



MITSUBISHI MOTORS
ENVIRONMENTAL REPORT 2017



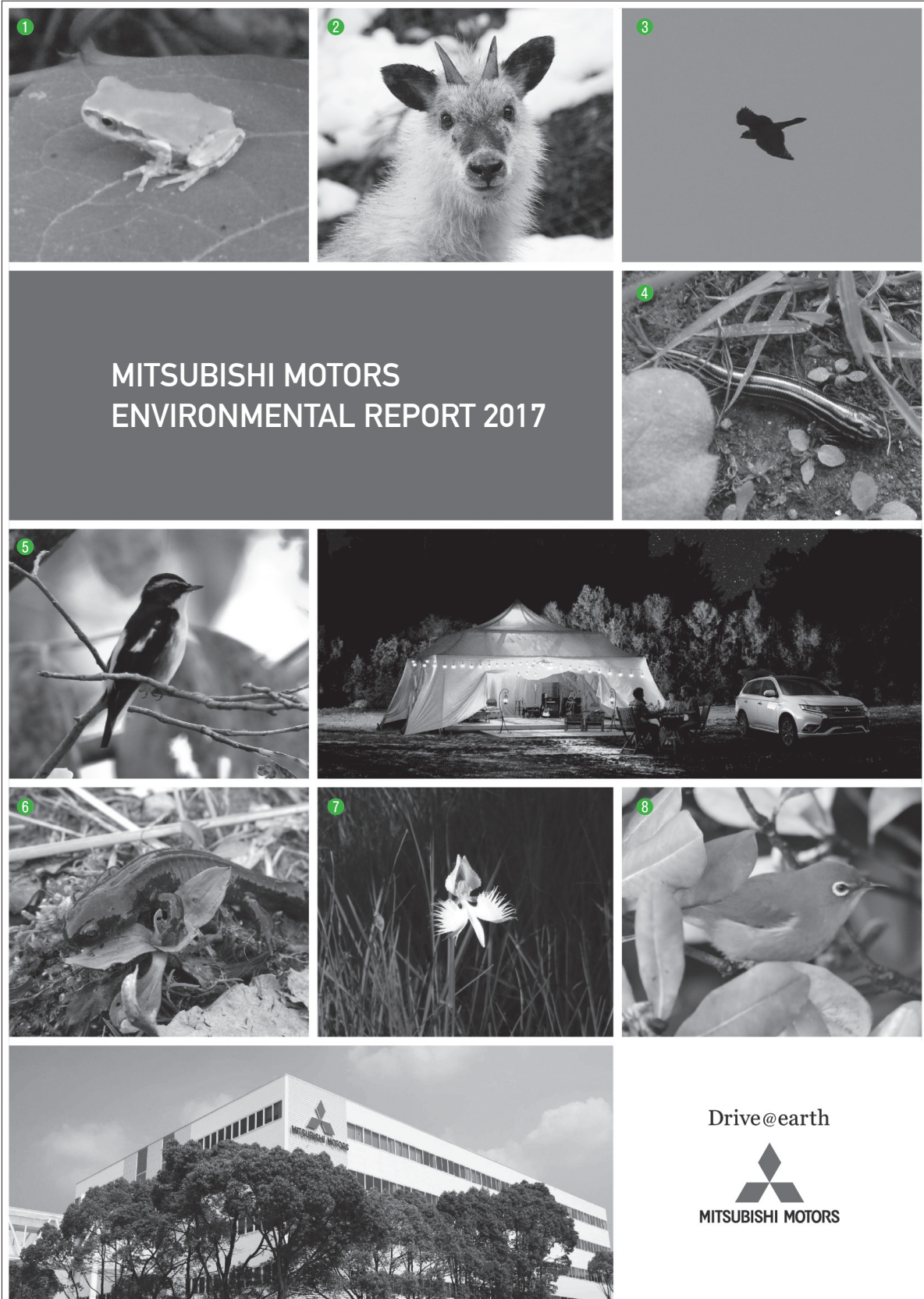
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The living creatures on the front cover

As part of our biodiversity preserving measures, we are conducting ecosystem studies at our domestic production sites. For details, please see: [Collaboration with Society > Initiatives for Preserving Biodiversity](#)

- ① Tree Frog (Okazaki Plant)
- ② Japanese serow (Kyoto Plant - Shiga)
- ③ Northern Goshawk (Okazaki Plant)
- ④ Japanese five-lined skink (Okazaki Plant)
- ⑤ Narcissus Flycatcher (Kyoto Plant - Shiga)
- ⑥ Clouded salamander (Kyoto Plant - Shiga)
- ⑦ White egret flower (Kyoto Plant - Shiga)
- ⑧ Japanese White-eye (Okazaki Plant)





Policies / Message from the Chief Environmental Strategy Officer

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Automobiles contribute significantly to society through their convenience. On the other hand, automobiles have an impact on the environment. As an automobile manufacturer, we believe it is our social responsibility to minimize this impact on the environment through all our business activities.

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

As promised in the "Mitsubishi Motors Group Environmental Vision 2020" announced in 2009, we will continue to contribute to society by raising the environmental performance of our products, centered on technological improvements to electric vehicles and plug-in hybrid vehicles. We will strengthen environmental measures in all areas of business, aiming to achieve a low-carbon society.



Masa Omidori
The Chief Environmental Strategy Officer



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.



Policies / Key Environmental Issues

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Vehicles are convenient for transportation and logistics. 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 gases such as CO₂, which is the cause of the global warming and the pollutants. The production of automobiles consumes resources and fossil fuels and also uses chemical substances which are a pollution risk to the environment.

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

Countermeasures against Climate Change

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

Most 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 lifecycles. Most CO₂ emissions by vehicles occur during driving, so 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 increasing tendencies for people to seek environmentally-friendly products, we believe that fuel economy performance will become more important when selecting a car. 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 is prioritizing effective energy use and the prevention of global warming, both of which act against climate change. The company released our "Environmental Vision 2020" in 2009, and we have been working on decreasing our energy consumption and reducing our CO₂ emissions for a pleasing and low-carbon society. We have set a CO₂ emissions reduction target and are reducing energy consumption by promoting the creation of electric-powered vehicles, improving fuel economy, increasing efficiency in our 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 : This refers to supplying power from the drive batteries of electric-powered vehicles to houses, buildings, or communities.

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 nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM), along with soil and water pollution caused by heavy metals in waste water, impacts the health of humans and the ecosystem. Long-term risks of substances left in the environment without decomposing have become a significant concern.

Most of vehicles emit NOx and SOx due to engine combustion while driving. In production, in addition to emissions of NOx and SOx 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 that stricter regulations on the emissions performance of vehicles and management of environmentally hazardous substances will be enforced in each country and region going forward. We also believe it is important to consider the impact on the environment of waste water derived from business activities in regions with high water risk.

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 in materials. In production, we have been working on the reduction of VOC emissions released in the use of paints and solvents.



Environmental Initiatives

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Policies / Environmental Vision 2020

In fiscal 2009, Mitsubishi Motors formulated an "Environmental Vision 2020" based on its "Environmental Policy". The "Environmental Vision 2020" states our medium- to long-term policy for environmental initiatives across the entire group for a low-carbon society. The "Environmental Vision 2020" centers on the concept of "Leading the EV* era, toward a sustainable future. "We aim to create a sustainable future by pursuing environmental initiatives in technological development and business activities, spearheaded by EV technology. We aim to work with customers and society to create a clean and vibrant low-carbon society.

Achieving the Environmental Vision 2020

To achieve the goals of the "Environmental Vision 2020", we will focus our efforts in a three-pronged approach comprising "products & technologies," "business activities," and "collaboration with society."

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. • Step up contribution to protecting the global environment by environmental conservation activities with local communities

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

Environmental Initiatives

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Policies / Environment Initiative Program

Mitsubishi Motors has formulated the Environment Initiative Program and defines overall targets for the Group to promote environmental initiatives. Until fiscal 2015, the period for each Environment Initiative Program had been five years. However, to make it easier to achieve the program goals, we are considering linking the content of the next Environment Initiative Program with the Mid-term Business Plan starting from fiscal 2017 and lasting for the next three years. We plan to put together the next Environment Initiative Program in autumn 2017, to span a period of three years. Fiscal 2016 was a transition period to the next Environment Initiative Program, and so we formulated a one-year program to work on. We achieved our targets in 18 items, such as reduction of vehicular running CO₂ emissions and reduction of CO₂ emissions in production. However, we did not achieve our targets in three items, including our target for EV/PHEV production ratio.

List of Results for Fiscal 2016

Products and Technologies

Evaluation ○:Achieved ×:Unachieved

Initiative	Fiscal 2016 Targets	Fiscal 2016 Results	Evaluation
Prevention of global warming			
Reduce vehicular running CO ₂ emissions	<ul style="list-style-type: none"> Reduce running CO₂ emissions by a global average of 19% (compared to fiscal 2005) 	<ul style="list-style-type: none"> 19.1 % reduction 	○
Enhance EV/PHEV product lineup and expansion of sales territory	<ul style="list-style-type: none"> Achieve EV/PHEV production ratio of 3.0% 	<ul style="list-style-type: none"> 2.7% 	×
Develop EV/PHEVs to reduce CO ₂ emissions	<ul style="list-style-type: none"> Promote the development of EV/PHEVs 	<ul style="list-style-type: none"> Promoted development of plug-in hybrid vehicles, and launched 2017 <i>Outlander PHEV</i> 	○
Develop and use technology that improves fuel economy	<ul style="list-style-type: none"> Pursue lightweight vehicles 	<ul style="list-style-type: none"> Pursued the production of lighter vehicles in the development of new vehicle models 	○
Recycling and resource conservation			
Develop new technologies for the recycling and reuse of EV/PHEVs and enhance relevant organizations and systems	<ul style="list-style-type: none"> Implement research into recycling technology for drive batteries 	<ul style="list-style-type: none"> Conducted research in new recycling technology (Japan, US, Europe) 	○
	<ul style="list-style-type: none"> Participate in field testing of battery reuse 	<ul style="list-style-type: none"> Conducted field testing for commercialization of battery reuse (Japan) 	
Improve recycling efficiency of used automobiles and parts	<ul style="list-style-type: none"> Achieve Japanese dealer repair/replacement bumper recovery rate of at least 34% 	<ul style="list-style-type: none"> 32.6% 	×
Prevention of environmental pollution			
Expand deployment of vehicles that emit little exhaust gas	<ul style="list-style-type: none"> Thoroughly comply with exhaust gas regulations 	<ul style="list-style-type: none"> Verified state of compliance with exhaust gas regulations 	○
Enhance management of hazardous substances in products	<ul style="list-style-type: none"> Promote compliance with environmentally hazardous substance regulations 	<ul style="list-style-type: none"> Conducted research into trends in various countries, and complied with revisions in regulations 	○

Business Activities

Initiative	Fiscal 2016 Targets	Fiscal 2016 Results	Evaluation
Prevention of global warming			
Reduce unit CO ₂ emissions in production	<ul style="list-style-type: none"> Reduce CO₂ emissions per production vehicle at Japanese and international plants by 30% (compared to fiscal 2005) 	<ul style="list-style-type: none"> 32% reduction 	○
Reduce unit CO ₂ emissions in non-production facilities	<ul style="list-style-type: none"> Reduce unit CO₂ emissions at non-production facilities by 20% (compared to fiscal 2010) 	<ul style="list-style-type: none"> 28% reduction 	○
Reduce unit CO ₂ emissions in logistics	<ul style="list-style-type: none"> Reduce CO₂ emissions per unit of transportation in Japan by 0.3% (compared to fiscal 2006) 	<ul style="list-style-type: none"> 3.4% reduction 	○
Recycling and resource conservation			
Conserve resources and recycle in production	<ul style="list-style-type: none"> Reduce externally disposed waste at Japanese plants by 46% (compared to fiscal 2005) 	<ul style="list-style-type: none"> 48% reduction 	○
Conserve resources and recycle in logistics	<ul style="list-style-type: none"> Reduce steel used per unit shipment volume at KD*¹ plants in Japan by 83% (compared to fiscal 2006) 	<ul style="list-style-type: none"> 91% reduction 	○
Prevention of environmental pollution			
Reduce hazardous substances generated in production	<ul style="list-style-type: none"> Reduce VOC*² per unit painting area to less than 35 g/m² (body and bumper painting) 	<ul style="list-style-type: none"> 37.9g/ m² 	×

Collaboration with Society

Initiative	Fiscal 2016 Targets	Fiscal 2016 Results	Evaluation
Spread of EV/PHEVs			
Enhance the charging infrastructure	<ul style="list-style-type: none"> Promote adaptation to smart charging systems 	<ul style="list-style-type: none"> Promoted response to implementation of smart charging systems 	○
Expand the use of EV/PHEVs	<ul style="list-style-type: none"> Promote initiatives for increasing of the value of EV/PHEVs 	<ul style="list-style-type: none"> Conducted research into actual state of V2H device usage 	○
Environmental preservation			
Promote activities to preserve biodiversity under our basic guideline	<ul style="list-style-type: none"> Conduct Ecosystem Survey in the Okazaki Plant 	<ul style="list-style-type: none"> Conducted Ecosystem Survey in Okazaki Plant 	○

Stronger Base of Implementation

Initiative	Fiscal 2016 Targets	Fiscal 2016 Results	Evaluation
Environmental management			
Promote LCA* ³	<ul style="list-style-type: none"> Examine disclosure of LCA results for models that were already assessed 	<ul style="list-style-type: none"> Disclosed LCA results for Triton on website 	○
Promote consolidated environmental management	<ul style="list-style-type: none"> Establish consolidated environmental management guidelines 	<ul style="list-style-type: none"> Expanded scope of companies for consolidated environmental management, and carried out selection 	○
Enhance environment-friendliness in purchasing	<ul style="list-style-type: none"> Encourage business partners to improve their management system for environmentally hazardous substances 	<ul style="list-style-type: none"> Revised Green Procurement Guidelines and deployed to suppliers 	○
Enhance environmental information disclosure and environmental communications	<ul style="list-style-type: none"> Enhance information disclosure according to GRI Sustainability Reporting Guidelines 	<ul style="list-style-type: none"> Expanded scope of disclosed information in Environment Report based on GRI guidelines 	○
	<ul style="list-style-type: none"> Set material issues for the environment 	<ul style="list-style-type: none"> Defining important issues regarding the environment (material issues) in preparation for discussions with experts 	

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

*2 VOC stands for Volatile organic compounds

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



Environmental Management / Environmental Organization

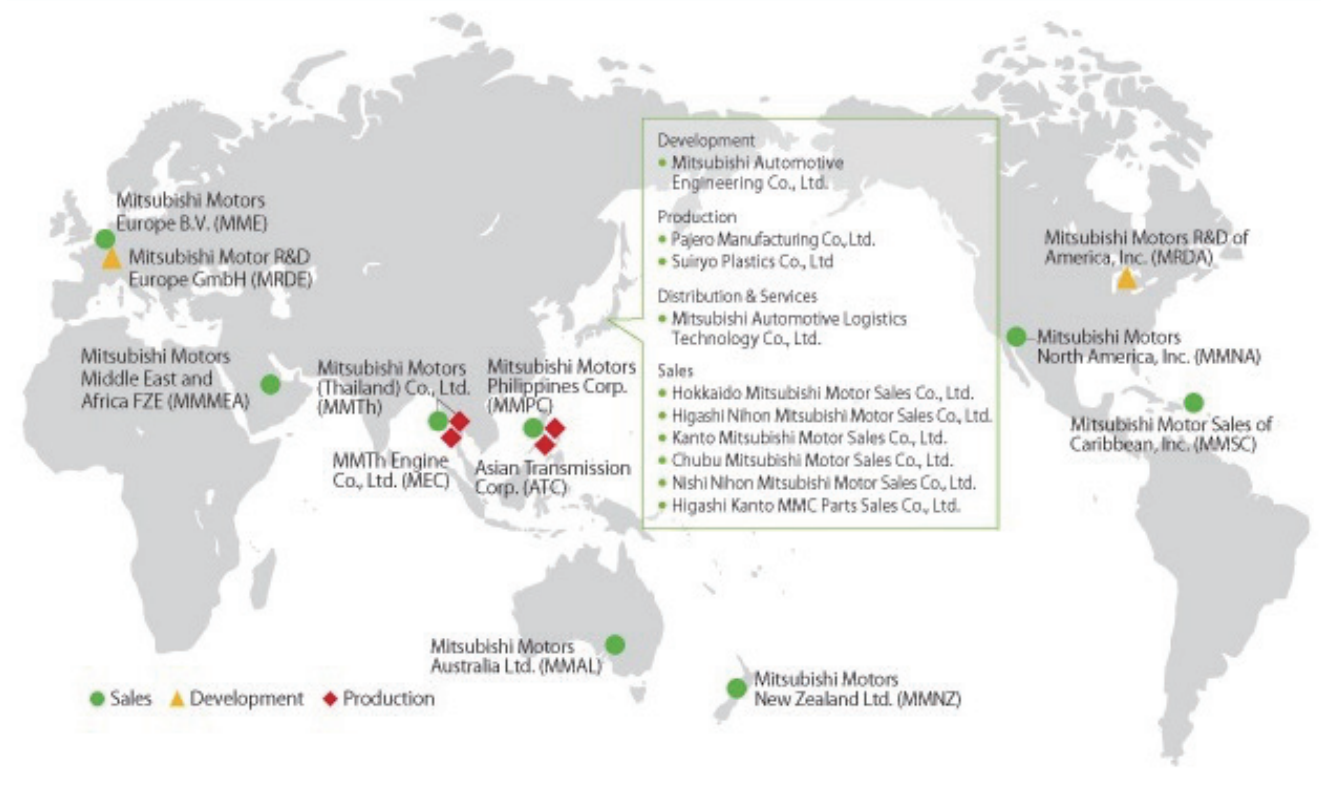


Mitsubishi Motors has been holding the "Environmental Council" since 1993. At the council, the President and other executive directors discuss environmental initiatives such as the medium- to long-term basic policy, targets, and implementation plans. They also check the progress and results of initiatives for the fiscal year. The proceedings of the Environmental Council are then reported to the Board of Directors.

Since we obtained ISO 14001 certification for the entire company in fiscal 2010, we have been encouraging environmental initiatives within each department—such as development, production, purchasing, and sales—to reduce the environmental impact at all stages of our vehicles' life cycles.

We have also built a framework to collect CO₂ emissions data at each domestic and overseas business site for production, development, and sales through regular reporting. We will continue to enhance our global environmental management systems by improving the efficiency and speed of data collection.

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





Environmental Management / Environmental Management System



Mitsubishi Motors acquired ISO14001 integrated certification, and is promoting environmental initiatives on company-wide basis. Major domestic and overseas affiliated companies also acquired ISO14001 certification. For the domestic dealers, we promote EA21*1 certification. *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-sized companies.

Environmental Management System Certification (Affiliated Companies and Dealerships)

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. Tokai Mitsubishi Motor Sales Co., Ltd	Aomori Mitsubishi Motor Sales Co., Ltd. Ibaraki Mitsubishi Motor Sales Co., Ltd. Sunen Mitsubishi Motor Sales Co., Ltd. Kyoto Mitsubishi Motor Sales Co., Ltd. Shiga Mitsubishi Motor Sales Co., Ltd Sobu Mitsubishi Motor Sales Co., Ltd



Environmental Initiatives

Environmental Management / Environmental Education



Mitsubishi Motors educates its employees on its policy, initiatives and issues regarding the environment in order to encourage employees to take the lead in promoting environmental initiatives.

Environmental education is incorporated into training programs by job grades. We work to promote understanding of the relationship between environmental problems and business activities and of the social responsibility that companies are expected to fulfill.



Trainings

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

Systematic environmental education to improve employees' environmental awareness

■ Do! Fiscal 2016 Achievements

Environmental education was conducted during training for staff newly promoted to management level, as well as for technical employees during engineer training. In order to promote the acquisition of official environment qualifications, junior technical employees were sent to training sessions outside the company.

In Japan, June was designated as Environment Month. During this month, the President sent a message about our environmental initiatives, and we also held an Environment Month Children Drawing Contest to increase the environmental awareness of employees and their families. During the contest, we accepted drawings by our employees' children under the theme "beautiful nature," and awarded prizes to outstanding works.



Winning work for President's Prize

■ Check! Fiscal 2016 Self Evaluation

Environmental education was provided as planned.

■ Action! Future Issues and Plans

The company will continue strengthen environmental education.



Judging the children's drawings in the Environment Month Children Drawing Contest



Environmental Management / Environmental Risk Management



Mitsubishi Motors has learned from past cases of failing to comply with environmental regulations such as those aimed at preventing pollution. We make every effort to comply with relevant laws, and our dedicated compliance department supports other departments and confirms that they are complying with environmental regulations. We sincerely respond to complaints from neighboring residents after investigating the situation.

We clearly set roles and procedures in our legal compliance framework and Environment Management System to ensure compliance with laws and regulations. In the event that environmental laws and regulations are violated or an environmental accident occurs, or if we receive a complaint, the corresponding division must submit a Legal Non-Conformity Report to the Compliance Department and take necessary measures against the cause. The report clarifies the details of the case, emergency measures, causes, and correction measures. Furthermore, we have been working to improve our environmental management system to prevent reoccurrence of incidents (improving work processes, enhancing the supervision system, and increasing employee awareness).

Fiscal 2016 Results

The compliance situation of Mitsubishi Motors and Pajero Manufacturing Co., Ltd. in FY2016 is as follows.

Two environment-related accidents occurred. Both were discovered by the company during regular inspections and were promptly reported to the respective prefectural and municipal offices.

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

Mitsubishi Motors and Pajero Manufacturing Co., Ltd. enhanced the day-to-day management of equipment and facilities and took measures to prevent future occurrences by sharing information about the accidents within both companies.

Fiscal 2016 Environment-Related Accidents

1. At Mizushima Plant, fluorocarbon gas was not recovered and instead disposed of due to a mistake in the model of the heat exchanger. This resulted in fluorocarbon gas being unintentionally released into the atmosphere.
2. At Mizushima Plant, due to overspill from heavy rains, the concentration of oil in waste water exceeded the level specified by Kurashiki City.

The company received one complaint about odor from our Kyoto Plant. We have been making efforts to reduce the odor from the corresponding facility, including the installation of a mist type odor eliminator.

Environmental Initiatives

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 2016		Fiscal 2015	
			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	234	1,281	286	1,688
	Global Environmental Conservation Cost	Preventing global warming and the ozone depletion	311	13	883	6
	Resource Circulation Cost	Reduction, proper disposal and recycling of the waste	5	874	0	828
Upstream/Downstream Costs		Withdrawing used bumpers and corresponding automobile recycling law	0	1,851	0	1,928
Administration Activity Cost		Maintaining certification of ISO14001, educating employees and monitoring	0	706	49	620
R&D Cost		Research and development about reductions in environmental impact of products such as improving fuel economy and exhaust gas measures	1,358	34,651	964	33,535
Social Activity Cost		Hands-on environmental lessons, supporting global environmental activity, donation to environmental groups and disclosing environmental information	17	150	0	217
Environmental Remediation Cost		Compensation for environmental damage by business activities	3	79	0	23
Total			1,928	39,604	2,182	38,845

	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	581	890	690	787

(2) Environmental conservation benefit

Category	Environmental performance indicators (Units)	Fiscal 2016	Fiscal 2015	Benefit (Reduced volume)
Environmental conservation benefit related to resources input into business activities	Total energy consumption (thousand GJ)	6,010	6,442	432
	Energy consumption by transportation (thousand GJ)	267	308	41
	Input of PRTR-listed substances (t)	1,644	1,628	-16
	Input of water (thousand m ³)	3,439	3,805	366
Environmental conservation benefit related to waste or environmental impact originating from business activities	GHG(CO ₂) emissions (thousand t-CO ₂)	329	369	40
	GHG(CO ₂) emissions by transportation (thousand t-CO ₂)	18	21	3
	Transfer and release of PRTR-listed substances (t)	409	411	2
	Total waste (thousand t)	107	127	20
	Waste landfilled directly (t)	32	31	-1
	Wastewater volume (thousand m ³)	2,640	2,990	350
Other environmental conservation benefit	Transport volume (million t-km)	212	247	35

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

Category	Details of Benefit	Fiscal 2016	Fiscal 2015
		Benefit (Million yen)	Benefit (Million yen)
Revenue	Operating revenue from the sale of recycled waste products and used products produced through key business	1,597	1,808
Cost Reduction	Energy expense saving through energy conservation	1,861	1,647
	Water expense saving through water conservation	13	-11
	Disposal cost saving through lower resource input or recycling	-18	178
	Packaging materials cost saving through recycling	251	322
Total		3,704	3,943

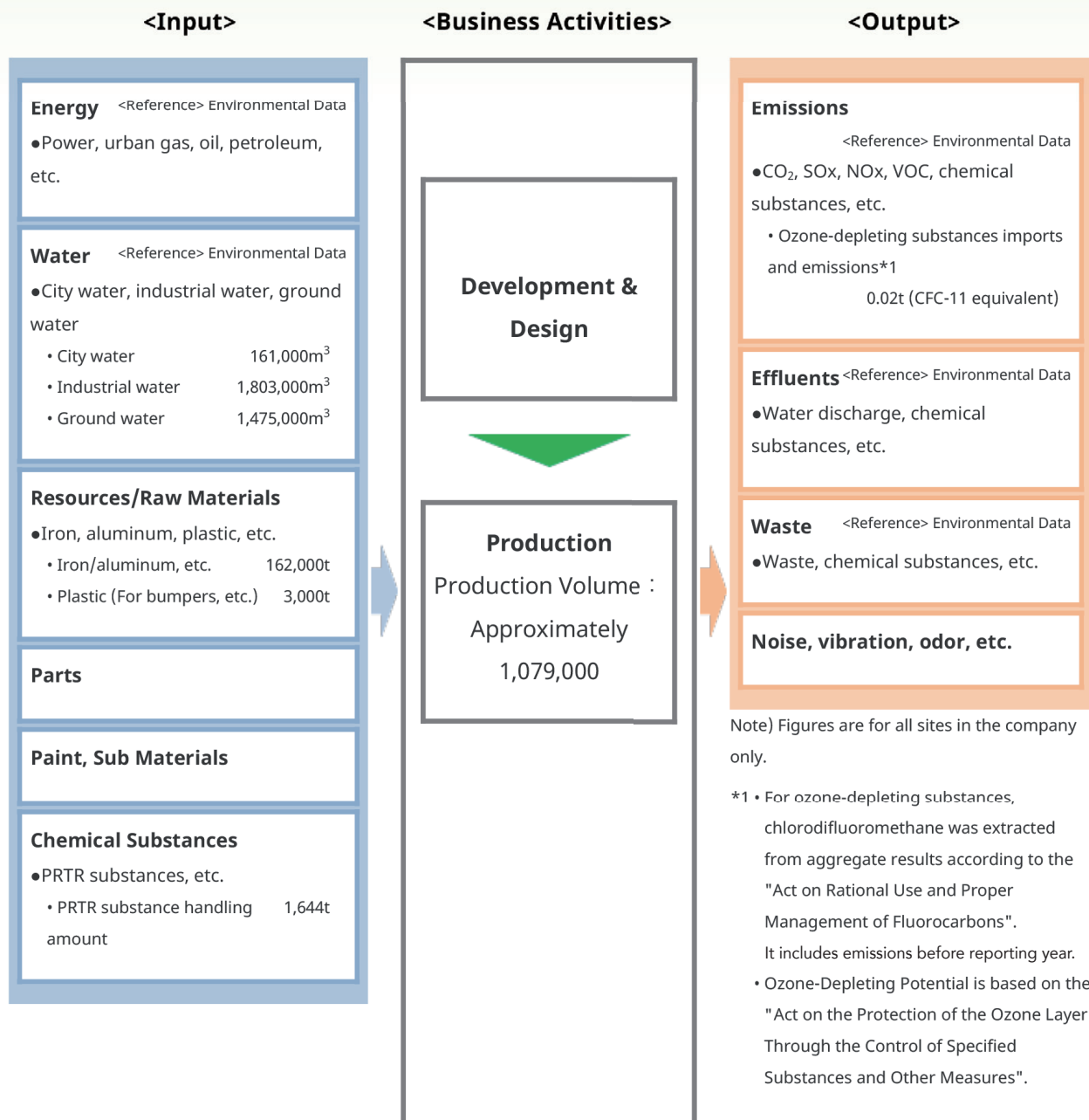
- Target sites : Mitsubishi Motors, Pajero Manufacturing Co., Ltd.
Following amounts cover only Mitsubishi Motors.
 - Energy input and CO₂ emissions through the transportation
 - Transportation volume
- Including summary by dividing
- Excluding depreciation
- In Table (2), minus sign "-" shows amount increasing.
- In Table (3), "Benefit" shows cost reduction compared to the previous year.



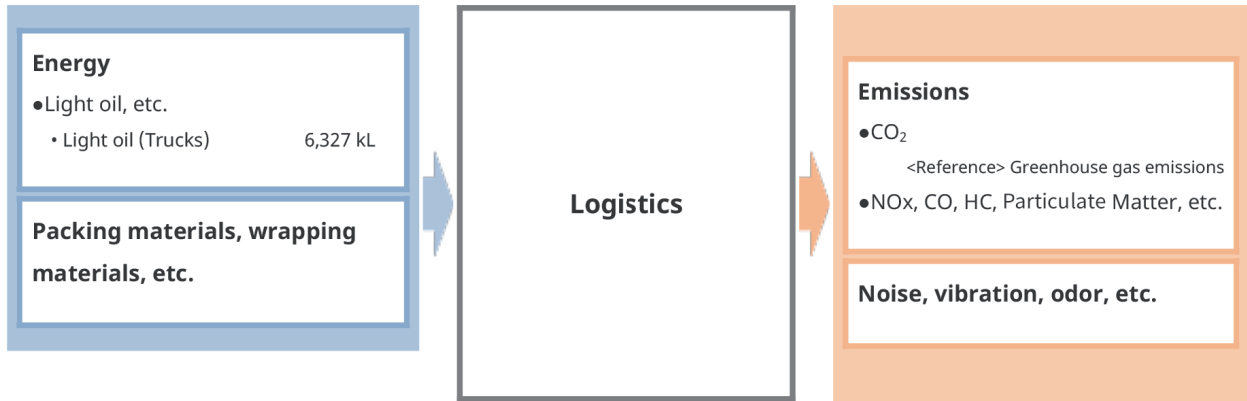
Environmental Management / Monitoring Environmental Impact within Supply Chain / Environmental Impact of Business Activities

FY 2016 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.



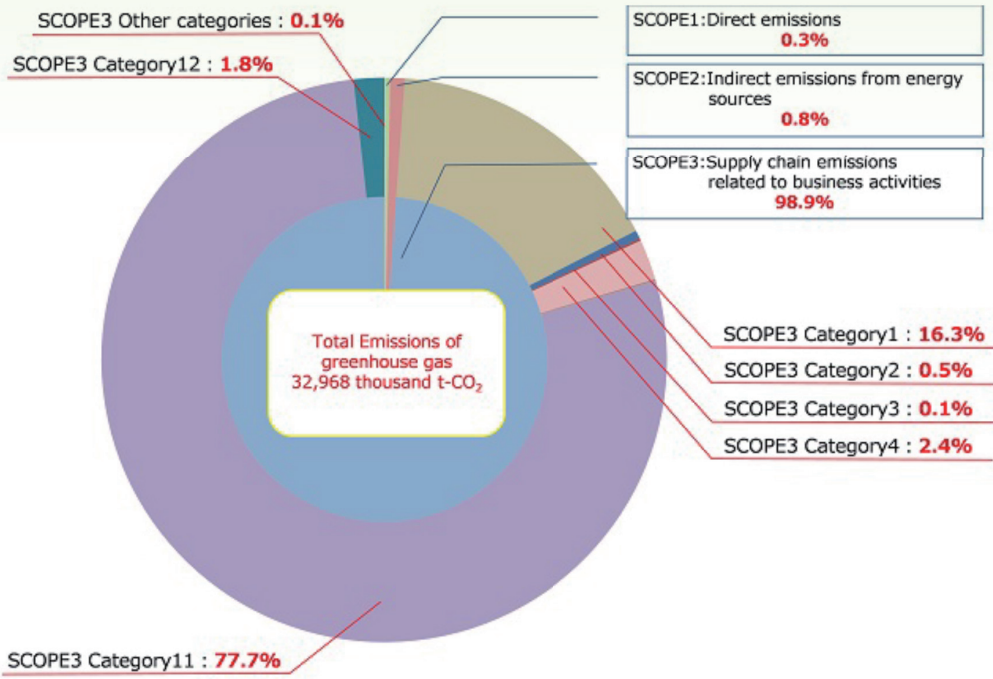
Note) Figures are for consignment transport within Japan



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 2016. Total emissions were 32,968 thousand t-CO₂. Continuously, we will promote our monitoring of greenhouse gas emissions.



Breakdown of greenhouse gas emissions

Category list		CO ₂ emissions (thousand t-CO ₂)	Coverage	
SCOPE1	Direct emissions	104	consolidated	
SCOPE2	Indirect emissions from energy sources	271	consolidated	
SCOPE3	Category1	Purchased goods and services	5,390	consolidated (only production)
	Category2	Capital goods	159	non-consolidated
	Category3	Fuel-and energy-related activities (not included in scope 1 or scope 2)*1	42	consolidated
	Category4	Upstream transportation and distribution	772	consolidated
	Category5	Waste generated in operations	10	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	25,623	all destination
	Category12	End-of-life treatment of sold products	575	all destination
	Category13	Downstream leased assets	–	–
	Category14	Franchises	5	some of dealers which are not affiliated
	Category15	Investments	–	–
	Subtotal	32,593		
Total		32,968		

*1 Including city water and industrial water



Environmental Management / Life Cycle Assessment (LCA)

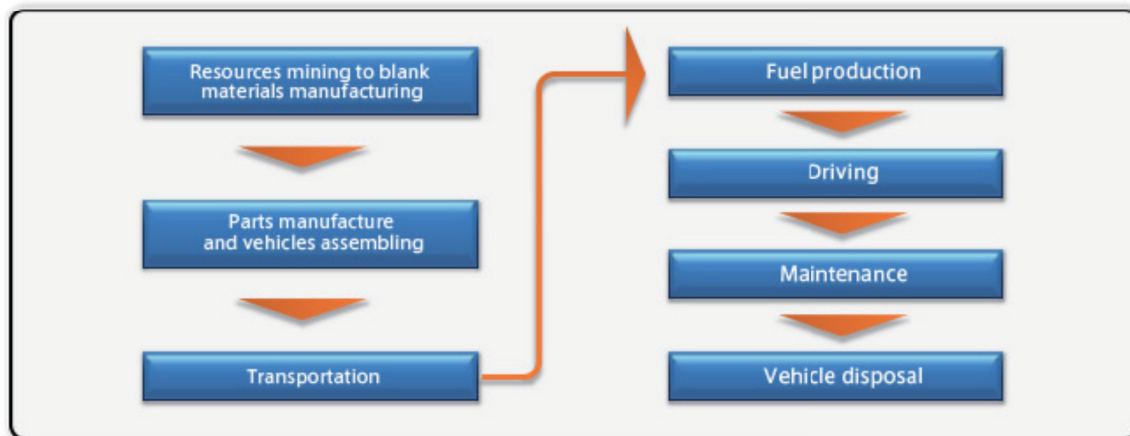


The LCA is an approach to quantify the environmental impact of a part or vehicle through all stages of its life cycle.

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

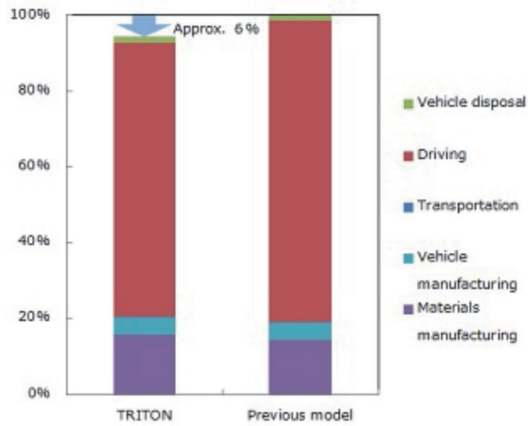
We use the LCA to develop environment-friendly parts, production technologies, electric-powered vehicles, and new model vehicles, and compares the life cycle CO₂ emissions with conventional parts and vehicles. The results are then used to determine whether further development is required, and to verify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

LCA result of TRITON

Our assessment shows that over its life cycle the *TRITON*, launched in November 2014 produces lower CO₂ emissions than the previous model.



Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

Study disclosure of LCA results for models that have already been assessed

■ Do! Fiscal 2016 Achievements

Disclosed LCA results of TRITON, launched in November 2014.

■ Check! Fiscal 2016 Self Evaluation

Progress was made according to the initial plan.

■ Action! Future Issues and Plans

We will continue to conduct LCA and disclose information for newly developed vehicles and parts.

Environmental Initiatives

Products and Technologies / Reduction of CO₂ Emissions while Driving



Gasoline and diesel engines inevitably generate exhaust gases that contain large quantities of CO₂, a cause of global warming.

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

Mitsubishi Motors focuses on products and technology-related initiatives, recognizing the importance of developing technologies for improving fuel economy and electric-powered systems, as well as spreading the use of vehicles equipped with these innovative systems.

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.



Outlander PHEV

Development of improving fuel economy technologies

We are committed to developing technologies to improve the fuel economy of gasoline and diesel engines, which greatly contributes to the reduction of CO₂ worldwide.

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

- Market entry of improved *eK Space* and *eK Space Custom*
- Market entry of hybrid *Delica D:2*

■ Do! Fiscal 2016 Achievements

Market entry of improved *eK Space* and *eK Space Custom*

In December 2016, the minicars *eK Space* and *eK Space Custom* were significantly improved and introduced to Japanese market. These models come with turbocharged engines equipped with an Auto Stop & Go function (idling-stop mechanism), added with a coasting stop function that stops the engine when driving at speeds of 13 km/h and slower, thereby reducing the amount of fuel being consumed. This improves the fuel consumption rate (JC08 mode) by 0.2 km/l to reach 22.2 km/l for the 2WD model, and 20.4 km/l for the 4WD model.

Market entry of hybrid *Delica D:2*

A hybrid model of the compact minivan *Delica D:2* was added to the series and introduced to the Japanese market in January 2017. EV driving is made possible through the use of a parallel hybrid system - which comprises a dual-jet engine, drive motor, high-voltage lithium-ion battery, and 5-speed automatic manual transmission (5AMT) - to achieve a fuel consumption rate (JC08 mode) of 32.0 km/l.

■ Check! Fiscal 2016 Self Evaluation

We encouraged the reduction of CO₂ emissions through the release of the improved models of the *eK Space* and *eK Space Custom*, and the hybrid model of the *Delica D:2* into the market as scheduled.

■ Action! Future Issues and Plans

We will continue to expand our lineup of EV/PHEVs and promote their deployment around the world.



eK Space



eK Space Custom



hybrid *Delica D:2*



Environmental Initiatives

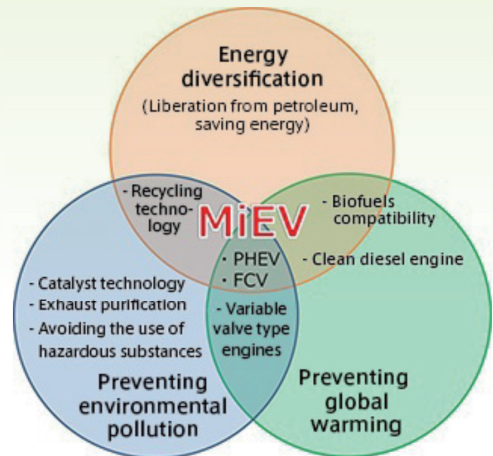
Products and Technologies / Development of Electric Vehicle Technologies



Vehicles are expected to be environmentally-friendly. This includes preventing environmental pollution and global warming, as well as diversifying energy sources from petroleum in recent years. Mitsubishi Motors strives to address these issues through initiatives such as improving the fuel economy of conventional engine-driven vehicles and developing clean diesel vehicles.

In particular, we position the electric vehicle technology incorporated in the MiEV*¹ series as our core technology for environmental friendliness, and we are committed to developing it further.

We would like to contribute to global environmental conservation by developing and promoting electric vehicles and plug-in hybrid electric vehicles featuring our electric vehicle technologies.



New values of Vehicle

Our EV/PHEVs are fitted with a large-capacity battery, which means that customers can connect their electrical appliances to use them even while on holiday or traveling. The batteries can also serve as an emergency source of electrical power in the event of disaster.*² (For the *Outlander PHEV*, a maximum of 10 days*³ of electrical power can be provided, including electricity generated by the engine*⁴.)

In addition, by adopting Vehicle to Home (V2H) technologies, which connect vehicles to the electrical supply of homes, batteries can be used for energy management or serve as an alternate power supply during power outages.

*1: MiEV: Mitsubishi innovative Electric Vehicle

*2: Please follow the instructions for each vehicle when connecting appliances.

*3: Calculated based on an approximate daily electric power consumption of 10 kWh for an average household (excluding conversion efficiency such as from V2H equipment)

*4: When connected to V2H equipment, the engine cannot be used to generate electricity

Environmental Initiatives

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



Electric Vehicle *i-MiEV*

The Electric Vehicle *i-MiEV* is powered 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 Vehicle



Plug-in Hybrid Electric Vehicle *Outlander PHEV*

Plug-in hybrid electric vehicles are powered by electricity stored in batteries. They use the engine to generate electric power when the battery level is low.

The Plug-in Hybrid EV System for the *Outlander PHEV* automatically shifts to the optimum driving mode for each running condition. "EV Drive Mode" uses electric power from the drive battery and is suitable for low to medium speeds in residential and urban areas. When the battery level is low, it shifts to "Series Hybrid Mode," which generates electric power using the engine. During high-speed driving, the vehicle shifts to "Parallel Hybrid Mode" driven by the engine and 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



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:





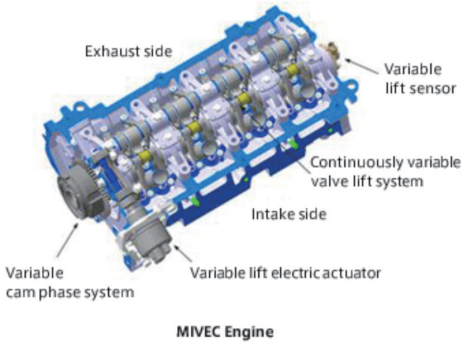
Products and Technologies / Development of Fuel Economy Improving Technologies / Engine Improvement



The key issues in developing technologies for improving fuel economy are how to minimize waste when burning fuel, and how to reduce the resistance of air intake and the friction of sliding parts. Mitsubishi Motors uses these perspectives to promote the development of technologies for improving the fuel economy of new engines.

Fuel economy improving technologies (Engines)

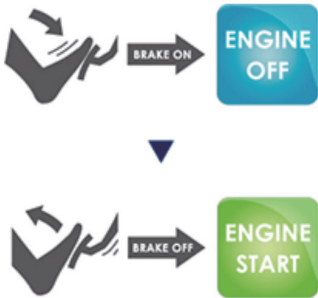
Variable valve timing mechanism "MIVEC" Mitsubishi Innovative Valve timing Electronic Control System



The new MIVEC is a variable valve timing mechanism for minimizing fuel consumption.

The intake valve lift is continuously varied according to the operating condition to reduce intake resistance. This minimizes air intake energy loss, resulting in improved fuel efficiency.

Idle-stop "AS&G" Auto Stop & Go



AS&G is an idling stop function that automatically stops and starts the engine when the vehicle stops or moves off. It improves fuel efficiency by not running the engine when the vehicle is stopped.

When fitted with a coasting stop function, AS&G stops the engine when decelerating.

Reducing engine friction

■ Reducing friction inside the engine to Improve fuel economy

Various engine losses can affect fuel economy: exhaust loss, cooling loss, mechanical friction loss, pump loss, and drive loss of auxiliary units.

Engine friction is a mechanical friction loss resulting from combustion gas within the cylinder causing engine parts such as the piston and crank shaft to move. This friction loss is mainly caused by these sliding parts. We make improvements to decrease the sliding resistance of such parts to reduce engine friction.

■ Approaches to reducing engine friction

■ Improving contact surfaces

Optimization of the shape and surface treatment of the piston skirt, and surface treatment of the cam

■ Reducing contact force

Improvements to the shape, and reduction of tension of piston rings, optimization of the set load of valve springs, crank shaft layout, shape of timing chain, tension of timing belt, etc.

■ Reducing friction by improving lubricants

Application of low-viscosity engine oils

■ Reducing resistance when stirring the engine oil

Optimization of the oil level

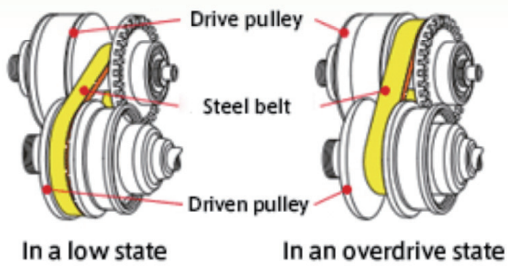


Products and Technologies / Development of Fuel Economy Improving Technologies / Vehicle Body Improvement



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.

CVT Continuously Variable Transmission



A continuously variable transmission (CVT) varies transmission ratio by seamlessly changing the effective diameter of the pulleys.

It seeks to improve fuel efficiency by controlling driving power. Based on throttle position information, driving power is controlled in accordance to the driving condition to achieve the most efficient balance between the engine and CVT.

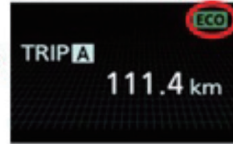
Eco-drive support

We are spreading equipment to support eco-driving, such as by equipping our vehicles with eco-drive support displays including an eco-lamp and fuel economy meter in the combination meter and central information display.

Eco-Drive Support Equipment (for Outlander)



Displays in meters
(Displays can be switched)



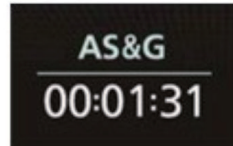
Eco-lamp



Average fuel consumption



Instantaneous fuel consumption



Idle-stop duration display



Eco-drive assist



ECO Score

- **Eco-lamp**
Lights up while driving in a fuel-efficient manner.
- **Fuel consumption meter**
Displays the average and current 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 of our vehicles to deliver excellent aerodynamic characteristics through repeated analysis and wind tunnel tests using Computational Fluid Dynamics (CFD) from the conceptual design stage.

Weight reducing technologies



We improve fuel economy by reducing vehicle weight.

We use aluminum, light but strong high-tensile strength steel panels, and rationalization of structures to keep vehicle weight down while ensuring safety through a larger vehicle body, thereby achieving a balance between fuel economy and safety.



Products and Technologies / Purifying Exhaust Gas while Driving



Vehicles powered by gasoline and diesel engines inevitably emit combustion gases from the engine while driving. These exhaust gases contain pollutants. Mitsubishi Motors constantly develops and promotes 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, hydrocarbons and nitrogen oxides (NOx) have been steadily restricted by regulations.

We have taken various measures since such regulations were first introduced. We currently 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, carbon monoxide, hydrocarbons, NOx and particulate matter have been regulated in some countries, such as Japan, United States and European countries, since the 1970s.

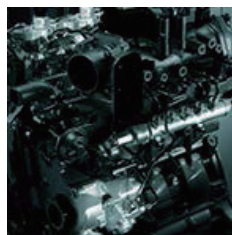
Since such regulations were first introduced, we have taken measures including improving the combustion technology. To comply with these regulations, we have developed and produced clean diesel engines by systemizing technology such as VG turbochargers, controlling combustion with a common rail fuel injection system, introducing after-treatment using NOx trap catalysts, and diesel particulate filters.

VG turbocharger



The VG turbocharger helps to improve fuel economy and suppress emissions of particulate matter through optimum supercharging across the engine's operating range.

Common rail fuel injection system



Particulate matter and NOx can be generated due to incomplete combustion. In Mitsubishi Motors vehicles, this is suppressed using a high-pressure fuel pump, common rail accumulator that stores highly pressurized fuel, and electronically controlled fuel injectors.

NOx trap catalyst



This converts toxic NOx into harmless nitrogen.

Diesel particulate filter (DPF)



This substantially reduces particulate matter.

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

Expanded launch of ultra-low emission vehicles certified as ULEV70 standard for North America

■ Do! Fiscal 2016 Achievements

In the *Mirage* and *Mirage G4* for North America, the company developed ultra-low emission vehicles classified as ULEV70 in California's Low Emission Vehicle Regulations. We greatly reduced the emissions of toxic substances in these models.

■ Check! Fiscal 2016 Self Evaluation

As scheduled, we expanded the launch of ULEV70-standard vehicles for North America.

■ Action! Future Issues and Plans

The company will continue to take action to comply with exhaust gas regulations in Europe and North America.



Mirage for North America



Mirage G4 for North America



Products and Technologies / Reduction of In-cabin VOC



To provide customers with a healthy and safe cabin space, Mitsubishi Motors works to reduce volatile organic compounds (VOCs) inside the cabin.

VOCs are compounds that easily volatilize at room temperature such as formaldehyde and toluene. These compounds are thought to cause sick building syndrome, and may irritate the eyes, nose, and throat. In an automobile cabin, they are mainly generated by adhesives and paint used in interior parts.

Progress

In order to reduce the amount of in-cabin VOCs, we are taking measures to reduce the sources of VOCs as well as VOCs themselves. All new models since the Mitsubishi / launched in January 2006 satisfy the voluntary guidelines set by the Japan Automobile Manufacturers Association (JAMA).

Example of Measures to Reduce VOCs*

	Area	Details of improvement
Measures against sources of VOCs	Central panel	Reduced organic solvents in the surface painting
	Carpet	Reduced aldehydes in pile adhesives
	Seat	Reduced organic solvents in fabric adhesives
Measures for reducing existing VOCs	Ceiling	Adsorbs and decomposes formaldehyde using the clean air filter deodorizing function
	Air-conditioner	Reduces VOCs with clean air filter with deodorizing function

* The performance of reduction measures depends on 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 countries 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 all aspects of the 3Rs including reduction and reuse. Since 1999, our unique Recycling Plan Guidelines have been observed throughout each process, 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. Example of parts made from recycled materials include spare tire covers and battery trays made using recycled materials from bumpers replaced during repairs by dealers.

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

- Promote 3R Design
- Use parts made from recycled materials

■ Do! Fiscal 2016 Achievements

- Promoted 3R Design
We proactively adopted 3R Design based on the Recycling Plan Guidelines in all vehicles developed in fiscal 2016.
- Used parts made from recycled materials
Bumper materials which were replaced during repairs at dealers were recycled to make the splash shield of the *Outlander PHEV*.

■ Check! Fiscal 2016 Self Evaluation

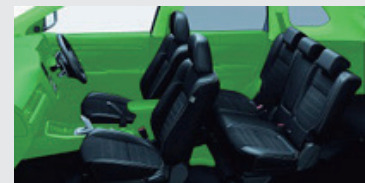
3R design was incorporated according to the Recycling Plan Guidelines during vehicle development, and development targets such as recyclability were achieved.

■ Action! Future Issues and Plans

We will continue to manufacture vehicles with due consideration to the 3Rs from the initial stages of development, so as to promote resource conservation and simplify recycling.



Exterior



Interior

Main sections (green sections) with easily recyclable "thermoplastic resin" in the *Outlander PHEV*, which was partially improved in fiscal 2016.

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*. 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).

* "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 drive batteries in electric-powered vehicles/Construction and operation of the recycling system

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

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 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 2016 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 97.8%.

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 2016 Self Evaluation

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

■ Action! Future Issues and Plans

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.



Products and Technologies / Reduction of Hazardous Substances

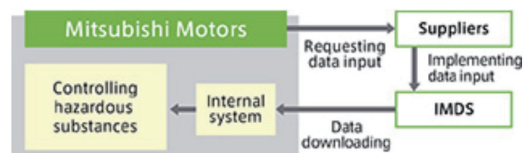


In accordance with the reduction targets of the Japan Automobile Manufacturers Association, Inc. and EU end-of-life vehicles directive, Mitsubishi Motors is working to reduce the use of four substances (lead, mercury, cadmium, and hexavalent chromium). We are also taking measures to comply with regulations 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 2016 Initiatives

■ Plan! Fiscal 2016 Targets

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

■ Do! Fiscal 2016 Achievements

Conformity with regulations for environmentally hazardous substances of continuously produced vehicles sold in FY 2016 and the reduction of use were confirmed by material data management with IMDS.

■ Check! Fiscal 2016 Self Evaluation

For continuously produced vehicles sold in FY 2016, the annual target was achieved.

■ Action! Future Issues and Plans

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



Business Activities / Efforts 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



Kyoto Plant - Kyoto



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



Business Activities / Efforts in Production / Reducing CO₂ Emissions



Mitsubishi Motors produces automobiles with less energy to prevent global warming along the theme of "Driving the earth; living with the earth".

By reducing the consumption of energy sources such as electricity and fossil fuels, we can control CO₂ emissions that cause global warming while also conserving the earth's limited resources. We actively promote global warming prevention through energy saving.

Equipment improvement for production

The waterborne paint lines at Okazaki Plant and Mizushima Plant use the waterborne 3WET paint method. This reduces CO₂ emissions by passing the painting workpieces through driving ovens only once compared to usual twice.



The waterborne paint Plant

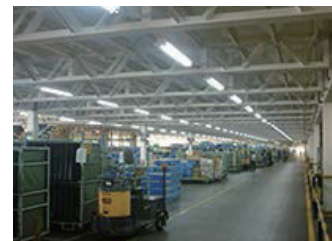
Promoting renewable energy and energy-saving units

By installing photovoltaic power generation panels on the roof of plants, we use renewable energy for office lighting and to charge electric-powered vehicles.

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

Improving production processes

We are reducing our energy consumption by consolidating our production processes by reviewing our production capabilities.

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

30% reduction of CO₂ emissions per production vehicle in plants in Japan and overseas (MMTh, MEC, MMPC) compared to FY2005

■ Do! Fiscal 2016 Achievements

CO₂ emissions per vehicle are reduced by 32% compared to FY 2005. We worked on the following main initiatives to promote energy conservation.

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

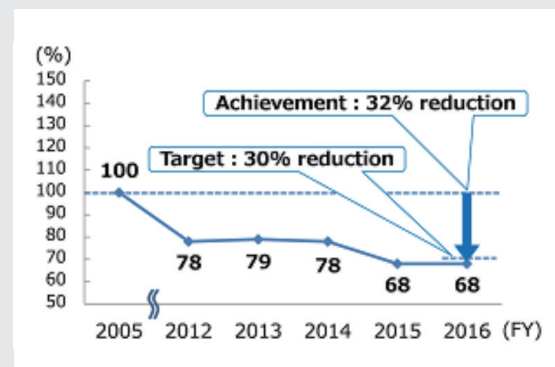
■ Check! Fiscal 2016 Self Evaluation

CO₂ emissions per production vehicle were reduced by 32% in plants in Japan and overseas compared to the 30% reduction target for FY 2016.

■ 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, Kyoto Plant
- Domestic affiliated companies
Pajero Manufacturing Co., Ltd., Suiryo Plastics Co., Ltd.,
- Overseas affiliated companies
MMTh, MEC, MMPC
- 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.



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 emitted from production plants, which can be a cause of acid rain and photochemical smog.

Reducing VOCs*1 Emissions

We endeavor to reduce the amount of VOCs emitted from vehicle body production by reducing consumption of paint and improving recovery rate of used paint thinner. We achieve this by 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. To reduce SOx emissions, we changed the fuel for the boilers to kerosene or city gas, which has less sulfur.

*2 NOx: Nitrogen oxide, SOx: Sulfur oxide

Reducing particulate matter

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

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

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

■ Do! Fiscal 2016 Achievements

We aimed to reduce the amount of VOC emissions per painting area from body and bumper painting, by collecting waste paint during color changes, optimizing paint discharge, and using electro static air spray guns. However, emissions increased to 38g/m².

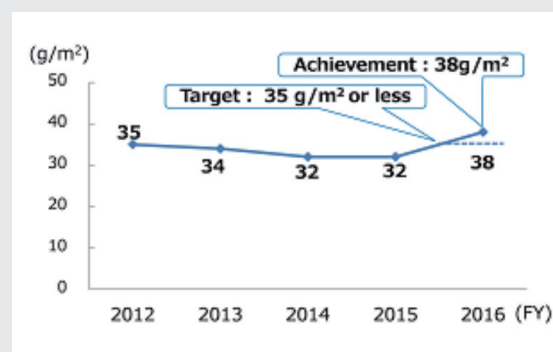
■ Check! Fiscal 2016 Self Evaluation

Due to the transfer of production lines, the increased number of thinner cleaning process in production of prototypes with new colors, and slow adoption of measures to deal with over spray areas during production, we did not achieve our fiscal 2016 target.

■ Action! Future Issues and Plans

Given the above reasons for the increase, we work to reduce emissions by reviewing the painting process.

VOC emissions per painting area in domestic plants



Target Sites

Okazaki Plant, Mizushima Plant,
Pajero Manufacturing Co., Ltd., Suiryo Plastics Co., Ltd.



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



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 that 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

Polychlorinated biphenyls(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 thoroughly investigate the current management of PCB waste, 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 2016, we properly disposed of 3,457 fluorescent light ballasts stored at our Okazaki Plant. Wastes with low concentrations of PCB were also properly disposed in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes.



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



At production plants, we convert industrial waste materials generated from production processes into reusable resources, reduce the volume of waste discharged, and maintain landfill waste disposal rate of zero*¹ at every plant.

*¹ This means land reclamation rate below 0.1 %

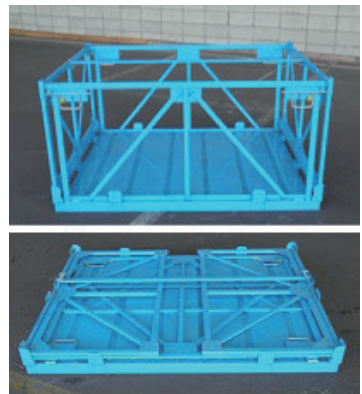
Converting waste into reusable resources and suppressing waste generation

We convert spent oil into usable oil, waste sand from foundries into base course material, and sludge into raw material for cement. We also aim to reduce the metal scraps generated from production processes and the amount of waste sand that is generated by foundries.

Conserving Resources at Knock-Down (KD)*² Plants

To reduce the amount of cartons and pallets used for transporting product to knock-down plants, we are increasing the use of returnable racks, thereby reducing our consumption of steel.

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



Returnable racks

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

- 46% reduction of externally-disposed waste per production vehicle at domestic plants compared to fiscal 2005 (116 kg/vehicle)
- 83% reduction in steel used per unit shipment volume at domestic KD plants (13 kg/case)
- 0.4% reduction of by-products (metal scrap and casting waste sand) per sales by the end of fiscal 2016 compared to fiscal 2011 (9.3 t/hundred million yen)

■ Do! Fiscal 2016 Achievements

Reducing externally-disposed waste

We promoted the recycling activities to internally reuse waste and valuable resources generated within our companies. As a result, externally-disposed waste (amount recycled externally as opposed to being used within the company) per production vehicle was reduced 48% to 112 kg/vehicle from fiscal 2005. Direct landfill disposal rate of waste is maintained at a high level of 0.03%.

Conserving resources in KD plants

Steel used per unit shipment volume was reduced 91% to 7.0 kg/case compared to fiscal 2006 due to the expansion of returnable rack use.

Suppressing generation of by-products

Metal scraps and casting waste sand per sales was reduced 48% from fiscal 2011 to 4.9 t/hundred million yen.

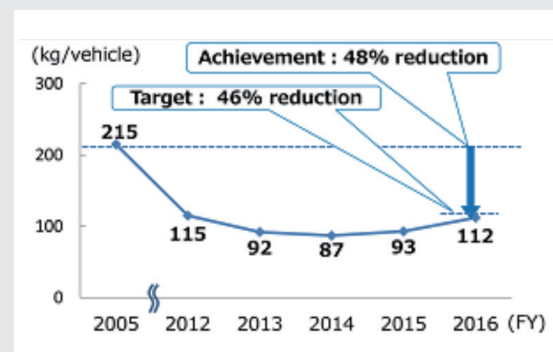
■ Check! Fiscal 2016 Self Evaluation

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, Kyoto 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

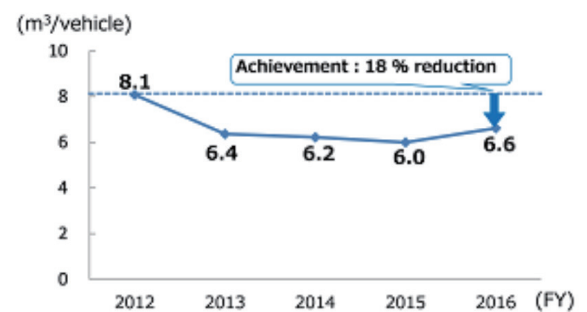
Plant	Water Withdrawal Source (Industrial water, City water)	Drainage
Okazaki Plant (Okazaki, Aichi Pref.)	Yahagi River	Tributary of Kanda River, etc.
Kyoto Plant -Kyoto (Kyoto, Kyoto Pref.)	Lake Biwa	Sewage line
Kyoto Plant -Shiga (Konan, Shiga Pref.)	Lake Biwa	Sewage line
Mizushima Plant (Kurashiki, Okayama Pref.)	Takahashi River	Hakken River → Mizushima Port
Pajero Manufacturing Co., Ltd. (Sakahogi-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 2016, in production plants of the company and Pajero Manufacturing Co., Ltd., the water withdrawal amount per production vehicle was approximately 6.6m³/vehicle which is an 18% reduction compared to FY 2012.

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

Transition of Water Withdrawal per Production Vehicle



Target Sites

Okazaki Plant, Mizushima Plant, Kyoto Plant, Pajero Manufacturing Co., Ltd

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 2016 circulated water used amount:111 million m³
- **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)**



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 of logistics, including energy use and CO₂ emissions, is particularly significant.

Mitsubishi Motors proactively works establish environmentally-friendly logistics systems such by improving transport efficiency and reducing 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 to improve the modal shift rate and use ECO Drive in transport vehicles. We also consolidate transportation route for 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 2016 Initiatives

■ Plan! Fiscal 2016 Targets

Reduction in CO₂ emissions per unit of transportation (procurement logistics and other transportation) by 0.3% compared to fiscal 2006.

■ Do! Fiscal 2016 Achievements

Reduced CO₂ emissions per unit of transportation for logistics in Japan by 3.4% compared to FY 2006.

Reduced CO₂ emissions (gross weight) to 17.9 kilotons, approximately 2,900 tons less than the amount for the previous year.

■ Check! Fiscal 2016 Self Evaluation

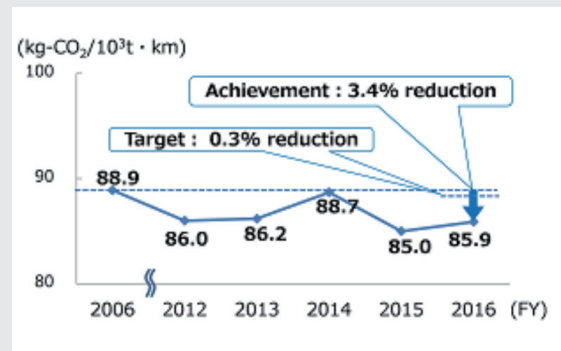
The targets for reduction rate of CO₂ emissions per unit was achieved, with an actual reduction of 3.4% against the target of 0.3%.

■ Action! Future Issues and Plans

We will continue to promote the following activities for improving logistics route, increasing load factor, and improving fuel economy to reduce unit CO₂ emissions in FY 2017.

- Change transport method of finished vehicles and components to transport by vessels and • railways (improve modal shift rate)
- Reduce transportation distance by locally procuring parts for production
- Improve packaging appearance and packing of parts parcels for production during shipping
- Improve freight efficiency by consolidating transport routes for parts and accessories
- Increase freight efficiency by increasing the number of engines loaded for transport
- Improve packing of KD parts in containers
- Improve fuel economy by encouraging the introduction of ECO Drive and eco-tires
- Promote fuel economy improvements by using fuel-efficient vehicles

CO₂ emissions per unit of transportation





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 that take into account all processes from manufacturing of materials and parts to the delivery of these materials and parts. Based on the basic concept of purchasing materials and parts with low environmental impact from suppliers who continuously work to reduce their environmental impact, we request 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.

We promote green procurement together with suppliers under our belief of spreading of 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 sub-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 to acquire and renew of external certifications of environment management systems, as well as to manage hazardous substances, promote the 3Rs submit LCA data to allow us to understand the lifecycle environmental impact, reduce environmental impact reduction in business activities, and reduce their environmental impact related to logistics.

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

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

- Promote improvements to the management system of environmentally hazardous substances at suppliers
- Revise the Green Procurement Guidelines and make suppliers aware of them

■ Do! Fiscal 2016 Achievements

- Promoted improvements to the management system of environmentally hazardous substances at suppliers
We promoted improvements to management methods for data on environmentally hazardous substances. We did this by conducting opinion-sharing sessions with our suppliers on the issues of IMDS entry and regulations governing chemical substances.
- Revised the Green Procurement Guidelines and made suppliers aware of them

Our Green Procurement Guidelines have been revised to include the latest information on related regulations and our initiatives for attaining external certification of our entire supply chain. The revised guidelines have been sent to all suppliers. In addition, at our New Year Meeting for suppliers and at our annual Supplier Meeting, we explained to our suppliers the importance of our environmental initiatives as well as our procurement policy.

■ Check! Fiscal 2016 Self Evaluation

All items were carried out as planned.

■ Action! Issues and Plans

We will enhance the Green Procurement Guidelines and work to further enhance the management system of environmentally hazardous substances at suppliers, including at those of our main overseas production bases such as Thailand.



Business Activities / Efforts in Offices and Dealers



Automobiles have an impact on the environment during all phases of the lifecycle, from development, production, logistics, sales, and use to disposal. Therefore, Mitsubishi Motors believes that we promote action to reduce the environmental impact through all business activities including our offices and dealers.

At dealers in particular, we promote action to spread electric-powered vehicles with outstanding environmental performance in addition to energy conservation activities and recycling activities. In this way, we can work toward a clean low-carbon society together with our customers.

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. We also promote the sales of environmentally friendly vehicles centered around EV and PHEV, as well as installation of battery charging infrastructure necessary for environmentally friendly vehicles.

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

In order to promote and spread EV and PHEV, quick charging points are installed at each dealer and "EV QUICK" signboards are also displayed so everyone can immediately know about the quick charging point. Local residents are also welcome to use these quick charging points. We are also putting effort into next-generation dealer "Dendō Drive Station" to introduce the value brought by the EV/PHEV.



"EV QUICK" Signboard



Quick charger installed in a dealer

Reduction of CO₂ Emissions

We set CO₂ emissions reduction targets for each fiscal year at internal non-production facilities such as offices and development facilities, as well as development, sales, logistics, and afterservice affiliated companies in Japan and overseas. We then promote initiatives to achieve these targets.

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

Reduce unit CO₂ emissions in non-production facilities*1 by 20% (compared to fiscal 2010)

■ Do! Fiscal 2016 Achievements

Energy conservation activities focusing on the reduction of power use were carried out, and unit CO₂ emissions at target sites were reduced by an average of 28%.

■ Check! Fiscal 2016 Self Evaluation

The fiscal 2016 target of 20% reduction was achieved.

■ Action! Future Issues and Plans

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

*1 The target sites are as below.

- Development, logistics, and other non-production facilities within Mitsubishi Motors Corporation
- Seven affiliated non-production companies in Japan:
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.
- Eight non-production overseas affiliated companies
MMNA, MRDA, MME, MRDE, MMSC, MMMEA, MMNZ, MMAL



Collaboration with Society / Initiatives for Preserving Biodiversity



All living creatures are connected through various intricate relationships to live in balance. We, as human beings, live with the blessings of this biodiversity every day. As an automobile manufacturer, Mitsubishi Motors has impacts biodiversity both directly and indirectly due to land use (including the construction of plants), the release of chemical substances from sites, and the greenhouse gas emitted 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 continue to 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 or adjacent to protected areas according to the Nature Conservation Act and prefectural codes. However, we have been progressively conducting surveys on ecosystems in order to understand the impact our business activities have on biodiversity. We learned that Shiga Plant has a high biodiversity value since the area around the plant is home to various rare species.

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 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 (Production, offices/dealers, logistics) • Reduction of waste generation (Production) • Decrease in chemical substance release
2. Consideration to biodiversity in products	<ul style="list-style-type: none"> • Fuel economy improvement/ CO₂ emission reduction • Exhaust gas countermeasures • Recycling-based design
3. Education, understanding and self-awareness	<ul style="list-style-type: none"> • Ecosystem Survey at Kyoto Plant-Shiga (2013) -Publication of "Mitsubishi Motors Wild Life of Kyoto Plant-Shiga" (2014) <Japanese only> • Kyoto Plant-Shiga Wild Life Study Meeting (2013) • Okazaki Plant Ecosystem Survey (2016)
4. Cooperation and collaboration with society	<ul style="list-style-type: none"> • Request for consideration of the environment to suppliers • Collaborative environmental preservation with society
5. Information disclosure	<ul style="list-style-type: none"> • Information disclosure through environment websites and environmental reports (CSR report, etc.)

Fiscal 2016 Initiatives

■ Plan! Fiscal 2016 Targets

- Conduct ecosystem surveys at the Okazaki Plant

■ Do! Fiscal 2016 Achievements

From February to November 2016, we conducted ecosystem surveys in the Okazaki region (Okazaki Plant and Research & Development Center) targeting plants, mammals, amphibians, reptiles, avian species and insects. Through the surveys, we gained an understanding of the composition of plants in the green spaces within the Okazaki region and of how animals use these green spaces. The distinctive species we found were Eurasian Sparrowhawk, Northern Goshawk, and *Polistes japonicus japonicus* (a species of paper wasp found in Japan). These species are listed in the Red Data Book (RDB) published by Japan's Ministry of the Environment. We also have a clearer understanding of the issues facing us, such as the presence of alien plant species.

■ Check! Fiscal 2016 Self Evaluation

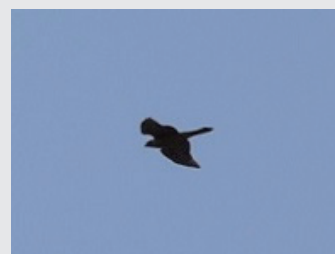
Progressed as planned.

■ Action! Future Issues and Plans

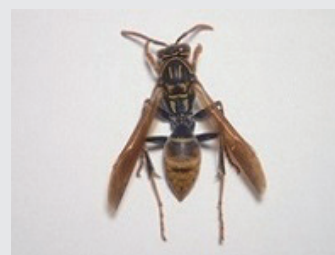
With a clearer understanding of the issues through our ecosystem surveys, we intend to plan and execute measures within the Okazaki region. These include management of green spaces, and raising the awareness of our employees. In addition, we will commence new ecosystem surveys in the Mizushima region from fiscal 2017.



Eurasian Sparrowhawk
"Near Threatened" in RDB



Northern Goshawk
"Near Threatened" in RDB



Polistes japonicus japonicus
"Data Deficient" in RDB



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. In addition, we listen to opinions from various people through our participation in environmental exhibitions and events, and then use these opinions in our initiatives.

Release of Environmental Information in Website and Environmental Report

The company releases information on the concept and details of our initiatives on the company website and in environmental report to make our environmental initiatives known widely.

Environmental report is included in the "Mitsubishi Motors Corporate Social Responsibility Report."



Environmental Website



Environmental Report

Participation in Environmental Exhibitions and Events

The company proactively participates in environmental exhibitions and events. There, we spread awareness about our environmental initiatives, which are built around electric-powered vehicle technology, and listen to opinions from various people for use in our initiatives.

Main Environmental Exhibitions and Events

Eco-Pro Exhibition



Eco-Pro Exhibition is the largest environmental exhibition in Japan. We introduce our environmental initiatives, including EV/PHEVs, and ask for opinions from the visitors. In addition, we have a quiz for children to provide them with an opportunity to think about the environment.

Automotive Engineering Exposition



The Automotive Engineering Exposition is Japan's largest exhibition of automotive engineering.

We introduce our environmentally friendly technologies, including exhibits of component technology that forms the structure of EV/PHEVs and new model engines with great environmental performance.

FY 2016 Main Participating Exhibitions and Events

Time	Event	Venue	Exhibition Details
April	Outdoor Day Japan Tokyo	Yoyogi Park event area and others (Tokyo)	Power feeding demonstration with Outlander PHEV
	GO OUT JAMBOREE	Fumotoppara Camp Site (Shizuoka)	Power feeding demonstration with Outlander PHEV
	Motor Sport Japan 2016 Festival in Odaiba	Aomi district, Tokyo Waterfront City (Tokyo)	Power feeding demonstration and test drive of Outlander PHEV
November	EV Festival 2016	Tsukuba Circuit Course 1000	Power feeding demonstration and test drive of Outlander PHEV
December	EcoPro 2016	Tokyo Big Sight (Tokyo)	Panel displays on environmental initiatives, and exhibition and test drive of Outlander PHEV

Fiscal 2016 Initiatives

■ Plan! FY 2016 Targets

- Enhance information disclosure according to GRI*1 Sustainability Reporting Guidelines
 - Define important environmental issues (materiality)
- *1 Global Reporting Initiative

■ Do! FY 2016 Achievements

- Enhanced information disclosure according to GRI Sustainability Reporting Guidelines
We enhanced the information in our Environmental Report and website by referencing the GRI G4 Sustainability Reporting Guidelines. Specifically, we expanded the scope of environmental data collected. At the same time, we added additional indicators, such as fuel economy data by country and region for product indicators, and emissions of sulphur and nitrogen oxides for business activity indicators.
- Defined important environmental issues (materiality)
Using the concept in the GRI guidelines, we identified important environmental issues (materiality) based on importance to our company and the expectations of our stakeholders, and developed proposals for these issues.

■ Check! Fiscal 2016 Self Evaluation

Actions were taken as planned.

■ Action! Future Issues and Plans

On April 20, 2016, we made an announcement regarding improper conduct in fuel consumption testing. We recognize this has significantly changed our company's situation and the expectations of our stakeholders. Given this, we will be defining materiality and announcing results. In addition, we will make effort to enhance information disclosed based on this materiality.



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.

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.

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 participate 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.

FY 2016 Environmental Conservation Activities

Initiatives		Venue	Collaboration Partner	Time
Forest preservation activity	"Pajero Forest"	Hayakawa-cho, Yamanashi-Pref.	Hayakawa-cho, Yamanashi-Pref. 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	Preserving biodiversity (Preservation of White egret flower wetland)	Kyoto Plant-Shiga (Konan, Shiga-Pref.)	Lago Co., Ltd.	November
Cleaning activity, mowing activity	Mowing and cleaning activity	Okazaki Plant (Okazaki, Aichi-Pref.)	—	Throughout the year (59 times)
		Mizushima Plant (Kurashiki, Okayama-Pref.)	—	Throughout the year (32 times)
		Kyoto Plant-Kyoto (Kyoto, Kyoto-Pref.)	—	Throughout the year (12 times)
		Kyoto Plant-Shiga (Konan, Shiga-Pref.)	—	Throughout the year (9 times)
		Pajero Manufacturing Co., Ltd. (Sakahogi-cho, Gifu-Pref.)	—	Throughout the year (Twice)
	"Lake Kojima Watershed Cleaning Campaign"	Kurashiki, Okayama-Pref.	"Small Kindness Movement" Kurashiki, Okayama Branch Lake Kojima Watershed Environment Preservation Promotion Council	October November
Alien species termination activity	"Lanceleaf tickseed Termination Campaign"	Pajero Manufacturing Co., Ltd. (Sakahogi-cho, Gifu-Pref.)	Sakahogi-cho, Gifu-Pref.	May
	Preservation of White egret flower wetland	Kyoto Plant-Shiga (Konan, Shiga-Pref.)	—	November



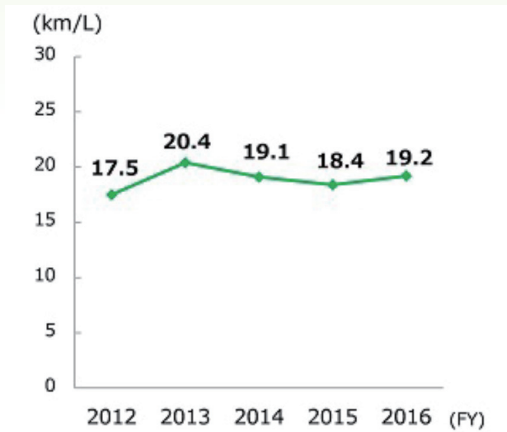
Environmental Initiatives

Environmental Data



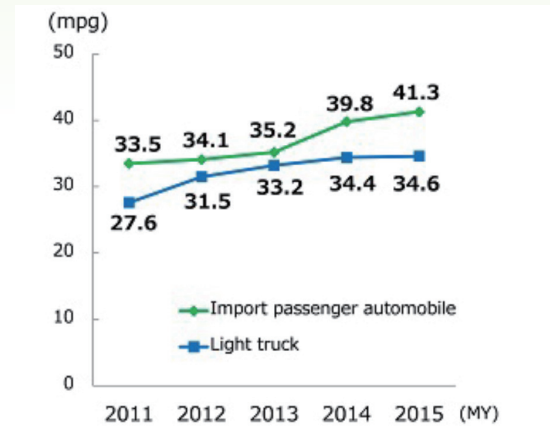
Product Indicators (Fuel Economy/CO₂ Emissions)

Corporate Average Fuel Economy in Japan



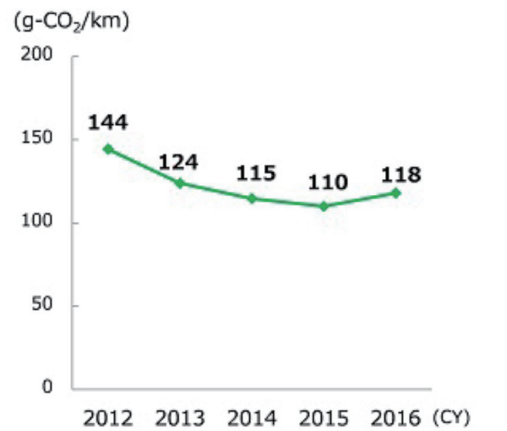
• Excluding electric vehicle and plug-in hybrid electric vehicle

Corporate Average Fuel Economy in the United States



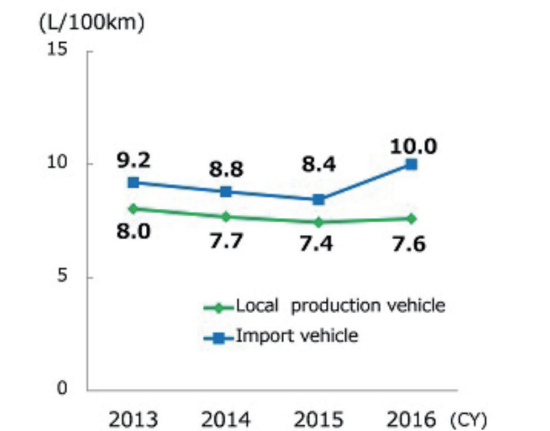
• Reported values to United States Environmental Protection Agency

Corporate Average CO₂ Emissions in Europe (Passenger cars)



• Reported values to European Commission

Corporate Average Fuel Consumption in China



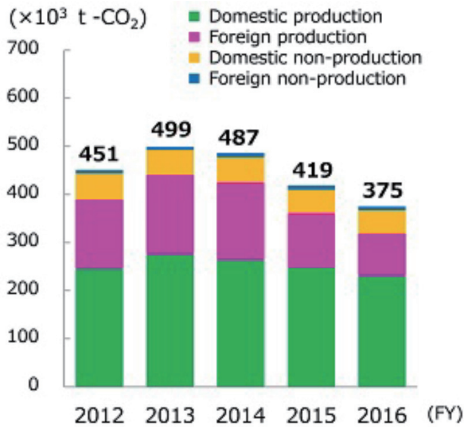
• Reported values to Chinese authorities

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

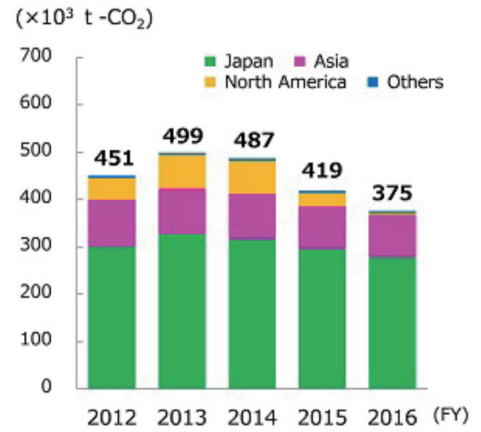
Business Activity Indicators

- Target sites are 22 global environmental management target companies (excluding the data with annotation).
- Some data in the past years was recalculated.

CO₂ Emissions (individual production or non-production)



CO₂ Emissions (individual region)



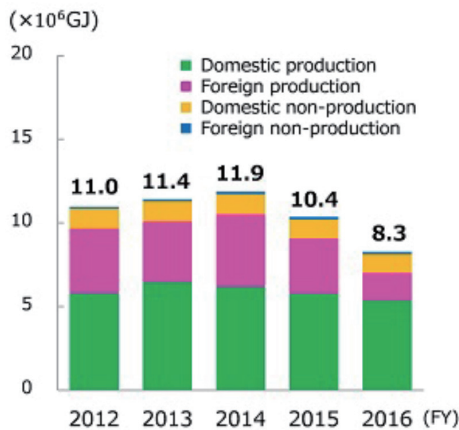
• CO₂ Emission Factors

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

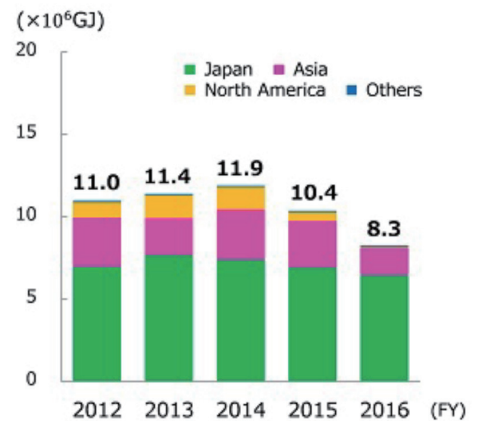
Electrical power used in overseas : values for 2005 with reference to IEA "CO₂ Emissions from Fuel Combustion (2010 edition)" or available values at each site

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

Energy Input (individual production or non-production)

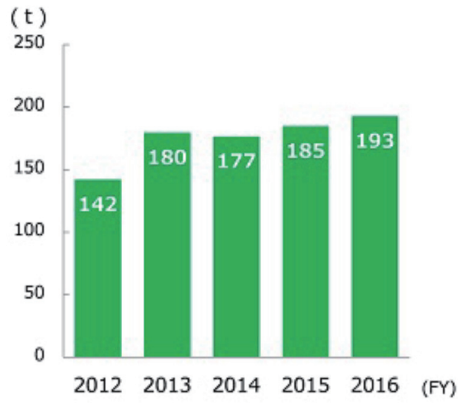


Energy Input (individual region)



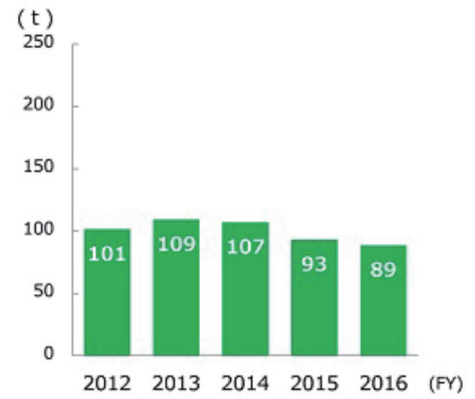
- Conversion factor: based on "Act on the Rational Use of Energy," etc.

Sulphur oxide (SOx) Emissions



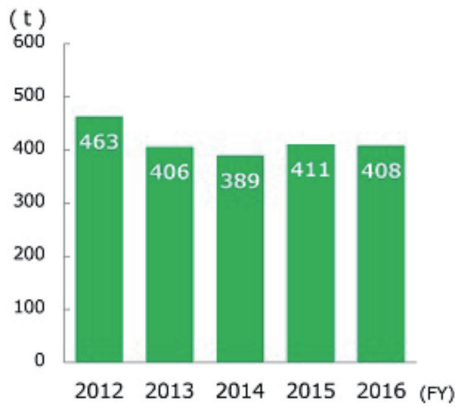
Calculation method : calculated the weight of sulphur contained in the used fuel and converted the weight into sulphur dioxide (SO₂)

Nitrogen oxides (NOx) Emissions



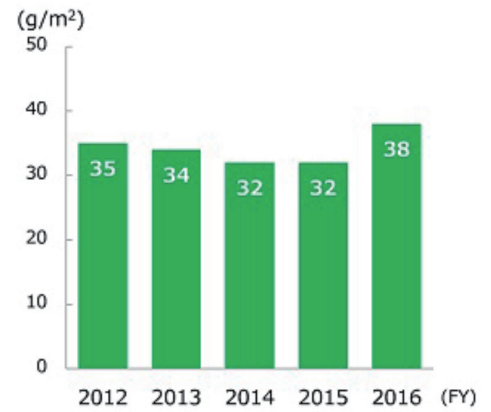
- Calculation method : calculated with multiplying each conversion factor to fuel consumption
- Conversion factor : based on "Environmental Activity Evaluation Program" of the Ministry of the Environment

Release and Transfer of PRTR substances



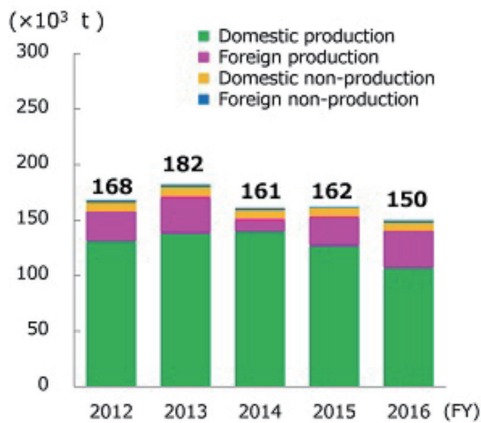
Target site : Okazaki Plant, Mizushima Plant, Kyoto Plant, Pajero Manufacturing Co., Ltd

VOC Emissions (per unit painting area)



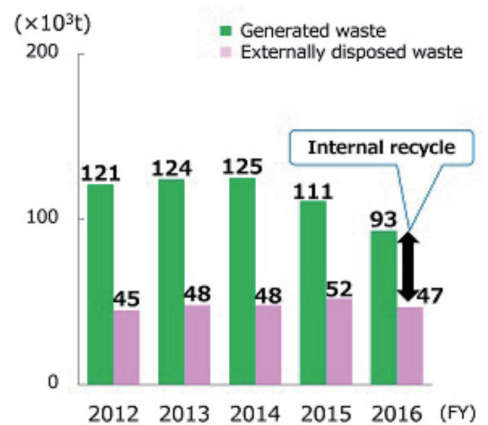
Target site : Okazaki Plant, Mizushima Plant, Pajero Manufacturing Co., Ltd, Suiryu Plastic Co., Ltd

Generated Waste



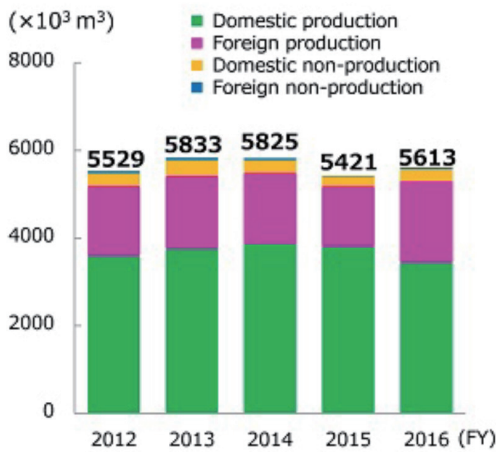
• Excluding some foreign affiliated companies

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



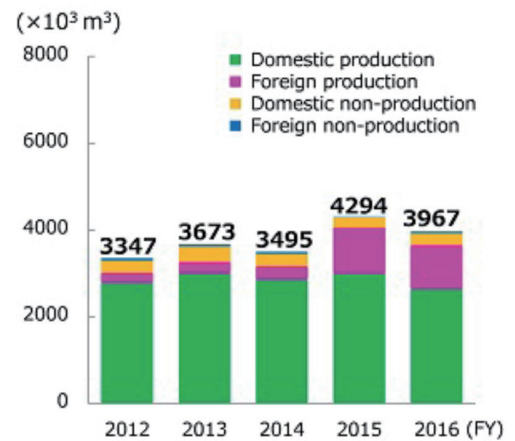
Target site : Okazaki Plant, Mizushima Plant, Kyoto Plant

Withdrawn water volume



• Excluding some foreign affiliated companies

Wastewater volume



• Excluding some foreign affiliated companies
• Including some estimates

Biodiversity Indicators

Condition of Protected or Restored Habitats (Achievements by FY2016)

	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
Kyoto Plant-Shiga	Environmental preservation of "Yatsuda" where White egret flower lives	Restoration of cogongrass gregariousness, which provides habitats for various insects
Kyoto Plant-Kyoto	—	Planting Asarum caulescens, Blackberry lily and Eupatorium japonicum, 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 FY2016)

Kyoto Plant-Shiga (investigation period :from 2013 to 2014)

Category	Number of species	Discovered species
VU (Vulnerable)	3	Clouded salamander, Whirligig Beetle and Oryzias latipes
NT (Near Threatened)	7	White egret flower, Agrostis valvata, Eurasian Sparrowhawk, Japanese pond turtle, Black-spotted Pond Frog, Trigomphus citimus and Trigomphus interruptus
EN (Endangered)	1	One species of insects not to disclose

Okazaki Plant and Research & Development Center (investigation period:2016)

Category	Number of species	Discovered species
NT(Near Threatened)	2	Nothern Goshawk, Eurasian Sparrowhawk
DD(Data Deficient)	1	Polistes japonicus japonicus