

Quality Management

KYB Group Basic Policy for Quality

KYB and its Group companies are committed to restoring the trust they have lost, and have established a medium-term action plan for compliance with the KYB Group Basic Policy for Quality to do so. To prevent a recurrence of quality-related misconduct, we will continue to foster and establish an awareness of compliance as the prerequisite for and foundation of quality management.

The KYB Group shall:

1. Address quality improvement with honesty driven by the belief that quality is the basis for business.
2. Deliver safe and secure products in compliance with promises to customers as well as with laws and regulations.

Quality Assurance System

We have built and operate an ISO 9001-compliant quality assurance system that emphasizes the quality of work processes as well as the quality of products and services. We strive each day to make improvements in all aspects of quality.

At KYB, we implement what is called a three-step evaluation system for the development and mass production of products, the development of technologies, manufacturing methods, and so on. We make every effort to achieve high quality throughout the product life cycle, from the product planning stage, to defect reduction and change management after mass production and shipment. At our production bases, we take a variety of quality improvement measures under the leadership of base managers and plant managers, and we are working to promote the unerring operation of our three-step evaluation system. Furthermore, to ensure the quality of mass-produced products, we also follow this system for single, small-lot orders and when production is moved to another production base.

Development of Products and Technologies through a Three-Step Evaluation System and the Quality Safety Audit

Step	Goal of the Three Steps	Quality Assurance Step
Prior and model development DR0 evaluation meeting	Proof of possibility (Description and evaluation of development quality)	Development quality
Order development DR1 evaluation meeting	Proof of mass production (Description and evaluation of development quality)	Start quality
Mass-production development and production preparations Quality Safety Audit	Proof of applicability and serialization (Demonstration and evaluation of start quality)	Mass-production quality
DR2 evaluation meeting	Bad News First Execute (until the reporter receives feedback) When abnormalities arise: Stop, Call, Wait	

Quality Safety Audit
Evaluate manufacturing site, manufactured products and data to confirm that mass-production quality is problem-free and that reliable production and shipment are possible.

Strengthening the Quality Audit System

KYB is strengthening its quality audit system to thoroughly prevent quality-related misconduct. Quality audits evaluate the materialization of risks of quality-related misconduct, improvement of such risks, and the effectiveness of the improvement measures taken. In addition, we are working to achieve our goals by evaluating whether our plans for quality assurance and quality control activities are being implemented effectively and systematically, and the effectiveness of our measures, among other factors.

Revision of Quality Audit Regulations (March 2020)

We conduct quality audits to prevent quality-related misconduct and to identify the actual conditions of quality assurance and quality control activities. We reflect the results in our business management, and work to improve the level of our quality assurance and quality control activities.

Establishment of Procedures for Dealing with Quality-Related Misconduct (April 2020)

We newly established procedures to strengthen compliance in management and maintain social credibility by establishing a

framework for appropriate response to reports of organizational or personal quality-related misconduct from employees or other parties and by conducting early detection and correction of quality-related misconduct.

Improvement of Quality Division Structure

Within the Quality Division, a functional division at the head office, the Quality Control Department was previously responsible for quality auditing and quality control operations. The QF Promotion Department was newly established within the division as the core of quality improvement operations from analyzing quality data to taking measures against quality defects. By separating the functions of management and practical execution, we intend to strengthen the functions of our quality maintenance management and improvement activities.

New Structure of Quality Division



Supply Chain Management

Basic Policy for Procurement

KYB works to fulfill its corporate social responsibility (CSR) and continues to be a company that society can rely upon. Suppliers are important partners for us in continuously developing our business through *monozukuri* (Japanese manufacturing expertise) and contributing to the realization of an affluent society.

Our basic policy for procurement is described below.

Basic Approach to Procurement

- ① Procurement activities aimed at the coexistence and mutual prosperity of KYB and its suppliers
- ② Legal compliance
- ③ Quality first
- ④ Safety and health, human rights and labor
- ⑤ Continuous cost reduction activities
- ⑥ On-time delivery
- ⑦ Protection of the natural environment
- ⑧ Construction of global procurement system
- ⑨ Risk management
- ⑩ Classified information management
- ⑪ Prevention of corruption

► For details, please see the Company website.

<https://www.kyb.co.jp/english/company/csr.html>

Specific Initiatives

FY2019 Procurement Policy Briefing

We held the FY2019 Procurement Policy Briefing in April 2019 in Tokyo and Nagoya. Suppliers involved in manufacturing were invited, and to strengthen cooperation, the Chairman, President Executive Officer and other members of KYB senior management explained our corporate policy, procurement policy, quality policy and the policies of each of our businesses to representatives of our suppliers. They also recognized excellent suppliers who contributed greatly to QCD,* and presented commemorative shields and mementos.

* Quality, cost and delivery



At the Tokyo briefing

Supplier QC Circle Convention

In November 2019, the 49th Supplier QC Circle Conference was held at Atsuta Shrine Hall in Nagoya. This competition is held every year to encourage improvement activities among our suppliers. This year, 237 people from 152 companies attended. Representative teams from each company announced the results of their activities for the year, and NTN Corporation was awarded the gold medal.



At the awards ceremony

Theme Study Group Improvement Activities

Thirty suppliers who participate in our theme study groups worked on improvement activities throughout FY2019 under the themes of quality and business continuity plans (BCP). Results included reduction of quality defects and the creation of a BCP crisis management system, and the groups also obtained approval from the Ministry of Economy, Trade and Industry for tax incentives, financial support and manufacturing subsidies for the BCP activities of small and medium-sized enterprises. We will use the results of these activities to improve quality and BCP management systems at our suppliers.

In FY2020, the name will be changed to Keneikai and a new team will be used to conduct improvement activities.

Survey of Status of BCP

To understand the BCP status of suppliers we conducted a questionnaire for self-assessment consisting of 100 items in seven categories (actions for anticipated risks; securing personal safety and emergency evacuation; emergency measures taskforce; confirmation of employee safety; confirmation of property damage; instructions for returning home and measures for people who have difficulty returning home; and restoration taskforce). Moreover, we surveyed the status of readiness of the entire supply chain with regard to a major earthquake. In this way, we have all suppliers review the status of their BCPs and encourage them to study issues requiring improvement and systematically implement BCP activities.

Initiatives to Prevent Human Rights Violations in the Supply Chain

In recent years, there has been growing demand for companies to prevent human rights violations globally, including in their supply chains.

For example, under the Dodd-Frank Wall Street Reform and Consumer Protection Act, companies are required to perform due diligence and identify whether their products contain tantalum, tungsten, tin or gold purchased from mines in the Democratic Republic of Congo (DRC) and nine neighboring countries, where the extraction of such mineral resources may be used to finance or benefit armed groups that are causing human rights violations and environmental destruction. The aim of the Dodd-Frank Act is to indirectly cut off financial sources from these "conflict minerals" to prevent such human rights violations. The EU has taken a broader approach to restricting conflict minerals by requiring all companies importing mineral resources into the EU to take similar actions.

In light of the Dodd-Frank Act, the KYB Group annually checks its products with the cooperation of its suppliers, summarizes the results and reports to customers that request such information.

In addition, in accordance with the U.K. Modern Slavery Act 2015 we annually release a statement on KYB Group business activities and initiatives to prevent slave labor and human trafficking in our supply chain, including the above-mentioned conflict mineral measures. We will carry on with our awareness-raising activities on prohibiting human rights violations and slavery labor.

► For details, see the "Supply Information" section of the Company website.

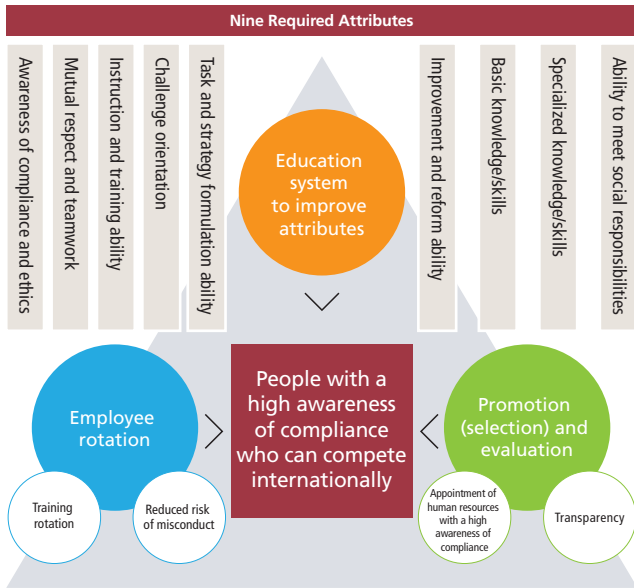
https://www.kyb.co.jp/english/company/supply_information.html

Human Resources Management

Human Resources Development

We nurture people with a high awareness of compliance who can compete internationally by linking (1) our education system, (2) employee rotation and (3) promotion and evaluation to improve the attributes of each employee.

The KYB Human Resources Development System

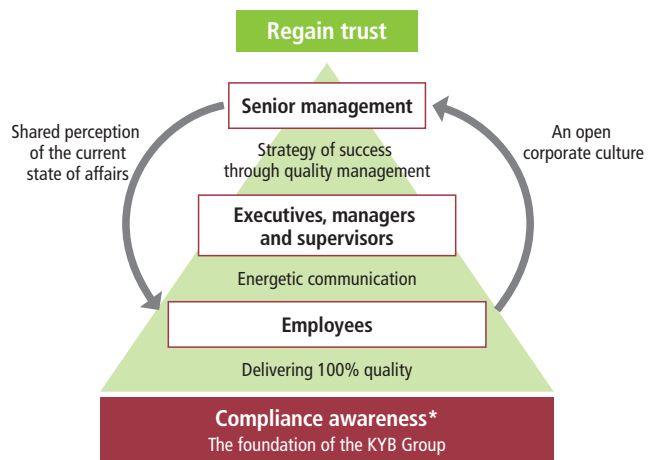


Specific Initiatives

Compliance Awareness Education

The KYB Group is committed to an open corporate culture in which management and employee communication is energized by sharing perceptions of the current state of affairs.

We promote quality management, which is fundamental to management, by positioning compliance awareness as the foundation of the KYB Group. We are working to foster a mindset of following moral, ethical, legal and societal rules among not only senior management but all employees.

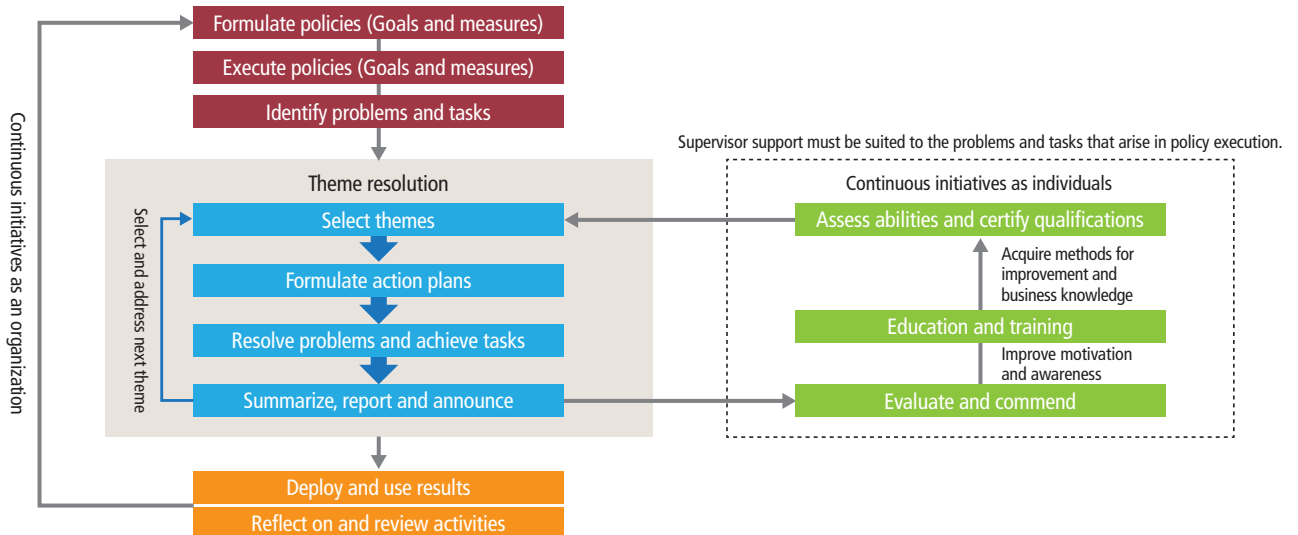


* Mindset of abiding by moral, ethical, legal and social rules

Small Group Activities

In each workplace, we form small teams that have been optimized for specific objectives. Guided by a supervisor, they work to establish compliance awareness and improve safety, quality and productivity. The goal of these Companywide activities is to help prevent improprieties, enhance corporate performance, energize the workplace and improve communication, and to develop our people by enhancing their ability to make improvements.

Basic Approach for Small Group Activities



Promoting Health Management

KYB Health Declaration

KYB sees the health of employees and their families as an important management resource and a source of corporate vitality, and is working to achieve sustainable growth through the creation of an environment in which all employees can work in good health both physically and mentally.

We are committed to actively supporting employees who are engaged in health promotion activities and to promoting organizational measures for health promotion in order to live up to our Corporate Spirit by “building a corporate culture full of vitality and holding high goals.”

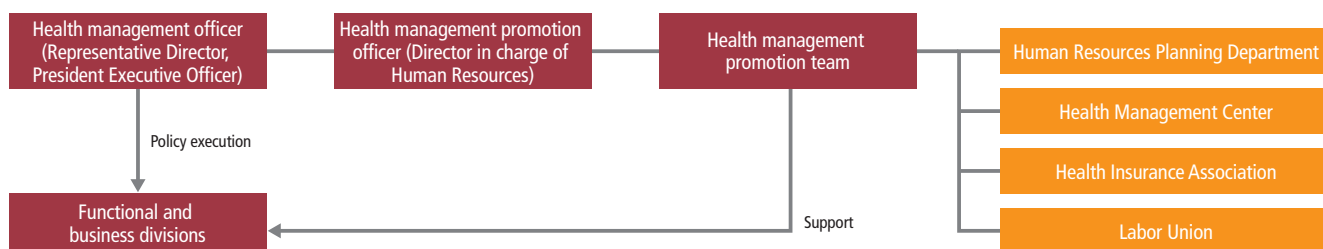
November 1, 2019

Masao Ono

Representative Director and President Executive Officer



Organizational Structure for Promoting Health Management



Key Initiatives

1. Measures for Lifestyle-Related Diseases

(Collaboration with Health Insurance Association)

- Creating an environment that facilitates exercise

We have installed walking courses and hold Companywide walking events.



- Initiatives to keep the percentage of employees undergoing scheduled health checkups at 100% and to improve the percentage of employees undergoing specified health checkups

Percentage of Employees Undergoing Health Checkups

	Regular Health Checkups	Specified Health Checkups
FY2017	100%	73.5%
FY2018	100%	77.4%
FY2019	100%	88.3%

- Health seminars

Visiting lecturers give annual health seminars at all of our business locations in order to raise health consciousness among employees.



2. Mental Health Measures

- Promoting mental health education

We promote class-specific education for primary prevention of mental health issues in the workplace.

Class-Specific Education in FY2019

	Seminars Held in FY2019	Attendance Rate
Supervisors	–	Postponed to the following fiscal year as a COVID-19 countermeasure
Managers	4	76.4%

- Activities for promoting freedom from harassment in cooperation with functional and business divisions

Based on the belief that freedom from harassment is essential for creating a vibrant and rewarding workplace, we have made freedom from harassment a corporate priority and are executing policies for all functional and business divisions.

3. Passive Smoking Countermeasures

- Smoking environment countermeasures

Based on the secondhand smoke prevention policy established in April 2020, we are in the process of prohibiting smoking in all areas in stages.

April 2020: Abolition of indoor smoking areas
 January 2021: No smoking during working hours (no tobacco break)
 April 2022: Complete prohibition of smoking and discontinuation of tobacco sales at all business sites



- Support for smoking cessation

We provide ongoing support for employees who want to quit smoking.

Promoting Work Style Reform

Basic Approach

We are focusing on building and enhancing systems using the themes shown on the right to achieve a rewarding workplace in which diverse individuals can contribute over the long term.

In addition, in FY2018 we began conducting an Employee Awareness Survey for all KYB employees regarding workplace climate, working conditions, management policy and other matters. Answers are anonymous, and an external organization compiles and analyzes the results. Consequently, response rates have been high (95.6% for the first survey in 2018, 97.1% for the second survey in 2019) and we have learned the true opinions of employees.

We will continue to conduct this survey regularly and use the data to promote Companywide initiatives for employee work style reform.

1. Support for work-life balance

Flexitime system, encouragement of taking annual paid leave in a continuous block, etc.

2. Consideration of diverse work styles

Promotion of telecommuting, shortened working hours to accommodate childcare, etc.

3. Promotion of employee health

See "Promoting Health Management" on page 27 for details.

4. Improvement of work process efficiency

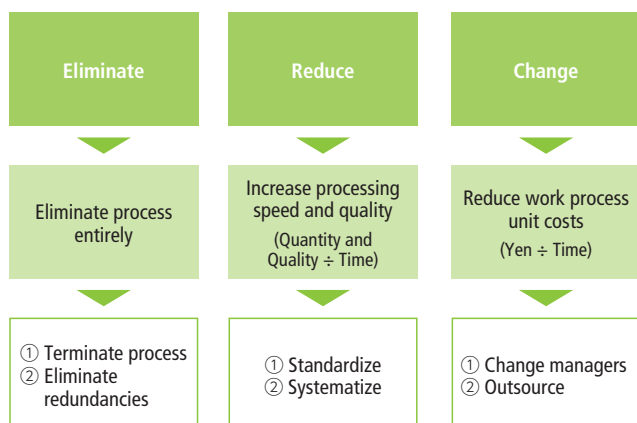
Includes projects to streamline operations

Specific Initiatives

Enhancing the Productivity of Administrative Operations

In FY2017, we launched the Administrative Operations Productivity Improvement Project and are working to improve efficiency and added value in administrative operations, including general affairs, accounting, human resources and production management.

Each administrative department aims to improve work process efficiency through a transition to higher added value by reviewing existing work from the perspectives of Eliminate, Reduce and Change. As part of this initiative, we have introduced robotic process automation (RPA) tools to automate routine work processes and we are conducting activities to shorten internal meetings (30 smart meeting activities). We will continue to study and verify all measures to increase efficiency in order to improve the productivity of administrative operations.



Support for Work-Life Balance

KYB supports work-life balance for its employees as a means to create an environment in which employees can participate with enthusiasm. In April 2018, we extended the childcare leave period

to the end of April after the child turns three in order to support employees raising children. Employees had indicated that the childcare leave period stipulated by law made it difficult to place children in nursery school because the leave period ended in the middle of the fiscal year, before the start of the school year.

Furthermore, we revised the flexitime system in April 2019 by extending the period of the workday available for flexitime work and applying the system uniformly at all business locations. This enables flexible work styles that match employees' private lives and work schedules.

Promoting Telecommuting

One of our work style reform initiatives has been to promote telecommuting, with the goal of reducing time and energy spent in commuting, and using the time saved more effectively. In November 2017, we launched a trial program focused on supporting work-life balance for employees raising children or providing nursing care for family members. Following a series of reviews of eligibility and system improvements, the program became an official system as of April 2020. We have now expanded its scope to cover administrative operations at all business sites, including plants, allowing employees to telecommute up to twice a week.

In addition, we registered with the organization implementing the Telework Days 2019 and Winter Smooth Biz Practice Period programs conducted by government ministries and the Tokyo Metropolitan Government, and encouraged employees to telecommute.

Based on employee feedback, we plan to improve our telecommuting system by making it more user-friendly, and to broaden eligibility.



Winter Smooth Biz Practice Period

Diversity

Empowering Diverse Human Resources

The entire KYB Group accepts and respects diversity regardless of gender, nationality, disability or other attributes. To be able to support the active participation of our diverse human resources, we are working to create an environment where all employees can play an active role while gaining satisfaction from their work. To that end, we are stepping up job rotation and encouraging the use of annual paid leave.



Key Initiatives

Stepping Up Job Rotation

- Stepping up job rotation in cooperation with each /business division/function

To facilitate women’s career planning, we are proactively promoting career development and new career opportunities through job rotation.

Encouraging Use of Annual Paid Leave

- Manager-led encouragement of use of annual paid leave

To help support work-life balance through the use of paid leave, we are conducting activities to encourage managers to take the lead in using their annual paid leave.

Certification as a 2020 Health & Productivity Management Organization

In March 2020, KYB received certification under the Health & Productivity Management Organization Recognition Program as a company that considers employee health management strategically. We view the health of employees and their families as an important management resource and the source of corporate vitality, and we will continue to strive to create a work environment where each employee is physically and mentally healthy and can work enthusiastically to achieve the sustainable growth of the Company.



Environmental Management

Basic Approach

KYB launched a new medium-term strategy in FY2020. Environmental initiatives are a global issue, and countries worldwide are working to reduce CO₂ emissions to prevent global warming. The KYB Group has introduced solar power generation systems and improved the efficiency of heat source equipment. We have also reduced CO₂ emissions by adopting energy-saving technologies such as LED lighting. Furthermore, with the cooperation of external experts, we are steadily making other improvements such as visualizing wasted energy through diagnostics, reducing leakage

of air and steam used in production equipment, and decentralizing air compressors.

Overseas, we are implementing 100% green power purchases of wind and solar power at our base in Spain, and we are also considering introducing green energy at our base in Mexico. We will continue to work toward achieving environmental impact targets, and in so doing contribute to a sustainable society. One measure will be to further promote energy-saving activities that support the reduction of CO₂ emissions, and to boost waste volume reduction and recycling.

Basic Environmental Policy

Slogan

Protect the Green Earth and Create Environmentally Friendly Products

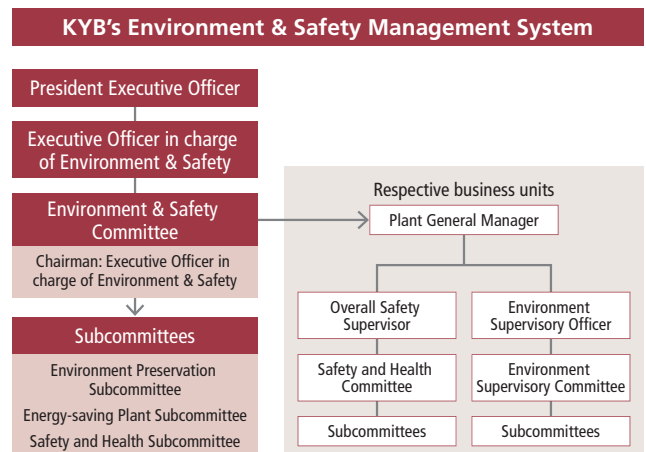
Basic Environmental Policies

The KYB Group creates user- and earth-friendly products. We actively promote environmental conservation activities as an important tool for evaluating management.

1. Develop and build up production and corporate activities based on recycling to reduce impacts on the environment.
2. Strive to ensure long-term and sustainable operations throughout the entire KYB Group.
3. Work to promote relationships with local communities and contribute to society as a good corporate citizen.
4. Clarify the role of each employee and encourage the participation of all employees.

Environment & Safety Management System

We established the Environment & Safety Committee, and have positioned officers responsible for environment and safety as leaders. Under the following system, KYB works to promote unity in environment and safety initiatives.



Environmental & Safety Mid-Term Policy

Phase 1 (2011-2013)

1. **Creation of energy-saving plants**
 - Reduce CO₂ per basic unit by 1% each year and cut CO₂ emissions by 25% compared with FY1990 levels by 2020
2. **Creation of waste-free plants**
 - Reduce final disposal amount of industrial waste by 65% compared with FY2000 levels by 2015
3. **Creation of accident-free plants**
 - Prevent industrial accidents through risk assessment
 - Develop safety simulation facilities, etc.

Phase 2 (2014-2016)

1. **Creation of plants that aim to minimize energy consumption and waste**
 - Reduce energy consumption per basic unit by 1% compared with FY2013 levels
 - Reduce amount of industrial waste per basic unit by 3% compared with FY2013 levels
2. **Creation and expansion of production bases with zero industrial accidents**
 - Improve employees' awareness of safety and eliminate critical hazard sources

Phase 3 (2017-2019)

1. **Creation of plants that aim to minimize energy consumption and waste**
 - Develop environment for partial supply of energy
 - Promote measures through energy visualization
 - Promote waste volume reduction and recycling
2. **Creation and expansion of production bases with zero industrial and fire accidents**
 - Promote risk assessment and countermeasures against industrial accidents
 - Promote measures for zero fire accidents

Phase 4 (2020-2022)

1. **Creation of plants that aim to minimize energy consumption and waste**
 - Consider environmental friendliness by reducing energy consumption and CO₂ emissions
 - Utilize energy sources with low CO₂ emissions and promote initiatives to prevent global warming
 - Promote measures through energy visualization
 - Contribute to creation of sustainable society while considering ESG initiatives and develop energy and facilities that are environmentally friendly
 - Promote waste volume reduction and recycling
2. **Creation and expansion of production bases with zero industrial and fire accidents**
 - Promote risk assessment and countermeasures against industrial accidents
 - Promote measures for zero fire accidents

Results of Environmental Conservation Efforts and Future Initiatives

We developed the Environmental Management Activity Plan based on the Company’s environmental policy and implemented a variety of activities at each production base to achieve our targets. However, compared with FY2016 levels, which was the benchmark, we failed to achieve our targets for CO₂ emissions, due in part to an increase in production volume. For industrial

waste, until FY2018 we presented it as the amount of overall emissions, but from FY2019 we clarified the definition of recycling and presented it as the volume of actual emissions. In addition, we will work to improve the efficiency of production facilities, further reduce energy consumption, improve productivity and promote recycling.

Results for FY2019

○: Goal attained x: Goal not attained

Theme		Target Value	FY2019 Result	Evaluation
Prevention of global warming	CO ₂ emission volume	93,650 t-CO ₂ or less	96,745 t-CO ₂	x
	Energy saving	Energy consumption per basic unit	0.69 kl/million yen or less	0.75 kl/million yen
Improvement of resource recovery and recycling rate	Recycling rate	92.8% or higher	91.8%	x
	Zero emission	4.6% or less	3.4%	○
Reduction of waste	General waste	489 t or less	515 t	x
	General waste per basic unit	2.03 kg/million yen or less	2.25 kg/million yen	x
	Metal scrap	17,393 t or less	19,319 t	x
	Metal scrap per basic unit	244 kg/million yen or less	285.0 kg/million yen	x
	Industrial waste	3,157 t or less	3,557 t	x
	Industrial waste per basic unit	25.94 kg/million yen or less	28.8 kg/million yen	x

Overview of Major Initiatives in FY2020

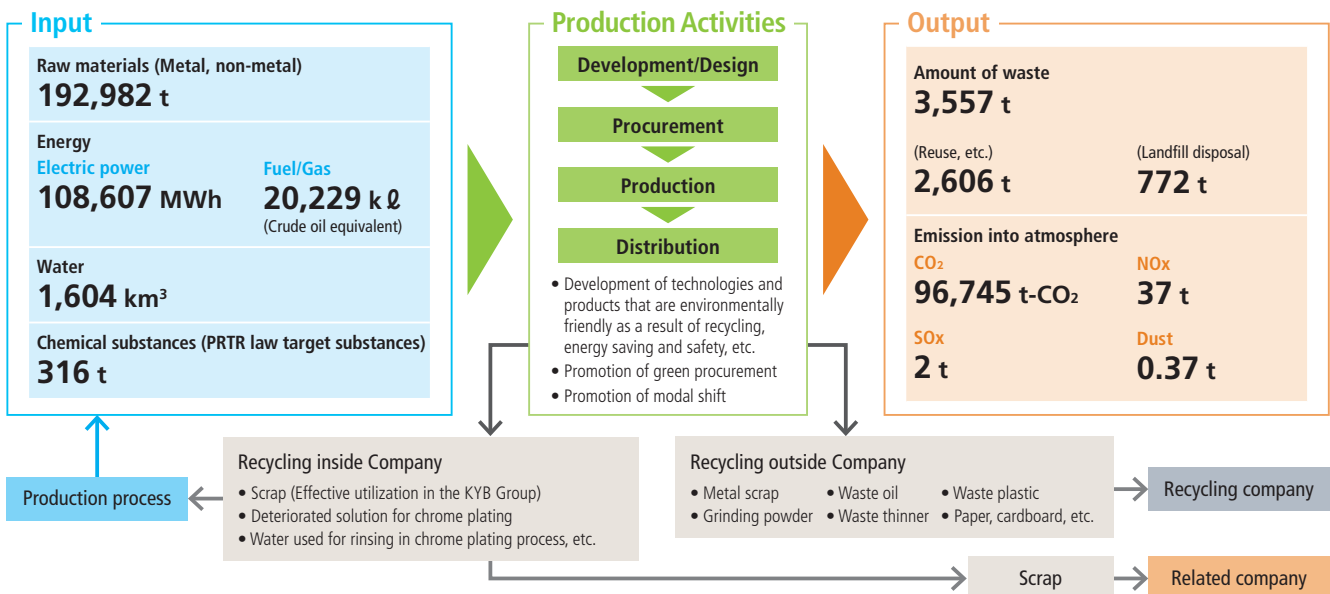
Global Warming Prevention
Measures include replacing lighting with LEDs, LVDs, and other highly efficient devices, adopting inverter control for hydraulic units, upgrading to high-efficiency compressors, eliminating leakage of air, reducing air consumption in plants, and implementing activities for environment impact reduction by installing high-efficiency air conditioning equipment and controlling facility temperatures.

Waste Material Reduction
Measures include reducing paint dust through biological treatment, introducing waste treatment and reduction systems, turning waste into valuable products and promoting recycling.

- Notes: 1. Basic units are calculated using marginal profit.
 2. For energy, crude oil equivalent is calculated for electricity and fuel, and the total value indicates energy consumption.
 3. CO₂ emissions and energy consumption per basic unit are calculated using methods determined by KYB.
 4. We have been promoting recycling activities to reduce industrial waste since FY2019. Therefore, recycling that turns waste into valuable products has been excluded.

Environmental Impact by Business Activity

KYB uses energy, water, chemicals and a variety of other resources. In order to make efficient use of those limited resources in production, we take steps to reduce waste, CO₂ and other emissions.



Chemical Substance Management

Response to Environmental Controls on Products

For the protection of the environment, the REACH Regulations, other ELV¹ and RoHS directives,² and various laws and regulations, which contain increasingly stringent provisions, have been established and are being implemented. In order to address stricter REACH and other regulations, in FY2013 we built a chemical substance database, which is a breakdown of each of our products containing chemical substances subject to the regulations. By FY2015, we had implemented its use throughout the KYB Group, conducted investigations of the relevant substances contained in our products, and collected relevant data. By using our database, we can rapidly respond to requests from clients to determine the presence or absence of not only banned substances and restricted-use materials but also of substances of very high concern, which have been periodically added to the REACH Regulations since the enforcement of the rule.

We will continue to provide products that meet client and market needs.

Notes: 1. A directive that came into effect in the EU in October 2000 to reduce environmental impact caused by end-of-life vehicles.
2. A directive that came into effect in the EU in July 2006 that restricts the use of specific hazardous substances found in electrical and electronic products.

Risk Assessment of Chemical Substances

In FY2015, we assessed the health risks related to chemical substances at all of our production bases in Japan. In FY2016, we

assessed risk of explosion and fire from chemical substances at the Gifu South Plant and Gifu East Plant. For the assessment, we explained to all of our departments that handle chemical substances about the three elements for combustion (i.e., combustibles, oxygen and ignition sources), flashpoint and ignition temperature, which are the basic factors in explosions and fires. Chemical substances handled by the plants include invisible gaseous substances and those with flashpoints below room temperature. By conducting risk assessments and sharing information Groupwide through the chemical substance database, we strive to provide useful information to those who handle chemical substances so that they understand the importance of eliminating ignition sources to prevent explosions and fires caused by chemical substances.

Response to PCB Disposal

Transformers and other electrical equipment containing PCBs are stored securely at each of our business establishments. We concluded a disposal contract with a company specializing in detoxification processes and started disposal in FY2012.

We have been promoting the disposal of transformers at each Group company, and will complete the disposal of the electrical equipment we have stored by the end of summer 2020. We will continue with appropriate disposal of equipment that exhibits low concentrations of PCBs.

ISO 14001 Certification Acquisition

In order to systematically develop initiatives for environment conservation, we are introducing and promoting an ISO 14001 environmental management system. We will shift to the 2015 edition sequentially in renewal examinations.

Japan

KYB	Year of Certification Registration
Gifu South Plant (Including Gifu East Plant, Production Technology R&D Center, Machine Tools Center, KYB Motorcycle Suspension Co., Ltd.)	Feb. 2000
Sagami Plant (Including the Basic Technology R&D Center and the Electronics Technology Center)	Dec. 2000
Kumagaya Plant	Dec. 2000
Gifu North Plant (Including KYB Kanayama Co., Ltd.)	Dec. 2001
Group Companies in Japan	Year of Certification Registration
Kayaba System Machinery Co., Ltd. (Mie Plant)	Dec. 2000
Takako Industries, Inc. (Shiga Plant)	Feb. 2003
KYB-YS Co., Ltd.	Apr. 2004
KYB Trondule Co., Ltd.	Nov. 2008

Overseas

Group Companies Overseas	Year of Certification Registration
KYB Manufacturing Taiwan Co., Ltd. (Taiwan)	Jun. 2001
KYB Steering Spain, S.A.U. (Spain)	Jun. 2001
KYB Suspensions Europe, S.A.U. (Spain)	Dec. 2001
KYB Americas Corporation (United States)	May 2002
KYB (Thailand) Co., Ltd. (Thailand)	Jul. 2003
KYB Steering (Thailand) Co., Ltd. (Thailand)	Aug. 2003
PT. Kayaba Indonesia (Indonesia)	Nov. 2004
KYB-UMW Malaysia Sdn. Bhd. (Malaysia)	May 2005
KYB-UMW Steering Malaysia Sdn. Bhd. (Malaysia)	May 2005
Takako Vietnam Co., Ltd. (Vietnam)	Jan. 2007
KYB Manufacturing do Brasil Fabricante de Autopeças S.A. (Brazil)	Mar. 2007
KYB Industrial Machinery (Zhenjiang) Ltd. (China)	Apr. 2009
KYB Manufacturing Czech, s.r.o. (Czech Republic)	Aug. 2009
Changzhou KYB Leadrun Vibration Reduction Technology Co., Ltd. (China)	Jan. 2010
Wuxi KYB Top Absorber Co., Ltd. (China)	Nov. 2013
Takako America Co., Inc. (United States)	Feb. 2013
KYB Manufacturing Vietnam Co., Ltd. (Vietnam)	May 2013
KYB Advanced Manufacturing Spain, S.A.U. (Spain)	Jun. 2015

OSHMS and ISO 45001 Certification Acquisition

In order to systematically implement initiatives to build an occupational health and safety management system and strengthen its foundation, we are introducing and promoting OSHMS ISO 45001. We introduced OSHMS at the Gifu North Plant in FY2004, and we have been rolling it out Groupwide (OSHMS in Japan and ISO 45001 overseas).

Our overseas bases have acquired OHSAS 18001 certification. We will gradually promote the shift to the international standard ISO 14001 environmental management system.

Bases with OSHMS and ISO 45001 Certification (As of April 2020)

Japan (OSHMS)

Gifu North Plant (Including KYB Kanayama Co., Ltd.)
Gifu South Plant (Including Gifu East Plant, Production Technology R&D Center, Machine Tools Center, KYB Motorcycle Suspension Co., Ltd.)
Sagami Plant (Including the Basic Technology R&D Center and the Electronics Technology Center)
Kumagaya Plant
Takako Industries, Inc. (Shiga Plant)
KYB-YS Co., Ltd.
KYB Trondule Co., Ltd.

Overseas (OHSAS 18001 and ISO 45001 Certification)

KYB Americas Corporation (United States)
KYB (Thailand) Co., Ltd. (Thailand)
PT. Kayaba Indonesia (Indonesia)
KYB-UMW Malaysia Sdn. Bhd. (Malaysia)
KYB-UMW Steering Malaysia Sdn. Bhd. (Malaysia)
KYB Industrial Machinery (Zhenjiang) Ltd. (China)
KYB Manufacturing Czech, s.r.o. (Czech Republic)
Changzhou KYB Leadrun Vibration Reduction Technology Co., Ltd. (China)
Wuxi KYB Top Absorber Co., Ltd. (China)
KYB Manufacturing Vietnam Co., Ltd. (Vietnam)

Environmental Accounting

The amounts of investment and cost were calculated with reference to the Environmental Accounting Guidelines, 2005, provided by the Ministry of the Environment.

(Millions of yen)

Cost Type	Major Contents	Invested Amount/Cost
(1) Business area cost	(1)-1 Pollution prevention cost <ul style="list-style-type: none"> • Air pollution and water pollution prevention activities • Maintenance and inspection of pollution prevention facilities • Analysis and measurement of atmosphere and water quality 	305.9
	(1)-2 Global environmental conservation-cost <ul style="list-style-type: none"> • Energy conversion • Energy-saving activities 	19.5
	(1)-3 Resource circulation cost <ul style="list-style-type: none"> • Recycling of plant waste • Reduction of industrial waste 	367.4
(2) Upstream/downstream cost	Not available	0.0
(3) Management activity cost	<ul style="list-style-type: none"> • Maintenance and management of ISO 14001 • Monitoring of environmental impact 	91.7
(4) R&D cost	<ul style="list-style-type: none"> • Environmentally friendly product development • Lightweight products and products containing less hazardous chemical substances 	77.0
(5) Social activity cost	<ul style="list-style-type: none"> • Support of non-profit environmental protection • Afforestation and maintenance of scenery around plants 	20.2
(6) Environmental remediation cost	Not available	0.0
(7) Other cost	<ul style="list-style-type: none"> • Internal environmental conservation • Welfare conservation 	22.7
Grand total	Not available	904.3

Note: Classification and Definition of Environmental Conservation Costs

Invested amount: Expense for the purpose of environmental conservation during the target period with effect that continues for a number of terms and running cost for those periods.

Cost: Cost or loss generated from expenditure of finances/services for the purpose of environmental conservation.

Activities at Production Bases

Energy Savings by Introducing Inverter Pumps for Coating Equipment Pretreatment

KYBT (Thailand) is moving ahead with replacement of inverter pumps when upgrading pretreatment pumps. By switching to inverter pumps, we were able to reduce CO₂ emissions by 87.75 t-CO₂ annually. Furthermore, the equipment is expected to reduce maintenance costs due to its few components.



Reducing Material Transportation through In-house Production

At KYB Advanced Manufacturing Spain, total truck mileage driven was shortened by moving manufacturing in-house in FY2019 and reducing material transportation. As a result, we were able to reduce CO₂ emissions by 55% and annual emissions to 14 tons.

Improvement of Local Environment (Reduction of Neighborhood Noise)

KYB Suspensions Europe in Spain is near a residential area, and we have reduced noise levels in the daytime by 55 dBA and by 50 dBA at night. We measured at 33 points, made a soundproofing plan, tested effectiveness in advance, and then implemented the initiative. As a result, noise was reduced at all measurement points. Significant noise reduction was achieved at all of the most important peripheral points, especially at night. The initiative was also approved by the government of Navarre.

Reducing Environmental Impact by Upgrading Cationic Electrodeposition Coating Equipment

The Kumagaya Plant now employs zirconium conversion coating, a first in the special-purpose vehicle industry, as the pretreatment for undercoating. In 2018, we upgraded cationic electrodeposition coating equipment and started



full-scale operation in May 2019. Compared to the zinc phosphate coating used by many companies with cationic electrodeposition coating equipment for chemical conversion coating, sludge was reduced by about 90%, and since heavy metals, phosphorus and nitrogen dioxide are not used, the amount of environmentally hazardous substances generated was greatly reduced. In addition, the upgrades improve the paint quality for concrete mixer trucks, which need an exterior that is both highly durable and attractive.

We will make further efforts to create products that are environmentally friendly and contribute to society.

Reducing Environmental Impact with LED Lighting in Plants

The Gifu North Plant has been phasing in LED lighting since FY2017. In FY2020, we also reduced lighting in conjunction with the move to 2,500 LED spotlights in offices and plants. The use of LED lighting reduces energy consumption by the crude oil equivalent of approximately 160 kℓ per year. We will promote the shift to LED lighting at other Group plants.



Industrial Waste Reduction by Extending the Cleaning Liquid Replacement Cycle

Plant No. 1 of KYB Kanayama Co., Ltd. made cleaning liquid replacement quantitative rather than periodic in FY2018. As a result, the plant was able to reduce the amount of effluent by one-third. KYB Kanayama also broadened deployment of this system to Plant No. 2 in FY2019 to further reduce industrial waste.

Compressor Operation Review to Save Energy

KYB Kanayama reviewed air supply operations due to oversupply at certain times of day. The resulting improvements reduced monthly electricity consumption by 21,120 kwh from 311,680 kwh to 290,560 kwh, and reduced CO₂ emissions by 11,088 t-CO₂.



Waste Reduction by Introducing Garbage Processing Equipment

Approximately 350 kg of garbage was discharged from the cafeteria at the Sagami Plant per month. A garbage processor was introduced to enable in-house garbage disposal, resulting in zero emissions and reduction of processing costs. In addition, this device uses microorganisms to decompose food waste into water and carbon dioxide, thus contributing to environmental protection.

"Special Award for Outstanding Foremen in Occupational Safety" from the Minister of Health, Labor and Welfare

In January 2020, the assistant manager of the Manufacturing Department of Hydraulic Components Operations at the Gifu South Plant received the "Special Award for Outstanding Foremen in Occupational Safety" from the Minister of Health, Labor and Welfare. This was the fourth time a KYB Group employee has received this award, which recognizes an outstanding foreman who has practiced appropriate safety guidance with a high level of safety awareness. We will continue to put the safety of our employees first as we strive for zero occupational accidents.