

ENVIRONMENTAL REPORT 2016



MITSUBISHI MOTORS ENVIRONMENTAL REPORT 2016

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Environmental Initiatives

Policies / Message from the Chief Environment Officer

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Automobiles contribute significantly to society through their convenience. However, on the other hand, automobiles are also products that have an impact on the environment. We, as an automobile maker, believe that it is a social responsibility for us making every efforts to minimize the impact on the environment through all business activities.

In order to fulfill this responsibility, we are working to develop electric vehicle technologies that contributes to the reduction of CO2 emissions and to improve the fuel economy of gasoline and diesel engine vehicles. In addition, we will work on decreasing our impact on the environment in all business activities including development, production, and service etc.

As promised in the "Mitsubishi Motors Group Environmental Vision 2020" made public in 2009, toward the realization of a low-carbon society, we would like to continue to contribute to society by raising the environmental performance of products provided to customers with improvements to the technology of electric vehicles and plug-in hybrid vehicles at the core.



Atsushi Iwada
The Chief Environment Officer

Environmental Initiatives

Policies / Environmental Policy

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Mitsubishi Motors formulated the "Environmental Policy" that clarifies its initiatives for environmental preservation in corporate management.

Basic Policy

Mitsubishi Motors recognizes that protection of the global environment is a priority for humankind and as such makes the following pledges:

1. Taking a global perspective, we are committed to harnessing all our resources to achieve continuous reductions in the environmental impact of all our corporate activities, spanning development, procurement, production, sales, and after-sales servicing of vehicles.
2. As a good corporate citizen, we are committed to take actions that protect the environment at the level of local communities and society as a whole.

Behavioral Standards

1. We will endeavor to protect the environment by forecasting and assessing the environmental impact of our products at all stages in their life cycle.

<Priority Initiatives>

- Prevention of global warming by reducing emissions of greenhouse gases
 - Prevention of pollution by restricting emissions of substances harmful to the environment
 - Reduction of waste and maximizing efficient use of resources by promoting conservation of resources and recycling.
2. We will endeavor to improve our environment management practices as part of ongoing efforts to ameliorate the impact on the environment.
 3. We will comply with environmental regulations and agreements, and will work to protect the environment by establishing voluntary management targets.
 4. We will encourage our affiliates and suppliers, both in Japan and overseas, to cooperate in working to protect the environment.
 5. We will actively disclose environment-related information and will seek the understanding of local communities and of society at large.

Environmental Initiatives

Policies / Key Environmental Issues

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Vehicles are convenient for transportation and logistics. However, on the other hand, vehicles have a major impact on the environment. While driving, vehicles consume fossil fuels such as gasoline and light oil. In addition, they emit CO₂, which is the cause of the global warming and the pollutants. During production, resources and fossil fuels are consumed, and chemical substances which are a pollution risk to the environment are used.

Mitsubishi Motors, as a corporation that produces and sells vehicles, has been promoting environmental initiatives while considering countermeasures against climate change caused by global warming, recycling, resource conservation, and environmental pollution prevention as a priority.

Countermeasures against Climate Change

Climate change from global warming is thought to be behind the increase in natural disasters, rise in sea level, desertification, and the food crisis. It is believed that the destruction of the ecosystem and damage to the human body caused by these phenomena will eventually put the existence of humans in danger. The Fifth Assessment Report of "Intergovernmental Panel on Climate Change (IPCC)" concluded global warming from the 20th century is highly likely attributable to human activities.

Most of vehicles move by burning gasoline or light oil. In the production phase of vehicles, energy such as power and gas are consumed. In this way, vehicles consume fossil fuels and emit CO₂, which is the cause of global warming, throughout their lifecycle. Most CO₂ emissions by vehicles occur during driving, therefore, we anticipate regulations on vehicle fuel economy and CO₂ emissions will be stricter in each country and region. At the same time, due to the increase in the trend of seeking environmentally friendly items, we believe performance in terms of fuel economy will become more important when people select cars. In addition, there is a possibility that fossil fuels will be unavailable for use due to the necessity of easing climate change, and in such case, there will be a risk in the procurement of fossil fuels.

Based on the above, the company considers effective energy use and the prevention of global warming which will lead to countermeasures against climate change as a priority. The company released the "Environmental Vision 2020" in 2009, and we have been working on decreasing energy consumption and reducing CO₂ emissions for a pleasing and low-carbon society. We have set a CO₂ emissions reduction target and are carrying out activities to reduce energy consumption by promoting the creation of electric-powered vehicles, improving fuel economy, increasing efficiency in business activities, and introducing energy efficient devices.

Furthermore, in response to increasing natural disasters due to climate change, we believe a power feeding function of electric-powered vehicles and plug-in hybrid vehicles such as V2X*1 will be one of the adaptation strategies.

*1 V2X stands for Vehicle to X.

Supplying power from the drive batteries of electric-powered vehicles to houses, buildings, communities, etc.

Recycling and Resource Conservation

The consumption of resources around the world tends to increase due to the rise in the world population and economic growth in emerging countries. In the production of vehicles, many resources are used, and in next generation vehicles such as electric-powered vehicles, in particular, many scarce resources including rare earth materials are used. Therefore, there are risks from resource depletion and difficulty in procurement.

Based on the above, the company regards effective resource use as our task and promotes initiatives for recycling and resource conservation. More specifically, we design products with a consideration for recycling and carry out recycling of end-of-life vehicles. In production, we work on the reduction of externally disposed waste.

Environment Pollution Prevention

Air pollution by NO_x, SO_x, and PM as well as soil and water pollution by heavy metals found in waste water has an impact on the health of humans and the ecosystem.

Furthermore, long-term risks from substances left behind in the environment without decomposing have become a concern.

Most of vehicles emit NO_x and SO_x due to engine combustion while driving. In production, in addition to emissions of NO_x and SO_x from combustion in boilers, volatile organic compounds (VOC) are emitted from the use of paint and solvents. Furthermore, since materials in vehicles contain environmentally hazardous substances, there is a risk of pollution throughout the entire lifecycle from production to disposal.

We believe regulations on the emission performance of vehicles and management of environmentally hazardous substances will be stricter in the future in each country and region. Moreover, we believe we need to consider the impact on the environment from waste water derived from business activities in the places with high water risks.

Based on the above, we have been promoting initiatives for the prevention of environmental pollution as a priority. For products, we are focusing on the development and diffusion of low-emission gas vehicles and the management and reduction of environmentally hazardous substances contained in materials. For production, we have been working on the reduction of emissions of VOC generated in the use of paint and solvent.



Policies / Environmental Vision 2020

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Mitsubishi Motors formulated an “Environmental Vision 2020” based on its “Environmental Policy” in fiscal 2009. The “Environmental Vision 2020” stipulates the medium-to long-term policy for the environmental initiatives of the entire group toward early achievement of a low-carbon society. We aim to realize a sustainable future by pursuing environmental initiatives in technical development with electric vehicles at the lead as well as business activities, and by realizing a clean low-carbon society with an infrastructure that supports the use of EVs.

Mitsubishi Motors Group Environmental Vision 2020 “Leading the EV*1 era, toward a sustainable future”

Products & Technologies	<ul style="list-style-type: none"> • Promote development and application of EV technology • Reduce environmental impact during vehicle life cycle
Business Activities	<ul style="list-style-type: none"> • Step up corporate activities to promote widespread use of EVs • Raise level of environmental protection activities by setting new standards for each field of corporate activity
Collaboration with Society	<ul style="list-style-type: none"> • Create a pleasing and low-carbon society by working together with customers and society at large • Step up contribution to protecting the global environment by environmental conservation activities with local communities

*1 EV: Electric vehicles, plug-in hybrid vehicles, and other electric-powered vehicles



Policies / Environment Initiative Program

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Message from the Chief Environment Officer

-Looking Back at the "Environment Initiative Program 2015"-

In the Environment Initiative Program 2015, we successfully achieved the targets in 23 items including reduction of CO2 emissions per production vehicle, but we could not achieve the targets in 4 items including reduction of vehicle-running CO2 emissions in the global sense and EV/PHEV production ratio even though improvements were made. Based on the results, we will work harder to improve and enhance our activities.

On the other hand, the importance of work on the problem of climate change due to global warming is increasing more and more, and the "Paris Agreement" was adopted in COP21 (21st Conference of the Parties to the United Nations Framework Convention on Climate Change in December 2015).

In our environment initiative program for the next term, we will pursue a response to climate change as a top priority, and we will work on environmental tasks such as the reduction of energy use, recycling and resource conservation, and prevention of environmental pollution together with all our stakeholders starting with customers and suppliers.

The Chief Environment Officer

Environment Initiative Program 2015

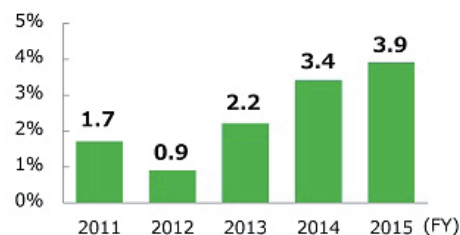
Mitsubishi Motors formulated the "Mitsubishi Motors Environment Initiative Program 2015," a mid-term plan for the group's environmental initiatives from FY 2011 to FY 2015. This program is an execution plan to realize "Environmental Vision 2020", and the company has pursued environmental initiatives according to this program. This initiative program 2015 set annual targets for 28 items such as prevention of global warming, recycling and resource conservation, prevention of environmental pollution, spread of EV/PHEV in four perspectives, namely, "Products and Technologies", "Business Activities" and "Collaboration with Society" in "Environmental Vision 2020", and "Stronger Base of Implementation".

The company set the following 3 items as medium-term targets in Environmental Vision 2020, and its achievements up to FY 2015 are as follows.

<5% or more EV/PHEV production ratio>

Since the number of launched models of electric-powered vehicles remained below than when the targets were set, we have not achieved the target. However, due to the improvement of merchantability and sales promotion of Outlander PHEV, the production ratio of electric-powered vehicles improved each fiscal year.

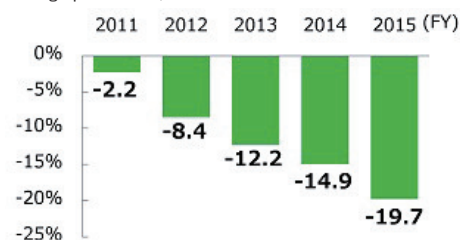
EV/PHEV Production Ratio



<25% reduction of vehicular running CO2 emissions>

Due to the increase in the ratio of sales in countries where the fuel economy is not regulated in addition to a review of the launch plan for electric-powered vehicles, we did not achieve the target. However, vehicular running CO2 emissions decreased each fiscal year owing to improvements in the internal combustion engine and the launch of new models.

Reduction of Vehicular Running CO2 Emissions (Global average per vehicle)

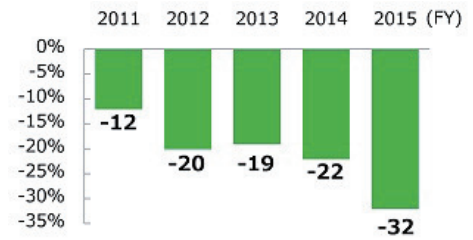


• Calculation based on reported fuel economy as of August 31, 2016 for Japan

<Reduction of 15% in CO2 emissions during production>

Due to the promotion of energy conservation measures such as the consolidation of production processes and introduction of highly efficient devices, since FY 2012, we have achieved the target. In FY 2015, we transferred production in MMNA (U.S.) to the Okazaki Plant and Pajero Manufacturing Co., Ltd. As a result, production efficiency improved, and we were able to achieve the target significantly.

Reduction of CO2 emissions in production (per production vehicle)



We finished FY 2015, which is the final year of the Environment Initiative Program 2015, and we achieved the target for 23 items. However, we were unable to achieve the target for 4 items, and for one item, we froze activity.

[Click here for results until FY 2015](#)

Future Environment Initiative Program

We have been considering an environment initiative program for the next term that can be coordinated with the contents and period of the new Mid-term Business Plan starting from FY 2017 for easier realization. Therefore, we position FY 2016 as a transition period to the environment initiative program for the next term, and we formulated a one-year program to work on.

[Click here for FY 2016 Initiative targets](#)

Mitsubishi Motors Environment Initiative Program 2015 Results

Products and Technologies

Evaluation ○:Achieved △:Partially Achieved ×:Unachieved --:Out of target

Initiative	Final Targets	5-year Results	Evaluation
Prevention of global warming			
Reduction of vehicular running CO2 emissions	<ul style="list-style-type: none"> 25% global average reduction of running CO2 emissions (against 2005) 	<ul style="list-style-type: none"> 19.7% reduction*1 	×
Enhancement of EV/PHEV product lineup and expansion of sales territory	<ul style="list-style-type: none"> Launch of commercial mini EV in the Japan market in 2011 Launch of plug-in hybrid vehicles in Japan, the United States and Europe since 2012 EV/PHEV production ratio of at least 5% 	<ul style="list-style-type: none"> Launch of cab-over type electric vehicle MINICAB-MiEV Launch of plug-in hybrid vehicle Outlander PHEV in Japan, Europe etc. EV/PHEV production ratio:3.9% 	△
Development of new technologies to improve performance of EV/PHEV	<ul style="list-style-type: none"> Improvement of battery energy density Development of smaller, lighter-weight parts and components for EV/PHEV, as well as integrating functions of those parts 	<ul style="list-style-type: none"> Promotion of development of smaller lighter-weight batteries and components for EV/PHEV 	○
Development and deployment of "Green Technologies"	<ul style="list-style-type: none"> New launch of hybrid vehicle Improvement of gasoline engines and clean diesel engines Lighter-weight bodies and components Market launch of eco-driving support system 	<ul style="list-style-type: none"> Market launch of hybrid vehicle <i>Dignity</i>, etc. Development of new gasoline engine models and new clean diesel engines that have adopted multi-stage power generation control and mounting these engines in new models Market launch of new lightweight model vehicles using high tensile strength steel plates Expansion of adoption of eco-driving support system in all passenger vehicles in Japan 	○
Recycling and resource conservation			
Development of new technologies and enhancement of organizations and systems for the recycling and reuse of EV/PHEV	<p>For used drive batteries</p> <ul style="list-style-type: none"> Development of recycling technology Creation of recycling systems and organizations Development of secondary utilization technologies and businesses 	<ul style="list-style-type: none"> Development of technology that allows the appropriate treatment of end-of-life drive batteries Establishment and ongoing operation of recycling systems in Japan, the United States and Europe Completion of the development of decision logic to measure the capacity for deciding whether or not reuse is possible 	○
Development and commercialization of less resource-intensive materials	<ul style="list-style-type: none"> Expanded application of "Green Plastic" (plant-based plastics) 	<ul style="list-style-type: none"> Using plant-based plastic for parts and accessories such as floor mats in the <i>Mirage</i> 	○
Improvement of recycling efficiency of used automobiles and its parts	<ul style="list-style-type: none"> Used automobile recycling efficiency*2: at least 96% Dealer repair/replacement bumper recovery rate: at least 60% 	<ul style="list-style-type: none"> Used automobile recycling efficiency: 99.5% Dealer repair/ replacement bumper recovery rate: 34.5% (Not achieved due to the impact from a review of the collection scheme) 	△
Prevention of environmental pollution			
Expanded deployment of low-emissions gas vehicles	<ul style="list-style-type: none"> Japan: Continue to expand deployment of 4 star-rated low-emission vehicles, Europe: Early adaptation to EURO6 USA: Adaptation to LEVIII*3 and ULEV70*4, Emerging countries: Promotion of EURO3-5 vehicles 	<ul style="list-style-type: none"> Ensuring the market launch of vehicles compatible with regulations in each country 	○
Reduction of hazardous substances in products	<ul style="list-style-type: none"> Formulation and expansion of common global hazardous substance management standards 	<ul style="list-style-type: none"> Formulation of the internal system to manage hazardous substance and expansion of common global standards 	○

*1 Calculation based on reported fuel economy as of August 31, 2016 for Japan

*2 Based on calculation methods used in the 3rd joint meeting of the Industrial Structure Council and Central Environmental Council on May 22, 2003

*3 Abbreviation for Low Emission Vehicle

*4 Abbreviation for Ultra Low Emission Vehicle

Business Activities

Initiative	Final Targets	5-year Results	Evaluation
Production and logistics			
Reduction of unit CO2 emissions in production	<ul style="list-style-type: none"> 15% reduction in CO2 emissions per production vehicle at Japanese and international plants (compared to FY2005) 	<ul style="list-style-type: none"> 32% reduction 	○
Reduction of unit CO2 emissions in logistics	<ul style="list-style-type: none"> Reduction in CO2 emissions per unit of transportation (compared to FY2006) Procurement logistics: 36% reduction; transportation of completed vehicle, etc.: 9% reduction 	<ul style="list-style-type: none"> Procurement logistics: 57% reduction Transportation of completed vehicle, etc.: 6.9% reduction 	△
Resource conservation and recycling in production	<ul style="list-style-type: none"> 45% reduction of externally disposed waste per production vehicle at Japanese plants (compared to FY2005) 	<ul style="list-style-type: none"> 57% reduction 	○
Resource conservation and recycling in logistics	<ul style="list-style-type: none"> 52% reduction in steel used per unit shipment volume at knock down (KD)*5 plants in Japan (compared to FY2006) 	<ul style="list-style-type: none"> 90% reduction 	○
Reduction of hazardous substances generated in production	<ul style="list-style-type: none"> Reduction of VOC*6 per unit painting area to less than 35 g/m² (body and bumper painting) in Japanese plants 	<ul style="list-style-type: none"> 31.6g/m² 	○
Establishment and enforcement of environmental standards in production	<ul style="list-style-type: none"> Establishment of environmental guidelines for plants, evaluation and improvement of plant environmental performance 	<ul style="list-style-type: none"> Activity frozen triggered by discovery of the failure to report and measure necessary items in accordance with the Air Pollution Control Act in March 2011. After the recovery, the promotion of building and enhancing the system to comply with environmental laws and regulations 	-
Development, sales, servicing and offices			
Reduction of unit CO2 emissions in non-production facilities	<ul style="list-style-type: none"> 5% reduction in unit CO2 emissions at Japanese facilities (development facilities, parts centers etc.) (compared to FY2010) 	<ul style="list-style-type: none"> 27.4% reduction 	○
Reduction of unit CO2 emissions at non-production affiliates	<ul style="list-style-type: none"> 5% reduction in unit CO2 emissions at Japanese affiliates (7 companies) (compared to FY2010) 2-5% reduction in unit CO2 emissions and international affiliates (9 companies) (compared to FY2010) 	<ul style="list-style-type: none"> Japanese affiliates: 28.6% reduction Overseas affiliates: 29.2% reduction 	○
Establishment and enforcement of environmental standards in sales and servicing	<ul style="list-style-type: none"> Establishment of environmental guidelines for dealers, evaluation and improvement of dealership and service center environmental performance 	<ul style="list-style-type: none"> Acquisition of certification of the environmental management system by 14 dealer companies in total in Japan 	○
Collaborative activities with suppliers			
Enhanced management of hazardous substances in the supply chain	<ul style="list-style-type: none"> Improved coordination of the supply chain to enhance management at the supplier level of hazardous substances in products and materials 	<ul style="list-style-type: none"> Implementation of audits on business partners and making improvements to the management system based on the audit results 	○
Promotion of energy and resource conservation at suppliers	<ul style="list-style-type: none"> Creation of systems and organizations to improve collaborative activities with suppliers 	<ul style="list-style-type: none"> Construction and operation of the system to collect and share environmental activity case examples of suppliers 	○
Global deployment of green purchasing guidelines	<ul style="list-style-type: none"> Deployment of green purchasing guidelines to the suppliers of international plants 	<ul style="list-style-type: none"> Deployment of Green Purchasing Guidelines to suppliers of MMTh (Thailand) and implementation of audits on their efforts according to the guidelines 	○

*5 Knockdowns (vehicles exported as parts for assembly at local plants)

*6 VOC stands for Volatile organic compounds

Collaboration With Society and Stronger Base of Implementation

Initiative	Final Targets	5-year Results	Evaluation
Collaboration for the spread of EV/PHEV			
Collaboration with government and other industries for the enhancement of the charging infrastructure	<ul style="list-style-type: none"> • Collaboration with “EV/PHV Towns” for the enhancement of the charging infrastructure • Collaboration with the CHAdeMO Association*7 for the enhancement of the recharging infrastructure and promotion of international standardization 	<ul style="list-style-type: none"> • Promotion of charging infrastructure in cooperation with the administration and other industries such as the launch of Nippon Charge Service, LLC 	○
Research into Smart Grids and other strategies for utilizing electric vehicles	<ul style="list-style-type: none"> • Participation in field testing for the commercialization of Smart Grids 	<ul style="list-style-type: none"> • Participation in field testing and promotion of cooperation in product development by Japanese and overseas charge-discharge device related companies 	○
Environmental preservation			
Promotion of activities to preserve biodiversity under our basic guideline	<ul style="list-style-type: none"> • Monitoring and analysis of the impact of business activities on biodiversity 	<ul style="list-style-type: none"> • Implementation of Ecosystem Survey in 2013 in Shiga Plant, and promotion of conservation activities with participation by employees and educational activities to increase understanding 	○
Strengthening of environmental management			
Promotion of environmental management that is integrated with affiliates	<ul style="list-style-type: none"> • Creation of integrated environmental management systems in collaboration with Japanese and overseas affiliates 	<ul style="list-style-type: none"> • Construction of integrated environmental management systems that is united with affiliated companies such as introduction of an environmental data management system and hosting environmental affairs communication meetings to promote a reduction of the environmental impact 	○
Expanded application of LCA*8 in product development	<ul style="list-style-type: none"> • Strengthening of systems to evaluate lifecycle CO2 emissions in new vehicle development 	<ul style="list-style-type: none"> • Compiling data necessary for LCA of electric-powered vehicles and implementation of LCA for 13 vehicles and 20 parts 	○
Enhancement of environmental information disclosure and environmental communications	<ul style="list-style-type: none"> • Enhancement of information disclosure in environmental accounting, etc., presented in environmental reports and on the website • Promotion of environmental communications with stakeholders 	<ul style="list-style-type: none"> • Enhancement of information disclosure in environmental websites • Promotion of environmental communication through participation in environmental activities in communities and visits to individual corporations and groups • Getting our environmental initiative program known to suppliers and requesting environmental activities through information exchange with suppliers 	○
Promotion of systematic environmental education	<ul style="list-style-type: none"> • Promotion of environmental education by job grade and business unit 	<ul style="list-style-type: none"> • Promotion of education systematically such as environmental education by job grade and business unit 	○

*7 The CHAdeMO Association works to increase the locations where EVs can be quickly charged and promotes the standardization of charging methods, both of which are indispensable for the popularization of the EVs.

*8 LCA stands for Life Cycle Assessment, which is a technique for calculating the environmental impact of a product from manufacturing to disposal

FY 2016 Targets List

Products and Technologies

Initiative	FY2016 Targets
Prevention of global warming	
Reduction of vehicular running CO2 emissions	<ul style="list-style-type: none"> • 19% global average reduction of running CO2 emissions (against FY 2005)
Enhancement of EV/PHEV product lineup and expansion of sales territory	<ul style="list-style-type: none"> • EV/PHEV production ratio :3%
Development of EV/PHEV for CO2 emissions	<ul style="list-style-type: none"> • Promotion of development of EV/PHEV
Development of technology to improve fuel economy and deployment in products	<ul style="list-style-type: none"> • Pursuit of lightweight vehicles
Recycling and resource conservation	
Development of new technologies and enhancement of organizations and systems for the recycling and reuse of EV/PHEV	<ul style="list-style-type: none"> • Implementation of research of recycling technology of drive batteries • Implementation of field testing of recycling technology overseas
Improvement of recycling efficiency of used automobiles and their parts	<ul style="list-style-type: none"> • Japanese dealer repair/replacement bumper recovery rate: at least 34%
Prevention of environmental pollution	
Expanded deployment of low-emissions gas vehicles	<ul style="list-style-type: none"> • Thorough compliance with emission gas regulations
Enhancement of the management of hazardous substances in products	<ul style="list-style-type: none"> • Promotion of reaction to environmentally hazardous substance regulations

Business Activities

Initiative	FY 2016 Target
Prevention of global warming	
Reduction of unit CO2 emissions in production	<ul style="list-style-type: none"> • 30% reduction in CO2 emissions per production vehicle at Japanese and international plants (compared to FY2005)
Reduction of unit CO2 emissions in non-production facilities	<ul style="list-style-type: none"> • 20% reduction in unit CO2 emissions at non-production facilities (compared to FY2010)
Reduction of unit CO2 emissions in logistics	<ul style="list-style-type: none"> • 0.3% reduction in CO2 emissions per unit of transportation in Japan (compared to FY2006)
Recycling and resource conservation	
Resource conservation and recycling in production	<ul style="list-style-type: none"> • 46% reduction of externally disposed waste level at Japanese plants (compared to FY2005)
Resource conservation and recycling in logistics	<ul style="list-style-type: none"> • 83% reduction in steel used per unit shipment volume at KD plants in Japan (compared to FY2006)
Prevention of environmental pollution	
Reduction of hazardous substances generated in production	<ul style="list-style-type: none"> • Reduction of VOC per unit painting area to less than 35 g/m2 (body and bumper painting)

Collaboration with Society

Initiative	FY2016 target
Spread of EV/PHEV	
Enhancement of the charging infrastructure	<ul style="list-style-type: none"> Promotion of response to smart charging system
Expansion of use of EV/PHEV	<ul style="list-style-type: none"> Promotion of initiatives toward further increase of the value of EV/PHEV
Environmental preservation	
Promotion of activities to preserve biodiversity under our basic guideline	<ul style="list-style-type: none"> Implementation of an Ecosystem Survey in the Okazaki Plant

Stronger Base of Implementation

Initiative	FY2016 target
Environmental management	
Promotion of LCA (Life Cycle Assessment)	<ul style="list-style-type: none"> Examination of disclosure of LCA results for models that were already assessed
Promotion of consolidated environmental management	<ul style="list-style-type: none"> Establishment of consolidated environmental management guidelines
Enhancement of environment- friendliness in purchasing activities	<ul style="list-style-type: none"> Promotion of improvement in the environmentally hazardous substance management system by business partners
Enhancement of environmental information disclosure and environmental communications	<ul style="list-style-type: none"> Enhancement of disclosure information according to GRI Sustainability Reporting Guidelines Setting materiality regarding the environment

Environmental Initiatives

Environmental Management / Environmental Organization

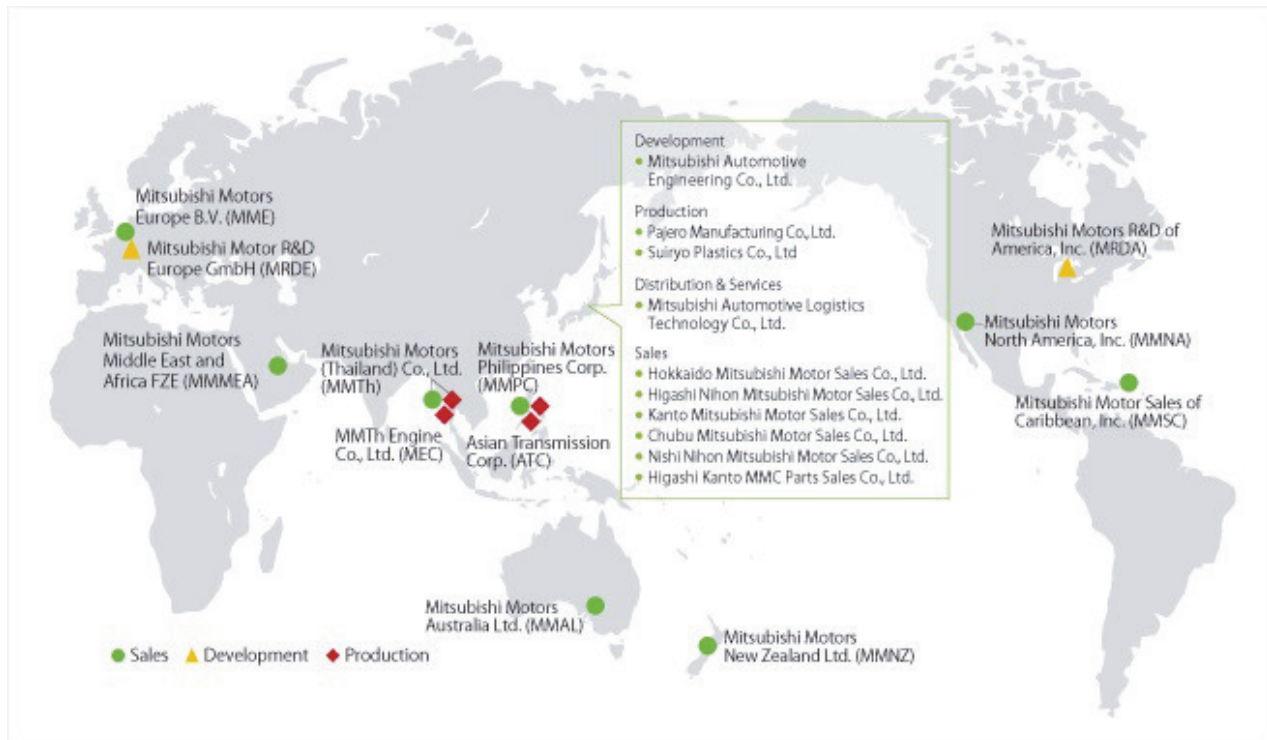


Mitsubishi Motors has been holding the “Environmental Council” annually since 1993. The executives including the president attend the “Environmental Council.” And medium- to- long term basic policy, targets, implementation plans, etc. regarding environmental initiatives are discussed and progress reports and activity results for the fiscal year are confirmed. The results of the environmental council and initiative achievements are reported to the board.

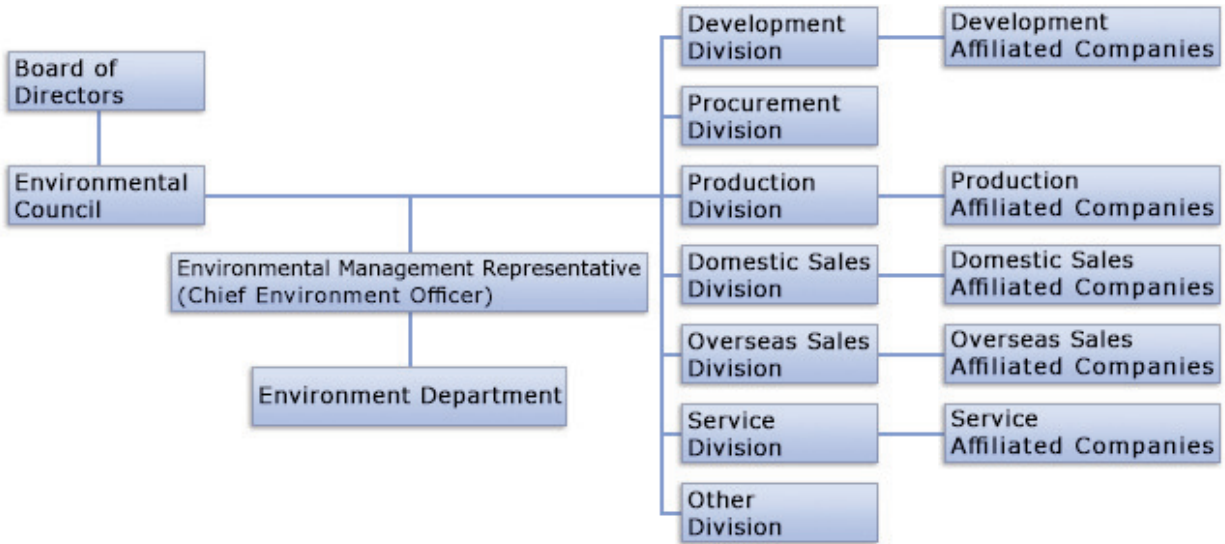
Since we acquired the ISO14001 integrated certification for the entire company in FY2010, we have endeavored to revitalize environmental initiatives for each department such as development, production, purchasing, and sales to reduce the environmental impact of its products at all stages in their life cycle.

In addition, we have built a framework to collect CO2 emissions data in each domestic and overseas business site for production, development, and sales, etc. by regular reporting. We will continue to enhance its global environmental management systems by improving the efficiency and instantaneity of the data collection.

Covered Companies of Global Environmental Management (22 Domestic and Foreign Affiliated Companies)



Company structure





Environmental Management / Environmental Management System



Mitsubishi Motors acquired ISO14001 integrated certification for the entire company, and the company is promoting its environmental initiatives on a company-wide basis. In addition, key domestic and overseas affiliated companies also acquired ISO14001 certification, and acquisition of Eco-Action 21*1 has been promoted in domestic sales companies.

*1 Eco-Action 21 is a certification and registration system based on the Environmental Management Systems guidelines formulated by Ministry of the Environment for medium and small-sized companies.

Affiliated Companies That Acquired Environmental Management System Certification

ISO14001

Development	Production	Distribution & Services	Sales
Mitsubishi Automotive Engineering Co., Ltd.	Pajero Manufacturing Co., Ltd. Suiryo Plastics Co., Ltd. MMPC (Philippines) ATC (Philippines) MMTh (Thailand) MEC (Thailand)	Mitsubishi Automotive Logistics Technology Co., Ltd	Meinan Mitsubishi Motor Sales Co., Ltd.

Eco-Action 21

Sales	
Hokkaido Mitsubishi Motor Sales Co., Ltd. Higashi Nihon Mitsubishi Motor Sales Co., Ltd. Kanto Mitsubishi Motor Sales Co., Ltd. Chubu Mitsubishi Motor Sales Co., Ltd. Nishi Nihon Mitsubishi Motor Sales Co., Ltd. Aomori Mitsubishi Motor Sales Co., Ltd.	Touou Mitsubishi Motor Sales Co., Ltd. Iwate Mitsubishi Motor Sales Co., Ltd. Sunen Mitsubishi Motor Sales Co., Ltd. Kyoto Mitsubishi Motor Sales Co., Ltd. Shiga Mitsubishi Motor Sales Co., Ltd. Tokai Mitsubishi Motor Sales Co., Ltd. Sobu Mitsubishi Motor Sales Co., Ltd.

Environmental Initiatives

Environmental Management / Environmental Education



Mitsubishi Motors provides a variety of environmental education on its policy and initiatives towards environmental problems as well as tasks so that employees may take the lead in promoting its environmental initiatives.

Environmental education is incorporated into training programs by job grades covering all staff from new employees to managerial employees, and the company is working to promote understanding centering on the relationship with environmental problems and business activities in addition to the social responsibility that the company should fulfill.



Trainings

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

Execution of systematic environmental education for improving the environmental awareness of employees.

Do! Fiscal 2015 Achievements

In training by job grade such as new employee training and promotion training, etc., environmental education was executed.

In order to promote the acquisition of official qualifications for the environment, junior technical employees were sent to training sessions outside the company.

For all employees, environmental education on global warming was conducted using e-learning.

In addition, in the Environment Month of June in Japan, we transmitted the president's message on initiatives for the environment and displayed posters containing the environmental message.

To increase the environmental awareness of employees and their families, paintings submitted by the children of employees are used for the posters.

Check! Fiscal 2015 Self Evaluation

Environmental education was provided as planned.

Action! Future Issues and Plans

The company will continue to promote the strengthening of environmental education.



Fiscal 2015 Environmental education poster

Environmental Initiatives

Environmental Management / Environmental Risk Management



Mitsubishi Motors found that the company failed to report the installation of facilities and to measure certain items stipulated in pollution prevention related laws and regulations including the Air Pollution Control Act in March 2011. We regret our failure, and we now thoroughly making efforts to comply with environmental regulations. For grievances from neighboring residents as well, we sincerely respond after investigating the situation.

For these actions, the company clearly sets roles and procedures in its Environment Management System (ISO14001) and ensure compliance. In the event that the company violates environmental laws and regulations or receives complaints or environmental accidents occur, the corresponding division must submit an "Environment Non-conformity Report" which clarifies the contents, emergency measures, cause, and correction measures to the Head Officer of the Headquarters and the Chief Environmental Officer to take necessary measures against the cause. Furthermore, we have been working on the improvement of the environmental management system to prevent reoccurrence (improvement of work process, enhancement of the supervision system, and increase of awareness of employees).

Fiscal 2015 Result

The situations of the company and Pajero Manufacturing Co., Ltd. in FY 2015 are as follows.

For environment related accidents, there were 5 cases*1 related to leaks and the outflow of oil and dirty water including the outflow of oil to a nearby river from hydraulic piping in the Okazaki Plant. The company immediately took cleanup measures and simultaneously carried out inspections and repairs of aged/defective sections and enhanced daily management to prevent reoccurrence.

There were no cases where the company was charged fines or penalties due to environmental accidents and the violations of laws.

For grievances, the company received one complaint for odor in the Powertrain Plant. We have been making efforts to reduce the odor including the installation of a mist type odor eliminator, etc. in the corresponding facility.

*1 : Figure includes cases where the impact was resolved within our premises.



Environmental Management / Environmental Accounting



In order to quantitatively assess environmental conservation costs and benefits, Mitsubishi Motors has introduced environmental accounting since 1998. It is based on the guideline published by the Japanese Ministry of Environment and the company's unique standard.

(1) Environmental conservation costs

Category		Main initiatives details	Fiscal 2015		Fiscal 2014	
			Investment (Million yen)	Cost (Million yen)	Investment (Million yen)	Cost (Million yen)
Business Area Cost	Pollution Prevention Cost	Preventing air pollution, water pollution and soil pollution	286	1,688	423	1,694
	Global Environmental Conservation Cost	Preventing global warming and the ozone depletion	883	6	789	18
	Resource Circulation Cost	Reduction, proper disposal and recycling of the waste	0	828	171	1,107
Upstream/Downstream Costs		Withdrawing used bumpers and corresponding automobile recycling law	0	1,928	0	2,150
Administration Activity Cost		Maintaining certification of ISO14001, educating employees, disclosing environmental information and monitoring	49	620	0	548
R&D Cost		Research and development about reductions in environmental impact of products such as improving fuel economy and exhaust gas measures	964	33,535	1,660	31,961
Social Activity Cost		Hands-on environmental lessons, supporting global environmental activity and donation to environmental groups	0	217	0	195
Environmental Remediation Cost		Compensation for environmental damage by business activities	0	23	0	8
Total			2,182	38,845	3,043	37,681

	Capital investment (100 Million yen)	R&D cost (100 Million yen)	Capital investment (100 Million yen)	R&D cost (100 Million yen)
<Reference>The group entire capital investment, R&D cost	690	787	680	746

(2) Environmental conservation benefit

Category	Environmental performance indicators (Units)	Fiscal 2015	Fiscal 2014	Benefit (Reduced volume)
Environmental conservation benefit related to resources input into business activities	Total energy consumption (thousand GJ)	6,442	6,774	332
	Energy consumption by transportation (thousand GJ)	308	338	29
	Input of PRTR-listed substances (t)	1,628	1,760	132
	Input of water (thousand m ³)	3,805	3,779	-26
Environmental conservation benefit related to waste or environmental impact originating from business activities	GHG(CO ₂) emissions (thousand t-CO ₂)	369	372	3
	GHG(CO ₂) emissions by transportation (thousand t-CO ₂)	21	23	2
	Transfer and release of PRTR-listed substances (t)	411	389	-22
	Total waste (thousand t)	127	140	13
	Waste landfilled directly (t)	31	24	-7
	Wastewater volume (thousand m ³)	2,990	2,999	9
Other environmental conservation benefit	Transport volume (million t-km)	247	260	13

(3) Economic Benefit Associated with Environmental Conservation Activities (Actual Benefits)

Category	Details of Benefit	Fiscal 2015	Fiscal 2014
		Benefit (Million yen)	Benefit (Million yen)
Revenue	Operating revenue from the sale of recycled waste products and used products produced through key business	1,808	2,422
Cost Reduction	Energy expense saving through energy conservation	1,647	-325
	Water expense saving through water conservation	-11	-7
	Disposal cost saving through lower resource input or recycling	178	5
	Packaging materials cost saving through recycling	322	336
Total		3,943	2,431

○Target sites : Mitsubishi Motors, Pajero Manufacturing Co., Ltd.

(Following amounts cover only Mitsubishi Motors.)

- Energy input and CO₂ emissions through the transportation
- Transportation volume)

○Period : April 2015–March 2016

○Including summary by dividing

○Excluding depreciation

○In Table (2), minus sign “-” shows amount increasing.

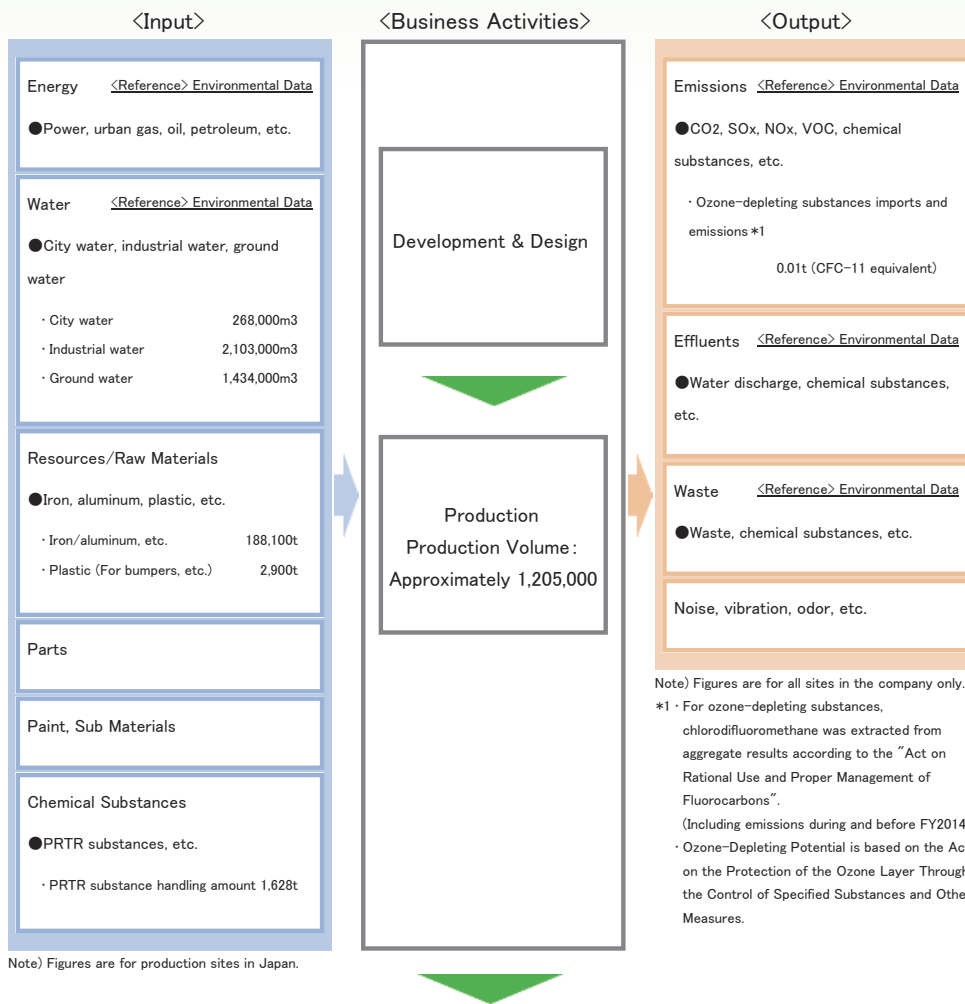
○In Table (3), “Benefit” is equal to the differences between fiscal 2014 and fiscal 2015.



Environmental Management / Monitoring Environmental Impact within Supply Chain / Environmental Impact of Business Activities

FY 2015 Material Flow

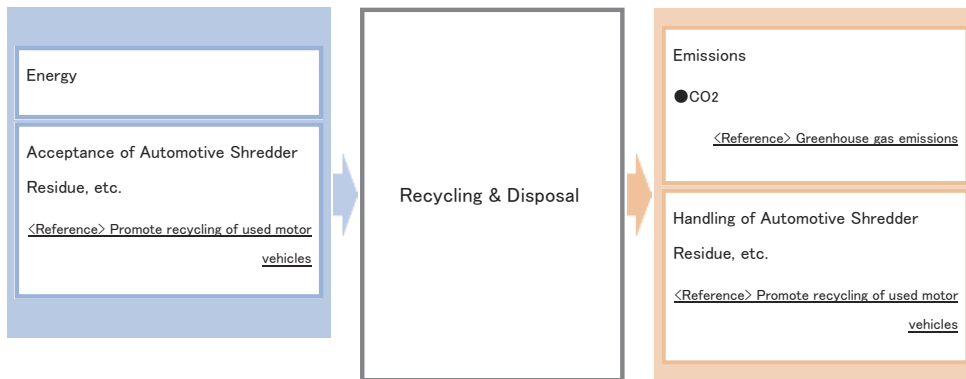
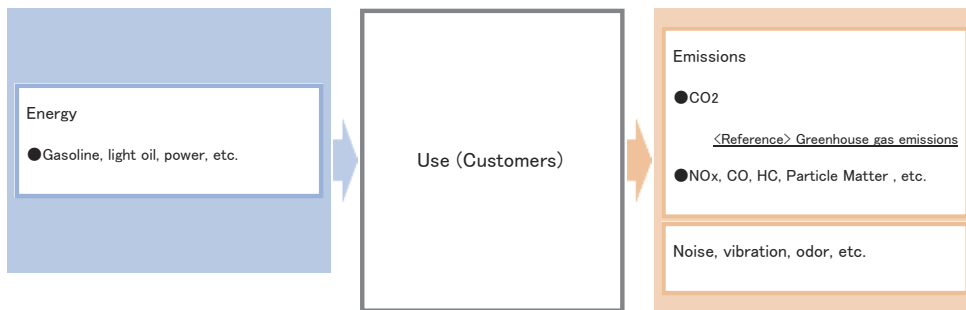
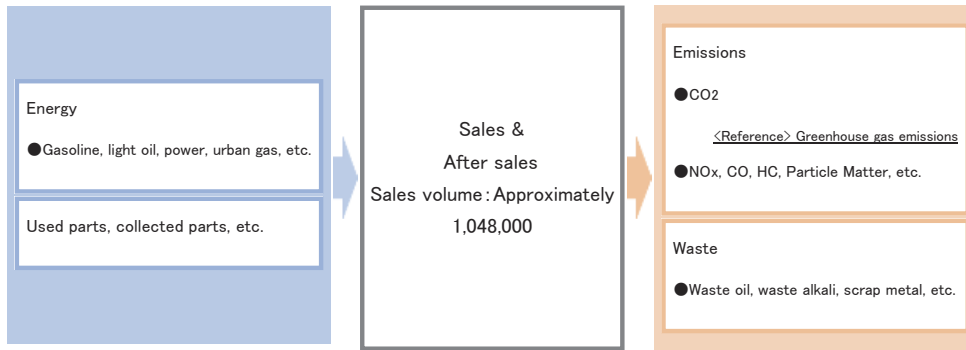
Automobiles have impacts on the environment in all phases from development and design to disposal. Mitsubishi Motors makes efforts to understand the impacts on the environment in every single business activity as a corporation that produces and sells automobiles.



Note) Figures are for production sites in Japan.



Note) Figures are for consignment transport within Japan



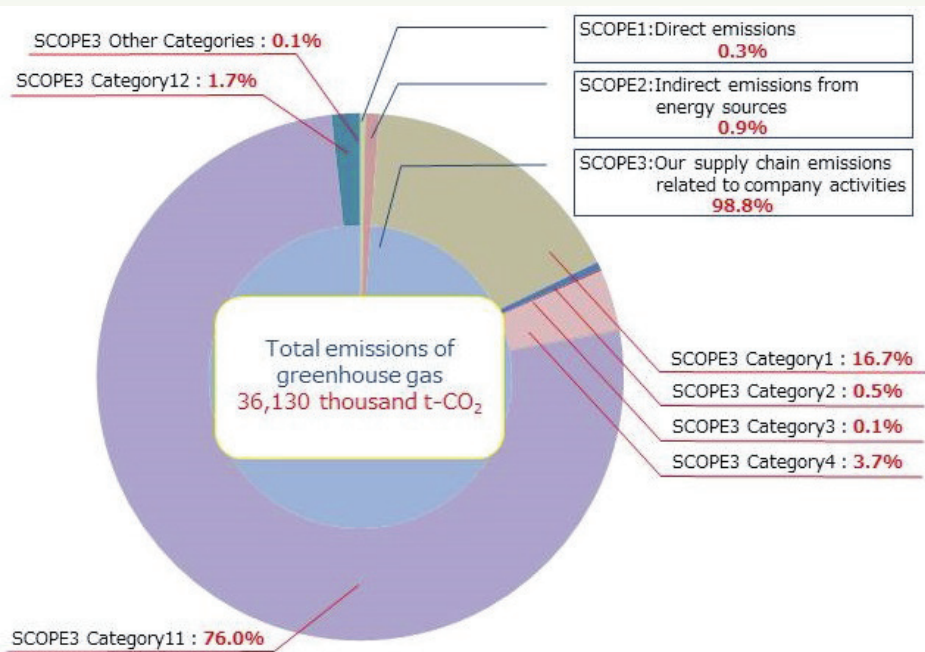


Environmental Initiatives

Environmental Management / Monitoring Environmental Impact within Supply Chain / Greenhouse Gas Emissions



Mitsubishi Motors calculated greenhouse gas emissions of entire supply chain related its activity in fiscal 2015. Total emissions were 36,130 thousand t-CO₂. Continuously, we will promote our monitoring of greenhouse gas emissions.



Breakdown of greenhouse gas emissions

Category list		CO2 emissions (thousand t-CO2)	Coverage
SCOPE1	Direct emissions	116	consolidated
SCOPE2	Indirect emissions from energy sources	303	consolidated
SCOPE3	Category1	Purchased goods and services	6,026 consolidated (only production)
	Category2	Capital goods	164 non-consolidated
	Category3	Fuel-and energy-related activities (not included in scope 1 or scope 2)	44 consolidated
	Category4	Upstream transportation and distribution	1,343 consolidated
	Category5	Waste generated in operations	12 non-consolidated (only production)
	Category6	Business travel	4 consolidated
	Category7	Employee commuting	13 consolidated
	Category8	Upstream leased assets	- -
	Category9	Downstream transportation and distribution	- -
	Category10	Processing of sold products	- -
	Category11	Use of sold products	27,475 all destination
	Category12	End-of-life treatment of sold products	626 all destination
	Category13	Downstream leased assets	- -
	Category14	Franchises	4 some of dealers which are not affiliated
	Category15	Investments	- -
	Subtotal	35,711	
Total		36,130	

*1 Including city water and industrial water

*2 The summary is based on the fuel economy value as of August 31st 2016.

Environmental Initiatives

Environmental Management / Life Cycle Assessment (LCA)



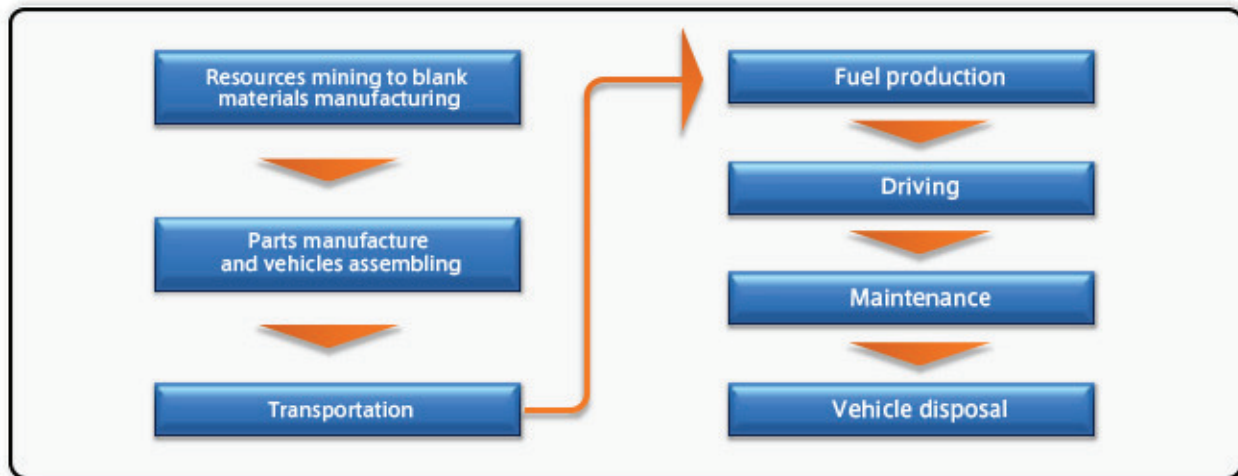
The LCA is an approach to quantify the environmental impact of a part or vehicle through all stages of its life cycle.

For automobiles, the LCA is used to examine the processes of mining natural resources for parts and materials, manufacturing materials and parts, assembling vehicles, driving vehicles, producing fuel, disposing the vehicle, and so on in order to quantify the carbon dioxide gas emitted from the respective processes as well as the physical quantities of other environmental items, which are then summed up and assessed.

With this method, Mitsubishi Motors gains a full picture of the CO2 emissions of parts and vehicles throughout their life cycle.

Thus, we use the LCA method to develop products with lower life cycle CO2 emissions.

General automobile life-cycles in view of the LCA



Effectively utilizing the results of the applied LCA

We use the LCA to develop environment-friendly parts, production technologies, electric-powered vehicles, and new model vehicles, and compares the life cycle CO2 emissions with conventional parts and vehicles. The results are then used to determine whether further development is required, and to verify the effect of development.

Subjects and Purposes of the LCA

	Typical subjects of the LCA (Example)	Major purposes
Components and technologies	Parts and accessories made of plant-derived materials and production engineering	Determining whether further development is required.
	Body parts employing plastics	Verifying the effect of weight reduction
Vehicle	<i>Outlander PHEV</i>	Assessing the effect of improvement from the gasoline-driven vehicle platform Assessing the impact of element parts
	<i>Triton</i>	Comparing the effect of improvement from conventional vehicles

Fiscal 2015 Initiative

In fiscal 2015, the company has developed neither new-type vehicle nor part.

We continuously make efforts to conduct the LCA for newly developed parts and vehicles.

Environmental Initiatives

Products and Technologies / Reduction of CO₂ Emissions While Driving



Gasoline and diesel engines inevitably generate exhaust gases containing large quantities of CO₂ that causes global warming.

For the sake of the environment, Mitsubishi Motors is striving to reduce the CO₂ emissions caused by driving.

We focus on products and technology-related initiatives, recognizing that the development of technologies for improving fuel economy and Electric-powered systems, as well as spreading the use of vehicles equipped with these innovative systems, are important for reducing CO₂.

Development of electric vehicle technologies

We introduced our Electric Vehicle *i-MiEV* in 2009, and Plug-in Hybrid Electric Vehicle *Outlander PHEV* based on Electric Vehicles in 2013.

We are also developing electric-powered vehicles by improving drive batteries and enhancing motor efficiency toward the realization of the vehicles to be expected in the future.

➤ Development of electric vehicle technologies



Outlander PHEV

Development of improving fuel economy technologies

Improving the fuel economy of gasoline and diesel engines greatly contributes to the reduction of CO₂ worldwide. This is why we are committed to developing technologies for improving fuel economy.

➤ Development of improving fuel economy technologies



Mirage

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- Market entry of the new *Pajero Sport* with improved fuel economy
- Market entry of the new *Outlander*

Do! Fiscal 2015 Achievements

Market entry of the new *Pajero Sport* mid-size SUV in Thailand. Sequential exports to overseas countries also to commence.

The new *Pajero Sport* shares the same 4N15 2.4L MIVEC diesel turbocharged engine as the *Triton*. The engine in combination with the first newly developed 8-speed AT Transmission in the company enabled CO₂ emissions when driving to be improved by approximately 17% compared with conventional vehicles. This advancement achieves CO₂ emissions of 200g/km in compliance with the lowest category of the new tax system being implemented in Thailand from January 2016.

New *Outlander* Launched in June 2015 (Japan)

Installed with a next generation CVT, the *Outlander* achieves class-leading*¹ environmental performance by optimizing coordinated control between the engine and CVT for a 0.8km/L improvement in the fuel consumption rate (JC08 mode) to 16.0km/L in 2WD vehicles.

*1 Comparison with the same emission class (as of June 2015, internal investigation)



New *Pajero Sport*



Outlander

Check! Fiscal 2015 Self Evaluation

As scheduled, the new *Pajero Sport* and *Outlander* were released in the market to promote the reduction of CO₂ emissions.

Action! Future Issues and Plan

We will continue to expand the lineup of plug-in hybrid vehicles and promote deployment around the world. In addition, the company will carry out the development of engine and vehicle body improvement technology.



Environmental Initiatives

Products and Technologies / Development of Electric Vehicle Technologies

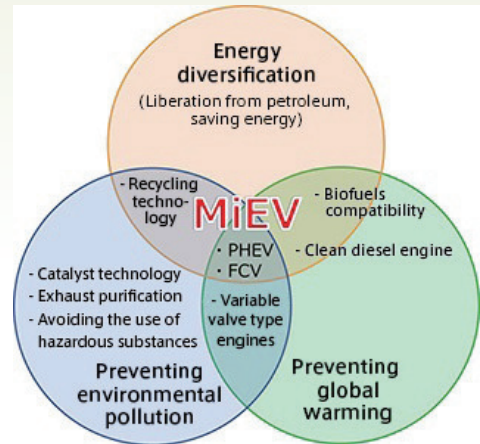


Environmental issues for vehicles include suppressing environmental pollution, preventing global warming, and in recent years, the diversification of energy sources to move away from petroleum. Mitsubishi Motors is striving to solve these problems by taking various initiatives such as improving the fuel economy of conventional engine-driven vehicles and developing clean diesel vehicles.

In particular, the electric vehicle technology incorporated in the MIEV*1 series vehicles is a core technology for solving environmental issues, and we are committed to developing it further.

We would like to contribute global environmental conservation by developing and promoting Electric Vehicles and Plug-in Hybrid Electric Vehicles with our electric vehicle technologies.

- > [Electric Vehicles](#)
- > [Plug-in Hybrid Electric Vehicles](#)



New values of a vehicle

We have successfully added new values to vehicles by developing electrical actuation technology.

For example, large-capacity batteries allow customers to use their home appliances for leisure while on trips, and can also serve as a useful emergency battery in the event of disaster*2.

Energy management is now easier thanks to V2H*3. Batteries can serve as a power supply during a power outage, by connecting the vehicle to distribution board of a home.

Electric Vehicles are finding new markets thanks to their value when stationary.

*1) Abbreviation of Mitsubishi innovative Electric Vehicle
 *2) Observe the precautions for each vehicle when using it.
 *3) Abbreviation of "Vehicle to Home"

Environmental Initiatives

Products and Technologies / Development of Electric Vehicle Technologies / Electric Vehicles



Electric Vehicle *i-MiEV*

The Electric Vehicle *i-MiEV* is powered not by a gasoline engine but by an electric motor, and so it emits no exhaust gases such as CO₂ while being driven. In 2009, Mitsubishi Motors released *i-MiEV* as the world's first mass-produced Electric Vehicle.

i-MiEV has built up a remarkable reputation among customers for its many advantages over conventional gasoline engine vehicles, including environmental performance, acceleration starting with maximum torque, reduced noise by the electric motor, and stability with the battery unit beneath the floor.



Electric Vehicle *i-MiEV*

Environmental Initiatives

Products and Technologies / Development of Electric Vehicle Technologies / Plug-in Hybrid Electric Vehicles



Plug-in Hybrid Electric Vehicle *Outlander PHEV*

Our Plug-In Hybrid Electric Vehicle is powered by charged electricity, while the engine generates electric power that recharges when the battery level is low.

The PHEV system for the Electric Vehicle *Outlander PHEV* automatically shifts to the optimum driving mode according to each running condition. "EV Drive Mode", which uses electric power from the drive battery, is suitable for low to medium speeds in residential and urban areas. When the battery level is low, it shifts to "Series Hybrid Mode" with electric power generated by the engine. And during high-speed driving, the vehicle shifts to "Parallel Hybrid Mode" driven by the engine, simultaneously assisted by the battery-powered motor.

Based on electric vehicle technology, the system has inherently lower CO₂ emissions than conventional gasoline engine vehicles, delivering outstanding environmental performance.

Concern over insufficient power is no longer an issue with the *Outlander PHEV*. It offers the advantages of EVs: powerful driving, superb quietness, and high stability.



Plug-in Hybrid Electric Vehicle
Outlander PHEV

Environmental Initiatives

Products and Technologies / Development of Fuel Economy Improving Technologies



Concern over the environment is growing, and regulations on fuel economy and emissions are becoming stricter worldwide.

Mitsubishi Motors has worked hard to improve fuel economy by developing various technologies to increase engine efficiency, ensure precise control, improve the drive train, minimize aerodynamic drag, and reduce vehicle weight.

Major technologies for improving fuel economy:

Improving the engine

Variable valve timing mechanism

Reducing engine friction

Idle-stop

Improving the body

Aerodynamics

Eco-drive support


Weight-reducing technologies

CVT



Environmental Initiatives

Products and Technologies / Development of Fuel Economy Improving Technologies / Engine Improvement

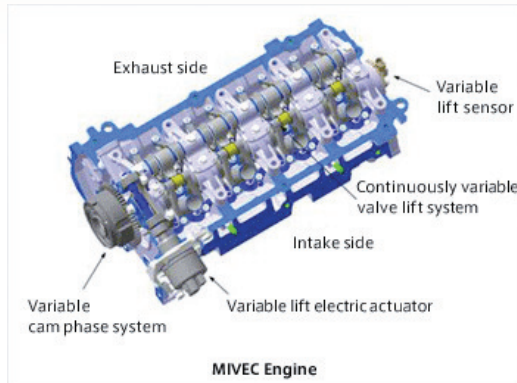


The key issues in developing technologies for improving fuel economy are how to minimize waste when burning fuel, and how to reduce the friction of sliding parts. Mitsubishi Motors is developing technologies to improve these performance aspects of new engines.

Fuel economy improving technologies (Engines)

Variable valve timing mechanism "MIVEC"

Mitsubishi Innovative Valve timing Electronic Control System

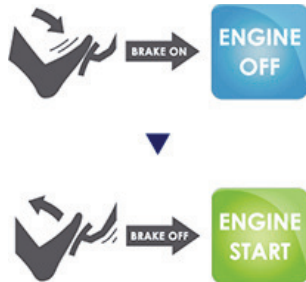


The "MIVEC" engine is equipped with continuously variable valve lifts for minimizing fuel economy.

To minimize air intake energy loss, the intake valve lift is continuously varied according to the operating condition, and thereby reducing intake resistance.

Idle-stop "AS&G"

Auto Stop & Go



This idle-stop system automatically starts and stops the engine in accordance with the vehicle to reduce fuel economy.

A coasting stop function for stopping the engine during deceleration is also equipped with regarding some models.

Reducing engine friction

Reduction of friction inside the engine to improve fuel economy

Engine losses that affect fuel economy include exhaust loss, cooling loss, mechanical friction loss, pump loss and drive loss of auxiliary units.

Among these losses, engine friction is a mechanical friction loss, caused by friction in sliding parts such as piston and crank shaft, resulting from combustion gas inside the cylinder.

To reduce engine friction, improvements are made to decrease the sliding resistance of such parts.

Examples of approaches to reducing engine friction:

- Improvement in contact surface of part Optimizing the shape and surface treatment of the piston skirt and surface treatment of the cam
- Reducing the parts contact force Improving the shape and reducing the tension of piston rings, optimizing the set load of valve springs, crank shaft layout, shape of timing chain, tension of timing belt, etc.
- Reducing friction by improving lubricants Applying low-viscosity engine oils
- Reducing resistance when stirring the engine oil Optimizing the oil level

Environmental Initiatives

Products and Technologies / Development of Fuel Economy Improving Technologies / Vehicle Body Improvement



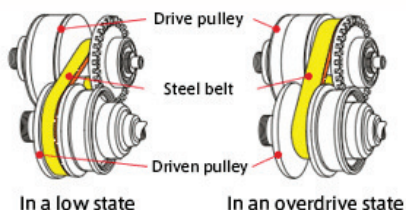
Components other than the engine also need to be examined to improve fuel economy.

Mitsubishi Motors is developing various technologies related to the vehicle body.

Improving the body:

CVT

Continuously Variable Transmission



A CVT varies transmission ratio by continuously varying the belt running radius on the drive and the driven pulleys. The continuously ratio control capability can be best balanced among Fuel Consumption, Exhaust Emission and Driving Feeling.

Eco-drive support

We promote the equipment to support eco-drive.

Eco-drive support displays such as the eco-lamp and fuel economy meter in the combination meter and central information display help you to drive economically.

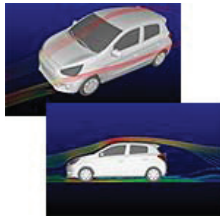
Example equipment for eco-drive support (for *Outlander*)

Displays in meters (Displays can be switched)

- Eco-lamp**: Shows a green leaf icon and "ECO" when driving in a fuel-efficient manner.
- Average fuel consumption**: Shows "AVG 15.2 km/L" with a green bar gauge.
- Instantaneous fuel consumption**: Shows "AVG 72 km/h" with a green bar gauge.
- Idle-stop duration**: Shows "AS&G 00:01:31" (Automatic Stop & Go).
- Eco-drive assist**: Shows "480 km" with a green bar gauge.
- ECO Score**: Shows a green leaf icon representing the driving status.

- Eco-lampLights while driving in a fuel-efficient manner.
- Fuel consumption meterDisplays the average and instantaneous fuel economy.
- Idle-stop duration display Displays the cumulative time of engine halts by the AS&G idle-stop mechanism.
- Eco-drive assist Displays how fuel-efficient the current driving style is.
- ECO Score Determines the driving status at predetermined intervals, and displays the eco-drive rate in a leaf-shaped gauge.

Aerodynamics



Improving aerodynamic performance for better fuel economy.

We optimize the shape to deliver excellent aerodynamic characteristics through repeated aerodynamic analysis and wind tunnel tests utilizing Computational Fluid Dynamics (CFD) from the conceptual design stage.

Weight reducing technologies



Reducing fuel economy by reducing weight.

The use of aluminum and high-tensile strength steel panels and rationalization of structures keep the weight down while ensuring safety and a large body, thus improving both fuel economy and safety.

Environmental Initiatives

Products and Technologies / Purifying Exhaust Gas while Driving



Vehicles powered by gasoline and diesel engines inevitably emit combustion gases from the engine while driving. Exhaust gases contain air-polluting substances. Mitsubishi Motors is constantly developing and promoting gasoline and diesel engine vehicles that emit lower concentrations of these noxious exhaust gases.

Improving gasoline engine vehicles

Since the 1960s, emissions of carbon monoxide (CO), hydrocarbons (HC) and nitrogen oxide (NOx) have been steadily restricted by regulations.

We have taken various measures since such regulations were first introduced. We are currently addressing to comply with these regulations by applying electronically controlled fuel injectors and advanced catalyst technologies to the combustion control system.

Improving diesel engine vehicles

For diesel engine vehicles, CO, HC, NOx and particulate matter (PM) have been regulated since the 1970s.

We have taken various measures since such regulations were first introduced, including improving the combustion technology. To comply with the Post-New Long-Term Regulations, we have developed and produced clean diesel engines by systemizing technology, such as VG turbocharger, combustion control with common rail fuel injection system, after-treatment using NOx trap catalyst, diesel particulate filter(DPF) etc.

VG turbocharger



The VG turbocharger helps to reduce fuel economy and suppress PM through optimum supercharging throughout the engine's operating range.

Common rail fuel injection system



PM and NOx generation due to incomplete combustion is suppressed by using a high-pressure fuel pump, common rail accumulator that stores highly pressurized fuel, and electronically controlled fuel injectors, etc.

NOx trap catalyst



Converts noxious NOx into harmless nitrogen.

Diesel particulate filter (DPF)



Substantially reduces particulate matter.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- Expanded launch of Euro6^{*2} compatible vehicles for Europe
- Expanded launch of ULEV^{*3} 70 compatible vehicles for North America

*2 Stricter exhaust gas regulations than past regulations (Euro5). Euro6 has been adopted in Europe since 2014.

*3 ULEV stands for Ultra Low Emission Vehicle

Do! Fiscal 2015 Achievements

- The company set Euro6 compatible models where the emissions of toxic substances were greatly reduced in the *Space star*, *ASX*, *Outlander*, and *Pajero* for Europe.
- In the *Outlander* and *Outlander Sports* for North America, the company established ULEV70 compatible models where the emissions of toxic substances were greatly reduced.
- We launched the new *Outlander PHEV* in various countries to make a substantial contribution to the reduction of exhaust gas.

Check! Fiscal 2015 Self Evaluation

As scheduled, the launch of vehicles compatible with Euro6 for Europe and ULEV70 for North America was expanded.

Action! Future Issues and Plans

The company will continue to take action in response to exhaust gas regulations in Europe/North America, etc.



Pajero for Europe



Outlander Sport for North America



New *Outlander PHEV* for Overseas



Environmental Initiatives

Products and Technologies / Reduction of In-cabin VOC



To provide customers with a healthy and safe cabin space, Mitsubishi Motors is working to reduce Volatile Organic Compounds (VOCs) to make the cabin more comfortable. VOCs are organic compounds such as formaldehyde and toluene that easily volatilize at room temperature. These compounds are thought to cause "sick house syndrome", and may irritate the eyes, nose and throat. In an automobile cabin, they are mainly generated from the adhesives and painting used in interior parts.

Setting objectives for reducing VOCs

We are taking measures to reduce in-cabin VOCs, for both improving the generation sources and reducing VOCs.

Examples of reducing in-cabin VOCs*

	Improved part	Details of improvement
VOC-reducing measures	Central panel	Reducing organic solvents in the surface painting
	Carpet	Reducing aldehydes in pile adhesives
	Seat	Reducing organic solvents in fabric adhesives
Measures for reducing generated VOCs	Ceiling	Adsorbing and decomposing formaldehyde by clean air filter deodorizing function
	Air-conditioner	Reducing VOCs with clean air filter with deodorizing function

* The performance of reduction measures varies with the vehicle model.

Environmental Initiatives

Products and Technologies / Recycling Initiatives



In the 1980s, large-scale illegal dumping of automotive shredder dust occurred due to a shortage of final disposal sites for such dust. In response, the Ministry of International Trade Industry (the present Ministry of Economy and Industry):METI drew up the Used Automobile Recycling Initiative in May 1997, to encourage proper recycling and disposal. Following METI's action, the Japan Automobile Manufacturers Association, Inc. (JAMA) established a voluntary action project called the "Automobile Recycling Initiative" in February 1998. Mitsubishi Motors introduced the "Mitsubishi Motors Recycling Initiative" in the same month.

In the Mitsubishi Motors Recycling Initiative, we set targets and continued improving the ease of recycling, reducing the use of lead (except for batteries), and introducing recycled parts (bumpers, interior substrate materials, floor mats, etc.) for new vehicles. In line with this unique guideline, we consider ease of recycling from the initial stage of designing and developing products, and have achieved our voluntary target values.

Dealing with automobile recycling acts of other countries

Since the Automobile Recycling Law was enforced in Japan in 2005, automotive manufacturers have been properly recycling shredder dust of discarded automobiles, airbags and freons (3 items), thus helping to create a recycling-based society.

The ELV Directive (2003) was enacted in Europe as well, specifying ease of recycling as a certification requirement and promoting recyclable design.

We will comply step-by-step with automobile recycling regulations which are now being introduced in developing nations in Asia.

Environmental Initiatives

Products and Technologies / Recycling Initiatives / Recycling-based Design and Development



Under vehicle recycling legislation in Japan and Europe, automotive manufacturers are obligated to consider recycling when developing products. Mitsubishi Motors actively incorporates not only recycling, but also reduce and reuse, referred to as the 3R. Since 1999, our unique Recycle Plan Guideline has been observed throughout the processes, beginning with the conceptual design stage.

For wires, harnesses and motors, both detachability and ease of recycling have been improved based on the Harness Design Guideline.

As an example for parts made of recycled materials, recycled bumpers replaced during repairs by distributors are used in spare tire covers.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- Promotion of 3R Design
- Adoption of parts using recycled materials

Do! Fiscal 2015 Achievements

We proactively adopted 3R Design based on "Recycling Plan Guideline" in all vehicles developed in FY2015.

For parts using recycled materials, recycled bumper materials which were replaced by sales companies are used for splash shields.

Check! Fiscal 2015 Self Evaluation

3R Design was incorporated according to "Recycling Plan Guidelines" during vehicle development, and development targets such as recyclability were achieved.

Action! Future Issues and Plans

We will continue to promote vehicle manufacturing in consideration of 3R from the initial stage of development and simplify recycling beginning with resource conservation.



Exterior



Interior

Main sections (green sections) with easily recyclable "thermoplastic resin" in the *Outlander PHEV* launched in FY2015

Environmental Initiatives

Products and Technologies / Recycling Initiatives / End-of-life Vehicle Recycling



Mitsubishi Motors is promoting the recycling of end-of-life vehicles to reduce the environmental impact of waste from end-of-life vehicles. In Japan, the EU, etc., we recycle materials in accordance with the automobile recycling laws of each country.

Response to Automobile Recycling Laws in Japan

The company accepts automobile shredder residue (ASR), airbags, and fluorocarbons for recycling. For the recycling of ASR, we participate in ART (Automobile Shredder Residue Recycling Promotion Team: Team established by Nissan Motor Corporation, Mazda Motor Corporation, Mitsubishi Motors, etc.) to jointly process ASR. The company outsources the treatment of airbags and fluorocarbons to the Japan Auto Recycling Partnership (JARP).

In addition, for the effective use of recycling fees deposited from customers, we proactively works on increasing the recycling rate by conducting efficient recycling and proper processing of these three items.

Recycling Promotion in the EU

Response to the EU's Directive on the Recycling of End-of-Life Vehicles

In the EU, automobile manufacturers or importers must accept and recycle end-of-life vehicles in accordance with the End-of-Life Vehicles Directive*1. The company built a system of acceptance and recycling in line with the actual situation of EU member countries centering on our European subsidiary MME (Netherlands).

*1 "Directive of the European Parliament and of the Council on End-of-Life Vehicles" effective from October 2000

Provision of Dismantling Information

In the EU, automobile manufacturers must provide dismantling information for new model vehicles to treatment operators. The company provides such information on a timely basis by using the International Dismantling Information System (IDIS) jointly developed by automobile manufacturers.

Response to the EU's Directives on Approval for Vehicle Models for Recyclability

In the EU, satisfying the minimum 95% recyclability rate is a requirement for type approval of vehicle models, and the company established a system that satisfies the requirements of this directive. Our vehicles sold to the EU meet the requirements of the directive under this system.

Collection of traction batteries in electric-powered vehicles/Construction and operation of the recycling system

The company established and operates a traction battery collection system for the purpose of recycling technology development and proper treatment of end-of-life traction batteries in electric-powered vehicles and plug-in hybrid vehicles in Japan, Europe, and North America.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- Automobile shredder residue (ASR) recycling rate improvement by developing a new processing facility (Japan)
- Satisfying the requirement for the recyclability rate in approval for new model vehicles (EU)

Do! Fiscal 2015 Achievements

Response to the Act on Recycling, etc. of End-of-Life Vehicles in Japan

The company accepted and recycled 3 items (shredder dust (ASR), airbags, fluorocarbons). As a result, the ASR recycling rate rose above the 70% statutory standard for fiscal 2015 and later to 97.5%.

Satisfying the requirement for the recyclability rate in approval for new model vehicles

Vehicles sold to the EU have met the requirements of this directive.

Check! Fiscal 2015 Self Evaluation

For the recycling of ASR, partially due to the use of the new recycling facility, a high recycling rate was achieved.

Action! Action! Future Issues and Plan

We will promote the development of new recycling facilities so we can continuously recycle ASR stably. For new model vehicles sold in the EU, we will continue to satisfy the necessary recyclability rate sequentially for the approval of new model vehicles.

Summary of Results of Recycling in accordance with End-of-Life Vehicle Recycling Laws of Japan for Fiscal 2015

Article	Item	No. of accepted vehicles	Amount processed
Shredder dust (ASR)	Total vehicles accepted/Total weight accepted	248,386	38,477t
	Recycling in ASR recycling facilities	236,651	35,727t
	Recycling of the whole dismantled vehicles	11,735	1,778t
	Recycling rate *2		97.5%
Airbags	Total vehicles accepted/Total airbags accepted	158,831	449,380 bags
	Removal and collection	19,153	49,531 bags
	On-board deployment operation	138,395	399,849 bags
	Partial removal/Partial on-board deployment	1,283	
	Recycling facility accepted		32,102kg
	Recycling amount		29,941kg
	Recycling rate *3		93.3%
	Fluorocarbons	No. of accepted vehicles/Amount accepted	214,638

Revenue and expenditure results of recycling fees

Reimbursed deposit total	2,263,599,071yen
Recycling, etc. cost	1,942,352,285yen
Revenue and expenditure	321,246,786yen

*2 (Recycling weight in ASR recycling facilities + Weight of recycling of whole dismantled vehicles) / Total weight of accepted ASR
Statutory standards: Minimum 30% for 2005 and later, minimum 50% for FY 2010, minimum 70% for FY 2015

*3 Recycling volume / Accepted volume by recycling facility



Environmental Initiatives

Products and Technologies / Reduction of Hazardous Substances



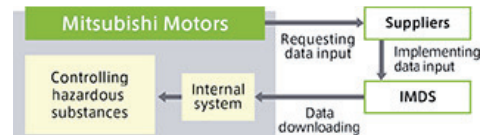
In accordance with the reduction targets of the Japan Automobile Manufacturers Association, Inc. and EU end-of-life vehicles directive, Mitsubishi Motors is working to reduce the use of four substances (lead, mercury, cadmium, and hexavalent chromium). We are also taking measures to comply with regulations on the use of hazardous substances in each country in compliance with the REACH regulation*1 concerning substances. At present, in addition to lead, mercury, cadmium, hexavalent chromium and other heavy metals, the use of VOCs (volatile organic compounds), bromine-based flame retardants and various other substances is regulated. Regulations similar to European ones are being enforced in developing countries in Asia as well.

We have established internal technical standards to voluntarily reduce hazardous substances.

Material data control by the International Material Data System (IMDS)

Data on the hazardous substances contained in vehicle parts delivered by suppliers are collected by the International Material Data System (IMDS), an international system for collecting such data. Together with overseas plants such as MMTh (Thailand), we utilize the collected data under a globally centralized internal system for reducing hazardous substances.

In cooperation with suppliers, we are complying with the REACH regulation, a general system for the registration, evaluation, authorisation and restriction of substances used in the EU.



Flow of data collection through IMDS

*1 REACH stands for "Registration, Evaluation, Authorisation and Restriction of Chemicals". Enacted on June 1, 2007, the REACH regulation is a general system to register, evaluate, authorise and restrict the use of substances.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

Conformity with regulations for environmentally hazardous substances of continuously produced vehicles and reduction of use of environmentally hazardous substances

Do! Fiscal 2015 Achievement

Conformity with regulations for environmentally hazardous substances of continuously produced vehicles sold in FY 2015 and the reduction of use were confirmed by material data management with IMDS.

Check! Fiscal 2015 Self Evaluation

For continuously produced vehicles sold in FY 2015, the annual target was achieved.

Action! Future Tasks and Plan

The company will continue to comply with regulations for environmentally hazardous substances and reduce the use of environmentally hazardous substances.

Environmental Initiatives

Business Activities / Efforts in Production



Environmental impact-reducing activities in production

Mitsubishi Motors mainly manufactures and sells vehicles.

While vehicles are convenient for users, they affect the environment in various ways throughout their life cycle, from development and use to final disposal. As a manufacturer, we have a responsibility to minimize the impact of vehicles on the environment.

Automobile production is related to various environmental issues, ranging from the community level to the global scale. We are constantly striving to reduce environmental impacts, including reducing CO₂ emissions from the production plants, and preventing air and water pollution.



Okazaki Plant



Mizushima Plant



Powertrain Plant – Kyoto



Mitsubishi Motors (Thailand) Co., Ltd.
(MMTh)

Environmental Initiatives

Business Activities / Efforts in Production / Reducing CO₂ Emissions



Energy saving and CO₂ reduction initiatives in production

Mitsubishi Motors produces automobiles with less energy from the viewpoint of preventing global warming along the theme of “Driving the earth; living with the earth”.

Reducing the consumption of energy sources such as electricity and fossil fuels contributes to suppression of CO₂ emissions that cause global warming, and preservation of limited resources on the earth. We actively promote global warming prevention through energy saving.

Equipment improvement for production

At the waterborne paint lines in Okazaki Plant and Mizushima Plant, the waterborne 3WET paint method is applied. CO₂ emissions are reduced by passing the painting workpieces through driving ovens only once compared to usual twice.



The waterborne paint Plant

Promoting use of renewable energy and energy saving units

By installing photovoltaic power generation panels on the roof of plants, the renewable energy is used for office lighting and electric vehicles charging.

In addition, we have changed all the newly installed lighting devices to LEDs to reduce power consumption.



Photovoltaic power generation panels



In-plant LED lighting

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

17% reduction of CO₂ emissions per production vehicle in plants in Japan and overseas (MMTh, MMNA) compared to FY2005

Do! Fiscal 2015 Achievements

CO₂ emissions per vehicle are reduced by 32% compared to FY 2005. (13% reduction compared to the previous year).

As main initiatives for the promotion of energy conservation, the company worked on the following measures.

1. Introduction of high efficient devices
 - Installation of LED lighting
2. Energy saving by altering operating hours
3. Energy use reduction by consolidating production processes
4. Energy saving measures
 - Energy efficient modifications to air conditioning systems
 - Modification of paint drying ovens

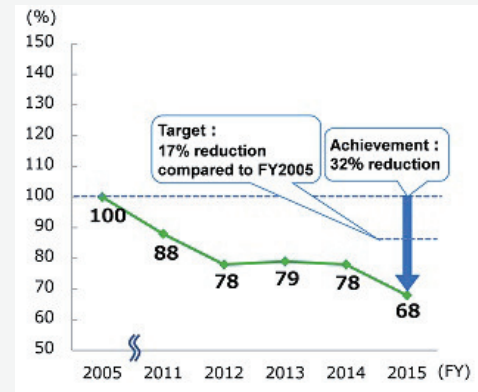
Check! Fiscal 2015 Self Evaluation

CO₂ emissions per production vehicle were reduced by 32% in plants in Japan and overseas (MMTh, MMNA) compared to the 17% reduction target for FY 2015.

Action! Future Issues and Plans

We will continue to promote activity for lowering CO₂ emissions to achieve the reduction target through the implementation of energy saving measures.

CO₂ emissions index per production vehicle in plants in Japan and overseas



Target Sites

Mitsubishi Motors

Okazaki plant, Mizushima Plant, Powertrain Plant

Domestic affiliated companies

Pajero Manufacturing Co., Ltd., Suiryo Plastics Co., Ltd.,

Mizushima Industries Co., Ltd.

Overseas affiliated companies

MMTh, MMNA

CO₂ emission factors,

Electricity power 0.381kg-CO₂/kWh,

Urban gas 2.348kg-CO₂/m³,

Kerosene 2.491kg-CO₂/L, Bunker A 2.709kg-CO₂/L.

Environmental Initiatives

Business Activities / Efforts in Production / Preventing Air Pollution

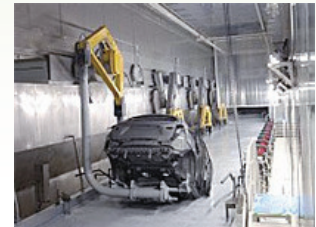


To prevent air pollution, Mitsubishi Motors takes a variety of measures to reduce contaminating substances in smoke exhausted from production plants which cause acid rain and photochemical smog.

Suppressing emissions of VOCs^{*1}

We endeavor to suppress VOCs emissions rate in vehicle body production by reducing consumption of painting and improving recovery rate of used paint thinner, through updating painting robots and adjusting the painting production lot size.

*1 Abbreviation of Volatile Organic Compounds.



Painting robots in Plant

Reducing NOx and SOx^{*2} emissions

We introduced low NOx content boilers and burners as the heat source used for paint process in production, to reduce the emission rate of NOx. As for SOx emissions reduction, we changed the fuel for the boilers to kerosene or city gas that has less sulfur.

*2 NOx: Nitrogen oxide, SOx: Sulfur oxide

Reducing particulate matter

We abolished waste incinerators to suppress the generation of soot and dioxins.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

35g/m² or less of VOC emissions per painting area in domestic plants (painting of vehicle body and bumpers)

Do! Fiscal 2015 Achievements

By collecting waste paint during color changes, optimizing paint discharge, and using electrostatic air spray guns, etc., the amount of VOC emissions from body and bumper painting per painting area was reduced to 32g/m².

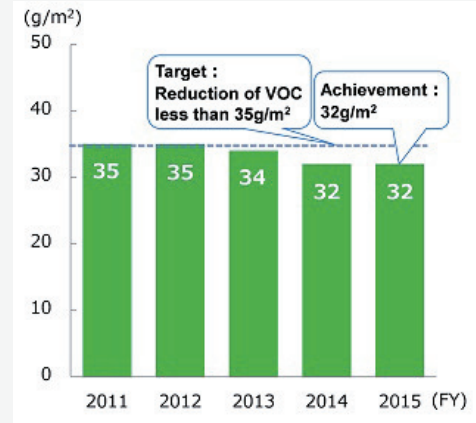
Check! Fiscal 2015 Self Evaluation

Fiscal 2015 target was achieved.

Action! Future Issues and Plans

We will continue to carry out emissions control activities.

VOC emissions per painting area in domestic plants



Target Sites :

Okazaki plant, Mizushima Plant,

Pajero Manufacturing Co., Ltd., Suiryo Plastics Co., Ltd.

Environmental Initiatives

Business Activities / Efforts in Production / Preventing Soil and Water Pollution



Mitsubishi Motors has long since conducted surveys and examinations to ensure that underground water or soil are not contaminated, to prevent adverse influence on human health. If contamination is to be observed, we take immediate measures to prevent its dispersion, and report to authorities and communities for information disclosure.

Environmental survey of soil and water pollution

We conduct regular monitoring of underground water quality at the wells along the border of the premises, and ensure that no hazardous substances are dispersing towards the outside.

Prevention measures against soil and water pollution

To prevent soil and water pollution, we implement effluent purification through installing a waste water treatment system by activated carbon, and an emergency reservoir tank.

We have also established voluntary control standards that are stricter than law-regulated values, to tackle pollution prevention.



General effluent treatment facilities

Environmental Initiatives

Business Activities / Efforts in Production / Management of Chemical Substances



To minimize the impact on the environment of chemical substances, Mitsubishi Motors ensures management of the usage and discharge status of chemical substances used in production plants.

Control of PRTR^{*1} substances

We have long since examined the physical properties and details of usage plans of new chemical substances by using the "substances toxicity prior examination system", to determine whether or not those new chemical substances may be introduced, in order to emphatically suppress the toxicity from highly risky chemical substances.

*1 Abbreviation of "Pollutant Release and Transfer Register". Report on the discharge removal quantities of substances

Appropriate Management of Hazardous Waste

We manage hazardous waste so we do not import or export hazardous waste which is restricted by the Basel Convention on the Control of Transboundary Movements of Hazardous and Their Disposal. In addition, in case of domestic transportation and disposal of hazardous waste, we make efforts to appropriately transport and dispose hazardous waste to prevent the exposure of toxic materials.

Appropriate Management of Waste Containing PCBs

PCBs are contained in transformers and condensers as insulation oil, and there were cases where we disposed polluted waste containing PCBs as regular waste by mistake.

To prevent incorrect disposal, we re-investigated the management situation of PCB waste in detail, and we are thoroughly implementing appropriate management in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes.

In FY 2015, we appropriately disposed of 3 transformers used in a casting melting furnace in the Mizushima Plant and two large size transformers that were used in the Okazaki Plant.

Environmental Initiatives

Business Activities / Efforts in Production / Promoting Effective Use of Resources



At production plants, industrial waste materials generated from production processes are converted to reusable resources, volumes of materials discharged out of the plants are reduced, and we also maintain zero land reclamation*1 achieved at every plant.

*1 This means land reclamation rate below 0.1 %

Converting waste materials into reusable resources, and suppressing waste generation

We promote converting spent oil into usable oil, waste sand from foundry into base course material, and sludge into raw material for cement.

We also tackle reduction of the metal scraps generated from production processes and of generated amount of foundry waste sand.

Knock-Down (KD)*2 plants resources saving

To reduce cartons and pallets used for product transportation to knock-down plants, we are increasing use of returnable racks, and thus the consumption of steel and other materials has been reduced.

*2 Refers to the exporting in the form of parts for assembling vehicles at the local plants.



Returnable racks

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- 45% reduction of externally disposed waste per production vehicle at domestic plants compared to FY 2005 (120kg/vehicle)
- 82% reduction in steel used per unit shipment volume at domestic KD plants (14kg/case)
- 0.4% reduction of by-products (metal scrap and casting waste sand) per sales by the end of FY 2016 compared to FY 2011 (9.3t/hundred million yen)

Do! Fiscal 2015 Achievements

Reduction of externally disposed waste, etc.

The company promoted the recycling of waste and valuables generated inside our companies as internal materials, and as a result, externally disposed waste (amount recycled externally as opposed to used within the company) per production vehicle for FY 2015 was reduced 57% to 93kg/vehicle from FY 2005. Direct landfill disposal rate of waste is maintained at a high level of 0.02%.

Resource Saving in KD Plants

Steel used per unit shipment volume was reduced 90% to 7.3kg/case compared to FY 2006 due to the expansion of returnable rack use.

Suppression of By-products

Metal scraps and casting waste sand per sales was reduced 44% to 5.2t/hundred million yen from FY 2011.

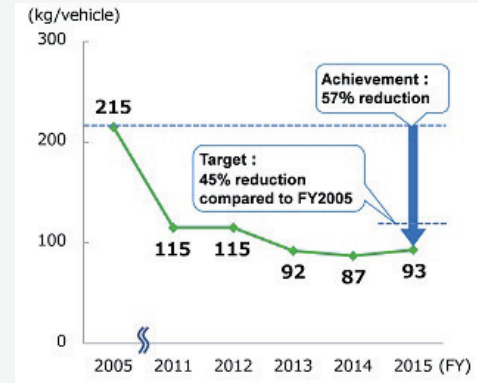
Check! Fiscal 2015 Self Evaluation

The company achieved all targets for three items.

Action! Future Issues and Plans

We will continue to carry out the appropriate disposal of waste and activities to recycle resources.

Externally disposed waste per production vehicle



Target Sites

Okazaki plant, Mizushima Plant, Powertrain Plant



Business Activities / Efforts in Production / Preserving Water Resources



Water resources are essential for creatures to live. The production activity of automobiles requires a large amount of industrial water, city water, and well water, etc. In recent years, due to the increase of droughts, flooding and water pollution, the stable use of the water resource is increasingly exposed to risk around the world.

Mitsubishi Motors sources its water from rivers and lakes in its production activities and discharges the used water in sewage lines and rivers, etc. We believe*1 that none of our key production plants are exposed to a high water risk, however, we are considering preparation for a future water risk as a task, and we are working on water resource conservation mainly by reducing the amount of water withdrawal.

*1 According to water risk map "Aqueduct" developed by Water Resources Institute.
Evaluation of the impact on business by regulatory risk and physical risk such as shortage of water resources, flooding, drought, significant seasonal changes, and water quality.

Water Withdrawal Source and Drainage Location in Main Production Plants

Plant	Water Withdrawal Source (Industrial water, City water)	Drainage
Okazaki Plant (Okazaki, Aichi Pref.)	Yahagi River	Tributary of Kanda River, etc.
Powertrain Plant -Kyoto (Kyoto, Kyoto Pref.)	Lake Biwa	Sewage line
Powertrain Plant -Shiga (Konan, Shiga Pref.)	Lake Biwa	Sewage line
Mizushima Plant (Kurashiki, Okayama Pref.)	Takahashi River	Hakken River → Mizushima Port
Pajero Manufacturing Co., Ltd. (Sakahagi-cho, Gifu Pref.)	Kiso River	Kiso River
MMTh (Thailand)	Nong Pla Lai Reservoir, etc.	Sewage line

Initiatives in the Reduction of the Water Withdrawal Amount by Production Plants in Japan

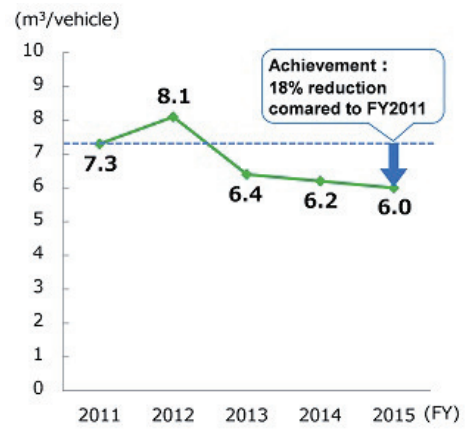
As a result of efforts to reduce the water withdrawal amount, in FY 2015, in production plants of the company and Pajero Manufacturing Co., Ltd., the water withdrawal amount per production vehicle was approximately 6.0m³/vehicle which is an 18% reduction compared to FY 2011.

We will continue to work on reducing the withdrawal amount to conserve water resources.

Initiative Example

- Recycling of industrial water
 - Recycling of washing water to pre-washing
 - Recycling of purified discharged water for watering green spaces
- Reuse of industrial water by circulating
 - Recycling of cooling water/temperature control water by circulating in cooling towers
 - FY 2015 circulated water used amount:126 million m³
- Improvement of the efficiency of use by changing production techniques
- Use of rain water
 - Watering flower beds on the premises with rain water storage tanks and automatic watering systems
- Use of industrial water and well water that were treated with filters (Okazaki Plant)

Transition of Water Withdrawal per Production Vehicle



- Target Sites
Okazaki Plant, Mizushima Plant, Powertrain Plants, Pajero Manufacturing Co., Ltd

Environmental Initiatives

Business Activities / Efforts in Distribution

Automobiles are made of numerous parts and materials transported from different regions and are shipped around the world. The environmental impact derived from the logistics such as energy use and CO₂ emissions, etc. is particularly significant.

Therefore, Mitsubishi Motors proactively works on the establishment of environmentally-friendly logistics systems such as the improvement of transport efficiency and reduction of packing materials.

CO₂ Emissions Reduction Initiatives

We set reduction targets for unit CO₂ emissions (kg-CO₂/1000t·km) during the transport of procured parts and products to promote initiatives for achieving these targets.

We strive to increase the load factor by improving the packing appearance and combination of parcels in procurement logistics.

For other transportation*1, we work on modal shift rate improvement and ECO Drive in transport vehicles as well as consolidating the transportation route of parts and accessories.

*1 Transportation pertaining to following:

- Finished vehicles in Japan
- Finished vehicles exported to overseas
- Knock Down
- Engines and Transmissions
- Spare parts

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

Reduction in CO2 emissions per unit of transportation (compared to FY 2006) Procurement logistics: 53% reduction; Other transportation: 6% reduction

Do! Fiscal 2015 Achievements

The unit CO2 emissions were reduced by 57% in procurement logistics and by 6.9% in other transportation compared to FY 2006.

In addition, CO2 emissions (gross weight) also decreased to 20,900 tons, which is approximately 2,000 tons less than the amount for the previous year.

Check! Fiscal 2015 Self Evaluation

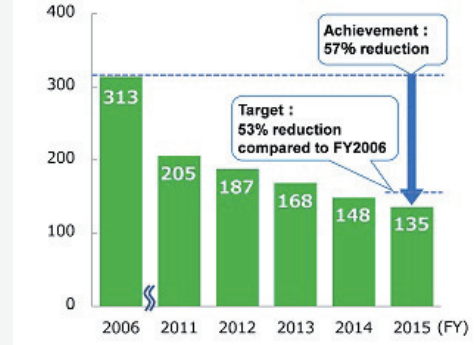
Reduction targets of CO2 unit emissions were achieved in procurement logistics and other transportation.

Action! Future Issues and Plans

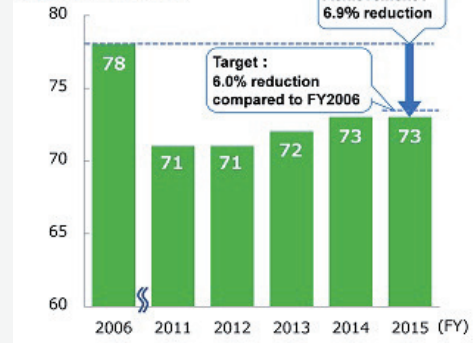
We will continue to promote the following activities for logistics route improvement, load factor increase, and fuel economy improvement to reduce unit CO2 emissions in FY 2016.

- Transportation distance reduction by increasing in the local procurement of parts used for production
- Change of transport method of finished vehicles from transport by trailers to transport by vessels and railways (Improvement of modal shift rate)
- Load factor increase of parts and accessories and engine transport
- Transport route consolidation of transport of parts and accessories and promotion of modal shift
- Improvement in packing of the combination of KD parts in containers
- Improvement in packaging appearance and combination of parcels of parts used for production during shipping
- Increase of transport efficiency by using low-floor vehicles in the shipment of engines
- Fuel economy improvement by encouraging the introduction of ECO Drive and eco-tires
- Promotion of fuel economy increase by adopting fuel efficient vehicles, etc.

Unit CO2 emissions in procurement logistics (kg-CO₂/ ×10³t · km)



Unit CO2 emissions in other logistics (kg-CO₂/ ×10³t · km)



Main Initiatives to Decrease CO2 Emissions in Fiscal 2015
(Cargo shipped by our company)

Measure	Details	Reduction Effect compared to Fiscal 2014 (t-CO ₂)
Load factor increase	Improving the packaging appearance and combination of parcels of parts for production during shipment	-645.0
Reduction of the No. of shipments	Route consolidation of parts transport and promotion of modal shift	-285.0
	Reduction of the No. of shipments by loading cargo for KD shipments and T/M shipments together	-12.1

Environmental Initiatives

Business Activities / Collaborative Efforts with Suppliers

Automobiles are composed of a wide variety of materials and parts which are developed and produced by our suppliers. Mitsubishi Motors believes that our impact on the environment can be reduced not only through our own business activities but also through initiatives taking into account all processes from manufacturing of materials and parts to the delivery of these materials and parts. Therefore, based on the basic concept of “purchasing materials and parts with less environmental impact from suppliers who continuously work on reducing the environmental impact,” the company requests compliance with environmental specifications, etc.*1 (restrictions of use of hazardous substances) in production to suppliers, in addition, we formulated “Green Procurement Guidelines” to promote green procurement while establishing a management system of hazardous substances, and we have rolled out the guidelines to all our suppliers.

*1 Environmental specifications of products, etc.

Environmental specifications include restrictions of use of certain substances by laws and regulations, prohibition of the use of materials that are restricted for use by voluntarily initiatives by Japan Automobile Manufacturers Association, Inc. as a general rule, and stipulations for substances whose use should be monitored. Some substances targeted by these specifications are designated by groups of manufacturers of automobiles, parts and materials from Japan, U.S., and Europe for the purpose of conservation of a sustainable global environment while other substances are stipulated by the company independently.

The company is promoting green procurement together with suppliers under its belief of spreading of its initiatives to reduce the environmental impact. We believe that these initiatives, implemented through Green Procurement Guidelines, will create a chain reaction that will spread to tier2 and subsequent suppliers and that this will lead to the realization of a clean and low-carbon society.

Expansion of Green Procurement Guidelines

The company requests suppliers for the acquisition and renewal of external certifications of environment management systems, management of hazardous substances, promotion of 3R, submission of LCA data to allow us to understand the lifecycle environmental impact, initiatives for environmental impact reduction in business activities, and the reduction of the environmental impact related to logistics.

Green Procurement Guidelines is also supplied to suppliers of key overseas plants such as Thailand.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- Audit of the management system of environmentally hazardous substances in suppliers
- Monitoring of the environmental activities of suppliers
- Establishment of supplier audit systems in MMTh (Thailand)

Do! Fiscal 2015 Achievements

- Audit of the management system of environmentally hazardous substances in suppliers
Audits on all suppliers of mass production parts were completed in FY 2015. The suppliers carried out improvement activities and all suppliers are sufficiently managing environmentally hazardous substances.
- Monitoring of the environmental activities of suppliers
Case examples of suppliers that are implementing outstanding environmental activities were monitored in each quarter and the activities were introduced to all suppliers.
- Establishment of supplier audit systems in MMTh (Thailand)
The same audit system as Japan was established.

Check! Fiscal 2015 Self Evaluation

All items were carried out as planned.

Action! Issues and Plans

We will enhance and revise the Green Procurement Guidelines as well as work on further enhancement of the management system of environmentally hazardous substances of suppliers.

Environmental Initiatives

Business Activities / Efforts in Offices and Dealers

Automobiles have an impact during all phases of the lifecycle from development, production, logistics, sales, and use to disposal. Therefore, Mitsubishi Motors believes that activity to reduce the environmental impact through all business activities including our offices and dealers must be promoted.

In dealers, in particular, to realize a clean low-carbon society together with customers, we promote activity to spread electric-powered vehicles with outstanding environmental performance in addition to energy conservation activities and recycling activities.

Activities in Dealers in Accordance with Environmental Guidelines

Our dealers in Japan carry out environmental initiatives in accordance with our Environmental Guidelines. These initiatives include acquisition of the "Eco-Action 21" environmental management system certificate which was formulated based on ISO14001 by the Ministry of the Environment, promotion of the sales of environmentally friendly vehicles centered around EV and PHEV, and the installation of battery charging infrastructure necessary for environmentally friendly vehicles.

Dealers that acquired the Eco Action 21 Certificate formulate targets and action plans for the reduction of energy use, waste and water use, green purchasing and the promotion of sales of environmentally friendly vehicles, and carry out specific activities.

For the penetration and promotion of EV and PHEV, quick charging points are installed in each dealer and "EV QUICK" signboards are also displayed so everyone can immediately know about the quick charging point and local residents feel welcome regarding use of the quick charging points.



"EV QUICK" Signboard



Quick charger installed in a dealer

Reduction of CO2 Emissions

Internal facilities other than plants such as offices and development facilities, development, sales, logistics, and after service affiliated companies in Japan and overseas set CO2 emissions reduction targets for each fiscal year and promote initiatives toward target achievement.

Fiscal 2015 Initiatives

Plan! Fiscal 2015 Targets

- Reduction of unit CO2 emissions in facilities in Japan (Compared to FY 2010)
- Reduction of unit CO2 emissions in 7 affiliated companies*1 in Japan (Compared to FY 2010)
- Reduction of unit CO2 emissions in 9 international affiliated companies*2 (Compared to FY 2010)

*1 7 affiliated companies in Japan: Parts sales division of Mitsubishi Automotive Logistics Technology Co., Ltd., Higashi Kanto MMC Parts Sales Co., Ltd., Hokkaido Mitsubishi Motors Sales Co., Ltd., Higashi Nihon Mitsubishi Motors Sales Co., Ltd., Kanto Mitsubishi Motors Sales Co., Ltd., Chubu Mitsubishi Motors Sales Co., Ltd., Nishi Nihon Mitsubishi Motors Sales Co., Ltd.

*2 9 international affiliated companies: MMNA, MRDA, MME, MRDE, MMSC, MMMEA, MMNZ, MMAL, MMSCN

Do! Fiscal 2015 Achievement

Energy conservation activities focusing on the reduction of power use were carried out. As a result, for the unit CO2 emissions, a 27% reduction was made in internal facilities in Japan, and a 29% reduction was achieved even in affiliates in Japan compared to FY 2010. In addition, overseas affiliates reduced CO2 emissions by 29% compared to FY 2010.

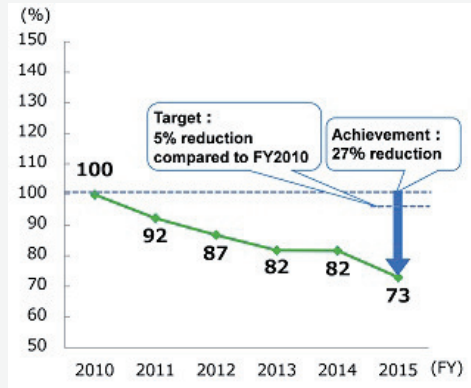
Check! Fiscal 2015 Self Evaluation

All internal facilities and affiliates in Japan and overseas achieved the target for FY 2015 which was a 5% reduction.

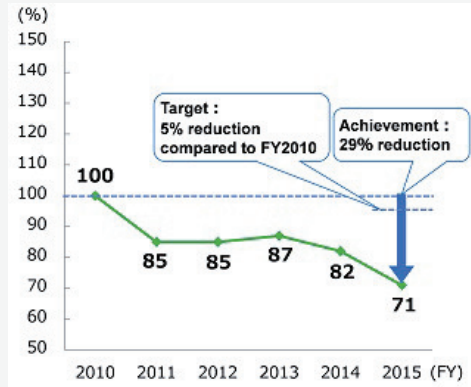
Action! Future Issues and Plans

We will continue to promote thorough energy control and introduction of energy efficiency equipment for the reduction of CO2 emissions.

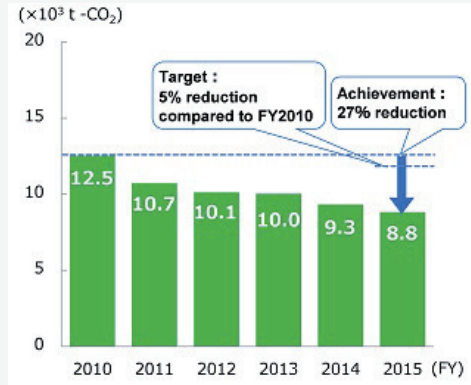
Unit CO2 emissions index in facilities in Japan



Unit CO2 emissions index in 7 affiliated companies in Japan



CO2 emissions in 9 international affiliated companies



Environmental Initiatives

Collaboration with Society / Initiatives for Preserving Biodiversity



All living creatures are intricately related in various relationships and live in balance. We, human beings, live with the blessings of this biodiversity every day.

Mitsubishi Motors, an automobile manufacturer, has an impact on biodiversity directly or indirectly due to land use including the construction of plants, release of chemical substances from sites, and greenhouse gas emissions from the use of the company's products and business activities. For this reason, we believe it is a priority to protect biodiversity so that the next generation can continuously enjoy the blessings of biodiversity. The company formulated the "Mitsubishi Motors Group Guidelines for the Preservation of Biodiversity" in August 2010 and promotes conservation activities.

None of our business sites in Japan are located in protected areas or adjacent areas according to the Nature Conservation Act and prefectural codes. However, we conduct surveys on ecosystems in Powertrain Plant-Shiga which is surrounded by an abundance of greenery. As a result, we learned the plant has a high biodiversity value since the area around the plant is home to various rare species.

[▶ Biodiversity related data](#)

Mitsubishi Motors Group Guidelines for the Preservation of Biodiversity

The Mitsubishi Motors Group will continue to track and reduce its impact on biodiversity, recognizing that the activities of humankind can both benefit from and affect the diversity of living organisms. To this end, the entire Group will take on initiatives for preventing global warming and environmental contamination, and promote the recycling and efficient use of resources, while engaging in activities that pay consideration to biodiversity.

1. Consideration to biodiversity in business activities

We will track and reduce the impact of its business activities on biodiversity by conserving energy, reducing the generation of waste, and curtailing the release of chemicals. At the same time, we will also pay consideration to neighboring communities when making use of land for factory construction and other purposes.

2. Consideration to biodiversity in products

We will promote fuel efficiency, exhaust gas countermeasures and recycling-friendly design of our products, while striving to select and use materials that pay consideration to the environment.

3. Education, understanding and self-awareness

We will continue to educate the entire Group from management to employees on the front lines to share a common understanding and develop a self-awareness of the relationship between business activity and biodiversity.

4. Cooperation and collaboration with society

These activities will be promoted in cooperation with all stakeholders including the supply chain, stockholders, local governments, local communities, non-profit organizations (NPOs) and non-governmental organizations (NGOs).

5. Information disclosure

We will strive to disclose and disseminate the content and results of these activities to customers and local communities.

Main Activities

Priority	Priority Activity Details
1.Consideration to biodiversity in business activities	<ul style="list-style-type: none"> • Energy conservation/ CO2 emissions reduction (<u>Production, offices/dealers, logistics</u>) • <u>Reduction of waste generation (Production)</u> • <u>Decrease in chemical substance release</u>
2.Consideration to biodiversity in products	<ul style="list-style-type: none"> • <u>Fuel economy improvement/ CO2 emission reduction</u> • <u>Exhaust gas countermeasures</u> • <u>Recycling-based design</u>
3.Education, understanding and self-awareness	<ul style="list-style-type: none"> • Ecosystem Survey at Powertrain Plant-Shiga (2013) — <u>Publication of "Mitsubishi Motors Wild Life of Powertrain Plant-Shiga" (2014) <Japanese only></u> • Powertrain Plant-Shiga Wild Life Study Meeting (2013) • Okazaki Plant Ecosystem Survey (Ongoing since 2015)
4.Cooperation and collaboration with society	<ul style="list-style-type: none"> • <u>Request for consideration of the environment to suppliers</u> • <u>Collaborative environmental preservation with society</u>
5.Information disclosure	<ul style="list-style-type: none"> • <u>Information disclosure through environment websites and environmental reports (CSR report, etc.)</u>

Fiscal 2015 Initiatives

Plan! FY 2015 Targets

- Conduct an ecosystem surveys in the Okazaki Plant
- Conduct enlightenment activities in relation with promotion systems in every workplace

Do! FY2015 Achievements

- An ecosystem surveys in the Okazaki plant
In February 2016, the Okazaki Plant launched ecosystem surveys targeting higher plants, mammals, amphibians, reptiles, avian species and insects.
In the winter survey in February, we investigated mammals and avian species and confirmed 2 mammal species and 12 avian species. In particular, for avian species, we discovered food marks by a raptor, and more specifically, the marks seemed to be made by goshawk.
- Enlightenment activities in relation with promotion systems in every workplace
For our future activities, explanatory meetings on biodiversity were held in Mizushima Plant and Powertrain Plant-Kyoto. 138 employees in total participated in the meetings to learn the meaning of biodiversity and significance of the conservation of biodiversity.

Check! FY 2015 Self Evaluation

- The ecosystem surveys in Okazaki Plant
Launched as planned.
- Enlightenment activities in relation with promotion systems in every workplace
Carried out as planned. According to the survey results in the explanatory meetings, 97% of the participants answered, "The meeting deepens the understanding of the meaning of environmental conservation activities including the conservation of biodiversity" which allowed us to consider the meeting a success as an educational activity.

Action! Future Issues and Plan

The ecosystem surveys in Okazaki Plant are scheduled to continue until October 2016. We will continue to promote activities that educate employees and raise the awareness of biodiversity.



Survey



Food marks by raptors



Explanatory meeting



Environmental Initiatives

Collaboration with Society / Environmental Communication



Mitsubishi Motors aims to be a corporation trusted by all of its stakeholders. For this goal, we release our environmental initiatives on our website, etc. In addition, we listen to opinions from various people through our participation in environmental exhibitions and events for utilization in our initiatives.

Release of Environmental Information in Websites and Environmental Reports

The company releases the information on the concept and details of its initiatives in company websites and environmental reports to make our environmental initiatives known widely.

Environmental reports are included in the "Mitsubishi Motors Corporate Social Responsibility Report".

[Click here for downloading Environmental Report](#)

[Click here for downloading CSR Report](#)



Environmental Website



Environmental Reports

Participation in Environmental Exhibitions and Events

Mitsubishi Motors proactively participates in environmental exhibitions and events to make our environmental initiatives that are built around electric-powered vehicle technology known widely as well as to listen to opinions from various people for use in our initiatives.

Main Participating Exhibitions and Events



Eco-Pro Exhibition (December)

EcoPro Exhibition is the largest environmental exhibition in Japan. We introduces our environmental initiatives including electric-powered vehicles. In addition, we have a quiz for children that can provide the children with an opportunity to think about the environment.



"Automotive Engineering Exposition" (May)

The Automotive Engineering Exposition is Japan's largest exhibition of automotive engineering. The company displays component technology that comprises electric-powered vehicles and new model engines with great environmental performance to introduce a variety of its environmentally friendly technology.

FY 2015 Main Participating Exhibitions and Events

Time	Event	Venue	Exhibition Details
May	Eco Life Fair MINATO2015	Arisugawanomiya Memorial Park (Tokyo)	Introduction of V2H*1 system with <i>Outlander PHEV</i> , power feeding demonstration
	Global Environment Fair 2015	Adachi City Office (Tokyo)	Test drive of <i>Outlander PHEV</i>
	Automotive Engineering Exposition 2015	Pacifico Yokohama (Kanagawa)	Introduction of "Plug-in Hybrid EV System" and V2H devices, test drive of <i>Outlander PHEV</i>
	Japan EV Festival 2015	Tsukuba Circuit Course 1000 (Ibaraki)	Power feeding demonstration of <i>Outlander PHEV</i> , test drive of <i>Outlander PHEV</i> and <i>i-MiEV</i>
July	Environmental Forum in Funao	Funao Public Hall (Okayama)	Panel display of our environmental initiatives, display of slogan and posters related to energy conservation, display of <i>i-MiEV</i>
	Japan EV Rally Hakuba 2015	Hakuba47 (Nagano)	Power feeding demonstration with <i>Outlander PHEV</i> , test drive of <i>Outlander PHEV</i> and electric-powered vehicles
August	Star Camp in Asagiri Plateau	Asagiri Plateau (Shizuoka)	Power feeding demonstration and test drive of <i>Outlander PHEV</i>
December	Eco-Products (Eco-Pro) Exhibition 2015	Tokyo Big Sight (Tokyo)	V2H system demonstration by <i>Outlander PHEV</i> , introduction of power feeding function and test ride

*1 V2H: Vehicle to Home

Fiscal 2015 Initiatives

Plan! FY 2015 Targets

- Enhance disclosure by the CSR report and the website
- Transmit and communicate with domestic and foreign business partners about our environmental initiative

Do! FY 2015 Achievements

- Enhance disclosure by the CSR report and the website

In the CSR Report 2015, we assigned pages related to our environmental initiatives as the "Environmental Report" and strived for enhancement of information disclosure including newly publishing "Environmental Data" with reference to the "Environmental Reporting Guidelines (2012)" by the Ministry of the Environment. "Environmental Data" is compiled using environmental data for the last five years. For the website, the page for environmental initiatives was significantly renewed in September 2015. The website was designed so stakeholders can browse the website easily. A page for "Environmental Topics" where the latest efforts are published has also been added.

- Transmit and communicate with domestic and foreign business partners about our environmental initiative

Our environmental initiatives were explained to suppliers and action by suppliers was requested in the "Mitsubishi Motors suppliers' meeting" and "Purchasing policy explanatory meeting", etc.

Check! Fiscal 2015 Self Evaluation

Actions were taken as planned.

Action! Future Issues and Plan

We will continue activities to gain an understanding of our initiatives from stakeholders and to listen to their opinions.



Mitsubishi Motors suppliers' meeting



Environmental Initiatives

Collaboration with Society / Collaborative Environmental Preservation with Society



Mitsubishi Motors believes initiatives in collaboration with society are important in environmental conservation. For this reason, we have been working on environmental conservation activities such as the forest preservation, cleaning, mowing, and termination of alien species in collaboration with stakeholders including communities, municipal governments, ministries and government agencies, and NPOs.

For collaboration with ministries and government agencies in particular, we support the national campaign "COOL CHOICE" for countermeasures against global warming and the climate change campaign "Fun to Share" by the Ministry of the Environment, and we participate in the "Light-Down Campaign".



Pajero Forest
(Forest conservation activity)

Since 2006, we have been working on protecting and cultivating a forest in Hayakawa-cho, Yamanashi Prefecture named "Pajero Forest" with the aim of protecting water sources and fostering the environmental awareness of the employees.

[Click here for details](#)



Children's Forest Program
(Forest Conservation Activity)

In this Program, active in 10 countries such as Thailand and Indonesia, children promote greening of the earth by planting and growing young trees in school yards, thus developing a love of nature.

[Click here for details](#)



Light-Down Campaign
(Global Warming Countermeasures)

This campaign is organized by the Ministry of the Environment on the day of the summer solstice and "Cool Earth Day" in July to turn off the lights at light-up facilities and houses. We participates in this campaign in key sites.



Hands-on Lessons
(Hands-on Environmental Lessons)

The company offers hands-on lessons to students on the environment to learn about the relationship between cars and environmental problems and quizzes using eco parts in coordination with education boards. Our employees visit elementary schools to provide the lessons.

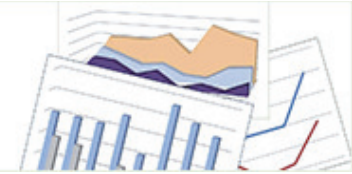
[Click here for details](#)

FY 2015 Environmental Conservation Activities

Initiatives		Venue	Collaboration Partner	Time
Forest preservation activity	"Pajero Forest"	Hayakawa-cho, Yamanashi-pref.	Hayakawa-cho, Yamanashi Prefecture OISKA	April, July, September
	Children's Forest Program	10 countries including Thailand and Indonesia	OISKA	Throughout the year (10 times)
Energy conservation, educational activity	"Light-Down Campaign" by Ministry of the Environment	Each site	Ministry of the Environment	June, July
Raising plants activity	Raising Indigenous Species of Plants (asarum caulescens, etc.)	Powertrain Plant -Kyoto (Kyoto, Kyoto-pref.)	Kyoto City Kyoto City Greenery Association	December
Cleaning activity, mowing activity	Mowing and cleaning activity	Okazaki Plant (Okazaki, Aichi-pref.)	-	Throughout the year (80 times)
		Mizushima Plant (Kurashiki, Okayama-pref.)	-	Throughout the year (28 times)
		Powertrain Plant -Kyoto (Kyoto, Kyoto-pref.)	-	Throughout the year (13 times)
		Powertrain Plant -Shiga (Konan, Shiga-pref.)	-	Throughout the year (5 times)
		Pajero Manufacturing Co., Ltd. (Sakahogi-cho, Gifu)	-	Throughout the year (Once)
	"Lake Kojima Watershed Cleaning Campaign"	Kurashiki, Okayama-pref.	"Small Kindness Movement" Kurashiki, Okayama Branch Lake Kojima Watershed Environment Preservation Promotion Council	November
	"River Cleaning Campaign"	Pajero Manufacturing Co., Ltd. (Sakahogi-cho, Gifu-pref.)	Sakahogi-cho, Gifu	October
Alien species termination activity	"Lanceleaf tickseed Termination Campaign"	Pajero Manufacturing Co., Ltd. (Sakahogi-cho, Gifu-pref.)	Sakahogi-cho, Gifu	May
	Termination of Argentine Ants	Pajero Manufacturing Co., Ltd. (Sakahogi-cho, Gifu-pref.)	Sakahogi-cho, Gifu	Throughout the year (Based on necessity)

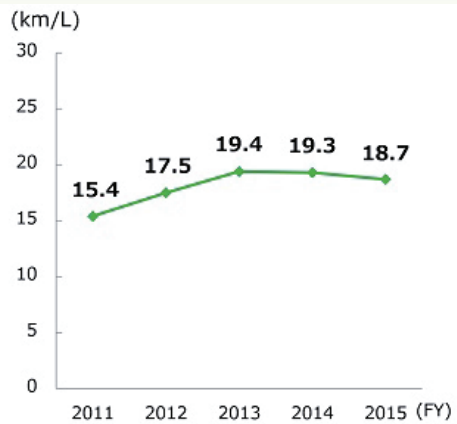


Environmental Data



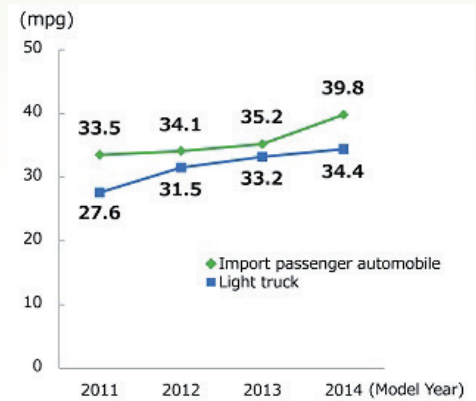
Product Indicators (Fuel Economy/CO2 Emissions)

Corporate Average Fuel Economy in Japan



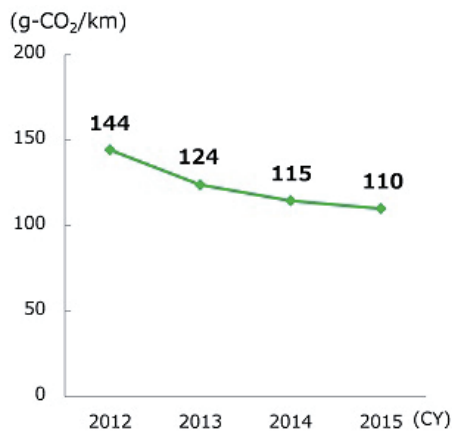
- Excluding electric vehicle and plug-in hybrid electric vehicle
- The summary is based on the fuel economy values as of July 31st 2016.

Corporate Average Fuel Economy in the United States



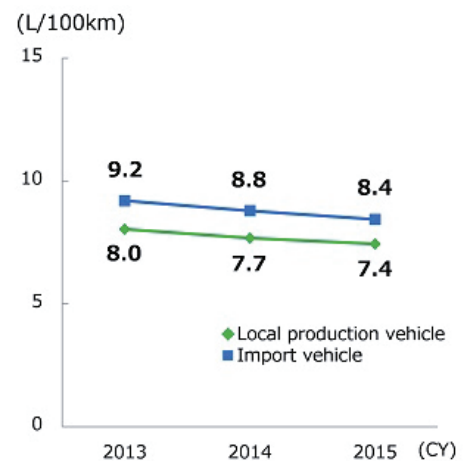
- Reported values to United States Environmental Protection Agency

Corporate Average CO2 Emissions in Europe (Passenger cars)



- Reported values to European Commission

Corporate Average Fuel Consumption in China

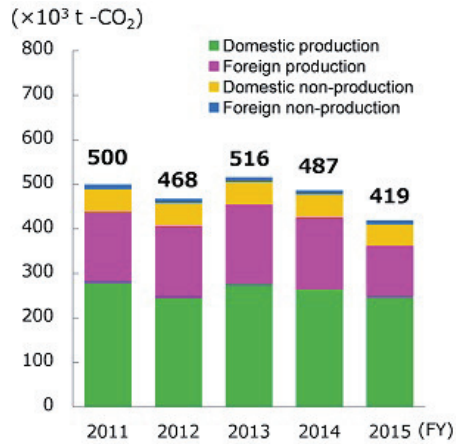


- Reported values to Chinese authorities
- Local production vehicle : values reported by GAC Mitsubishi Motors Co., Ltd.
- Import vehicle : values reported by Mitsubishi Motor Sales (China) Co., Ltd.

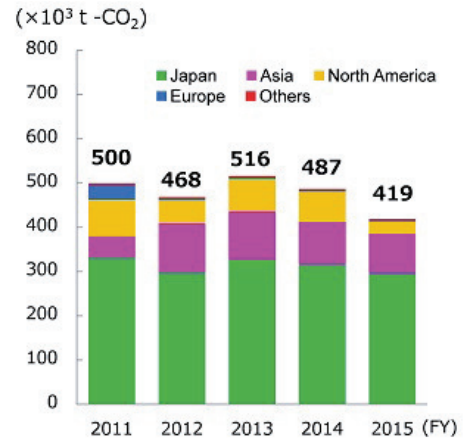
Business Activity Indicators

Target sites are 22 global environmental management target companies (excluding the data with annotation).

CO2 Emissions (individual production or non-production)



CO2 Emissions (individual region)



- CO2 Emission Factors

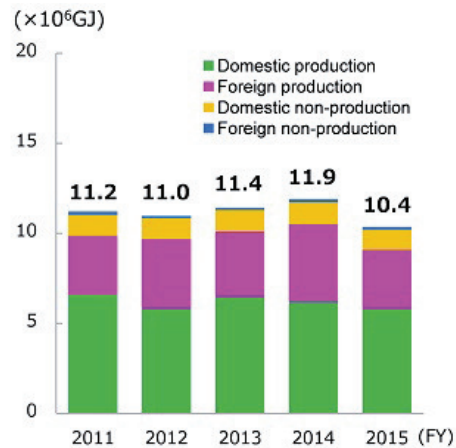
Electrical power used in Japan : 0.381 kg-CO₂/kWh

Electrical power used in overseas : values for 2005 with reference to IEA "CO₂ Emissions from Fuel Combustion (2010) edition"

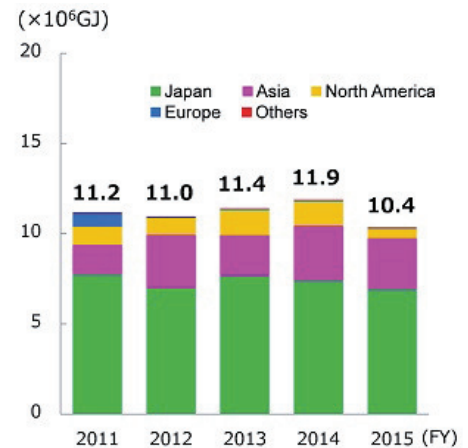
Other energy input : values of "Act on Promotion of Global Warming Countermeasures," etc.

- Data was recalculated by revising the calculation target in some years.

Energy Input (individual production or non-production)

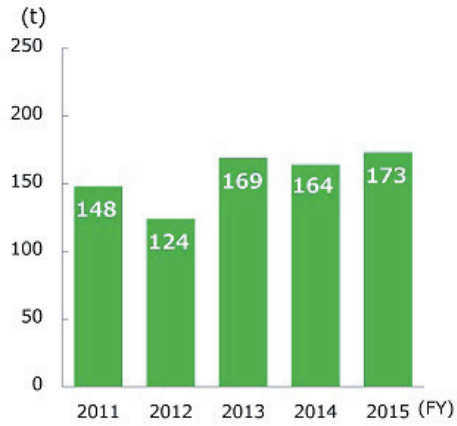


Energy Input (individual region)



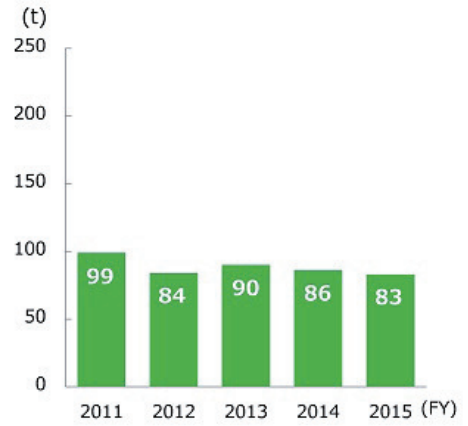
- Conversion factor: derived from "Act on the Rational Use of Energy," etc.
- Data was recalculated by revising the calculation target in some years.

Sulphur oxide (SOx) Emissions



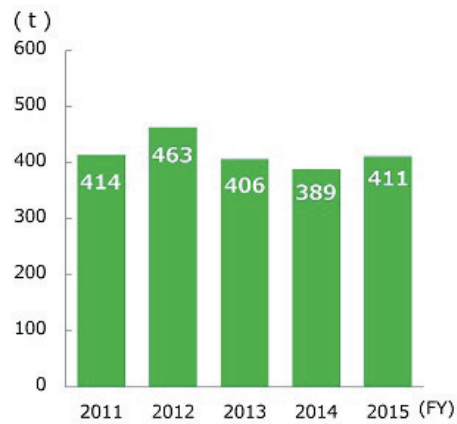
Calculation method : calculated the weight of sulphur contained in the used fuel and converted the weight into sulphur dioxide (SO₂)

Nitrogen oxides (NOx) Emissions



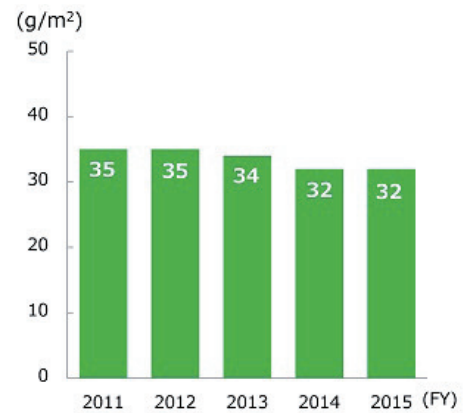
- Calculation method : calculated with multiplying each conversion factor to fuel consumption
- Conversion factor : derived from "Environmental Activity Evaluation Program" of the Ministry of the Environment

Release and Transfer of PRTR substances



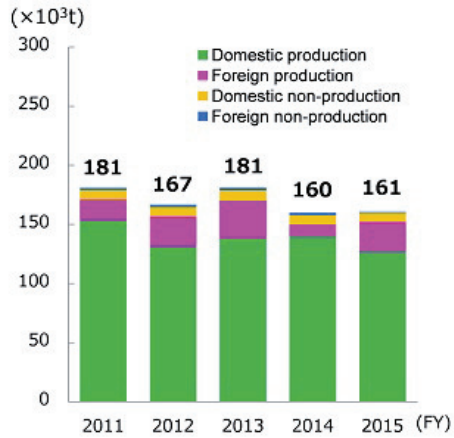
Target site : Okazaki Plant, Mizushima Plant, Powertrain Plant, Pajero Manufacturing Co., Ltd

VOC Emissions (per unit painting area)



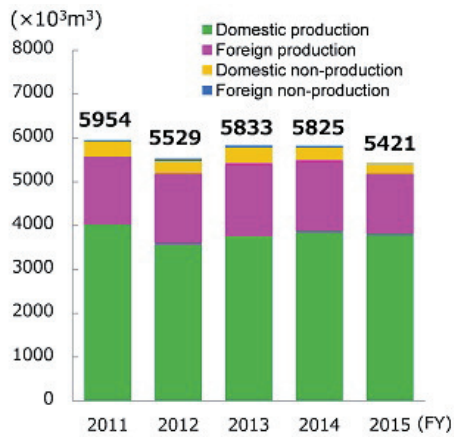
Target site : Okazaki Plant, Mizushima Plant, Pajero Manufacturing Co., Ltd, Suiro Plastic Co., Ltd

Generated Waste



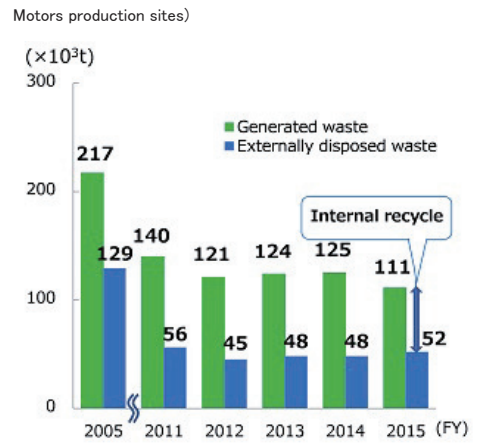
- Excluding some foreign affiliated companies

Withdrawn water volume



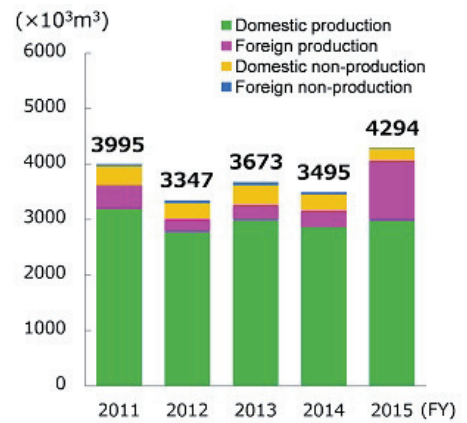
- Excluding some foreign affiliated companies

Generated Waste and Externally Disposed Waste (Mitsubishi Motors production sites)



Target site : Okazaki Plant, Mizushima Plant, Powertrain Plant

Wastewater volume



- Excluding some foreign affiliated companies
- Some mistakes of calculation in the past year were revised.
- Including some estimates

■ Biodiversity Indicators

Condition of Protected or Restored Habitats (as of fiscal 2015)

	Protection Initiative of preserving native plants and creatures in and around the plant	Restoration Initiatives of restoring the ecosystem in and around the business areas to the condition which native plants and creatures are able to live
Powertrain Plant–Shiga	Environmental preservation of “Yatsuda” where fringed orchid lives	Restoration of cogon grass gregariousness, which provides habitats for various insects
Powertrain Plant–Kyoto	-	Planting <i>Asarum caulescens</i> Maxim. (scientific name), blackberry lily and <i>Eupatorium japonicum</i> (scientific name), which are native plants of Kyoto city

Habitat status of rare species (Red List of Ministry of the Environment) in and around the plants (the status to fiscal 2015)

Powertrain Plant–Shiga (investigation period :from 2013 to 2014)

Category	Number of species	Discovered species
VU (Vulnerable)	3	Japanese clouded salamander, Whirligig beetle and <i>Oryzias latipes</i> (scientific name)
NT (Near Threatened)	7	Fringed orchid, <i>Agrostis valvata</i> (scientific name), Eurasian sparrowhawk, Japanese pond turtle, Leopard frog, <i>Trigomphus citimus</i> (scientific name) and <i>Trigomphus interruptus</i> (scientific name)
EN (Endangered)	1	One species of insects not to disclose