Social and Environmental Report 2013





Drive@earth





In reporting on social and environmental efforts in the 2012 fiscal year, I would first like to offer my deepest apologies to customers and all other stakeholders for any inconvenience or concerns they experienced owing to issues resulting from instruction by the Ministry of Land, Infrastructure, Transport and Tourism regarding recall notifications for minicars.

On December 19, 2012, we submitted to the Ministry of Land, Infrastructure, Transport and Tourism a fourth recall notice since 2010 on minicar engine oil leaks. At the same time, we presented a report backgrounding the issue and the results of internal investigation. The investigation showed that while we did not violate any laws, we did not maintain a clear decision-making criteria or a clear stance on recalls and other measures in the marketplace or on review processes. Issues that the investigation revealed included problems with the time devoted to technical assessments and insufficient attention to the inconvenience we caused customers. The Ministry reprimanded us on the day we submitted the report. The Ministry also announced an on-site inspection on April 23, 2013, and included its findings in a test results report.

We took the Ministry's findings very seriously, and as part of our response we swiftly submitted a report on improvement measures. Another part of our response was to deploy the Customer First Program, through which we are undertaking reform initiatives to review all business processes related to quality so we can return to a rigorous companywide commitment to a customer-driven perspective that makes safety and security of our customers our top priority. To drive our initiatives, we set up reform teams in three fields—quality, corporate culture, and business quality. The head officers of the Development, Production, and Domestic Sales Group Headquarters lead these teams, whose responsibilities are to formulate and execute improvement plans. On top of that, we established the Reform Committee, which reports directly to the president, to monitor progress as part of a structure to properly follow up on activities.

MMC has also reflected on previous recall issues, and has worked to ensure compliance with business ethics, considering societal norms that change with the needs of the times, as well as laws and ordinances, international rules and internal regulations. I believe, however, that our endeavors have unfortunately been inadequate. We have therefore returned to the basics of Compliance First, Safety First, and Customers First in practicing a corporate philosophy that makes CSR a top priority, thereby ensuring that our commitment to CSR underpins our corporate activities. At the same time, we made progress in various ways in terms of environmental initiatives that are central to the JUMP 2013 mid-term business plan, centered on developing and selling vehicles incorporating electrical systems.

MMC's corporate tagline of Drive@earth seeks a sustainable future, through which we endeavor to create unique vehicles that balance driving pleasure and environmental friendliness. We have accordingly focused on the @earth TECHNOLOGY concept in next-generation technological development.

A key outcome of our efforts has been the Mitsubishi *Plug-in Hybrid EV System* that powers the *Outlander PHEV* that went on sale in January 2013. This model has overcome the two key challenges of electric vehicles (EVs), notably cruising distance and the charging infrastructure. The vehicle employs a large drive battery. It has a plug-in cruising range of more than 60 km (under the JC08 mode) and can charge the drive battery with the engine to attain a total cruising range of more than 800 km (under the JC08 mode) when the battery is fully charged and the fuel tank is full.

We expanded our EV lineup in January 2013 when we launched the *MINICAB-MiEV TRUCK*. This model complements the *i-MiEV* that we introduced in 2009 and the *MINICAB-MiEV* that we brought out in 2011.

Although problems with drive batteries have inconvenienced some customers, MMC will continue to develop and introduce vehicles employing electrical systems. We will also collaborate with governments and municipalities, companies, and other entities in Japan and abroad to popularize EVs and plug-in hybrid EVs and help create a lowcarbon society.

We have also made progress with technologies that make existing gasoline-powered cars more fuel-efficient. The *eK Wagon*, which we launched in June 2013, employs the Auto Stop & Go idle-stop system and improved aerodynamics. These and other features have resulted in an outstanding fuel efficiency of 29.2 km/L (in JC08 mode). Following up on the 2010 model *Pajero*, we incorporated "clean diesel," which delivers high fuel efficiency and lower emissions as a result of technological advances in *DELICA D:5* in December 2012. It has been very well received for its excellent environmental performance and handling.

During the year, we forged ahead with projects focusing on environmental initiatives and emerging markets to help materialize "Growth and Leap Forward," pursuing progress in new model launches, production and sales. Specific achievements included bringing out the new *Mirage*, *Outlander* and *Outlander PHEV*. We reinforced our production capabilities in Thailand, China, Russia and other emerging markets. We also progressed with selection and concentration initiatives, as part of which we divested Netherlands Car B.V., a European production subsidiary that had been unprofitable. This and other moves enabled us to increase revenues and earnings despite an adverse business climate stemming from the prolonged European sovereign debt crisis.

Our mid-term business plan will end in the 2013 fiscal year. We will thus use the term to complete initiatives and put ourselves in position for the successor plan, which we will announce during the current fiscal year. We will undertake several key endeavors. Overseas, we will make worldwide releases of models launched during the 2012 fiscal year and expand unit sales. In Thailand, China and Russia, we will add more locally produced models, and plan to boost unit sales. Domestically, we will endeavor to reinforce cost-competitiveness of our plants while introducing new minicars to increase unit sales.

In conclusion, we continue to support restoration in areas hit by the Great East Japan earthquake by participating in Project YUI. This is a consortium of public and private sectors in Japan, and provides full support to employees volunteering their assistance. We will continue various activities to aid the restoration of disaster-hit areas. All of us at Mitsubishi Motors will give 100% towards contributing to our environment and community in order to meet the expectations of all of our stakeholders. Moving forward, I sincerely ask for your unwavering support and guidance.

September 2013

8. masupo

Osamu Masuko President



Mitsubishi Motors' unique approach to automobile manufacturing aims to provide products that balance driving pleasure and consideration for the environment—towards a sustainable future for everyone.

Our Mid-Term Business Plan "Jump 2013" announced in 2011 adopted a business strategy based on concentrating resources in emerging markets and environmental initiatives, and established "Drive@ earth" as our corporate tagline.

In order to achieve these business strategies, MMC is focusing its efforts on developing products with built-in "@earth TECHNOLOGY," the integration of our unique, innovative technologies.



"Drive@earth"holds two meanings: a renewed focus on the connection between driving and environmental issues, and a reference to the unique variety of landscapes our planet offers us to discover.

The phrase "Drive@earth" also shows that Mitsubishi Motors is committed to manufacturing vehicles that demonstrate the synergy between dynamic and environmental performance, and in this way building a connection to customers, to communities, and ultimately to the natural world around us.

@earth TECHNOLOGY is the general term for the next-generation advanced technology that embodies the spirit of "Drive@earth" in the three pillars of technological development: "Environmental Responsibility," "Driving Pleasure" and "Toughness & Safety."

For more details, refer to the MMC website. Web http://www.mitsubishi-motors.com/en/spirit/earth_technology/index.html

Environmental Responsibility

First of all, regarding technologies aimed at enabling us to contribute to the environment, MMC is focusing development programs on four technologies to respond the earth's diverse needs.

The first technology is electric vehicles ("EVs"). In 2009, MMC launched the *i-MiEV*, thus becoming the world's first automaker to begin mass production and sales of an automobile that emits absolutely no CO₂ or other emissions while being driven. MMC followed this by launching sales of the commercial minicar-class *MINICAB-MiEV* in 2011. Furthermore, in January 2013, MMC expanded the EV lineup with the launch of sales of the *MINICAB-MiEV TRUCK*, a light-weight truck for commercial use, and reached cumulative EV sales of 30,000 vehicles^{*1}. Going forward, MMC will continue to develop EV technologies that are even more eco-friendly, such as extending cruising ranges.

Also, MMC is proposing ways to utilize the energy storage function of EVs to supply power during natural disasters and other emergencies, as well as for smart houses which manage a home's overall electric power use.

Furthermore, we are progressing with experimental studies in the "M-tech Labo," a new energy solution that can store the energy from solar power or other clean energy sources in EVs, and then supply this electricity from EVs to factories or offices during peak electric power consumption times in order to control the demand peaks.



The MiEV HOUSE exhibit at Tokyo Motor Show 2011

The second technology MMC is focusing on is the

Mitsubishi *Plug-In Hybrid EV System* (abbr. PHEV). This is a technology unique to MMC which utilizes the EV technology cultivated through *MiEV*, and was used in the all-new *Outlander PHEV* which went on sale in January 2013. The *Outlander PHEV* has a large drive battery, and is capable of driving 60.2 km^{*2} in EV driving mode, which allows drivers to enjoy clean driving with zero emissions in almost all everyday driving situations. The *Outlander PHEV* has three driving modes, EV Driving Mode, Series Hybrid Mode, in which the gasoline engine generates electric power while the vehicle is being driven, and Parallel Hybrid Mode, in which the gasoline engine drives the vehicle while being assisted by the electric motors. The act of automatically selecting the optimum driving mode in response to the driving circumstances and the remaining battery power allows for fuel-efficient driving. With this technology, combined fuel consumption^{*3} of 67.0 km/L^{*4} was achieved, while a hybrid fuel efficiency of 18.6 km/L^{*4} was achieved.

This PHEV overcomes the cruising range issue as well as the lack of battery charging infrastructure, both of which have been issues for EVs, and MMC will continue to bolster its lineup of PHEVs going forward.



The system composition of the Outlander PHEV

- *1: Includes overseas sales and supply of OEM vehicles.
- *2: The cruising range when using charged electric power is the figure under the determined test conditions.
- *3: Combined fuel consumption rate: This representative figure is calculated by combining the fuel consumption rate from plug-in driving
- (using power from an external charge) with the fuel consumption rate from hybrid driving.
- *4: JC08 mode fuel consumption rate (Screening figure of Japanese Ministry of Land, Infrastructure and Transport)

Words From a Developer

How can we go to a distant ski resort by EV without charging battery? The answer is the PHEV 4WD, an SUV with an extended cruising range and which is adapted to drive on snowy roads. In order to increase the cruising range of the *Outlander PHEV*, a electric generator driven by the gasoline engine was used, and a



Assistant Manager, EV/Powertrain Systems Technology Department **Yoshihiro Sakaguchi** Outlander PHEV.

Twin Motor 4WD system was created by placing powerful motors in both the front and rear of the vehicle.

With these moves, motor performance has been enhanced and the vehicle has been made more compact because the motors are placed in with the engine. Accomplishing both of these was a difficult task. Please enjoy a variety of leisure activities with the *Outlander PHEV*



The all-new eK Wagon

Eco Drive Assist display

(Display example: eK Wagon)

The third technology MMC is focusing on is fuel-efficiency improvement technology to enhance the fuel efficiency of gasoline-engine vehicles. In addition to basic performance enhancements such as making vehicles lighter and improving engine units, MMC is using

technologies to improve fuel efficiency. All of these efforts contribute to reduce CO₂ emissions.

The new models of the *eK* Wagon and *eK* Custom which went on sale in June 2013 employ the Auto Stop & Go (AS&G) idling stop system^{*1} (with coasting stop function^{*2})



and have improved aerodynamics, giving them excellent fuel efficiency of 29.2 km/L $^{\ast3}.$

The *Mirage* and *Outlander* which went on sale in 2012 also have high fuel efficiencies based on the use of AS&G and other technologies to reduce fuel consumption.

MMC has named "Eco Support" to the AS&G and other power train technologies which contribute to improving fuel efficiency.

Moreover, in order to help people drive their cars in a more ecofriendly manner, MMC has increased the range of models equipped with Eco Drive Assist displays such as an eco-driving indicator and fuel efficiency meter located in the combination meter or the center information display. To further increase fuel efficiency, MMC will continue to develop new technologies.

Words From a Developer



There are two hurdles in improving the fuel efficiency of vehicles.

The first is the cost performance of the fuel efficiency technology. Even if a fuel efficiency boost is significant, if costs rise considerably, they are passed on to the customer, so it is difficult to employ such technology. As a result, we keep a close eye on costs, and work each day to make fuel efficiency improvements at the 0.1% level. The second hurdle is working with the other

Koyu Araki

department that are involved, including the engine department, the power train department, and the vehicle body department, to resolve problems and strike a balance at a high level.

Fuel efficiency is a comprehensive technology. I will continue to work closely with all of the development department and aim to make further improvements to fuel efficiency.

The fourth technology is "clean diesel." With the advance-

ment of diesel engine technologies, diesel engines have become recognized around the world for becoming more fuel efficient and for having cleaner exhaust gas than before. In 2010, MMC equipped the *Pajero* with a 3.2 L clean diesel engine which clears the "2009 emissions gas regulations (Japan's Post New Long Term emissions regulations)", some of the toughest regulations in the world. Furthermore, in January 2013, MMC equipped the *DELICA D:5* with a 2.2 L clean diesel engine, giving the automobile both excellent environmental performance as well as powerful driving.

Good fuel

consumption

*1: Featured in some trim levels.

*2: When decelerating, a system that stops the engine idling from under about 13 km/h to curb gasoline consumption.

*3: Only 2WD G/M trim levels. Fuel consumption is the JC08 mode fuel consumption rate. (Screening figure of Japanese Ministry of Land, Infrastructure and Transport)



2.2 L "clean diesel" engine used in DELICA D:5

MMC's Environmental Initiatives

Community Initiatives

Driving Pleasure

In order to provide driving pleasure, MMC is developing a variety of technologies to increase driving performance and handling stability, which are the principal aspects of automobiles that people enjoy.

We are evolving our traditional 4WD technology into optimal 4WD systems based on the size of automobiles and the way they are used. This includes adding "S-AWC^{*1}" which offers excellent handling and superior stability at a high level.

S-AWC is an advanced integrated vehicle dynamics control system. Its advanced integrated control built on control of the driving forces and braking forces of the four wheels makes it possible for "anyone to drive with pleasure and peace of mind" in a variety of driving conditions.

In order to provide toughness and safety, MMC has developed technologies that offer safety and comfort to allow customers to use their vehicles with peace of mind for a long period of time, and has introduced these technologies in a variety of models. Such technologies include ASC (Active Stability Control), which improves control, and Hill Start Assist, which makes hill starts easier.

Toughness & Safety

Among these technologies, "e-Assist^{*2}," which was first used in the *Outlander* that went on sale in Japan in 2012, are innovative safety technologies which detect and warn the driver of the risk of an accident, assisting in the prevention, avoidance and mitigation of possible damage from accidents. This technology includes a Forward Collision Mitigation system, which automatically applies the brakes when there is a sudden shortage in the distance with the vehicle in front and helps avoid a collision or reduce impact damage in the event of a collision, Adaptive Cruise Control system, which maintains a safe distance with the vehicle in front, not only at fast speeds but even in slow-moving heavy traffic, and a Lane Departure Warning system, which alerts the driver when the vehicle starts to drift from its lane, aiding driver concentration.

Innovative safety technologies "e-Assist"

Forward Collision Mitigation system



Feature 2: Connections Between Electric Vehicles and Society



Children in Fukushima Prefecture participating in the opening ceremony for the *i-MiEV* donated to the Minamisoma Solar Agripark

In July 2009, MMC launched sales of the *i-MiEV*, an electric vehicle (EV) that emits no CO₂ while driving, in order to address environmental problems typified by global warming and energy issues centered on the limited amounts of fossil fuels available.

MMC believes that the popularization of EVs is one way the transportation sector can help to achieve a low-carbon society, and has been working to promote EVs on a wider scale in Japan and overseas.

MMC has expanded the product lineup, including the launch of the commercial minicar-class *MINICAB-MIEV*.

Since the Great East Japan Earthquake, new roles for EVs have begun to garner attention, in addition to their contribution to creating a low-carbon society.

Connections Between EVs and Society



MMC lent 89 *i-MiEV*s to areas affected by the disaster in order to support restoration efforts following the Great East Japan Earthquake.

While it was extremely difficult to obtain gasoline and other fuels for automobiles immediately after the earthquake, electricity was restored relatively quickly. The *i-MiEV* was lauded as a very useful means for medical responders to move around as well as shuttling people and items between evacuation shelters. Furthermore, based on requests to supply the electricity stored in EVs to other equipment such as home appliances, MMC developed the *MiEV Power BOX*, a 1,500 W power supply device, and launched sales of the device in April 2012. The Great East Japan Earthquake thus provided an opportunity to focus on the electricity storage function of EVs and use them as emergency power sources. In addition, EVs are also being studied for their ability to be used as storage batteries in smart grids.

In addition to contributing to the environment, EVs are already being used in a variety of ways to resolve energy problems. Furthermore, EVs are also being used to promote an understanding of energy issues among children.

The objective is to link power stations with homes, factories and other places where electricity is supplied through a network, and make full use of the newest electric power technology and IT technology to efficiently supply electricity.

*1: A power grid that controls and optimizes the flow of electricity.

*2: A society in which local communities not only consume energy, but also comprehensively manage energy within each local community basis on the assumption that they will create, store and use the energy.

For Our Children's Future



Smart grids Smart communities

Minamisoma Solar Agripark

The Minamisoma Solar Agripark (Minamisoma City, Fukushima Prefecture), which opened in May 2013, supports the development of children in Minamisoma City and other parts of Fukushima Prefecture by using the areas afflicted by the tsunami and offering work experiences to children at a solar power station and a plant factory planned and operated by the Foundation for Promoting Fukushima Recovery Solar Agri Experiences. As a symbol of the restoration of Minamisoma City, the Minamisoma

In May 2013, MMC donated an *i-MiEV* to the Minamisoma Solar Agripark to be used as an experiential learning vehicle.

The Minamisoma Solar Agripark gives children hands-on experiences with clean energy, and provides a learning program in which the children experience working at a solar power station and a plant factory. The *i-MiEV* is used as a learning tool for the children.

In the learning program, the children use original solar power research equipment to change the direction and angle of the solar panels and learn about the difference in the amount of power generated, allowing them to enjoy the experience of creating as much clean energy from nature as possible.



Children running fans by using the electricity stored in the EV

Solar Agripark aims to eliminate reputational damage and contribute to the restoration of the agricultural, industrial and tourism industries in the area by encouraging interaction with people from across the country.

These programs are a part of the Minamisoma City Renewable Energy Promotion Vision which Minamisoma City formulated in October 2012 to promote use of renewable energy and energy conservation.



Children learn through using the solar power research equipment

The children also have the chance to charge an EV with the electricity they generated (to use energy on their own), which gives them a sense of how to effectively use electricity as well as the importance of energy.

Furthermore, the children are able to operate home appliances and other electronic devices using the electricity stored in the EV.

The children thus get a good sense of how they will live in the future, when green power created clean energy will power the society (smart communities).

In this way, EVs are useful both to teach children about renewable energy and promote their understanding of energy issues.

Going forward, MMC will continue to support the development of children, the leaders of tomorrow, through learning programs utilizing EVs.



Through the working experience at the solar power station, the children can enjoy learning the importance of creating electricity by natural energy. They also go on inspection rounds of the solar power station, giving them a chance to get a feel for this unglamorous yet critical work as well. Thanks to the donated i-MiEV, the children were able to experience not only the work of generating power with clean energy, but were also able to utilize green energy. At the Minamisoma Solar Agripark, children are delighted by the fan running powerfully on electricity supplied by the *i-MiEV*.

> Foundation for Promoting Fukushima Recovery Solar Agri Experiences Director Eiiu Hangai

Anti-Disaster Measures in the Community

On September 21, 2012, MMC and other cooperating companies (Kyoto Mitsubishi Motor Sales Co., Ltd., NICHICON CORPORATION, GS Yuasa Corporation) concluded a cooperation agreement with Kyoto Prefecture regarding electric vehicles and power supply devices in the case of a natural disaster.

Under this agreement, in the case of a calamity such as a natural disaster or large-scale blackout in Kyoto Prefecture, the prefectural government can request assistance from the cooperating companies in the form of EVs and power supply devices for use in emergency response and disaster recovery.

The EVs provided will be the *i-MiEV* and *MINICAB MiEV* (25 vehicles^{*1}) owned by the cooperating companies.

The power supply device will be the *MiEV Power BOX*, which can supply up to 1,500 W of electricity from the power stored in the drive batteries of the *i-MiEV* and *MINICAB MiEV* EVs.

Upon receiving a request from Kyoto Prefecture, the cooperating companies will send the EVs and power supply devices in their possession to the delivery location, where they will hand them over free of charge to the prefectural or municipal governments.

When connected to a fully-charged 16 kWh batteryequipped EV model, the *MiEV Power Box* can supply 1,500 W of power for between five and six hours, equivalent to the amount consumed by an average Japanese household in a single day.



Eco-education

Smart grids

Smart communities

Ceremony for concluding the agreement with Kyoto Prefecture

This is the first-ever cooperative agreement in Japan under which EVs will be used as portable emergency power sources in the event of a disaster

This agreement will ensure that the authorities not only have emergency transportation available in the form of the EVs, but also that they can combine the EVs with the power supply devices to use as emergency power sources. This will help evacuation shelters, which serve as the base for living in the communities during such times following a disaster, to operate more effectively.

With more focus on EVs from the standpoint of responding to situations where energy supply is tight, MMC is advancing R&D on related technologies including the *MiEV Power BOX*.



*1: As of September 21, 2012

*2: A fully-charged 16 kWh MiEV can supply power equivalent to the amount consumed by an average Japanese household in a single day (about 9 kWh).

Feature

Managing Power Usage



Use as an emergency power source

In April 2013, Málaga, in the Autonomous Community of Andalucia, South Spain (population around 560,000), started testing a smart community project, and 160 i-MiEV vehicles were brought in as a part of the process.

The demonstration will run for 3 years until the end of fiscal 2015, and aims to develop projects that will contribute to the continued growth of smart communities.

Málaga is well known as an environmentally-advanced city that is active in using renewable energies along with other efforts. In addition to companies and local municipalities, 50 residents will participate as EV drivers in the demonstration.

In introducing the EVs, a total of 23 quick charging stations were installed in 9 locations in Málaga and the surrounding vicinity.



Rapid charging stations were installed in the city of Málaga



The *i-MiEV* that is used in the demonstration

Equipment that sends out vehicle-related data has been mounted in the EVs that are being used in the demonstration. The drivers can check the usage status of nearby charging stations and other information via their smartphones.

Also, EV driving data and charging data will be stored in a central management center. The project plan to analyze these data to figure out by how much CO2 emissions have been reduced, to ascertain the status of the use of the EVs, to guide users to the most appropriate charging stations, and otherwise reduce the impact on the electric grid, all in an effort to manage energy more efficiently.

MMC will continue to promote the use of EVs as a part of the social infrastructure in such regions with a high level of environmental awareness.



The opening ceremony for the concluded Málaga Project was held in the Málaga Automobile Museum.



Elementary school toilets renovated to become bright and cheerful

Immediately after the Great East Japan Earthquake occurred, MMC made monetary donations, provided relief supplies and *i-MiEV* electric vehicles (EV), and provided use of a company dormitory free of charge.

In areas affected by the disaster, many people faced difficulties they had never experienced before, and even today many people are living under difficult conditions. MMC believes that a big concern these people have is that they may have been forgotten.

MMC provides complete support to employees who wish to participate in a week-long volunteer program. This support is based on MMC's hope that as many employees as possible will contribute to local restoration efforts by visiting the areas affected by the disaster, getting physically involved, and personally interacting with the local people. MMC also believes that these volunteer activities will give employees an opportunity to achieve personal growth.

MMC will continue to provide support to the areas affected by the disaster to let the residents know that they have not been forgotten and that they are still connected to the rest of the country.

MMC with the Project YUI Consortium in Japan, a General Incorporated Association

With the aim of making the children afflicted by the disaster once again cheerful and happy, Project YUI focuses on providing opportunities for children to learn and play as well as restoring the local community that has been hit hard. Activities are centered on Ishinomaki City, Miyagi Prefecture.

MMC believes that all of the people of Japan must work together and continue to provide as much support as possible in order to restore the areas that were devastated by this unprecedented disaster. MMC supports Project YUI's aim to have individuals, NPOs, companies, and governments work together across private-public sector and regional lines. These people work as a team, with each participant bringing various talents and resources, such as manpower, materials, funding, and knowledge, in order to support the creative reconstruction of the area affected by the earthquake. Together everyone works to support the rebuilding effort with Project YUI.



Continuing to make local people feel they have not been forgotten and are still connected to the rest of Japan

♦ Experience what it's like first hand by meeting with the locals Some of the schools damaged by the tsunami are still holding classes in facilities being borrowed from other schools. Despite the challenging environment, Project YUI is working to help teachers focus on teaching by taking care of school rebuilding work as requested by the boards of education, and organizing the many books that have been sent from all over the country.

And then in the afternoons, volunteers including employees from MMC tap into their areas of expertise and hobbies as they support community restoration and children's learning and play at "*Minna no ba* (the Place for Everyone)" run at community

spaces in the temporary housing complexes.



Renovation of elementary school toilets that were struck by the disaster

Comment from participating employee

The more we talk to the people living in the affected areas, the more we notice the distance between their hearts and ours, as we live so far away from them.

There is no need to prepare any equipment or do any special mental preparation. The company takes care of the expenses. I would like for employees to work extra hard in advance and then take leave and go to the affected areas for a week.

• Use of *MINICAB-MiEV* electric vehicle free of charge

Employees participating in volunteer activities told MMC management that the passenger cars used for local activities were not suitable for transporting relief supplies to schools or delivering tools to community centers. They also noted that gasoline costs were consuming a lot of their activity budgets. MMC responded by lending out a *MINICAB-MiEV* to Project YUI free of charge.



MMC employees who participated in volunteer activities together with a *MINICAB-MIEV*

+ Helping students understand the essence of work

Based on a request from Project YUI, MMC sent an employee to Ishinomaki City junior high schools, where he gave talks about his occupation as a part of junior high school career education aimed at giving students an understanding of the essence of work.



An MMC designer talks about his views on work

Comment from a student

It really hit home when I heard that work has deadlines, and that it is important to work with goals and objectives in order to meet those deadlines. Both studying and club activities have endings at some point as well. With respect to club activities, I will work hard with the goal of achieving the best performance possible at the Junior High School Sports Festival, and in my studies. I will set the goal of trying my best to get into the high school of my choice.

Donation of blankets

Because a lottery was used to decide the temporary housing allocations in the disaster areas, some people ended up with neighbors they did not know, and would often spend the day not speaking with anyone. Project YUI started craft classes at community spaces to break the ice.



In fiscal 2012, MMC donated blankets to everyone who was actively involved in local craft classes.

Cute and beautifully decorated blankets

Comment from an administrator of the craft classes

A total of 26 people, from children to the elderly, had a very fun time participating in a crafts class where they made floor cushions from blankets and decorated them.

Three Principles

"Shoki Hoko"=Corporate Responsibility to Society

Strive to enrich society, both materially and spiritually, while contributing towards the preservation of the global environment.

"Shoji Komei"=Integrity and Fairness Maintain principles of transparency and openness, conducting business with integrity and fairness.

"Ritsugyo Boeki"=Global Understanding through Business Expand business, based on an all-encompassing global perspective.

The Three Principles, the spirit of Mitsubishi since its founding, embody the fundamental philosophy common to the Mitsubishi Group. Furthermore, Mitsubishi's Corporate Philosophy is derived from them.

Corporate Philosophy

"We are committed to providing the utmost driving pleasure and safety for our valued customers and our community. On these commitments we will never compromise. This is the Mitsubishi Motors way."

Our Corporate Philosophy clarifies the significance of our existence and our future direction. It constitutes the bedrock of why society needs our continued existence.

All our business operations are carried out based on the concepts of our corporate philosophy.

Approach to CSR

We will continually contribute to both society and the environment by winning trust in MMC through the fulfillment of the expectations and demands of stakeholders through the implementation of our Corporate Philosophy

In Our Mid-Term Business Plan, "Jump 2013," covering fiscal 2011 through 2013, MMC made the following commitment to prioritize CSR, which forms the basis for its business operations: continue to actively engage in activities that enhance "trust of society" in MMC and meet society's expectations.

Corporate Ethics Guidelines

MMC's daily business activities and actions are derived from the Corporate Ethics Guidelines which describe our behavioral standards in detail. In fiscal 2013, we are reviewing these Corporate Ethics Guidelines as one part of our internal reforms, and working to acquaint every single employee with them.

*MMC recognizes that its stakeholders comprise all of its customers, shareholders, business partners, sales companies, employees and regional communities.

Community Initiatives

MMC's Environmental Initiatives

In January 2011 MMC formulated its Environment Initiative Program 2015 to pursue interim targets toward achieving the objectives of MMC's Environmental Vision 2020. We are actively pursuing our environmental conservation initiatives on an integrated, Group-wide basis.

The MMC Environmental Policy that underpins corporate management's environmental conservation initiatives

Basic Policy

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

- 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

- 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 is given to the following areas:
 - 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.
- 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.

Major Environmental Targets

	Environment Initiative Program 2015	Environmental Vision 2020	
CO ₂ emissions	25% reduction	50% reduction	
(vehicle-produced)	Compared to FY2005 Global average for all new vehicles		
Electric-powered vehicles*1 production ratio	5% or more	20% or more	
Production CO ₂ emissions	15% reduction	20% reduction	
Froduction CO ₂ emissions	Compared to FY2005 Per production vehicle		

*1: Electric-powered vehicles: These vehicles run on electric power that has been stored in batteries which are charged from the outside. They include EVs (electric vehicles) and PHEVs (Mitsubishi Plug-in Hybrid EVs).

Reflecting on the Fiscal 2012 Activities



Automobiles are essential for affluent lifestyles as a means for transporting people and goods, while at the same time they also affect the environment at every lifecycle stage-from development through production, distribution, sales, usage and disposal.

I believe that one of MMC's most important social responsibilities is to minimize the environmental impact of automobiles and leave a better environment for future generation.

MMC's environmental initiatives in the 2012 fiscal year included announcing @earth TECHNOLOGY. This concept refers to advanced MMC technologies that encompass our ideals: "Environmental Responsibility", "Driving Pleasure" and "Toughness & Safety." During the year, we introduced several models that minimize their environmental impact, such as plug-in hybrid *Outlander PHEV*, clean diesel *DELICA D:5* and electric vehicle *MINICAB-MIEV TRUCK*.

Operationally, we lowered carbon dioxide emissions and conserved electricity in summer and winter. Our electricity savings surpassed the Japan's government's target requirement. On the biodiversity protection front, we started surveying what kinds of natural life make their habitat at the Shiga Factory, and we plan to finish this initiative during the fiscal 2013.

Notwithstanding progress with environmental endeavors, it was found to be fact, that the Mizushima Plant and other facilities mistakenly disposed of equipment containing polychlorinated biphenyls. We take this matter very seriously, and we are taking action to prevent recurrences. We apologize deeply for causing concern to many people, especially local residents.

While continuing to strive to build a sustainable future in harmony with society and the earth, we will remain united in endeavoring companywide to achieve the goal of the Mitsubishi Motors Environmental Initiative Program 2015.

loon On

Masao Omichi Chief Environmental Strategy Officer

1. Products & Technology

Category	Initiative	FY2015 target (Specific initiatives and targets*1)
Prevention of global warming	(1) Reduction of vehicle-running CO_2 emissions	25% global average reduction of vehicle-running CO ₂ emissions (against 2005)
	(2) Enhancement of electric powered vehicle (EV/PHEV)*2 product lineup and expansion of sales territory	 Launch of commercial mini electric vehicle (EV) in the Japan market in 2011 Launch of plug-in hybrid vehicles in Japan, the United States and Europe from 2012 EV/PHEV production ratio of at least 5%
	(3) Development of new technologies to improve performance of EV/PHEV	 Improvement of battery energy density Development of smaller, lighter-weight parts and components for EV/PHEV, as well as integrating functions of those parts
	(4) Development and deployment of "Green Technologies"	 New launch of hybrid vehicle Improvement of gasoline engines and clean diesel engines (expanded utilization of idling stop mechanism, next-generation MIVEC^{*3}, etc.)
Recycling and resource conservation	(5) Development of new technologies and enhancement of organizations and systems for the recycling and reuse of EV/ PHEV	For used drive batteries: Development of recycling technology; Creation of recycling systems and organizations
	(6) Development and commercialization of less resource-intensive materials	Expanded application of "Green Plastic" (plant-based plastics)
	(7) Improvement of recycling efficiency of used automobiles and their parts	 Used automobile recycling efficiency^{*4}: at least 96% Dealer repair/replacement bumper recovery rate: at least 60%
Prevention of environmental	(8) Expanded deployment of low-emissions gas vehicles	 Japan: Continue to expand deployment of 4 star-rated low-emission vehicles, Europe: Early adaptation to EURO6 USA: Adaptation to LEVIII^{*5}, Emerging countries: Promotion of EURO3-5 vehicles
pollution	(9) Reduction of hazardous substances in products	Formulation and expansion of common global hazardous substance management standards

*1: All targets are for FY2015 unless specifically noted otherwise. *2: Electric-powered vehicles comprise electric vehicles (EV) and plug-in hybrid vehicles (PHEV). *4: Based on calculation methods used in the 3rd joint meeting of the Industrial Structure Council and Central Environmental Council on May 22, 2003

2. Business Activities

Category	Initiative	FY2015 target (Specific initiatives and targets*1)
Production and logistics	(10) Reduction of unit CO_2 emissions in production	 15% reduction in CO₂ emissions per production vehicle at Japanese and international plants (compared to FY2005)
	(11) Reduction of unit CO ₂ emissions in logistics	Reduction in CO ₂ emissions per unit of transportation (compared to FY2006) Procurement logistics: 36% reduction; transportation of completed vehicle, etc.: 9% reduction
	(12) Resource conservation and recycling in production	45% reduction of externally disposed waste per production vehicle at Japanese plants (compared to FY2005)
	(13) Resource conservation and recycling in logistics	 52% reduction in steel used per unit shipment volume at knock down (KD)^{*7} plants in Japan (compared to FY2006)
	(14) Reduction of hazardous substances generated in production	 Reduction of VOC^{*8} per unit painting area to less than 35 g/m² (body and bumper painting) in Japanese plants
	(15) Establishment and enforcement of environmental standards in production	Establishment of environmental guidelines for plants, evaluation and improvement of plant environmental performance
Development, sales, servicing and offices	(compared to EV(2010)	
	(17) Reduction of unit CO ₂ emissions at non-production affiliates	 5% reduction in unit CO₂ emissions at Japanese affiliates (7 companies) (compared to FY2010) 2–5% reduction in unit CO₂ emissions and international affiliates (9 companies) (compared to FY2010)
	(18) Establishment and enforcement of environmental standards in sales and servicing	Establishment of environmental guidelines for dealers, evaluation and improvement of dealership and service center environmental performance
Collaborative activities with suppliers	(19) Enhanced management of hazardous substances in the supply chain	Improved coordination of the supply chain to enhance management at the supplier level of hazardous substances in products and materials
FF	(20) Promotion of energy and resource conservation at suppliers	Creation of systems and organizations to improve collaborative activities with suppliers
	(21) Global deployment of green purchasing guidelines	Deployment of green purchasing guidelines to the suppliers of international plants

*7: Knockdown vehicles are those exported as parts for assembly at local plants. *8: VOC stands for Volatile Organic Compounds.

3. Collaboration With Society and Stronger Base of Implementation

Category	Initiative	FY2015 target (Specific initiatives and targets*1)
Collaboration for the spread of EV/PHEV	(22) Collaboration with government and other industries for the enhancement of the charging infrastructure	 Collaboration with "EV/PHV Towns" for the enhancement of the charging infrastructure Collaboration with the CHAdeMO Association^{*11} for the enhancement of the recharging infrastructure and promotion of international standardization
	(23) Research into Smart Grids and other strategies for utilizing electric vehicles	Participation in field testing for the commercialization of Smart Grids
Environmental	(24) Promotion of activities to preserve biodiversity under MMC's basic guideline	Monitoring and analysis of the impact of business activities on biodiversity
preservation		
Strengthening of environmental (25) Promotion of environmental management that is integrated with affiliates		Creation of integrated environmental management systems in collaboration with Japanese and overseas affiliates
management		
	(26) Expanded application of LCA ^{*10} in product development	Strengthening of systems to evaluate lifecycle CO ₂ emissions in new vehicle development
	(27) Enhancement of environmental information disclosure and environmental communications	 Enhancement of information disclosure in environmental accounting, etc., presented in environmental reports and on the website Promotion of environmental communications with stakeholders
	(28) Promotion of systematic environmental education	Promotion of environmental education by job grade and business unit

*10: LCA stands for Life Cycle Assessment, which is a technique for calculating the environmental burden of a product from manufacturing to disposal. *11: The CHAdeMO Association works to

Mitsubishi Motors Corporation (MMC) started its Environment Initiative Program 2015, a 5-year plan, to make its Environmental Vision 2020 a reality, and the entire Group pushed ahead to achieve the program's targets, while MMC formed collaborations with each Group company.

In fiscal 2012, the second fiscal year of the program, MMC achieved most of its targets.

Evaluation 🧿: Achieved 😵: Unachieved ta				
FY2012 target	FY2012 results	Evaluation	FY2013 target	Refer to
Recognition of projected compatibility with fuel consumption regulations	 Confirmed projected compatibility with European CO₂ regulations Verified/confirmed target fuel consumption of each vehicle Achieved fuel consumption target as planned for each new vehicle model 	0	 Recognition of projected compatibility with fuel consumption regulations Achieve fuel consumption targets for new vehicles 	P.34 Web
 Deployment of <i>i-MiEV</i> in all regions of the U.S. Launching of PHEVs in each market 	 Deployed <i>i-MiEVs</i> in all regions of the U.S. Launched plug-in hybrid vehicles in Japan 	\bigcirc	Launch PHEVs in each overseas market	P.10 P.34 Web
 Mass-production plan for small general-purpose inverters with double output density and deployment in new vehicles 	 Deployed small general-purpose inverters in mass-production vehicles 	\bigcirc	 Complete development of high energy density lithium-ion batteries 	_
 Market launching of eco drive support system Weight saving in new vehicles 	As regards 2 models of new vehicles: • Launched built-in eco drive support system (ECO lamp, etc.) • Achieved targeted weight saving in vehicles	\bigcirc	 Expand introductions of eco drive support system Achieve weight saving in new vehicles 	P.11 P.34 Web
Development of extraction technology for positive- electrode material for traction batteries, and of commercial plants	 Started provision of testing program components for recycling testing in Europe 	\bigcirc	Survey/research traction battery recycling technology	Web
Completion of development of low-cost plant-based materials	Progress as planned	\bigcirc	Develop technology using plant-based materials	-
 Recycling efficiency: at least 96% Bumper recovery rate: at least 55.5% 	Recycling efficiency: 99.2% Bumper recovery rate: 58.6%	\bigcirc	 Recycling efficiency: at least 98% Bumper recovery rate: at least 58.6% 	Web
■ Launching of new ☆☆☆☆ vehicle in Japan ■ Confirmation of progress made with low exhaust gas compatibility of new vehicles appearing since FY2013	● Launched 2 new models of ☆☆☆☆ vehicle in Japan ● Achieved low exhaust gas design target of newly developed vehicles		◆Introduce ☆☆☆☆ vehicles in Japan ◆Introduce ULEV ^{*6} for North America	Web
Elimination/reduction of 4 heavy metal substances in line with EU/South Korean regulations for new vehicles	Progress as planned	\bigcirc	 Eliminate/reduce 4 heavy metal substances in line with EU/South Korean regulations for new vehicles 	Web

*3: MIVEC stands for Mitsubishi Innovative Valve timing Electronic Control system. *5: Abbreviation for Low Emission Vehicle *6: Abbreviation for Ultra Low Emission Vehicle

FY2012 target	FY2012 results	Evaluation	FY2013 target	Refer to
7% reduction in CO ₂ emissions per production vehicle (compared to FY2005)	 Achieved fiscal year target with 17% reduction (390 kg-CO₂/vehicle) 		◆15% reduction in CO₂ emissions per production vehicle (compared to FY2005)	P.33 Web
Reduction in CO ₂ emissions per unit of transportation (compared to FY2006) Procurement logistics: –33% reduction; transportation of completed vehicles, etc.: –6% reduction	 Procurement logistics : Achieved fiscal year target with 40% reduction, the transportation of completed vehicles and other related operations: Achieved fiscal year target with 10.5% reduction 		 Reduction in CO₂ emissions per unit of transportation (compared to FY2006) Procurement logistics: 40% reduction; transportation of completed vehicles, etc.: 7% reduction 	P.33 Web
45% reduction of externally disposed waste per production vehicle (compared to FY2005)	Achieved target with 47% reduction	\bigcirc	45% reduction of externally-disposed waste per production vehicle (compared to FY2005)	Web
48% reduction in steel used per unit shipment volume (compared to FY2006)	Achieved target with 71% reduction	\bigcirc	 72% reduction in steel used per unit shipment volume (compared to FY2006) 	Web
Reduction of VOC per unit painting area to less than 36 g/m ² (body and bumper painting)	Achieved target with 35 g/m ²		 Limitation/Reduction of VOC per unit painting area to less than 36 g/m² (body and bumper painting) 	Web
(Suspended until the building of a system in compliance with environmental laws has been completed to some extent)			(Suspended until the building of a system in compliance with environmental laws on production has generated some result)	_
Reduction in unit CO ₂ emissions (compared to FY2010) Target for each facility: 2%–10% reduction	Achieved target with 2.5%–28.8% reduction		 Limitation/Reduction of unit CO₂ emissions (compared to FY2010) Set target for each facility: +39%~-30% 	Web
In Japan, 2% reduction in unit CO ₂ emissions at sales subsidiaries (5) and at parts dealerships (2) (compared to FY2010)	 In Japan, achieved targets with 8.1% reduction at sales subsidiaries (5) and 18.5% at parts dealerships (2) (compared to FY2010) 	\bigcirc	 In Japan, 4.5% reduction at sales subsidiaries (5) and 18.5% reduction at parts dealerships^{*9} (compared to FY2010) 	Web
 0.8%–8.9% reduction of unit CO₂ emissions at international affiliates (compared to FY2010) 	• Of the 9 companies, 2 did not achieve targets	\bigotimes	 Limitation +8.4%~-47.9% reduction of CO₂ emissions (compared to FY2010) 	
Advancement of activities to formulate dealership guidelines	Mainly examined guidelines as regards understanding and compliance with environmental laws at sales companies	\bigcirc	 Set environmental targets and activities with which sales companies should comply 	Web
Auditing of management system for hazardous substances at business partners (35 companies)	Audited 36 companies	\bigcirc	 Auditing of management system for hazardous substances at business partners (35 companies) 	Web
Implementing pilot operation for monitoring energy-saving activities at business partners	Operated as planned	\bigcirc	 Continue to operate pilot operation for monitoring energy-saving activities at business partners 	Web
Implementing operational follow-ups for guidelines at each overseas affiliate	 Conducted pilot audit at guidelines developer and completed manual 		Conduct audits of MMTh business partners	Web

*9: Parts sales base of Mitsubishi Automotive Logistics Technology (formerly Mitsubishi Motors Parts Sales) and Higashi Kanto MMC Parts Sales

FY2012 target	FY2012 results	Evaluation	FY2013 target	Refer to
Expansion of number of quick-charging stations Japan: 71 (cumulative 250); North America: 10	 Japan: 66 (cumulative 245); North America: 1 unachieved target 		 Build new popularization systems by measures including use of government subsidies 	_
Achievement of EV charging management system at Keihanna, a smart grid demonstration trial city	Completed MMC's fiscal 2012 items as planned	٢	 Achieve EV charging management system at Keihanna Project, a smart grid demonstration trial city Cooperate with testing programs at overseas power companies 	P.13
Preparation to do "nature monitoring" at Shiga Plant	• Completion of preparing "nature monitoring" at Shiga Plant and did 1st survey	0	 Continue and strengthen doing "nature monitoring" at Shiga Plant 	P.37 Web
 Formulation of in-house sales company guidelines "Support of domestic marketing" Introduction of unit CO₂ emissions management at international affiliates 	 Submitted draft of in-house sales company guidelines Implementation of unit CO₂ emissions management at international affiliates 		Provide affiliates with information about environmental laws	Web
Implementation of LCA for electric vehicles	Implementation of LCA for plug-in hybrid vehicles	0	 Implementation of LCA for new vehicles Conduct LCA data surveys of parts and reflect results in evaluation 	Web
 Strengthening of communication (transmission ability) through societal and environmental reports Expansion of environmental communication with external groups, etc. 	 Issued report as planned and increased questionnaire responses Conducted monthly information exchanges with private companies, local governments and NPOs 	٥	 Strengthen communication (transmission ability) through societal and environmental reports (reform articles in societal fields) Continue to expand environmental communication with external groups, etc. (conduct information exchanges once a month) 	Web
Implementation and evaluation of systematic environmental education	 Implemented basic environmental education for all employees 	0	 Implement and evaluate systematic environmental education 	Web

increase the locations where EVs can be quickly charged and promotes the standardization of charging methods, both of which are indispensable for the popularization of EVs.

Community Initiatives

Preventing Global Warming (Reduction in CO₂ emissions)

Preventing global warming is a top priority for countries worldwide. MMC is working to cut CO₂ emissions in all aspects of its operations. We do this not just through our products, notably by enhancing the fuel efficiency of gasoline-powered vehicles and selling electric vehicles (EVs), but also in our operations in the areas of production, distribution, and sales.

Reducing CO₂ Emissions During Production

Fiscal 2012 Target

• 7% reduction compared to fiscal 2005 in CO₂ emissions per production vehicle at Japanese and international plants (MMTh)

Results of Fiscal 2012 Initiatives

In fiscal 2012, MMC lowered its total domestic CO_2 emissions by 12.0% from a year earlier on the strength of companywide electricity consumption reductions and other energy-saving efforts. We achieved an 8.5% reduction in CO_2 emissions per production vehicle at Japanese and overseas plants compared to a year before. Another factor was requests to reduce electricity usage at peak times because power supplies were tight. We reduced CO_2 emissions per vehicle by 17.0% (from 470 kg per vehicle, to 390 kg. We undertook the following key initiatives to reduce electricity consumption.

- Lowering electricity consumption of air-conditioners We maintained air-conditioner temperatures at 28°C and switched to energy-saving models.
- 2. Lowering electricity consumption by changing operating hours
- We changed production operations to day and night shifts, and changed employees' break times on production lines.
- 3. Using a demand monitoring system to monitor peak power consumption
- 4. Using energy-saving lighting and office equipment



Reducing CO₂ Emissions in Transportation

Fiscal 2012 Target

We targeted a 33% reduction in unit CO₂ emissions compared to fiscal 2006 in procurement logistics, and by 6% in the transportation of completed vehicles and other related operations.

Results of Fiscal 2012 Initiatives

We implemented various initiatives to reduce emissions. We shortened transportation distances by procuring production parts locally and improved load ratios by improving the transportation loading arrangement and packing format. We also increased fuel efficiency through eco-driving practices for completed vehicles and knockdown component transportation vehicles.

We thus reduced unit CO₂ emissions by 40% compared to fiscal 2006 in procurement logistics, and by 10% in the transportation of completed vehicles and other related operations. We reduced CO₂ emissions by 500 tons better than expected, to 18.000 tons.



Results of Fiscal 2012 CO₂ Emission Reduction Initiatives

Community Initiatives

Reducing CO₂ Emissions in Products

Fiscal 2012 Target

- Deployment of *i-MiEV* in all regions of the U.S.
- Launching of PHEVs in each market
- Market launching of "eco drive support system"
- Weight saving in new vehicles

Results of Fiscal 2012 Initiatives

Expanded deployment of EVs

MINICAB-MIEV TRUCK, a lightweight truck for commercial use

In Japan, we have already launched the *i-MiEV* and the *MINICAB-MiEV* electric vehicles, which do not emit CO₂ during driving. In January 2013, we commercialized the *MINICAB-MiEV TRUCK*. We finished deploying the *i-MiEV* around the United States in June 2012.

Launch of plug-in hybrid vehicle Outlander PHEV in the Japan market

In January 2013, we domestically introduced the Outlander PHEV, derived from our EV range.

This model incorporates the Mitsubishi *Plug-in Hybrid EV System*^{*2}, and has a plug-in cruising range of 60.2 km^{*3}, so it can function as a purely electric vehicle for most daily driving. Also, we achieved the high-level environmental performance of a combined fuel consumption^{*4} of 67.0 km/L^{*5}, and a hybrid fuel efficiency of 18.6 km/L^{*5}.

Expanded utilization of duel efficiency improvement technology, Eco Support^{*6}

The Mirage and the Outlander, which we launched in fiscal 2012, employ the

new MIVEC engine^{*7} and the Auto Stop & Go idle-stop system (AS&G). Augmenting the AS&G we incorporated in the *eK Wagon* and *eK Custom*, which we brought out in June 2013, with coasting stop function^{*8}, with improved fuel efficiency translating into lower CO₂ emissions.

Lightweight body structure

The *Mirage* is light, employing an optimized body structure and high-tensile steel paneling. The *Outlander* is around 100 kg lighter than its predecessor because it uses more high-tensile steel paneling and has lighter seats, suspension, and other parts.

Products reflecting fuel efficiency improvement technologies

By employing Eco Support, lightweight materials, enhanced aerodynamics, and other fuel consumption improvement technologies, the *G* and *M* trim levels of the *Mirage* achieve a fuel economy of 27.2 km/L^{*5}. This figure is Japan's fuel efficiency standards for 2015 by 20%. All variants of the *Outlander* have matched Japan's fuel efficiency standards for 2015. The 2WD & 4WD versions respectively deliver fuel economies of 15.2 km/L^{*5} and 14.4 km/L^{*5}. The new *eK Wagon* and *eK Custom* (excluding turbo variants) both better Japan's fuel efficiency standards for 2015 by 20%. The *G* and *M* trim levels of the 2WD variant achieve a fuel economy of 29.2 km/L^{*5}.

Launch of vehicle with built-in clean diesel engine

In January 2013, we launched the *DELICA D:5*, the first minivan to employ a clean diesel engine. This model's performance betters Japan's fuel efficiency standards for 2015 by 20%.

- *3: Figure based on cruising range when driven while using the battery.
- *4: This representative figure is calculated by combining the fuel consumption rate from plug-in driving (using power from an external charge) with the fuel consumption rate from hybrid driving.
- *5: JC08 mode fuel consumption rate (Screening figure of Japanese Ministry of Land, Infrastructure and Transport)
- *6: The generic term for powertrain technologies that contribute to improved fuel consumption.
- *7: Mitsubishi Innovative Valve timing Electronic Control system, the generic term for engines with MMC's variable valve timing mechanism.





Outlander PHEV

^{*1:} Unit CO₂ emissions: Amount of CO₂ emissions (kg-CO₂) per unit of transportation (1,000 tons-km) [Amount of CO₂ emissions (kg-CO₂)/Unit of transportation (1,000 tons-km)]

^{*2:} A system that we developed based on EV technologies employed in the *i-MiEV* and *MINICAB-MiEV*, for use in mid-sized passenger cars designed for long-distance transportation.

^{*8:} When decelerating, a system that stops the engine idling from under about 13 km/hr to curb gasoline consumption.

MMC has plant tours in each factory. In fiscal 2012, the Nagoya Plant, Mizushima Plant, Powertrain Plant (Kyoto Factory and Shiga Factory) and Pajero Manufacturing Co., Ltd., hosted a total of around 45.000 visitors.

Initiatives by the Nagoya Plant and R&D center (Aichi Prefecture)

Environmental Appreciation Ceremony held to thank local elementary schools activities

In constructing "M-tech Labo,"* which is operating at the Okazaki Works, we conducted the Environmental Appreciation Ceremony to thank students from Mishima Elementary School and Kitano Elementary School for drawing environmental pictures for the facility.

Activities during the ceremony proceedings included presenting a letter of appreciation, conducting a tour of

"M-tech Labo," and taking commemorative photographs.





'37-Piece Puzzle" drawings by Kitano Elementary School, Okazaki City

"People, Dreams and the Future" drawings by Mishima Elementary School, Okazaki City

Initiatives by the Mizushima Plant (Okayama Prefecture)

Kurumaza Troupe of players made up of employee volunteers

In 2002, workers from the Mizushima district voluntarily launched the Kurumaza Troupe as a way of entertaining and expressing thanks to the community by performing plays at homes for the elderly and other venues.



Kurumaza Troupe performs 5 times a year

Initiatives by the Powertrain Plant (Shiga Prefecture)

Biodiversity preservation project starts

MMC takes the preservation of biodiversity as one of the important environmental activities and has been planning to educate and familiarizes its employees about its effects through the investigation. In 2012, MMC has begun investigations around Shiga Plant as "nature monitoring".

Shiga Plant was selected as the first plant which should roll out "nature monitoring" ahead of all other plants because there must be much opportunities we can see more creatures such as plant, animal and so on. Actually, Shiga Plant was designed to preserve natural environment in the area as maximum as possible.

A "Kasumi salamander" which is designated as endangered species by Red Data Book (published by Ministry of the Environment in Japan) was found at the waterside around Shiga Plant in the "nature monitoring" in March, 2013.

We aim to strengthen biodiversity activity such as "nature monitoring" in and around Shiga Plant and in 2013 we are planning to implement an investigation of plant, birds, insects and the mammals

Findings will be utilized for our employees environmental education purposes.





Conducting a survey inside the Shiga Plant (the survey was subcontracted)

Initiatives by *Pajero* Manufacturing Co., Ltd. (Gifu Prefecture)

Holding baseball clinics

Pajero Manufacturing's employee Hatobukikai baseball team and the MMC Okazaki Baseball Club jointly held baseball clinics for around 110 elementary school students from the Sakahogi and Minokamo little leagues. During breaks, the teams put on a hot beverage service using heat from a 1,500 W MiEV power BOX. This service proved popular among parents during the cold weather.



Being coached in batting

* A smart grid demonstration facility that uses storage batteries mounted in electric vehicles to level out power demand at plants.

Feature

Overseas initiatives

Taking part in tour to support patients with intractable diseases (America)

As part of social contribution initiatives, employees of Mitsubishi Motors North America, Inc. (MMNA), and their families took part in a port-to-port walking and bicycle tour organized by the National MS Society. Their participation raised US\$26,000 for treating multiple sclerosis sufferers, bringing the total raised since fiscal 2000 to US\$300,000.



Participants in the walking and bicycle tour



An elementary school that is being supported

Donated to the Commission's "School Lunch Project" (Thailand)

Mitsubishi Motors Thailand Co., Ltd. (MMTh), is supporting the Office of the Basic Education Commission recommended "School Lunch Project," which fosters nutrition and health for children. In fiscal 2012, MMTh donated THB20,000 baht each to 150 schools around Thailand.

Participating in project to reduce environmental impact (Philippines)

Mitsubishi Motors Philippines Corporation (MMPC) participates enthusiastically in Green Philippines Islands of Sustainability, a project that the European Union launched to reduce environmental impact.

The target of this project is for enterprises to harness resources effectively to ensure even cleaner production and services, thereby reducing environmental impact. The project began in 2011, and 245 companies currently take part in Metropolitan Manila and the CALABARZON region.



Gave the ECOSWITCH PLANET AWARD For Energy Efficiency

In the fiscal 2012 GPIoS awards, MMPC received an ECOSWITCH Certification Award. MMPC was also honored with a prestigious ECOSWITCH Planet Award for Energy Efficiency in recognition of initiatives to reduce energy consumption, notably by lowering the temperature settings of plant air-conditioning systems and turning off unnecessary lighting.

MMPC participates in the Philippine government's National Greening Program. Under this national project, 1.5 billion trees will be planted from 2011 through 2016. By 2012, 220 million trees had been planted.

Many MMPC employees had taken part in this initiative by May 2013, planting 2,000 trees in Tanay in the province of Rizal. MMPC will continue with these initiatives in the years ahead.



Employees who participated in a tree-planting ceremony

In line with the "Environment preservation Month" of June, Mitsubishi Motors held a painted poster contest for the children of Mitsubishi Motors' personnel. The children entered paintings they had made on a theme, of environmental protection to be used as in-house educational posters. On this page we show the posters for which we awarded prizes.

(subtitles)

Elementary schoolchildren 3rd grade or below: "The nature that we like"

Elementary schoolchildren 4th grade or above: "How I imagine nature in the future"



Gold Award Mio Ishikawa



"How I imagine nature in the future" Gold Award Naoki Furuta



Tomoyo Yasukawa



'The nature that we like' Silver Award Asahi Yasunaga



"How I imagine nature in the future Silver Award Mayu Akado



Momoka Oda



"The nature that we like" Bronze Award Sho Shibata



"How I imagine nature in the future" Bronze Award Eriko Furuta



Environmental Award Momoka Nishimoto



Designers Award Tadashi Sumikama

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