

Environmental Performance Review 2012



for a greener tomorrow



家庭から宇宙まで、エコチェンジ。



精于节能 尽心环保



Eco Changes communications commenced in April 2012 in China, under the tagline,
"experts in energy conservation, devoted to environmental protection"

True Dedication to Environmental Management

Entering an All-New Phase of Reducing CO₂ Emissions through the Use of Our Products

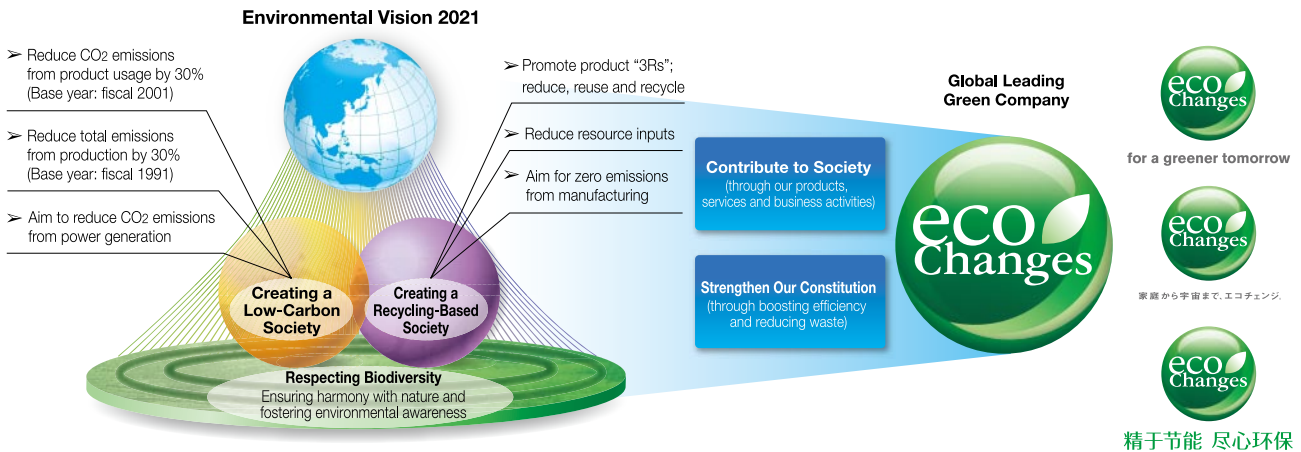
The Mitsubishi Electric Group launched its 7th Environmental Plan beginning in April of 2012. This plan puts even greater emphasis on making contributions to the environment through our products, services and businesses.

The plan is an important step on the way to achieving our 2007-initiated Environmental Vision 2021, which has the two core objectives of reducing total CO₂ emissions from production and reducing CO₂ emissions from product usage. Of the two, expectations towards the manufacturing sector have tended to center more on the former. Accordingly, Mitsubishi Electric has put particular focus on thoroughly reducing CO₂ emissions in product manufacturing processes by eliminating waste and realizing greater production efficiencies. These two initiatives are paramount to helping reduce production-based CO₂ emissions and strengthening our constitution as a manufacturer. To that end, we have established CO₂ emissions reduction targets for our frontlines of production and are proceeding with improvement activities at each of our business sites to achieve them.

There is greater scope, however, for reducing CO₂ emissions resulting from product usage than that which can be reduced through production-related improvements. Mitsubishi Electric provides, to markets around the world, a broad range of home electronics as well as products that are core to the social infrastructure, including energy-related and transportation-related equipment and devices. By increasing the energy-saving performance of every product and replacing existing products with new-and-improved versions, we will be able to help significantly reduce CO₂ emissions on a global scale.

Our initiatives to help create a low-carbon society have entered a completely new phase. Under the 7th Environmental Plan, we will focus even greater efforts on strengthening our constitution through reducing CO₂ emissions from production. At the same time, based on a heightened recognition of the importance that products play in achieving a low-carbon society — and true to our mission as a manufacturer — we will also create products with high environmental performance, and by providing these to society, we will collectively reduce CO₂ emissions.





Pursuing Initiatives Rooted in Local Conditions as a Global, Leading Green Company

Mitsubishi Electric declared last year its intention to become a global, leading green company, and carries out a number of environmental activities towards this end. Moving forward, the concept of "local production for local consumption," where local conditions and needs are better met, is set to take on even greater significance. With the current system, the design and production of components is concentrated in Japan or another country and products are assembled in the local market where they will be sold. In contrast, the new standard will be sourcing components locally and localizing design initiatives to achieve high efficiency, as well as high-quality local production for local consumption. By procuring components, designing, manufacturing and assembling locally, it becomes possible to pursue a type of manufacturing that better captures local market needs and meets the heightened growth demands of these regions. This approach contributes to greater job opportunities, better infrastructure and revitalized local economies.

In tandem with the localization of our operations, we must also localize our environmental management based on the circumstances of each region and country, establishing a platform that underlies Mitsubishi Electric's environmental activities. However, I believe building this foundation will take longer than it will to further localize our operations. Also, it may be

unreasonable to roll out advanced environmental technologies and systems in countries that have only recently begun to experience economic growth. We need to accurately ascertain the needs and growth levels of each region and country to implement optimal approaches. I believe this is the path that a truly global, leading green company should pursue.

Delivering True Benefits through 'True Dedication'

There is one thing that we must not lose sight of when pursuing our environmental goals: the degree of our dedication to the cause. It must be unwavering and true. The Mitsubishi Electric Group's managerial indicators for building a foundation for growth include compliance, quality, safety, costs, the environment, delivery, and inventory. As is the case when there are multiple objectives, people have a tendency to prioritize one over the other. This approach does not take 'degree of dedication' into account, however. Even with multiple priorities, tasks that need to be addressed at any given time are clear. The environment is one of these tasks, and I believe successful environmental management creates true benefits for all. That is to say, a company cannot exist without the environment.

Everyone at the Mitsubishi Electric Group maintains an earnest, steadfast, and unwavering dedication to delivering these true benefits. This is the type of environmental management that we will pursue.

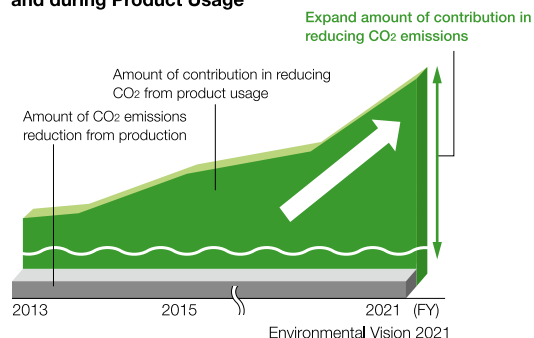
K. Yamanishi

Kenichiro Yamanishi, President & CEO

Placing an Emphasis on Increasing the “Amount of Contribution*” to CO₂ Reduction

Since fiscal 1994, the Mitsubishi Electric Group has formulated a three-year environmental plan outlining specific activities and goals in an effort to improve its management of environmental affairs. Beginning with the 6th Environmental Plan (FY2010–2012), goals have been established to realize the Group's long-term vision for environmental management, called Environmental Vision 2021. The 7th Environmental Plan (FY2013–2015) continues this framework, and was formulated based on the results achieved and challenges experienced to date, as well as social demands for energy-saving products. The main focus of the 7th Environmental Plan is to strengthen measures for both production and product usage as a means to increase the “amount of contribution” to CO₂ reduction.

Expand Amount of Contribution in Reducing CO₂ Emissions from Production and during Product Usage



Items and Main Indicators of the 7th Environmental Plan

1. Initiatives toward Creating a Low-Carbon Society

- Improve the energy-saving performance of products, and reduce CO₂ emissions by an average rate of 27% in comparison to FY2001. (84 target products.)
- Improve the amount of CO₂ emissions per unit of sales from production to 83% in comparison to FY2011. (Equivalent to 121,000-ton reduction in CO₂.)
- Achieve a cumulative total of 14,100 kW in photovoltaic (PV) power generation for the entire Group in Japan by the end of FY2015. (Install a further 6,400 kW of PV capacity.)
- Install a demand monitoring system at all of the Group's major sites (contract demand of 500 kW or more, with a group total of 68 sites) for centralized management of peak power usage, and promote energy conservation measures such as upgrading to highly efficient air conditioners in support of CO₂ reductions.
- Reduce non-CO₂ greenhouse gases (SF₆, PFC, HPC) by 70% in comparison to FY2006. (CO₂ emission equivalent.)

2. Initiatives toward Creating a Recycling-Based Society

- Promote thorough analysis and separation of waste, and a reduction in the final disposal ratio at business sites. (Mitsubishi Electric: less than 0.1% (ongoing); affiliates in Japan: less than 0.1%; overseas affiliates: less than 1.0%.)
- Reduce input of resources by 39% compared to FY2001 through producing smaller and lighter weight products.

- Promote product 3Rs (reduce, reuse, recycle) through such initiatives as recovery of rare earth magnets and by expanding applications for recycled materials.

3. Initiatives toward Strengthening Environmental Management and Expanding Environmental Businesses

- Cultivate Environmental Training Experts with specialized expertise in energy conservation, waste management, and pollution control, capable of conducting Group-wide environmental training sessions, and strengthen environmental management platforms. Also, conduct nature conservation activities through collaboration with local communities, and roll out such activities globally.
- Enhance compliance with regulations on chemical substances used in products, such as Europe's RoHSII and REACH.
- Expand environment-related businesses globally by creating products with highly innovative environmental features including the use of more recycled resources or enhanced energy efficiency, in fields such as smart grids and smart communities.

*"Amount of contribution" to CO₂ reduction (from product usage) refers to the CO₂ reduction effect gained when replacing an older product with a newer one that has greater energy-saving performance, the result of which is then calculated across the product's operational lifetime and multiplied by the number of units sold. Calculation is done according to the following equation: Amount of contribution to CO₂ reduction = CO₂ reduction effect from product usage per unit × the number of units sold for the fiscal year.

NOTE: Fiscal years used in this booklet refer to the fiscal period starting on April 1st of the previous year and ending on March 31st of the year shown.

Accelerating Development of Systems that Use Silicon Carbide Power Devices

Silicon carbide (SiC) is a chemical compound combining equal parts silicon and carbon. Using SiC as a semiconductor element greatly improves the performance of power devices, which efficiently control electricity in equipment. This greater performance helps improve energy conservation and also results in a lighter weight design. Mitsubishi Electric is focusing on the research and development of next-generation SiC power modules and equipment that incorporates these modules. Since fiscal 2011, we have taken steps toward the commercialization of such designs.

We also developed a variety of devices in fiscal 2012. For example, in October 2011, we were the first in the world to announce a SiC inverter for use in railcar applications. By using a large capacity SiC power module, we were able to successfully reduce energy loss by 30% and volume and mass by 40% compared to our existing version. This inverter

was installed on railcars used by Tokyo Metro Co., Ltd. and these cars went into commercial operation in February 2012.

In March 2012, we announced the development of a motor system with a SiC inverter. SiC was used in the power semiconductor element for the inverter, which is the drive of the motor system, reducing energy loss by half. Integrating the inverter and motor also reduced the volume by half compared to conventional designs. This represents the industry's smallest motor system for electric vehicle powertrains.



SiC inverter for railcars



Motor system with SiC inverter for electric vehicles

Recovering Rare Earth Magnets from Used Room Air Conditioners

Rare earth elements are essential for improving the energy efficiency of room air conditioners, but their procurement is becoming more difficult. Mitsubishi Electric (with support from the Ministry of Economy, Trade and Industry's implementation project for industries that use rare earth metals) developed automatic dismantling equipment for recovering rare earth magnets (neodymium magnets) from the rotor of used room air conditioner compressors, in order to effectively utilize existing rare earth resources. Beginning in April 2012, our subsidiary and Japan's first large-scale, high-purity plastic recycling service provider, Green Cycle Systems Corporation (GCS), began recovering rare earth magnets. Until now, it was technologically impossible to separate rare earth magnets due to their powerful magnetism, but this newly developed equipment is able to automatically separate and recover individual rare earth magnets at a pace of one every 30 seconds. It was also designed to handle the different rotor shapes used by each manufacturer.

Our rare earth elements recovery business features a

collaborative resource recycling structure. First, our home appliance recycling plant and subsidiary Hyper Cycle Systems Corporation (HCS) removes the compressor from used room air conditioners and sends these to GCS. In turn, GCS recovers the rare earth magnets, which are sent to a magnet manufacturer in Japan to be recycled.

Mitsubishi Electric will continue to ensure that the rare earth elements it recovers are recycled and reused in Japan, and is currently examining the viability of recovering rare earth magnets from hard disk drives.



Automatic dismantling equipment

Neodymium Magnet Recovery Process

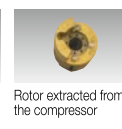
Remove rotor from partially disassembled air conditioner compressor

Degauss magnets from the rotor at ambient temperature

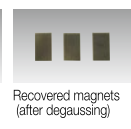
Separate magnets



Partially disassembled room air conditioner compressor



Rotor extracted from the compressor



Recovered magnets (after degaussing)

Visit our website for more examples of our development projects.

Environmental Technology R & D Achievements <http://www.MitsubishiElectric.com/company/environment/report/products/randd/>

Implementing Electricity Conservation Measures to Meet Japan's Need for Reduced Electricity Consumption

In 2011, Japan faced electricity supply shortages in the wake of the Great East Japan Earthquake. Electricity reduction targets were set by Tokyo Electric Power Co., Inc. and Tohoku Electric Power Co., Inc. for the summer and by Kansai Electric Power Co., Inc. and Kyushu Electric Power Co., Inc. for the winter, making 2011 a year in which all of Japan needed to reduce its electricity usage collectively. This special feature introduces Mitsubishi Electric's electricity conservation measures and results from fiscal 2012.

Ambitious Joint Targets Set by 18 Sites for the Summer

In July 2011, the Ministry of Economy, Trade and Industry (METI) issued an order to restrict electricity usage based on Article 27 of Japan's Electricity Business Act. This restriction required commercial-scale utility users with contract demand of 500 kW or more to reduce peak power demand by 15% over the previous year for the three-month period between July and September.

We employed a set of joint power restriction schemes to collectively control peak usage at 16 business sites in the Tokyo region and 2 business sites in the Tohoku region. We also set an ambitious target to achieve a 25% year-on-year reduction in peak power usage.

Conservation Efforts at Each Site

Each site, while adjusting demand targets, modified the way it used lighting and air conditioning and made changes to operating shifts. The Mitsubishi Electric Head Office, which is not a commercial-scale utility user, also curbed consumption.

Implementation of a Demand Control System

For central management of demand control, this system monitored power demand trends for each participating business site and alerted personnel when forecast demand approached the reduction target. This technology made it possible to avoid excessive power use.

Large-Scale Investments in Energy-Saving and Energy-Creating Facilities

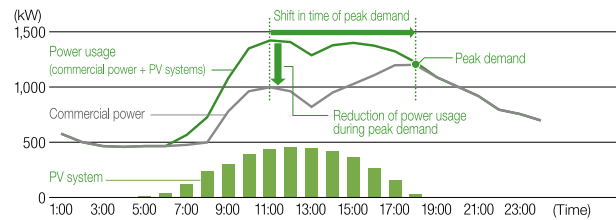
Looking beyond the temporary period of power restrictions, Mitsubishi Electric installed 2 MW worth of photovoltaic (PV)

systems to permanently enhance the Group's sustainability. Air conditioning equipment was replaced and lighting fixtures were upgraded with high-efficiency LED lights.

As a result, the 16 participating sites in the Tokyo region reduced peak power demand by 27.6% compared to the previous fiscal year. In terms of power consumption, they achieved a reduction of more than 2,670,000 kWh in August alone, or equivalent to 1,129 tons of CO₂ (representing a 19% year-on-year reduction in emissions).

Effect from PV Systems

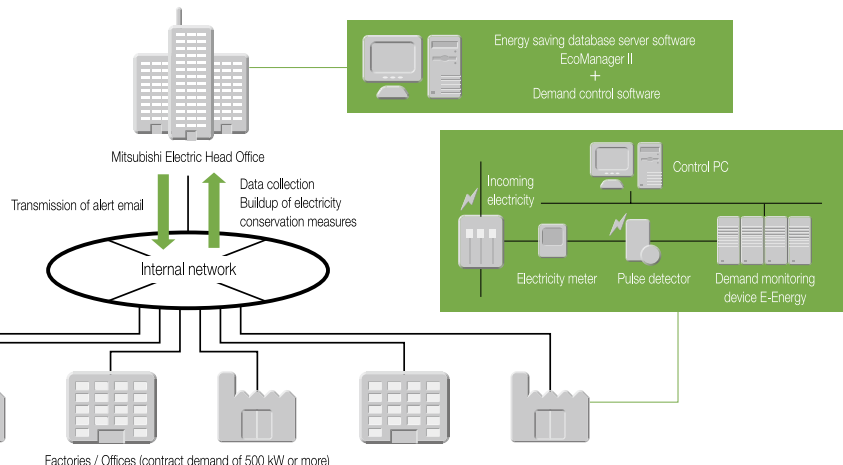
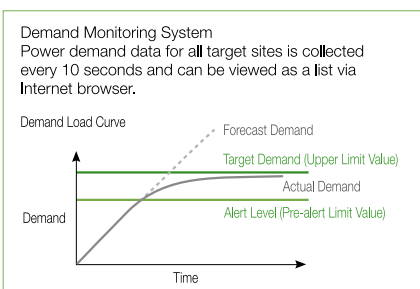
Peak demand occurs between the hours of 11:00 a.m. and 2:00 p.m. during the summer. Sites that installed PV systems were able to offset rises in power consumption by increasing power generation, effectively shifting the time of peak demand to later in the day and making it easier to adjust power usage.



Applying Know-How Gained

Know-how gained in the summer was applied during the winter months to cut peak power demand by 14.9% within areas covered by Kansai Electric Power and 10.9% within areas covered by Kyushu Electric Power. We will build on this achievement by expanding the coverage of the demand control system to include all commercial-scale utility users within the Group (a total of 68 sites).

Overview of Mitsubishi Electric Group's Power Demand Control Initiative



Other Distinctive Electricity Conservation Examples

Installation of 488 kW PV System

Information Technology R&D Center

In only a two-month period, the Information Technology R&D Center installed a PV system with a total generating capacity of 488 kW onto two green patches onsite, in order to have it ready for the summer. Together with existing facilities, a total of 600 kW was generated to offset electricity used to power the site's air conditioners.

In addition, employees, computer rooms and servers were relocated or integrated into a research building where an environment was set up to conduct an energy conservation demonstration experiment for the entire building. As a result, peak power demand was reduced by up to 45% compared to fiscal 2011.



A total of 488 kW is generated from two sites: 352 kW from 1,760 PV modules (above); and another 136 kW from 680 PV modules (right).

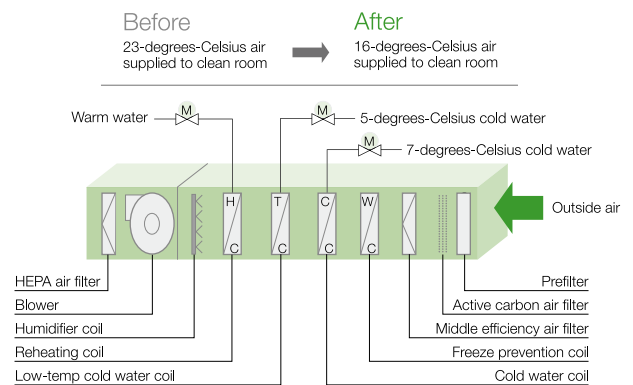


Change of Blast Air Temperature Supplied to Clean Room

Power Device Works, Kumamoto Region

The Power Device Works located in the Kumamoto region, which develops and manufactures semiconductor products, increased the effectiveness of its electricity conservation efforts by making changes to the temperature of external air supplied to the clean room.

Previously, outdoor air was cooled to 9 degrees Celsius to dehumidify it, reheated to 23 degrees Celsius and then supplied to the clean room, in order to maintain the room temperature at 23 degrees Celsius. The Power Device Works began reheating the air to only 16 degrees Celsius and using that to cool the clean room. This helped reduce power consumption by more than 2,348,000 kWh for the year.



Replacing Mercury Lamps and Fluorescent Bulbs with LED Lights

Itami Works

The Itami Works implemented a large-scale lighting replacement project in which 40 W fluorescent lights used in offices and meeting rooms were changed over to 26 W LED lighting. As of the end of July 2012, this amounted to 3,047 lights, which will cut power consumption by 106,700 kWh per year. Inside the factory, Itami Works also switched 108 of its 400 W mercury lamps to 202 W LED ceiling lights, which will reduce power consumption by 47,500 kWh per year.



Inside the factory after the lighting changeover. LED lighting not only consumes less electricity, but its dimming control function helps control light levels, and it can be immediately turned on without any idling, which contributes to energy savings and electricity conservation.

Performance Data

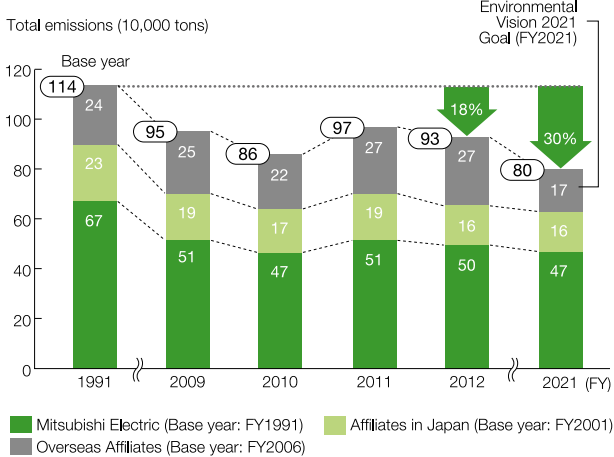
Reducing CO₂ from Production

The Mitsubishi Electric Group's 6th Environmental Plan has established total CO₂ emissions targets for fiscal 2012 of 510,000 tons for Mitsubishi Electric Corporation, 190,000 tons for affiliates in Japan and 260,000 tons for overseas affiliates.

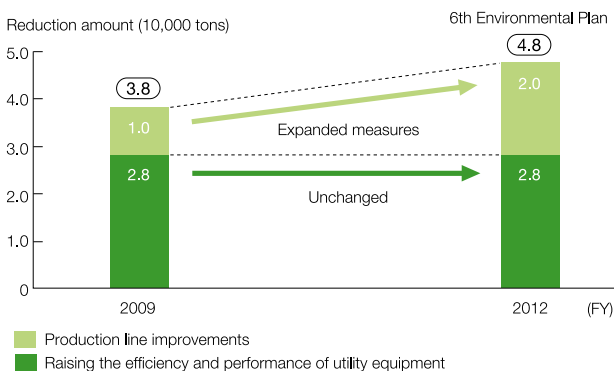
Production divisions are working to reveal hidden energy wastage in the production process and address those areas through production line improvements. Initiatives are also in progress to conserve energy through installation of more efficient utility equipment and through improvements in operational methods. In offices, energy conservation measures, such as turning off lights in areas with no people and using energy-saving settings on office equipment, are underway to further the improvement of facilities in cooperation with building management.

In fiscal 2012, in addition to the above, we also focused on electricity conservation measures in Japan, given the need for the entire country to reduce its electricity consumption. As a result, although there was a rise in CO₂ emissions at our overseas sites due to an increase in production, total Group-wide emissions were 933,000 tons, compared to the Group's target of 960,000 tons for the year. Our measures also helped achieve a CO₂ reduction amount of 37,000 tons, compared to an initial target of 34,000 tons, indicating that we were able to achieve the target set out in the 6th Environmental Plan.

Groupwide Plan to Reduce CO₂ from Production (as of the 6th Environmental Plan)



Breakdown of CO₂ Reduction Plan through Expansion of Production Line Improvement Measures (Mitsubishi Electric)



NOTE: Fiscal years used in this booklet refer to the fiscal period starting on April 1st of the previous year and ending on March 31st of the year shown.

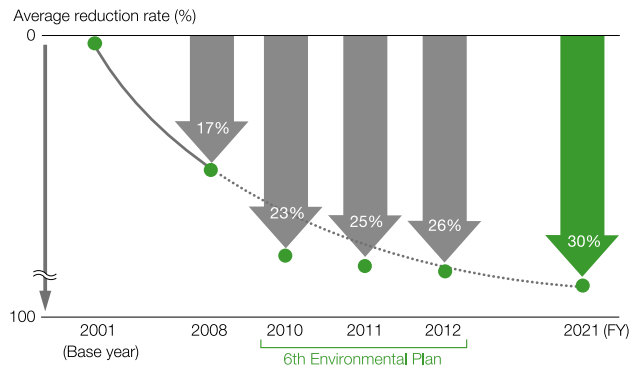
Reducing CO₂ from Product Usage

The Mitsubishi Electric Group conducts product Life Cycle Assessment (LCA) evaluations, based on the Product Assessment Guidelines, which reflect the following perspectives: effective use of resources, efficient use of energy, and avoidance of substances with potential environmental risk.

Because CO₂ emissions from product usage can total between 40 to 50 times more than the amount emitted during the production process (by Mitsubishi Electric calculations), the company actively pursues greater reductions. The 6th Environmental Plan establishes the goal of improving the average CO₂ reduction rate in fiscal 2012 by 25% compared to fiscal 2001, and Mitsubishi Electric systematically proceeded with the selection of products that have the highest potential for CO₂ reduction.

Target products in fiscal 2012 totaled 84, while the average CO₂ reduction rate for these products was 26%. This means we were able to achieve our targets under the 6th Environmental Plan for 80 target products and an average CO₂ reduction rate of 25%.

Plans to Reduce CO₂ from Product Usage under Environmental Vision 2021

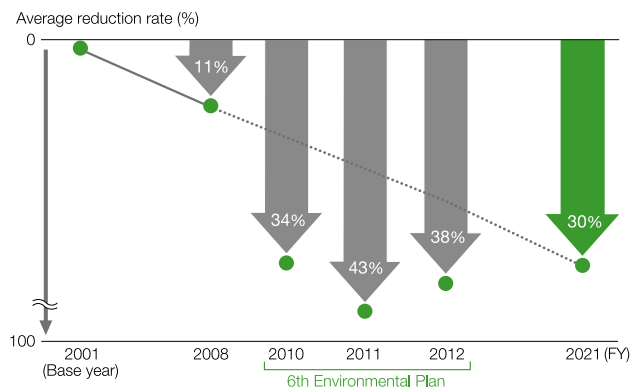


Reducing Resource Inputs and Recycling End-of-Life Products

Mitsubishi Electric is reducing resource inputs through the promotion of product recycling and through designing its products to be more compact and lightweight. Plans call for an increase in the number of target products that promote reduced resource inputs to 60 or more by fiscal 2012, and aim to improve the company's resource input reduction ratio by 30% compared to fiscal 2001 levels. In fiscal 2012 the number of such products reached 64, exceeding the target and achieving an average 38% reduction ratio.

In fiscal 2012, Mitsubishi Electric recycled 62,000 tons of four kinds of home appliances. Computers and monitors totaled 4,891 units with an average recycle rate of 76%. The four kinds of home appliances are: air conditioners; televisions (CRT, LCD, and plasma models); refrigerators/freezers; and washing machines/clothes dryers.

Reduction of Resource Inputs under Environmental Vision 2021

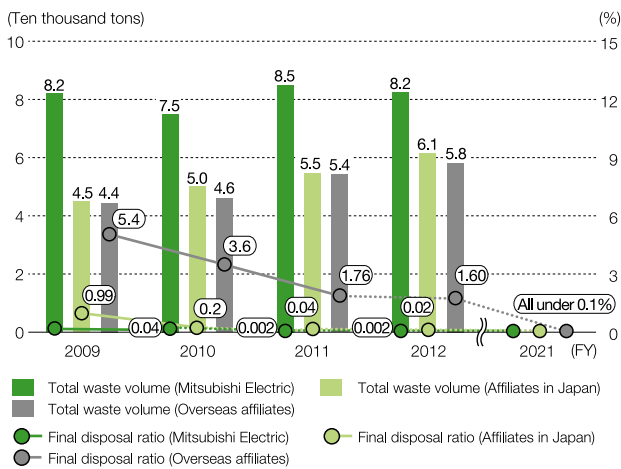


Zero Emissions

The 6th Environmental Plan establishes a final waste disposal ratio target of less than 0.1% for Mitsubishi Electric, less than 0.5% for affiliates in Japan, and less than 3.0% for overseas affiliates for fiscal 2012.

To this end, initiatives implemented according to waste generation and processing status at each production site resulted in achievements far beyond expectations, including a final disposal ratio for fiscal 2012 of 0.002% at Mitsubishi Electric, 0.02% at affiliates in Japan, and 1.60% at overseas affiliates. In particular, activity levels in Japan were improved with initiatives such as waste management collaboration among multiple production sites.

Total Waste Output and Final Disposal Ratio



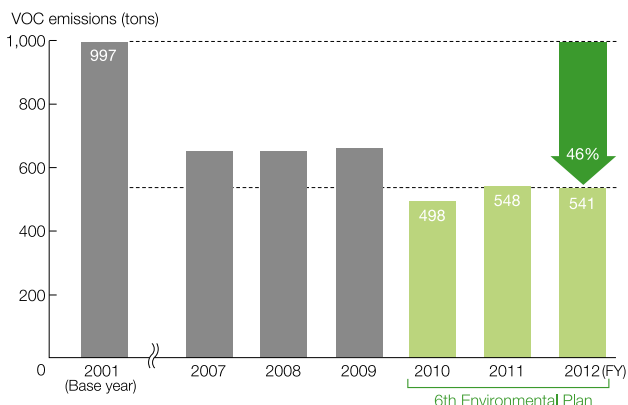
Managing Chemical Substances

In addition to the 462 substances designated under the revised PRTR (Pollutant Release and Transfer Register) law of Japan, Mitsubishi Electric and affiliates in Japan make use of a comprehensive Chemical Substance Management System for voluntary management of 2,097 substances, including refrigerant fluorocarbons used in air conditioners and refrigerators, VOCs (volatile organic compounds) as well as six RoHS substances.

In fiscal 2012, Mitsubishi Electric used 6,934 tons of 142 different chemical substances; affiliates in Japan used 1,717 tons of 49 different substances.

In fiscal 2012, Mitsubishi Electric's VOC emissions totaled 541 tons, 7 tons less than the previous year, to reach a reduction rate of 46%. This means that we maintained emissions at less than 40% of fiscal 2001 results, still within 6th Environmental Plan targets.

Controlling VOC Emissions

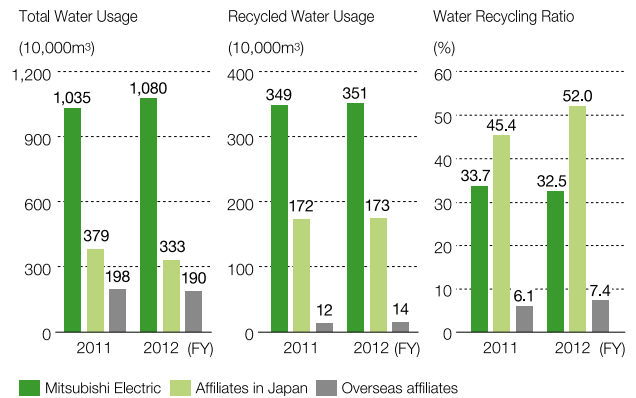


Effective Water Usage

The Mitsubishi Electric Group works toward the effective use of vital water resources, including public water, industrial water, and groundwater, from the perspective of the "3Rs": reduce, reuse and recycle.

In fiscal 2012, Mitsubishi Electric saw an increase in standalone usage, but its affiliates in Japan and overseas used less water than in the previous fiscal year. The Group-wide application of reused water increased compared to the previous fiscal year, showing effective progress in water usage.

Total Water Usage, Recycled Water Usage, Water Recycling Ratio

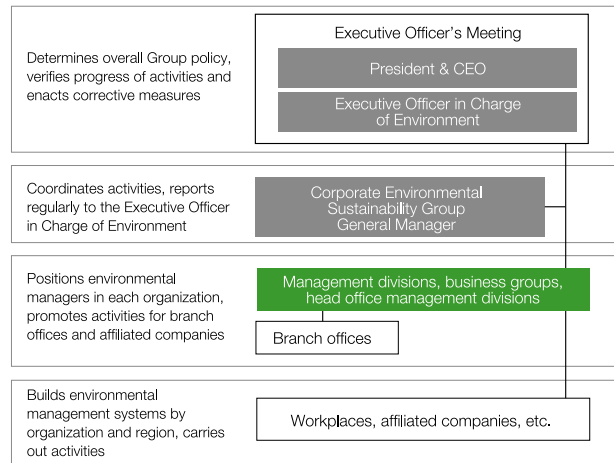


Environmental Management

Mitsubishi Electric's 6th Environmental Plan (fiscal 2010-2012) aims to establish a uniformly high level of quality in environmental management across all organizations within the Mitsubishi Electric Group of companies, and to make continuous improvement accordingly.

Environmental governance and corporate governance are key links in the business management of the Mitsubishi Electric Group, and are applicable to the company, its consolidated subsidiaries, and its affiliated companies. All levels of the organization — from head office management divisions to management and business groups, workplaces, and affiliated companies — work within the scope of their responsibilities to ensure due execution of environmental conservation activities, through the establishment of a system to manage and monitor the plans, progress, and environmental performance of each downstream organization.

Environmental Management Promotion Structure



Material Balance

Period Covered: April 1, 2011 to March 31, 2012

Scope of Report: Mitsubishi Electric Corporation, 114 affiliates in Japan and 68 overseas affiliates (total of 183 companies)

* Up to fiscal 2009, the scope of our report was limited to those companies that had drawn up an environmental plan for governance from an environmental conservation perspective. But under the policy of expanding global environmental management, we have broadened the scope of the report to cover Mitsubishi Electric, and its major affiliates.

IN



Factory

Materials for Manufacturing

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Materials ¹	390,000 tons	160,000 tons	540,000 tons

Manufacturing

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Electricity	1,054 million kWh	318 million kWh	317 million kWh
Natural gas	22,340,000 m ³	2,030,000 m ³	9,330,000 m ³
LPG	1,987 tons	2,580 tons	1,735 tons
Oil (crude oil equivalent)	6,794 kl	3,585 kl	2,075 kl
Water	7,290,000 m ³	1,600,000 m ³	1,760,000 m ³
Public water	1,260,000 m ³	410,000 m ³	650,000 m ³
Industrial water	2,240,000 m ³	320,000 m ³	820,000 m ³
Groundwater	3,790,000 m ³	870,000 m ³	10,000 m ³
Others	0 m ³	0 m ³	280,000 m ³
Reuse of water	3,510,000 m ³	1,730,000 m ³	140,000 m ³
Controlled chemical substances (amounts handled)	6,933.6 tons	1,716.9 tons	2,566 tons
Ozone depleting substances (amounts handled)	4.9 tons	156.3 tons	249 tons
Greenhouse gases (amounts handled)	2,457.3 tons	55.6 tons	530 tons
Volatile organic compounds (amounts handled)	1,546.6 tons	1,513.0 tons	223 tons

¹ Materials: Sum of shipping weight of "Design for Environment" (DfE) products, plus amount of product packaging materials used, plus total amount of waste.

OUT

Emissions (From Manufacturing)

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)	
Discharge into water	Water	6,640,000 m ³	1,350,000 m ³	1,240,000 m ³
	Controlled chemical substances	7.6 tons	0.0 tons	41.8 tons
	BOD (biological oxygen demand)	78.0 tons	6.4 tons	21.7 tons
	COD (chemical oxygen demand)	19.9 tons	5.9 tons	44.0 tons
	Nitrogen	86.7 tons	11.6 tons	2.4 tons
	Phosphorus	7.2 tons	0.2 tons	2.4 tons
	Suspended solids	75.9 tons	5.0 tons	29.9 tons
	n-hexane extracts (mineral)	0.8 tons	0.3 tons	1.1 tons
	n-hexane extracts (active)	4.6 tons	0.3 tons	0.1 tons
	Total emissions of zinc	0.3 tons	0.0 tons	0.1 tons
Emissions into the atmosphere	Carbon dioxide (CO ₂)	504,000 tons-CO ₂	160,000 tons-CO ₂	269,000 tons-CO ₂
	Controlled chemical substances (excluding amounts contained in other waste)	596.1 tons	133.9 tons	221.8 tons
	Ozone depleting substances	0.61 ODP tons	0.00 ODP tons	0.45 ODP tons
	Greenhouse gases	119,000 tons-CO ₂	56,000 tons-CO ₂	68,000 tons-CO ₂
	Volatile organic compounds	541.2 tons	315.4 tons	29.2 tons
	Sulfur oxide (SO _x)	1.7 tons	0.70 tons	2.20 tons
	Nitrogen oxide (NO _x)	8.0 tons	58.5 tons	8.9 tons
	Fly ash	0.8 tons	2.0 tons	14.8 tons
	Amount of fluorocarbon recovered	2.4 tons	213.1 tons	—

Waste

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Total waste emissions	82,192 tons	60,516 tons	58,139 tons
Amount recycled	76,588 tons	48,818 tons	48,720 tons
Waste treatment subcontracted out	36,573 tons	43,615 tons	8,479 tons
Final disposal	2 tons	10 tons	933 tons
In-house weight reduction	1,476 tons	1 tons	0 tons

Products²

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Weight of all "DfE" sold	256,000 tons	94,000 tons	439,000 tons
Weight of packaging materials	49,000 tons	8,000 tons	46,000 tons

² Products: Weight related to "Design for Environment" (DfE) products.



Logistics

Sales and Logistics³

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Fuel for trucks (gasoline)	11,797 kl	2,572 kl	372 kl
Fuel for trucks (diesel)	24,114 kl	6,091 kl	19,217 kl
Fuel for rail (electricity)	1,742 MWh	467 MWh	0 MWh
Fuel for marine transport (bunker oil)	437 kl	3 kl	44,150 kl
Fuel for air transport (jet fuel)	468 kl	151 kl	10,734 kl

³ Sales and logistics: Includes 11 sales companies in Japan. Figures for overseas affiliated companies include transportation between countries.

Emissions⁴

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Carbon dioxide (CO ₂)	93,000 tons-CO ₂	22,000 tons-CO ₂	220,000 tons-CO ₂

⁴ Emissions: Includes 11 sales companies in Japan. Figures for overseas affiliated companies include transportation between countries.



Products (Customer)

Energy Consumption⁵

	Mitsubishi Electric	Affiliates (Japan)	Affiliates (Overseas)
Annual power consumption from use of "Design for Environment" (DfE) products	5,790 million kWh	450 million kWh	13,400 million kWh

⁵ Energy Consumption: Amount related to "Design for Environment" (DfE) products.

Emissions⁶

	Mitsubishi Electric	Affiliates (Japan)
Annual CO ₂ emissions from use of "Design for Environment" (DfE) products (corresponding value)	2,443,000 tons-CO ₂	190,000 tons-CO ₂

⁶ Emissions: Amount related to "Design for Environment" (DfE) products.



Recycle

End-of-Life Products⁷

	Mitsubishi Electric
Air conditioners	13,295 tons
Televisions	22,293 tons
Refrigerators	19,431 tons
Washing machines/ Clothes dryers	7,069 tons
Personal computers	40 tons

⁷ End-of-Life Products: Weight of products taken back and weight of recovered resources of four types of appliances subject to Japan's Home Appliance Recycling Law, plus personal computers.

Resources Recovered⁸

	Mitsubishi Electric
Metals	28,746 tons
Glass	8,742 tons
Fluorocarbon	282 tons
Others	13,207 tons

⁸ Resources Recovered: Weight of products taken back and weight of recovered resources of four types of appliances subject to Japan's Home Appliance Recycling Law, plus personal computers.

Environmental Accounting

Period Covered: April 1, 2011 to March 31, 2012
 Scope of Report: Mitsubishi Electric Group (Mitsubishi Electric Corporation and affiliates in Japan and overseas; a total of 183 companies)

Environmental Conservation Costs

□ Mitsubishi Electric Group ■ Mitsubishi Electric (100 million yen)

Item	Capital Investment	Cost ¹	Year-on-Year Change	Main Costs
Business area activities	56.1	99.2	(2.4)	
	36.2	64.5	(0.9)	
Pollution prevention	3.2	26.8	(2.6)	Installation of wastewater treatment equipment and cleaning machine effluent recovery equipment, and upgrades due to aging of hazardous material warehouses and outdoor oil storage tanks, etc.
	0.9	17.1	(0.4)	
Global environmental conservation	50.5	44.5	2.4	Mainly due to the concentration of spending on global warming prevention measures, such as the installation of photovoltaic systems and a demand control system across the Group, as well as upgrades to high-efficiency air conditioning and lighting.
	33.5	30.8	0.9	
Resource recycling	2.4	27.9	(2.2)	Outsourcing of waste recycling and processing, etc.
	1.8	16.6	(1.4)	
Green purchasing/procurement and product-related activities upstream and downstream from production	0.7	6.2	(2.4)	Investigations into hazardous substances contained in products and tasks related to obtaining the certification that no unregistered chemicals were used in products, etc.
	0.5	3.8	(1.9)	
Management activities	0.2	28.5	(2.4)	EMS secretariat activities, maintenance, and environmental information system operations, etc.
	0.0	22.7	(0.5)	
R&D activities for reducing environmental impact	1.7	37.5	(12.7)	Development of super high-efficiency silicon cells, improved efficiency of outdoor heat pumps, improved efficiency of LED lighting, and next-generation plastic recycling technologies, etc.
	1.7	34.1	(12.9)	
Community activities	0.0	0.3	(1.0)	Onsite greenery maintenance/upkeep, Satoyama woodland preservation activities, clean-up activities in urban areas, factory tours, etc.
	0.0	0.2	(0.8)	
Environmental damage	0.0	1.0	(3.6)	Installation of groundwater purification equipment and analysis, etc.
	0.0	1.0	(3.6)	
Total	58.7	172.7	(24.5)	
	38.4	126.3	(20.6)	
Year-on-year change	8.7	(24.5)		
	3.2	(20.6)		

¹ Includes depreciation of capital investment over the past five years.

Environmental Conservation Benefits (Environmental Performance)

Item	Unit	Fiscal 2012	Year-on-Year Change	Year-on-Year Per Net Sales
Total energy used	10,000 GJ	1,291	(624)	102%
		1,178	26	67%
Total water used	10,000 m ³	1,064	(15)	106%
		729	43	99%
Total greenhouse gas emissions	10,000 tons-CO ₂	117	(2)	99%
		62	(0)	99%
CO ₂ (Energy consumption)	10,000 tons-CO ₂	93	(3)	99%
		50	(0)	97%
HFC, PFC, SF ₆	10,000 tons-CO ₂	24	2	110%
		12	(0)	104%
Total releases and transfers of chemical substances into the atmosphere	tons	886	12	99%
		541	(7)	101%
Total wastewater discharged	10,000 m ³	923	(52)	91%
		664	(66)	95%
Total releases and transfers of chemical substances into the water and soil	tons	49	(5)	76%
		8	(2)	91%
Total waste discharged	tons	194,256	531	100%
		82,192	(2,695)	97%
Final disposal	tons	945	(36)	81%
		2	(0)	96%

Economic Benefits from Environmental Conservation Activities (Real Benefits)

Item	Amount	Year-on-Year Change	Main Benefits
Earnings	35.3	0.4	Promotion of turning waste into salable material through sorting and recycling.
	16.3	(2.0)	
Savings	234.2	117.4	Reduction in electricity costs from installation of photovoltaic systems and high-efficiency equipment, activities to eliminate wastefulness in production processes, and reduction of resource usage through use of returnable items, etc.
	90.6	2.6	
Total	269.5	117.8	
	106.9	0.6	

Economic Benefits from Environmental Consideration in Products and Services

Item	Amount	Main Products
Economic benefits to customers	389.1	Improved efficiency of machinery using key devices and components, reduction in electricity costs from energy-saving water heaters, air conditioners, refrigerators, optical wireless telecommunication systems and LCD TVs.
	389.1	
Environmental improvement effects	9.8	
	9.7	

Corporate Profile (as of March 31, 2012)

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: Kenichiro Yamanishi

Number of Employees:

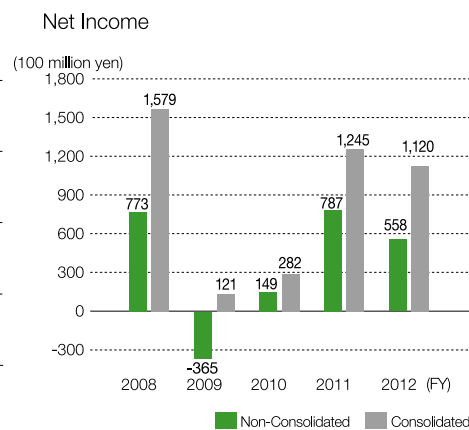
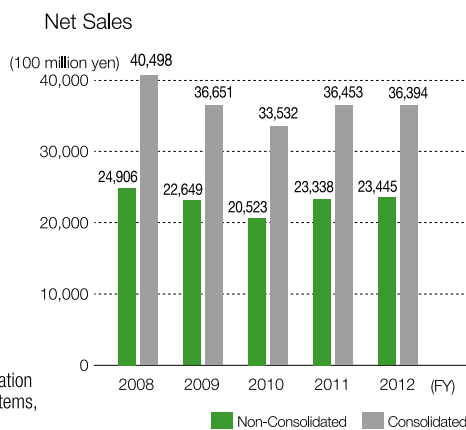
Consolidated 117,314
 Non-consolidated 28,808

Number of Affiliated Companies:

Subsidiaries 161 Affiliates 40

Business Segments:

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



Mitsubishi Electric Group Environmental Information

Mitsubishi Electric's global website contains information about the Mitsubishi Electric Group's activities related to corporate social responsibility (CSR). Within the site, our environmental policy, vision, environmental plans and environmental management are introduced in the section titled Basic Policy and Approach to Environmental Management, while targets and achievements of fiscal 2012 are published in the section entitled Environmental Report 2012.

<http://www.MitsubishiElectric.com/company/environment/>

Environmental Statement: Eco Changes

Eco Changes is our 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.

<http://www.MitsubishiElectric.com/eco/ecochanges/>



for a greener tomorrow

Global Environmental Portal

Provides information about environmental initiatives by Mitsubishi Electric Group companies around the world.

<http://www.MitsubishiElectric.com/eco/>



MITSUBISHI ELECTRIC CORPORATION

<http://www.MitsubishiElectric.com>

Inquiries Corporate Environmental Sustainability Group
Tokyo Building 2-7-3, Marunouchi, Chiyoda-ku, Tokyo 100-8310, Japan
TEL: +81-3-3218-9024 FAX: +81-3-3218-2465
E-mail: eqd.eco@pj.MitsubishiElectric.co.jp

