

Hitachi Metals Group

CSR Detailed Activity Report

2018

Published: November 2018

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About This Document

Purpose of Publication

This report is published for the purpose of comprehensive disclosure of the Hitachi Metals Group's basic approach to corporate social responsibility (CSR), and the content of its related activities.

Note: The main activities for fiscal 2017 are stated in "The Hitachi Metals Group Report 2018 (Integrated Report)."

Publication Date

November 2018 (next issue scheduled for October 2019)

The Scope of This Report

Period covered: The report is centered on fiscal 2017 (April 1, 2017 to March 31, 2018).

Organizations covered: Hitachi Metals, Ltd. and consolidated subsidiaries

Scope of recorded data:

- | | |
|--------------------|--|
| Finance | Hitachi Metals, Ltd. and 69 consolidated subsidiaries, and 9 equity method companies |
| Social | Unless stated otherwise, Hitachi Metals, Ltd. |
| Environment | The data of environmental burden covers approximately 97% of burden created by the Hitachi Metals Group overall. |

Major changes occurring within the reporting period: None applicable

Underlying Guidelines

Environmental Reporting Guidelines 2012 Edition (the Ministry of the Environment, Japan)

GRI Standards (Global Reporting Initiative)

ISO 26000: 2010 (International Organization for Standardization)

Disclaimer

This report contains forward-looking statements and descriptions of plans, estimates, and projections, as well as facts about the Hitachi Metals Group in the past and at present. Such statements and descriptions reflect our current assumptions and expectations of future events based on information available at present. Accordingly, they are inherently susceptible to uncertainties and changes in circumstances, and future performance and events may differ.

This report has been translated into English from the Japanese version. In cases where the Japanese description is different from the English description, the Japanese description shall take preference.

Corporate Philosophy

和則彊

Wa sureba tsuyoshi

“*Wa*” refers to “individuals with different characters coming together to create harmony.” “*Tsuyoshi*” means “strength to accomplish the results we hope for.” “*Wa sureba tsuyoshi*” portrays our endeavor to work as one while improving ourselves individually in order to create the best possible company.

Hitachi Metals Corporate Creed

The origins of our company can be traced back
more than one hundred years,
and our main products have been standing at the top
in each industry both qualitatively
as well as quantitatively.

We devote ourselves to technology and
aspire to contribute to society by being
the best enterprise based on “*Wa sureba tsuyoshi*”
our people possess and their loyalty to the company.

Hitachi Metals Group Codes of Conduct

Preface

Our corporate creed is to “contribute to society by being the best enterprise.” In striving to accomplish this mission, we embrace the values of our corporate philosophy, “*Wa sureba tsuyoshi*,” the founding spirit of Hitachi Metals. We have also stipulated the Hitachi Metals WAY, a systematic philosophy that shapes our corporate culture and action principles, in order to provide society with value that is unique to the Hitachi Metals Group.

The Hitachi Metals Group Codes of Conduct consist of rules and principles intended to assist officers and employees in making decisions and taking actions based on “obey the law and walk the path of virtue,” with our corporate creed and corporate philosophy as a foundation, in order to realize this Hitachi Metals WAY. All officers and employees of the Hitachi Metals Group companies shall understand and follow the Codes of Conduct, and act with sincerity and fairness in a highly ethical manner.

1. Toward a Sustainable Society

- (1) We will contribute to resolving social issues by promoting innovative solutions, accelerating collaborative creation with partners and stakeholders, and further integrating social and environmental responsibility into our business activities.
- (2) We will strive to develop technologies that contribute to social development and use them with due consideration of their impact on society.
- (3) We envision a low-carbon society, a resource efficient society, and a harmonized society with nature. To this end, we will endeavor to reduce CO₂ emissions, use water and other resources efficiently, and minimize impacts on natural capital throughout our value chain.
- (4) As a corporate citizen, we will make efforts to build rapport with communities and contribute to their development by working together to resolve social issues.

2. Sincere and Fair Business Activities

2.1 Fair Trading

- (1) To ensure fair and open competition, we will observe the fundamental rules of trade, including domestic and overseas competition laws and regulations, and act in compliance with legislation and sound corporate ethics.
- (2) We will have no relationship whatsoever with antisocial forces anywhere in the world, and resolutely reject involvement in improper or antisocial transactions.
- (3) We will not trade shares using undisclosed information regarding the group, affiliated companies, business partners, or customers that could affect the judgment of investors (insider information).
- (4) We strictly prohibit and will have no involvement in bribery and other corrupt business practices. We will neither give or receive gifts nor extend or accept invitations to business entertainment beyond socially accepted limits, as we recognize that such practices can foster corruption. When working with political entities, we will build and maintain sound and transparent relationships.
- (5) We will help maintain international peace and security through compliance with all applicable

laws and regulations concerning import and export, and will operate appropriately according to our internal rules and policies.

- (6) We will comply with applicable laws, respect social cultures and practices, and act sincerely and fairly in countries and regions where we have operations. Furthermore, we will do so guided by international norms and standards even in areas where legislation is not adequately enforced.

2.2 Relationships with Suppliers

- (1) With a global vision, and mindful of the long-term perspective, we will find qualified suppliers and build fair and equal partnerships with them, working together to build mutual understanding and trust.
- (2) In selecting suppliers, we will thoroughly review the quality, reliability, delivery time, and price of the materials they provide as well as their business stability and technological capability. We will give due consideration to their adoption of social responsibility practices, including areas such as the abolition of unfair discrimination, the elimination of child labor and forced labor, and environmental conservation.
- (3) We will not accept any personal benefits from suppliers in procurement transactions.

2.3 Relationships with Customers

- (1) We will provide products and services that meet the needs and requirements of our customers, complying with relevant laws and standards and ensuring quality and safety by setting additional standards of our own where necessary.
- (2) We will communicate with customers sincerely, address defects and customer complaints quickly and in good faith, and strive to determine causes in order to eliminate them and prevent recurrence.

3. Respect for Human Rights

- (1) We will promote our understanding of internationally recognized human rights, and will respect and not infringe on the human rights of all those involved in our business activities.
- (2) We will implement human rights due diligence appropriate to the social circumstances of the countries and regions where we have operations and the nature of our businesses, products, and services there.
- (3) We will assess and prevent potential violations of human rights. In the event of such a violation, we will promptly take internal and external actions to correct and remedy the situation.
- (4) We will respect individual human rights in the recruitment and treatment of employees and during all other company activities. We will not engage in any acts that may impair individual dignity or discriminate on bases such as sex, sexual orientation, age, nationality, race, ethnicity, ideology, belief, religion, social status, family origin, disease, disability.
- (5) We will hire employees in compliance with the relevant laws and regulations in each country and region, and in accordance with international norms and standards. We will not use child labor that employs children below the minimum working age or forced labor that is against

the will of employees.

- (6) We will strive to resolve issues through sincere and constructive discussion between management and employees, in compliance with the laws, regulations, and labor practices of each country and region, and in accordance with international norms and standards.

4. Building a Work Environment That Brings Out Employee Strengths

- (1) Prioritizing health and safety above all else, we will strive to ensure the safety of employees and the workplace. In addition, we will promote the physical and mental health of employees and their families.
- (2) We will support flexible work styles and respect diverse values, creating workplaces that provide employees with a sense of accomplishment and personal growth, and we will promote the sustainable growth of the organization and individuals.
- (3) We will invest in educational programs to help employees expand their capabilities and exercise their strengths. Supervisors will fairly and appropriately support, guide, and educate their employees to develop their abilities.

5. Information Management and Communication

- (1) We will promote the ethical handling of information, so as to ensure respect for human rights and security, through the proper management of personal information based on our Personal Information Protection Policy.
- (2) We will properly manage and protect confidential information related to our business activities in compliance with domestic and international laws and regulations as well as our internal rules and policies.
- (3) In order to maintain and expand our trusting relationship with the Hitachi Metals Group's diverse stakeholders, we will disclose information openly and transparently, and respond to stakeholders responsibly through dialogue and other means of communication.

6. Protection of Intellectual Property and Brand

- (1) We will protect our own intellectual property, respect third-party intellectual property, and use both effectively for smooth business operations.
- (2) We will manage our own and third-party confidential information by importance and manage and handle it appropriately based on this ranking.
- (3) We will protect and enhance the value of the Hitachi Metals Brand, recognizing it as an important management asset.

7. Securing Corporate Assets

We will use all our corporate assets only for business activities and other appropriate purposes, and manage them properly to protect their value.

8. Crisis Management

We will make concerted efforts throughout the Hitachi Metals Group to secure employee safety and business continuity in case of disasters and threats such as earthquakes, tsunamis and

floods, cyberattacks, and terrorism.

9. Responsibilities of Employees

Employees shall pledge to comply with the Codes of Conduct. If they become aware of any non-compliant activity, they shall immediately report to their manager or via the internal reporting system.

10. Responsibilities of Top Management

Top managers shall take the initiative in complying with the Codes of Conduct and make their best efforts to conduct business based on corporate ethics and the law. In the event of violation of the Codes of Conduct, top managers shall swiftly take corrective measures and actions to prevent the recurrence of similar incidents, while at the same time strictly disciplining themselves as well as those involved in the violation.

Formulated: September 17, 2010

Revised: October 1, 2018

I. Message from Management

As a high-performance materials company that is unparalleled in the world, the Hitachi Metals Group aims to help to resolve social issues through its businesses, and by doing so, contribute to society and enhance its corporate value. Among those efforts, the Hitachi Metals Group Report 2018 and this report, the “Hitachi Metals Group CSR Detailed Activity Report 2018,” are positioned as important forms of communication with stakeholders.

By systematically integrating financial and non-financial information, the Hitachi Metals Group Report 2018 is intended to convey the Group’s strengths and vision, and to clarify our process for creating value. In this “Hitachi Metals Group CSR Detailed Activity Report 2018,” we report detailed information regarding our environmental, social, and governance activities.

We hope that readers will find this information useful in deepening their understanding of the activities of the Hitachi Metals Group.

Akitoshi Hiraki

Representative Executive Officer,
President and Chief Executive Officer

II. About the Hitachi Metals Group

1. Corporate Profile

Corporate Name	Hitachi Metals, Ltd.
Established	April 10, 1956
Head Office	2-70, Konan 1-chome, Minato-ku, Tokyo 108-8224, Japan
Representative	Akitoshi Hiraki Representative Executive Officer President and Chief Executive Officer
Capital	¥26,284 million (As of the end of March 2018)
Number of Employees	Hitachi Metals, Ltd., Non-consolidated: 6,315 Hitachi Metals Group, Consolidated: 30,390 (As of the end of March 2018)
Products and Businesses	Manufacture and marketing of specialty steel products, magnetic materials and applications, functional components and equipment, wires, cables, and related products
Group Companies	69 consolidated subsidiaries (26 in Japan, 43 outside Japan) 9 equity method companies (5 in Japan, 4 outside Japan) (As of the end of March 2018)

2. Consolidated Operating Performance

(Millions of yen)

	FY2016	FY2017
Revenues	910,486	988,303
Adjusted operating income*	65,983	65,130
IFRS operating income	68,267	46,326
Total assets	1,040,390	1,058,832
Interest-bearing debt	194,457	160,844
Total equity	548,746	570,192
Capital expenditures	63,843	91,786
Research and development expenses	17,971	17,749

* Adjusted operating income: Revenues – Cost of sales – Selling, general and administrative expenses

3. Principal Business Bases

Please see the following links on the Hitachi Metals website.

Main Sales Bases

[WEB](http://www.hitachi-metals.co.jp/e/corp/bases01.html) <http://www.hitachi-metals.co.jp/e/corp/bases01.html>

Major Operation Bases / R&D Bases

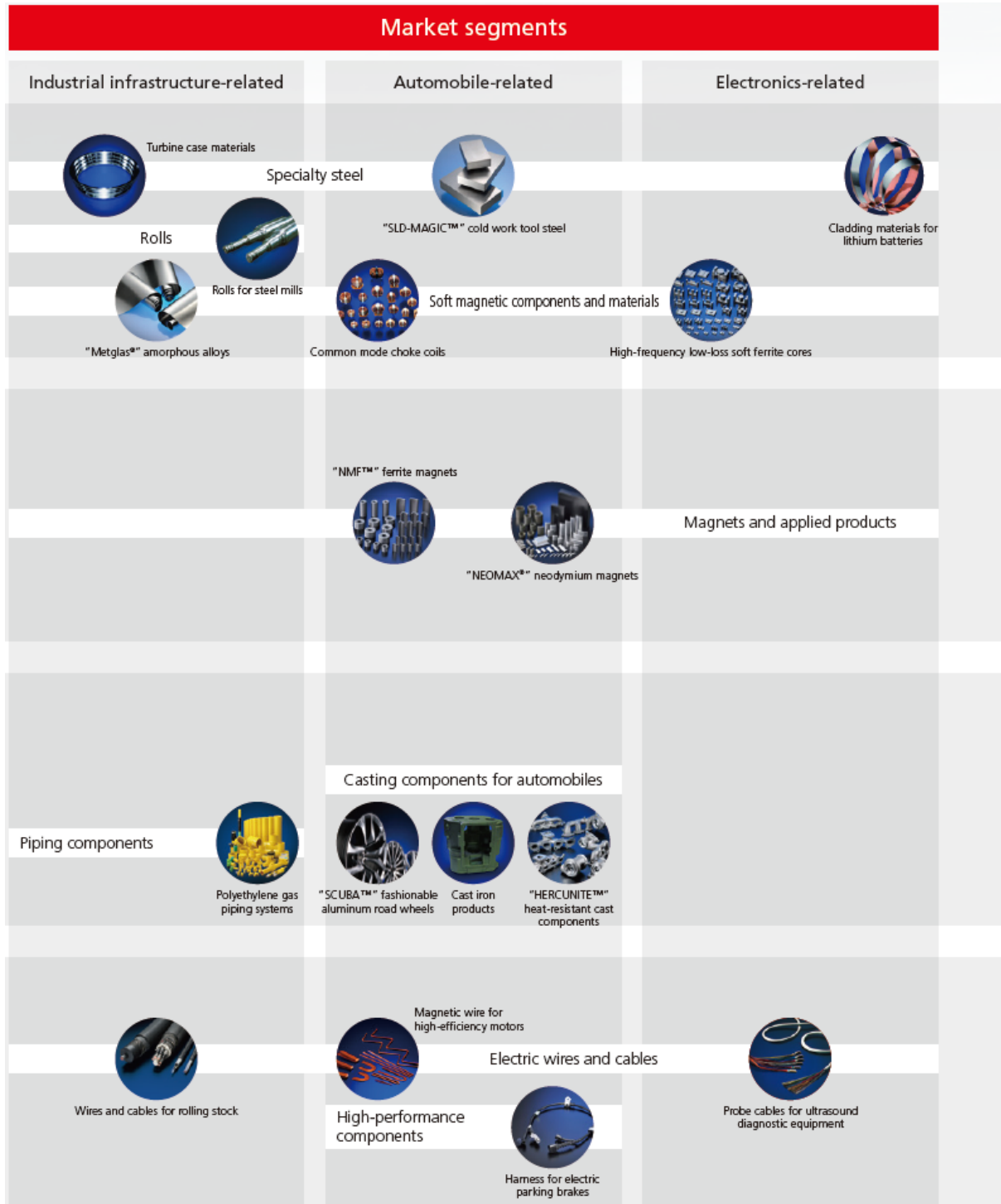
[WEB](http://www.hitachi-metals.co.jp/e/corp/bases02.html) <http://www.hitachi-metals.co.jp/e/corp/bases02.html>

The Hitachi Metals Group

[WEB](http://www.hitachi-metals.co.jp/e/corp/corp08.html) <http://www.hitachi-metals.co.jp/e/corp/corp08.html>

4. Business Domains and Major Product Applications

The Hitachi Metals Group specializes in the development of high-performance materials. Leveraging this expertise, we supply materials and products mainly to customers in the industrial infrastructure-, automotive-, and electronics-related segments.



III. Corporate Governance

1. Basic Approach

The underlying basis for corporate governance at Hitachi Metals is to ensure transparent, sound, and efficient management, meet the needs of our stakeholders, and increase corporate value. We believe increasing corporate value to be one of our most important management challenges.

Accordingly, it is imperative that we create an organizational structure in which management oversight and business operations function effectively and in balance. We also believe that timely, high-quality information disclosure contributes to the improvement of corporate governance. In pursuit of this philosophy, we go beyond simple financial disclosure, regularly publishing the details of individual business segments and medium-term management plans.

We acknowledge that compliance is the linchpin of corporate governance. Nonetheless, our corporate activities go beyond mere compliance with laws and internal regulations, extending to the role we must fulfill as a member of society, based on respect for social ethics and morality. We established the Hitachi Metals Group Code of Conduct to give form to this perspective and establish specific standards of conduct for officers and employees.

The policy concerning compensation for directors and executive officers is that the Company shall compensate directors and executive officers for executing management that enhances the Company's corporate value and contributes to stakeholders by formulating, deciding, and implementing management policies, medium-term management plans, and annual budgets from a medium- to long-term perspective, and that the compensation system shall reflect the Company's performance over the short, medium, and long terms.

The Company has prescribed its framework for corporate governance in the Corporate Governance Guidelines (the "Guidelines") and the fundamental policy concerning the system of internal controls established by the Board of Directors based on the Companies Act. The Guidelines are posted on the Company's website (<http://www.hitachi-metals.co.jp/e/ir/ir-csr.html>). The details of the fundamental policy concerning the system of internal controls are disclosed in the annual securities reports, etc.

2. Overview of the Corporate Governance Structure

(Supervisory System)

Hitachi Metals has adopted the system of a company with a nominating committee, etc. This system helps the Company to swiftly implement bold policies and measures as well as Companywide management that encompasses business reorganization and strategic investments. The Company has outside directors on its Board of Directors, who also serve on the Nominating, Audit, and Compensation committees. Well versed in general societal matters and possessing extensive experience and advanced knowledge, these outside directors contribute to the strengthening of the decision-making and oversight functions as well as the improvement of management transparency, integrity, and efficiency. Under this system, the Company elects eight directors (one of whom is a woman), including three outside directors, and has established the Nominating Committee, Audit Committee, and Compensation

Committee, in accordance with the provisions of the Companies Act. The Nominating Committee, Audit Committee, and Compensation Committee each comprise four members (three of whom are outside directors). Each committee member is appointed by resolution of the Board of Directors (as of June 19, 2018, the date of the 81st Ordinary General Meeting of Shareholders). Furthermore, the Company appoints one full-time director who is well-versed in the Group's business and internal matters, and who does not concurrently serve as an executive officer, to assist the Audit Committee with its duties.

The Nominating Committee has the authority to decide on the content of proposals related to the appointment and dismissal of directors submitted to the general meeting of shareholders. The policies governing nomination of candidates for directors by the Nominating Committee are stipulated in the Guidelines (Article 12. Size of the Board, Article 13. Composition of the Board, and Article 14. Qualifications of Directors). The Guidelines are posted on the Company's website (<http://www.hitachi-metals.co.jp/e/ir/ir-csr.html>).

The Audit Committee audits the execution of duties by directors and executive officers, and also has the authority to determine the content of proposals for the general meeting of shareholders regarding the appointment and dismissal of the Accounting Auditor.

The Compensation Committee has the authority to formulate policies to determine the content of compensation for directors and executive officers, as well as the content of individual compensation based on policies.

In addition, the Board of Directors Office has been established to assist the Board of Directors and the committees in executing their duties, at which persons in charge of the Board of Directors and committees have been placed.

(Business Execution System)

Regarding business execution, the Board of Directors delegates a great deal of decision-making authority concerning business execution to executive officers to achieve prompt decision-making. Executive officers (all of them male) organize the Executive Committee to ensure that executive officers execute their duties efficiently, and in compliance with laws and regulations and the Articles of Incorporation. This committee holds discussions on certain important management matters that impact the Company or the Group, and makes decisions regarding these matters. The Company has adopted an internal company system based on the decision that such a system is a good fit for the particular nature of the Company, which engages in multiple businesses with diverse products and markets.

(Internal Audit Organization)

The Company has an Internal Auditing Office that is in charge of internal audits. This office formulates annual audit implementation plans and audit policies, and regularly conducts audits regarding the status of business execution and management of each office and Group company based on said plans and policies. Furthermore, it may conduct occasional audits when necessary, and issues recommendations for improving operations, etc. It also notifies the president and chief executive officer and the Audit Committee of audit implementation plans in advance, and reports the audit results to them. If necessary, it also carries out audits in collaboration with individual divisions in charge of the environment, safety, and systems within the Company.

(The Audit Committee as an Audit Organization)

The Audit Committee comprises four members, of which three are outside directors (as of June 19, 2018). Of the Audit Committee members, Mr. Toshitake Hasunuma has considerable knowledge of finance and accounting based on his past experience in the finance division of Hitachi, Ltd. Ms. Toshiko Oka has considerable knowledge of finance and accounting based on her abundant experience and in-depth knowledge acquired as a corporate manager at consulting firms. The director who assists the Audit Committee in the execution of its duties, Mr. Katsuro Sasaka, has considerable knowledge of finance and accounting based on his past experience in the Company's accounting and finance divisions. The Audit Committee is in charge of auditing violations of laws and regulations or the Articles of Incorporation by directors or executive officers, the appropriateness of management's judgments, the adequacy of internal control systems, and auditing accounting. The execution of duties by the Audit Committee is assisted by a director who is appointed to provide support for the Audit Committee in the execution of its duties, as well as a person in charge of the Audit Committee at the Board of Directors Office. To ensure independence from executive officers, these persons do not concurrently serve in any position at any other business operating division. The Audit Committee formulates annual audit implementation plans and auditing policies, and performs audits based on said plans and policies by hearing reports on important items and having Audit Committee members visit each office, etc., and each subsidiary to conduct audits as regular audits. In addition, special audits are conducted when any likelihood exists of violations of laws and regulations or the Articles of Incorporation by directors or executive officers.

(Accounting Auditor)

Accounting audits for fiscal 2017 (April 1, 2017, to March 31, 2018) were conducted by certified public accountants Mr. Takashi Ouchida and Mr. Seiji Kuzunuki, engagement partners of Ernst & Young ShinNihon LLC. Under the direction of said certified public accountants, as necessary, certified public accountants, certified public accountant assistants, and other personnel from Ernst & Young ShinNihon LLC assisted with the execution of accounting audit duties. Seven certified public accountants and 25 other personnel assisted with the Company's accounting audit duties.

(Coordination among the Audit Committee, Accounting Auditor, and Internal Audit Division)

The Audit Committee (1) receives explanations from the Accounting Auditor regarding audit implementation plans, and engages in consultation and adjustments when necessary; (2) receives audit result reports and engages in an exchange of opinions; and (3) in the event that the Accounting Auditor, during the course of executing its duties, discovers misconduct or material facts in violation of laws and regulations or the Articles of Incorporation regarding the execution of duties by executive officers, receives reports on these matters. The Audit Committee receives reports from the Internal Audit division on its audit implementation plans and regularly examines reports. Furthermore, to promote collaboration between the Internal Audit division and the Audit Committee in auditing, the committee can instruct the Internal Audit division to (1) conduct a special audit of certain divisions deemed to be required by the Audit Committee, and (2) decide on critical audit items in audits conducted by the Internal Audit division. The Internal Auditing Office is also in charge of evaluating internal controls, and reports the status of such to the Audit Committee. Corporate divisions, etc., other than the Internal Audit division, in charge of finances, compliance, risk, and other areas also play

a certain role in the Company's internal controls, and report the status of the execution of their duties to the Audit Committee.

Moreover, the Company considers the promotion of tripartite audit function to be its primary theme regarding audit and supervisory functions. The Company, therefore, goes a step beyond one-way evaluation of the Accounting Auditor from the Company's side, based on the evaluation standards for an accounting auditor, and promotes mutual checks and evaluation. In particular, the Company considers the risk detection function of the Accounting Auditor, which is an external institution, as an important aspect of overall risk detection for the Group. In order to reinforce that function, the Company is expanding mutual evaluations between the Accounting Auditor and the Company's finance divisions, the Internal Audit division, and the Audit Committee, respectively. Specifically, these bodies evaluate each other in terms of communication, coordination, organizational structure, etc., and convey the results to their counterparts, thus leading to reinforcement of the risk detection function. The Company is also starting mutual evaluations between the Accounting Auditor and the finance divisions at its business offices and subsidiaries.

(Outside Directors' Functions, Roles, and Their Relationship with the Company)

Three of the Company's eight directors, Mr. Masaru Igarashi, Ms. Toshiko Oka, and Mr. Takashi Shimada, are outside directors (as of June 19, 2018). Outside directors act as members of the Board of Directors and members of the Nominating Committee, Audit Committee, and Compensation Committee. The Company believes they possess extensive experience and advanced knowledge, are well versed in the general norms of society, and use their broad perspectives to contribute to the enhancement of decision-making and auditing functions and efficiency of the Company's management.

In nominating candidates for outside directors, the Nominating Committee shall consider that the candidate has the highest personal and professional ethics, integrity, and insights regardless of his or her nationality or gender; has abundant experience and in-depth knowledge in business management, law, administration, accounting, education, etc.; is well versed in social norms; and is expected to contribute to the strengthening of the decision-making and supervisory functions of the management of the Company as well as the enhancement of its effectiveness from a wide perspective. In addition, the Nominating Committee judges an outside director to be independent if he or she does not fall under any of the following items:

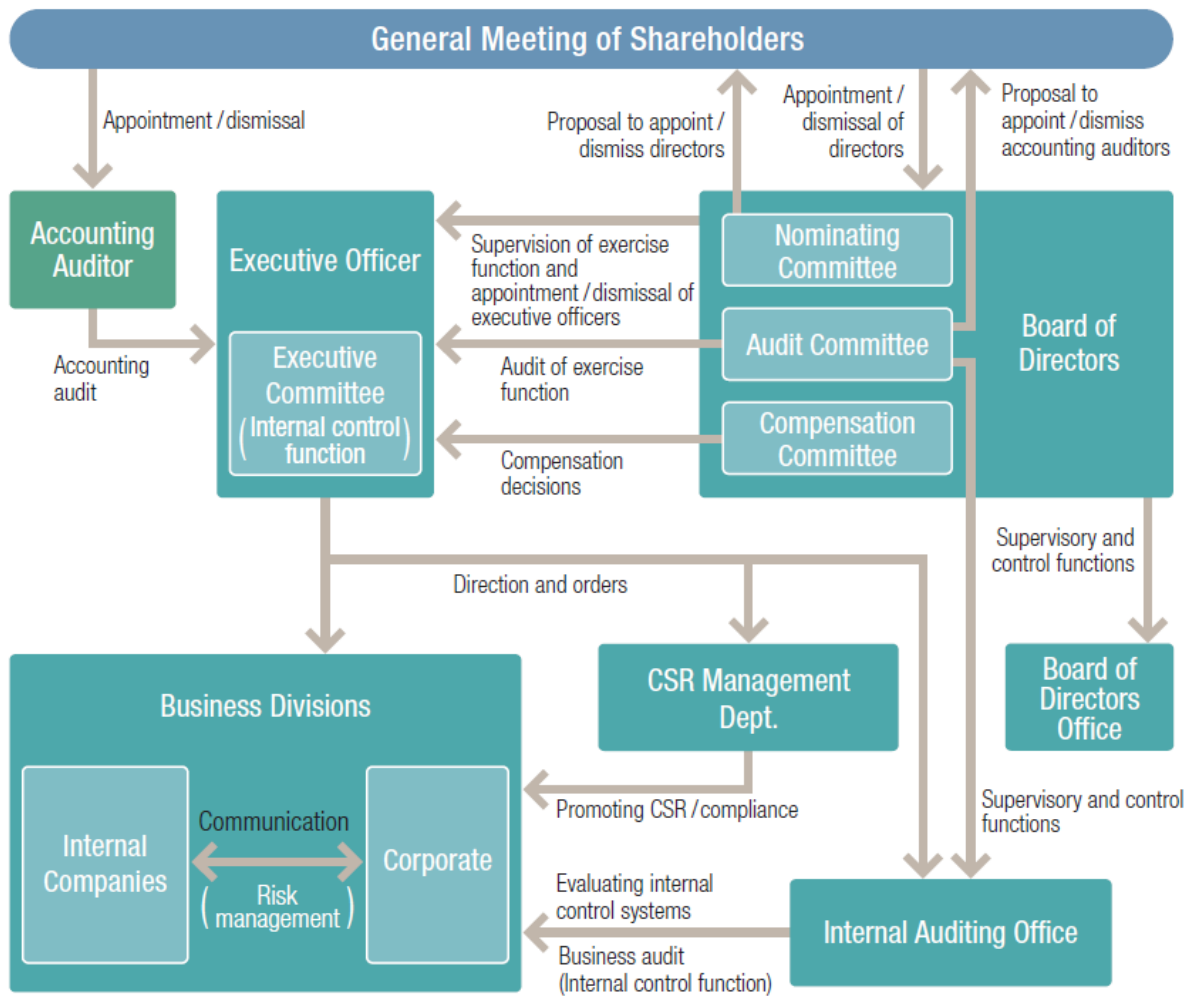
- (a) a person who has received or who serves or has served within the last one year as an executing person (that is, an executive director, executive officer, or employee; hereinafter the same) of a corporation that has received from the Company a payment of 2% or more of the entity's consolidated annual revenues for products or services in the most recent fiscal year;
- (b) a person who has paid the Company or who serves or has served within the last one year as an executing person of a corporation that has paid the Company 2% or more of its consolidated annual revenues for products or services in the most recent fiscal year;
- (c) an attorney, a certified public accountant, a licensed tax accountant, or a consultant who has received from the Company an annual payment of 10 million yen or more of monetary or other property benefits other than compensation for directors and executive officers within the last one year, or a person who is or has been within the last one year a member, a partner, an associate, or an employee of a law firm, an auditing firm, a tax accountant corporation, a consulting firm, or other professional advisory firm that has received from the Company a

payment of 2% or more of the firm's consolidated annual revenues in the most recent fiscal year;

- (d) a person who serves or has served within the last one year as an officer of a not-for-profit organization that has received from the Company discretionary charitable contributions of monetary or other property benefits of 10 million yen or more, or 2% or more of that organization's annual gross revenues or ordinary income, whichever amount is higher, during the most recent fiscal year;
- (e) a person who serves or has served within the last one year as an executing person or a non-executive director of a parent company of the Company;
- (f) a person who serves or has served within the last one year as an executing person of a brother company of the Company;
- (g) a person who is a spouse or a relative within the second degree of kinship of a person (excluding a person who has or had no important position of the following) who falls under the items of the following:
 - (1) who falls under the items of the above (a) through (f);
 - (2) who is, or has been within the last one year, an executing person of a subsidiary of the Company;
 - (3) who is an executing person or non-executive director of a parent company of the Company;
 - (4) who is an executing person of a brother company of the Company;
 - (5) who is, or has been within the last one year, an executing person of the Company; and
- (h) a person who has a risk of having material conflicts of interests with ordinary shareholders for reasons other than those stated above.

There are no personnel relationships, transactional relationships, etc., that fall under any of the items in the criteria stated above, and no other special-interest relationships between any of the outside directors and the Company. The Company considers each outside director to be fully independent from the Company, and has registered all of these directors with the Tokyo Stock Exchange as independent directors.

Corporate Governance Structure



(Compensation, etc. for Directors and Executive Officers)

Pursuant to provisions of the Companies Act, the Compensation Committee formulated a policy for determining the individual compensation packages, etc., of directors and executive officers. A summary of the policy is as follows:

- (a) The directors and executive officers who manage the Company determine management policies from a long-term perspective, and formulate and execute medium-term management plans and annual budgets. By doing so, they enhance our corporate value and perform management that contributes to shareholders and other stakeholders, for which they are compensated.
- (b) A compensation system shall be implemented that reflects the Company's performance over the short, medium, and long terms. Compensation shall be provided for outstanding performance in an effort to take full advantage of the management expertise, skills, and know-how of directors and executive officers and to serve as a source of motivation.
- (c) Compensation paid by the Company shall consist of base compensation and a term-end bonus.
 - (1) Base compensation: Base compensation payments shall be determined on the basis of individual director and executive officer performance, reflecting individual responsibility, experience, knowledge, acumen, and specialist skills. In addition, compensation for directors and executive officers shall be consistent with levels paid by other companies.
 - (2) Term-end bonus: A term-end bonus shall be linked to the business performance of the Company.
- (d) To share interests with shareholders by holding treasury stock and thereby promote sustainable growth and the enhanced corporate value of the Company over the medium to long term, directors and executive officers shall, as a general rule, contribute part of their compensation to the officers' shareholding association and acquire treasury stock until such stock reaches a certain number. The acquired stock shall be held continuously during the terms of office of directors and executive officers and, as a general rule, one year after retiring from their posts.

The value of compensation disclosed in the Annual Securities Report for the 81st business term (April 1, 2017 to March 31, 2018) is as follows:

Director/executive officer category	Total amount of compensation, etc. (millions of yen)	Total amount of compensation, etc., by type (millions of yen)		Number of directors and executive officers who received compensation, etc.
		Base compensation	Term-end bonus	
Directors (excluding outside directors)	132	119	13	4
Executive officers	458	333	125	15
Outside directors and officers	52	45	7	3

Note: Directors who work as executive officers receive compensation as executive officers and do not receive compensation as directors.

(Relationship with the Parent Company)

In principle, the business operations and transactions of the Company are conducted on an autonomous basis and are independent of Hitachi, Ltd., the parent company, and its group companies. In the implementation of its business operations, however, and as a member of the Hitachi Group, the Company has a close collaborative relationship with Hitachi, Ltd. and its Group companies through joint

research and development and other initiatives. Based on the effective use of shared management resources, the Company aims to provide high-quality products and services.

Hitachi, Ltd. owns 53.5% of the total number of voting rights of the Company (including indirect ownership) as of the end of March 2018. As for personnel relationships with Hitachi, Ltd., one director and one executive officer of that company also serve as directors of the Company (as of June 19, 2018). Through its expression of opinions and participation in votes at meetings of the Board of Directors of the Company, Hitachi, Ltd. could have an influence on the determination of management policies and other aspects of the Company. Nevertheless, three outside directors have been appointed as independent directors according to the rules of the stock exchange, diversifying the opinions expressed in the deliberations of the Board of Directors. Therefore, it is our view that the Company is in a position to be able to make independent management judgments. No executive officers of the Company who perform executive duties are also directors or executive officers of Hitachi, Ltd.

The Company also conducts a range of transactions with Hitachi, Ltd. based on the Hitachi Group's pooling system. These include borrowing and lending as well as other activities. The Company remains convinced, however, that its business activities are not significantly dependent on transactions with Hitachi, Ltd. The Company has adopted a policy that regulates transactions with Hitachi, Ltd. so that they are carried out in a fair manner, based on market prices. The Company has established rules stipulating internal procedures for deciding the terms of transactions, with the aim of ensuring appropriate operations related to transactions in general. All transactions such as sales of products and procurement of materials, etc., including those with Hitachi, Ltd., are conducted according to these rules. If the need arises to conduct transactions with Hitachi, Ltd., the Company's parent company, that could create a material conflict of interest with minority shareholders, the matter shall be referred to the Board of Directors and a decision made based on careful deliberation.

3. Internal Control System

The Company's Board of Directors has established a fundamental policy concerning the system of internal controls pursuant to the Companies Act, and is developing an internal control system based on this policy. Details of the fundamental policy are disclosed in the annual securities reports, etc.

The summary of the implementation status of the internal control system in fiscal 2017 (April 1, 2017, to March 31, 2018) is as follows:

(a) Compliance

To foster a deeper understanding of compliance, the Company has prepared and distributed the CSR Guidebook to all officers and employees of the Group, and provides Groupwide compliance education in both lecture and e-learning formats, on a regular basis. In addition, the Company has set October of each year as Corporate Ethics Month, and holds compliance lectures delivered by outside instructors for management, as well as various other events to cultivate an awareness of compliance.

In fiscal 2017, to ensure more thorough compliance, the entire Group, under the leadership of the corporate division, engaged in activities to continually improve our efforts to prevent the occurrence of inappropriate issues. In addition, having enhanced our awareness of global compliance standards, we partially revised the "Hitachi Metals Global Compliance Program" regarding the prohibition of bribery, compliance with competition laws, and prevention of transactions with antisocial forces, and asked Group employees at the manager level and above to complete a check sheet to confirm their overall awareness of compliance with a pledge to comply with laws and regulations.

(b) Risk Management

With respect to risk management, each executive officer identifies and analyzes business risks including changes in political, economic, and social situations, currency fluctuations, rapid technological innovations, as well as changes in customer needs, examines measures against such risks, and reviews these measures whenever necessary through discussions at the Board of Directors, the Audit Committee, the Executive Committee, and other meeting bodies. In addition, each of the Group's sites has established a system to promptly share information that has come to light regarding risks related to compliance, antisocial forces, finance, procurement, the environment, disasters, quality, information security, export control, legal affairs, etc., with each business division. Meanwhile, each corporate administrative division has prepared internal rules, guidelines, etc., conducts education and enlightenment activities, preliminary checks, audits of business operations, etc., and cooperates with the business divisions of relevant internal companies to avoid, prevent, and manage risks. Furthermore, with regard to business continuity plans (BCPs), the Company has not only prepared the plans but also implements business continuity management (BCM) that periodically and continually improves BCPs in response to changes in the business structure or risks.

In fiscal 2017, the Company reviewed its BCP, which was formulated in anticipation of a major earthquake at the Group's domestic locations, and updated the plan. In addition, the Company is implementing a Companywide expansion of its system to confirm the safety of all employees during

times of disaster.

(c) Evaluation of the Effectiveness of Internal Controls over Financial Reporting

The Company has set up an Internal Controls Committee, chaired by an executive officer and its secretariat at the Internal Auditing Office, to enhance internal control functions within the Company. The secretariat formulates an evaluation policy every fiscal year and evaluates the development and implementation status of internal controls over financial reporting. The Internal Controls Committee reviews the evaluation results at its meetings (five meetings in fiscal 2017), and provides necessary instructions for the relevant divisions. The Committee's review results are reported to the Executive Committee and the Audit Committee.

(d) Internal Audit

The Internal Auditing Office formulates annual audit policies and audit implementation plans for internal audits of the Group. Based on these policies and plans, the Office conducts audits on the status of management and business execution of the Company's offices and subsidiaries in Japan and overseas over the course of three years, in principle (in fiscal 2017, audits were conducted at the Company and 20 subsidiaries in Japan and overseas). In addition, special audits may be conducted based on orders of the president and chief executive officer and others. The Internal Auditing Office also reports to the president and chief executive officer and the Audit Committee its audit policies and audit implementation plans in advance, and reports audit results to them on a monthly basis, in principle.

4. Basic Approach and Development Status Regarding Elimination of Antisocial Forces

Our policy is to take a resolute stance against antisocial forces that pose a threat to the order and safety of civil society, and cut off all ties with them. The following systems have been put in place to ensure the efficacy of this policy.

- (a) The compliance department will address risks involving antisocial forces, and an officer and a person in charge will be appointed for each business office. These people will collect and provide risk-related information, and explain response procedures for risk scenarios.
- (b) To ensure close liaison with the Tokyo Metropolitan Police Department and other police departments with jurisdiction, and with Tokubouren, the Bar Association, and other external agencies, we will keep up visits and other links to build up information on antisocial forces. If there is the possibility of harm from such forces, we will promptly notify these agencies, consult with them, and act in partnership with them.
- (c) To eliminate antisocial transactions, we will work to enact rules on the prevention of such transactions, establish a system for the compliance department in all divisions to vet new trading partners, and introduce clauses for the elimination of gang activity from contracts and transaction terms. The compliance department will conduct internal audits to confirm the state of compliance.
- (d) To raise awareness among employees on how to handle antisocial forces, we distribute guidebooks, etc., declaring, "We absolutely refuse all contacts and demands from antisocial forces and groups," and strive to make all employees aware of the declaration.

IV. CSR Management

1. CSR Activities at the Hitachi Metals Group

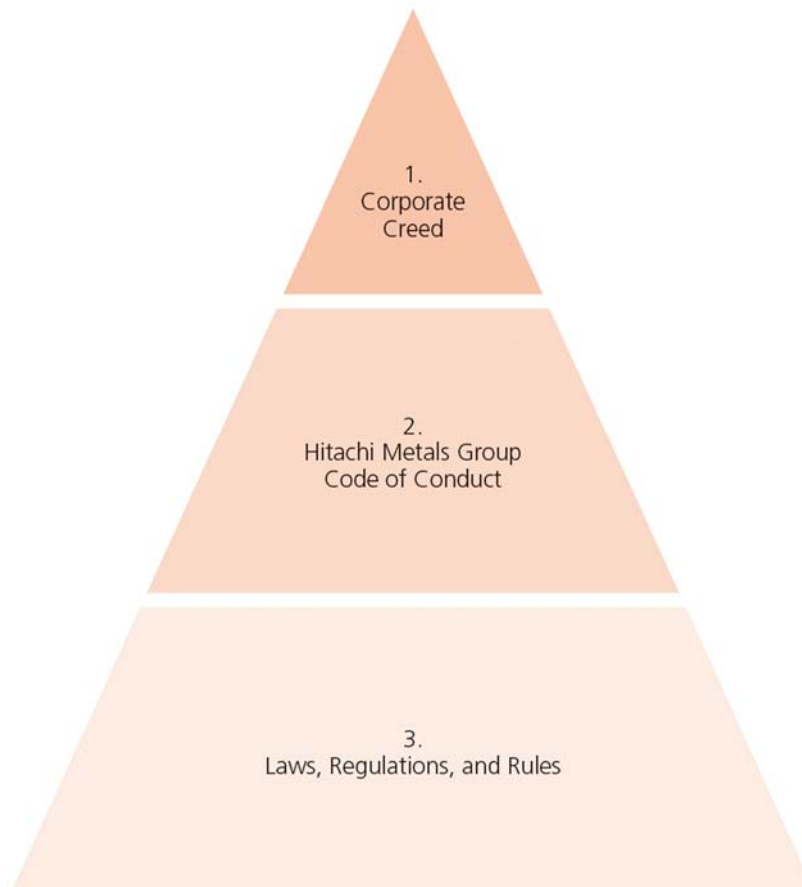
Since our independence from Hitachi, Ltd. in October 1956, we at Hitachi Metals have operated under our Corporate Philosophy of “*Wa sureba tsuyoshi*” (strength through harmony), and our Corporate Creed of contributing to society by being “the best enterprise.” Accordingly, we have worked to help solve social issues by utilizing our advanced technologies and capabilities.

CSR management, which calls on corporations not only to pursue profitability but also to meet stakeholders’ expectations and contribute to the development of society, is literally consistent with our aspiration declared in our Corporate Creed. It is fair to say that the guiding principles of CSR are the Corporate Creed that we have embraced since our independence.

We at the Hitachi Metals Group promote CSR activities based on our Corporate Creed, aiming to contribute to society through our business operations.

(1) Guidelines for CSR Activities

The Hitachi Metals Group systematically established guidelines for CSR activities as follows:



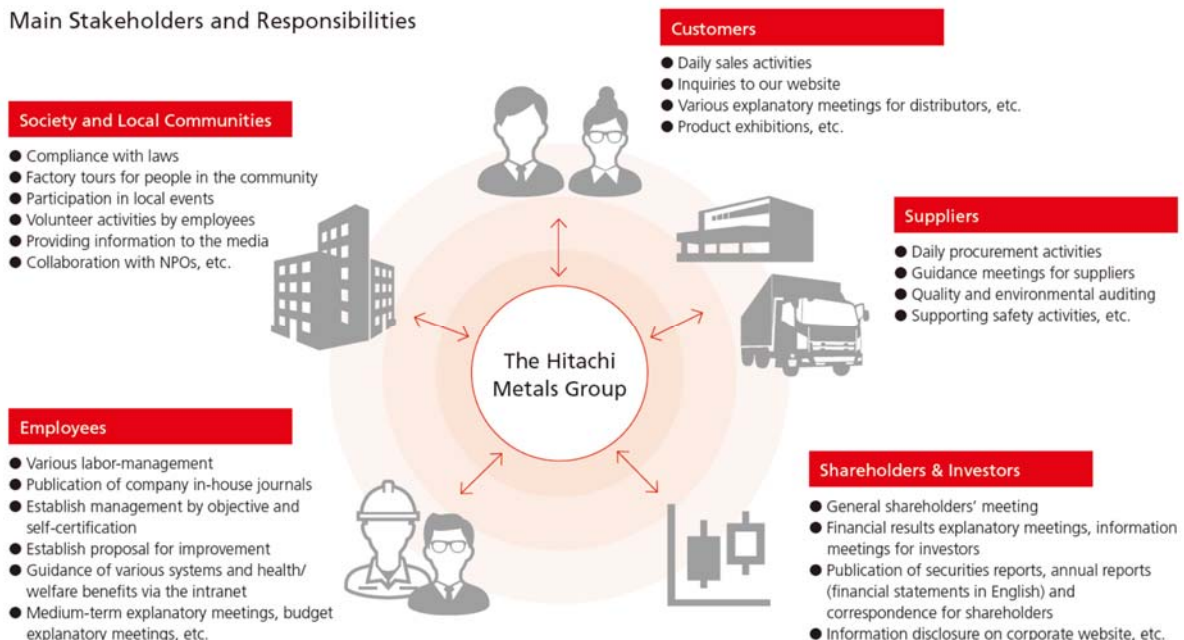
1. The Corporate Creed governs all corporate activities of the Hitachi Metals Group. It also functions as the guiding principles of our CSR activities.
2. The Hitachi Metals Group Code of Conduct defines the basis for the decision making and conduct carried out by all Hitachi Metals Group Directors and employees in order to realize the Hitachi Metals WAY, based on our Corporate Creed and Corporate Philosophy, adhering to the principle of “obey the law and walk the path of virtue.” It is a declaration to society concerning in which direction our Group should move forward and it also serves as the standard of our corporate ethics.
3. Laws and regulations are the basic rules of corporate activity. It should be noted, however, that they stipulate minimum requirements only.

The Hitachi Metals Group aims to carry out its social responsibility and realize its Corporate Creed through the observance and implementation of laws and regulations, as well as the Hitachi Metals Group Code of Conduct, by all Directors and employees in their daily duties.

(2) Hitachi Metals Group Stakeholders

The business of the Hitachi Metals Group is materialized through engagement with stakeholders. The Hitachi Metals Group considers stakeholders strongly associated with its business activities as “customers,” “shareholders and investors,” “suppliers,” “employees,” and “society and local communities,” and develops its CSR activities by responding to requests and expectations from those stakeholders and contributing to society’s connectivity.

Main Stakeholders and Responsibilities



(3) System for Promoting CSR

As the business domains of the Hitachi Metals Group have expanded rapidly on a global scale due to M&A and other activities, thorough compliance has assumed increasing importance as the management foundation that enables the Group to fulfill its social responsibility. The CSR Management Office, an organization that is independent from other corporate and business divisions, plays a central role in working with divisions involved in business activities and Group companies, in order to address compliance issues in response to the demands and expectations of stakeholders.

As an organization to achieve these goals, we have appointed a Hitachi Metals Group Risk Management Officer to supervise the compliance activities of the entire Group, and have also established compliance promotion departments at each of our internal companies and appointed risk management officers at all Group companies, thereby creating a structure that encourages internal companies and Group companies to carry out compliance activities autonomously. These departments cooperate with other corporate divisions to resolve socially important challenges such as human rights issues and environmental problems.

(4) CSR Activity Results and Plans

(a) Framework for CSR Activities

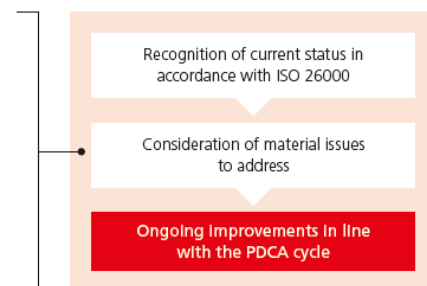
The Hitachi Metals Group is continually enhancing its management quality based on a framework in accordance with international standards.

Every year since fiscal 2015, the Hitachi Metals Group has evaluated its activity results, set targets and measures for the upcoming fiscal year, and integrated the evaluation results into a road map in accordance with the Hitachi Group CSR Policy formulated and based on ISO 26000, the global standard for corporate social responsibility. By repeating this cycle of road map setting and implementation, the Group is continually enhancing the quality of management.

CSR Management Framework for the Hitachi Group



Hitachi Metals Group Initiatives



(b) Fiscal 2017 Initiative Results and Fiscal 2018 Plans

★★★ Achieved ★★ 90% Achieved ★ Not Achieved

FY2017 Measures (Planned)	FY2017 Measures (Results)	Self-assessment	Measures Planned for FY2018
1. Recognition of Social Responsibility			
<ul style="list-style-type: none"> Seek advice on/assessment of the Company's CSR activities from outside experts (ongoing) 	<ul style="list-style-type: none"> Received advice on/assessment of the Company's CSR activities from a professor in Hosei University's Faculty of Sustainability Studies 	★★★	<ul style="list-style-type: none"> Seek advice on/assessment of the Company's CSR activities from outside experts (ongoing)
2. Organizational Governance			
<ul style="list-style-type: none"> Hold compliance management meetings semiannually to analyze matters related to compliance and risks involving our businesses, formulate preventative measures, and share information (ongoing) 	<ul style="list-style-type: none"> Continuously followed up on the execution and results of preventative measures and shared information regarding the status of compliance activities and incidents 	★★★	<ul style="list-style-type: none"> Hold regular meetings regarding compliance, formulate preventative measures, and share information (ongoing)
<ul style="list-style-type: none"> Conduct CSR and compliance training at the Company and subsidiaries in Japan and overseas (ongoing) Conduct environmental education at the Head Office and each company (ongoing) 	<ul style="list-style-type: none"> Conducted CSR and compliance training (150 times at the Company and subsidiaries in Japan and overseas) Conducted environmental e-learning (100% of employees) and environmental auditor development training (3 times) 	★★★	<ul style="list-style-type: none"> Conduct compliance training at the Company and subsidiaries in Japan and overseas (ongoing) Conduct environmental e-learning (100% of employees) and environmental auditor development training (once)
<ul style="list-style-type: none"> Ongoing implementation of Hitachi Insights, the Hitachi Group employee satisfaction survey targeting all back-office workers 	<ul style="list-style-type: none"> Conducted Hitachi Insights, the Hitachi Group employee satisfaction survey targeting all back-office workers in September (6,468 employees responded on a consolidated basis) 	★★★	<ul style="list-style-type: none"> Ongoing implementation of Hitachi Insights, the Hitachi Group employee satisfaction survey targeting all back-office workers
3. Human Rights			
<ul style="list-style-type: none"> All employees receive human rights training every three years, based on the Hitachi Metals Group Human Rights Policy, according to Hitachi Group policies 	<ul style="list-style-type: none"> Systematically conducted human rights training throughout the entire Hitachi Metals Group (5,416 employees in total) 	★★★	<ul style="list-style-type: none"> Conduct human rights training systematically throughout the entire Hitachi Metals Group (ongoing)
4. Labor Practices			
<ul style="list-style-type: none"> Set KPIs and work to achieve them through the project "work style reform" (reduction in total annual back-office working hours), the foundation of the Company's diverse human resources Set a diversity employment target rate (the Company's own indicator) of 50% or more and actively hire diverse human resources Establish an intranet dedicated to diversity promotion 	<ul style="list-style-type: none"> Launched the companywide "work style reform" project in May 2016, set KPIs, implemented measures to reduce total annual working hours companywide and improve productivity, etc. Achieved the diversity employment target rate of 60% Set up a dedicated website for diversity management on the intranet Selected as a FY2017 Nadeshiko Brand 	★★★	<ul style="list-style-type: none"> Further promote "work style reform" through awareness-raising for those in management positions, measures to improve operational efficiency (reduce paperwork and meetings, etc.), a reduction in total annual working hours, and providing support through systems Continue to set a target rate of 50% or more for diversity employment Set the ratio of women in career-track positions (4%)

IV. CSR Management

FY2017 Measures (Planned)	FY2017 Measures (Results)	Self-assessment	Measures Planned for FY2018
<ul style="list-style-type: none"> · Formulate an action plan integrating the Act for Measures to Support the Development of the Next Generation and the Act on Promotion of Women's Participation and Advancement in the Workplace, and announce the plan to the public. Also, disclose related figures · Create opportunities for coordination and information exchange for women in career-track positions 	<ul style="list-style-type: none"> · Formulated an integrated action plan and announced it to the public. Related figures were also disclosed as widely as possible · Held a networking event targeting all women in career-track positions 	<p>★ ★ ★</p>	<ul style="list-style-type: none"> · Formulate an action plan integrating the Act for Measures to Support the Development of the Next Generation and the Act on Promotion of Women's Participation and Advancement in the Workplace, and proactively disclose related figures to the public · Increase the ratio of women in management positions · Continue to create opportunities for information exchange between women in career-track positions and strengthen coordination among them
<ul style="list-style-type: none"> · Exceed the legal employment rate of employees with disabilities 	<ul style="list-style-type: none"> · The actual figure for FY2017 was 2.43%, achieving the target 	<p>★ ★ ★</p>	<ul style="list-style-type: none"> · Exceed the legal employment rate of 2.2%
<ul style="list-style-type: none"> · Confirm activities regarding Hitachi Metals Group's key health and safety measures, as well as the state of legal compliance through health and safety audits of business offices, and implement health and safety training for supervisors · Conduct stress checks throughout the Hitachi Metals Group 	<ul style="list-style-type: none"> · Conducted health and safety audits at 15 domestic business offices. These audits were carried out at one overseas business office (China) · Conducted stress checks throughout the Hitachi Metals Group 	<p>★ ★</p>	<ul style="list-style-type: none"> · Confirm activities regarding Hitachi Metals Group's key health and safety measures, as well as the state of legal compliance through health and safety audits of business offices, and implement health and safety training for supervisors · Conduct stress checks throughout the Hitachi Metals Group · Carry out a health and safety diagnostic program as part of Hitachi Group's safety activities
<ul style="list-style-type: none"> · Formulate a human resources development plan for employees representing the next generation and conduct systematic personnel rotation and training programs 	<ul style="list-style-type: none"> · Identified outstanding human resources at the manager level and conducted training programs to develop global leaders · Focused on securing human resources through midcareer hiring to revitalize systematic personnel rotation 	<p>★ ★ ★</p>	<ul style="list-style-type: none"> · Examine and implement a selective development program for management candidates, targeting human resources at the general manager level · In addition to securing a certain number of human resources by hiring new graduates, continue to conduct midcareer hiring in the interest of personnel rotation and to adjust the age composition
5. The Environment			
<ul style="list-style-type: none"> · Increase the sales ratio of key environmentally conscious products*1 (19% or more) 	<ul style="list-style-type: none"> · Increased the sales ratio of key environmentally conscious products (20.7%) 	<p>★ ★ ★</p>	<ul style="list-style-type: none"> · Increase the sales ratio of key environmentally conscious products (21%)
<ul style="list-style-type: none"> · Reduce active mass per production unit of energy consumption (11.5% compared to base year FY2005) 	<ul style="list-style-type: none"> · Reduced active mass per production unit of energy consumption (6.6% compared to base year FY2005) 	<p>★</p>	<ul style="list-style-type: none"> · Reduce active mass per production unit of energy consumption (13% compared to base year FY2005)

FY2017 Measures (Planned)	FY2017 Measures (Results)	Self-assessment	Measures Planned for FY2018
<ul style="list-style-type: none"> Reduce active mass per production unit of waste/valuables generation (7.5% compared to base year FY2005) Increase the recycling rate (72%) 	<ul style="list-style-type: none"> Reduced active mass per production unit of waste/valuables generation (11% compared to base year FY2005) Increased the recycling rate (79%) 	★★★	<ul style="list-style-type: none"> Reduce the ratio of waste generation per production unit (8% compared to base year) Increase the recycling rate (74%)
<ul style="list-style-type: none"> Reduce chemical substance emissions per production unit (32% compared to base year FY2006) 	<ul style="list-style-type: none"> Reduced chemical substance emissions per production unit (19% compared to base year FY2006) 	★	<ul style="list-style-type: none"> Reduce the ratio of chemical substance emissions per production unit (34% compared to base year)
6. Fair Operating Practices			
<ul style="list-style-type: none"> Conduct extraordinary compliance (Anti-Monopoly Act) audit (ongoing) 	<ul style="list-style-type: none"> Conducted extraordinary compliance (Anti-Monopoly Act) audit (document review, hearing with sales department managers) 	★★★	<ul style="list-style-type: none"> Continue to conduct audits related to compliance (including compliance with the Anti-Monopoly Act)
<ul style="list-style-type: none"> Survey the status of CSR efforts by the Company's suppliers based on the Hitachi Group's CSR procurement guidelines 	<ul style="list-style-type: none"> Distributed the Hitachi Metals Group Supply Chain CSR Procurement Guidelines, collected CSR Procurement Checksheets, and confirmed the status of CSR promotion by suppliers 	★★★	<ul style="list-style-type: none"> Provide feedback on the results of the CSR Procurement Checksheet survey to suppliers, and share issues
<ul style="list-style-type: none"> Conduct Corporate Ethics Month in October (ongoing) Audit the compliance status of compliance-related laws and regulations (ongoing) 	<ul style="list-style-type: none"> Carried out various measures to ensure thorough legal compliance and ethical behavior, such as the lectures of management executives by external instructors, during Corporate Ethics Month in October Confirmed the compliance status of compliance-related laws and regulations during an internal audit Conducted a risk survey of major overseas Group companies, identified risks, and developed countermeasures 	★★★	<ul style="list-style-type: none"> Conduct Corporate Ethics Month in October (ongoing) Audit the compliance status of compliance-related laws and regulations (ongoing)
<ul style="list-style-type: none"> Conduct information security education (ongoing) Conduct information security self-audits (ongoing) Confirm that business information has been erased from privately owned computers (ongoing) Conduct targeted e-mail attack simulations (ongoing) Conduct a survey and analysis of the status of virus elimination and disclose the information 	<ul style="list-style-type: none"> Conducted information security education Conducted information security self-audits Confirmed that business information had been erased from privately owned computers Conducted targeted e-mail attack simulations Conducted a survey and analysis of the status of virus elimination and disclose the information 	★★	<ul style="list-style-type: none"> Conduct information security education (ongoing) Conduct information security self-audits (ongoing) Make an online pledge not to retain business information on privately-owned computers Conduct targeted e-mail attack simulations (ongoing) Implement measures against missent e-mails and expand said measures throughout the Group Comply with EU General Data Protection Regulation (GDPR)

FY2017 Measures (Planned)	FY2017 Measures (Results)	Self-assessment	Measures Planned for FY2018
7. Customers (Consumer Issues)			
<ul style="list-style-type: none"> Conduct gleaning meetings^{*2} at consolidated companies (ongoing) Expand company-sponsored mini gleaning meetings at business offices in Japan and overseas (ongoing) 	<ul style="list-style-type: none"> Conducted gleaning meetings at consolidated companies as planned Held company-sponsored mini gleaning meetings at eight business offices in Japan and overseas 	★★★	<ul style="list-style-type: none"> Conduct gleaning meetings at consolidated companies (ongoing) Expand company-sponsored mini gleaning meetings at business offices in Japan and overseas (ongoing)
<ul style="list-style-type: none"> Implement tasks for the creation of new business (ongoing) Expand new product sales ratio (new product sales ratio: 30% or higher) Promote cooperation and collaboration with customers and research institutions in Japan and overseas (carry out open innovation) 	<ul style="list-style-type: none"> Implemented tasks for the creation of new business (16 themes; promotion ongoing) Expanded new product sales ratio and developed strategic new products (new product sales ratio: 29%) Promoted cooperation and collaboration with customers and research institutions in Japan and overseas: Opened the "3DAM Open Laboratory") 	★★	<ul style="list-style-type: none"> Implement tasks for the creation of new business and select ongoing themes Process research (develop industrial technologies using AI and robotics) Promote cooperation and collaboration with customers and research institutions in Japan and overseas (expand open innovation)
8. Community Involvement and Development			
<ul style="list-style-type: none"> Consider social contribution activities enabling a closer relationship with regional citizens and culture (ongoing) 	<ul style="list-style-type: none"> Conducted regional contribution activities mainly in regions where offices and factories are located (social contributions amounting to 250 million yen) 	★★★	<ul style="list-style-type: none"> Consider social contribution activities enabling a closer relationship with regional citizens and culture (ongoing)
<ul style="list-style-type: none"> Contribute to material science technical research through support of Hitachi Metals · Materials Science Foundation (ongoing) Support <i>tatara</i> method of iron manufacture (ongoing) 	<ul style="list-style-type: none"> Contributed to material science technical research through support of Hitachi Metals · Materials Science Foundation (4 million yen) Supported <i>tatara</i> method of iron manufacture (operations and personnel) conducted by the Society for Preservation of Japanese Art Swords at <i>Nittoho Tatara</i> in Okuizumo, Shimane Prefecture 	★★★	<ul style="list-style-type: none"> Contribute to material science technical research through support of Hitachi Metals · Materials Science Foundation (ongoing) Support <i>tatara</i> method of iron manufacture (ongoing)
9. Review and Improvement of CSR Activities			
<ul style="list-style-type: none"> Improve management quality using CSR research (ongoing) 	<ul style="list-style-type: none"> Provided feedback from the CSR research results to relevant divisions. Implemented measures to improve management quality in each division based on these results 	★★★	<ul style="list-style-type: none"> Improve management quality using CSR research (ongoing)
<ul style="list-style-type: none"> Develop activities conforming to international standards for CSR and requests from various research and assessment institutions (ongoing) Improve responses to the Carbon Disclosure Project (CDP)^{*3} 	<ul style="list-style-type: none"> Applied the PDCA cycle to CSR activity issues based on ISO 26000, social responsibility guidance of the International Standard for Organization (ISO) Improved scope of disclosure in accordance with sustainability reporting international guideline GRI-G4 Provided responses to the Carbon Disclosure Project (CDP) 	★★★	<ul style="list-style-type: none"> Develop activities conforming to international standards for CSR and requests from various research and assessment institutions (ongoing) Improve responses to the Carbon Disclosure Project (CDP) (ongoing)

*1 Products targeted for growth based on a management strategy that makes a significant contribution to resolving environmental issues such as climate change and resource recycling

IV. CSR Management

- *2 Meetings conducted from the customers' perspective to determine the primary causes of product accidents and deliberate preventative measures
- *3 Project in which institutional investors request information about climate change from major corporations

(5) Economic Performance

(a) Direct Economic Value Generated and Distributed

Please refer to the following pages.

Investor Package

[WEB](http://www.hitachi-metals.co.jp/e/ir/library/ifrs.html) <http://www.hitachi-metals.co.jp/e/ir/library/ifrs.html>

Social Contribution Activities

Pages 44–47

3. In Cooperation with Society and the Local Community

(2) Our Social Contribution Activities in Fiscal 2017

Environmental Accounting

Page 59

1. Environmental Management

(5) Environmental Accounting

(b) Corporate Pension System

As of the end of fiscal 2017, the Company had lump-sum-at-retirement and defined-benefit pension liabilities payment obligations of ¥189.6 billion. Of this amount, ¥134.0 billion (coverage ratio of 70.7%) was contributed to an external fund as plan assets. The ¥55.6 billion underfunded by the difference between retirement benefit obligations and plan assets is recorded under reserves.

2. Compliance

(1) Basic Approach

To foster a deeper understanding of compliance, the Company has prepared and distributed the CSR Guidebook to all officers and employees of the Group in Japan and overseas, and provides compliance education in both lecture and e-learning formats on a regular basis. In addition, the Company has set October of each year as Corporate Ethics Month, and holds compliance lectures delivered by outside instructors, primarily for employees in management-level positions, as well as various other events to cultivate an awareness of compliance.

In fiscal 2017, to ensure more thorough compliance, ongoing improvement activities were carried out by the corporate division at the Company and subsidiaries in Japan and overseas with regard to tasks to be addressed to prevent the occurrence of inappropriate issues. In addition, we partially revised the "Hitachi Metals Global Compliance Program," which comprises rules based on global standards regarding the prohibition of bribery, compliance with competition laws, and prevention of transactions with antisocial forces. Meanwhile, for employees at the manager level and above, we asked them to complete a check sheet to confirm their overall awareness of compliance and implemented measures with a pledge to comply with laws and regulations.

(2) Compliance Education Activities

(a) Hitachi Metals Group Corporate Ethics Month

To thoroughly instill compliance, we designated October as the Hitachi Metals Group Corporate Ethics Month, as in past years, and carried out the following measures, in addition to conducting compliance training.

- i) The president prepared the "President's Message for the Hitachi Metals Group Corporate Ethics Month," discussing adherence to compliance in his own words. The message was translated into 11 languages, and distributed and publicized throughout the Hitachi Metals Group in Japan and overseas.
- ii) We held compliance lectures (led by outside instructors) for those in management-level positions. (Targets were executive officers and other management, and general managers working at the head office.)
- iii) We organized workplace debates regarding compliance at Hitachi Metals Group business offices in Japan and overseas.
- iv) All Hitachi Metals Group employees in Japan and overseas conducted self-audits based on a check sheet regarding compliance awareness and implemented measures.
- v) At the Hitachi Metals Group in Japan and overseas, employees at the manager level and above were asked to sign a pledge of compliance, and submission was confirmed.

(b) CSR and Compliance Training

Each year, the compliance department conducts CSR and compliance training for officers and employees of the Company and its subsidiaries in Japan and overseas. This training covers compliance with the Code of Conduct and the Antimonopoly Act, prevention of acts of bribery, and prevention of transactions with antisocial forces. In fiscal 2017, a total of 150 training sessions were carried out at the Company and its subsidiaries in Japan and overseas. Participants were asked to sign a pledge of compliance after completing the course.

Training related to CSR and compliance was included in the curriculum for new employees and in education for specific levels and positions, etc.

No.	Type	Name	Target employees
1	Education for all members	CSR and compliance training	Hitachi Metals Group employees
2		Compliance lectures for employees in management-level positions (led by outside instructors)	Executive officers and general managers working at the head office
3		Hitachi Group compliance e-learning	Managers and professionals
4	Education for new employees	Training for new hires	New hires
5	Education for specific levels and positions	Training for newly appointed assistant managers	Newly appointed assistant managers
6		Training for newly promoted managers and professionals	Newly promoted managers and professionals
7		Training for newly promoted managers	Newly promoted line managers
8		Training for newly promoted managers at Group companies	Newly promoted line managers at Group companies
9	Group company education	Compliance training for Group company officers (led by outside instructors)	Officers at subsidiaries in Japan

(3) Compliance Audits**(a) Antimonopoly Act Special Audit (Term: September 2017–May 2018)**

The compliance department conducts Antimonopoly Act special audits of Hitachi Metals business offices and Group companies each year. In fiscal 2017, the implementation period of these special audits coincided with internal audits by Hitachi, Ltd. Accordingly, these special audits were carried out jointly with the compliance department of Hitachi, Ltd.

We confirmed that there were no violations of the Antimonopoly Act by taking statements from sales managers regarding the process of setting prices presented to customers, and whether or not there was contact with competitors when participating in industry groups, based on relevant

documents such as quotations, lists of the industrial organizations to which business offices and Group companies belong, applications for business trip expenses, and minutes from meetings of industry groups, and the like that were attended by our employees (Compliance Record*).

* A record, based on prior approval from a superior and a follow-up report by the participant, stating that there were no issues with regard to the Antimonopoly Act in the actions of employees who participate in industry-group conferences or similar events where they may come in contact with competitors.

(b) Compliance Audits

The Internal Auditing Office conducted internal audits of all of its offices. The compliance department joins this audit activity in order to conduct compliance audits to check whether there is any suspicion of practices that violate either laws or company rules.

(4) Export Controls

In its Code of Conduct, Hitachi Metals sets “Obey the law and walk the path of virtue” as the basis of its actions. Accordingly, our basic policy on export controls is to “Strictly observe export-related laws and contribute to the maintenance of international peace and security,” and under this policy, we formulated and resolutely apply a compliance program that includes Rules on Security Export Controls. Specifically, we scrutinize the destination countries and regions, applications, and customers of all exported goods and technologies as we perform procedures on the basis of relevant laws. We guide global Group companies in enacting export control rules and establishing systems to ensure that they control exports appropriately, in line with the policy. We also provide educational assistance and perform internal audits.

Hitachi Metals will make exhaustive efforts to carry out our social responsibility for the maintenance of international peace and security in the future.

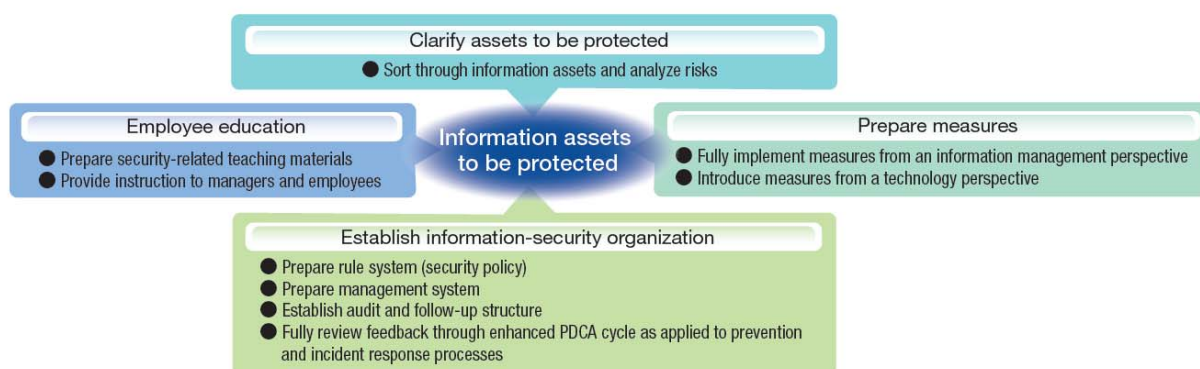
In fiscal 2017, the Hitachi Metals Group committed no major violations of export controls.

3. Information Protection and Management

(1) Basic Approach

The evolution and spread of IT, particularly in the form of the Internet and social networking services (SNSs), have resulted in an expanded litany of security risks. Managing and protecting corporate information, including personal information, is more important than ever as a corporate social responsibility. The Hitachi Metals Group established a “Basic Policy of Information Security” in April 2004, followed by a “Personal Information Protection Policy” in January 2005, establishing an organization of personal information protection/information security based on these policies. The Company has continued to update information security measures in line with these policies.

Basic Concept on Protection of Information Assets



In January 2016, private companies along with local governments and other organizations across Japan began using the My Number system, a social security and tax information system for individuals. At corporations, human resources and general administration departments deal with employees’ My Number information, legal departments handle shareholders’ My Number information, and procurement departments collect My Number data on sole proprietors. Consequently, the My Number launch precipitated the need to amend personal information protection policy along with regulations on management of personal information as well as peripheral rules, detailed regulations, guidelines, and other administrative formalities. However, personal information, including that of the My Number system, is a valuable asset that companies must manage and safeguard. To date, Hitachi Metals has applied a two-pillared approach—rules pertaining to information security that hinged on basic policy for information security and rules pertaining to management of personal information that hinged on personal information protection policy. Two corporate structures—the Personal Information Protection Committee and the Information Security Committee—worked as one to expediently promote measures. Consequently, the introduction of My Number provided an opportunity to implement a system with a single set of rules and to integrate the corporate structures as well.

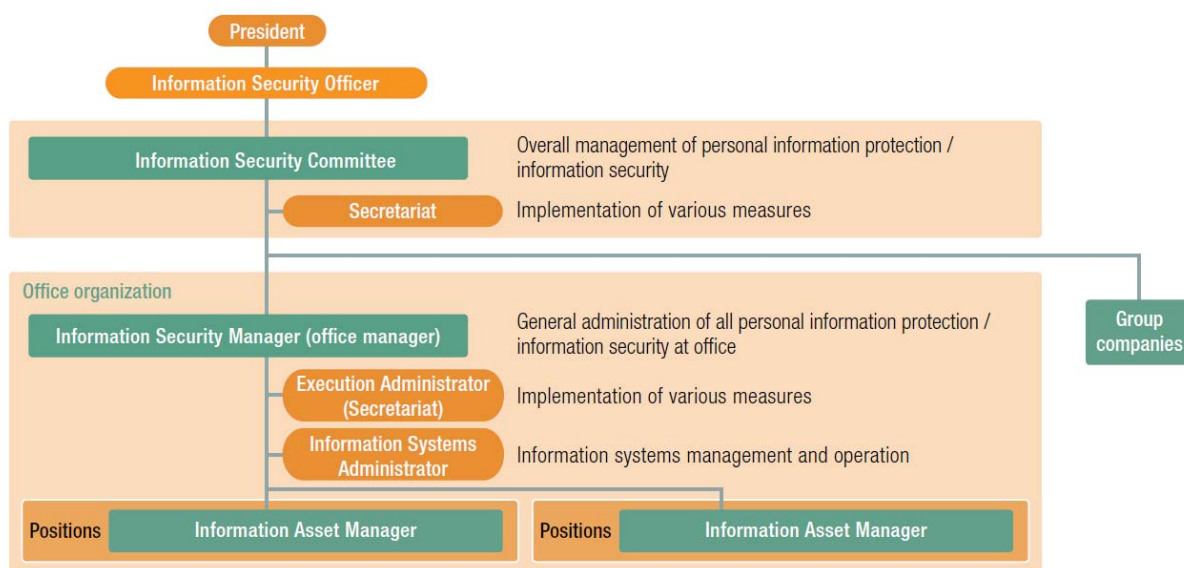
In December 2015, Hitachi Metals unified existing rules related to information security and rules related to management of personal information along with rules related to the handling of confidential documents, and then merged them into rules related to information security, which are the mainstay of information security management rules.

Hitachi Metals’ efforts to enhance information security are driven by four considerations—1) establish an information security organization, 2) clarify assets to be protected, 3) educate employees,

and 4) maintain various security measures—and the Company works steadily to implement steps to achieve each one. Particular emphasis, however, is placed on prevention, responding quickly if a situation arises, heightening employees’ sense of ethics, and making them more security conscious. In addition, Hitachi, Ltd. leads the Hitachi Group, of which Hitachi Metals is a part, in promoting information security management and working toward a higher level of security throughout the wider group organization.

(2) Promotion Organization

Following the integration of related rules in December 2015, the Personal Information Protection Committee and the Information Security Committee were reorganized into a new Information Security Committee.



(3) Information Security Measures

Hitachi Metals has systematically implemented measures against external risks from targeted attacks and other unauthorized access and computer viruses, internal risks such as the unauthorized removal, loss, or theft of company information or missent e-mails, and other risks including natural disasters, etc.

The Hitachi Metals Group has been searching the personal computers owned by employees continuously since fiscal 2006, to find and delete business information, and this was done again in fiscal 2017. Since fiscal 2007, the Company has also requested its business partners to deploy equivalent measures to prevent business information leakage via file-sharing software, etc., on personal computers. Since fiscal 2009, we have introduced a filtering system to monitor all e-mails sent externally to prevent external leaks of business information. Further efforts have also been made to enhance measures preventing information leaks, such as reviewing and improving our management system for portable information terminals to prevent losses of increasingly capable mobile phones, smartphones, and other devices.

Unfortunately, the Hitachi Group was among the victims of a cyber-attack by a ransomware worm that affected more than 150 countries in May 2017. In this attack, part of the Group's internal system was damaged, including its e-mail system. Furthermore, mobile computers, mobile phones, and other

devices were reported lost or stolen, and the Hitachi Metals Group experienced problems with e-mails sent to unintended recipients. Nevertheless, there were no incidents involving breach of customer privacy or leaked customer information.

(4) Employee Education

Each year, the Company provides information security education for all employees (including temporary staff, etc.) who use IT equipment. This education is designed to instill an understanding of rules related to the use of IT equipment, including the handling of information (including personal information) and the prohibition against using personal computers for work. During fiscal 2017, the Company conducted on-site training at Hitachi Metals Group locations (simultaneously with compliance training) and training using simulated e-mails about targeted attacks, as a means of countering targeted attacks on corporate information from outside the Company. Both initiatives were designed to improve the security awareness of every Hitachi Metals Group employee.

	On-site training at global offices	Training using simulated e-mails about targeted attacks
Implementation timing	September 2017–April 2018	November–December 2017
Training recipients and number of sessions	Hitachi Metals Group employees 150 sessions in Japan and overseas	Employees at business offices connected to the Hitachi Metals Group network 1 session

(5) Self-audit

Each year, the Company conducts a self-audit of personal information protection/information security, confirming the status of the rules compliance, and improving any areas that need to be addressed. Our fiscal 2017 audit was performed between January and March 2018. In order to achieve a more complete self-audit this year, a study group led by an instructor from Hitachi, Ltd. was held prior to conducting the audit for all employees responsible for the implementation of information security in the Group.

(6) Protection and Respect for Intellectual Property

Hitachi Metals' policy states that we must "actively create intellectual property, protect it appropriately, and strive to put it to effective use," and "respect the intellectual property rights of others."

To appropriately protect and effectively apply intellectual property created in such processes as research, development, and manufacturing, Hitachi Metals acquires the rights to inventions and ideas devised by employees in the course of their work, in accordance with the Company's rules, which have been established through legally stipulated procedures. With the global expansion of our business, we acquire and maintain the rights to these inventions and ideas as intellectual property rights inside and outside Japan, forming assets that will support the sustainable growth of the Hitachi Metals Group. We take appropriate action against infringements of our own intellectual property rights, including exercise of our rights through legal action.

At the same time, we strive to prevent infringements of the intellectual property rights of others and smoothly advance our business. To that end, we investigate the intellectual property rights of others globally, in advance of all stages of research, development, design, etc., for new products and technologies, in accordance with Hitachi Metals rules. If that investigation reveals a need to use the intellectual property rights of others, we acquire licenses.

We also provide our employees with ongoing education and training about intellectual property, to instill awareness of the protection and respect of our intellectual property rights and those of others.

4. Respect for Human Rights and Compliance with International Norms

The Hitachi Metals Group stipulates respect for human rights in both the Hitachi Metals Group Code of Conduct and the supplementary Hitachi Metals Group Human Rights Policy. Our basic stance is to respect and work to refrain from infringing on the rights of all persons involved in our business operations. The Hitachi Metals Group Human Rights Policy, which was formulated in December 2013, recognizes the human rights stated in the International Bill of Human Rights and the ILO (International Labour Organization) Declaration on Fundamental Principles and Rights at Work as the minimum levels of these rights. This policy clearly states that the Hitachi Metals Group pursues measures to observe the international principles of human rights. Specifically, we will implement human rights due diligence and appropriate education, based on the UN Guiding Principles on Business and Human Rights, while strictly observing the laws of the regions and countries in which we do business. We put the Hitachi Metals Group Human Rights Policy into practice, and are continuously working on initiatives such as raising the awareness of our officers and employees, and establishing hotlines to promote the creation of a corporate culture in which human rights abuses do not occur.

We regularly utilize e-learning to conduct human rights education and training at each employee level, in order to systematically raise awareness of human rights (with a total of 6,031 employees, on a consolidated basis, receiving human rights-related training in fiscal 2017). In addition, we have established various harassment hotlines, in order to incorporate the Hitachi Metals Group Human Rights Policy into all of our activities.

As our business activities expand rapidly on a global basis, we will continue to enhance human rights awareness and support measures to prevent the occurrence of human rights abuses based on differences in religion or nationality, the presence or absence of disabilities, gender, or other factors.

V. Report on Social Aspects

1. Responsibility to Customers

(1) Basic Approach

Driven by our philosophy underpinning quality assurance activities that is grounded in the legendary Hitachi “Ochibo Hiroi concept” (The spirit of the Gleaning), the Hitachi Metals Group continues to improve our quality assurance technologies, offering products that delight both our customers and the ultimate product consumer. This is yet another way in which we contribute to the betterment of society.

July 1, 1988

President

Philosophy of Quality Assurance Activities

1. Objectives behind the Establishment of Our Philosophy of Quality Assurance Activities

The Corporate Philosophy of the Hitachi Metals is relentless pursuit of technology, contributing to the betterment of society through the manufacture and sales of high-quality, unique products.

Quality assurance activities are pillars of our “*monozukuri*.” We practice quality assurance activities as a fundamental part of our daily work. To further instill an awareness of quality assurance activities throughout our organization, we have established a Companywide standard, clearly defining our philosophy regarding quality assurance activities within Hitachi Metals.

2. Philosophy of Quality Assurance Activities

The Hitachi Metals’ philosophy concerning quality assurance activities is built on the legendary Hitachi “Ochibo Hiroi concept” (The spirit of the Gleaning). The philosophy of this activity is as described below.

(1) Quality first, customers first

Product quality is the highest priority among our many duties to our customers.

Our primary objective is to be a trusted company that satisfies customers and plays a role in the betterment of society.

(2) Build quality into our products, and conduct final inspections from the standpoint of the customer

Quality is the starting point for all of our corporate activities. Our development, production, sales and other departments maintain a focus on quality, aligning efforts as a team to consistently improve quality within the organization, to build quality into our products.

Manufacturing and final inspection are the twin pillars of quality assurance. Error-free technology and equipment, process control, and a continuous approach to final inspection from the standpoint of the customer is what ensures the quality of Hitachi Metals products.

(3) A sincere response to quality issues and prevention of recurrence

If we ever inconvenience our customers because of a quality defect, we believe it is our responsibility to resolve the issue in the best manner possible. We must fully investigate the underlying cause of the issue, learning the lessons that will ensure the issue never happens again.

(2) Quality Assurance Structure

The quality assurance departments of each internal company and Group companies do quality assurance work for the products under their jurisdiction, and strive to enhance quality. In January 2016, we established the Corporate Quality Assurance Division to reinforce our quality assurance structure on a global basis. The division supports the departments of all companies with a broad perspective. It also promotes the quality assurance activities of all companies and provides quality-related education, so that quality-related activities in all departments can proceed smoothly.

The Group's core materials and components are supplied to a wide range of customers in the steel, automotive, and electronics industries. Quality assurance, appropriate to the needs of each customer, is carried out at every site. Domestic plants have received ISO 9001 or ISO/TS 16949 certification, and have put quality assurance structures in place. The Hitachi Metals Group has manufacturing plants in North America, Asia, and Europe, and is developing businesses appropriate to each area of operation. The plants in Japan function as "mother plants" to their counterparts outside Japan, and provide guidance regarding manufacturing technologies and quality control through close links. The major plants outside Japan have also received ISO 9001 or ISO/TS 16949 certification.

(3) Product Safety

(a) Safe Product Supply System

New products and those in development are subject to thorough product safety (PS) design reviews, thereby assuring the production of safe products. We have established product safety committees companywide, and in each internal company and plant, and these committees work together as they advance PS activities. As a result, no PS-related incidents involving products occurred in fiscal 2017. The entire Hitachi Metals Group also has further strengthened its controls on chemical substances in products.

(b) Quality Incident Response Structure

In the event of an incident involving a product, we respond in good faith, on the principle of putting the customer first, and expedite information on all incidents to internal companies and to Corporate through the specified information route. In addressing incidents, both the direct causes and the background factors, including psychological factors, leading to those causes are investigated thoroughly. When investigating background factors, the Hitachi Metals Group places particular importance on uncovering motivational factors as part of efforts to eliminate incidents and prevent recurrences. The legendary Hitachi Group "Ochibo Hiroi" (gleanings) meeting is one activity that we undertake to ensure that we learn lessons from incidents and other mistakes. This meeting is held annually at manufacturing plants of each internal company, Group companies, and elsewhere.

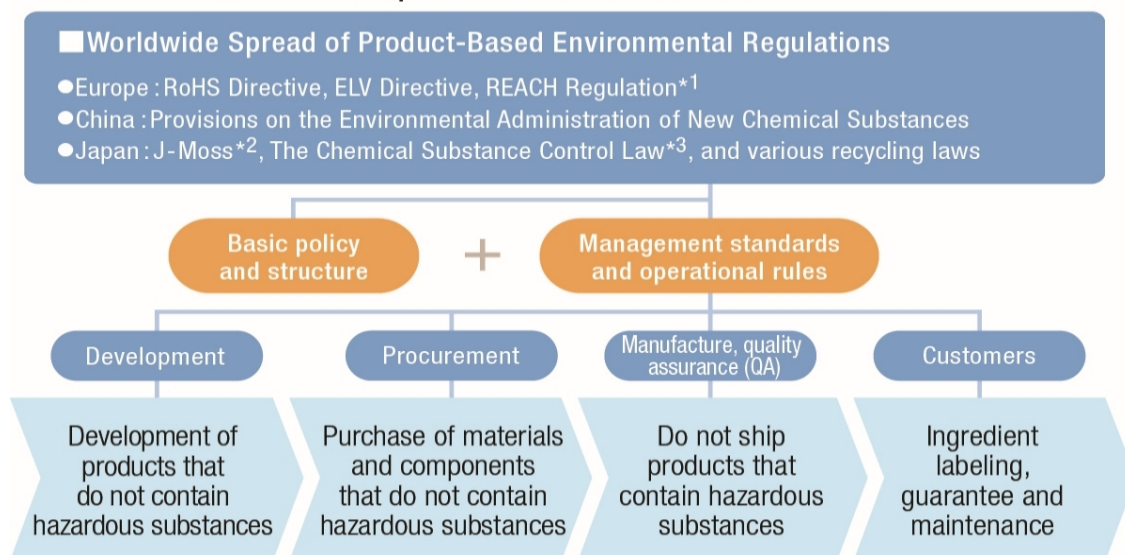
(4) Supervision of Substances Contained in Products

The Hitachi Metals Group embraces a global approach to "Environmental CSR-Compliant *Monozukuri*"* activities—methods of production that do not incorporate harmful substances. As shown in the chart, these activities involve applying mechanisms to eliminate harmful substances at each stage of production. Doing so allows us to promote the identification of chemical substances contained in our products, and register and file for approval of chemical substances and provide information on them to our customers with regard to REACH and other regulations. We will also cooperate with our customers

and business partners to ensure that we provide information in an efficient manner.

* The Japanese word *monozukuri* expresses the art and joy of making things as perfectly and efficiently as possible, while respecting nature in terms of the materials used and the environment.

Environmental CSR-Compliant Monozukuri Structure



*1 Registration, Evaluation, Authorization, and Restriction of Chemicals

*2 Refers to a new set of regulations issued in December 2005 to coincide with the revision of the Law for the Promotion of Effective Utilization of Resources. These regulations are stipulated as a JIS standard (JIS C 0950:2005) and are in line with the EU's RoHS Directive. J-Moss concerns the disclosure of the presence of specific chemical substances in electrical and electronic devices.

*3 The formal name is the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Promote the identification of chemical substances included in products, register and file for approval of chemical substances, provide information regarding chemical substances to customers.

(5) Evaluations from a Third-Party Perspective

As part of its ongoing efforts to further improve quality, the Hitachi Metals Group takes seriously the evaluations it receives from customers and third-party institutions. These evaluations include quality excellence awards and outstanding supplier awards received from customers in Japan and overseas, in recognition of our improvement activities. In addition to our stable quality, a major factor in receiving these awards was our customers' high regard for our quality assurance structure.

2. Together with Our Suppliers

(1) Basic Policy of CSR Procurement

Based on the Corporate Creed of contributing to society by being “the best enterprise,” Hitachi Metals has formulated its procurement policy to outline its basic concepts regarding material procurement, and published this policy on its website. As our business progresses globally, we share this procurement policy among all of the companies in the Hitachi Metals Group, in order to encourage them to contribute to society through their own business activities. We will continue striving to comply with laws and regulations as well as social norms, and to fulfill our social responsibility with consideration for human rights and the environment, while fostering a fair and impartial business culture based on relationships of trust with our suppliers.

Procurement Policy

Basic Concept of Material Procurement

- **Open, global procurement**

We procure materials from suppliers regardless of their nationality, size, and performance based on the principle of free competition.

- **Fair, clean trading**

We select suppliers on a fair and equitable basis according to their economic rationality such as quality, prices, delivery time, technologies, the credibility of management and services. We never receive any personal gifts or offers from them.

- **Maintain partnerships**

We cultivate fair business relations with all of our suppliers on an equal footing. We constantly strive to deepen mutual understanding and trust, and aim to achieve growth, development, and a working partnership with them from a long-term perspective.

- **Comply with laws**

We conduct procurement activities in compliance with applicable laws and regulations as well as social norms. We are determined not to have any relations with antisocial forces that threaten the order and safety of civil society.

- **Take consideration of human rights, occupational safety, and health**

We take special care to ensure human rights, occupational safety, and health in our procurement activities. We also ask our suppliers to make the same efforts.

- **Keep confidentiality**

We treat all confidential information of our suppliers obtained through procurement activities as being strictly private and confidential, by using the same degree of care we use to safeguard our own proprietary information. We do not disclose their information to a third party nor use it for purposes other than the original intent without their prior consent.

- **Preserve the environment**

We give priority to suppliers who positively work on environmental preservation as well as to environmentally friendly materials and components.

(a) Creation of a Supply Chain CSR Procurement Guideline

Hitachi Metals revised the Hitachi Metals Group Supply Chain CSR Procurement Guideline in May 2017 and published the revised version on its website. The Guideline encompasses a wide range of CSR concepts recognized as a company's social responsibility, including respect for human rights, consideration of the environment, fair trading and ethics, occupational health and safety, product quality and safety, information security, and social contributions. We will share our philosophy of fulfilling our social responsibility and strive to maintain and develop relationships of trust not only within the Company, but also throughout our supply chain. In addition, when starting new business relationships, we communicate this policy, and at the same time conduct corporate surveys regarding bribery risks based on the Hitachi Metals Global Compliance Program (HMGCP) to promote the strengthening of supplier reviews.

Supply Chain CSR Procurement Guideline

[WEB](http://www.hitachi-metals.co.jp/e/corp/corp11_04.html) http://www.hitachi-metals.co.jp/e/corp/corp11_04.html

(b) Compliance

The Company makes a daily commitment to thoroughly obey laws, regulations, and social proprieties in our transactions. On a regular basis, we call together our procurement specialists at business offices on a regular basis for education regarding laws and regulations, as well as to confirm the status of compliance. In addition, we have established and follow internal rules for self-regulation regarding compliance with the Act against Delay in Payment of Subcontract Proceeds, Etc., to Subcontractors, in order to ensure legal compliance, and are making efforts to “obey the law and walk the path of virtue.”

(c) Green Purchasing

In 1998, Hitachi Metals created its Green Procurement Guidelines in order to share our approach to environmental consciousness with our suppliers, including prevention of global warming, recycling of resources, and conservation of biodiversity and ecosystems. Since that time, we have revised these guidelines many times in response to the latest laws and chemical substance regulations. By sharing the latest information, we are working to reduce our environmental impact (conserving resources, saving energy, recycling, and appropriate management of chemical substances contained in products).

(d) Procurement BCP Initiatives

Hitachi Metals seeks to minimize its risk in the face of earthquakes, wind and flood damage, and other natural disasters, as well as acts of terrorism, epidemics, fires, electrical outages, and other factors that could halt its business. For this reason, we engage in procurement BCP activities. We are working to minimize procurement risks by promoting procurement protection measures, such as diversifying our sources of procurement and asking our key suppliers to establish their own BCP measures.

(2) Response to Globalization

We strive to establish and expand a global procurement network across Europe, North America, and Asia, while sharing our procurement policy and enhancing CSR risk management within the network.

(a) Promoting Local Procurement

In line with global business expansion, Hitachi Metals is promoting local procurement activities by cultivating optimal suppliers in various parts of the world. We established Global Procurement Offices (GPOs) to support local procurement activities in four regions (North America, Europe, Asia, and China), and strive to cultivate local suppliers in each region, while making efforts to promote CSR procurement.

(b) Our Initiatives to Address the Issue of Conflict Minerals

The U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act, which came into force in January 2013, obligates U.S. listed companies to report to the Securities and Exchange Commission (SEC) regarding their use of conflict minerals (i.e., tantalum, tin, tungsten, and gold, which provide sources of funding for armed groups) mined in the Democratic Republic of the Congo and its neighboring countries (DRC countries), with the aim of cutting off funding sources for armed groups engaged in tyranny and serious human rights abuses. The Hitachi Metals Group will never be complicit in such human right abuses. To make our supply chain transparent and maintain responsible procurement, we continuously conduct surveys of mineral-producing countries and our supply chain, using the Conflict Minerals Reporting Template developed by the Responsible Business Alliance (RBA) and the Global e-Sustainability Initiative (GeSI). At the same time, we continue to demand procurement from Conflict-Free Smelters (CFS)*.

* CFS (Conflict-Free Smelter): A smelter that is certified to not be involved in regional conflicts by the Responsible Minerals Initiative (RMI), which was established by RBA and GeSI, two organizations that are addressing the issue of conflict minerals.

3. In Cooperation with Society and the Local Community

(1) Basic Approach

The Hitachi Metals Group pursues social contribution activities in fields such as sports promotion, environmental protection, social welfare, arts and culture, community activities, and support for disasters, to bring progress to communities around the world where the Group is active. We also work together with social welfare organizations and educational institutions to gain a sense of what communities want from the Hitachi Metals Group as we carry on with our activities.

Besides social contribution activities as a company, we support volunteer activities by employees through volunteer leave and a system of volunteer awards as part of our efforts to nurture a corporate culture that helps create a better society.

Hitachi Metals' characteristic social contribution activities include support for Japan's research into materials science and technology by supporting the Hitachi Metals · Materials Science Foundation, which was established largely with funds willed by Dr. Kakunosuke Miyashita (a former Hitachi Metals vice president). We also contribute to the preservation of Japan's traditional culture through our work with the operations of *Nittoho Tatara*, which was revived in 1977 by the Society for Preservation of Japanese Art Swords.

(2) Our Social Contribution Activities in Fiscal 2017

In fiscal 2017, the Hitachi Metals Group made social contributions including staging events such as sports competitions, environmental protection activities, welcoming tours of our plants and donation. The total expenditure was equivalent to ¥250 million*. The main content of our contribution activities is as follows:

* This figure includes the calculated equivalent values of employees and company facilities required for activities.

	Genres and activity content	Company name and business office name
Social welfare	Donation of wheelchairs, etc., to social welfare councils and social welfare facilities	Hitachi Metals head office
	Central Community Chest of Japan, Year-End Mutual Aid Fund	Hitachi Metals and domestic Group companies
	Cooperation in blood donation activities	Hitachi Metals and global Group companies
	Made donations, mainly of food, clothing, blankets, and toys, to low-income people and their children through welfare groups. Made donations to welfare groups* ¹	Hitachi Metals and global Group companies
	Supported Mexican association that helps children with cancer	HC Queretaro S.A. de C.V.
	Participated in activities undertaken by organizations which build homes for low-income families and the elderly	Hitachi Metals America, LLC. Hitachi Metals (India) Private Limited
	Supported local citizens' support facilities (child care center, fire station, and hospital)	Waupaca Foundry, Inc. San Technology, Inc. HC Queretaro S.A. de C.V.
	Participated in sports events run by the American Cancer Society to raise cancer awareness	Waupaca Foundry, Inc. Hitachi Metals America, LLC. Hitachi Cable America, Inc.
	Participated in protection activities at animal shelters	Waupaca Foundry, Inc.
	Organized dinners for the elderly in local communities	Hitachi Metals Hong Kong Ltd.

Genres and activity content		Company name and business office name
	Christmas gift program*2 for children in low-income families, support for school supplies	Hitachi Metals America, LLC. Metglas, Inc.
	Support for welfare facilities for the elderly	Namyang Metals Co., Ltd.
	Support for guide dog associations	Hitachi Metals America, LLC
	Support for an association that assists children with leukemia	Hitachi Metals America, LLC
	Support for low-income students	Ward Manufacturing, LLC Pacific Metals Co., Ltd.
	Support for facilities for the elderly	Pacific Metals Co., Ltd.
Health, medicine, sports	Organized the Wakamatsu Junior High School Rubber Baseball Tournament*3	Hitachi Metals Wakamatsu, Ltd.
	Organized the Junior High School Goodwill Sporting Event*4	Yasugi Works, Hitachi Metals, Ltd.
	Organized the Wakyo-Hai Volleyball Tournament	Moka Works, Hitachi Metals, Ltd.
	Sponsored the Kumagaya Sakura Marathon*5	Kumagaya Works, Hitachi Metals, Ltd., and Group companies
	Sponsored the Japan Rubber Baseball Association Kuwana Branch Junior High School Baseball Pennant Tournaments*6	Kuwana Works, Hitachi Metals, Ltd.
	Sponsored the Boys' Baseball Western Regional Tournament	Kuwana Works, Hitachi Metals, Ltd.
	Dispatched employees to act as referees in local competitions	In-house sports clubs of Hitachi Metals, Ltd.
	Organized sports classes by in-house sports clubs (basketball, tennis, baseball, kendo, etc.) for elementary, junior high, and senior high school students	Various Hitachi Metals works and global Group companies
	Supported Hitachi Sakura Road Race	Ibaraki Works, Hitachi Metals, Ltd.
	Sponsored Hitachi Metals Cup mini basketball tournament in Hidaka district	Ibaraki Works, Hitachi Metals, Ltd.
	The Hitachi Metals Cup Tottori Prefecture Junior High Volleyball Tournament*7	Hitachi Ferrite Electronics, Ltd.
	Donated to Sports Promotion Funding Foundation to promote sports (including Rugby World Cup 2019)	Hitachi Metals, Ltd.
	Supported Showa no Mori charity golf competition in Gunma Prefecture	Hitachi Metals Solutions, Ltd.
	Supported Nakaumi Marathon, a national event	Yasugi Works, Hitachi Metals, Ltd.
	Supported intercity baseball tournament encompassing five prefectures of Chugoku region	Yasugi Works, Hitachi Metals, Ltd.
	Supported Kanda Citizens' community-friendly marathon*8	Kyushu Works, Hitachi Metals, Ltd.
	Support for regional sports events (including charity events)	Global Group companies
	Volunteers served as guides for the visually impaired at the Kasumigaura Marathon	Hitachi Metals Neomaterial, Ltd.
	Academic and research education	Support through Hitachi Metals · Materials Science Foundation
Donated money to universities to support education		Hitachi Metals and overseas Group companies
Science seminar project for elementary, junior high, and senior high school students		Overseas Group companies
Visiting lecture program and support for local schools		AAP St. Marys Corporation Waupaca Foundry, Inc. Hitachi Metals (India) Private Limited
Participated in Hitachi Science Seminars (jointly held by The Hitachi Global Foundation and Science Museum)*9		Hitachi Metals, Ltd.

Genres and activity content		Company name and business office name
	Welcomed factory tours by schools and other groups	Various Hitachi Metals works and global Group companies
	Dispatched practical skills teachers to Wakamatsu Labor Standards Association	Hitachi Metals Wakamatsu, Ltd.
	Supported industrial robot-building and programming competition (First Robotics Competition)	Metglas, Inc.
	Supported efforts to promote education by regional boards of education	Yasugi Works, Hitachi Metals, Ltd.
Culture and art	Performance by the Hitachi Yasugi brass band	Yasugi Works, Hitachi Metals, Ltd.
	Donated to local museums and fine art foundations	Waupaca Foundry, Inc.
Environment	Participated in Tottori Sand Dunes Weeding Volunteers activity* ¹⁰	Hitachi Ferrite Electronics, Ltd.
	Participated in forest conservation activities (Shimane CO ₂ absorption certification system)	Yasugi Works, Hitachi Metals, Ltd.
	Tree-planting activities	San Technology, Inc., and others
	Cleaning activities in areas near business offices	Various Hitachi Metals works and global Group companies
	Ran eco forums in Sendai and Tagajo	Tohoku Rubber Co., Ltd.
	Donated to Rikyu-no-Mizu Protection Society	Yamazaki Manufacturing Dept., Hitachi Metals, Ltd.
	Donated to Japan Center for International Exchange	Hitachi Cable America Inc.
Community activities, preservation of historical sites and traditional culture	Supported a cutting steel symposium	Yasugi Works, Hitachi Metals, Ltd.
	Sponsored the Yasugi Knife Festival	Yasugi Works, Hitachi Metals, Ltd.
	Supported <i>Nittoho Tataro</i> operations, guided operations of mini- <i>tataro</i> * ¹¹	Yasugi Works, Hitachi Metals, Ltd. HMY, Ltd.
	Organized the Hidaka Summer Festival* ¹²	Ibaraki Works, Hitachi Metals, Ltd., and Ibaraki Technos, Ltd.
	Held a Cultural Festival	Hitachi Metals (India) Private Ltd.
	Supported regional festivals and sporting events	Various Hitachi Metals works and global Group companies
	Supported Hitachi Sakura Road Race	Ibaraki Works, Hitachi Metals, Ltd.
	Operated casting museum (at Kyushu Works)	Kyushu Works, Hitachi Metals, Ltd.
Disaster area support	Northern Kyushu torrential rain relief donations	Hitachi Metals, Ltd.
	Reconstruction support for tornado victims	Waupaca Foundry, Inc.
Urban development and disaster prevention	"Children's Dial 110 House" registration	Hitachi Alloy Co., Ltd.
	Participated in traffic safety and disaster prevention events	Various Hitachi Metals works and global Group companies
Facility open days	Opened sports grounds, gymnasias, tennis courts, welfare facilities, parking lots, etc., to the general public	Various Hitachi Metals works and domestic Group companies
Other donations, etc.	Sponsored the Orchard Road Christmas Lightup	Hitachi Metals Singapore Pte. Ltd.
	Assisted the running of "Japan Day (Dusseldorf)"	Hitachi Metals Europe GmbH
	Donated cleaning equipment to local kindergartens and elementary schools	PT. HITACHI METALS INDONESIA
	Offered management support to local professional soccer teams	Hitachi Metals Europe GmbH
	Donated to various organizations, including the Hitachi Global Foundation	Hitachi Metals and global Group companies

V. Report on Social Aspects

		
<p>*1 Providing food and other support to low-income people (Hitachi Metals America, LLC.)</p>	<p>*2 Christmas gifts for children in low-income families (Hitachi Metals America, LLC.)</p>	<p>*3 Organized the Wakamatsu Junior High School Rubber Baseball Tournament (Hitachi Metals Wakamatsu, Ltd.)</p>
		
<p>*4 Organized the Junior High School Goodwill Sporting Event (Yasugi Works, Hitachi Metals, Ltd.)</p>	<p>*5 Sponsored the Kumagaya Sakura Marathon (Kumagaya Works, Hitachi Metals, Ltd.)</p>	<p>*6 Sponsored the Japan Rubber Baseball Association Kuwana Branch Junior High School Baseball Pennant Tournaments (Kuwana Works, Hitachi Metals, Ltd.)</p>
		
<p>*7 The Hitachi Metals Cup Tottori Prefecture Junior High Volleyball Tournament (Hitachi Ferrite Electronics, Ltd.)</p>	<p>*8 Supported Kanda Citizens' community-friendly marathon (Kyushu Works, Hitachi Metals, Ltd.)</p>	<p>*9 Jointly hosted Hitachi Science Seminars (Hitachi Metals, Ltd.)</p>
		
<p>*10 Participated in Tottori Sand Dunes Weeding Volunteers activity (Hitachi Ferrite Electronics, Ltd.)</p>	<p>*11 Guided operations of mini-tatara (Yasugi Works, Hitachi Metals, Ltd., and HMY, Ltd.)</p>	<p>*12 Organized the Hidaka Summer Festival (Ibaraki Works, Hitachi Metals, Ltd., and Ibaraki Technos, Ltd.)</p>

4. Responsibility to Employees

(1) Labor and Management Relations

Hitachi Metals sincerely addresses common management-labor issues, respecting the basic rights and responsibilities of each, built on a “foundation of mutual trust.” The Company provides full explanations of management policies, business plans, management measures, etc., at various meetings, while at the same time listening to feedback from the employee union as Company management works for the rapid implementation of various corporate measures. Since fiscal 2010, we have been fully implementing a new labor and management structure that corresponds to our internal company system. Increasing the level of communication will help establish a stronger relationship between labor and management within the Company. The employee unions of the Hitachi Metals Group companies have formed a union council, using the forum to periodically exchange opinions and clarifying Group management policies and plans, enhancing mutual understanding.

(2) Promoting Diversity

Hitachi Metals considers diversity and inclusion to be important management strategies, and is pursuing various measures based on the belief that “creating an innovative corporate culture will increase corporate value.”

In particular, we are actively implementing measures to promote the participation and advancement of women in the workplace, based on our management’s firm commitment regarding this issue as an important theme in diversity promotion.

[Policy on promoting the participation and advancement of women in the workplace]

- 1) Setting targets for the ratio of women among newly hired graduates (Technical positions: 10%, administrative positions: 40%) *Achieved in fiscal 2017
- 2) Enhancing support for retention (Career support, awareness-raising for those in management-level positions, etc.)
- 3) Systematic promotion of female employees (Target ratio for women in management-level positions: 1.5% in fiscal 2018)

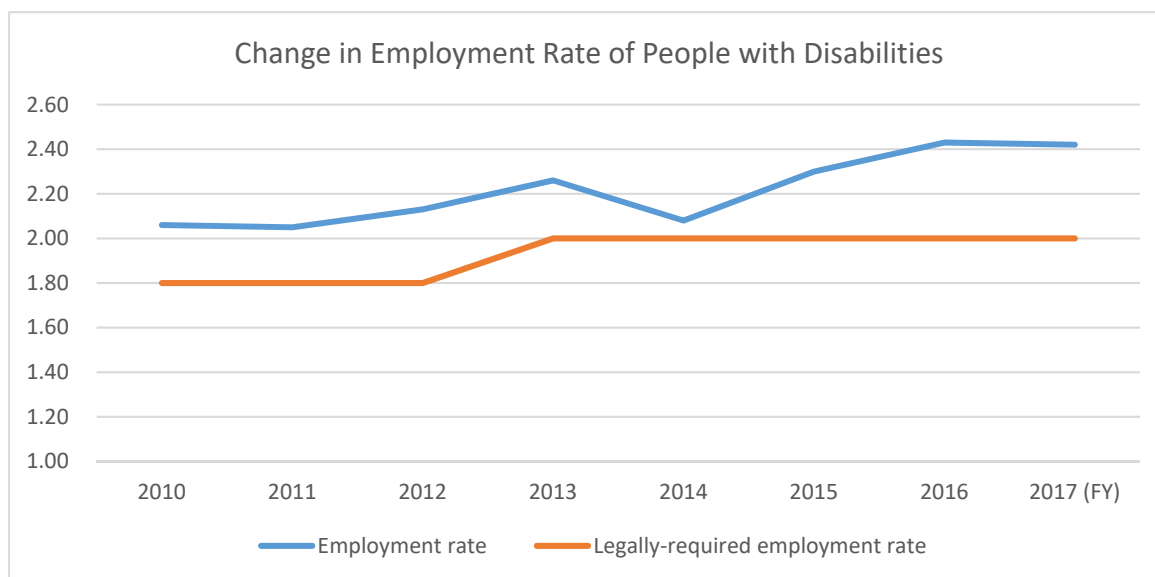
In recognition of these efforts, in March 2018, Hitachi Metals was selected as a fiscal 2017 “Nadeshiko Brand,” as a company that is outstanding in terms of encouraging the success of women in the workplace. We will continue working to promote diversity, and to create an environment in which all employees can participate fully.

(a) Promoting Employment of People with Disabilities

Regarding the hiring of people with disabilities, Hallow, Ltd., a special subsidiary established in 1998, marked its 20th anniversary, and is looking forward to further development since changing its corporate name to Hitachi Metals Hallow, Ltd. in fiscal 2018. In addition, in 2006, Kuwana Create Co., Ltd. (currently, Hitachi Metals FineTech, Ltd.) received special government certification as a company offering employment opportunities to people with disabilities. The Hitachi Metals Group has received high marks for these efforts, including awards from local communities.

Meanwhile, HMY, Ltd. maintains a program through which supervisors themselves acquire qualification as a Type 2 Job Coach (employees of private companies who assist disabled co-workers at the job site). In addition, HMY has a history of actively hiring people with disabilities through job

centers, independent living support centers, special needs schools, and “Hello Work” Public Employment Security Offices. We plan to continue working to further expand employment throughout the Hitachi Metals Group.



(b) The Act on Measures to Support Raising Next-Generation Children, and the Act on Promotion of Women’s Participation and Advancement in the Workplace

Starting from fiscal 2008, the Company has established a child allowance benefit for employees as a policy for supporting the development of the next generation, strengthening our support of employees who are raising children.

In 1992, Hitachi Metals was also one of the first companies to adopt a system to reemploy individuals who had to give up their jobs due to childbirth or home care, demonstrating once again our proactive and forward-thinking policies. With regard to leave related to child care, nursing care for the elderly, and time needed to care for someone who is sick, we have created a supportive environment that enables employees to address various family responsibilities without worrying about job security. For example, as of fiscal 2016, child care leave has been extended to the end of the month in which a child turns three years old, and for employees taking nursing care leave, we now provide an amount equivalent to 50% of their salary as family care leave benefits during this leave of absence. In addition, we provide employees with generous conditions in terms of the scope and period of leave that exceed the requirements under the revised Child and Family Care Leaves Act. As such, employees can take leave for a variety of reasons: nursing care, child care, or to look after their parents (or in-laws) or spouse. Furthermore, following the introduction of the Act on Promotion of Women’s Participation and Advancement in the Workplace, effective from April 1, 2016, we prepared an integrated action plan covering the Act on Measures to Support Raising Next-Generation Children, and the Act on Promotion of Women’s Participation and Advancement in the Workplace. We have disclosed the content of this action plan, namely, initiatives over the next three years to reduce overall annual work hours in back-office departments and establish diversity-oriented hiring ratio targets.

Number of Employees Using Work-Life Balance Support Systems

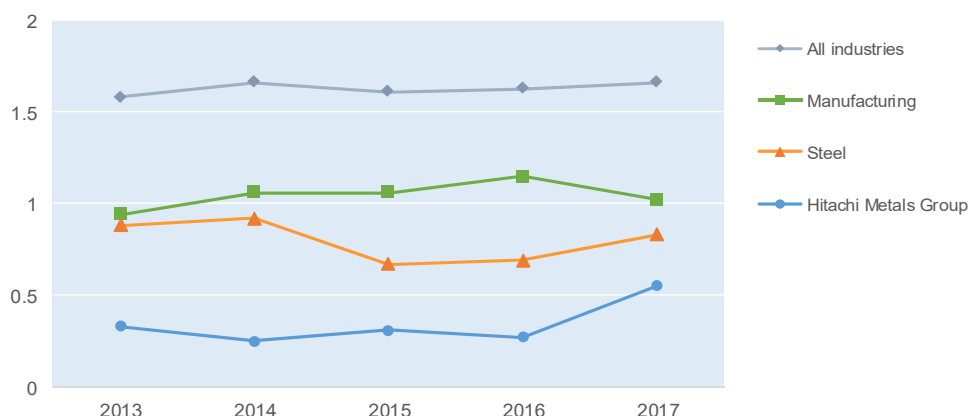
	FY2013	FY2014	FY2015	FY2016	FY2017
Number of employees taking child care leave	24	23	24	25	32
Number of employees using shorter working hours for child care	33	28	35	35	40
Number of employees taking nursing care leave	1	0	0	1	1
Number of employees using shorter working hours for nursing care	2	0	0	0	1

(3) Occupational Health and Safety**(a) Action to Eliminate Work Accidents**

The safety results for the Hitachi Metals Group in 2017 revealed seven accidents involving lost working time at Hitachi Metals and nine such accidents at the Hitachi Metals Group in Japan. Accordingly, as the number of accidents had reversed from a downward trend to a year-on-year increase, this year was one for reflection. In analyzing the details of accidents that occurred in 2017, we found that human error was the cause in more than 90% of the accidents, and accidents involving inexperienced workers (with less than three years' experience) in particular were increasing. In addition, we again saw accidents that could have turned into major disasters with one wrong step. Given this situation, in 2018, we promoted occupational health and safety activities throughout the entire Group, under the slogan, "Entrench the concept of 'Safety always comes first' in the culture of the Hitachi Metals Group with all-out efforts by each employee." Key strategies in this effort include: 1) instilling the concept of 'Safety always comes first;' 2) risk assessment of work and actions that may lead to major accidents or serious injuries; 3) OHSMS initiatives; 4) reinforcement of our foundations for health and safety by visualizing remaining risks, 5S3*tei** activities, and the point-and-confirm method; and 5) implementing planned risk assessment of chemical substances.

* 5S3*tei*: 5S is for five Japanese words beginning with "s"—*seiri* (orderly), *seiton* (tidy), *seiso* (clean), *seiketsu* (sanitary), and *shitsuke* (disciplined)—and 3*tei* represents three Japanese words beginning with "tei"—*teichichi* (designated place), *teihin* (designated tool), and *teiryō* (designated amount).

Frequency of Occupational Injuries (by calendar year)



* Frequency of Occupational Injuries = No. of occupational deaths or injuries ÷ total labor hours × 1,000,000

Frequency of Occupational Injuries

	2013	2014	2015	2016	2017
All industries	1.58	1.66	1.61	1.63	1.66
Manufacturing	0.94	1.06	1.06	1.15	1.02
Steel	0.88	0.92	0.67	0.69	0.83
Hitachi Metals Group	0.33	0.25	0.31	0.27	0.55

(b) Promoting Everyone’s Mental and Physical Health

We actively support health management that promotes good mental and physical aspects of health.

To promote physical health, we recommend that all employees undertake a secondary checkup following their regular medical examination, and we focus on lifestyle diseases and other health guidance. Regarding mental health, the stress check system is implemented every year. In addition to encouraging individuals to pay attention to their own mental health, we strive to improve the work environment through Groupwide analysis of the stress check results.

(4) Human Resources Training

(a) Basic Approach

With the Corporate Creed of “contributing to society by being the best enterprise” and the management policy of pursuing high-quality products, we aim to achieve new global growth through “transformation” and “challenge.” To grow as a global company amid turbulent market conditions, we need to cultivate human resources who can constantly develop and put on the global market products that are original.

Our approach to our people is the distillation of “strength through harmony,” our fundamental spirit since the inception of our company. Based on this philosophy, we continue to develop “People of action with global perceptions at Hitachi Metals” who are able to demonstrate their own personality and values through good teamwork.

Under the determination for each and every employee within the organization to be a key driver of growth, a sentiment incorporated into our communications symbol “Materials Mag!c,” we support our employees in developing their expertise so that they become an efficient workforce who can actively seek out challenges and take action to achieve success or solve problems, as well as being

shining examples for the Company.

(b) Training and Education Systems

We are building a personnel education system that links three elements: OJT, a personnel system that supports OJT, and OFF-JT for training, etc. OFF-JT training, etc., in planning fields sets personnel targets and requirements based on Hitachi Metals' Corporate Creed and Corporate Philosophy, plans training to match requirements, and implements training accordingly. We have formulated a training system by global categories of management, planning/administration, technical, sales, and core business divisions.

(c) Nurturing the Next Generation of Human Resources

In the interest of sustainable corporate growth, we are deliberately cultivating the next generation of human resources who will take responsibility for operations on a global scale.

• Cultivating the next generation of human resources

We have formulated a plan for cultivating the personnel who will take responsibility for the Company in the next generation, and are conducting regular employee rotations, tough assignments, and OFF-JT training programs. We also support employees who study abroad to earn MBAs.

• Cultivating local management personnel at each location

At Group companies outside Japan, we are supporting efforts to cultivate locally hired personnel, with an emphasis on future executive candidates. We are also proceeding with measures to cultivate such personnel and promote them into positions of responsibility.

(5) Employee Benefits and Welfare

To make the lives of employees and their families more affluent and stable, Hitachi Metals offers a comprehensive range of measures to support them. These include housing support systems such as providing dormitories and housing allowances, as well as asset-building savings and group insurance.

As one of the employee benefits and welfare initiatives to support self-help efforts and the independence of employees, in 2003 the Company implemented the "Cafeteria Plan System" (selective benefit and welfare system). This system offers options to meet the different lifestyles and needs of individual employees such as "ability and skill development," "child rearing," "nursing," and "health building," in addition to such conventional benefits as dormitories for single employees and company-run houses and provision of medical services for employees. Within a range of points that each employee has earned ("Cafeteria Points"), he or she can choose the type of support wanted, when necessary.

(6) Life Plan Support

In this day of declining birthrates and an aging population, and as lifestyles in old age become more diversified, having a definitive life plan is becoming more and more important. Hitachi Metals provides information to serve as the basis for life planning after retirement (retirement benefits, company pension, welfare pension, health insurance, employment insurance, etc.) and hosts Life Plan Seminars as an opportunity to think about one's current work style and one's lifestyle after retirement.

(7) Composition of Employees

	FY2013	FY2014	FY2015	FY2016	FY2017
Number of employees	6,362	6,306	5,966	5,858	6,315
Male	5,720	5,660	5,339	5,241	5,654
Female	642	646	627	617	661
Ratio of female employees	10.1	10.2	10.5	10.5	10.5
Average age (years)	42.1	43.0	43.5	43.9	43.6
Average service (years)	19.2	20.0	20.6	21.0	21.0
Number of female managers	10	10	11	12	16
Employment rate of people with disabilities	2.11	2.24	2.34	2.40	2.31

5. Responsibility to Shareholders and Investors

(1) Shares and Shareholders

The total number of outstanding shares in Hitachi Metals as of March 31, 2018 was 428,904,352, and there were 29,148 shareholders (including shareholders who only hold odd lots). The distribution of shares between owners is as follows:

Segment	Number of shareholders	Number of shares held (hundreds of shares)	Percentage of shares held
Financial institutions	71	613,323	14.32
Financial instruments business operators	50	24,999	0.58
Other domestic corporations	545	2,344,927	54.75
Foreign nationals	513	947,748	22.13
Individuals and others	24,991	352,253	8.22

Notes: 1. Shares representing less than one unit are not included.

2. Treasury shares (13,279 share units) are included in "Individuals and others."

(2) Basic Policy on Profit Allocation

As customer needs and technologies evolve and globalize, we regard it as our responsibility as a company to return appropriate profits to our shareholders in the long term, by strengthening our international competitiveness and expanding corporate value. With that responsibility in mind, our basic policy is to determine profit allocations to shareholders and internal reserves with the emphasis on medium- and long-term growth, giving overall consideration to the management environment, future business expansion, and business performance.

Internal reserve funds are used to invest in the development and commercialization of new materials, the creation of new business, the increased production and streamlining of competitive products, and other applications, with a view to future business expansion. We will also acquire our own shares, where appropriate, for purposes such as enabling dynamic capital policy, taking into account the necessity of such acquisition, the financial situation, the share price level, and other factors.

(3) Information Disclosure and IR Activities

To earn trust as a highly transparent "open firm," the Hitachi Metals Group is working to enhance in-house systems to appropriately implement prompt, accurate, and fair disclosure of company information and publish information in a timely manner.

Divisions work together, centered on the Hitachi Metals Corporate Communications Office, to disclose quarterly operating and financial results information, and hold presentations including operating results briefings for institutional investors and analysts. This effort extends beyond information on operating results, and we also actively disclose information on topics by separate business and our medium-term management plans via corporate website, etc. The Hitachi Metals Group communicates our management policies via integrated reports, corporate websites, and numerous other communications channels.

VI. Report on Environmental Aspects

1. Environmental Management


(1) The Hitachi Group's Environmental Vision

The Hitachi Metals Group promotes a “Low-Carbon Society,” “Resource Efficient Society,” and “Harmonized Society with Nature” as the three key pillars of the Hitachi Group’s Environmental Vision. We aim to realize both higher quality lifestyles and a sustainable society by resolving environmental issues through the social innovation business in collaboration with our stakeholders. In addition, we will fulfill our required role to achieve Hitachi’s long-term environmental targets called Hitachi Environmental Innovation 2050.


Environmental Vision

Hitachi will resolve environmental issues and achieve both a higher quality of life and a sustainable society through its Social Innovation Business in collaborative creation with its stakeholders.


The aim of Hitachi’s environmental management



Low-Carbon Society
Climate Change Mitigation/Adaptation



Resource Efficient Society
Saving and Recycling Resources





Harmonized Society with Nature
Preservation of Ecosystems

Long-term Environmental Targets

Hitachi’s resolution looking toward 2050 and 2030

Hitachi Environmental Innovation 2050

<p>For a low-carbon society</p> <p>through the value chain CO₂ emissions</p> <p>FY 2050 80% reduction</p> <p>FY 2030 50% reduction (compared to FY 2010)</p> 	<p>For a resource efficient society</p> <p>Build a society that uses water and other resources efficiently with customers and society</p> <p>Efficiency in use of water/resources FY 2050 50% improvement (compared to FY 2010 in the Hitachi Group)</p> 	<p>For a harmonized society with nature</p> <p>Impact on natural capital</p> <p>Minimized</p> 
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Environmental Action Plan

Set environmental action items and targets every 3 years in order to achieve the long-term targets

(2) Hitachi Metals Group Basic Environmental Protection Policies

Hitachi Metals Group Basic Environmental Protection Policies

Philosophy

Hitachi Metals' Corporate Creed is to "contribute to society by being the best enterprise." In line with this, we regard it as crucial to ensure that humanity's shared environmental resources can be passed down to future generations in the best possible condition. Accordingly, throughout our operations we treat environmental considerations as an issue of the highest importance and strive actively to promote environmental protection efforts on both the global and local community levels.

Slogan

- With a deep awareness that environmental protection is major issue for all humanity, fulfill social responsibilities by striving to establish a sustainable society in harmony with the environment regarding it as one of the essential aspects of corporate activity.
- Contribute to society by developing highly reliable technologies and products in response to needs for environmental protection and the limited nature of resources.

Business Conduct Guidelines

1. Compliance with environmental laws and regulations, and prevention of pollution

Comply with all applicable laws and regulations concerning environmental issues on all levels, from international laws to national, regional, and local pacts. Establish voluntary environmental standards as needed in order to assure compliance.

Identify potential environmental problems and take action to prevent pollution. In the event that environmental problems have happened, take appropriate countermeasures to minimize environmental impact.

2. Maintenance of environmental organizational structure and enhancement of environmental supervision

Maintain an organizational structure that includes leadership by an executive responsible for managing environmental issues, as well as an underlying administrative structure. Promote environmental protection activities by applying voluntary environmental standards and establishing clear environmental-related goals.

Additionally, strive to continually improve our environmental management through confirming that our environmental protection activities are being carried out in an adequate, effective, and proper manner.

3. Promotion of global manufacturing with consideration of LCA (Life Cycle Assessment)

Endeavor to reduce the environmental burden at entire life cycle, including R&D, product design, manufacture, distribution, sale, use, and disposal. Promote the following as global manufacturing priorities: environmentally conscious products in society, prevention of global warming, conservation and recycling of resources, chemical management, as well as conservation of biodiversity.

4. Environmental consideration at the sites all over the world

Consider environmental impact in the areas around our manufacturing sites, and strive to carry out policies responsive to the requirements and needs of the local communities.

5. Education and training to increase environmental awareness

Educate and train employees about environmental protection and importance of compliance with environmental laws and regulations to raise employees' awareness of environment with a broad perspective.

6. Information disclosure

Promote positive communication through the disclosure of information regarding environmental protection activities to stakeholders, and strengthen the mutual understanding and collaborative relationship.

Formulated April 1, 2010

Revised December 1, 2016

(3) The Hitachi Metals Group's Environmental Management Promotion Structure

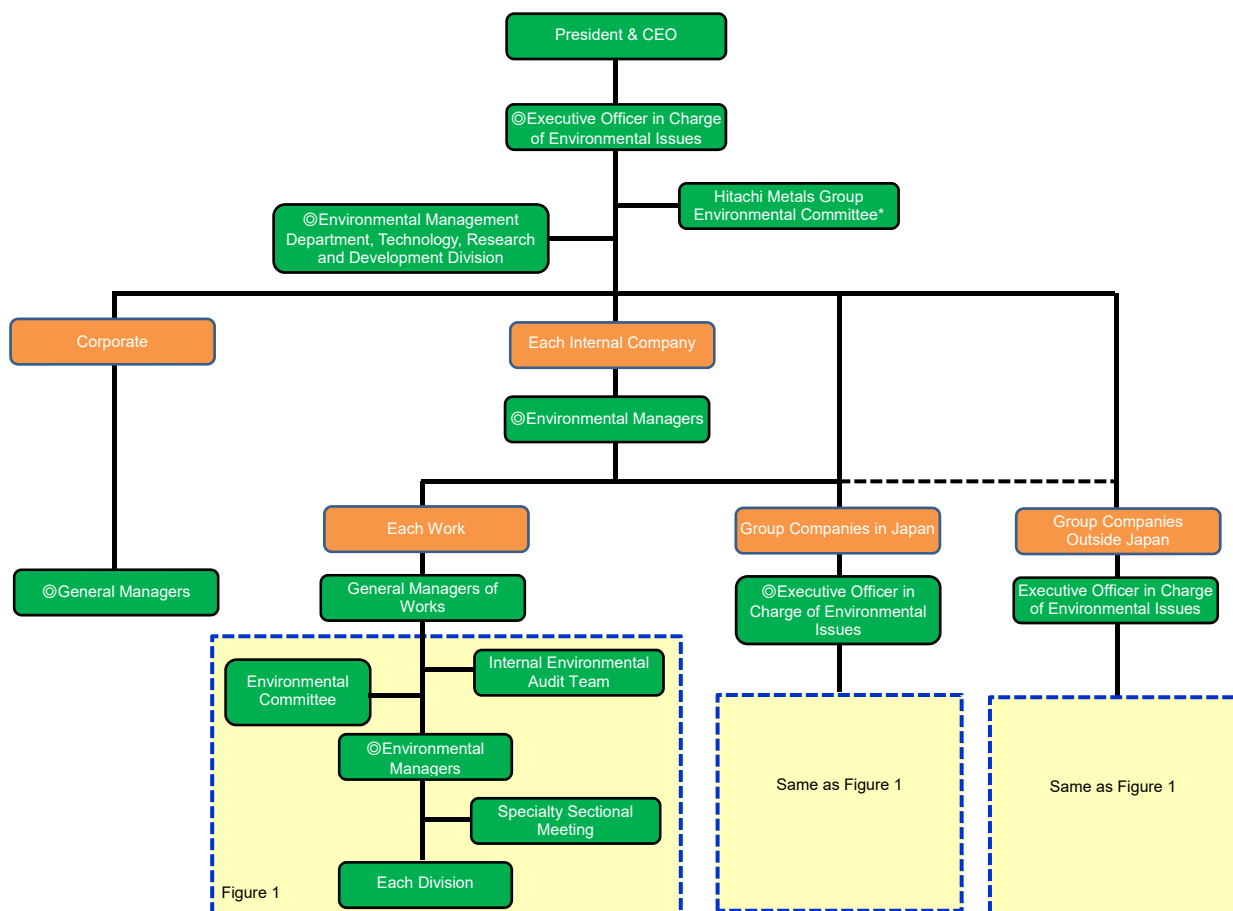
Environmental management within the Hitachi Metals Group hinges on the Environmental Management Department, Technology, Research and Development Division, which promotes environmental management activities in cooperation with environmental managers at internal companies. The executive officer in charge of environmental issues at Hitachi Metals heads up the Environmental Committee.

In April 2010, we formulated the Hitachi Metals Group Basic Environmental Protection Policies, which clarify our companywide commitment to environmental management.

Especially, to advance environmental management suited to a corporation that does business globally, we strive to ensure that the basic environmental protection policies are thoroughly shared within the Hitachi Metals Group, taking into account national and regional differences. Our efforts to reduce environmental burden and our response to environmental risk are based on these shared policies.

Policies and targets related to environmental activities are reviewed and revised annually at the Hitachi Metals Group Environmental Committee.

The Hitachi Metals Group Environmental Management Promotion Structure



* The Hitachi Metals Group Environmental Committee is attended by the following members, marked with (©) in the above chart: the executive officer in charge of environmental issues, environmental managers at each internal company, environmental managers at the Works, the general managers of corporate divisions, the executive offices in charge of environmental issues of Group companies, and the staffs of the Environmental Management Department, Technology, Research and Development Division.

(4) Fiscal 2016–Fiscal 2018 Medium-Term Environmental Action Plan and Fiscal 2017 Results

The Hitachi Metals Group's Medium-Term Environmental Action Plan for fiscal 2016 to fiscal 2018, along with results and assessments for fiscal 2017, are summarized in the table below.

	Items	Action Target	FY2016			FY2017			Target Values (FY)
			Target	Result	Rating	Target	Result	Rating	2018
Management	Adhere to environmental compliance practices and reduce risks	Internal audit implementation rate	100%	100%	✓	100%	100%	✓	100%
	Cultivate environmental literacy	Implement environmental auditor development training	1	1	✓	1	3	✓	1
		e-learning attendance rate	100%	100%	✓	100%	100%	✓	100%
	Improve environmental activity level	GREEN21-2018	220GP	252GP	✓	320GP	354GP	✓	420GP
	Contribute to protection of ecosystems	Number of ecosystem protection initiatives	1,530	1,532	✓	1,560	1,565	✓	1,600
Products	Improve environmental performance	Sales ratio of key environmentally conscious products	17%	20.8%	✓	19%	20.7%	✓	21%
		Rate of reduction in resource consumption	10%	56%	✓	15%	66%	✓	20%
	Conduct assessments	Environmentally conscious design assessment and LCA implementation rate	0%	0%	✓	50%	33%	✗	100%
Factories and offices	Reduce energy consumption	Reduction in energy consumption ratio per production unit (Base year: FY2005)	10%	6.1%	✗	11.5%	6.6%	✗	13%
		Year-on-year reduction in transportation energy (in Japan) (Year on year)	1%	0.1%	✗	1%	8.7%	✓	1%
	Limit output of waste	Improve rate of waste and valuables generated per production unit (Base year: FY2005)	7%	8.3%	✓	7.5%	11.0%	✓	8%
	Promote waste recycling	Rate of reused resources	70%	76%	✓	72%	79%	✓	74%
	Promote more efficient use of water	Improvement ratio of water use per production unit (Base year: FY2005)	10%	15%	✓	12%	24%	✓	14%
	Reduce output of chemical substances	Improve per unit rate of chemical substances released into the atmosphere (Base year: FY2006)	30%	17.4%	✗	32%	19.2%	✗	34%
Collaboration with stakeholders	Social contribution	Number of projects undertaken, including environmental education and Light-Down Campaign (accumulated total)	100	148	✓	200	300	✓	300
	Enhance information disclosure content and practices	Enhance information disclosure to stakeholders and opportunities for reciprocal communication, and improve environment brand value	CSR Report, response to questionnaires, such as one from CDP		✓	CSR Report, response to questionnaires such as those from CDP and the Nikkei Environmental Management Survey		✓	—

(5) Environmental Accounting

The Hitachi Metals Group has introduced environmental accounting to allocate corporate resources appropriately and continuously improve the efficiency of environmental investments and activities. The Group also aims to increase the understanding of its stakeholders by disclosing information about the effect and efficiency of its activities.

Environmental costs include things like environment-related capital investment, equipment maintenance and administration costs, and R&D costs.

Environmental effects include economic effects measured in monetary terms and categorized under waste processing and recycling, energy conservation, and others (R&D, recycling of products and packing materials, etc.).

The results for fiscal 2017 is as follows:

(a) Environmental Costs

Our environmental costs in fiscal 2017 were ¥7.56 billion in expenses and ¥3.18 billion in investment, for a total of ¥10.74 billion.

(b) Environmental Effects

The economic effects amounted to a total of ¥8.76 billion, primarily due to waste elimination, recycling, and energy conservation.

(c) Results of Environmental Accounting

■ Environmental Costs

(100 million yen)

Cost Classification			FY2016		FY2017	
			Expense	Investment	Expense	Investment
Business area costs	Pollution prevention	12.9	1.5	14.4	10.5	
	Global environmental preservation	4.0	1.4	7.0	20.5	
	Resource recycling	24.2	0.3	26.7	0.5	
Subtotal		41.1	3.1	48.2	31.6	
Upstream and downstream costs		0.0	0.0	3.3	0.2	
Management activity costs		7.4	7.4	6.0	0.0	
Research and development costs		26.1	26.1	19.8	0.1	
Community activity costs		1.2	0.0	0.1	0.0	
Others		0.2	0.0	0.7	0.0	
Total		71.6	3.5	75.6	31.8	

■ Environmental Effects

(100 million yen)

Economic Effects	Item	FY2016	FY2017
	Waste processing and recycling	72.1	82.4
Energy conservation	5.2	2.4	
Others	2.6	2.9	
Total		79.9	87.6

- Scope of disclosure: The Hitachi Metals Group in Japan
- Calculation period: April 1, 2017 to March 31, 2018

(6) Integrated Environmental Management System (Integrated EMS)

The Hitachi Metals Group has introduced ISO 14001 as its environmental management system.

We began acquiring certification for individual factories in 1997, and built integrated Environmental Management Systems (integrated EMS) at each of four internal companies (Specialty Steel Company, Magnetic Materials Company, Functional Components Company, and Cable Materials Company). This action was prompted by the increasing necessity of close linkage with headquarters departments in areas such as engineering, planning, and sales, to comply with product environmental regulations and expand sales of eco-products.

ISO 14001:2015, revised in September 2015, requires that environmental management be in balance with the strategic direction of business and integrated with business processes. We strove to transition to the 2015 requirements as we worked toward an integrated EMS at our internal companies, and completed the transition during fiscal 2017.^(Note)

Note: Our four internal companies transitioned in fiscal 2017. Hitachi Metals' consolidated Group companies are scheduled to implement the transition by July 2018.

(7) Environmental Auditing

The Environmental Management Department, Technology, Research and Development Division conducts companywide environmental auditing in an attempt to achieve thorough adherence and compliance with environment-related laws and regulations, appropriate EMS management regarding environmental action plan, and comprehensively mitigate environmental risks.

In fiscal 2017, environmental affairs auditing was conducted at seven sites in Japan and eight sites outside Japan in conjunction with internal auditing. While 60 cases of minor non-conformance were revealed, we confirmed that there were no major non-conformities requiring administrative guidance.

At the same time, in fiscal 2017 we underwent internal auditing by Hitachi, Ltd. Environmental management auditing was conducted at six sites in Japan and five sites overseas. As a result, 21 cases involving minor non-conformance were discovered, and appropriate measures were taken in response.

(8) Environmental Education and Awareness Promotion

The Hitachi Metals Group has set up workplace-specific training and training systems as part of our EMS, and has established clearly defined roles for companywide training and individual factory-level training for further improvement of the employees' environmental awareness as well as the enhancement of knowledge and skills relevant to each workplace.

Environmental Training Systems

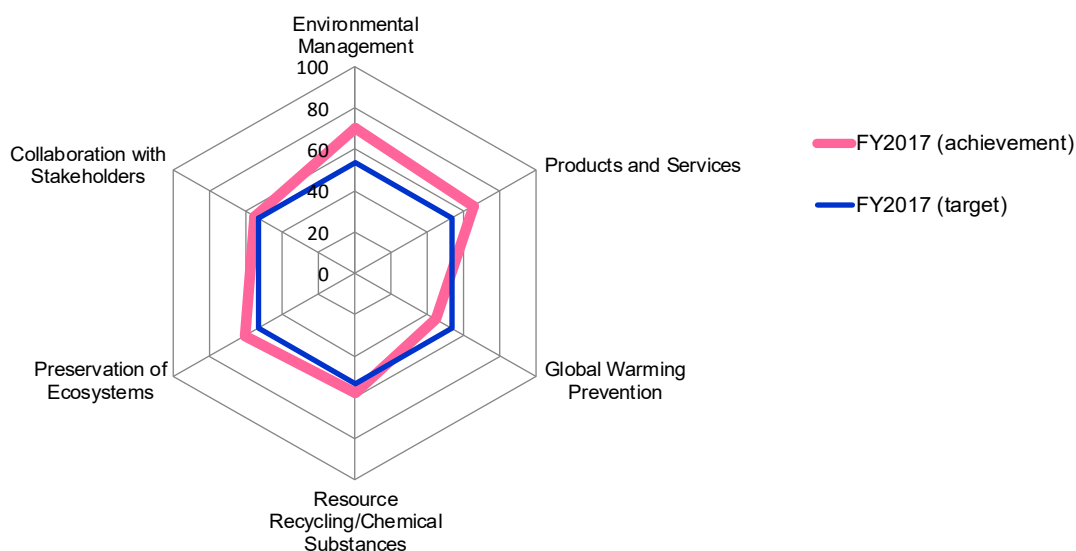


(9) Environmental Management Level “GREEN21-2018” Activities

The Hitachi Group promotes “GREEN21” as a system to assess point scores for ongoing improvement in environmental activities and for raising the level of activity. It revised GREEN21 for the fourth time in fiscal 2016, and pursues activities under GREEN21-2018 during the three years from fiscal 2016 to fiscal 2018.

In GREEN21-2018, activities are categorized under the six items in the table below, and are assessed and scored in accordance with the achievement status of the Environmental Action Plan. Additional points are provided for upward revision of targets, external awards, etc.

In fiscal 2017, the Hitachi Metals Group scored 354 Green Points (GPs) in six categories, surpassing our target of 320 GPs. We will continue our efforts to achieve the targets of the Environmental Action Plan and make further progress under GREEN21.



No.	Category (Rating Form)	Main Rating Contents
1	Environmental management	Implementation of environmental audits, regulatory compliance, environmental education (e-learning)
2	Products and services	Improvement of environmental performance, implementation status of eco-design assessment, use of recycled materials, product recycling
3	Global warming prevention	Improvement in energy consumption per production unit, improvement in transportation energy consumption, adoption of renewable energy
4	Resource recycling/chemical substances	Reduction of waste generation per production unit, increased recycling rate, reduction of water usage, reduction of chemical substance emissions
5	Preservation of ecosystems	Surveying, planning, and implementation of measures for preservation of ecosystems
6	Collaboration with stakeholders	Environmental education outside the Company, greening and cleanup activities, Light-Down Campaigns, external awards and certifications

GREEN21-2018 Targets and FY2017 Achievement

	FY2016	FY2017	FY2018
Target	220	320	420
Achievement	252	354	—

(10) The State of External Communications about the Environment**(a) Participation in Exhibitions**

The Hitachi Metals Group participates in various exhibitions and introduces its environmentally conscious technology, products, etc. The Group tries to show how its products contribute to the reducing of environmental burden.

Main Exhibitions Participated In (Fiscal 2017)

Event date	Exhibition name (location)
April 19–21, 2017	TECHNO-FRONTIER 2017 (Chiba)
May 17–19, 2017	JECA Fair 2017—The 65th Japan Electrical Construction Association Fair (Tokyo)
May 19–20, 2017	A Prosperous Future Together 2017 (Tokyo)
May 24–26, 2017	The Automotive Engineering Exposition 2017 (Yokohama)
May 29–30, 2017	Powertrain Innovation Day 2017 (Stuttgart, Germany)
June 13–16, 2017	DIE & MOULD CHINA 2017 (Shanghai, China)
June 19–25, 2017	The 52nd International Paris Air Show (Paris, France)
August 1–3, 2017	Plumbing & Sanitary Materials and Equipment Show 2017 (Tokyo)
September 7–9, 2017	Plumbing & Sanitary Materials and Equipment Show 2017 (Osaka)
October 9–11, 2017	EVS30 (The 30th International Electric Vehicle Symposium & Exhibition) (Stuttgart, Germany)
October 25–November 5, 2017	The 45th Tokyo Motor Show 2017 (Tokyo)
November 28–December 1, 2017	The 19th China Dongguan International Mold and Metalworking, Plastics and Packaging Exhibition (Dongguan, China)
November 29–December 1, 2017	The 5th Mass-Trans Innovation Japan 2017 (Chiba)
February 28–March 2, 2018	The 9th International Rechargeable Battery Expo (Tokyo)
March 10–14, 2018	ELECRAMA 2018 (Greater Noida, India)

(b) External Awards

The Hitachi Metals Group's products and environmental activities won the following five external awards in fiscal 2017.

Company name	Product/technology awarded	Title of award	Awarding body
Hitachi Metals, Ltd./ Mitsubishi Hitachi Tool Engineering, Ltd.	Development of ultra-heat-resistant nickel-based alloy processing insert tools	The Japan Society for Precision Engineering (JSPE) Technology Award of fiscal 2017*	The Japan Society for Precision Engineering
Cable Materials Research Laboratory, Hitachi Metals, Ltd.	High-speed transmission metal cable (OMNIBIT™)	Fiscal 2017 Kanto Local Commendation for Invention, Invention Encouragement Prize	Japan Institute of Invention and Innovation
Metglas, Inc.	SC Smart Business Recycling Program	Recycling efforts for Fiscal 2017	South Carolina Department of Health and Environmental Control (SC DHEC)
Waupaca Foundry, Inc.	For outstanding commitment to energy efficiency practices	2017 Environmental Stewardship Award	State of Wisconsin Focus on Energy
Waupaca Foundry, Inc.	Energy saving, reduction of waste and water usage, reduction of emissions of air polluting substances	Environmental Stewardship Award	Kawasaki Motors Manufacturing Co.

* Hitachi Metals, Ltd. and Mitsubishi Hitachi Tool Engineering, Ltd. also won the fiscal 2016 JSPE Best Paper Award from The JSPE for "Analysis of Coating Technologies for Cutting Tools" on March 14, 2017.

(11) Consideration for the Preservation of Biodiversity

The Hitachi Metals Group's ecosystem preservation measures include tree planting and forest conservation activities, cleanup activities in areas surrounding plants, and environmental education.

(a) Examples of Major Ecosystem Preservation, Tree Planting, and Forest Conservation Activities



"Harmony Forest" tree planting activities (460 sawtooth oak trees planted) (HMY, Ltd.)



Cleanup activities at Ramsar sites Nakaumi and Shinji-ko lakes (Yasugi Works, Hitachi Metals, Ltd. and HMY, Ltd.)

Community beautification campaign activities (Hitachi Metals Neomaterial, Ltd.)



Community cleanup activities along Juogawa River (Ibaraki Works, Hitachi Metals, Ltd.)

Kazusawagawa River cleanup activities



Group cleanup activities at Tottori Sand Dunes (Hitachi Ferrite Electronics, Ltd.)

2. Environmental Consideration in Products

The Hitachi Metals Group considers “Thinking about the next generation—An environment friendly solution” an important managerial issue. We contribute to the realization of a sustainable society through the creation of new products and new technologies that give rise to such needs, as well as through the provision of advanced environmentally conscious products.

(1) Environmentally Conscious Vision in Products and Services

The Hitachi Metals Group is focusing attention on environmental and energy sectors as we promote the development of new products with our next-generation flagship products. What is more, for the development and design of new products, we promote environmentally friendly product development based on the “Hitachi Group Eco-Design Management Guidelines” (revised version), which consider product life cycles.

R&D Case Studies

Sector	Environmental key words	R&D field
Energy	Renewable energy	Materials for solar cells (amorphous cut cores, dust choke coils, target materials, plated wires) Materials for wind power generation (rare earth magnets, amorphous metal materials, FINEMET cores, magnet wires)
	Highly efficient power generation	Ultra heat-resistant metal materials, precision casting blades for turbine wheels, SOFC* ¹ components (interconnector materials, heat-resistant components)
	Energy-saving/electricity storing/electricity transforming/smart grids	Amorphous metal materials for low-loss transformers, electrode components for secondary batteries, high-efficiency amorphous motor components
Automobiles	Exhaust-gas regulations	Components that help clean exhaust gas
	Reduced weight and low fuel consumption	Heat-resistant cast steel materials, lightweight components for chassis, lightweight aluminum wheels, CVT* ² belt materials, magnets for EPS* ³ , brake hoses, various sensors
	Hybrid/electric vehicles	Rare earth magnets for motors, amorphous metal materials, FINEMET cores, clad metals for secondary battery electrodes, high-efficiency motor magnet wires, battery harnesses, quick charger components
Rolling stock	High speed railways	Cables for rolling stock
Electronics	More efficient, compact, lighter weight	Communication modules, multilayer ceramics components
	Electromagnetic field	Magnetic components for EMC* ⁴
	Energy-saving electrical appliances	Air conditioning/refrigerator compressor magnets
	Semiconductors/liquid crystal panels	Mass flow controllers, linear stages
	Substances of environmental concern	Components free from environmental concerns
Industries/ Infrastructure	Long-life products	Long-life die steel, carbide rolls, corrosion/heat-resistant fittings, Eco-Green cables
	Aircraft components	Highly heat-resistant and corrosion-resistant alloys
Medical	Energy-saving, high-precision	Cables for medical applications

*1 Solid Oxide Fuel Cell

*2 Continuously Variable Transmission

*3 Electronic Power Steering

*4 Electro-Magnetic Compatibility

(2) Expansion of Key Environmentally Conscious Products

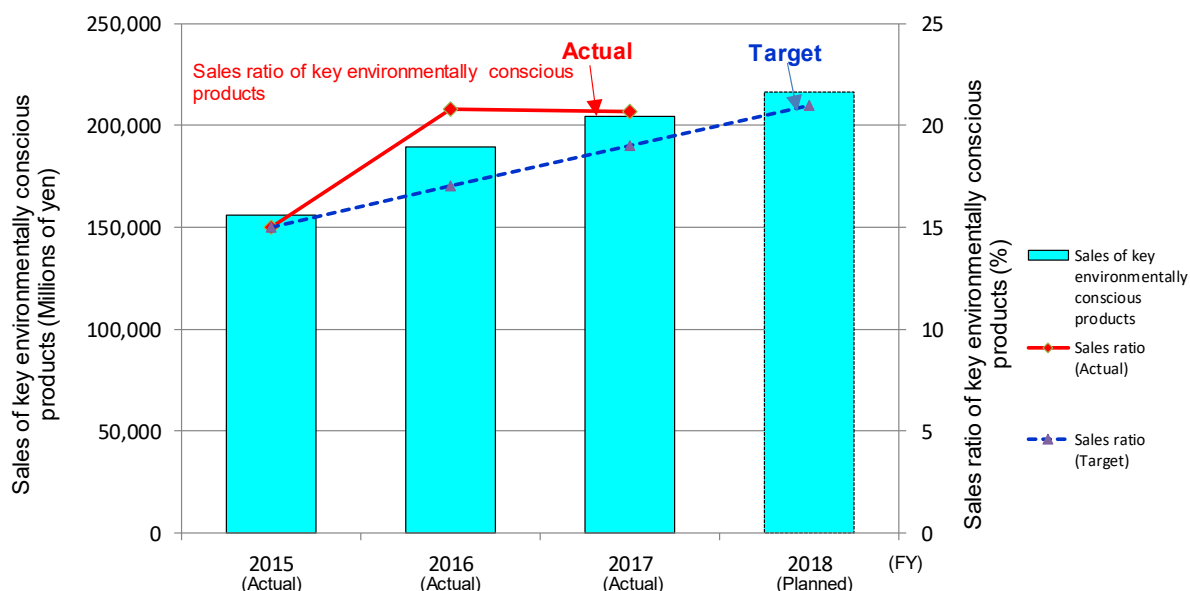
Considering our management priorities with regard to products in fiscal 2016, we have set targets for an increase in sales of “Key environmentally conscious products,” and worked to increase the sales ratio of these products.

These are products targeted for growth based on management strategy. They also contribute significantly to resolving environmental issues such as climate change and the efficient use of resources.

In fiscal 2017, we succeeded in raising the actual sales ratio of key environmentally conscious products to 20.7%, above the target ratio of 19%. This achievement is attributable to an expansion of applicable products along with sales growth.

We will continue to expand sales of these products in line with our management strategy while contributing to the resolution of society’s environmental issues.

Sales and Sales Ratio of Key Environmentally Conscious Products



(3) Revision of Eco-Design Assessment

Eco-design that takes into account product life cycles is now required as a result of the revision of ISO 14001:2015, the establishment of IEC 62430, and national regulations for energy-saving products. The Hitachi Metals Group revised its “Eco-design assessment” and “Life Cycle Assessment (LCA)” in fiscal 2016. Under the revised versions, assessments are conducted from a life cycle perspective in accordance with IEC 62430. Using these assessment tools, we carry out product development and design that consider the environment throughout the entire life cycle of the product, from procurement and manufacturing to use and disposal by the customer.

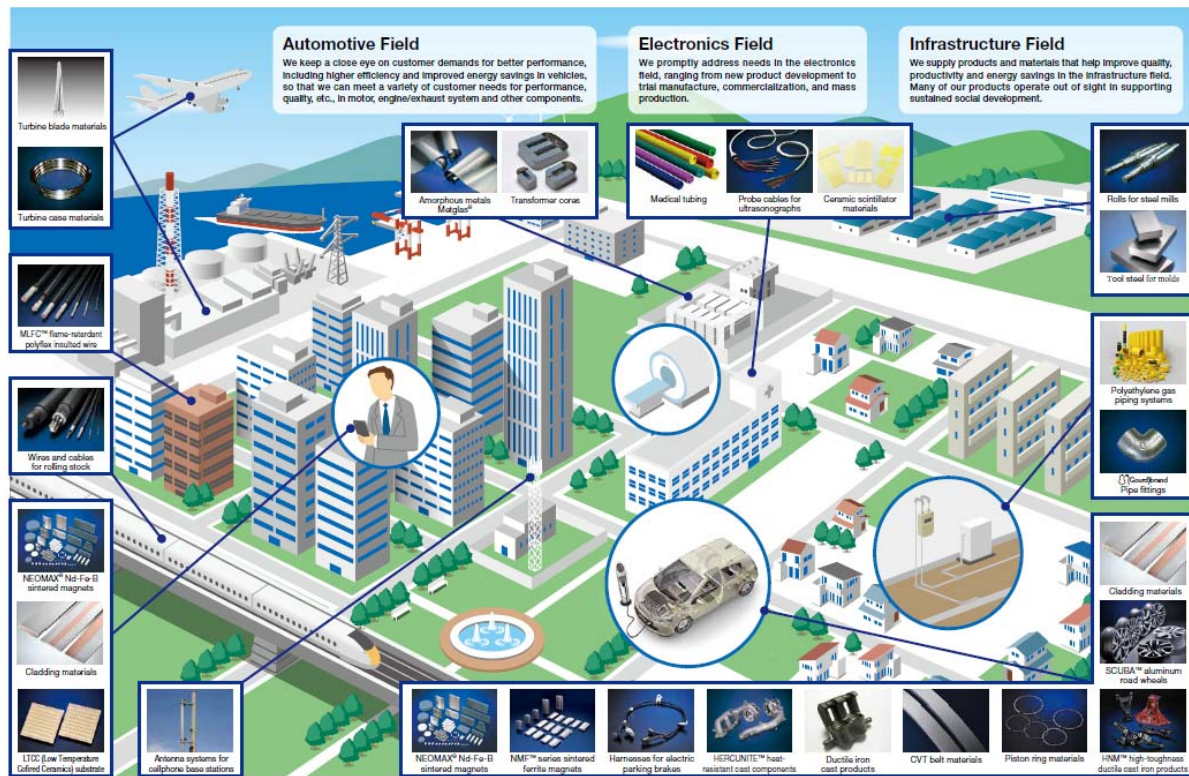
Items and Revised Points of the Eco-Design Assessment (Revised Version)

Evaluation Items		Design for Environment (DfE) Evaluation Points
DfE on procurement		Reduced use of rare metals, expanded use of recycled materials, increased energy efficiency by suppliers
DfE on manufacturing	Climate change	Reduced electricity and gas use during manufacture, improvement in energy-use processes, productivity improvements
	Resource recycling	Improvement in yield rate, recycling promoted in processes, reduced waste, reduced water use
	Prevention of environmental pollution	Reduced emissions of toxic chemical substances, lowered air emissions of NO _x , SO _x , and dust
DfE on transportation		Improvement in loading efficiency, modal shift, reduced transportation distance and number of trips, reduced packing materials
DfE on use	Climate change	Energy saving and low fuel consumption during product use, higher environmental functions, improved product utilization rate
	Resource recycling	Product compacting and lighter weight, improvements in durability, abrasion resistance, and life spans, improvements in heat resistance, rigidity, and strength
	Prevention of environmental pollution	No use of toxic chemical substances, improvement in exhaust gas, lower noise and vibration
DfE on disposal and recycling		Improvement in recyclability rate, improvement in ease of disassembly, improvement in degradability, provision of product environmental information

(4) The Hitachi Metals Group's Environment- and Energy-related Products

The Hitachi Metals Group develops and delivers materials and products in fields ranging from generators and transformers, through factories, plants, offices, homes, and vehicles, contributing to the environment and energy in wide-ranging aspects of society.

List of Environment- and Energy-related Products



(5) Introducing New Products Contributing to Reduced Environmental Loads

HINEX™ series of long-life High-Speed Steel (HSS) rolls

Roll Business Unit, Specialty Steel Company

The Roll Business Unit, Specialty Steel Company developed the HINEX™ series of HSS rolls using a new production method, which displays superior resistance to abrasion and roughness, for use in the hot rolling of steel products, and has been marketing HINEX™ since 1988. HINEX™ rolls display three to five times higher abrasion resistance compared to rolls constructed using conventional materials such as high-chromium cast iron or grain-type rolls, and their longer lifespan contributes to the effective use of resources.



Exterior photograph of HINEX™ rolls

We have also developed and are providing centrifugal casting HSS rolls made using conventional production methods. In addition, we continue to develop, improve and market rolls with superior abrasion resistance and excellent black oxide layer stability, with the aim of preventing damage during rolling.

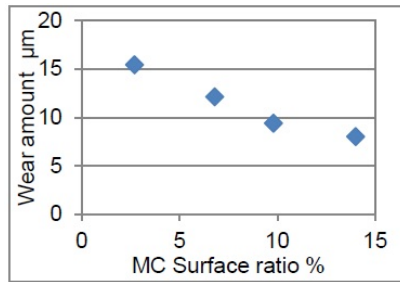


Fig. 1 Correlation between MC amount and wear amount

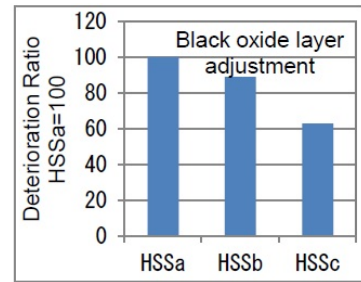
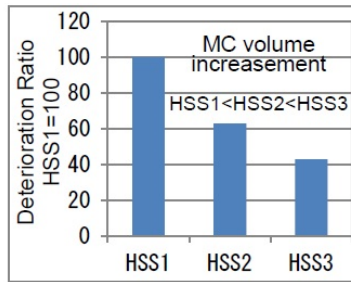


Fig. 2 Comparison of HSS material quality and the degree of surface damage

Improvement resulting from an increase in amount of high-hardness carbides (MC)

High-performance ferrite magnets (NMF™ – 12J, 12K, 15G, 15J)

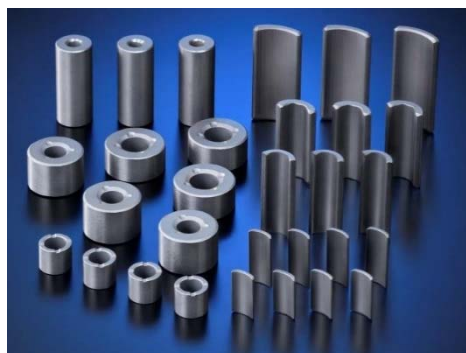
Magnetic Materials Company

Hitachi Metals took the lead in mass producing and enhancing the performance of Sr-La-Co ferrite magnets (NMF™ – 9 series) from the late 1990s, and Ca-La-Co ferrite magnets (NMF™ – 12 series) from 2007, in response to demand for higher performance ferrite magnets with superior cost performance. Furthermore, in 2016 we began mass production of the NMF™ – 15 series, which features ferrite magnets with the world's best magnetic properties.

In addition, we added products in the high-coercive-force domain (NMF™ – 12J, 12K) to the NMF™ – 12 series. These products are needed for use in electric generators for hybrid and electric vehicles, which require magnets with high resistance to demagnetization. (The figure on the upper right shows a map of the magnetic properties of the NMF™ series of ferrite magnets.)



Map of magnetic properties of the NMF™ series of ferrite magnets



Exterior photograph of the NMF™ series of ferrite magnets

High strength lightweight ductile cast iron OMEGA KNUCKLE®

Functional Components Company

—Using high-precision CAE and assessment technologies to create lightweight chassis components for automobiles to help increase fuel efficiency—

Chassis components for automobiles are required to be lightweight from the viewpoint of greater fuel efficiency, while also maintaining strength and rigidity.

In our lightweight ductile cast iron OMEGA KNUCKLE®, we were able to efficiently achieve a lighter weight, while maintaining strength and rigidity by using high-precision CAE (Computer Aided Engineering) and assessment technologies to create a thin-walled, semi-hollow cross-sectional structure (17% lighter than our previous products).

By providing such ductile cast iron components worldwide from our manufacturing bases, the Functional Components Company contributes to the prevention of global warming through improved automobile fuel efficiency.



Exterior photograph of the high strength ductile cast iron OMEGA KNUCKLE®



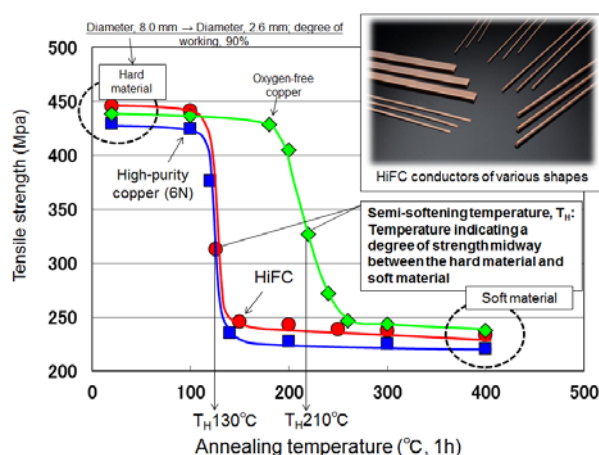
Cross-sectional photograph of the hollow opening of the OMEGA KNUCKLE®

HiFC™ high-performance pure copper

The Cable Materials Company developed HiFC™ (Hitachi Fine Copper) by using very small amounts of active metals to form compounds with impurities such as sulfur that are dissolved in copper, thereby eliminating the negative impact of such impurities and bringing out the characteristics of copper.

HiFC™ displays nearly the same softening properties as high-purity copper (6N, 99.9999% purity), which contains almost no impurities. Because this material gets softer at lower temperatures than oxygen-free copper, machining strain can be removed with less annealing energy. This material has applications for many conductor products, including cables and magnet wire, making it possible to reduce energy in the manufacturing process. In addition, its excellent electrical conductivity helps to make devices more efficient and conserve energy (received the 21st Century Invention Prize of the FY2014 National Invention Awards).

Cable Materials Company



Comparison of the softening properties of HiFC™ and various copper materials

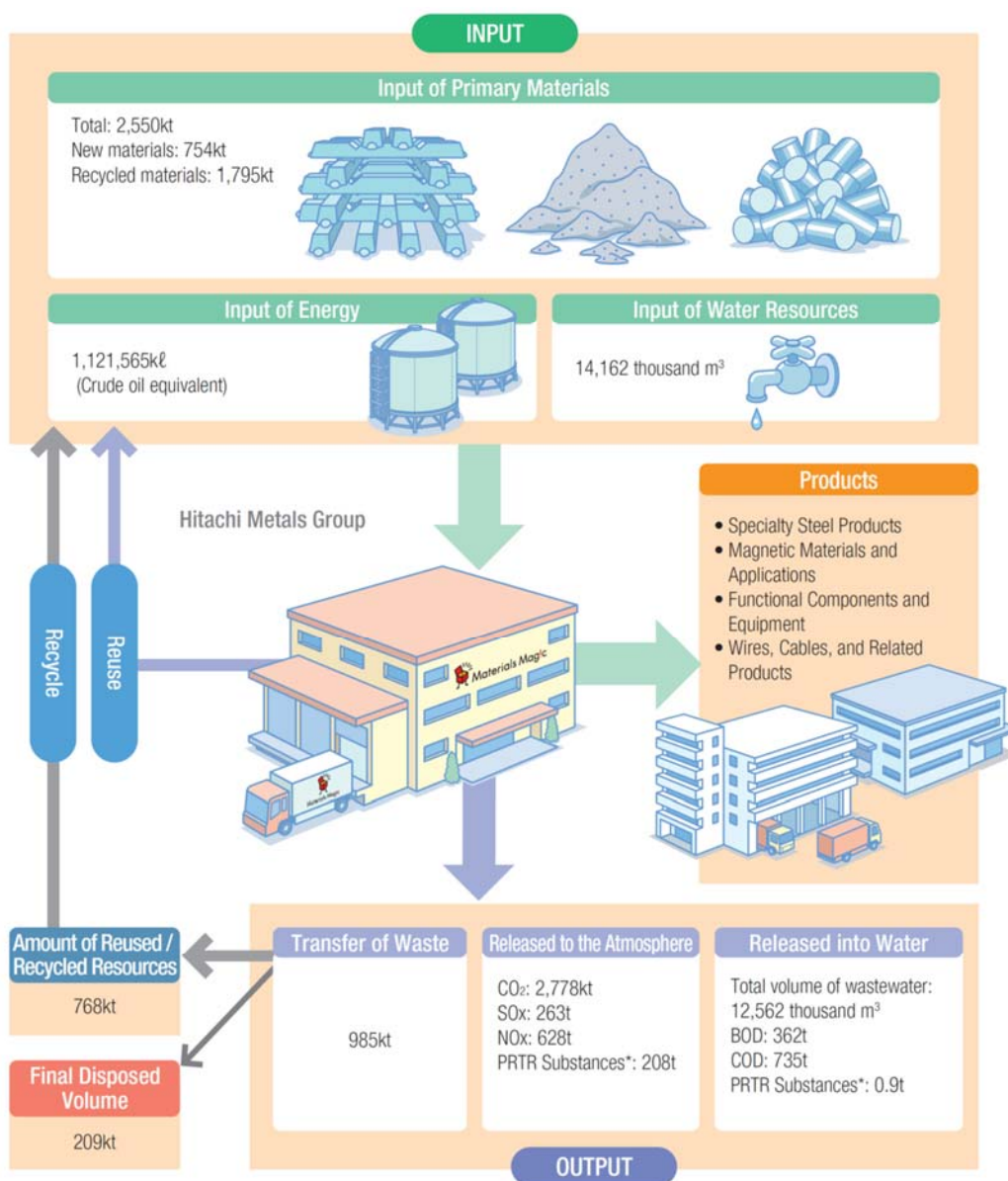
3. Environmental Consideration in Manufacturing

This is a graphical representation of the balance of materials in manufacturing processes at the Hitachi Metals Group for fiscal 2017.

The Hitachi Metals Group is promoting the reduction of the environmental burden in two directions: reducing the volume of input through the efficient use of resources and energy, and reducing the volume of output by controlling atmospheric releases and wastewater discharges, reducing and recycling waste, and so on.

(1) Material Balance

The Hitachi Metals Group's Material Balance for Fiscal 2017 (Global)



* PRTR Substances: Substances targeted by the PRTR Law in Japan

(2) Global Warming Prevention

The Hitachi Metals Group is a materials manufacturer and uses much energy in its manufacturing processes. For this reason, the Group positions the prevention of global warming as a management priority. The Group has established medium- to long-term targets and is now working on energy conservation measures to reduce its energy consumption rate and CO₂ emissions.

(a) Vision for Preventing Global Warming

The Hitachi Metals Group worked toward the following targets in fiscal 2017, which was the second year of our three-year plan covering fiscal 2016 to fiscal 2018.

● Targets for Fiscal 2017 in Medium-Term Environmental Action Plan

Improvement of energy consumption ratio per production unit^{*1} at least 11.5% from the base year, fiscal 2005 (global)

*1 (Energy consumption converted into crude oil units) ÷ (amount of activity^{*2})

*2 A figure representing the scale of business activities such as sales or production weight

● Fiscal 2017 Results

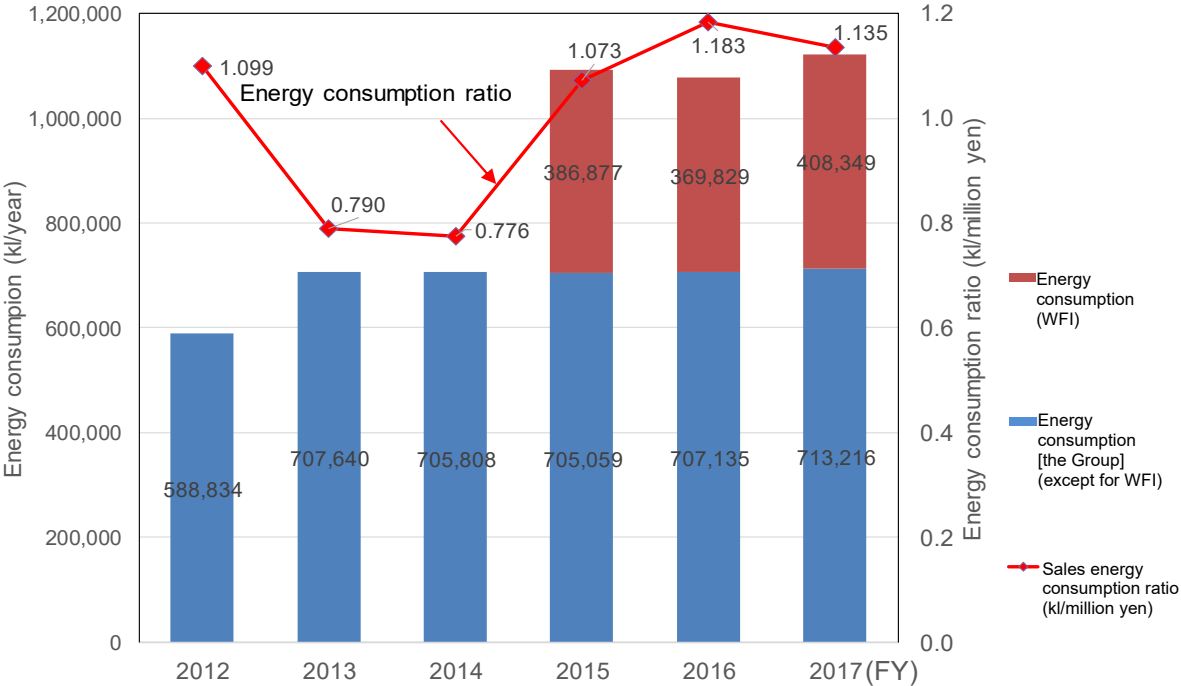
Improvement of energy consumption ratio per production unit: 6.6%

(b) Trends in Energy Consumption and Sales Energy Consumption Ratio per Production Unit

The Hitachi Metals Group's global energy consumption in fiscal 2017 was equivalent to 1,122 thousand kl of crude oil, up 45 thousand kl from fiscal 2016. However, the energy consumption ratio per production unit compared to revenues improved by approximately 4%, from 1.183 to 1.135, due to the impact of an 8.5% increase in revenues compared to the previous fiscal year. (Revenues include an increase of 4.9% due to rising raw material prices and the impact of foreign exchange rates.) Nevertheless, results fell short of our Environmental Action Plan targets, due to an increase in energy consumption for winter heating, etc., owing to a harsh winter in North America, as well as a decline in production operating rates at some sites.

To reduce energy consumption even further, we will continue to pursue energy-saving activities linked to *monozukuri*. The emphasis is on omitting excess processes, improving efficiency, boosting yield rate, and installing energy-saving equipment.

Trends in Energy Consumption and Sales Energy Consumption Ratio

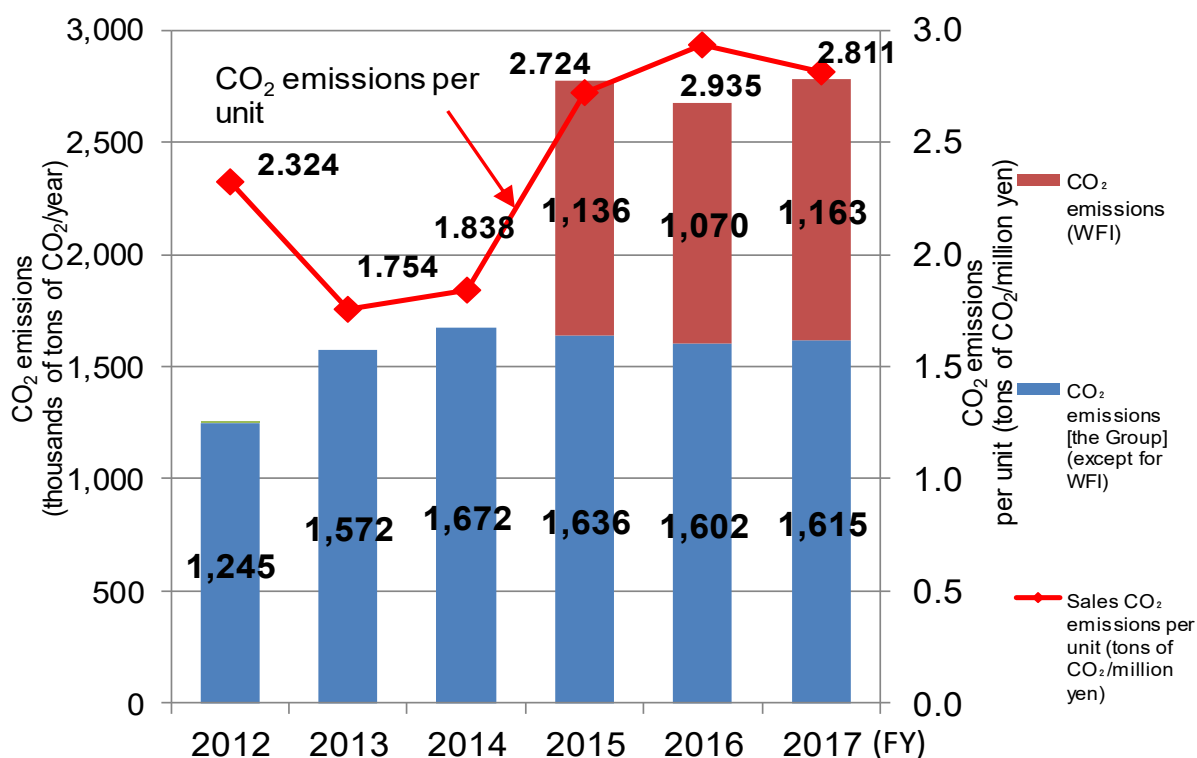


(c) Trends in CO₂ Emissions from Energy Usage and CO₂ Emissions per Unit

In fiscal 2017, CO₂ emissions from the Hitachi Metals Group’s business activities increased by 105 thousand tons year on year, to 2,778 thousand tons. However, CO₂ emissions per unit compared to revenues decreased by approximately 4.2%, from 2.935 to 2.811, due to the impact of an 8.5% increase in revenues compared to the previous fiscal year. (Revenues include an increase of 4.9% due to rising raw material prices and the impact of foreign exchange rates.)

The Hitachi Metals Group carries out energy-saving activities coordinated with its *monozukuri* to reduce CO₂ emissions. Specifically, these activities include omitting excess processes, improving efficiency, obtaining higher yield rates, and introducing energy-saving equipment.

Trends in CO₂ Emissions from Energy Usage and CO₂ Emissions per Unit



- Notes: 1. On the graph, “WFI” indicates CO₂ emissions of the U.S.-based Waupaca Foundry, Inc.
 2. Electricity accounts for 62% of the Hitachi Metals Group’s CO₂ emissions, followed by coke and town gas, respectively. In Japan, the power company CO₂ emissions coefficient is based on the “power supplier emissions coefficient” announced by the Ministry of the Environment; outside Japan, it is based on the 2010 IEA “country-specific conversion coefficient.”

(3) Effective Use of Resources

(a) Vision for Effective Use of Resources

The Hitachi Metals Group is committed to creating a recycling-oriented society by preventing the illegal disposal or dumping of waste, helping to improve resource productivity and recycling rates, and reducing final disposal volumes as laid out in the 3rd Basic Plan for Establishing the Recycling-Based Society, and also reusing and recycling waste internally.

● Targets for Fiscal 2017 in Medium-Term Environmental Action Plan

- Reduction of waste generation per production unit*¹ by at least 7.5% compared to fiscal 2005 (global basis)
- Recycling rate: 72% or higher (global basis)

*1 (Waste and valuables generation) ÷ (amount of activity*²)

*2 A figure representing the scale of business activities such as sales or production weight

● Fiscal 2017 Results

Rate of reduction of waste generation per production unit: 11%

Recycling rate: 79%

We are working to reduce waste/valuables generation (“waste”), which is measured by the generation of waste per production unit as an indicator. We are promoting efforts to reduce waste output, focusing on process innovation such as *kaizen* (improvement) of production processes. Furthermore, given the increasing scarcity of final disposal sites and the need to respond to social demands related to the effective use of resources, we have set targets for improving the recycling rate, starting from fiscal 2016, and are working to increase recycling and reduce final disposal volume.

(b) Results of Waste Management

Total waste generated by the Hitachi Metals Group in fiscal 2017 reached about 985 thousand tons, down 19 thousand tons from 1,004 thousand tons in the previous fiscal year.

We achieved an 11% reduction from the base year in the generation of waste per production unit, a management indicator in our Environmental Action Plan, and significantly exceeded our target. This was attributable to the additional launch of operation of a sand recycling system at the U.S.-based Waupaca Foundry, Inc., among other factors.

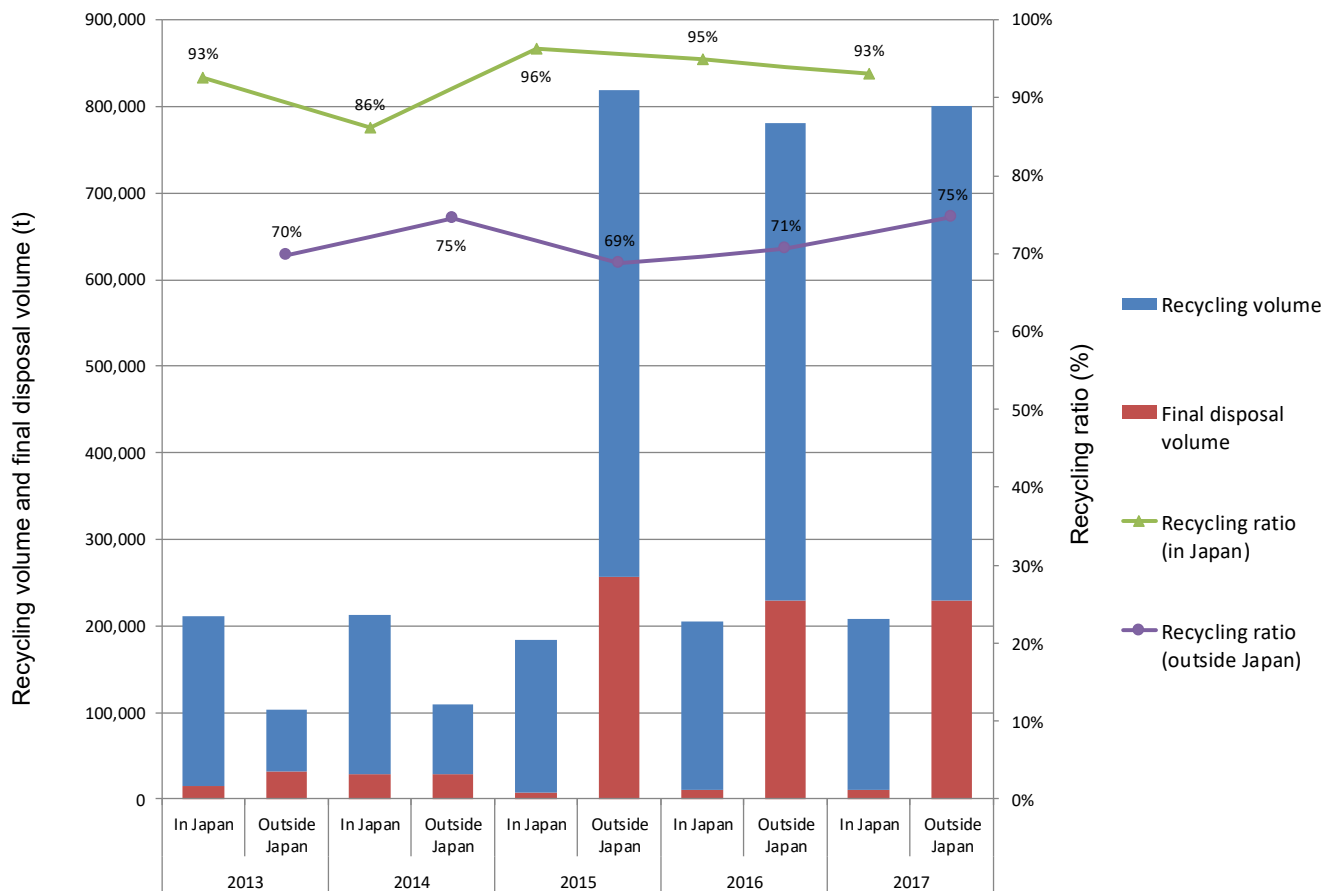
We recycled 197 thousand tons of waste in Japan, and 571 thousand tons outside Japan. In Japan, we sent 15 thousand tons for final disposal. The amount outside Japan was 194 thousand tons.

Although we reduced our final disposal volume by changing disposal contractors and through other measures, our domestic recycling rate in fiscal 2017 was 93%, which is nearly the same level as in the previous fiscal year, due to a large volume of materials that are difficult to recycle. Our recycling rate outside Japan showed progress, improving by 4% from the previous fiscal year to 75%. We will continue to focus on resource recycling in the future.

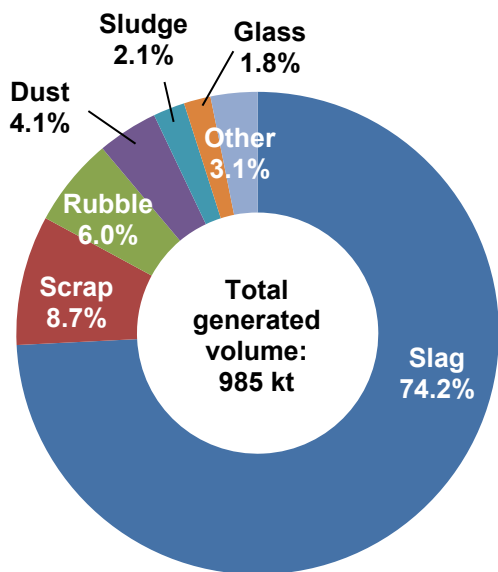
Also of note, we achieved zero emission status* at 15 business offices.

* Deemed to be a final disposal volume of less than 0.5% of total emissions since fiscal 2011.

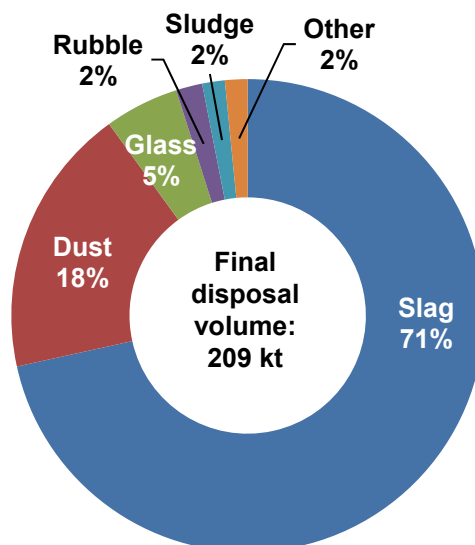
Recycling Volume, Final Disposal Volume and Recycling Ratio



Breakdown of Waste Volume (Hitachi Metals Group)



Breakdown of Final Disposal Volume (Hitachi Metals Group)



(c) Reduction of Water Usage

● **Targets for Fiscal 2017 in Medium-Term Environmental Action Plan**

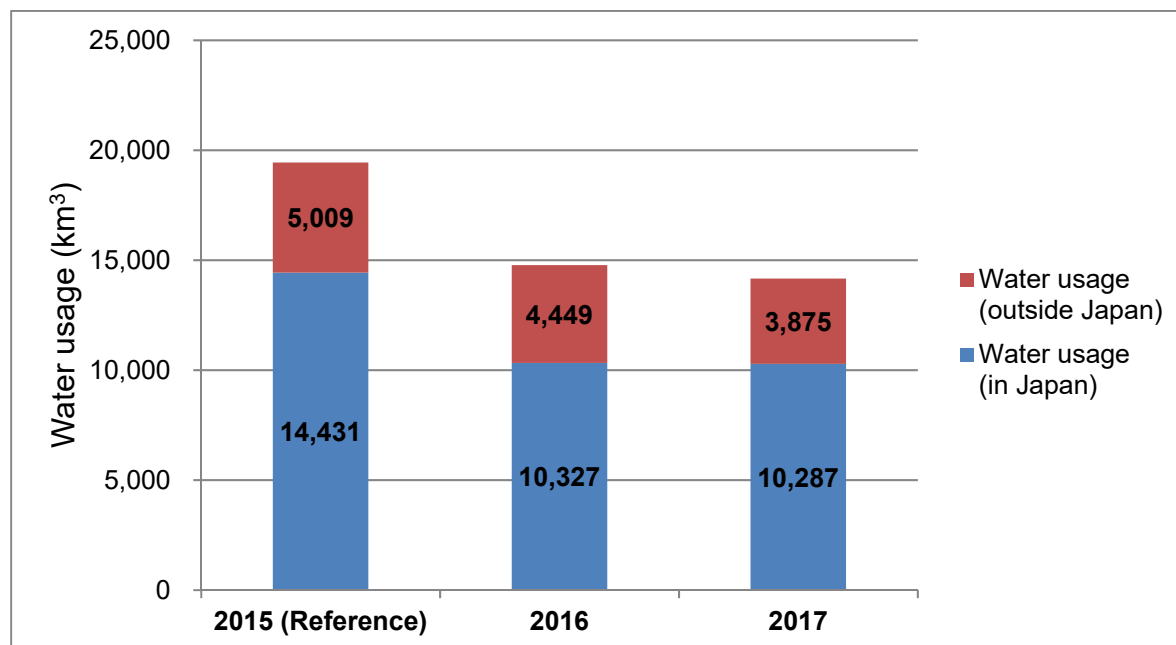
- Reduction of water usage per production unit*1 by at least 12% compared to fiscal 2006 (global basis)

*1 (Water usage) ÷ (amount of activity*2)

*2 A figure representing the scale of business activities such as sales or production weight

● **Fiscal 2017 Results**
 Rate of reduction of water usage per production unit: 24%

Since fiscal 2016, we have been working to achieve the targets for effective use of water resources set in the Environmental Action Plan through global efforts including those of domestic business offices. Our water usage amounted to 14,162 thousand m³, a decrease of 614 thousand m³ from fiscal 2016. We reduced water usage per production unit by 24% compared to the base year, achieving our target.



(4) Chemical Substance Management

(a) Reduction of Substances of Environmental Concern

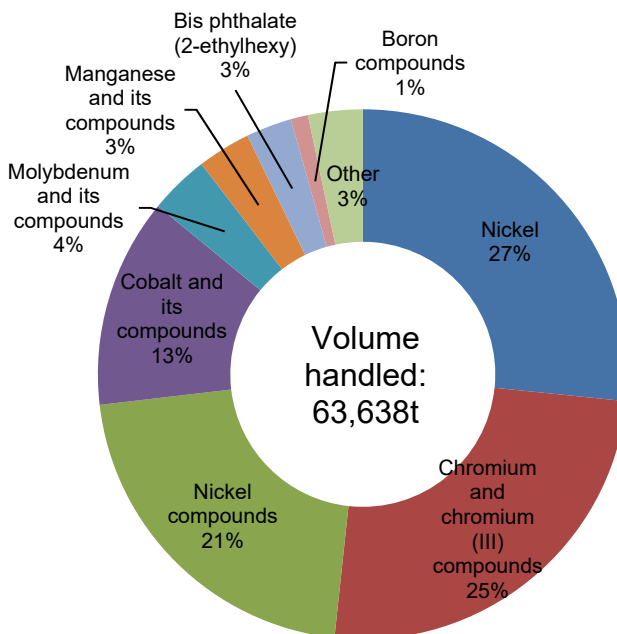
Of substances handled by domestic companies in the Hitachi Metals Group that are subject to the PRTR Law*, chromium, nickel, nickel compounds, molybdenum, phthalic acid (2-ethylhexyl), manganese, and cobalt are essential raw materials in Hitachi Metals' products. These seven substances constitute 95% of regulated materials and 81% of the total amount transferred.

Of this total amount released, 99% or more was released into the atmosphere and 89% of atmospheric release consisted of three Volatile Organic Compounds (VOCs), which are toluene, xylene, and ethylbenzene.

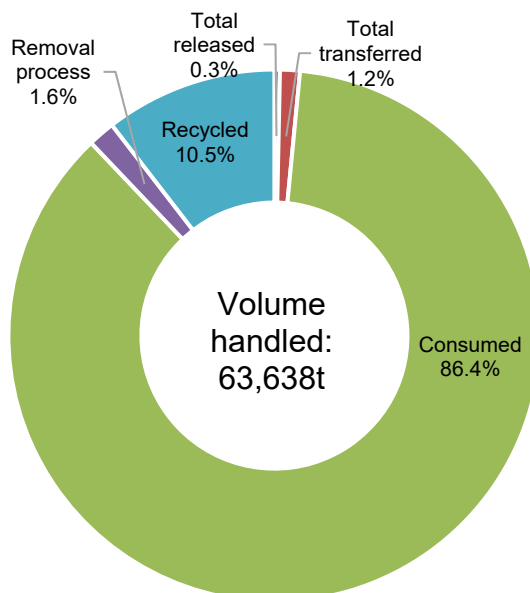
* Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management

The State of PRTR Substance Handling in Fiscal 2017 (Domestic Group)

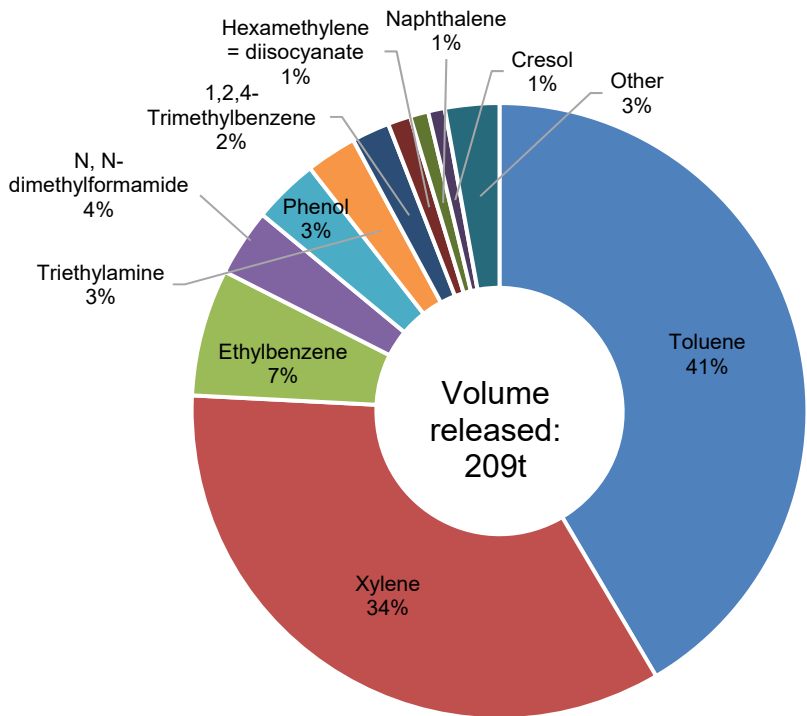
Breakdown of Volume Handled



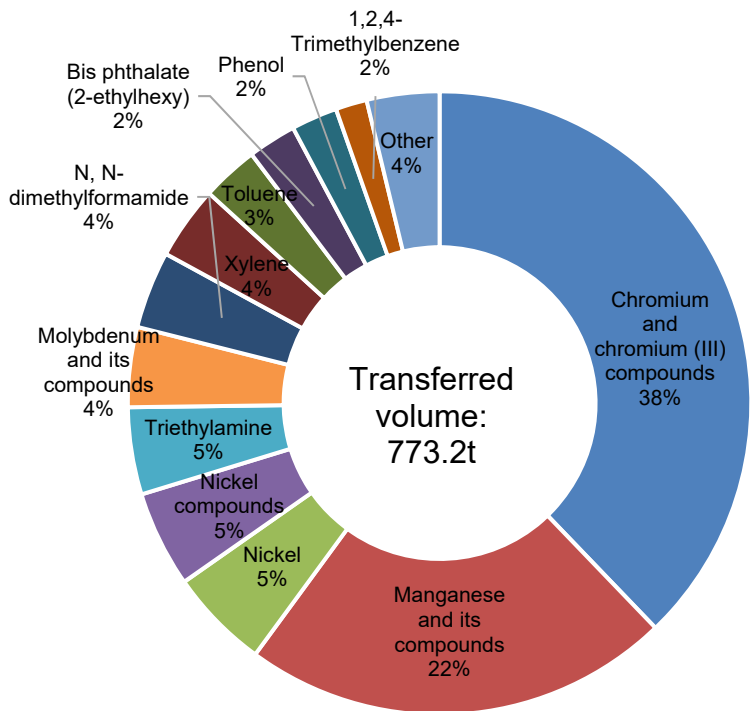
Volume Consumed, Released and Transferred, and Other Breakdown



Breakdown of Volume Released



Breakdown of Transferred Volume



VI. Report on Environmental Aspects

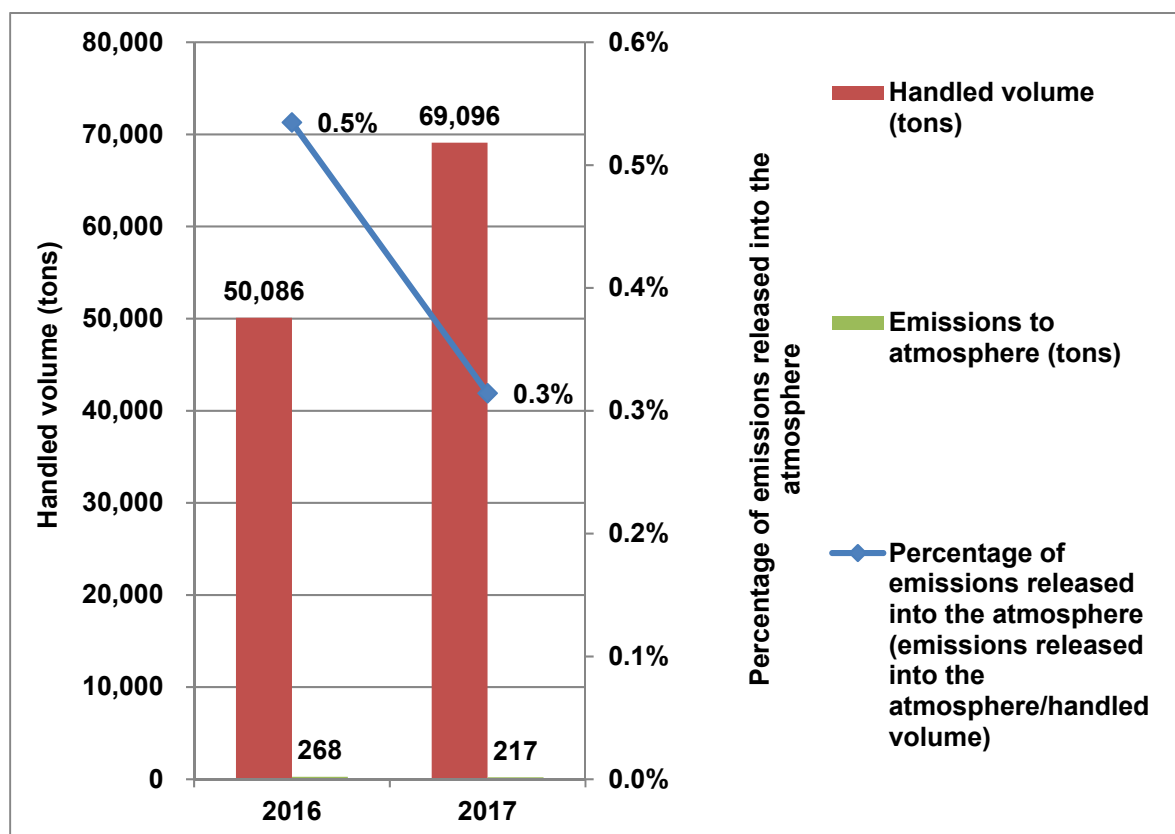
Fiscal 2017: PRTR Data (in Japan) (Unit: Tons/year)

Ordinance number	Substance	CAS No.	Volume handled	Volume released					Volume transferred		
				Atmosphere	Public water system	Soil	Landfill	Total released	Sewage system	Waste	Total transferred
31	Antimony and its compounds	—	105	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
32	Anthracene	120-12-7	28	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
37	4,4'-isopropylidenediphenol (Synonym bisphenol A)	80-05-7	64	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5
42	2-imidazolidinethione	96-45-7	2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
44	Indium and its compounds	—	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	Ethylbenzene	100-41-4	37	14.0	0.0	0.0	0.0	14.0	0.0	7.1	7.1
71	Ferric chloride	7705-08-0	330	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	Xylene	1330-20-7	164	71.9	0.0	0.0	0.0	71.9	0.0	29.5	29.5
82	Silver and its water-soluble compounds	—	35	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4
86	Cresol	1319-77-3	249	1.8	0.0	0.0	0.0	1.8	1.2	6.4	7.6
87	Chromium and chromium (III) compounds	—	15,968	0.0	0.1	0.0	0.0	0.1	11.0	292.5	303.5
132	Cobalt and its compounds	—	8,135	0.0	0.0	0.0	0.0	0.1	13.5	3.6	17.1
155	N-(Cyclohexylthio)phthalimide	17796-82-6	1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
213	N,N-dimethylacetamide	127-19-5	7	0.5	0.0	0.0	0.0	0.5	0.0	0.2	0.2
230	N-(1, 3-butylidimethyl)-N'-phenylphenylenediamine	793-24-8	4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
232	N,N-dimethylformamide	68-12-2	296	7.4	0.0	0.0	0.0	7.4	0.0	31.0	31.0
268	Tetramethylthiuram disulfide (Synonym thiuram or thiram)	137-26-8	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
277	Triethylamine	121-44-8	91	5.6	0.0	0.0	0.0	5.6	0.0	34.9	34.9
296	1, 2, 4-Trimethylbenzene	95-63-6	35	4.2	0.0	0.0	0.0	4.2	0.0	12.6	12.6
297	1, 3, 5-Trimethylbenzene	108-67-8	9	0.6	0.0	0.0	0.0	0.6	0.0	2.6	2.6
300	Toluene	108-88-3	113	86.9	0.0	0.0	0.0	86.9	0.0	22.8	22.8
302	Naphthalene	91-20-3	3	2.0	0.0	0.0	0.0	2.0	0.0	0.8	0.8
304	Lead	7439-92-1	139	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4
305	Lead compounds	—	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
308	Nickel	7440-02-0	16,939	0.1	0.0	0.0	0.1	0.2	88.1	40.2	128.3
309	Nickel compounds	—	13,648	0.0	0.2	0.0	0.0	0.2	1.3	38.6	39.9
330	Bis (1-methyl-1-phenylethyl) = peroxide	80-43-3	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
349	Phenol	108-95-2	306	7.2	0.0	0.0	0.0	7.2	1.1	18.5	19.7
355	Bis phthalate (2-ethylhexyl)	117-81-7	1,775	0.0	0.0	0.0	0.0	0.0	0.1	19.4	19.5
374	Hydrofluoric acid and its water-soluble salts	—	3	0.0	0.0	0.0	0.0	0.0	160.0	0.0	160.0
391	Hexamethylene = diisocyanate	822-06-0	25	2.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0
405	Vanadium compounds	—	675	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
411	Formaldehyde	50-00-0	3	1.4	0.0	0.0	0.0	1.4	0.0	1.2	1.2
412	Manganese and its compounds	—	2,066	0.1	0.3	0.0	0.0	0.3	21.9	172.0	193.9
438	Methylnaphthalene	1321-94-4	18	0.6	0.0	0.0	0.0	0.6	0.0	0.0	0.0
453	Molybdenum and its compounds	—	2,319	0.0	0.0	0.0	0.0	0.0	201.6	31.9	233.5
(Total of 54 substances with handled volumes of less than one ton)			9	1.7	0.3	0.0	0.0	2.0	0.2	1.9	2.2

(b) Reduction of Chemical Substance Emissions

We have revised our management of chemical substances, which had previously targeted only Volatile Organic Compounds (VOCs), based on risks such as acute toxicity and carcinogenesis, and have identified 50 new substances for management from among substances handled in large amounts. We are engaged in activities aimed at controlling the release of these substances to the environment. Most are emitted into the atmosphere, and VOCs account for over 90% of the total. We are therefore continuing improvement activities that focus on the treatment of solvent components used for product coating, as in the past, and working to reduce emissions by conducting technological investigations and making changes in equipment to find substitutes for coating materials and improve processes.

The volume of chemical substances handled in fiscal 2017 increased by 19 thousand tons from the previous fiscal year, due to an increase in the volume of metal compounds used as raw materials for magnets and other products. However, emissions into the atmosphere decreased by 51 tons due to the effects of activities to reduce VOC emissions.



(5) Eco-Factory Case Study

Initiatives in Waste Reduction and Resource Recycling

Reducing landfill waste and promoting recycling through sand recycling

Waupaca foundry, Inc.

The United States-based Waupaca Foundry, Inc. (WFI) produces gray cast iron and ductile cast iron castings. In September 2016, WFI introduced a sand recycling system at Plant 5, and in fiscal 2017 became capable of recycling 30% of foundry sand used in production. As a result, WFI as a whole reduced its waste generation by 23,000 tons from the previous fiscal year, contributing to a 33,000-ton reduction in final landfill waste. WFI improved its waste generation by approximately 12% in terms of dissolved weight per production unit, and by 3.8% in terms of recycling rate. Plant 5 is planning to promote the expanded use of recycled sand. One of its targets is to use 75% recycled sand in its core sand, which is equivalent to 55,000 tons of recycled foundry sand per year.

WFI will continue to promote the sustainable use of resources, such as reducing waste generation and final landfill waste, recycling and reusing foundry sand, and making effective use of slag.



Sand recycling system introduced at Plant 5

Launch of the GEMBA Innovation Management Division and Promotion Activities Companywide Initiative

The on-site reform activities of the Corporate *Monozukuri* Innovation Project, which we have been engaged in since April 2016, have resulted in brighter, more open manufacturing worksites, which in turn has led to a more positive attitude toward reform among our workers. We therefore established a new GEMBA Innovation Management Division in April 2018, and are promoting the expansion of these activities. While continuing the on-site reform activities (“2S-3F”—Sort Out, Set In Order, Fixed Location, Fixed Quantity and Fixed Item) that we have been pursuing for the past two years, the GEMBA Innovation Management Division also plans to step up our activities to promote improvements in set-up work and TPM*1 activities. We are engaging in activities that will ultimately improve cash flow through efficient production. We have also begun improvements in production management operations. In addition to the automated creation of production plan proposals, which mostly depended on particular employees, we have started activities aimed at drafting optimal production plans (plans that take into account minimization of material losses and combination losses) based on simulations. These activities also have environmental effects, such as saving energy and resources, and reducing waste.

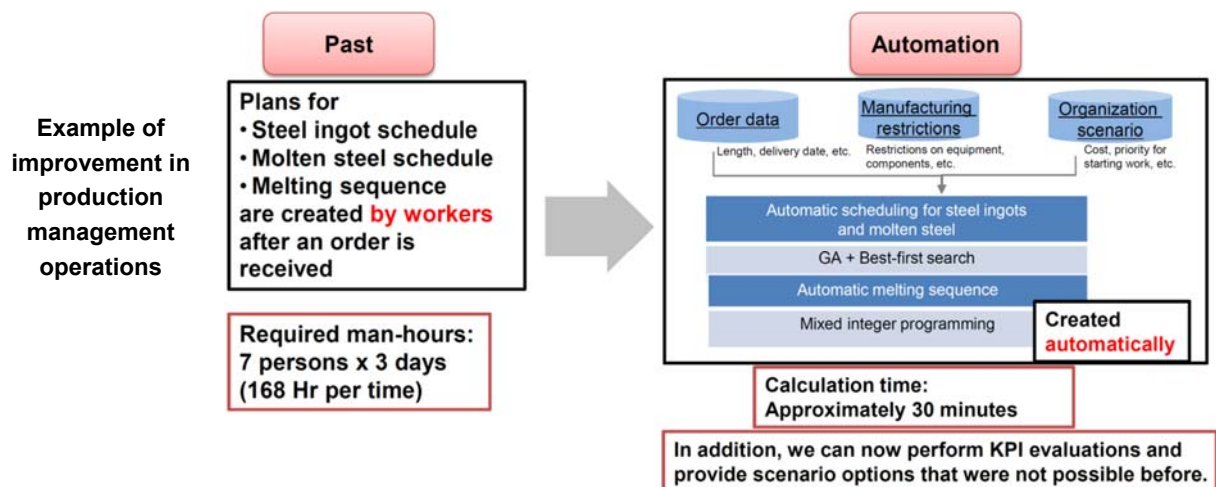
*1 TPM: Total Productive Maintenance



Example of set-up improvement



Example of TPM activities



(6) Site Data**Materials Flow in Major Domestic Manufacturing Sites in the Hitachi Metals Group in Fiscal 2017**

Classification	INPUT				OUTPUT									
	Raw Materials (t/year)	Energy Use (Crude oil kl/year)	Water Use (Thousand m ³ /year)	PRTR Chemical Substances (t/year)	Waste (t/year)	CO ₂ * ¹ (t/year)	SOx* ² (t/year)	NOx* ² (t/year)	BOD* ² (t/year)	COD* ² (t/year)	PRTR Emission* ³ (t/year)	PRTR Transfers* ³ (t/year)	Waste Water (Thousand m ³ /year)	Main Discharge Destinations
Kyushu Works	11,350	38,522	225	6,050	46,294	82,326	0.0	4.0	0.0	0.6	15	118	62	Seto Inland Sea
Moka Works	35,770	26,237	545	59	15,041	53,015	0.4	3.3	0.6	0.7	6.1	53	401	Kinugawa River
Kuwana Works	17,643	15,858	384	22	14,505	37,263	2.4	6.1	0.0	0.0	0.7	3.2	382	Inabegawa River
Yasugi Works	175,835	175,996	5,365	29,508	68,494	477,546	38.8	149.0	0.7	16.7	0.7	371	5,226	Nakaumi Lake
Okegawa Works	1,851	21,205	399	1,183	1,190	42,176	0.3	8.7	2.4	4.3	0.0	10	399	Arakawa River
Kumagaya Light Alloy Plant	27,485	25,593	252	172	21,839	49,987	1.3	25.1	7.3	6.4	106	34	795	Arakawa River
Kumagaya Works	12,059	28,440	623	253	8,613	56,433	1.2	0.0	0.0	0.0	0.2	3.3		
Yamazaki Manufacturing Dept.	0	3,509	68	0	412	6,940	0.0	1.7	0.1	0.0	0.0	0.0	50	Sewerage
Metglas Yasugi Works	24,779	8,245	—	675	236	23,069	0.0	0.0	0.0	0.0	0.0	0.0	0	Nakaumi Lake
Saga Works	1,241	7,201	38	20	472	15,269	0.0	0.0	0.0	0.0	0.0	0.0	38	Rokkakugawa River
Ibaraki Works	135,982	40,663	1,317	2,130	7,503	79,779	0.3	10.3	37.6	25.3	27	72	1,234	Pacific Ocean, Kazusawagawa River, Juogawa River
HMY, Ltd.	327	11,631	10	13,800	1,555	32,310	0.4	0.6	0.0	0.0	0.3	0.1	5	Nakaumi Lake
Hitachi Metals Precision, Ltd.	5,236	9,332	7	4,637	5,198	24,873	0.0	0.0	0.0	0.0	0.0	2.6	2	Nakaumi Lake
Hitachi Metals Neomaterial, Ltd.	12,631	13,292	253	3,158	8,953	27,502	0.2	0.7	11.0	0.0	1.1	0.3	248	Sewerage, Yoneshirogawa River
Hitachi Metals Wakamatsu, Ltd.	31,271	26,958	135	986	42,408	59,375	0.0	8.6	0.0	0.0	2.0	61	77	Sewerage
Hitachi Metals Tool Steel, Ltd.	0	6,075	20	0	898	11,903	0.0	0.0	0.0	0.0	0.0	0.0	16	Sewerage, etc.
Hitachi Ferrite Electronics, Ltd.	0	4,380	42	38	379	12,298	0.0	0.0	0.5	0.0	0.0	11	40	Sewerage
NEOMAX KINKI Co., Ltd.	3,915	19,399	204	0	3,330	38,595	0.1	1.1	0.4	0.5	0.0	0.0	204	Maruyamagawa River
NEOMAX KYUSHU Co., Ltd.	7,619	10,026	64	77	1,347	21,259	0.0	14.4	0.0	0.0	2.7	2.5	42	—
Hitachi Alloy, Ltd.	8,717	3,421	137	103	789	6,745	0.0	0.0	1.0	1.1	0.0	0.0	133	Arakawa River
Tonichi Kyosan Cable, Ltd.	42,574	5,714	123	798	2,669	11,110	0.1	0.3	0.0	0.0	0.4	19	123	Kasumigaura
Tohoku Rubber Co., Ltd.	2,531	1,903	76	57	560	4,621	2.2	1.1	0.2	0.5	23	5.2	67	Pacific Ocean

*1 Calculations of CO₂ emissions for electric power use the adjusted emission coefficients for each power company.

*2 Atmospheric emission concentrations measured based upon the Air Pollution Control Law and Water Pollution Prevention Act.

*3 PRTR emission quantities are totals of emissions to the atmosphere, public waterways, and soil. PRTR Transfers are totals of transfers to waste materials and to sewers.

VII. Third-Party Opinion

Professor Naoya Hasegawa, Faculty of Sustainability Studies, Hosei University

The strong point of this year's CSR Detailed Activity Report is its clear and easy-to-understand summary of the value creation roadmap symbolized by the slogan "the best enterprise" against the backdrop of the philosophy and history of the Hitachi Metals Group. The environment surrounding the company is becoming increasingly severe due to physical risks caused by global warming, as well as migration risks associated with policy changes aimed at reducing CO₂ emissions. In order to maintain sustainable growth in a market environment in which conventional business models no longer perform effectively, companies are expected to strike a balance between reinforcing existing businesses and developing new ones, while also responding to social changes immediately through an "outside-in" approach.

This CSR Detailed Activity Report provides detailed disclosure of Hitachi Metals' environment (E), social (S), and governance (G) initiatives. In particular, I give the Company high marks for setting KPIs for each of the seven core ISO 26000 issues as a guideline for its CSR practices, and for visualizing its approach to "enhancing management quality" through specific activities.

In terms of the environment, "reducing CO₂ emissions," "improving the water and resource use ratio," and "minimizing the impact on natural capital" are set forth as key issues for 2050. The report discloses quantitative data on the Medium-Term Environmental Action Plan and its results, and on the results of environmentally friendly products and manufacturing processes. I give the Company full marks for disclosing this information in an easily comprehensible manner that is considerate of stakeholders.

In the area of society, the relationship between a company's initiatives and its core business is difficult to understand in many cases. However, this report discloses the Company's activities in detail through specific examples for customers, suppliers, local communities, employees, shareholders and investors, and I was able to confirm that these activities are progressing steadily.

In the field of governance, systems are in place to carry out transparent, fair, swift, and resolute decision-making as required by the Corporate Governance Code. In addition, the transparency of management has improved considerably from an investor's point of view, as well. I confirmed that the quality of the initiatives in each of the three key domains of sustainable management, namely, environment, social and governance, is increasing year by year.

Meanwhile, I would like the Hitachi Metals Group to show how it positions the SDGs in relation to its long-term vision and core competencies, with a view toward 2030. Responsible investment is spreading widely both inside Japan and overseas. If the Company would present a concrete roadmap and goals (outcomes) for long-term value creation and visualize the relationships between key CSR issues and the SDGs, this information would be very useful for investors and all other stakeholders.

The issues facing contemporary society are already beyond the ability of any one company to resolve single-handedly. In future, I would like to see the members of the Hitachi Metals Group take the lead in making ongoing efforts to tackle the SDGs, while enhancing its partnerships with a range of actors such as NPOs and NGOs.