



**What Mitsubishi Electric
Can Do for the
Future of the Earth**

Mitsubishi Electric Group
Environmental Performance Review

2018

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Aiming to Become a Global, Leading Green Company by Contributing to the Environment Through Products and Services, and Reducing Environmental Load from Production

Contributing as a Manufacturer Throughout the Product Lifecycle

As Mitsubishi Electric works towards becoming a “Global, Leading Green Company,” it is contributing to the creation of a more affluent society that simultaneously achieves sustainability, safety, security and comfort.

As a manufacturer, among a number of environmental initiatives, Mitsubishi Electric places the greatest importance on creating a recycling-based society. This is because manufacturers are involved in the entire lifecycle of every product, from procuring resources and materials to manufacturing and sales, as well as the collection and recycling of products at the end of their service life.

The Mitsubishi Electric Group is committed to taking responsibility for its products throughout their lifecycles, doing so by promoting original approaches for saving resources such as reducing product size and weight beginning from the initial design stage. In the product collection and disposal stages, our initiatives are wide-ranging, including the modernization (renewal) of elevator systems utilizing existing parts and equipment, and resource recycling businesses such as recycling used home appliances. We are also striving to contribute towards a low-carbon society through the dissemination of highly efficient, energy-saving products.

The Mitsubishi Electric Group contributes to initiatives that focus mainly on promoting the creation of a recycling-based society and is committed to resolving environmental problems. Our efforts contribute to society through the provision of eco-conscious products and services to customers and the implementation of activities that minimize the environmental impact caused by production.

Through these environmental initiatives, I believe that the Mitsubishi Electric Group will be recognized by all stakeholders as a company needed by society. Accordingly, I hope that each and every employee of the Mitsubishi Electric Group is proud of his/her work and speak well of the company to their families, doing so with purpose and a sense of pride.

Promoting Environmental Plans in Order to Achieve Environmental Vision 2021

The Mitsubishi Electric Group set forth Environmental Vision 2021 targeting completion in the year 2021, when the company will celebrate its 100th anniversary. To

date, as the company progresses towards achieving that vision, we have implemented various measures based on environmental plans that have been drawn up every three years. In the 8th Environmental Plan (fiscal 2016-2018), our activities were driven under four pillars: creating a low-carbon society, creating a recycling-based society, creating a society in tune with nature, and strengthening our environmental foundations.

The fruition of such efforts includes improvements in production efficiency utilizing IoT*1 and the global expansion of highly efficient, energy-saving products. As a result, we have reduced CO₂ emissions from production and product use, thereby contributing to lower levels of greenhouse gases. Additionally, we have achieved zero emission of wastes both in Japan and in all overseas regions, thereby contributing to more effective use of resources. Furthermore, improving employee environmental awareness has led to an increase in the number of participants in the Mitsubishi Electric Outdoor Classroom and “Satoyama” Woodland Preservation Projects, which have substantially outperformed our targets. Biodiversity preservation activities have expanded to all Mitsubishi Electric business sites in Japan as well, thus contributing to the creation of a society in tune with nature. By focusing on improving the quality of environmental initiatives at each manufacturing base, higher levels of environmental management capability have been achieved and our environmental management foundations strengthened.

Our environmental initiatives have not gone unrecognized. Mitsubishi Electric was given the highest rank, the A list, by CDP*2 in fiscal 2018 for the second consecutive year in three categories: climate, water and supply chain. It gives me great pleasure, and I am honored, that our consistent efforts in carrying out these activities





have been recognized by society.

The period covered by the 9th Environmental Plan (fiscal 2019-2021), which was launched in fiscal 2019, is regarded as the final three years for achieving our vision. For this period, we have taken into consideration how we will manage future water shortages and more stringent overseas regulations, in addition to the aforementioned four pillars of the 8th Environmental Plan. Consequently, effective water usage and improving the level of environmental initiatives at overseas business sites have been added to the key issues for our activities.

Our goal is to become a Global, Leading Green Company, and in line with this, we have set targets for consolidated sales of ¥5 trillion and operating margins of 8% or higher to be achieved by fiscal 2021. In order to achieve these growth targets, it is imperative that we meet stakeholders' expectations through various initiatives, including those which contribute to the environment through business operations.

Long-term Outlook for Environmental Activities

The Mitsubishi Electric Group has been working on the formulation of a next long-term environmental vision that contributes to achieving SDGs^{*3} looking ahead as far as 2030, or even 2050. We will set forth targets for the next long-term vision, together with a concrete and feasible roadmap to achieve those targets, after studying possible changes in the future social environment and various risks likely to emerge. Among those far-sighted initiatives, we are hoping to set targets for CO₂ emission reductions and obtain approvals for SBT^{*4} initiatives by fiscal 2020.

In relation to Society 5.0^{*5}—being promoted by the Japanese government—our aim is to contribute to the achievement of a sustainable society that flourishes

environmentally and economically. To this end, we have listed, as one of the problems to be solved, overcoming environmental restrictions on energy through the use of resources and energy that generate zero waste. Mitsubishi Electric will strive to contribute to realizing Society 5.0 and achieving SDGs by developing and providing energy-saving products and systems that help reduce CO₂ emissions, including devices such as power semiconductors, products like air-conditioners and system solutions such as ZEB.^{*6}

In the past, through my involvement in the Company's automotive equipment, home appliances and other business operations, I put my energy into developing and providing products and services that simultaneously achieve comfort for customers and reduce environmental load. Going forward, I will use all my knowledge and skills to lead the Mitsubishi Electric Group toward the creation of a prosperous society; doing so by clarifying how to contribute to society and indicating the direction in which we shall proceed.

June 29, 2018

Takeshi Sugiyama President & CEO
Mitsubishi Electric Corporation

^{*1} Internet of Things: the network of various things connected via the Internet and controlling each other through the exchange of information.

^{*2} CDP: International non-government organization that conducts surveys, discloses performance and evaluates the environmental activities of companies and cities.

^{*3} Sustainable Development Goals to be achieved by 2030, included in "The 2030 Agenda for Sustainable Development", which was adopted at the United Nations Sustainable Development Summit in September 2015.

^{*4} Science-Based Target initiatives: Initiatives regarding targets for reducing CO₂ emissions based on scientific grounds.

^{*5} One of the basic guidelines advocated by the Japanese government in its science and technology policies. An initiative to realize a "super smart society", the 5th phase of a society, which follows hunting, agrarian, industrial and information societies.

^{*6} Zero Energy Building: A building where the net consumption of fossil fuel energy is zero or roughly zero, offset by energy savings and the utilization of renewable energy resources.

FOR THE GLOBAL ENVIRONMENT

Perspective towards the Earth's Environment:

Contributing to the Environment through Products and Services

Fiber 2D Laser Processing Machines

Reducing power consumption through shorter processing time and energy-saving technologies

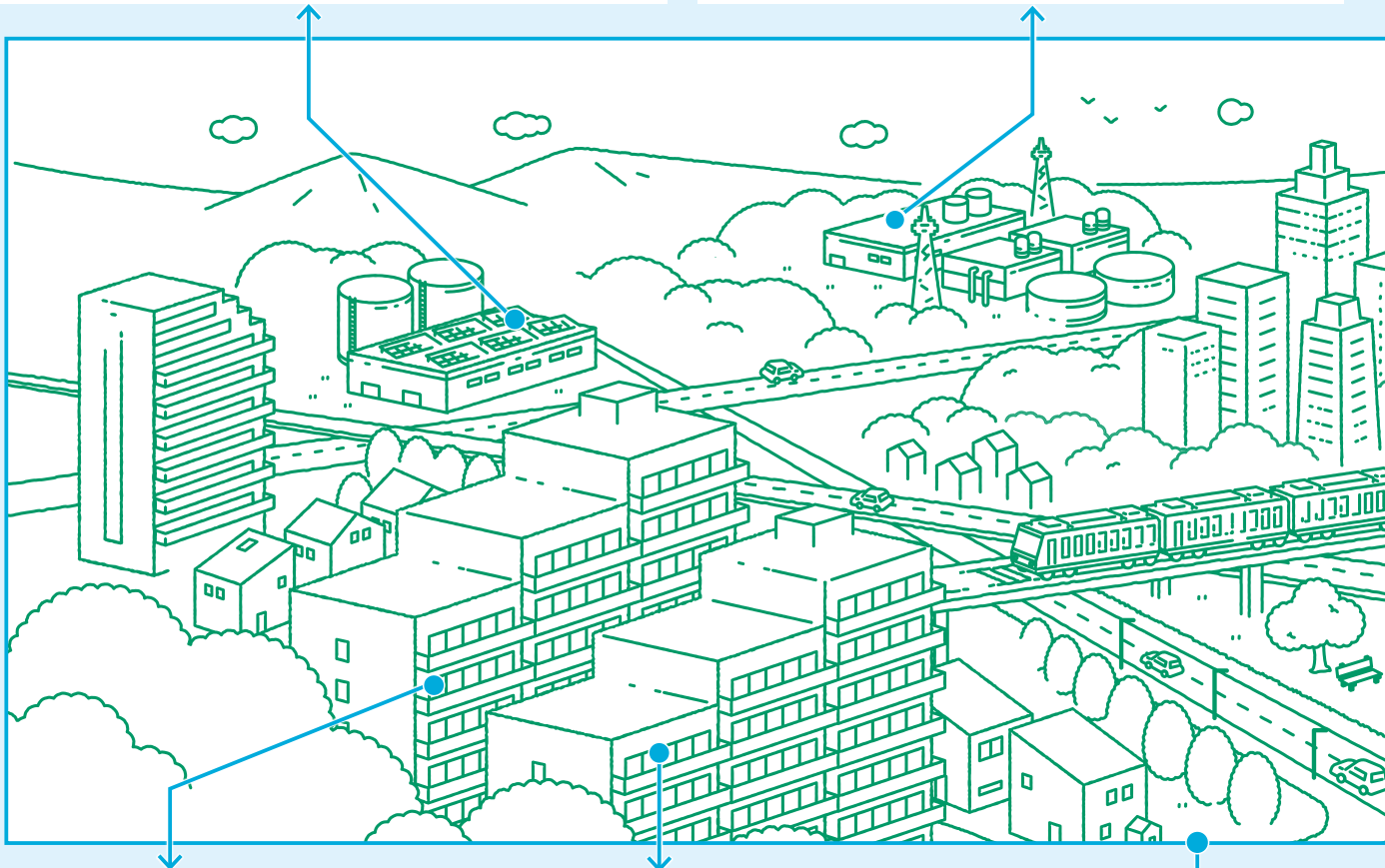
Fiber laser processing machines are sheet-metal working equipment that utilize lasers for the cutting process. The latest eX-F Series models have successfully reduced the time required for processing, as well as amount of electricity used. The adoption of Mitsubishi Electric's own servomotor, amplifier and inverter-controlled cooling system has enabled a substantial reduction in power consumption.



High-efficiency Turbine Generators

Achieving world-class power generation efficiency

This is a large indirect hydrogen-cooled turbine generator for thermal power plants. Despite its compact size, it is capable of high-efficiency and significant power output. The products manufactured by Mitsubishi Electric are responding to a worldwide surge in power demand and the shift towards a low-carbon society.



Room Air Conditioners

Simultaneously achieving high energy efficiency and comfort

Kirigamine FZ Series room air conditioners are equipped with "Move Eye mirA.I.", an artificial intelligence application that predicts sensory temperatures ahead of time. They are also equipped with technologies that automatically switch wiring according to the motor speed required. As a result, high energy efficiency and comfort have been simultaneously achieved.



Subscriber Terminal Equipment for Optical Access Systems

Contributing to a minimal increase in power consumption in today's information society

The GE-PON ONU subscriber terminal equipment for optical access systems enables a single fiber-optic cable to be shared by a number of users. Accordingly, this helps to reduce the power consumed by equipment and electricity/unit data volume, thereby helping to minimize the increasing power consumption required for today's information-based society.



Power Semiconductor Devices

Contributing to reducing power loss in devices

Power semiconductor devices are built-in electronic power control devices used in various products including automobiles, home electrical appliances, rolling stock, and industrial equipment. They help save energy and are one of the key devices playing a significant role in reducing the power lost during product use.

Ozone Generators

Contributing to the conservation of water

Ozone generators are water-purifying equipment that utilize ozone, which has excellent anti-bacterial, deodorizing, decoloring, and oxidizing properties. These generators are playing an active role in various areas, including advanced levels of water purification. They are capable of supplying safer, more trustworthy and better-tasting water as compared to traditional purification methods that use chlorine and other chemicals.



Observation Satellites

Contributing to the conservation of woodland and marine environments

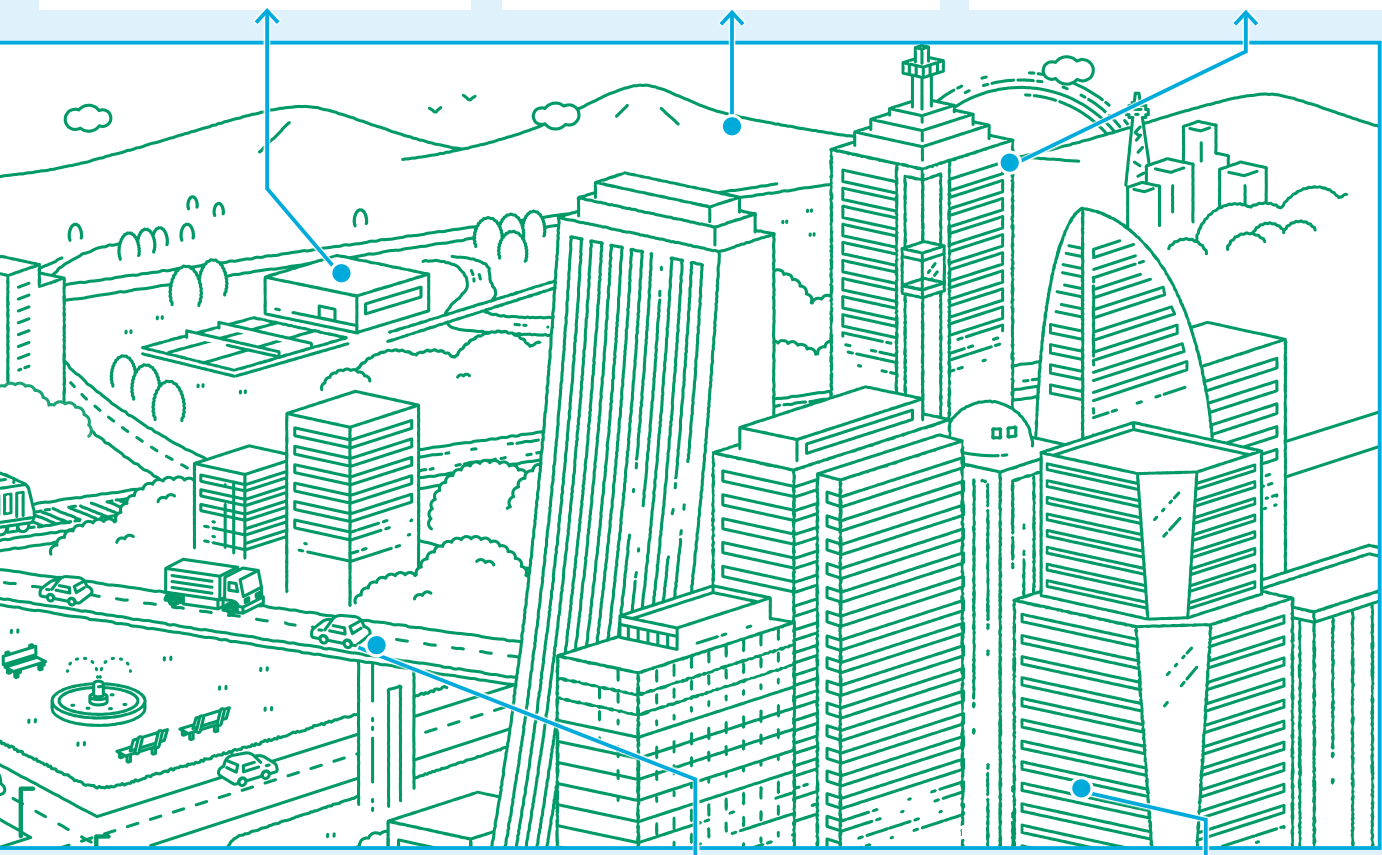
With the aim of ensuring safe lifestyles and solving global environmental issues, the DAICHI-2 Advanced Land Observing Satellite-2 (ALOS-2) was launched on May 24, 2014. It is also contributing to the surveillance of illegal logging in rainforests and the observation of forest degradation.



Elevators

Contributing to reducing power consumption and waste

Mitsubishi Electric elevators are equipped with various energy-saving and resources-saving technologies, including the use of regenerative electric power, the adoption of silicon carbide (SiC) power semiconductors that lose less power, reductions in the size and weight of devices, and efficient renewal of products currently in use. They also offer smooth and comfortable rides.



Motor Generators

Contributing to reducing automobile fuel consumption

Motor generators combining the engine starting function and the alternator electricity generating function into a single unit. They have an important role in a wide range of products and technologies, including idle-stop systems, engine assist when driving, and regeneration of energy when slowing down, thereby contributing to the reduction of fuel consumption.



Data Centers

Improving eco-conscious working environments

Data centers are facilities designated to house servers and telecommunication equipment, and are part of the social infrastructure required to remain operational 24/7. Amidst progress in the utilization of big data and the shift to the Internet of Things (IoT), increasing power consumption has become an issue of concern. Energy-saving measures at data centers are helping to reduce the environmental load.



FOR THE GLOBAL ENVIRONMENT

Perspective towards the Earth's Environment:

Reducing Environmental Load from Production

Reducing Environmental Risk through the Introduction of the Green Accreditation System

The Mitsubishi Electric Group issues Green Accreditation certifications to those suppliers that satisfy its accreditation standards. Certification criteria includes passing evaluations of each supplier's environmental management system initiatives, compliance with environmental regulations, and management of chemical substances contained in products supplied to the Group. This system has been helping to reduce environmental risk within the Group. Currently 99% of all suppliers have obtained Green Accreditation certification, and the goal is to improve this to 100% in the future.

Promoting Emission Reduction of Four Greenhouse Gases

Mainly four greenhouse gases are emitted during Mitsubishi Electric Group business operations; namely, CO₂, SF₆, PFC and HFC. Regarding initiatives to reduce CO₂ emissions, the focus remains on energy savings at production facilities and utilities. We have been working to reduce other gases by introducing gas abatement systems and switching to refrigerants with a low Global Warming Potential (GWP).



Solar power generation system utilizing roofs



Promoting Self-contained Plastic Recycling System

We continue to promote increased use of our self-contained plastic recycling system, in which raw materials recovered from end-of-life home electric appliances are reused in new products. Highly precise separation of different types of plastic fragments after crushing the used products has resulted in our plastic recycling rate rising from around 6% to 70%.



Different types of crushed plastic from used products

Pursuing Reduction in Resource Inputs and Improvement in Waste Materials Final Disposal Rate

We have been reducing the use of resources necessary for manufacturing products by reducing the size and weight of products. Additionally, efforts are being made to recycle waste materials generated during the production processes. This is being accomplished by applying various methods, including conversion to valuable resources through analysis and the thorough separation of waste materials.

Top Evaluation from CDP* Results in Consecutive Selection as an A List Company

In fiscal 2018, Mitsubishi Electric was selected by CDP for the second year running as having a superior approach to and strategies for reducing greenhouse gas emissions, halting climate change, and managing water resources. We were placed among the highest-scoring companies in the CDP Climate A List and CDP Water A List in fiscal 2017 and 2018. We also made the A List for the Climate and Water categories in the CDP Supply Chain Program for two consecutive years.

*CDP: International non-governmental organization (NGO) that examines, evaluates, and discloses environmental initiatives of corporations and cities.



Working to Achieve Sustainable Development Goals (SDGs)

In 2015, the United Nations set 17 global goals, collectively known as the Sustainable Development Goals (SDGs), that should be achieved by the year 2030. The Mitsubishi Electric Group has been working to achieve all of these targets throughout its business operations, and six of the goals in particular are closely related to its environmental activities. We will continue to focus our efforts on coming up with new ideas and creating new technologies for solving social issues from the environmental aspect.



Providing Information and Solutions in Support of Customers' Initiatives to Reduce Environmental Load

The Mitsubishi Electric Group is offering information via the Internet and other media as to how to make most of its products use less electricity. In addition, we are introducing successful examples of products and services that contribute to reducing environmental load, and offering seminars on energy-efficient solutions at various locations.



Example of introducing energy-saving system installation



Energy-saving achievements in the Group



Packaging/
Transportation



Usage

Focusing on Reduction of Water Usage at All Business Sites in Japan and Overseas

We are monitoring the use and reuse of water at all of our business sites and implementing measures when necessary. Each site is working to reduce water usage and improve reuse rates, with useful case examples being shared with other sites.



Water recycling facility

Promoting Strain-free, Waste-free, Seamless Product Transportation

We are working to minimize CO₂ emissions during product transportation. Our initiatives include switching from trucking to railway and marine transportation (i.e., modal shift), reducing the number of vehicles used through improving load factors, and changing to more efficient logistic routes. We are also working to reduce the use of disposable packaging materials.

Promoting Three Initiatives to Realize a Society Living in Harmony with Nature

Mitsubishi Electric Outdoor Classroom

Regarding natural fields, including woodlands, river banks, parks and coastal areas as classrooms, our employees lead participating in learning the importance of nature.

“Satoyama” Woodland Preservation Project

As part of our social contribution activities built on employee volunteer spirit, this project is aimed at recovering local nature, including parks, woodlands and rivers around business sites, to its original state.

Preserving Biodiversity at Business Sites

At all business sites in Japan, we are promoting the preservation of local indigenous species, control of alien species, and improvement of greenery with biodiversity in the surrounding areas in mind.



Field trip to observe nature with kindergarten children



9th Environmental Plan (Fiscal 2019-2021)

The Mitsubishi Electric Group implements a new environmental plan every three years, in which concrete targets and initiatives for environmental preservation are set. For the 9th Environmental Plan, the following have been identified as key issues for making final touches to achieve Environmental Vision 2021, and efforts are being made to realize it.



Reducing CO₂ from Production

We will push forward with reductions in CO₂ from production (CO₂ originating from energy), as well as reducing non-CO₂ greenhouse gases (SF₆, HFC, and PFC).

Fiscal 2021 Target

Total emission of greenhouse gases from production (CO₂ equivalent)

1.47 million tons or less



Contribution to Reducing CO₂ from Product Usage

We will help reduce CO₂ emissions through reducing the electricity consumed by customers during product use.

Fiscal 2021 Target

Reducing CO₂ emissions from product usage by an average of

35% compared to use in fiscal 2001

Contribution to reducing CO₂ from product usage

7,000 million tons



Effective Utilization of Resources

We will promote thorough waste separation, recycling, and greater efficiency of waste collection and transport in order to reduce final waste disposal.

Fiscal 2021 Target

Final disposal rate in Japan Less than

0.1%

Final disposal rate overseas Less than

0.5%



Reducing Resource Inputs

We will reduce the use of resources (resource inputs) as a measure towards creating a recycling-based society.

Fiscal 2021 Target

Reduce resource inputs by an average of

40% compared to fiscal 2001



Using Water Effectively

Considering the increasing importance of water resources, we set new targets. We will engage in thorough management of water usage and drainage volumes, and promote water savings and reuse in Japan and overseas.

Fiscal 2021 Target

Reduce water usage per unit of sales by

1% per annum compared to fiscal 2011



Nature Conservation Activities

We will continue to hold Mitsubishi Electric Outdoor Classrooms and proceed with the “Satoyama” Woodland Preservation Project.

Fiscal 2021 Target

The cumulative number of participants in Mitsubishi Electric Outdoor Classrooms and the “Satoyama” Woodland Preservation Project

51,000 or more

Compliance with Environmental Regulations

We will work to introduce alternative technologies in order to ensure compliance with RoHS2 chemical substance regulations in Europe.

Improving the Level of Environmental Initiatives at Manufacturing Bases

We will strengthen the monitoring of compliance at all overseas manufacturing bases and proceed with the development of technologies in response to various laws and regulations.



Greenhouse Gas Emissions along the Value Chain

The Mitsubishi Electric Group refers to regulations such as the Greenhouse Gas (GHG) Protocol—an international standard for calculating greenhouse gas emissions—and the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain published by Japan’s Ministry of the Environment, to determine how to assess and calculate emissions from business activities (scopes 1 and 2, respectively) and indirect emissions from outside the range of its business activities (Scope 3).

Fiscal 2018 Greenhouse Gas Emissions

The “★” symbol denotes Mitsubishi Electric Group greenhouse gas emissions for which third-party verification has been carried out by SGS Japan Inc.

Scope	Category	Accounting / 10,000 tons-CO ₂ (Scope 3 Emission Rates)	Accounting summary ^{*1}
Scope1	Direct emissions associated with fuel use at our company	★ 31	Direct emissions from fuel use and industrial processes at our company ^{*2}
Scope2	Indirect emissions associated with use of externally-purchased electricity and heating		Indirect emissions associated with use of electricity and heat purchased by our company ^{*3}
	Market based	★ 98	Calculated using power emission coefficient based on contract
	Location based	★ 97	Calculated using average power-generation emission coefficient within the zone
Scope3	Indirect emissions outside the scope of our company’s operational activities		
	Category 1 Purchased goods and services	670 (15%)	Emissions associated with activities up to the manufacturing of materials, etc. relating to raw materials, parts, purchased products, and sales ^{*4}
	Category 2 Capital goods	66 (1.5%)	Emissions generated by the construction and manufacturing of own capital goods
	Category 3 Fuel- and energy-related activities not included in Scope 1 or Scope 2	8.5 (0.2%)	Emissions associated with procurement of fuel necessary for power generation, heat supply, etc. and power such as electricity supplied by other parties
	Category 4 Upstream transportation and distribution	43 (1.0%)	Emissions associated with logistic processes up to the delivery to our company of materials, etc. relating to raw materials, parts, purchased products, and sales ^{*5}
	Category 5 Waste generated in operations	0.04 (0.0%)	Emissions associated with transporting and processing waste produced by our company ^{*6}
	Category 6 Business travel	★ 4.0 (0.1%)	Emissions associated with employee business travel ^{*7}
	Category 7 Employee commuting	★ 2.9 (0.1%)	Emissions associated with employees commuting to and from their respective workplaces ^{*8}
	Category 8 Upstream leased assets	-	Emissions associated with operation of leased assets hired by our company (Calculated by Mitsubishi Electric under Scope 1 and Scope 2)
	Category 9 Downstream transportation and distribution	0.7 (0.0%)	Emissions associated with the transportation, storage, cargo handling and retailing of products
	Category 10 Processing of sold products	0.2 (0.0%)	Emissions associated with the processing of interim products by business operators
	Category 11 Use of sold products	★ 3,736 (82%)	Emissions associated with the use of products by users (consumers/business operators)
	Category 12 End-of-life treatment of sold products	3.0 (0.1%)	Emissions associated with the transportation and processing of products for disposal by users (consumers/business operators) ^{*4}
	Category 13 Downstream leased assets	0.01 (0.0%)	Emissions associated with operation of leased assets
	Category 14 Franchises	-	Emissions at companies operating as franchises (Not applicable to Mitsubishi Electric)
Category 15 Investments	8.0 (0.2%)	Emissions associated with operation of investments	
	Total	4,543	

*1 Excerpt from Basic Guidelines published by the Japanese Ministry of the Environment and Ministry of Economy, Trade and Industry

*2 CO₂, SF₆, PFC, and HFC emissions associated with the use of gas, heavy oil, etc., and with product manufacturing

*3 CO₂ emissions associated with the use of electricity, etc.

*4 Excludes some regions

*5 CO₂ emissions associated with product distribution/circulation (sales distribution) Subject to accounting: 55 companies (production sites)

*6 CO₂ emissions associated with transportation of waste (waste distribution) Subject to accounting: Mitsubishi Electric

*7 Results for Japan. Excludes CO₂ emissions associated with actual use of taxis and accommodation

*8 Assuming that all employees use passenger rail services

PERFORMANCE DATA

Our Initiatives to Date:

Fiscal 2018 Environmental Data

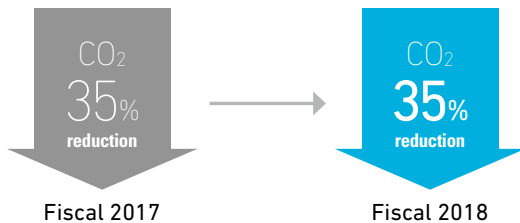


Contribution to Reducing CO₂ from Product Usage

We believe that reducing the electricity consumed by products when customers use them should lead to energy savings for society as a whole. Based on this perspective, we are committed to improving the energy efficiency of our products.

In fiscal 2018, two areas—information and communication systems and electronic devices—reported notable progress in energy savings. As a result, average reduction rates were maintained at a high level of 35% compared to that reported for fiscal 2001.

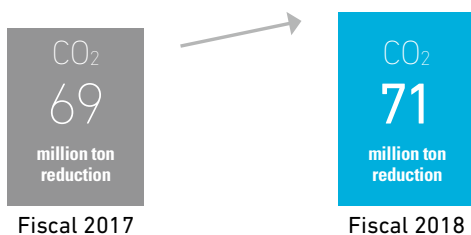
Reducing CO₂ from Product Usage through Improving Energy Efficiency



We are also trying to expand the reduction of CO₂ by visualizing the amount reduced as a result of replacing old products with their new counterparts that operate with higher energy efficiency. In fiscal 2018, contribution to reducing CO₂ from product usage amounted to 71 million tons.

Contribution to Reducing CO₂ = Effect of reducing CO₂ from product usage per unit × Number of units sold during the fiscal year

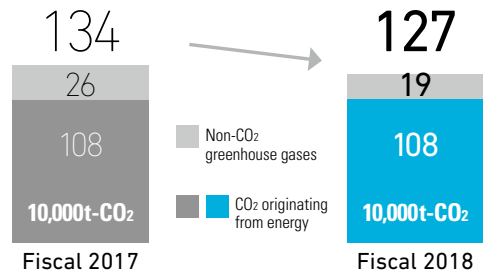
Contribution to Reducing CO₂ from Product Usage



Reducing CO₂ from Production

In fiscal 2018, our initiatives to reduce CO₂ emissions originating from energy included the introduction of high-efficiency devices and the expansion of new energy-saving technologies in Japan, and the adoption of technologies that have proven effective for saving energy in Japan to our overseas affiliates. Combined with abatement and recovery of non-CO₂ greenhouse gases (SF₆, HFC and PFC), the total of all greenhouse gas emissions combined was substantially reduced.

CO₂ Emissions from Production



Effective Utilization of Resources

In fiscal 2018, we focused on reducing the final disposal ratio, especially overseas. With a target of a final disposal ratio of 0.5% or less, initiatives for thorough separation of wastes and the expansion of recycling activities were implemented.

We ensured that hazardous wastes* were appropriately disposed of according to laws and regulations while actively promoting recycling.

*The Mitsubishi Electric Group defines hazardous wastes as follows:
Mitsubishi Electric and affiliates in Japan: "Specially-controlled industrial wastes" specified by the Japanese Waste Disposal Law.
Overseas affiliates: Wastes determined by each affiliate as hazardous wastes based on local laws and regulations.

Total Waste Output

Fiscal 2017	Fiscal 2018
Mitsubishi Electric.....8.6	Mitsubishi Electric.....8.8
Affiliates in Japan.....4.7	Affiliates in Japan.....4.6
Overseas affiliates.....7.2	Overseas affiliates.....8.1

10,000 tons

Details of information on this page and other performance data are available on the "Environmental Report 2018" website.



www.MitsubishiElectric.com/en/sustainability/environment/report

Final Disposal Ratio

Fiscal 2017		Fiscal 2018	
Mitsubishi Electric	0.002 %	Mitsubishi Electric	0.001 %
Affiliates in Japan	0.01 %	Affiliates in Japan	0.01 %
Overseas affiliates	0.69 %	Overseas affiliates	0.59 %

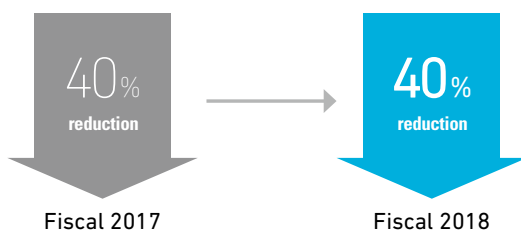
Hazardous Wastes Emissions

Fiscal 2018	
Mitsubishi Electric	2,612
Affiliates in Japan	649
Overseas affiliates	5,042



Reducing Resource Inputs

In fiscal 2018, all products in all segments saw steady reductions in resource inputs. Consequently, an impressive average reduction rate of 40% was achieved for 64 targeted products.



Reducing Resource Inputs



Using Water Effectively

In fiscal 2018, we carried out initiatives to save water in Japan and overseas, including the reuse of the warm water used in shipment testing for processing and cleaning components, and the use of treated wastewater for flushing toilets.

Total Water Usage (Water Recycling Volume)

Fiscal 2017		Fiscal 2018	
Mitsubishi Electric	1,098 (325)	Mitsubishi Electric	1,080 (327)
Affiliates in Japan	236 (94)	Affiliates in Japan	269 (107)
Overseas affiliates	189 (18)	Overseas affiliates	211 (17)

10,000 m³



Chemical Management and Reduced Disposal

We have identified a total of 3,264 controlled substances at present and are comprehensively managing them utilizing a chemical management system that includes information on parts and materials procurement.

Chemicals Used

Fiscal 2017		Fiscal 2018	
Mitsubishi Electric	141 types 4,116 tons	Mitsubishi Electric	141 types 4,592 tons
Affiliates in Japan	41 types 1,376 tons	Affiliates in Japan	41 types 1,482 tons

Corporate Profile (as of March 31, 2018)

Company Name: Mitsubishi Electric Corporation

Head Office Location:

Tokyo Building, 2-7-3, Marunouchi, Chiyoda-ku, Tokyo 100-8310, Japan

Established: January 15, 1921

Paid-in Capital: ¥175,800 million

President: Takeshi Sugiyama (assumed position on April 1, 2018)

Number of Employees:

Consolidated 142,340

Non-consolidated 34,561

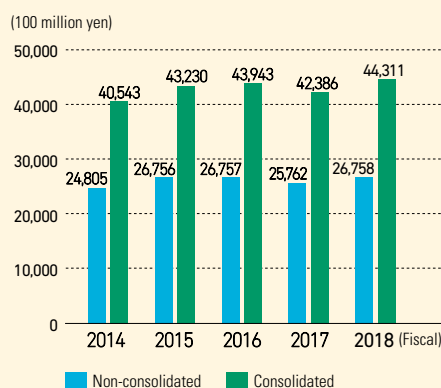
Number of Affiliated Companies:

Subsidiaries 205 Affiliates 36

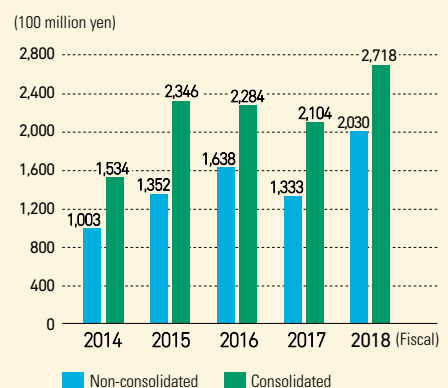
Business Segments:

Energy and Electric Systems, Industrial Automation Systems, Information and Communication Systems, Electronic Devices, Home Appliances, Others

Net Sales



Net Income Attributable to Mitsubishi Electric Corp.

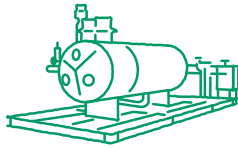


What We Can Do for the Future

01 Public Utility Systems Group

Main Products and Technologies

- Total energy and environmental solutions for railways
- Railcar air-conditioner units
- Ozone generators
- Water treatment systems
- Aurora Vision



Aiming to Build Next-Generation Social Infrastructure with a Broad Range of Technologies and Continuous R&D to Realize a Low-Carbon Society

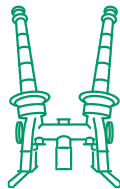
The Public Utility Systems Group offers an extensive range of products and services for customers responsible for building social infrastructure, including the public sector and road/railway-related companies. These solutions include water treatment plant systems, intelligent transport systems, railway information systems, and electromagnetic products for rolling stock. In the process of designing and manufacturing these products, we are promoting a shift towards smaller and lighter products, as well as saving resources and greater energy efficiency through improving product performance and efficiency.

For example, we incorporated SiC power modules in station energy-saving inverters that supply the surplus power left over from the regenerated electric power produced when rolling stock is braking to power other systems such as station lighting and air conditioning. This system was awarded the Agency of Natural Resources and Energy Director-General's Award in the New Energy Grand Prize in fiscal 2017. We aim to expand the use of SiC power modules and further increase the conservation of energy.

02 Energy & Industrial Systems Group

Main Products and Technologies

- Turbine generators
- Switchgear
- Transformers
- Power electronics systems for electric power
- Smart meter systems
- Battery storage systems
- Plant monitoring and control systems



Developing High-performance, Eco-conscious Devices and Systems to Create a "Safe, Secure, and Comfortable Sustainable Society"

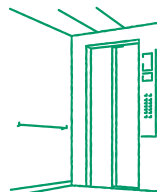
The Energy & Industrial Systems Group provides a wide range of systems and products that play vital roles in power generation, transmission, power distribution, and power retailing. On the product side, this includes generators, transformers, switchgear, and vacuum circuit breakers, while systems include plant monitoring, grid stabilization, grid protection and control systems, and direct-current monitoring technologies. Through these products and systems, we comprehensively support the establishment and operation of electric power infrastructures.

With the realization of a sustainable society now an important theme globally, we will continue to develop eco-conscious, high-performance devices and next-generation power systems capable of managing disasters, human threats and changes in the electricity market. Our aim is to contribute to creating a "safe, secure and comfortable sustainable society".

03 Building Systems Group

Main Products and Technologies

- Elevators
- Escalators
- Access control systems
- Building management systems
- Surveillance cameras



Proactively Proposing Building Solutions Leading to Energy Savings While Pursuing Eco-conscious Products

The Building Systems Group provides public and private building owners with vertical transport systems such as elevators and escalators, and building management systems such as access control, building management, and surveillance. During the course of the development and offering of these products, we prioritize customer safety and security throughout the lifecycle of the products while focusing on the following environmental approaches:

1. Pursuit of eco-conscious products

- (1) Development of products and technologies with excellent energy efficiency and resources-saving performance
- (2) Continuous efforts to reduce environmental load during the processes of production and testing
- (3) Promotion of greater energy efficiency and waste reduction through updating existing equipment

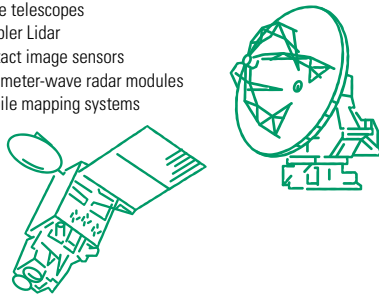
2. Proposal of total building solutions leading to higher energy efficiency

Energy management and improvement in comfort and convenience

04 Electronic Systems Group

Main Products and Technologies

- Communications, broadcast, and observation satellites
- Ground control systems for satellite operation
- Large telescopes
- Doppler Lidar
- Contact image sensors
- Millimeter-wave radar modules
- Mobile mapping systems



Working to Solve Environmental Problems and Develop Products for Next-generation Energy Solutions

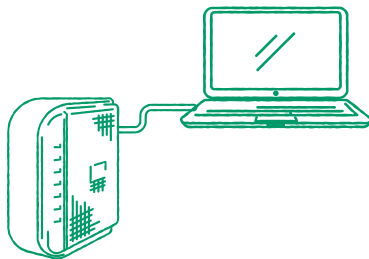
The Electronic Systems Group manufactures space infrastructure, ranging from observation satellites to ground control systems for satellite operation and large terrestrial telescope facilities, among other products. These products play a key role in leading to solutions to social issues around the globe.

For example, we oversaw the manufacturing of the DAICHI-2 Advanced Land Observation Satellite (ALOS-2) and meteorological satellites Himawari-8 and Himawari-9, which contribute to improving the assessment of disaster situations, the monitoring of oceans and forests and the observation of the atmosphere, as well as safeguard communities and help solve global environmental problems. Furthermore, the Doppler Lidar, which is capable of remotely measuring the speed of dust and particulates in the atmosphere, is expected to improve wind power generation efficiency and extend the operating life of wind power plants.

05 Communication Systems Group

Main Products and Technologies

- Subscriber terminal equipment for optical access systems
- Gateway equipment
- Network camera system



Contributing to Expanding the Market and Reducing Environmental Load by Offering Systems with High Added-value

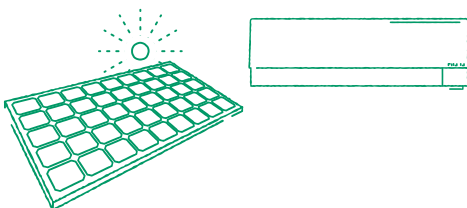
The Communication Systems Group is contributing to advancement of the information society through products and services supplied to customers such as communications carriers, financial services and retail distribution companies, and government agencies in Japan and overseas. These products and services include communications infrastructure equipment that uses optical and wireless information communications technologies and network camera systems equipped with imaging technologies.

While the products and systems are key elements of social infrastructure and offer greater functionality, the use of more and more devices has resulted in a rapid increase in the amount of electricity consumed. Under these circumstances, the Communications Systems Group focuses on four themes: energy-efficient products; energy savings in services provided through Group products; eco-conscious installation; and reducing CO₂ emissions from production and during product transportation. Through these initiatives, our aim is to contribute to expanding the market and reducing environmental load by developing and offering systems with high added-value.

06 Living Environment & Digital Media Equipment Group

Main Products and Technologies

- Room air conditioners
- Retail and office/building air conditioning
- LED lighting
- Solar power generation systems
- Heat-pump hot-water supply systems



Developing Environmentally Friendly Products and Reducing Our Own Environmental Impact

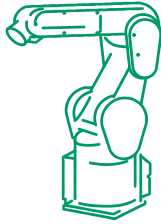
The Living Environment & Digital Media Equipment Group provides air conditioners, ventilating units, water heaters, photovoltaic systems, lighting solutions, kitchen appliances, home electronics, and digital media equipment. In particular, we focus on the air-conditioning and refrigeration systems business, one of Mitsubishi Electric's growth drivers. In addition to expanding operations in various segments such as room and packaged air-conditioners, we are pressing forward with the creation of new businesses and strengthening present ones. While providing customers at home, offices and factories with eco-conscious products and services, we also offer solutions that achieve higher energy efficiency for systems as a whole, such as ZEHs and ZEBs. We aim to expand the scale of our operation and help society reduce environmental impact. We also make continuous efforts to reduce the environmental impact of our own plants.

What We Can Do for the Future

07 Factory Automation Systems Group

Main Products and Technologies

- Total factory automation solutions
- Programmable Controllers
- Fiber 2D Laser Processing Machines
- Industrial robots
- Energy-saving motors
- Energy measurement units
- Molded Case Circuit Breakers for DC Circuit (up to 1000VDC)



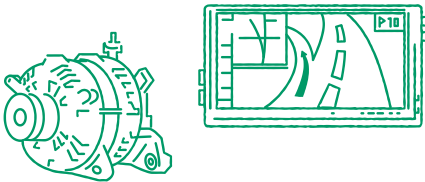
Delivering Devices, Equipment, and Solutions that Help Reduce Energy Usage during Production to Customers around the World

The Factory Automation Systems Group provides a wide variety of products and solutions for customers in the industrial mechatronics segment. In recent years, we have been maximizing the use of factory automation (FA) technologies that Mitsubishi Electric has developed over the years and IT-connected technologies. With the concept of solution proposals for manufacturing ahead of time, we are strongly supporting the optimization of manufacturing and management. By connecting all devices and equipment with Internet of Things (IoT) networks and analyzing and utilizing data, we offer e-F@ctory solutions that optimize entire manufacturing processes. We hope that our tireless campaign for improvement will significantly contribute to greater energy efficiency at production facilities.

08 Automotive Equipment Group

Main Products and Technologies

- Alternators
- Starters
- Electric power steering
- Engine control units
- Car navigation systems



Contributing to the Realization of a Low-carbon Society through the Development of Low Fuel Consumption and Electrification Technologies for Vehicles

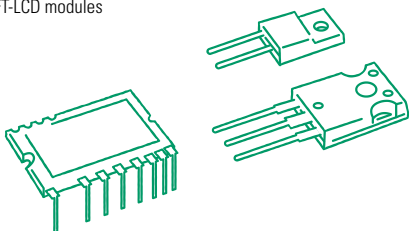
The Mitsubishi Electric Group is contributing to the realization of a sustainable global environment with the aim of being a “global leading green company”.

The Automotive Equipment Group provides powertrain products, body control products, and car multimedia devices globally. As a full-support supplier, we work together with our customers to develop cutting-edge technologies and endeavor to provide a wide range services, from production, sales, and supply to spare parts and rebuilds. The Automotive Equipment Group aims to expand its environmental contribution through its business operation. It is engaged in initiatives to reduce CO₂ emissions both by installing its products in vehicles to achieve better fuel efficiency and electrification, and by reducing energy consumption during the manufacturing process. We are also working on technological innovations for automotive products that will lead to the practical use of autonomous driving in coming years.

09 Semiconductor & Device Group

Main Products and Technologies

- Power devices
- High frequency devices
- Optical devices
- TFT-LCD modules



Contributing to the Realization of a Low-carbon Society by Providing Energy-efficient Products

Minimizing loss of generated power is essential to creating a sustainable global environment. The Semiconductor & Device Group globally provides key devices that play a significant role in reducing power loss and supporting a sustainable low-carbon society. These products include power devices that support higher efficiency of motor control and power conversion for home appliances and industrial equipment. We also provide high-frequency devices used in a wide range of areas, from wireless and satellite communications, and optical devices to support high-speed optic communications to TFT-LCD modules that enhance information interfaces. In recent years, we have been providing state-of-the-art products that incorporate the use of silicon carbide (SiC), a material that significantly reduces power loss, with the aim of further contributing to the creation of a low-carbon society.

More detailed information is available on the website, including a list of environmental issues that explains the risks and opportunities recognized and/or evaluated by each business group, messages from the managers of the business groups, initiatives for environmental issues through business operations, and efforts to reduce environmental load.

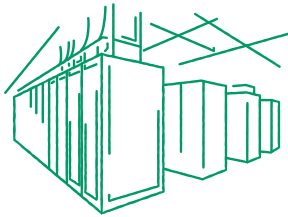


www.MitsubishiElectric.com/en/sustainability/environment/business

10 Information Systems & Network Service Group

Main Products and Technologies

- Cloud services
- Security solutions
- ERP solutions
- Document management solutions
- CTI



Contributing to the Realization of a Low-Carbon Society through the Promotion of Various IT Services

The Information Systems & Network Service Group operates in a wide range of areas, from social and public systems to corporate systems. We are involved in the entire lifecycle of information and network systems including planning and design stages, construction, operation, and maintenance, offering a one-stop IT service with optimal solutions that best suit customers' needs.

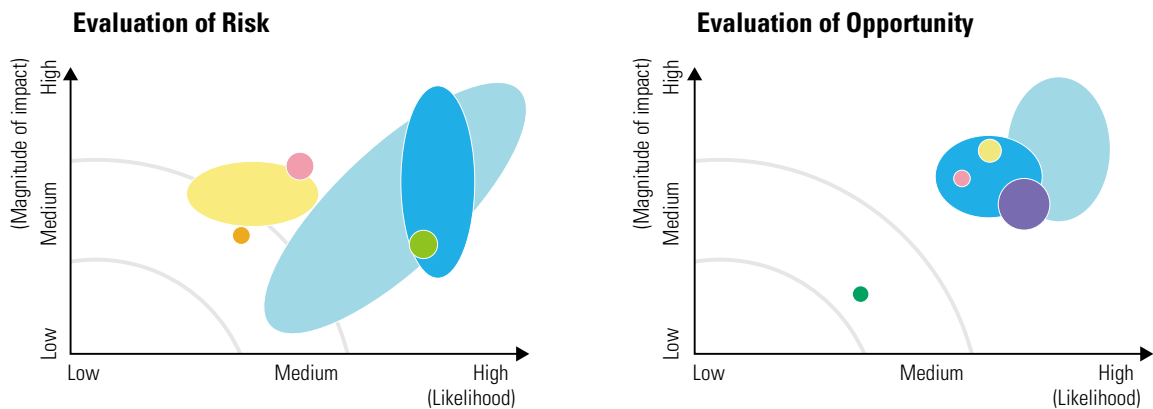
Our objective is to propose solutions that reach the heart of a customer's management strategies and issues, as well as ideas that take into account current social issues. The aim, of course, is to improve customer satisfaction and achieve a sustainable society.

Evaluation of the Importance of Environmental Issues

In order to determine which environmental issues should be prioritized when reducing the environmental impact of our business activities, each of our ten business groups (the organizational units for environmental management) evaluate the level of importance of key environmental issues. This assessment is made from two perspectives: the likelihood of a risk or opportunity that could affect a business group and the magnitude of its impact.

Image Chart of Evaluation

The horizontal axis shows the likelihood of the emergence of a risk/opportunity, while the vertical axis indicates the magnitude of impact. The environmental issue with the highest importance is climate change for both risk and opportunity.



Response to Environmental Issues

- | | | | |
|---|---|---|---|
| ■ Climate change | ■ Waste reduction and management | ■ Depletion of mineral resources | ■ Air, water, and soil pollution |
| ■ Proper management of chemical substances | ■ Conservation of biodiversity | ■ Deforestation | ■ Appropriate use of water |

for a greener tomorrow



Environmental Statement: “Eco Changes”

Eco Changes is the Mitsubishi Electric Group’s environmental statement, and expresses the Group’s stance on environmental management. Through a wide range of businesses for homes, offices, factories, infrastructure and even outer space, we are helping contribute to the realization of a sustainable society.

In line with the Mitsubishi Electric Group’s corporate statement, “Changes for the Better,” which reflects our drive to always seek improvement and make changes accordingly, Eco Changes represents our efforts to work together with our customers to change the global environment for the better.

Behind these multifold improvements is our wish for each employee in the Group to instigate positive changes, and our strong desire to bring about a variety of changes in product development, production and shipping, in product, system and service usage, and in recycling.

Eco Changes is the Mitsubishi Electric Group’s commitment to continuously strive for a greener tomorrow through cutting-edge global environmental technologies and outstanding strength in manufacturing.

The Mitsubishi Electric global website contains more detailed information about the Group activities related to the “environment.”



MITSUBISHI ELECTRIC CORPORATION

<http://www.MitsubishiElectric.com>

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