisions by business site
- (4) Enhances dialog and discussion on critical risks between the parent company and subsidiaries, and provides an appropriate support for business sites

##### Activating of Parent-subsidiary Discussion and Support Regarding Risk Countermeasures

Critical risks are classified into four categories according to the attributes of each, with roles and responsibilities set concerning the means of involvement at each level (management level, corporate division, company and other business division, business site).

In an effort to ensure that all critical risks are addressed without fail, a system has been established that allows for business sites to receive a sufficient support - following consultations with the parent company and overseeing business division, and corporate divisions specializing in the area of risk at hand—if the application of measures addressing risks proves particularly difficult for an individual business site alone.

##### Roles and responsibilities according to level for each critical risk



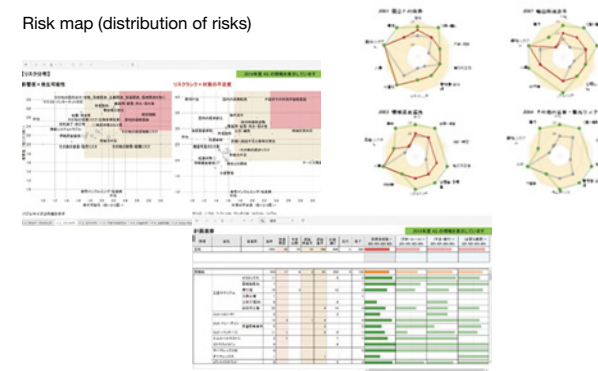
##### Enhancements to Risk Portfolio Management and Monitoring

Monitoring risk information is made easy by taking steps to visualize risk conditions and the progress status of risk reduction efforts. We are working to promptly and accurately determine where to prioritize deploying management resources to address risks, and the level to which risks can be reduced, etc., by mapping out the risks possessed by the business operations of the Group.

Further, monitoring the progress status of risk reduction efforts in an integrated manner has made it easier to identify delays, and facilitates prompt and appropriate response to risks.

From fiscal 2021, we have upgraded this tool to make it easier to use and have enabled information on critical risks to be shared throughout the entire Group. This will enable us to improve the level of management and make it easier to horizontally deploy good practices of risk countermeasures across the Group.

##### Visualization of risk information



#### Crisis Management Activities

##### Basic Perspective

We are striving to strengthen our crisis management systems to facilitate prompt, accurate responsiveness to emergency situations, including natural disasters, accidents, terrorist attacks and pandemic events. Besides operating crisis management related rules that apply to the entire Group, we formulate business continuity plans at all our consolidated subsidiaries in Japan and overseas, with the aim of minimizing the impact on customers of any crisis that might occur through swift restoration and continuation of operations.

We also receive the latest global information on crisis

management and expert advice from an external consulting company, and have established a system that enables employees dispatched overseas and stationed regionally to receive advice on action to take in the event of an emergency, as well as direct safety assurance services and medical services. Other efforts include the deployment of a safety guidebook that considers the risks faced by each country and region, and the implementation of security checks in countries and regions deemed particularly high risk.

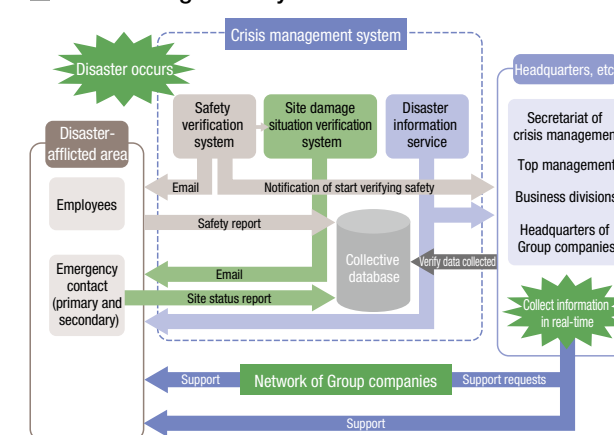
From fiscal 2021, our Crisis Management Activities will now include serious operational risks such as quality scandals, business legal violations, information leaks, cyber attacks, and breaches of trust, in addition to natural disasters, accidents, acts of terrorism, and pandemics, etc., which were already covered by the activities. To ensure that the system can respond to a wide range of crisis situations, it defines how to respond to each type of crisis situation, clarifies roles and responsibilities, and provides a framework that organizes the items to handle on a timeline.

##### Implementation of a Crisis Management System

The Group implemented a crisis management system in January 2019 both in Japan and abroad in order to help quickly establish an understanding of the safety of employees and the scope of damages at business sites, and to share this across the Group, should a disaster or another state of emergency occur.

This has made it possible to initiate a prompt and adequate initial response, and has also allowed us to leverage the Group network to provide support, etc. from sites nearby disaster-afflicted areas.

##### Crisis management system



## Strengthening the Foundation

### Risk Management

#### Preventing COVID-19 Infections and Ensuring Business Continuity

##### Basic Policy

The Group implements various measures under a common group policy to prevent important business from stopping, which prioritizes the prevention of employee infections and the prevention of the spreading of infections at business sites and in the local community.

1. We will make every effort to prevent infections and the spread of infections in order to prioritize the health of employees and the safety of the workplace.
2. We will conduct business activities according to the requests and instructions of national and regional government, and each of our employees shall act with awareness in their personal lives.
3. We will continue our business to ensure the production and supply of products that support society and prevent interruptions to our recycling business, and thereby meet the demands of our customers and society.
4. We will take efforts for responding to COVID-19 as an opportunity to implement workstyle reforms, and improve productivity.

##### Task Force

When the spread of infections was recognized in China in late January this year, the Group established a task force at the head office, which promotes unified handling across the Group. The task force formulates preventative measure guidelines and group action policies according to the status of the pandemic around the world and deploys them to all business sites, centralizes information on the health of employees, the situation and policies/regulations of various countries and regions, impact on business sites, and impact on the supply chain, etc., shares that information with top management, and conducts monitoring to ensure that the Group can handle changes to the situation swiftly and appropriately.

##### Measures for Preventing Infection and the Spread of Infection

The Group implements various measures for ensuring the health of all employees and maintaining workplace safety in Japan and overseas, as well as preventing the spread of infection in the various regions where we conduct business.

1. Dissemination of infection prevention measures in the workplace and thorough health management of employees.
2. Dissemination of the procedure to follow when an individual is infected or suspected to be infected.
3. Full-scale operation of working from home at offices, restrictions on using public transport, and utilization of satellite offices.
4. Restrictions on business trips, meetings, and events, and promotion of remote meetings via the Web.
5. Evacuation of employees stationed overseas, depending on the regional status of the epidemic, movement restrictions, standard of medicine, and state of medical services, etc.

##### Business Continuity

In order to continue the production and supply of products that support society and important businesses such as the recycling business, and thereby meet the demands of our customers and society, the Group is implementing various measures according to the situation of the pandemic and requests from national and regional government, based on business continuity plans for each of our business sites.

1. The functions of the Tokyo head office were moved to suburban offices. (Returned in June)
2. Offices continue business upon identifying important work, having all employees work from home in principle, and limiting office attendance to the minimum BCP members.
3. Production sites identify the important work to continue and implement a system for doing so based on multiple scenarios that take into account employee commute restrictions and operation restrictions due to the spread of community infections.
4. Enhance the supply chain by decentralizing the suppliers of raw materials, outsourcers, diversifying distribution routes, and enhancing cooperation with customers.

##### Resilience

In order to respond to major changes in the business environment and business structure and the severe impact to the real economy that is expected to have long-term consequences, the Group is implementing various measures for increased competitiveness, such as further enhancing cooperation with markets and customers, migrating to new work styles such as teleworking, improving management speed via digital transformation, and rebuilding business models.

In June 2020, we established the “Corporate Functions Optimization Panel” in the Sustainable Management Office. The panel has been given the mission to enhance the motivation and ability of employees by pursuing an efficient and highly productive work style that is not necessarily bound by the conventional labor practices at the head office.

## Strengthening the Foundation

### Climate Change

The Mitsubishi Materials Group will actively promote reductions in CO<sub>2</sub> emissions and provide products, services and technologies that lead to solving issues related to climate changes in order to contribute to the building of a decarbonized society.

##### Initiatives for Climate Change

There is no longer any doubt that global warming is caused by greenhouse gas emissions from human activities. The amount of damage caused by storms, floods, droughts and other extreme weather events is increasing, and the scale of the damage is growing. There is also a growing sense of crisis regarding the risk to the global economy.

At the Mitsubishi Materials Group, we are carrying out initiatives for reducing CO<sub>2</sub> emissions by setting targets for individual facilities in accordance with our Environmental Policy. We are also assessing and controlling risks and opportunities related to climate change.

Physical risks related to climate change at each facility, including water risks associated with acute and chronic risks of disastrous extreme weather events such as superstorms, floods, storm surges, or drought, are covered by the risk management activities of the Group.

With respect to transition risks, any tightening of regulations on greenhouse gas emissions (including emissions trading schemes) could pose a financial risk to all of our businesses. Above all, our cement business is expected to face considerable financial risk because the business not only produces CO<sub>2</sub> through its use of energy sources, but also produces CO<sub>2</sub> emissions through the thermal decomposition of limestone, the main raw material in cement production.

At the same time, however, demand for technologies, products, and services that will help to save energy and reduce CO<sub>2</sub> emissions is expected to increase, which could create more business opportunities. In the Mitsubishi Materials Group, we are taking initiatives such as the development of materials, products, and technologies that contribute to decarbonization, the development and promotion of the use of renewable energy such as geothermal power, participation in projects pushing forward demonstration experiments or studies into suitable locations related to CO<sub>2</sub> capture and storage, and activities to preserve the forests we own.

##### Support for the TCFD

In March 2020, the Mitsubishi Materials Group decided to support the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which was established by the Financial Stability Board, and to participate in the TCFD Consortium, which consists of companies, financial institutions, and other organizations that support those recommendations. We will continue to disclose information proactively in accordance with the TCFD recommendations, through the assessment and control of the risks that we face and opportunities related to climate change, and by considering the reflection of risks and opportunities in our medium- to long-term management strategy and risk management.



##### Governance

In April 2019, we established the Sustainable Development Department under the Corporate Strategy Department to plan and promote strategic initiatives on risks and opportunities related to global warming by linking them with a company-wide management

strategy. In addition, the Climate Change and Energy Panel, a dedicated subcommittee under the Sustainable Management Office that was established in April 2020, is considering scenario analyses based on the TCFD recommendations, setting greenhouse gas emissions reduction targets, advancing consultations, sharing information, and furthering other activities related to climate change. The results of the monitoring of this panel's activities are to be reported at the Executive Officers' Meeting and Board of Directors' Meeting on a quarterly basis, after being reported to and deliberated on at the Sustainable Management Office.

##### Initiatives for Water Risks

###### <Water-Related Management>

The vast majority (approx. 91%) of the water we use at the Mitsubishi Materials Group is seawater used as cooling water. Usage of fresh water (such as industrial water and groundwater) is relatively low. However, because a shortage of fresh water may affect our business activities, securing the necessary quality and amount of water is essential for the business operation of the Group. We have also considered the seriousness of the water-related problems that have occurred frequently in recent years, such as flooding caused by typhoons or torrential rains, and the great impact of these problems. We manage the risks related to these problems accordingly.

We implement measures for reducing water risks at individual facilities. To secure water resources, we save water through measures including the recycling of water, the introduction of equipment with low water consumption, and the renovation of equipment to reduce water consumption. To mitigate the risk of flooding, we take initiatives including the elevation of buildings, pumps, and electric equipment, the installation of drainage pumps, and the implementation of disaster drills for high water events. We also take measures to prevent abnormalities in the quality of the effluent from our facilities and to prevent water quality accidents. These measures include the management of effluent under our own standards that are stricter than official laws and regulations, as well as the introduction of sensors that detect abnormal water quality and a system that stops water discharges automatically.

###### <Aqueduct water risk assessment>

We conducted risk assessments at our manufacturing facilities in fiscal 2020 using Aqueduct, a water risk assessment tool developed by the World Resources Institute (WRI). We also conducted hearings concerning items related to water risk at each facility to find out details such as incidents that had occurred in the past and measures for reducing risks that had been taken at each facility. We found that we have overseas facilities located in areas with a high level of risk relating to water resources, flooding, or water quality, as well as facilities in Japan located in areas that have a high risk of flooding. With that said, based on what we learned in the hearings, we judged that there was no need for significant concern, because no water incidents had ever occurred, or because measures for reducing the risks had been taken individually at facilities that were judged by Aqueduct to be high risk.

Moving forward, we will consider the information on the water usage and water pollutant load of each facility that we have obtained, and continue to pursue assessment methods that are suitable for the Group's businesses and apply them to reduce water risks.



## Strengthening the Foundation

### Environmental Management

The Group is committed to protecting the environment and to pursuing effective use and recycling of resources based on our Environmental Policy, and seeks to prevent pollution in the vicinity of our business operations and to develop various activities as part of our efforts to create a decarbonized society.

#### Environmental Policy

The Group is committed to protecting the environment and to pursuing effective use and recycling of resources based on the following Environmental Policy. We also promote efforts to prevent environmental pollution in regions where we conduct business and tackle issues regarding the global environment.

#### ■ Environmental Policy

Based on our Corporate Philosophy “For People, Society and the Earth,” we recognize the importance of environmental protection on a global scale and strive to contribute to the creation of a sustainable society through our business activities.

As a comprehensive materials manufacturer, with operations ranging from cement, metals and metalworking through to electronic materials and components, we supply many of the basic materials and products that are essential to our industrialized society. Indeed, our materials and products are widely used in many aspects of daily life.

Whereas operations within the materials industry inevitably have a high environmental impact at the manufacturing stages, they also present opportunities to effectively harness and recycle resources through initiatives at the waste processing and recycling stages.

We take the environment into consideration in everything that we do and are committed to environmental management, capitalizing on the nature of our operations to strike a balance between business and the environment. With that basic philosophy in mind, we are determined to do our bit to help create a recycling-oriented society that has a low impact on the environment, through strict legal compliance and operations such as supplying and recycling essential everyday materials and products.

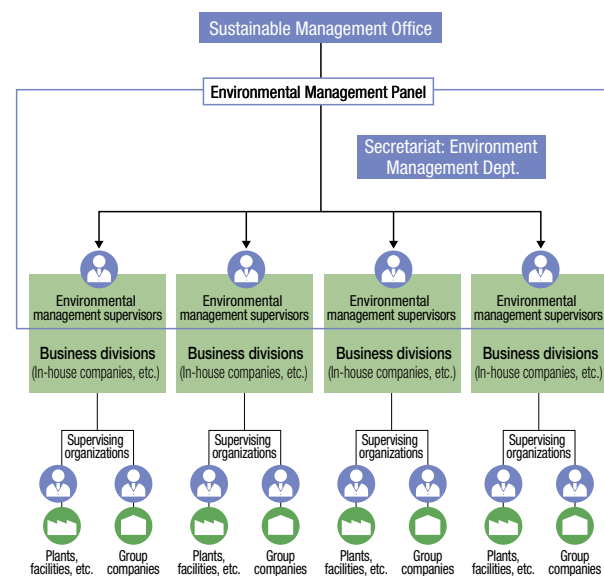
1. Promote environmental management
2. Reduce environmental impact
3. Contribute to creation of a recycling-oriented society
4. Preserve biodiversity
5. Help to create a low-carbon society
6. Coexist with local communities

#### Environmental Protection

##### <Environmental Management System>

The Group has established an environmental management panel as a specialized subcommittee of the Sustainable Management Office, which plans and executes environmental measures across the the entire Group. Environmental management supervisors are appointed at each business site, and strive to prevent pollution and ensure compliance of laws and regulations related to the environment, based on close cooperation with the Sustainable Management Office at the head office.

#### ■ Environmental Management System



##### <Environmental Management Activities>

The various business sites of the Group operate an environmental management system such as ISO14001 to ensure legal compliance and promote continuous activities for improving environmental performance. In order to ensure that the managers that promote these activities have the required knowledge on environmental technologies and laws and regulations, we developed and adopted an environmental education program and a legal check system required for daily management.

Furthermore, in order to respond to the various environmental issues faced by our business sites, we have also established a consultation desk run by staff specializing in the environment at the head office, which provides detailed support and shares useful information for responding to environmental issues with the head office and other business sites to enable horizontal deployment.

Since the Group is promoting the use of recycled materials, particularly in the copper smelting and refining business and cement business, managers and staff specializing in waste management are appointed at each business site in order to implement proper waste management and ensure compliance with waste-related legislation, based on unique operation rules and education about laws and regulations.

## Strengthening the Foundation

### Abandoned Mines

The Group owns mines around Japan, including limestone, coal and nonferrous metal mines, but operations at all of our nonferrous metal mines have now been suspended or abandoned. At these abandoned mines, we promote appropriate maintenance and management from the perspective of safety and the environment.

#### Management of Abandoned Mines

We are a company with its origins in the mining industry, and the Group owns a wide range of mines around Japan, including limestone, coal and nonferrous metal mines, such as copper, lead and zinc mines. Operations at all of our non-ferrous metal mines have now been suspended or abandoned. The following controls and management programs are currently in place at 21 abandoned mines in 14 locations.

- Management of tailings dam (sites used to store waste-rocks from mining of ore minerals, slag and precipitation sediment generated by from mine drainage treatment)
- Maintenance of old mine workings (mining levels, drifts and drainage tunnels) and implementation of safety measures at disused adit mouths and subsidence sites
- Treatment of acid mine drainage containing heavy metals from the above sites

We continue to preserve and maintain sections of mining levels in some abandoned mines as cultural heritage sites or tourist facilities to exhibit their former conditions and preserve historical mining technologies for future generations.



Pit waste water treatment plant at the Yatani Mine (completed in fiscal 2020)

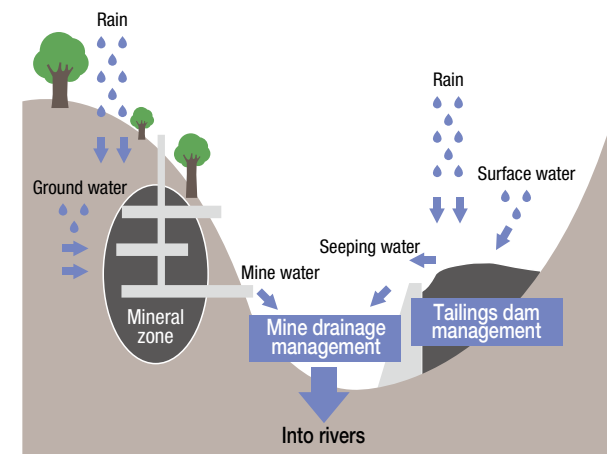
#### Facility Upgrading and Environmental Countermeasures for Abandoned Mines

Since 2015, our Group has been implementing responses to deteriorating natural disasters and other risks by conducting protective construction to guard against contamination and other threats, reinforcing tailing dams to prevent uncontrolled release



Reinforcement work by soil stabilization at the Ikuno Mine Tailings Dam

#### ■ Overview of Wastewater Treatment in Abandoned Mines



of slag and sediment in the event of major earthquakes, reducing wastewater at the source and upgrading aging facilities. By fiscal 2019, we had completed appropriating an environmental countermeasure reserve for work expenses.



Contamination containment work by slope seeding called Chip-crete at the Komagi Mine

#### Human Resource Cultivation

Technicians with nonferrous metal mining technology are retiring and aging, resulting in a steady decline in personnel. In order to continue to sustainably manage abandoned mines, we are aggressively training young workers with little mining experience, and setting up a variety of educational programs for managers and workers of abandoned mines and working to pass on and teach technology with the guidance of experienced technicians.

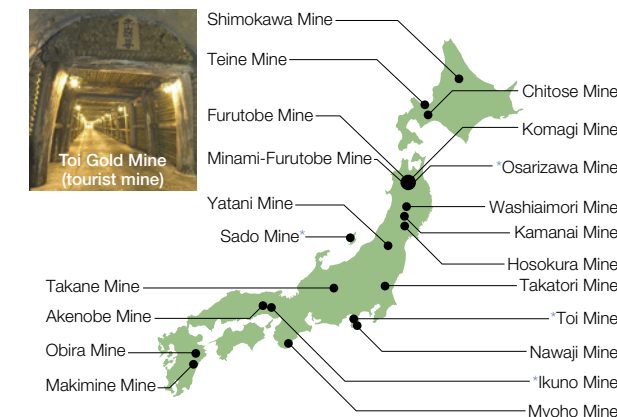
#### Joint Industry-academic Activities

Beginning in fiscal 2018, we have been introducing an endowed course named “Laboratory of Resources Environment and Remediation” at Hokkaido University, to give lectures to students and conduct research activities of various kinds related to the conservation of mine environments. We are also working on developing and investigating new environmental preservation technologies with the cooperation and guidance of experts at other universities, which include developing unpowered mine waste water treatment technologies by taking advantage of the natural purification action of microorganisms, developing abandoned mine site reforestation technologies, and studying methods of evaluating the impact of mine waste water on the surrounding environment.



Endowed course at Hokkaido University (seminar)

#### ■ Abandoned Mitsubishi Materials (Non-ferrous) Mines



\*Sites operated as tourist mines  
(Osarizawa Mine, Sado Gold Mine, Toi Gold Mine, Ikuno Silver Mine)



Strengthening the Foundation

Information Security

The Group defines information security as one of the issues in management, and aims to conduct safe business by ensuring information management, including the handling of personal information.

Basic Policy

The Group defines information security as one of the issues in management, recognizes the personal information of customers and business partners to be the most important information asset, and strives to reduce the risk of information leakage, loss, and destruction.

Management System

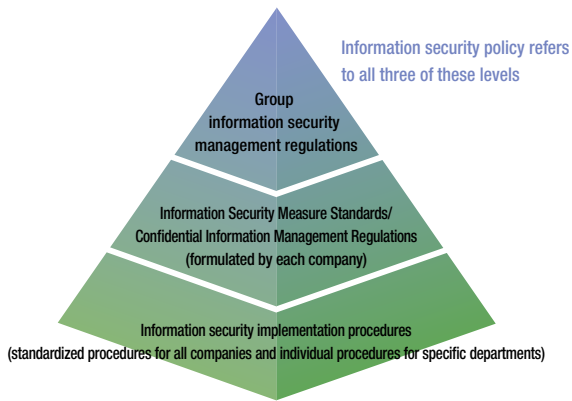
In order to observe the Group information security management policy, Group Information Security Management Regulations, Information Security Measure Standards, Confidential Information Management Regulations, and various implementation procedures are defined and must be complied with.

**Group Information Security Management Regulations:**  
Basic rules regarding the construction and operation of a management system for Group information security, for the goal of protecting the information assets owned or managed by the Group from theft, leakage, modification, or destruction, and minimizing corporate loss

**Information Security Measure Standards:**  
Standards defining information security countermeasures for electromagnetic information assets that the Group must follow

**Confidential Information Management Regulations:**  
Basic rules regarding the handling of personal information and basic indicators on management methods for maintaining the confidentiality of information assets in general

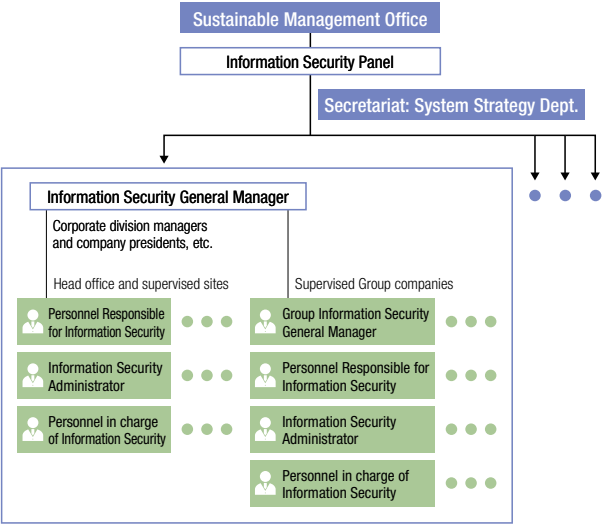
Scheme of Information Security Policy and Documentation



The “Information Security Panel” was established as one specialized panel of the Sustainable Management Office in order to establish, adopt, operate, monitor, review, maintain, and improve our information security policy, and a secretariat has been appointed at the department in charge of information security.

In order to ensure effectiveness, we have established an organization composed of an Information Security General Manager, Personnel Responsible for Information Security, Information Security Administrator, and Personnel in charge of Information Security at Mitsubishi Materials Corporation and its Group companies, which conducts operation and monitoring.

Operating Organization for the Information Security



Various Initiatives for Information Security Compliance

Our information security activities involve striving to enhance and expand information infrastructure with an eye on business continuity in the event of a large-scale disaster, enhancing various technical measures for information systems based on assistance from the Information Security Panel, and adopting and operating management systems.

Technical efforts include enhancing protective measures for preventing damage from attacks on known vulnerabilities, and risk reduction measures such as enhancing Defense In Depth and the early detection of damage from new threats such as Advanced Persistent Threat.

In order to counter the rising threat of ransomware (a virus that demands a ransom), we alert Mitsubishi Materials Corporation and its Group companies, and have adopted a system for forcibly applying updates and patches for vulnerabilities at all Group companies including those overseas.

In terms of management, we strive to maintain and improve the level of security by rotating the PDCA cycle of performance evaluations and employee education.

As security threats continue to worsen, we will continue to comprehensively, efficiently, and appropriately investigate and implement various technical countermeasures.

Strengthening the Foundation

Stakeholder Communication

We proactively create opportunities for engaging in diversified communication and deepening mutual understanding to ensure incorporation of feedback from our stakeholders into management.

In the interests of sustainable corporate management, we believe that communicating with our stakeholders is crucial if we are to reflect their expectations and requirements in our business strategies and activities. While creating more opportunities for communication, our aim is to incorporate stakeholders’ perspectives into our management practices to a greater extent than ever before.

In April 2020, we established the Corporate Communications Department in the Corporate Strategy Division. Consolidating business related to public relations, IR, and CSR communication in the Corporate Communications Department will enable us to promote effective communication with stakeholders both inside and outside the company and in Japan and abroad.

Concept and main communication method for building relationships with stakeholders

