MITSUBISHI MOTORS

Social and Environmental Report 2005

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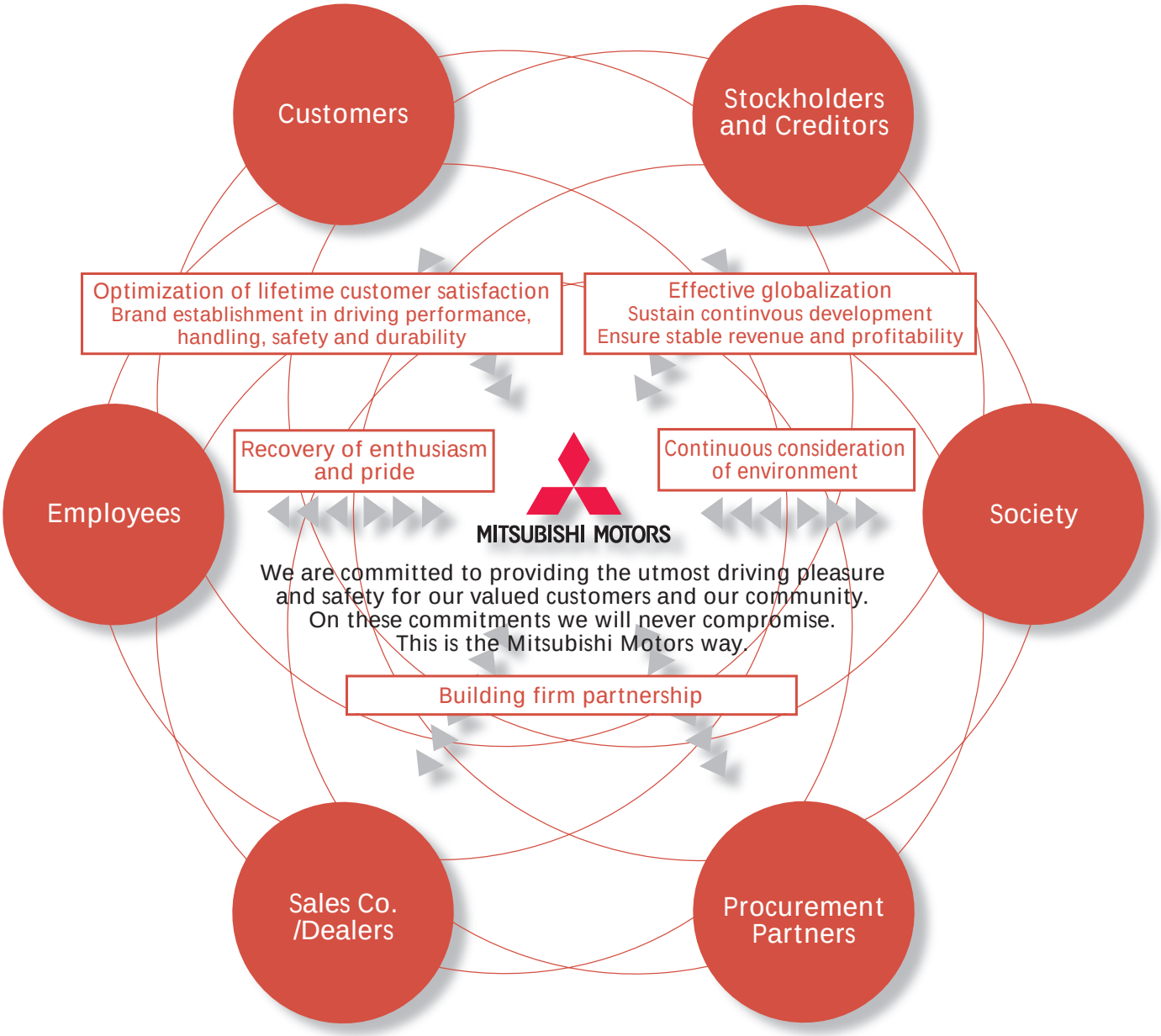
Mitsubishi Motors Environmental and Social Activities



Mitsubishi Motors Social & Environmental Report 2005

Note to Readers

Mitsubishi Motors Corp. (MMC) has published environmental sustainability reports in English and Japanese every year for the past six years. The inaugural publication was in September 1999. Although previous years' reports have included various information on social aspects, this year the title has been changed to reflect a sharper focus on the reporting of matters related to stakeholders in light of an enhanced recognition of corporate social responsibility. The aim of this report is to provide all stakeholders with a full and honest account of MMC's environmental and social activities.

Reference: Environmental Reporting Guidelines (2003), Japan's Ministry of Environment

Scope of Report

- Environmental activities: MMC in Japan
  (Note: The report also includes the activities of some MMC affiliates)
- Social activities: MMC in Japan
- Economic data: MMC, Consolidated subsidiaries and Affiliates

Reporting Period

- Fiscal 2004 (FY2004 : April 1, 2004–March 31, 2005)
  (Note: The report also includes some recent information from April 2005 onward)

Please also refer to:
•Web-based information on MMC's environmental activities
http://www.mitsubishi-motors.com/corporate/environment/e/index.html

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Point 1

Messages From Senior Management → P.04

Senior management involved in social and environmental activities explain the current and future actions of MMC.

Point 2

Formulation of New Corporate Philosophy → P.09

Mitsubishi Motors has instituted a new corporate philosophy to state the purpose of MMC's existence and to provide a roadmap for its future direction. This new philosophy underpins all corporate activities.

Point 3

Partial Revision of Environmental Sustainability Plan → P.13-14

Although MMC has made progress in line with specific environment-related activities and goals contained in the Environmental Sustainability Plan published in 2002, MMC has made some revisions to the plan, notably in terms of extending some deadlines for performance targets. Efforts are being accelerated to attain medium-term goals.

Point 4

Electric Vehicle Development Program → P.23-24

Mitsubishi Motors is focusing efforts on the development of electric vehicles (EVs) to create automobiles with ultra-low emissions. Field trials with a *Colt EV* prototype have been conducted to raise the performance of lithium-ion batteries. These high-performance batteries power innovative in-wheel motors at the heart of a design for the next generation of EVs (the MIEV project).

Point 5

"Corporate Ethics Compliance First" Declaration → P.39

In June 2004, former chairman and chief executive officer Mr. Yoichiro Okazaki and former president and chief operating officer Mr. Hideyasu Tagaya announced a new declaration by senior management to prioritize compliance with corporate ethics. Fiscal 2004 marked the start of a new action program. Mr. Osamu Masuko, who was appointed president of MMC in January 2005, reaffirmed this compliance-first declaration on March 18, 2005 upon his appointment as Chief Business Ethics Officer (CBEO). Programs are ongoing to ensure that compliance is placed at the forefront of business.

Point 6

Sale of LEVs → P.57

MMC has launched new versions of the *Colt*, *Colt Plus* and *Lancer* series with exhaust emissions that are 75% lower than the 2005 Japanese emission standards. This performance qualifies these models for a SULEV (Super Ultra Low Emission Vehicle) rating from the Japanese government. In the minicar segment, the latest models in the *eK* series have also attained a SULEV rating in recognition of similarly large reductions in exhaust emissions.

We Are Committed to Achieving the Goals of the Revitalization Plan and to Addressing Environmental and Social Challenges

After unveiling the Mitsubishi Motors Revitalization Plan in January 2005, we have made a fresh start. We are now taking on the challenges of restoring our corporate vitality and regaining the trust and confidence of the public. At the end of March 2005, based on the results of our investigations into the past several recalls that helped to precipitate the crisis of 2004, we announced disciplinary measures against the people involved and instituted a program of measures to prevent any reoccurrence. We have now made a clean break with the past.

The new corporate philosophy that we formulated as part of the discussions leading to the creation of the Revitalization Plan will serve as the basis for all corporate activities. The philosophy places the greatest value on our corporate responsibilities to customers and society at large. We have made concerted efforts to internalize this philosophy so that it underpins all of our actions. Reflecting this shift in thinking, we have changed the name of our annual environmental sustainability report to the Social and Environmental Report. The content has been upgraded to include sections on our social activities, such as business ethics compliance and quality control improvements.

The Mitsubishi Motors Environmental Sustainability Plan that we launched in 2002 has guided our environmental protection activities over the past few years. The sharp deterioration in our business conditions during fiscal 2004 necessitated major changes in product development plans, which in turn led us to extend the deadlines for achievement of some performance targets contained in the Environmental Sustainability Plan. However, there has been no change in our commitment as a company to environmental protection.

We continue to channel our resources into the development of vehicles with eco-friendly performance. For instance, we have lowered exhaust emissions with the *Colt*, *eK-WAGON* and other leading small passenger car models to a level where many qualify for a SULEV rating from the Japanese authorities. We have launched a series of cars in Japan with improved fuel efficiency to allow customers to benefit from the preferential tax treatment of eco-friendly vehicles. In addition, a centerpiece of our low-emission vehicle development program is the MIEV, a next-generation electric vehicle with ultra-low emissions that employs high-density lithium-ion batteries to power an original system of in-wheel motors (see page 24). We plan to launch commercial versions by 2010.

I believe that companies will need to find a balance between their economic, social and environmental activities to survive in the 21st century. Although our business will continue to face challenges in fiscal 2005, we are wholly focused on making sure that we move forward in line with the Revitalization Plan. At the same time, to earn the trust of the public again, we are channeling our energies into activities that address environmental protection and social issues such as road safety. We also pledge to maintain a commitment to full disclosure so that our customers can better appreciate our efforts. We ask for your support as we take on these important challenges.

Osamu Masuko
President

What is the thinking of Mitsubishi Motors on CSR?

Interview With Executive Officer, CGM of CSR Promotion Office
Yoshikazu Nakamura

Specifically, what is the role of the CSR Promotion Office?

Nakamura: Broadly speaking, the CSR Promotion Office has two functions. One is internal and external communications, and the other is monitoring. If we were to do only what we thought was right, I believe that it would inevitably create a gap between MMC and the public at large. To close that gap, we need to ensure external disclosure of all the appropriate information while asking for reviews by third parties. So this makes our communications with society vital to our role.

In addition, besides monitoring from outside, we also need to monitor our operations from an internal perspective. For instance, the Internal Audit Department performs regular checks to see whether or not our internal business processes, from financial accounting to business flows, are compliant both with internal rules and with external laws and regulations. Similarly, the Quality Audit Department checks that the processes related to establishing product quality are compliant with internal rules, as you would naturally expect, and that any recall processes implemented in the event of a defect are applied properly.

Was there previously any monitoring of recall processes such as that now entrusted to the Quality Audit Department?

Nakamura: In the past, we had a cross-functional monitoring function that performed audits and checks across divisions. However, there was no function such as the Quality Audit Department to check recall processes. Now that we have upgraded internal monitoring functions, I am confident that we are able to perform the necessary level of checks on product quality and on any recalls that we need to make in response to a quality defect.

Corporate social responsibility (CSR) is in your office's title. What is your view of CSR?

Nakamura: I think that CSR is critical to a company's survival. Particularly in our case, where I believe that our stance as a company on compliance and other issues related to past recall-related problems will be a major factor affecting our continued existence. The spotlight is turned on CSR in Japanese society, and we have a lot of issues to address because we have been evaluated harshly under these new conditions. Among these issues, I think that CSR is an extremely important one. There is a general tendency to confuse social responsibility with business morals, but I think that focusing purely on moral questions is inadequate as a response because it is passive. In the same vein, CSR does not merely mean obeying the law. Beyond moralizing and trying to inculcate a law-abiding spirit, I think that CSR and compliance promotion is about taking proactive measures to earn a reputation from society as a company with integrity.

What specific actions are you taking on compliance and other corporate ethics issues?

Nakamura: In April 2004, the chairman and president issued a declaration that committed senior managers to place the highest priority on corporate ethics compliance. At the same time, we instituted a "compliance-first" action program. All directors and employees were asked to sign corporate ethics compliance declarations to signify our commitment across the whole of MMC to establish and implement the highest ethical standards.

One item on the "compliance-first" action program was the reconstruction of our business ethics promotion structure. As part of this, we established new positions of Compliance Officer within each company office. This structure ensures that all employees possess a high awareness of corporate ethics and that all programs are implemented. The Business Ethics Committee established in June 2004 also oversees these activities, providing further guidance and advice where necessary.

Would you care to give us any final message?

Nakamura: Advertising and public relations are the best ways for us to send messages to customers about MMC. In 2004, we limited our promotional activities due to the recall-related problems, but in 2005 we have begun advertising our products more actively again. There was various media coverage of our recall-related problems during this period of self-restraint on the advertising front. In future, my goal is to ensure that we are transparent about our problems by disclosing information timely. In this way, I hope that we can restore the trust of customers in MMC.

Note: Answers are based on replies given at an internally conducted interview.

What is Mitsubishi Motors doing to develop more eco-friendly vehicles?

Interview With Managing Director in Charge of Product Development and Environment Affairs Group Headquarters
Tetsuro Aikawa

Your position as managing director covers the two divisions for product development and for the environment. How do you see the link between these two roles?

Aikawa: Environmental issues related to vehicles affect all aspects of the life cycle, from development, production, logistics and sale to the period of customer use and then final disposal. But, from our perspective as an automaker, development issues have perhaps the most significant impact in environmental terms. Specifically, the most important point is to create an eco-friendly design for the car that you plan to manufacture. To achieve this, it is vital that there is a high level of environmental awareness within the product development operations. In that sense, I think that managing the development and environment divisions in a single job can help me to tackle the environmental issues more quickly and more efficiently. Another point in its favor is that if you create an eco-friendly vehicle at the development stage then it becomes much easier to tackle the environmental issues that arise during all the later downstream stages.

Turning to recycling, which is one of those downstream stages, how is MMC responding to the automobile recycling legislation that was recently enacted in Japan?

Aikawa: In March 2002, we created the Recycling Promotion Office. We prepared carefully for this law, and we are making excellent progress as a result. The law actually came into effect in January 2005. In the first three months of 2005, our recycling operations generated significant volumes of reusable resources. Fluorocarbons from air-conditioning systems totaled the equivalent of 15,000 vehicles. We also recovered the equivalent of air bags for 2,000 vehicles as well as 21,000 vehicles-worth of shredder dust. At 60.1%, the recycling rate for shredder dust was considerably higher than the statutory minimum level of 30%. The mandatory target for 2010 is 50%, so we have met this goal well ahead of the legal deadline.

How would you characterize the Environmental Sustainability Plan that MMC has published?

Aikawa: In 1999, we formulated an Environmental Policy as the basis for tackling related issues. Next we formulated a five-year medium-term plan, the Environmental Sustainability Plan, for environmental activities starting in 2002 to put this policy into practice. The Environmental Sustainability Plan is our way of communicating to people outside the company what activities we are doing and the achievement status for each aspect of the plan, which is updated on an annual basis. The four major areas of the plan are environmental management, recycling, prevention of global warming and prevention of environmental pollution. We update our activities in each of these areas each year based on discussions within the Environmental Council and examples of what other companies are doing.

"DfE" is one of the headline goals of the plan. What does this mean?

Aikawa : "DfE" is short for "Design for Environment," which basically means eco-friendly design. At MMC, we aim to make DfE the central motif of our product development process as we seek to minimize the environmental impact of our passenger cars over the entire life cycle from development to disposal. In practice, this means taking an overall look at the processes involved to determine what volume of CO_2 is emitted during the manufacturing stage or the degree to which the vehicle could be recycled. We try to minimize life cycle eco-impact by creating a more eco-friendly car at the design stage. At the moment, we are still in the process of developing the various practical tools involved. By the end of fiscal 2005, we expect to have refined the overall process into a systematic form so that we can start to apply it to all new vehicle development.

MMC is undertaking various environmental management initiatives. What impact do environmental considerations have on the new vehicle development process?

Aikawa: One good example is our development of a next-generation electric vehicle that would not produce any CO_2 at all. In this project, we are aiming to develop an application for original MMC technology. The development of EVs was popular within the car industry over a decade ago, but efforts foundered because low battery power caused very short cruising range. Interest in EV development faded away, and other automakers turned their attention to hybrid vehicles. Here, however, we took the other path of trying to improve battery performance.

In the past few years, we have achieved dramatic improvements in the range that can be achieved on a single battery charge. The battery is now at a stage where it would certainly be of practicable application in an automobile. Our research into hybrid vehicles kept pace with that of other manufacturers, but we have lagged behind at the commercialization stage, unfortunately. To

regain lost time, we plan to commercialize EVs as quickly as possible. In environmental terms, EVs are actually superior to hybrid vehicles because they produce no CO_2 emissions whatsoever.

By this you mean MIEV (pronounced "MEEV"), a next-generation electric vehicle project that MMC announced recently?

Aikawa: That's correct. MIEV uses original technology that features the combination of a high-powered lithium-ion battery with small motors fitted to the wheels (known as "in-wheel motors"). In the nearly 100 years since the Ford Model T was launched in 1908, the complex drivetrain of the mass-production car has barely changed. MIEV technology eliminates these complexities by using a vastly simplified structure, in which the battery is connected directly to motors in the wheels. I believe that we can claim with some pride that the development of the MIEV for mass production would represent a revolution in automotive drivetrain technology.

Besides a simpler structure, what are the other practical benefits?

Aikawa: The MIEV design has motors in each wheel capable of independent operation. If we apply the 4WD technology from the *Lancer Evolution* models, we can make the handling safer and more enjoyable than many conventional vehicles by providing independent control of potential wheel slip and of the inner and outer wheels during cornering. In addition, because the motors are located inside the wheels, the space usually needed for the engine and transmission simply disappears. This frees up many of the typical restraints on the car's basic packaging. So MIEV technology actually gives us a platform for making cars that customers will find easy to drive.

Furthermore, such a car would have low operating costs as well as be kind to the environment because it would use no gasoline. It represents an extremely economical vehicle. We estimate that, assuming battery charging was done during the day, the total cost of the electricity would be only one-third or so that of the fuel for an equivalent-sized gasoline engine. This ratio would drop to about one-tenth with overnight charging, due to cheaper tariffs.

When do you plan to launch MIEV on the market?

Aikawa: We hope to have commercial vehicles based on MIEV on the market by 2010. We are also trying to accelerate the development program so that our customers do not have to wait a day longer than is necessary.

(Please refer to page 24 for details of the MIEV project.)

Finally, what are your product development ambitions?

Aikawa: Looking ahead, we are making progress in the development of next-generation engines producing higher fuel efficiency and lower emissions. In addition, we are focusing on developing attractive cars in the minicar segment, where lower fuel consumption naturally favors eco-friendliness. We hope to get more people driving this type of car, which would be better for the environment. At the same time as making eco-friendly vehicles, my aim is to ensure that our cars deliver the utmost driving pleasure and safety, as espoused in the new Mitsubishi Motors corporate philosophy.

Note: Answers are based on replies given at an internally conducted interview.

How is Mitsubishi Motors improving quality control?

Interview With Senior Executive Officer ,CGM of Quality Affairs Office

Mitsuo Hashimoto

How have you found the first year in your position?

Hashimoto: This past year has been primarily concerned with putting in place all the measures needed to clear up the past recall-related issues. In order to strengthen our quality assurance systems, we have created an office under my control of about 1,200 people that are focused entirely on quality. In concrete terms, we have integrated departments involved in quality control, such as Quality Control at each plant, Engineering Verification Certification and Regulation Compliance, Warranty Management and Supplier Parts Quality Engineering. As a result, we have integrated all our quality-related teams into a single division.

Do you think that this integration has helped to define the role of the Quality Affairs Office (QAO) more precisely?

Hashimoto: I think that the integration process has clearly defined the QA responsibility for all vehicles as falling under the purview of the QAO. In other words, the role of the QAO is to display leadership on all quality-related issues throughout the stages from product development through production and sale.

What is the relationship between your operations and the Quality Audit Department inside the CSR Promotion Office?

Hashimoto: The role of the Quality Audit Department is to conduct objective internal audits of the QAO to verify that our operations are being performed by the proper procedures. In practice, people from the Quality Audit Department attend all the key meetings that we hold as the QAO, and there is a lot of advice from them about decisions that we take. The set-up is designed to act as a series of checks and balances.

Aside from organizational changes, what are you doing to restore trust in quality control at MMC?

Hashimoto : Any process that involves the handling of many things will inevitably produce some kind of defect, no matter what level of care and consideration you take. I think what is important is to react swiftly and appropriately once the defects have been discovered. Last year, we put a lot of stress on making the recall decisions from a customer-centric perspective. I think that we succeeded in establishing this process, but the speed is still not good enough. I am now in the process of establishing schemes for raising our speed of response.

Please tell us more about this initiative to make processes faster.

Hashimoto: In practical terms, we are reinforcing the 10 Technical Centers that we have around Japan so that we can get precise information on defects quickly when customers approach us initially. In addition, since June 2005, we have been using a new process. With this process, designers get involved with the investigation from the time that the information about the defect is initially received to make our response more effective.

Separately, since late 2001, we have been employing the Mitsubishi Motors Development System (MMDS) under the Quality Gate structure introduced under the guidance of DaimlerChrysler. I think that our vehicle development processes will continue to evolve from hereon, too, and we will also upgrade our Quality Gate system along with it.

Do you have any final message for readers of this report?

Hashimoto: I believe that the most critical element in maintaining quality is to maintain good communications with both internal departments and external parties. So we are promoting activities to ensure that there are many opportunities to exchange opinions directly for the people in my office as well as development divisions and those on the frontline, either the salespeople or service engineers.

To raise quality for customers, we must not only improve the quality of our products, but there is also a need to enhance our service quality. To do this, we need to have excellent two-way communications between the QAO and all other departments in the company, particularly the development and sales operations. I believe that it is these types of communications that will help strengthen trust from customers so that they will understand MMC provides safe and enjoyable driving. I think that we will succeed in doing this, so I ask the readers of this report not to lower their expectations of MMC.

What initiatives related to the environment and quality is Mitsubishi Motors undertaking within manufacturing?

Interview With Managing Director in Charge of Production Group Headquarters
Makoto Maeda

What kind of environmental protection activities does MMC undertake at its production plants?

Maeda: Measures to counter global warming and air pollution are two key elements of our environmental protection program. On global warming, we are focusing in particular on reducing our CO_2 emissions. As you are aware, the target under the Kyoto Protocol is a 6% cut compared to the 1990 level, but we have made considerable progress on this front. Our emissions in fiscal 2003 were 24% less than fiscal 1990 levels, and in fiscal 2004 the reduction increased to 32%.

In terms of preventing air pollution, our current priority is to reduce emissions of volatile organic compounds (VOCs). This is in line with recent changes to Japanese laws, which set new limits on VOC emissions. We have our own internal VOC emission standards, which are stricter than the statutory limits. Our manufacturing plants are already in compliance with the revised Japanese regulations, and we are implementing measures to meet our own internal VOC emissions target, which is a 30% reduction relative to 2000 levels by 2010. For example, we have achieved significant reductions in VOC emissions at the Mizushima Plant through the introduction of water-based paints.

And what about the distribution side of MMC's operations?

Maeda: On the distribution side, we are working to reduce CO_2 emissions through more efficient transport of finished vehicles. We are on track to meet the targets in our plan, but we are also trying to find other ways of boosting efficiency in distribution operations.

Another initiative is in packing materials, where we are reducing the amounts of wood that we use. For example, for export shipments of knockdown parts and service parts we are replacing wooden packing materials with containers made out of steel. The new rule that we are implementing is that packing materials should be returnable after delivery. Although the reduction in wooden packing materials that we recorded in fiscal 2004 fell short of our target, in fiscal 2005 we expect to achieve our target, a reduction of 15%, relative to fiscal 2000 levels.

Quality is a major part of production. What is MMC doing to raise quality?

Maeda: First, we are constructing systems with the aim of ensuring that defects do not occur, and that in the unlikely event that they do occur we can respond quickly to solve the problem. In terms of specifics, we have adopted a system that we call "In Stage Quality Creation" (ISQC) to lower defect rates by raising quality within production processes. ISQC is a system that controls quality all the way through the manufacturing process from the initial stages.

If for some reasons a defect arises we are trying to trace precisely when the problem began and exactly how many vehicles are affected.

For any given finished vehicle, we are trying to pinpoint where and when its engine was made, and even when the cylinder block for that engine was cast. I give a major priority to important components related to customer safety, and we can trace 56 separate chassis components and 21 engine parts. Our plan is to expand the system so that eventually all components are fully traceable.

Finally, how do you see the future of environmental protection activities at MMC?

Maeda: I think that the important point is to change the way of thinking among our employees. We need to make sure that all our employees realize that cars are making an impact on the environment due to exhaust emissions and other factors. Based on this realization, we need to make all our processes more eco-friendly.

In addition, I believe that we need to treat environmental issues not just on a regional level, but also on a global scale. We must be more proactive in engaging in activities that make a positive contribution to various global environmental issues, such as planting trees.

Note: Answers are based on replies given at an internally conducted interview.

“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.”

Mitsubishi Motors (MMC) has drawn up a new corporate philosophy that states the purpose of the company’s existence and provides a clearer roadmap for its future direction. The new philosophy will serve as a touchstone for all activities conducted under the Mitsubishi Motors name.

Corporate Philosophy

“The Three Principles” of the Mitsubishi Group, Corporate Philosophy and Three Management Commitments

MMC has made a clean break from the corporate culture and the ways of the past, and has set out to create a new future for the company. MMC is now channeling all its resources and energies into restoring corporate vitality and regaining the trust and confidence of the public. To guide these endeavors, MMC unveiled a new corporate philosophy in January 2005, alongside the announcement of the Mitsubishi Motors Revitalization Plan. Underpinning all corporate activities and adhering to “The Three Principles” of the Mitsubishi group of companies, the new corporate philosophy is the product of extensive internal discussions, which were conducted in conjunction with the formulation of the Mitsubishi Motors Revitalization Plan. There are three Management Commitments based on the new corporate philosophy.

The Three Principles of the Mitsubishi Group

While the members of the Mitsubishi group are independent and mutually autonomous, they share Three Principles (“Sankoryo”).

- **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**

International Understanding Through Trade: Expand business, based on an all-encompassing global perspective.

Corporate Philosophy

- **Customer-centric approach**

MMC will give the highest priority to earning the satisfaction of its customers, and by doing so, become a company that enjoys the trust and confidence of the community at large. To that end, MMC will strive its utmost to tackle environmental issues, raise the level of passenger and road safety and to address other issues of concern to car owners and the general public.

- **A clear direction for the development and manufacturing of MMC’s vehicles**

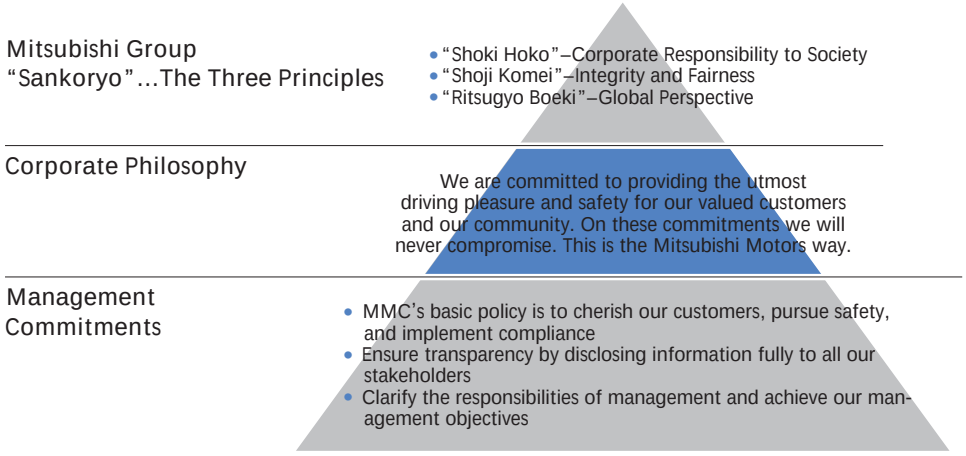
The cars that MMC will manufacture will embody two major concepts: “driving pleasure” and “safety.” MMC will manufacture cars that deliver superior driving performance and superior levels of safety and durability, and as such, those who use them will enjoy peace of mind.

- **Going the extra mile**

MMC will pay close attention to even the smallest details in the belief that this approach will lead customers to discover new value in their cars, giving them a richer and more rewarding motoring experience.

- **Importance of continuity**

MMC will continue to manufacture distinctive cars with the passion and conviction to overcome all challenges.



Creating a New Mitsubishi Motors

Recognizing that fundamental management reform is necessary to restore public confidence, MMC has initiated earnest moves to solve two major issues as quickly as possible. First, the company aims to restore the trust that was lost due to recall-related problems. Second, MMC is undertaking major restructuring to restore profitability.

Moves to restore public confidence

MMC created the Business Ethics Committee in June 2004 to provide the company with external guidance and counsel on how to reform corporate ethics and culture with a view to establishing an effective internal compliance system. ▶▶▶P.39

In September 2004, MMC submitted to Japanese authorities final reports explaining the series of past events and circumstances that contributed to problematic recalls and faulty related procedures. In March 2005, based on the results of a fact-finding study to establish the causes of these failures, the company instituted measures to prevent any reoccurrence. These included the disciplinary treatment of senior managers, including executive officers, and the publication of new policies. MMC hopes that these actions have served to draw a line under these issues.

Business restructuring initiatives

In June 2004, the Corporate Revitalization Committee began a strict 12-month program of reform measures. Cross-functional teams (CFTs) comprised of young, energetic and enthusiastic employees that are determined to address and resolve key management issues have spearheaded the effort, using the results of employee interviews and questionnaires to identify management issues. CFTs have surmounted organizational barriers to propose various measures to further reforms. The Mitsubishi Motors Revitalization Plan published in January 2005 incorporated many of these measures (see column).

MMC also implemented organizational reforms in April 2005 to strengthen management capabilities through the establishment of a fully integrated management hierarchy and the clarification of responsibilities. At the same time, the company reinstituted systems to follow up reforms. These moves included the appointment of a new vice-president in charge of the business revitalization process and the establishment of a new Revitalization Promotion Department. In addition, the Business Revitalization Monitoring Committee was created as an advisory body to the Board of Directors in April 2005 to monitor progress in implementing the Revitalization Plan.

Achievement of all the goals in the Mitsubishi Motors Revitalization Plan is management's foremost priority to place the company on the path toward restoration of public confidence and profitability. Based on acceptance of the new corporate philosophy, all executive officers and employees are firmly committed to implementing the measures contained in the plan in a bid to secure a new future for MMC.

Mitsubishi Motors Revitalization Plan

Unveiled in January 2005, the Mitsubishi Motors Revitalization Plan contains strategic measures suggested by CFTs and related managers, along with various plans based on tie-ups, alliances and financial restructuring measures. Together, these aim to secure a stable future for the business over the medium and long term.

By carrying out this plan, MMC aims to establish good business prospects for the longer term and to achieve a stable, firm financial footing. Given limited resources, MMC is pursuing a policy of selective focus on certain businesses to ensure the success of revitalization plans. The aim is to create a transformed business of appropriate scale that can develop products that customers will find satisfying based on the company's technical strengths.

- Commitments

(1) Return to profitability in fiscal 2006 (net income of ¥8 billion)
(2) Establish sustainable profitability in fiscal 2007 (net income of ¥41 billion)

- Key points

(1) Putting customers first/Recovering trust
- The new plan puts customers first in all areas, from marketing through after-sales service
- The new plan provides measures for achieving no-compromise improvements in product quality

(2) Business strategy
- Sales plans reflect downside risks
- Promotion of operational tie-ups with other automakers
- Rationalization of production capacity and size of sales networks (U.S., Australia, Japan)

(3) Reinforcement of capital and funding
- Strengthening of financial standing and securing capital for revitalization

Environmental Protection as one of Most Important Issues

Mitsubishi Motors (MMC) has formulated its own policy on the environment, based on the recognition that environmental protection is one of the most important issues for management. MMC is focused on continuously executing the Environmental Sustainability Plan as the cornerstone of environmental protection activities. The Environmental Council, which is chaired by the president, has overseen internal environmental programs at MMC since 1993.

Environmental Policy

MMC formulated a specific Environmental Policy in 1999 to clarify the aims of environmental protection activities (see below). This policy affirms environmental protection as one of the most important issues for management and declares the MMC's commitment to undertake environmental protection activities on a continuous basis while adopting a proactive stance on environmental management and performance issues. MMC has also formulated the Environmental Sustainability Plan ▶▶▶P.13-14 to guide specific activity programs so that environmental policies are reflected in all products and services.

Mitsubishi Motors Corporation Environmental Guidelines (formulated August 1999)

Basic Policy

Mitsubishi Motors recognizes that protection of the global environment is a priority for humanity 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 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.
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.

Specific Action Plans: Environmental Sustainability Plan ▶▶▶P.13-14

MMC formulated a medium-term program of action for environmental protection activities to ensure that the environmental policy would not be a mere verbal philosophy. Covering the five years from fiscal 2002, the published plan sets out specific actions and targets for MMC's efforts as an automobile manufacturer to improve the environment. Programs are grouped under four main headings.

(1) Environmental management

Promotion of the DfE project, establishment of environmental management systems (notably progress in ISO 14001[*1] certification) and disclosure of related information; upgrading of environmental protection systems in collaboration with affiliates, suppliers and dealers both in Japan and abroad.

(2) Recycling

Promotion of recycling for automobiles and related manufacturing activities to make efficient use of resources and to reduce waste.

(3) Prevention of global warming

Measures to improve vehicle fuel economy and also reduce emissions of greenhouse gases such as CO_2 and fluorocarbons, including those emissions caused by production and distribution progress.

(4) Prevention of environmental pollution

Measures to make the environment cleaner, such as the development and promotion of low-emission vehicles, the reduction of exhaust emissions and the restriction of emissions of substances with an adverse environmental impact.

*1. ISO 14001 is a standard for environmental management systems that is administered by the International Organization for Standardization.

Environmental Organization

Environmental Council

The Environmental Council, which is chaired by the president, was established in 1993 to coordinate environmental protection activities across MMC.

The council convenes on an annual basis to determine basic policy on environmental protection activities and to discuss and decide matters related to the proposals made by its three constituent committees. Progress toward environmental performance targets is tracked and reported each quarter.

The council is composed of three standing committees (the Product Committee, the Production Committee and the Environmental Management & Recycling Committee). The Automobile Recycling Law Task Force was set up in August 2001 to coordinate preparations for the Automobile Recycling Law that came into force in Japan at the beginning of 2005. The Environmental Management & Recycling Committee has handled all related matters since the law's enforcement.

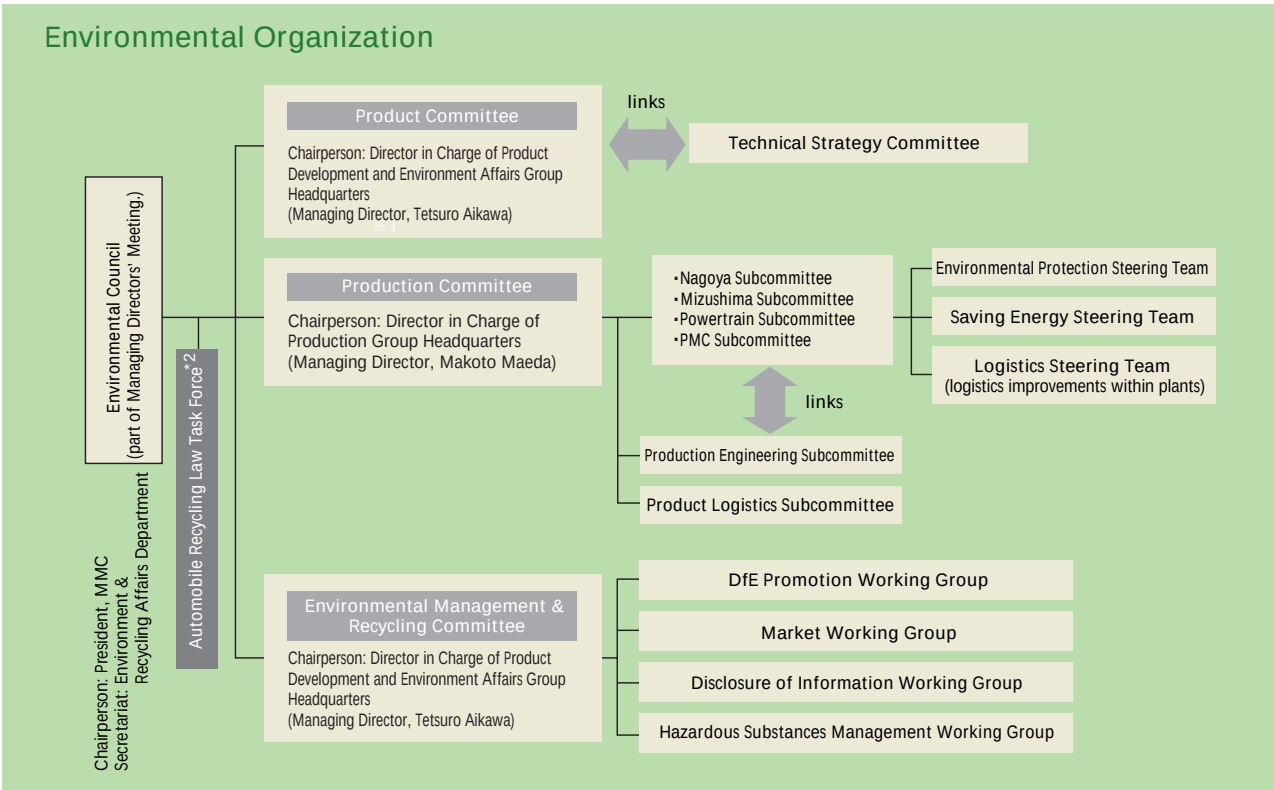
In August 2004, the Environmental Council was upgraded in status to be part of MMC's Managing Directors' Meeting. As a result of this move, any decisions by the council now constitute formal company policy.

In fiscal 2004, to comply with fuel economy regulations in Japan, Europe and the U.S. as part of efforts to prevent global warming, the Environmental Council revised related plans to ensure that future activities in this area by MMC are in line with prevailing social trends.

Environment & Recycling Affairs Department

MMC established the Environmental Affairs Department in May 1999 to coordinate environmental protection activities across the company. The department was increased in size and renamed the Environment & Recycling Affairs Department in April 2000. In June 2004, the department absorbed the Recycling Promotion Office, which had been established to accelerate efforts to comply with various recycling laws in Japan and overseas. Besides proposing strategies related to environmental protection for MMC, the Environment & Recycling Affairs Department also functions as the secretariat for the Environmental Council.

Environmental Organization



*2. This task force was subsumed into the Automobile Management & Recycling Committee following the enforcement of the End-of-Life Vehicle Recycling Law on January 1, 2005.

Ongoing Progress on Environmental Activities Guided by Environmental Sustainability Plan

The Environmental Council revises the Environmental Sustainability Plan each year. In FY2004, a number of new targets were re-established in line with the Business Revitalization Plan.

(1) Environmental management

An asterisk (※) signifies revision of the medium-term target in FY2004.

Category	Item		Medium-term Target
Design for environment	Application of DfE (Design for Environment)		•Completion of DfE system, application to product development (※1-year deadline extension)
Environmental management systems (EMS)	ISO 14001 certification	Company sites/ affiliates	•Expand number of ISO 14001-certified sites
		Suppliers	•Promote certification of all existing and new suppliers (※ongoing goal without specific deadline)
	Dealer systems		•Establishment/operation of EMS by all dealers (※1-year deadline extension)
Collaboration with production affiliates	Japan		•Promote environmental plans through regular MMC Group meetings and internal publications
	Overseas		•Strengthen environmental collaboration with major overseas sites through mutual exchanges and assessment of regulatory trends
Disclosure	Disclosure		•Ongoing disclosure of environmental information, including publication of annual environmental sustainability report

(2) Recycling

Category	Item	Medium-term Target
Automobile recycling	Japan	•Comply with vehicle recycling law and promote smooth processes (system development/operation, management of hazardous substances, proper processing, disclosure, etc.)
	Europe	•Achieve effective recycling rate of 95%; build mandatory collection network for end-of-life vehicles (ELV); disclose information, etc.
	Hazardous substances	•Comply with restrictions on use of lead, mercury, hexavalent chromium and cadmium (Japan/Europe)
Recycling within production processes	Landfill disposal of waste	•Maintain zero emissions of landfill waste at all manufacturing sites (internal limit of less than 0.1% of waste by weight)
	Recycling	•Achieve waste recycling rate of at least 98% (by end of FY2005)
	By–product emissions	•Reduce emissions of metal scraps and waste casting sand per unit of sales (by1.7% relative to FY2001 by end of FY2006)
	Water resources	•Rationalize use to achieve reductions in total consumption (by 5% relative to FY2000 by end of FY2005)

(3) Prevention of global warming

Category	Item		Medium-term Target
Improvements in vehicle fuel economy	Japan		•Early achievement of 2010 domestic fuel economy standards (※by end of FY2007)
	Europe		•Improve fuel economy to achieve 2009 voluntary targets for Europe
Air-conditioner refrigerants	Reductions in usage of substitute freons (HFC-134a)		•Expand installation of low-refrigerant air-conditioning systems in new models (reduction of at least 20% relative to 1995 levels)
	Adoption of air-conditioning systems free of substitute freons		•Promote development of CO_2-based air-conditioning system •Achieve compliance with EU standard (complete elimination of HFC-134a) [new item added in FY2005]
Production and logistics	Reductions in CO_2 emissions	Manufacturing sites	•Achieve at least 20% reduction in emissions relative to FY1990 levels by means of site-based energy-saving measures (by FY2010)
		Finished-vehicle logistics	•Achieve at least 6% reduction in emissions relative to FY2000 levels through more efficient vehicle transportation (by FY2005)
	Packing/packaging materials		•Reduce usage of wooden packing cases per knockdown unit of sales relative to FY2000 levels by at least 15% (by FY2005)

(4) Prevention of environmental pollution

Category	Item		Medium-term Target
Low-emission vehicles (LEVs)	Original technology vehicles (MIEV technology)	MIEV-related R&D	•Conduct R&D into application of in-wheel motors to electric vehicles [new item added in FY2005]
		Electric vehicles (EVs)	•Undertake R&D on EVs and hybrid EVs (HEVs); conduct road trials (※plans revised in part)
		Fuel-cell vehicles (FCVs)	•Introduce next-generation FCVs (※plans revised in part)
	Other clean-energy vehicles		•Pursue further research into commercial application of idling stop technologies
	Fuel-efficient LEVs		•Boost ratio of vehicles sales in Japan qualifying for tax incentives Registered vehicles: at least 75%; minicars: at least 55% (by FY2005) •Achieve ratio of registered vehicles (non-minicar) sold in Japan with certified LEV status (new ULEV[*2] or SULEV[*3]) of 85% (by FY2005)
Cabin environment	Emissions of VOCs (volatile organic compounds)		•Reduce cabin VOC emissions
Reduction of use of hazardous substances during production	VOC emissions		•Restrict average emissions across company to maximum of 42g/m2 (by end of FY2009) [※performance criterion changed to company-wide average]
	Dioxin emissions		Item removed from Environmental Sustainability Plan following successive years of regulatory compliance; now subject to normal management controls

Evaluation of FY2004 results: circle = target achieved; triangle = achievement of target imminent despite delay; cross = target not achieved, prompting revision of the Plan.

FY2004 Result	Evaluation	FY2005 Target	Page Ref.
•Revisions required to promotional framework due to more detailed study of environmental factors	×	•Complete system by the end of FY2005, start applying to product development	▶▶P.20,25
•Systems revised (all company plants and plants of affiliates worldwide already certified)	△	•Update certifications to revised 2004 standard; obtain certification for MMC Product Development Group Headquarters	▶▶▶P.15
•Certification ratio: 93.6% (379/405 firms)	×	•Promote certification of all existing and new suppliers	▶▶▶P.27
•Industrial waste processing guidance given at meetings; systems revised	×	•Re-establish/operate EMS	▶▶▶P.34
•Environmental plans promoted through regular MMC Group meetings and internal publications	○	•Promote environmental plans through regular MMC Group meetings and internal publications	▶▶▶P.18
•Status of major overseas sites assessed; support given for establishment of energy-saving targets	○	•Assess status of major overseas sites; propose CO_2 emission-reduction targets	▶▶▶P.56
•English/Japanese versions of annual environmental sustainability report published (August 2004); pamphlets published; web site updated (June 2004)	○	•Change name to Social and Environmental Report; improve content and ease of comprehension	▶▶▶P.17

FY2004 Result	Evaluation	FY2005 Target	Page Ref.
•Legal compliance achieved (system development, dissemination of recycling fees, development of processing systems for received items, etc.)	○	•Develop recycling system; release more data, including other information related to recycling •Improve ASR[*1] recycling rate and other recycling processes	▶▶P.35-38
•Mandatory collection network constructed •Followed revised directives for ELVs; disassembly data provided; recycling information disclosed	○	•Confirm achievement of effective recycling rate of 85% •Follow revised directives for ELVs; provide disassembly data; release recycling information	▶▶P.36-37
•Survey of hazardous substance usage in new Japan market models initiated (completion postponed due to delays in data collection) •Conformity with EU regulations achieved; internal management systems operational	△	•Complete survey of hazardous substance usage in new Japan market models •Promote compliance with all EU regulations; propose alternatives for hexavalent chromium	▶▶P.26-27
•Zero emissions of landfill waste maintained at all sites	○	•Maintain zero emissions of landfill waste at all sites	▶▶▶P.29
•Maintained waste recycling rate of at least 98%	○	•Maintain waste recycling rate of at least 98%	▶▶P.29,53
•Emissions per unit of sales increased 0.7% relative to FY2001	△	•Continue activities to achieve medium-term target	▶▶▶P.29
•Maintained reduction of more than 5% relative to FY2000	○	•Continue to achieve reduction of at least 5% relative to FY2000 usage	▶▶P.30,53

FY2004 Result	Evaluation	FY2005 Target	Page Ref.
•Gasoline passenger cars: compliant in 4/7 categories Gasoline commercial vehicles: compliant in 10/15 categories •Fuel economy targets revised due to business reforms; deadlines pushed back by two years	×	•Propose measures to achieve targets prior to revised FY2007 deadline	▶▶P.21,57
•Plans revised due to business reforms	×	•Propose realistic commercial technology-based measures	▶▶▶P.21
•Launched *Colt* model with low-refrigerant air-conditioning system	○	•Install low-refrigerant air-conditioning systems in new 2005 models	▶▶▶P.22
•Plans delayed due to temporary stoppage of basic research program •N/A: target only adopted in FY2005	△ —	•Evaluate and improve CO_2-based air-conditioning system •Formulate legal compliance and system introduction plans	▶▶▶P.22
•Maintained reduction of at least 20% relative to FY1990 levels	○	•Maintain at least 20% reduction in emissions relative to FY1990 levels	▶▶P.28,53
•Emissions reduction of at least 6% relative to FY2000 levels achieved	○	•Maintain at least 6% reduction in emissions relative to FY2000 levels	▶▶▶P.33
•Usage per unit of sales still on par with FY2000 levels due to lower number of returnable rack shipments caused by reduced production volumes	△	•Achieve medium-term target through shift to non-wooden materials and expansion of returnable rack usage	▶▶▶P.33

FY2004 Result	Evaluation	FY2005 Target	Page Ref.
•N/A: goal introduced in FY2005	—	•Undertake R&D on proprietary systems; conduct basic performance evaluation	▶▶▶P.24
•EV/HEV strategy revised in line with the Business Revitalization Plan	×	•Evaluate performance of MIEV prototype	▶▶▶P.23
•Development plans for next-generation FCVs revised	○	•Rearrange development plans for next-generation FCVs	▶▶▶P.23
•Development plans for idling stop technology revised	×	•Complete development of idling stop system	
•Ratio of vehicles sold qualifying for tax incentives Registered vehicles: 49.5% (FY2004 target: 65%) Minicars: 30.7% (FY2004 target: 20%) •Ratio of vehicles sold with certified LEV status New vehicle registrations: 58.3% (FY2004 target: 75%)	× ×	•Achieve medium-term target for ratio of vehicles sold qualifying for tax incentives Registered vehicles: at least 75%; minicars: at least 55% •Achieve target of ratio of registered vehicles sold in Japan with certified LEV status of 85%	▶▶P.22,57
•Low-VOC materials developed and applied to new models	○	•Promote VOC-reduction technology; apply to new models	▶▶▶P.22
•Year-on-year reduction of 11% achieved due to partial introduction of water-based paint production lines	○	•Revise long-term plans to achieve maximum company-wide average emissions of 42g/m^2	▶▶P.30,32
See left	—	—	▶▶▶P.32

*1. ASR: Automotive Shredder Residue
*2. New ULEV: vehicle with exhaust emissions at least 50% less than 2005 Japanese standards
*3. New SULEV: vehicle with exhaust emissions at least 75% less than 2005 Japanese standards

ISO 14001 Certification and Environmental Education & Awareness Activities

All MMC manufacturing sites undergo regular environmental audits to the ISO 14001 and other standards. Internal education programs and related activities boost awareness of the importance of environmental activities. MMC also has representatives for environmental affairs in different departments and at each operating site.

ISO 14001 Program

ISO 14001 Certification Program

All MMC manufacturing sites in Japan and major affiliates worldwide have obtained ISO 14001 certification for the environmental management systems used at each site.

Japan	
•Nagoya Plant	Nov. 1998
•Powertrain Plant	Nov. 1998
•Mizushima Plant	Dec. 1998
Domestic Affiliates	
•Pajero Manufacturing Co., Ltd.	Jul. 1999
•Mitsubishi Automotive Engineering Co., Ltd.	Feb. 2000
•Mizushima Industries Co., Ltd.	Oct. 2001
•Suiryo Plastics Co., Ltd.	Jun. 2002
•Mitsubishi Automotive Logistics Co., Ltd.	Nov. 2003
Overseas Affiliates	
•Netherlands Car B.V. (NedCar)	Sep. 1999
•Mitsubishi Motors North America, Inc. (MMNA)	Mar. 2001
•Mitsubishi Motors (Thailand) Co., Ltd. (MMTh)	Jun. 2001
•Mitsubishi Motors Philippines Corp. (MMPC)	Jul. 2001
•Mitsubishi Motors Australia, Ltd. (MMAL)	Mar. 2003

Environmental Audits

Internal auditors undergo internal and external training in line with MMC's accreditation scheme for internal auditing qualifications. Once accredited, auditors check the environmental operations of sites against checklists of about 700 items. Any items designated as requiring further investigation are submitted for checking and review by a senior authority. Appropriate corrective measures are implemented if this review identifies such a need.

No third-party environmental audit conducted at an MMC manufacturing site in fiscal 2004 discovered any compliance problem, serious or minor. Corrective measures were applied immediately in the cases of four identified systems-related issues.

Emergency Response

MMC has established proper operating and work procedures at all plants to ensure the safety of all production personnel and to reduce environmental impact where possible. Emergency response procedures have also been established for natural disasters and for various situations that could arise during everyday operations. Emergency training drills are conducted on a regular basis.

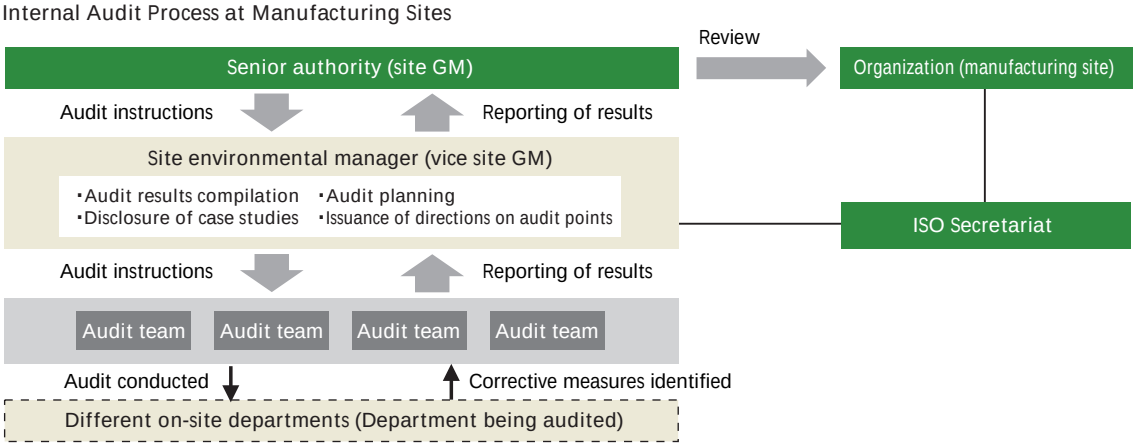
Environmental Incidents, Complaints and Litigation

There were no environmental incidents at MMC sites during fiscal 2004. There were 10 cases of complaints being made by local residents, in the majority of cases due to noise or odorous emissions. In each case, MMC identified the causes of the problem and instituted immediate measures to improve the situation. MMC also undertakes inspections in the vicinity of each site to identify and correct such problems at an early stage.

A lower court ruling was handed down on October 29, 2002 in the first of a series of cases relating to automobile exhaust emissions in Tokyo. This ruling is currently on appeal. Four similar cases are currently before the Tokyo District Court.

Four of the recalls notified by MMC to the Ministry of Land, Infrastructure and Transport during fiscal 2004 were environment-related. One of these related to a malfunctioning of the diesel particulate filter (DPF), where it was suspected that the problem could result in emissions of particulates exceeding legal limits. The other three cases concerned a risk of cracks developing in the front main muffler exhaust pipe which could increase noise pollution. MMC replaced the faulty units in all vehicles in each of these cases.

Internal Audit Process at Manufacturing Sites



Internal Education & Awareness Activities

Employee Training

Training on environmental activities is a component of a number of training courses for new recruits, engineers and other employees. In addition, the ISO Secretariat organizes educational activities on an ongoing basis, mainly for employees at MMC manufacturing sites. These courses help employees to better appreciate the importance of environmental protection activities.


Seminar on environmental activities

Environmental Affairs Representatives

Due to their multifaceted nature, environmental activities tend to transcend functional roles. Recognizing this fact, MMC has appointed environmental affairs representatives in each region and department to provide leadership in related activities and to promote internal communications on environmental matters. Most representatives are selected from managerial ranks. To promote deeper understanding of environmental issues, MMC organizes seminars on environmental regulatory trends and on related matters on a region-by-region basis for these representatives. About 270 representatives attended such training events in fiscal 2004.

Separately, MMC also distributes summary environmental reports to all employees in conjunction with explanatory presentations by environmental affairs representatives. Plans call for this to be done once a year going forward to aid greater workforce understanding of environmental issues.

In December 2004, the Environment & Recycling Affairs Department sent out the inaugural edition of a newsletter designed to improve interdivisional environmental communications. The publication also covers social contribution activities, compliance-related issues and a wide range of other information. It is distributed by internal e-mail to save paper.

Promotion of Idling Prevention[*1]

MMC provides employees with guidance on preventing engine idling. Similarly, requests are made to visiting customers and companies delivering supplies to save energy by restricting engine idling.

Workforce Environmental Qualifications

Employees with Major Qualifications

Qualification type		No. of people
Pollution prevention management	Chief	4
	Air quality	16
	Dioxins	4
	Water quality	23
	Noise	12
	Vibration	6
	Total	65
Energy management	Heat	15
	Electricity	14
	Total	29

Environment Month Activities

Environment Month Activities (June 2004)

Item	Details
Awareness activities	Environment Month posters displayed
	PR activities by signboard
	Newspaper on different region activities
	Information posted on intranet
Implementation	Environmental facility inspections and measurements
	Survey of waste disposal and treatment contractors
	Local vicinity clean-up campaigns
	Site inspections by site environmental manager
Other	Idling prevention internal checking campaign
	Inspection and pruning of trees onsite
	Participation in various events

Environment Month 2005 Activities

In June 2005, activities took place across MMC rather than being organized purely on a regional basis. Employees were encouraged to dress in lighter clothing and thermostat settings were raised to 28°C. Each site checked whether lighting could be turned off to save energy. These and other initiatives helped to raise environmental awareness. During July 2005, MMC employees also participated in "Team Minus 6%" events.

*1. Engine idling while a vehicle is stationary wastes fuel and is also a source of atmospheric pollution. These prevention activities aim to minimize unnecessary engine idling.

Emphasizing Communication With Stakeholders

MMC uses various means to release environment-related information. Besides environmental reports, the company also publishes information on its web site. MMC also actively cooperates with production affiliates in Japan to promote environmental protection activities.

Communication

Publication of Environmental Reports and Site Reports

MMC has published annual environmental reports in English and Japanese since September 1999. The reports are available in printed form or can be accessed online through the company's web site.

Separately, for the purpose of promoting communications with the respective local communities, MMC also publishes environmental activity reports in cooperation with three domestic production sites.

Publication History for MMC Environmental Reports

1st issue (1999)	Sep. 1999
2nd issue (2000)	Aug. 2000
3rd issue (2001)	Sep. 2001
4th issue (2002)	Oct. 2002
5th issue (2003)	Jul. 2003
6th issue (2004)	Aug. 2004
7th issue (2005)	Oct. 2005

Note: 2005 issue renamed Social and Environmental Report

Publication of Educational Booklet

In June 2004, MMC published a booklet targeted at elementary schoolchildren entitled The Environment and Manufacturing Automobiles that contains information on the company's environmental activities. This booklet is distributed on plant tours and in classes on the environment, and is also available through dealers.

Online Information

The Environment section of MMC's web site provides download access to past editions of the company's environmental report. It also contains details of the Environmental Sustainability Plan and other related information.

MMC also publishes details of the environmental performance of its leading models as a reference to aid customers in making eco-friendly purchasing decisions.

The web site also contains a special section for children (Kids' Square) to introduce the relationship between automobiles and the environment. There is also a telephone information service for schoolchildren.

Web http://www.mitsubishi-motors.com/corporate/environment/e/index.html

Participation in External Events

MMC displays various LEV models at exhibitions and other events to publicize low-emission vehicles. The table below lists the main events in which MMC participated in fiscal 2004.

Main events in FY2004	Main event sponsor	Date (FY2004)	Locality/region
2004 JSAE Automotive Engineering Exposition	The Society of Automotive Engineers of Japan (JSAE)	5/19–21	Yokohama
Eco Car World 2004	Ministry of the Environment,etc.	6/5–6	Yokohama
15th World Hydrogen Energy Conference	Hydrogen Energy Systems Society of Japan, New Energy and Industrial Technology Development Organization (NEDO)	6/28–30	Yokohama
2004 Clean Energy Vehicles Fair in Osaka	Osaka Prefecture, City of Osaka	9/17–19	Osaka
All Eco-Car Festival in Wakayama Marina City	City of Wakayama	10/21–23	Wakayama
Eco-Car Prototype Fair in Odawara	City of Odawara	10/31	Odawara
10th Japan EV Festival	Japan Electric Vehicle Club	11/3	Tsukuba
Kyoto Prefecture LEV Fair in Keihanna	Kyoto Prefecture	11/14	Kyoto
2nd Hiroshima LEV Test Drive Exhibition	Hiroshima Prefecture, City of Hiroshima	11/26	Hiroshima
Kyoto Environment Festival 2004	Kyoto Prefecture	12/11–12	Kyoto
The 29th Energy & Environment Exhibition (ENEX 2005)	The Energy Conservation Center, Japan	2/9–11	Tokyo
FY2004 JHFC Seminar	Japan Hydrogen & Fuel Cell Demonstration Project (JHFC)	3/10–11	Yokohama

Environmental Activities at MMC Affiliates

Cooperation With Domestic Production Affiliates

As a major domestic production company, Pajero Manufacturing Co., Ltd. (PMC) is a member of the Production Committee of the Mitsubishi Motors Environmental Council (the PMC Subcommittee). PMC collaborates with MMC on environmental activities and exchanges information with other MMC manufacturing sites. ▶▶▶P.28

Cooperation with other domestic production affiliates on environmental activities is guided by the meetings of the Mitsubishi Motors Group Plant Environment Liaison Council, which are held twice a year.

Starting in fiscal 2004, meetings were also held in July and December 2004 at two other affiliates, Mizushima Industries Co., Ltd. and Suiryo Plastics Co., Ltd., respectively. These events provided opportunities to discuss technical environmental management issues and for MMC Group member companies to exchange information on environmental activities.

MMC publishes Plant Environmental Topics twice a year for its 65 affiliated suppliers in Japan. This publication provides information on regulatory trends and various environmental issues. The 15th edition gave details of regulatory trends in the area of VOC emission limits (an aspect of Japanese legislation on atmospheric pollution) and tackled the question of how to manage low-level PCB contamination. Another topic covered was the End-of-Life Vehicle Recycling Law, which came into force in January 2005.

Plant Environmental Topics (#15)

Pajero Manufacturing Co., Ltd. (PMC)

PMC has upgraded the level of its environmental activities significantly over the past decade, gaining ISO 14001 certification in July 1999. PMC has its own medium-term environmental action plan, which is based on the MMC Environmental Sustainability Plan. The PMC Environmental Council, which comprises the Environmental Protection Committee and the Energy Conservation Committee, guides efforts to lower the environmental impact of operations. PMC is acknowledged as an "eco-friendly site" by the local prefectural authority of Gifu. PMC has set performance goals for all its major eco-impact reduction initiatives, which include programs to eliminate landfill disposal of waste, to conserve energy and to promote recycling.

Mizushima Industries Co., Ltd.

MIC obtained ISO 14001 certification in October 2001 and passed its first renewal audit in 2004. MIC creates an environmental management program each fiscal year based on its medium-term business plan, setting specific targets for improvements in performance. The MIC Environmental Council, which is chaired by MIC's president, monitors progress on environmental issues and oversees efforts to reduce the firm's environmental impact.

Suiryo Plastics Co., Ltd.

SPC gained ISO 14001 certification in June 2002. Three internal committees (environmental management, resource conservation/recycling, prevention of global warming) oversee the setting of performance targets. Major areas of focus within the SPC environmental protection program include upgrading of environmental management systems, promotion of office-based environmental protection activities, resource conservation and recycling, elimination of waste sent to landfill, restriction of CO_2 emissions, and efforts to reduce emissions of hazardous substances.

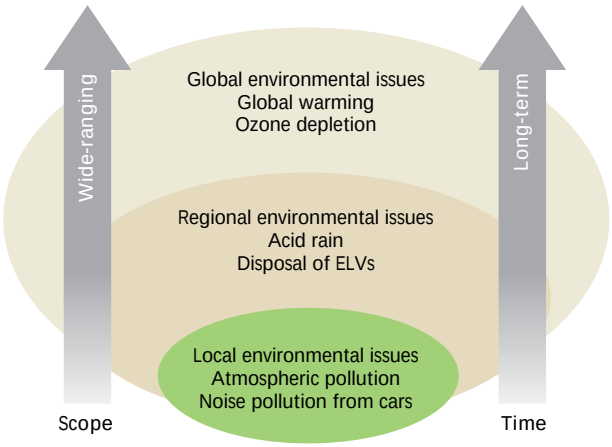
Approaching Eco-Friendly Design From Multiple Angles

Design for Environment (DfE) is the name of the eco-friendly design drive at MMC. MMC has established DfE management systems and defined clear standards for eco-impact reduction within development and design processes as part of an ongoing campaign to take environmental management to a higher level.

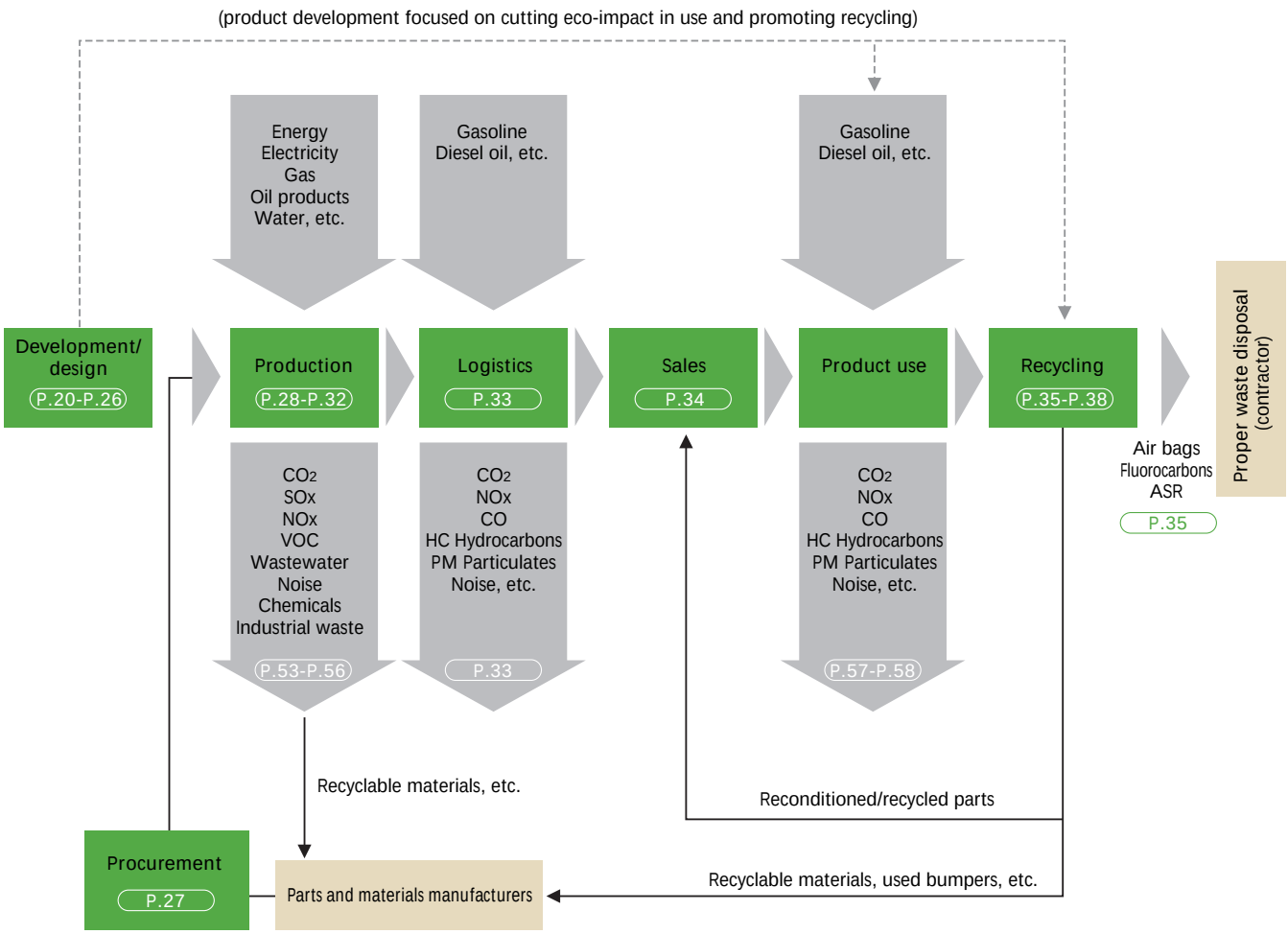
Life Cycle Environmental Impact of an Automobile

Automobiles have an impact on the environment, but one that varies in form across the three major life cycle phases of production, usage and disposal. As a class of product, automobiles form an intimate part of environmental problems from the local to the global level. MMC has adopted a comprehensive stance on solving the related issues as part of its long-term and wide-ranging efforts to lower environmental impact on a continual basis.

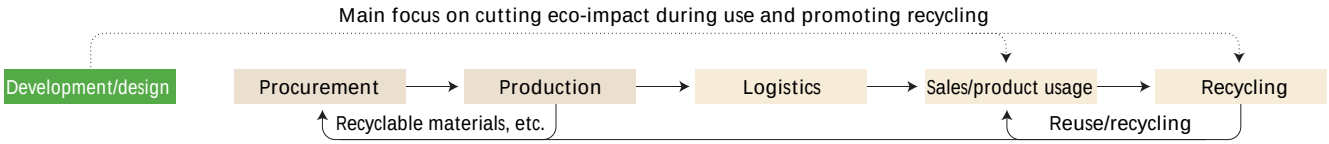
The diagram below illustrates the principal inputs (such as energy) and outputs (such as environmental emissions) at each of the stages of the automobile life cycle.*1 The following pages provide specific details on the ways that MMC is trying to alleviate environmental impact at each stage of the life cycle.



Product Life Cycle and Related MMC Activities



*1. Automobile life cycle
In this report, the life cycle is deemed to stretch from design processes within industrial product development to disposal and recycling. The same concept applies to Product Life Cycle Management (PLM).



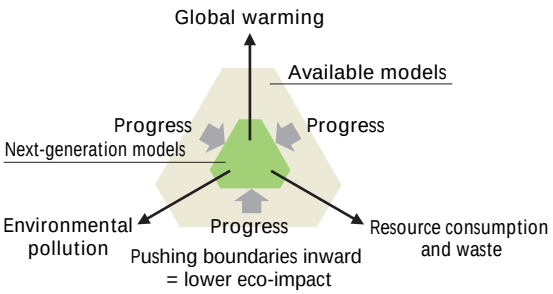
Development & Design

Promotion of Eco-Friendly Design

The aim of DfE is to design and develop vehicles with lower environmental impact over their entire life cycle. MMC is also developing management systems to guide the DfE process. Currently, MMC is focusing on the early application of its original environmental design and evaluation system, called e-DES. The e-DES system uses precise standards, procedures and structures to guide the eco-friendly design and development process in order to boost environmental performance of products and to continually raise the level of environmental management in design and development. Progress in the e-DES system is measured along three axes, or indices (see diagram). The main aspects of the e-DES system are summarized below.

- Progress within MMDS is managed using "Quality Gates" (QG[*2]).
- A leader is assigned to push each development project forward and head up a special DfE team comprising staff from the various design and quantitative development divisions.
- Each project must analyze ways to improve its own rate of progress.
- Target values for each of the three major environmental indices are set and evaluated from early in the project.
- The core aim is to use innovative thinking to exceed the performance of current models in terms of the various eco-friendly management indicators (see diagram).
- All the environmental data for a product are collated during the project.

Schematic for DfE Goals and Promotion (via e-DES)



Application of LCA Methods

Life Cycle Assessment (LCA[*3]) methodology is a way of predicting the impact that a product will have on the environment in quantitative terms from the extraction of raw materials all the way to disposal and recycling.

MMC applies LCA methods to estimate the values of life cycle CO_2 emissions of products as a key determinant of the global warming prevention environmental index that is used in the e-DES system.

For the production stage of the LCA calculations, the design data for the vehicle are used to create a list of the weights of various parts and materials. Once the fabrication methods are all specified, the CO_2 emissions due to the production process can be estimated. Parts are divided into approximately 500 categories, and the LCA calculation also uses inputs for about 80 types of material. As a rule, the fabrication processes are specified through linkage to the materials involved.

For each of these processes, data from previously completed internal surveys of MMC manufacturing plants provide a value for the CO_2 emissions per unit of production for that process. In the final calculation, the weights of each material used are multiplied by the CO_2 emissions per unit of production for each process to yield total projected emissions for the manufacturing stage.

e-DES Environmental Indices

Priority areas	Eco-index	Link to life cycle stage		
		Production	Usage	Disposal
Prevent global warming	LCA value (CO_2)	✓	✓	✓
Prevent pollution	Exhaust emissions		✓	
	Hazardous substance usage			✓
Restrict resource consumption/waste	ASR standard weight			✓
	Vehicle weight	✓		
	Fuel economy (10-15 mode)		✓	
	3R indicators (Reduce/Reuse/Recycle)	✓	✓	✓

Classifications of Parts in LCA Calculations (extract)

(Unit: kg)

Part sub-category	Name of part	Type A	Type B
M2****	Wheels and tires	39.4	51.2
M5****	Rear side structures	46.6	60.9
M5****	Fender shields	18.9	42.5
M5****	Rear floor	29.4	28.5
M6****	Front seat assembly	33.3	30.4
M1****	Cylinder block	22.3	31.4

Classifications of Materials in LCA Calculations (extract)

Name of material	Material code
Structural steel	31
Structural alloy	32
Thermoplastic elastomer	77
Polyamide	78
Aluminum alloy	53
Cotton/fiber	23

*2. Quality Gate (QG)
Six Quality Gates are used to evaluate, confirm and manage the progress of any new vehicle development project in the Mitsubishi Motors Development System (MMDS: see p. 44). The gates extend from the final decision on the product concept (Gate F) to the ultimate product quality checks (Gate A). ▶▶P.43,44
*3. The ISO 14040 series is the accepted international LCA standard.

Developing Cars to Help Prevent Global Warming and Atmospheric Pollution

As part of efforts to prevent global warming, MMC actively seeks to curb carbon dioxide (CO_2) emissions and to cut usage of refrigerants in air conditioners. The latest models from MMC boast emissions that are 75% less than the 2005 exhaust emissions standards, and MMC is also working to make cabin interior environments more pleasant.

Prevention of Global Warming

Greenhouse gas (GHG) emissions are believed to be a leading cause of global warming. MMC is taking a number of measures to combat GHG emissions, as outlined below.

Reduction of carbon dioxide (CO_2) emissions

Japan's Energy Conservation Law*1 sets standards for energy consumption efficiency for automobiles (fuel economy standards*2) in a bid to reduce CO_2 emissions. These standards apply to gasoline vehicles from fiscal 2010 and diesel vehicles from fiscal 2005. MMC has aimed to conform to the 2010 standards as soon as possible. Development programs to boost fuel economy for new models have targeted improvements in engines and drivetrain, vehicle weight reductions, as well as lower rolling resistance and aerodynamic drag. In MMC's fiscal 2004 model lineup, 55 editions of 13 models conformed to the 2010 fuel economy standards. In fiscal 2004, MMC's vehicles exceeded standard performance criteria in four out of seven categories for gasoline passenger cars and in five out of eight categories for gasoline commercial vehicles with manual transmissions; gasoline commercial vehicles with automatic transmissions achieved standard performance criteria in five out of seven categories. MMC raised the share of production units meeting fuel economy standards from 66% to 69% for gasoline passenger cars and from 63% to 87% for all gasoline commercial vehicles. ▶▶▶P.57

Lower-emission high-efficiency engines

A MIVEC*3 engine, which combines improved fuel economy, lower emissions and higher power, has been fitted to the *Grandis*, *Colt* and now *Colt Plus*.

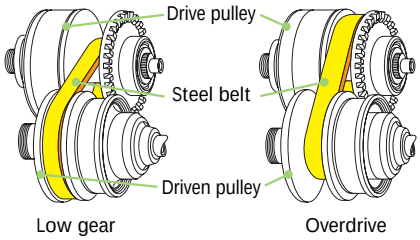
The latest MIVEC versions developed by MMC are based on a new engine structure. The MIVEC engines fitted to the *Colt* and *Colt Plus* models, in particular, are smaller and lighter due to all-aluminum casting. Combining high power and low fuel consumption, these engines have produced cars that are designated by MLIT as having emissions of 75% and 50% below the 2005 standard.

*Adoption of CVT*4 expanded to about 30% of models*

The CVT employs a metal belt to transmit power at continuously variable ratios. This contributes to improved fuel economy by allowing the engine to operate continually in its most efficient range. MMC has developed a small, lightweight CVT and introduced it to the smaller models in the passenger car lineup, starting with the *Lancer* in May 2000 Models fitted with a CVT accounted for about 30% of MMC-made vehicles registered in fiscal 2004, excluding the minicar segment.

CVT-equipped Models

Colt	All editions
Colt Plus	All editions
Lancer	1.5-liter engine models
Lancer Wagon	Except turbo editions
Lancer Cargo	Except 4WD editions
Dion	Except turbo editions



CVT Mechanism

Use of automatic manual transmission (AMT)

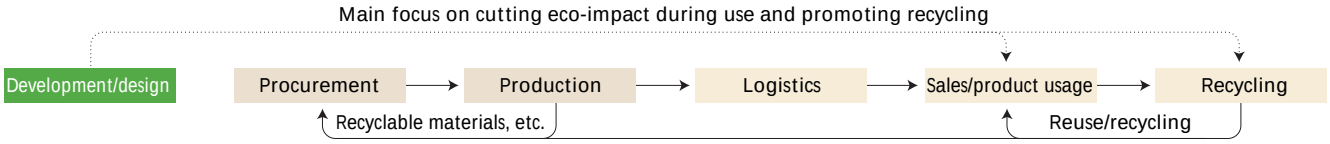
The European edition of the fiscal 2004 *Colt* model featured an AMT, which combines sporty performance with an improvement in fuel economy of 5% against EU standards, compared with a conventional manual transmission.

Energy-efficient air-conditioning system based on new technology

The air-conditioning system fitted to the *Grandis* is more powerful but also boasts improved fuel efficiency. This achievement is due to the three technical advances summarized below.

- More efficient core components (compressor, air conditioner and condenser)
- Optimized control (of energy consumption and working with engine)
- Reduced weight of air-conditioning unit

*1. The official name is the "Law Concerning Rationalization of Energy Usage."
*2. The standards apply to all passenger cars and trucks weighing no more than 2.5 tons.
*3. MIVEC (Mitsubishi Innovative Valve timing Electronic Control system) is a general name given to MMC engines that are equipped with variable valve timing mechanisms.
*4. A continuously variable transmission (CVT) is designed to extract power from an engine efficiently.



Reduced usage of air-conditioner refrigerant (HFC-134a)

On all new models launched since 1997, MMC has fitted air-conditioning systems that feature smaller heat exchangers and high-efficiency condensers. These moves have helped to restrict usage of the air-conditioner refrigerant HFC-134a, which is a more potent greenhouse gas than CO_2. The *Colt Plus* model launched in fiscal 2004 featured similar innovations. In addition, MMC is working with air-conditioner manufacturers to develop units that replace HFC-134a with CO_2.

Prevention of Atmospheric Pollution

Exhaust emission standards are becoming stricter in Japan, Europe, the U.S. and many other countries and regions. Japan introduced its first standards in 1966, and these have become progressively more stringent over the years. The cleanest vehicles running on gasoline today have emissions that are one-hundredth of the level of forty years ago. MMC aims to respond quickly to develop new models that comply with evolving global emissions standards as part of an ongoing drive to make cleaner automobiles.

Reduced gasoline engine emissions

Many of the new passenger car models released by MMC in fiscal 2004, such as *eK-WAGON*, *Colt* and *Lancer*, received designations from MLIT as vehicles with particularly low emissions. A total of 17 editions received ratings as having emissions 75% below the 2005 standard and 53 editions were 50% below the 2005 standard. ▶▶▶P.57 These vehicles accounted for 67% of MMC's fiscal 2004 sales by volume. Furthermore, 73.5% of MMC vehicles had emissions 75% below both the 2000 and 2005 standards.

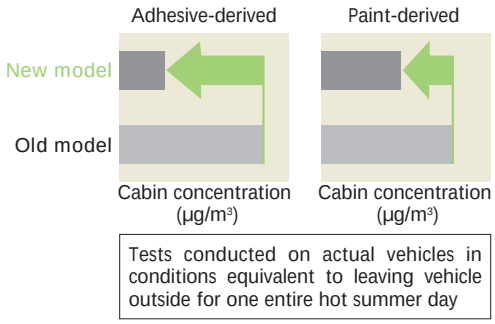
In the U.S. market, the *Galant* model marketed since 2003 has a PZEV*5 (Partial Zero Emission Vehicle) designation from the California Air Resources Board (CARB).

Improved Cabin Environments

MMC is working to reduce the amounts of volatile organic compounds (VOCs) such as solvents that are produced by the components used in the interior cabins of vehicles. Using improved materials and fabrication methods, MMC aims to create safer and more pleasant cabin environments. In the new *Grandis* minivan, the levels of VOC emissions inside the cabin have been reduced by over two-thirds for chemicals from adhesives and by over one-third for paint-derived emissions, compared with earlier models.

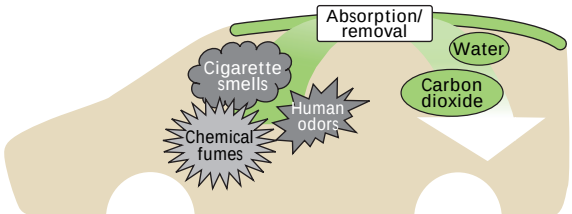
Improved interior components (to reduce chemicals)	
Roof liners	Chemical absorption and removal using deodorizing materials
Interior panels	Reduced use of organic solvents in surface paints/coatings
Door trim	Reduced use of organic solvents in adhesives for ornamental coverings

Comparison of cabin chemical emissions for *Grandis*



Tests conducted on actual vehicles in conditions equivalent to leaving vehicle outside for one entire hot summer day

In May 2003, MMC scored a first in the Japanese automobile industry by fitting the new *Grandis* with deodorizing roof liners. These work by absorbing cigarette and other odors, as well as obnoxious chemicals such as formaldehyde, and then converting them into water and carbon dioxide. Similar technology was introduced to the *Colt* and *Colt Plus* in October 2004. The liners are particularly effective in quickly removing any ammonia (a common constituent of body odor) or formaldehyde from the cabin. Odor removal function continues for a long time, because the chemical conversion is based on the action of a catalyst. In addition, MMC has also adopted special deodorizing air filters that remove bad smells as well as irritants such as pollen and dust from the air that enters the cabin.



*5. PZEV (Partial Zero Emission Vehicle). These are certified as clean gasoline vehicles under ZEV regulations. Five PZEV's are counted as one ZEV.

Promoting R&D Into Low-Emission Vehicles

Mitsubishi Motors is actively undertaking various R&D programs to create next-generation LEVs such as electric vehicles (EVs), fuel cell vehicles (FCVs) and vehicles that run on natural gas.

LEV Research and Development Programs

Electric vehicles

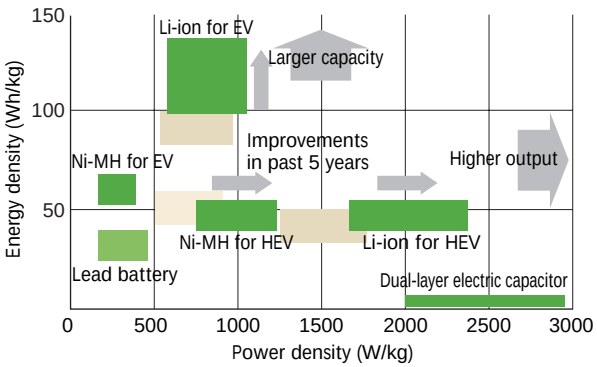
An EV (electric vehicle) is eco-friendly because it does not emit any harmful exhaust gases during operation. The main technical challenges in developing EVs are to extend operating range and to shorten the time required to recharge batteries.

Colt EV prototype for battery test

MMC has focused on the development of EVs for a number of years. The *Eclipse EV* prototype, which featured a high-performance motor and battery, has taken part is a rally and other events since 2001. Since 2004, MMC has been conducting road trials on a high-performance lithium-ion battery fitted to the *Colt EV* prototype .

Significant improvements in recent years in the performance of electric motors and lithium-ion batteries have helped to raise driving performance, boost operating range, shorten charging times and reduce the weight of the vehicle. Today, EVs are becoming a realistic alternative for future driving.

Lithium-ion Battery Performance Improvements



CNG (Compressed Natural Gas) vehicles

Compared with conventional gasoline vehicles, CNG vehicles produce fewer CO_2 emissions and are also much cleaner due to the absence of soot and other particulates in the exhaust. MMC markets a light truck in Japan that is CNG-powered. ▶▶▶P.57

CNG-powered minicab

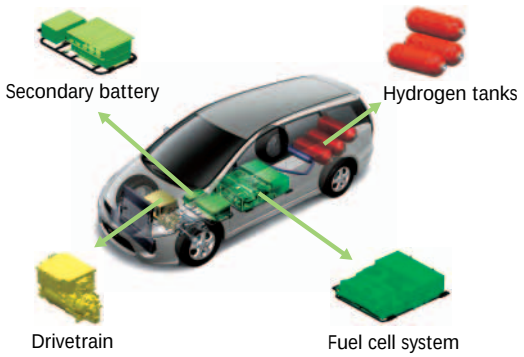
Fuel cell vehicles (FCV)

In October 2003, MMC received MLIT certification for *Mitsubishi FCV* as Japan's first fuel cell-powered minivan with three-row seating (based on the *Grandis* platform).

During fiscal 2004, MMC also participated in the Japan Hydrogen Fuel Cell (JHFC) Demonstration Project sponsored by the Ministry of Economy, Trade and Industry. Tests conducted on public roads in the Tokyo and Yokohama areas enabled MMC to gather basic data on the safety and the driving and environmental performance of this vehicle. Technical work continues to develop a commercial version of this FCV.

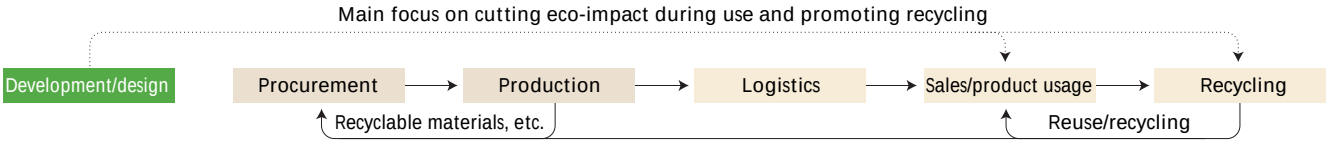
Mitsubishi FCV

System Layout



Main Specifications

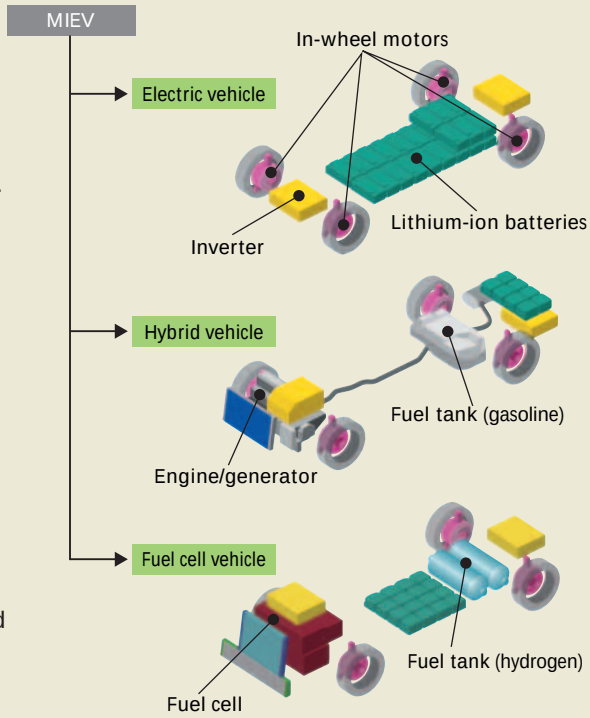
Model name		*Mitsubishi FCV*
L/W/H		4,755/1,795/1,690mm
Vehicle weight		2,000kg
Passengers		Five
Max. speed		140km/h
Operating range		150km
Fuel cell system	Type	Polymer electrolyte (Ballard Power Systems)
	Output	68kW
Hydrogen tanks	Storage method	Compressed hydrogen gas
	Tank filling pressure	35MPa
	Capacity	117 liters
Secondary battery		Nickel-metal hydride
Motor	Type	A/C induction motor
	Maximum output	65kW
	Maximum torque	210N·m



MIEV (Mitsubishi In-wheel motor Electric Vehicle): A Next-Generation EV

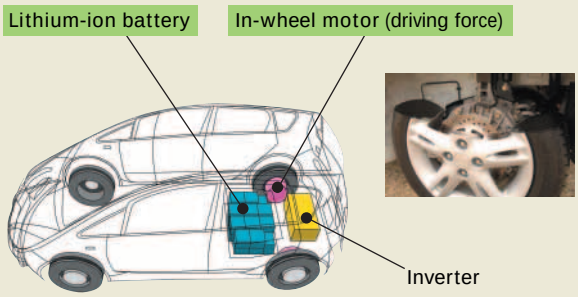
The MIEV next-generation EV development project combines the two new core technologies: in-wheel motor, which makes the drivetrain more compact; and a high-performance lithium-ion battery, which can pack more power into a smaller space. With the MIEV project, MMC aims to create vehicles that are ideally suited to a more eco-oriented society by developing technologies that have potential applications in either hybrid or fuel cell vehicles.

- **In-wheel motor**
  Putting the drivetrain system in a compact form inside the wheels makes a dramatic difference in terms of freeing up the layout of the vehicle. This makes the in-wheel motor a promising technology for use in either EVs or hybrid vehicles–as well as in FCVs, where a lot of space is needed to accommodate the fuel cell stack and any hydrogen tanks.
- **Evolution of all-wheel control technology**
  Putting in-wheel motors into all four wheels creates the possibility for a 4WD system without the usual complicated drivetrain (including the transmission, driveshaft and differential gears). The system also allows for advanced independent control of driving and braking on each wheel, contributing to excellent driving performance.
- **Lithium-ion batteries**
  Lithium-ion batteries are better than conventional lead-acid or Ni-MH batteries due to higher energy density and longer life. MMC has been developing EVs using this type of battery for many years, including the *Mitsubishi HEV* (1996), the *FTO-EV* (1998) and the *Eclipse EV* (2000). Road trials and continuous operation tests with these prototypes have demonstrated the practicality of such batteries as an EV power source.



Colt EV: An In-Wheel Motor Prototype

As the first prototype of the MIEV concept, the *Colt EV* is a test vehicle based on the *Colt* chassis with MMC's original in-wheel motors fitted to both rear wheels. MMC is conducting tests on this prototype at its testing ground to help identify and solve technical issues with the in-wheel motor.



Main Specifications for *Colt EV*

Model name		*Colt EV*
Length		3,885mm
Width		1,680mm
Height		1,550mm
Vehicle weight (empty)		1,150kg
Passengers		Five
Max. speed		150km/h
Operating range on single charge (10-15 mode)		150km
Motor (with internal reduction gear)	Type	Permanent magnet synchronous motor
	Maximum output	20kW
	Maximum torque	600N·m
	Max. revs	1,500rpm
	Dimensions	310mm (diameter) x 220mm
	# units fitted	Two (2)
Battery	Type	Lithium-ion
	Capacity	40Ah
	Voltage	14.8V
	Dimensions	194 x 175 x 116 (mm)
	# units fitted	22
Control device		Inverter
Drive system		Rear-wheel drive
Tires		185/55R15

Original "3R-Oriented" Vehicle Designs Promote Recycling

The *Colt Plus*, one of the new models launched by MMC in fiscal 2004, is a showcase for the ways that MMC is developing vehicles with improved levels of recyclability. A proactive focus on these "3R-oriented designs" helps to reduce environmental impact by conserving resources and by making vehicles more easily recyclable.

Improving Vehicle Recyclability

MMC aims to build easy recyclability and reduced environmental impact into its vehicles from the earliest design stages. Based on the internal guidelines for designs that aid recycling, MMC tries to promote 3R-oriented design.*1

Reduce: Designs to Conserve Resources

MMC designers aim to conserve resources and to lengthen vehicle life.

Resource conservation initiatives

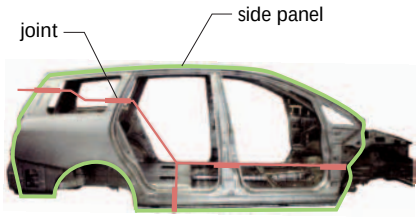
Reduce size and weight

- Switch from cast iron to aluminum cylinder blocks
- Use plastic for intake manifolds and cylinder head covers
- Make connecting rods thinner
- Switch to thinner, high-tensile steel sheet (body and chassis components)
- Use tailored blanks (body panels and door panels)

Use fewer parts

- Reduced use of wiring harnesses
- Use modules for interior panels, doors and overhead units

Application of tailored blanks for making side body panels



Initiatives to lengthen vehicle life

Raising durability and resistance to corrosion

- Adopt timing chain that is maintenance-free
- Expand use of rustproof steel sheet (body/chassis/engine parts)
- Expand use of body sealant and undercoating materials

Reuse/Recycle: Designs to Promote Recycling

The design of the *Colt Plus* promotes reuse and recycling in various ways.

Initiatives to lengthen vehicle life

The design of the *Colt Plus* makes active use of easily recyclable plastics.

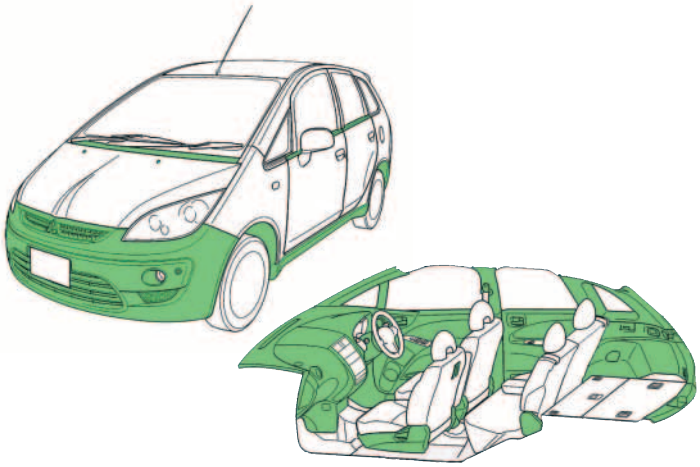
Substitution of thermoplastic resin

- Fuel hoses
- Weather strips (hood)
- Weather strips (tailgate)

Use of olefin resin

- Exterior parts (bumpers, radiator grill, etc.)
- Interior parts (instrument panel, trim, etc.)

Parts made from easily recyclable plastics (*Colt Plus*)



Greater use of recycled materials

MMC is expanding the reuse and recycling of both in-process and other industrial waste materials.

Reuse of in-process waste materials

- Bumpers, front grills, etc.
- Floor insulation materials (carpet scraps)

Recycling of other industrial waste materials

- Air cleaner cases (using old paper and recycled polypropylene food containers)
- Engine oil gauges (using recycled PET*2 bottles)
- Dashboard panel sound-absorbing materials (using recycled PET bottles and used clothing)

Simplifying disassembly and sorting

MMC uses material markings and improved structural designs to simplify the dismantling of end-of-life vehicles and related sorting processes, thereby promoting the recycling of similar types of materials.

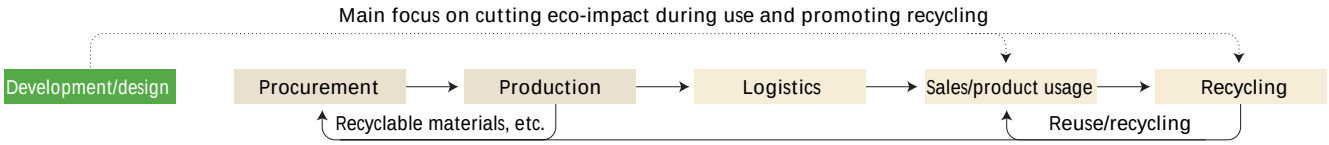
Use of material markings

- Marking of all plastic and rubber parts exceeding 100g
- All-over markings on large parts such as bumpers

Simplified structural designs to promote dismantling and sorting

- Elimination of metal bumper reinforcements
- Fewer connecting bolts to be used
  Front bumper: from 2 bolts to none
  Rear bumper: from 4 bolts to 2

*1. 3Rs: Reduce, Reuse, Recycle
*2. PET (polyethylene terephthalate) is a common plastic used to make items such as beverage bottles, photographic film and magnetic tape.



Rubber hose markings

Rear combination lamp markings

Reduced use of hazardous substances

The EU directive on end-of-life vehicles (ELVs), which was proposed by the European Commission and approved by the European Parliament, in principle banned the use of four environmentally hazardous substances (lead, mercury, cadmium and hexavalent chromium) in automobiles from July 2003. MMC is in compliance with the EU directive on ELVs.

In Japan, the Japan Automobile Manufacturers Association (JAMA) has also established new targets for reducing the use of such substances. MMC is working toward the complete elimination of these substances in vehicles.

JAMA reduction targets (for new models)

Targeted substance	Reduction goal
Lead	Reduction of 90%+ from 1996 levels by Jan. 2006
Mercury	Elimination from Jan. 2005, with following exceptions: •Liquid crystal displays •Combination meters •Discharge lamps •Cabin fluorescent lighting
Cadmium	Elimination by Jan. 2007
Hexavalent chromium	Elimination by Jan. 2008

Adoption of lead-free materials

MMC has introduced lead-free wheel-balancing weights on all the *Colt* and *Colt Plus* versions since FY2002. This has enabled MMC to achieve the JAMA target of a 90% reduction from 1996 levels ahead of the 2006 deadline. MMC is now focusing on further reducing the use of lead in new models.

- Wheel-balancing weights
- Fuel tank
- Electrodeposited body paint
- Glass ceramic print
- Connecting rods, bearings, etc.

Elimination of mercury, cadmium and hexavalent chromium

MMC has achieved the JAMA target for mercury on the *Colt Plus*. The use of LEDs (light-emitting diodes) for backlighting has also enabled mercury to be eliminated from the combination meters. Cadmium has been eliminated except for the miniscule amounts contained in their some electronic components (the same applies to many household appliances). Hexavalent chromium is still used in protective surface treatments for fasteners and other galvanized parts, but MMC is progressively eliminating its use through substitution in parts where there are no negative safety implications in terms of corrosion or applied torque.

Voluntary management targets for hazardous substances

For environmentally hazardous substances other than the four discussed above, MMC is collecting data from the IMDS[*3] on the amounts of such substances contained in their products. MMC has established internal guidelines and voluntary targets for the management of hazardous substances. Efforts are under way to collate data across the internal systems and apply integrated management methods to reduce the use of such substances.

Use of recycled materials

MMC is expanding its use of recycled materials based on original concepts and joint development projects with materials and parts suppliers. One result of such collaboration is a canister case[*4] made out of recycled air bag cloths, a world-first. Another example is an air cleaner case made from recycled polypropylene[*5] food containers and recycled paper, which is being fitted to many MMC models such as *Colt* and *Lancer*.


Canister case
(made from recycled air bags)

*3. The IMDS (International Material Data System) is an international system of databases for automotive products containing data on materials from all suppliers. Data is provided to member automakers.
*4. The canister case is a device for temporarily absorbing and storing any gasoline condensate that is emitted from the fuel tank.
*5. Polypropylene is widely used to make plastic films and various molded products. It can also be melted to form yarn used in fiber products.

Environmental Protection Activities in Procurement and Production

In procurement, MMC asks all its parts and materials suppliers to obtain ISO 14001 certification. MMC also has a green procurement program in place. Energy saving and other environmental protection measures are a key component of production activities at MMC.

Procurement

Green procurement*1

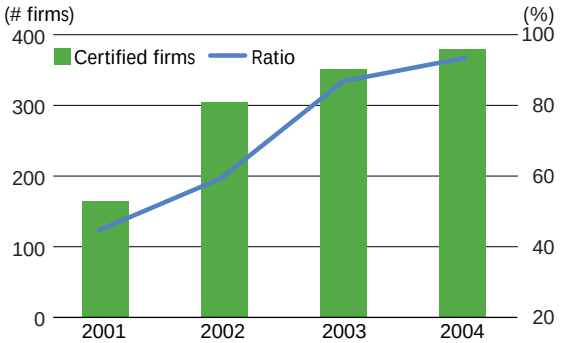
MMC initiated a green procurement program as part of its environmental protection activities in November 2000. As part of this program, MMC has made the following requests of all its parts and materials suppliers:

- Gain ISO 14001 certification (the international standard for environmental management systems)
- Provide information on any environmentally hazardous substances that are contained in the parts and materials that are supplied to MMC

ISO 14001 Certification by Suppliers

One of the goals of MMC's Environmental Sustainability Plan is to ensure that all suppliers acquire ISO 14001 certification (by a target deadline of fiscal 2004). During fiscal 2004, a total of 27 suppliers were newly certified. This raised the total number of ISO 14001-certified MMC suppliers to 379 firms.

ISO 14001 Certification Status of MMC Suppliers



Management of Data on Environmentally Hazardous Substances

Four substances (lead, mercury, cadmium and hexavalent chromium) are now banned in Europe by the EU directive on end-of-life vehicles. In Japan, JAMA has set usage reduction and elimination targets for the automobile industry. Regulations on the use of environmentally hazardous substances continue to be reinforced on a global basis.

Responding to such trends, MMC is in the process of collating data on any hazardous substances contained in supplied parts and materials, based on information from suppliers and data held in the IMDS databases. The aim is to manage such information in an integrated fashion. In fiscal 2004, MMC began collecting such data on three more vehicle models. Plans also call for these efforts to be extended to all new models in due course.

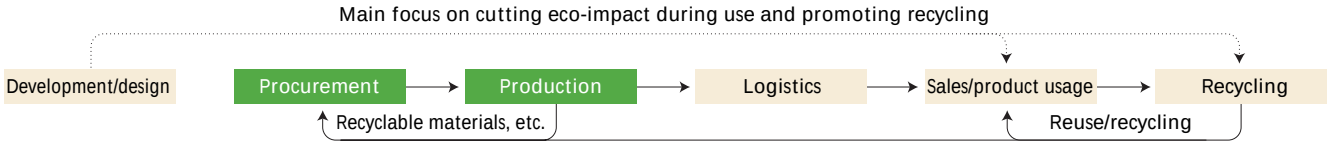
Supplier Seminar on Environmentally Hazardous Substances

In April 2005, as part of moves to comply with regulations on hazardous substances and to improve communications with parts and materials suppliers, MMC organized a training seminar on environmentally hazardous substances for the benefit of personnel from suppliers. A total of 335 people from approximately 260 firms attended the seminar.

MMC also took the opportunity to brief suppliers on regulatory trends with hazardous substances and on MMC's response to such developments. MMC asked for the cooperation of its suppliers in complying with the EU directive on hazardous substances and in submitting information to the IMDS. The event provoked a lively discussion, with many questions focusing in particular on the issue of how to eliminate hexavalent chromium.

MMC seminar for suppliers on hazardous substances

*1. Green procurement
MMC defines green procurement in terms of environmental protection activities at the procurement stage of the production process. The term does not extend to purchasing of stationery, office supplies and related products.

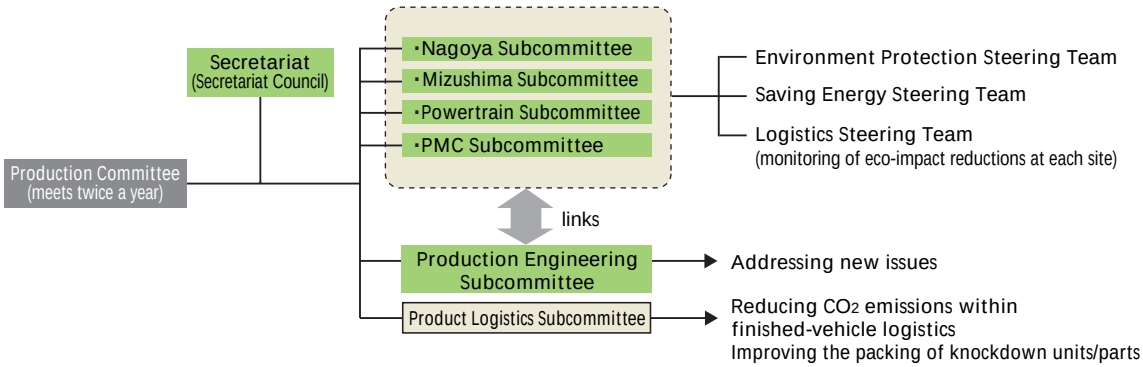


Production

Environmental Protection Organization

The Production Committee of MMC's Environmental Council contains a number of subcommittees, with multiple teams overseeing different aspects of environmental protection activities at MMC production facilities. The Environmental Protection Steering Team oversees specific programs to lower the environmental impact of MMC manufacturing plants and to prevent accidents that could have a harmful impact. The Saving Energy Steering Team organizes regular checks of MMC's various energy-saving programs to aid ongoing efforts to cut consumption of power, gas and water.

Organization and Activities of Environmental Council Production Committee



Energy Conservation (Prevention of Global Warming)

Based on the perceived need to prevent global warming, MMC is working to restrict its emissions of the leading greenhouse gas CO_2 during production by reducing energy consumption in the form of electricity and fuel.

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Principal energy conservation initiatives

1. Proper operation of cogeneration systems*2
2. Reduced outlet pressure for motive power sources (air/steam)
3. Minimized energy consumption outside production hours (stoppage of intake and exhaust fans, etc.)
4. Installation of high-efficiency equipment
5. Revised operating conditions (temperature settings, ignition times for drying ovens, etc.)
6. Thermal recycling of waste heat from incinerators (steam recovery)

Turbo motor driven by recycled waste heat
At the Nagoya Plant, waste heat from the incinerator feeds a boiler, which in turn generates steam to drive a fan turbo motor. This arrangement helps to cut power consumption. Other thermal recycling within the plant uses excess steam in efficient ways.

Energy Conservation Improvements

Energy-saving measures in new paint shop (Mizushima Plant)

Cold-water heat-storage tank
Energy stored in water heated overnight is used to drive air-conditioning systems during the day. This measure helps even out power loading over each 24-hour period, thus contributing to greater energy efficiency and more economic plant operation.

Small boilers
The use of 33 small 2-ton boilers allows heating capacity to be adjusted to the demand load more precisely, helping to boost energy efficiency.

Besides conserving energy, the chainless friction conveyors introduced at the Mizushima Plant also help to reduce noise. Excess steam is recycled to drive a 200kW turbine to create electricity.

*2. Cogeneration is an energy conserving system that effectively utilizes waste heat from electricity generation for HVAC and water heating systems.

Waste Reduction and Prevention of Air/Water Pollution

In its production processes, MMC strives to reduce waste and to prevent air, water and noise pollution as well as vibrations.

Maintenance of Zero Landfill Waste Emissions[*1]

From the perspective of reducing environmental impact and of creating a recycling-oriented society through more efficient use of resources, MMC is working to raise recycling rates for the wastes generated by production processes and to reduce the amounts of waste sent to landfill for disposal.

The first method for achieving these aims is to improve production methods and material yields[*2] and thus restrict the amounts of waste generated. Complementing this approach, MMC also tries to promote the reuse and recycling of waste materials wherever possible to minimize the volume of final residual waste that is sent to landfill for disposal. The overall goal is to eliminate this residual waste completely through a combination of restricted waste emissions and expanded material recycling.

MMC production sites achieved zero emissions in March 2002 and have maintained this performance every month since March 2002 . Aggregate waste generation in fiscal 2004 totaled 186,000 tons, of which over 99.8% by volume was reused or recycled. Disposal by incineration or other forms of waste compaction accounted for a further 0.13%, and the ratio of landfill waste emissions was 0.05%. Going forward, MMC plans to continue 3R activities while maintaining zero emissions. ▶▶▶P.53

Promotion of 3R Activities

Resource conservation (Reuse, Recycle)

MMC practices both material recycling (the reuse of wastes as raw materials for other products) and thermal recycling (the recovery of energy from waste oils and plastics by incineration). Using improved waste separation procedures, MMC is actively trying to upgrade its resource conservation activities by shifting further from thermal to material recycling.

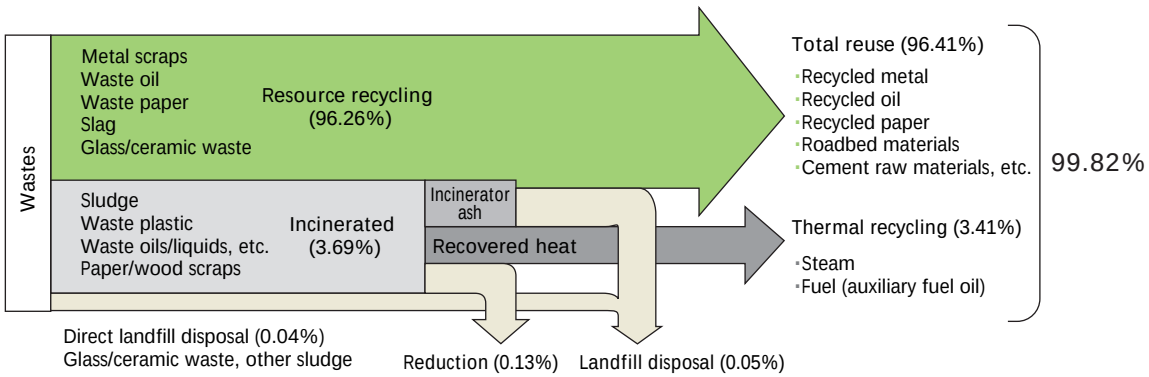
Restriction of by-product emissions (Reduce)

Metal scraps and waste casting sand account for approximately 90% of the waste generated in MMC production processes (based on fiscal 2004 figures). As part of its efforts to promote 3R activities, MMC is working toward a goal of reducing aggregate waste emissions for these two major by-products per unit of sales by around 2% relative to fiscal 2001 levels by the end of fiscal 2006. The corresponding waste generated in fiscal 2004 was 138kg per million yen of production, which represented an increase of 0.7% over fiscal 2001 levels.

Principal measures

1.Improvements in yield through use of tailored blanks
2.Higher yields through greater use of dual-stamping presses
3.Reductions in waste shavings from smaller machining areas

Treatment of Waste in Fiscal 2004

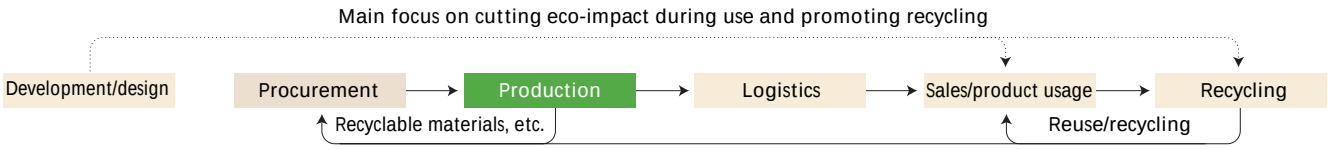


Examples of Resource Recycling

Source	Type of waste	Recycling application
Casting	Waste sand	Steel raw material, roadbed material
Stamping processes	Metal scraps	Material for steel
Painting	Chemical sludge	Raw material for cement
	Paint sludge	Fuel
	Washing thinners	Recycled thinners, fuel

Source	Type of waste	Recycling application
General plant waste	Waste oil	Recycled oil, fuel
	Waste plastics	Raw materials for resins/cement; fuel
	Waste water treating sludge	Raw material for cement
	Glass/ceramic waste	Glass raw materials, roadbed material
	Collected dust	Raw material for cement
	Grinding sludge	Raw material for cement
	Incinerator ash	Roadbed material (after melting/solidification)
Office waste	Waste paper	Recycled paper materials

*1. Zero landfill waste emissions: MMC defines this as a ratio of waste sent to landfill for disposal to total waste of no more than 0.1% by weight.
*2. Material yields are measured in terms of the proportion of the raw materials that actually ends up in the manufactured product.



Prevention of Atmospheric Pollution

- VOC[*3] (volatile organic compounds) emissions
  MMC is taking various measures to restrict emissions of volatile solvents during car body painting processes. These include the adoption of new painting methods; the installation of high-efficiency electro-deposition machinery; the introduction of modified processes that use lower quantities of solvent for cleaning paint guns between color changes; improved recovery rates for washing thinners; and installation of machinery to direct exhaust fumes toward an oven for volatilization.

  A major renewal of the Mizushima Plant paint shop has also enabled the use of water-based paints that employ less solvent, resulting in significant reductions in VOC emissions.
- SOx (oxides of sulfur) emissions ▶▶▶P.53-55
  Low-sulfur kerosene and greater adoption of gas as a clean fuel by Japanese industry for use in boilers, industrial furnaces and other incineration facilities have cut the quantities of sulfur in emissions substantially since the 1970s. SOx emissions by MMC are extremely low.
- NOx (oxides of nitrogen) emissions ▶▶▶P.53-55
  MMC has introduced low-NOx boilers and burners to restrict emissions of such gases. In recent years, although the installation of cogeneration systems as an energy-saving measure has contributed to higher NOx emissions in relative terms, NOx emissions at MMC continue to decline in absolute terms due to the combined use of cogeneration systems with electric heating systems. MMC plans to continue working to restrict NOx emissions through general energy-saving measures.

Rationalized Water Usage

For production processes, MMC uses a mixture of industrial water, water from wells and tap water supplied by local utilities. MMC's policy is to rationalize water consumption wherever possible to help conserve resources. Each manufacturing site has its own action plan to reduce water usage.

Prevention of Water Pollution

Since the pollution load in the wastewater from MMC manufacturing sites differs according to the process involved, the water is first subjected to the appropriate primary and secondary processing steps before undergoing a final purification stage at a general treatment facility, which uses advanced treatment methods such as activated carbon filtration.

The quality of the water discharged from MMC production sites into the public water bodies is monitored according to internal limits for nitrogen, phosphorus, BOD[*4] and COD[*5], all of which are stricter than legal standards. MMC also maintains water storage tanks for use in emergency situations.

MMC tries to use sub-materials in production processes that do not contain nitrogen or phosphorus, since excessive quantities of these two elements in wastewater emissions can contribute to eutrophification[*6] of closed bodies of water such as lakes, marshes and bays. MMC is also installing denitrification systems in its water treatment facilities to combat this problem. ▶▶▶P.53-55

Prevention of Pollution due to Noise and Vibration

Stamping equipment, compressors, air blowers and engine-testing equipment are all major potential sources of pollution due to noise and vibration in the vicinity of vehicle production sites. MMC installs equipment to minimize noise and vibration from such sources. Careful location of this equipment and sound-insulating walls and buildings also helps to reduce noise pollution, along with various other measures. Before installing a new facility, MMC conducts simulations to predict levels of noise and vibration and takes appropriate measures to minimize related pollution in the general vicinity.

Noise-deadening wall

*3. VOC is the general term for any organic compound that can volatilize easily at room temperature, including toluene and xylene.
*4. BOD (biochemical oxygen demand)
BOD is an indicator of water pollution, as measured by the amount of dissolved oxygen consumed in the oxidation and degradation of organic matter (the pollutant) by aerobic microorganisms over a fixed period of time.
*5. COD (chemical oxygen demand)
COD is an indicator of water pollution, as measured by the amount of dissolved oxygen consumed in the oxidation of organic matter.
*6. Eutrophication
Eutrophication refers to the excessive supply of nutrient salts containing nitrogen and phosphorus to closed bodies of water such as lakes, marshes and bays. Excessive nutrient supply can lead to abnormal production of plankton, which in turn can lead to red or blue algae tides that damage fish populations and cause water to become stagnant.

Reduced Odorous Emissions and Prevention of Soil Contamination

MMC installs equipment to prevent the release of odorous emissions and conducts patrols to monitor air quality around manufacturing sites. MMC has also instituted voluntary measures to prevent soil contamination or groundwater pollution at sites, including the sinking of observation wells.

Reduction of Odorous Emissions

Casting equipment, paint shops and wastewater treatment and other facilities are all sources of bad odors. MMC has installed equipment to eliminate smells. Methods of deodorization include adsorption onto activated carbon, burning off (by direct, catalyzed or regenerative combustion) and chemical dosing.

Routine management methods include regular site patrols to check that bad smells do not reach the periphery of plants. MMC also conducts dispersal analyses to simulate the impact of odorous emissions within the vicinity of sites.

Deodorization equipment at wastewater treatment facility

Management of Chemical Substances

MMC operates a chemical management system whereby any compound that is due to be introduced into production processes is pre-screened for toxicity. MMC prioritizes efforts to restrict emissions based on the level of risk that is established for each chemical. In line with the potential hazard, daily inspections of facilities where chemicals are handled are also carried out to ensure the safety of the workplace environment and the local vicinity.

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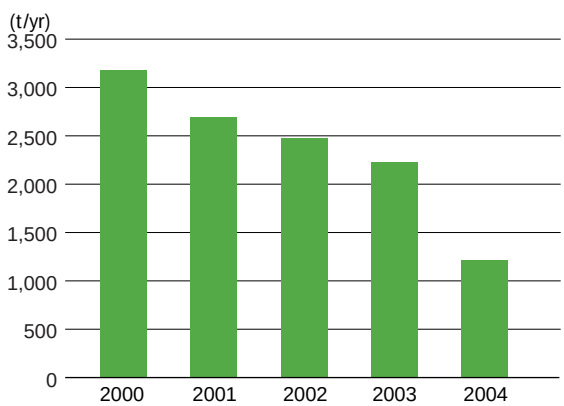
Emissions of PRTR-designated chemical substances



Storage of PCBs

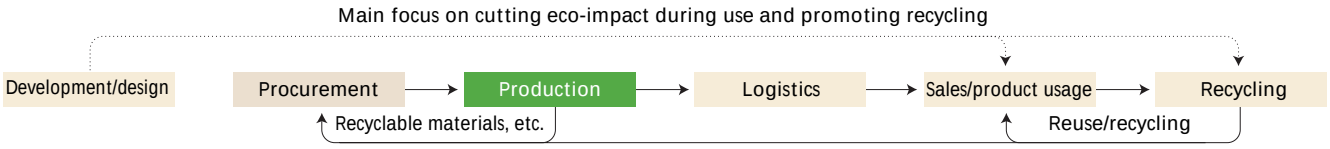
MMC is storing polychlorinated biphenyls (PCBs) contained in insulating oil within transformers and condensers in specially designated warehouses, as required by Japanese legislation. As of the end of fiscal 2004, the total number of such units in storage was 1,245.

Storage warehouse for equipment containing PCBs

Prevention of Soil and Groundwater Contamination

MMC has consistently monitored existing wells for noxious substances to prevent any adverse impact on human health from seepage of toxic chemicals. Heightened interest in Japan in potential soil contamination has prompted MMC to install observation wells in recent years to monitor the quality of groundwater. In July 2001, MMC established an internal task force that was charged with the testing of soil samples to survey the pollution risks at different production sites. MMC also takes other voluntary measures to prevent soil and groundwater pollution, including the issuance of manuals.

Observation well to monitor groundwater quality



Mizushima Plant Passenger Car Paint Shop Goes Aqueous

The new paint shop at the Mizushima Plant, which became operational in August 2004, is more eco-friendly in a number of ways. (Please refer to pages 28 and 30 for related information on energy conservation and noise pollution).

Reduced emissions of atmospheric pollutants

1. Adoption of water-based paints for the intermediate and final coats has enabled a reduction in paint shop VOC emissions of nearly 70%.
2. The installation of new machinery (paint guns that enable more efficient electrostatic deposition, plus robot-based systems to facilitate uniform application) has also resulted in lower VOC emissions by reducing the amounts of paint required.
3. Rearranging the position of color-switching valves has minimized paint losses during color changeovers (by cutting the length of the paint lines that must be washed out), further reducing VOC emissions.
4. Modification of the waste gas processors in each of the drying ovens has allowed them to retain heat, ensuring that over 95% of formaldehyde is removed during the drying process. This has significantly cut emissions of waste gases such as formaldehyde.

New paint shop (Mizushima Plant)


Robots help to reduce the amount of paint used.

Oye Plant Soil Contamination Survey Results and Countermeasures

In compliance with local ordinances, MMC conducted soil and groundwater contamination surveys prior to the sale of the land at the Oye Plant site at the Nagoya Plant. MMC submitted a report to Nagoya city authorities on the results of the surveys, which were released in October 2004, and on the planned countermeasures. MMC subsequently undertook a site cleanup under the guidance of local authorities, which continued until March 2005.

Pollution status

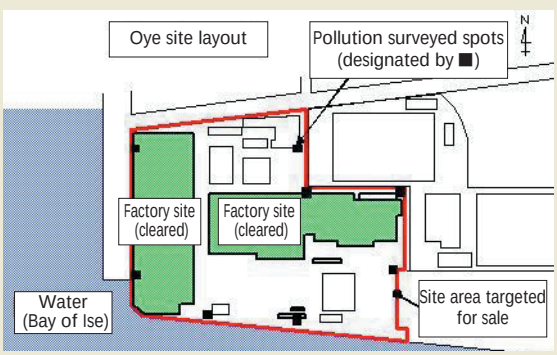
Site surveys of soil and groundwater conducted from July 2004 found levels of VOCs up to 24 times and levels of heavy metal contamination up to 8 times those of environmental standards.*1 VOC pollution at the site is believed to be due to past seepage of cleaning solvents into the ground. The heavy metal contamination could also have been the result of seepage of paints containing lead and fluorine, although the concentrations found were similar to the levels of these substances occurring naturally in the area.

Impact on health

Analysis of groundwater at the periphery of the site confirmed that VOC levels were within regulatory limits at all points surveyed. These results indicated no reason to fear any dispersal of harmful chemicals from the site into surrounding areas with a potentially deleterious impact on health.

Countermeasures and plans

MMC has completed the proper excavation and removal of contaminated soil at all parts of the site where VOC pollution was confirmed. Once the site is sold, MMC plans to monitor groundwater on an ongoing basis in conjunction with the new owner.



*1. Japan's Basic Law on the Environment stipulates various environmental standards for different substances based on the levels desired to protect the environment and to safeguard human health.

CO_2 Emission Reductions in Distribution and Development of Dealer Management Systems

In distribution operations, the two main environmental challenges for MMC are to raise transportation efficiency and to reduce the use of packing materials in logistics systems. MMC is also working with major distributors/dealers to promote the collection and recycling of automotive parts in an effort to upgrade the company's environmental protection activities further.

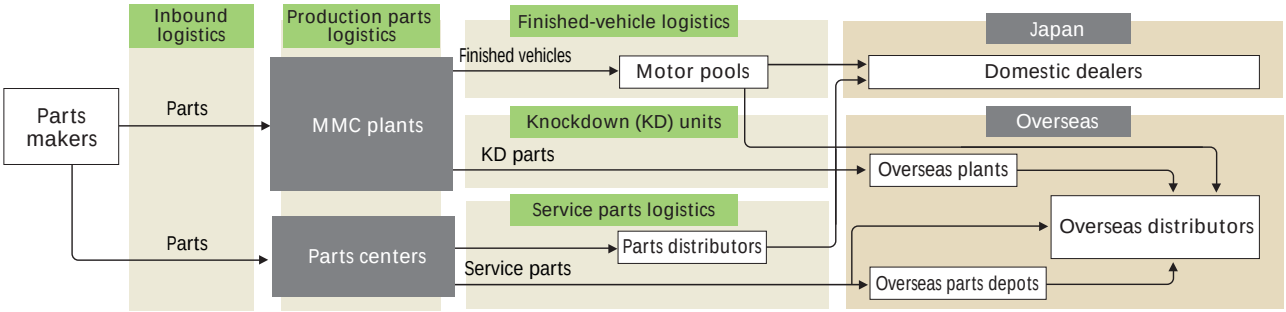
Logistics

Distribution Systems

MMC actively aims to develop eco-friendly distribution systems by raising transportation efficiency during the production, sales and service stages and by reducing the use of packing materials.

Inbound logistics	Transportation of parts made by parts suppliers to factories and parts centers
Production parts logistics	Transportation of parts for production between plants
Finished-vehicle distribution	Transportation of finished vehicles from factories to motor pools (storage/distribution depots) Transportation of vehicles from motor pools to domestic dealers Transportation of vehicles from motor pools to overseas distributors
Knockdown (KD)*1 parts	Transportation of parts for production to overseas manufacturing sites
Service parts distribution	Transportation of service parts from parts centers to dealers

MMC Distribution System Schematic



Increasing Transportation Efficiency

MMC is undertaking a variety of initiatives within Japan to lower CO_2 emissions by making the transportation of finished vehicles more efficient.

- Promotion of modal shifts*2
- More efficient loading of trailers for transporting cars
- Stopping idling and promoting more efficient operational management by using digital tachographs*3
- Expanded joint transportation initiatives with other automakers

In fiscal 2004, these various activities enabled MMC to cut the level of CO_2 emissions associated with finished-vehicle transport operations in Japan (as measured in terms of equivalent emissions per unit shipped) by 6% relative to fiscal 2000 levels. MMC plans to continue working to improve performance in this area.

Reducing Use of Packing and Packaging Materials

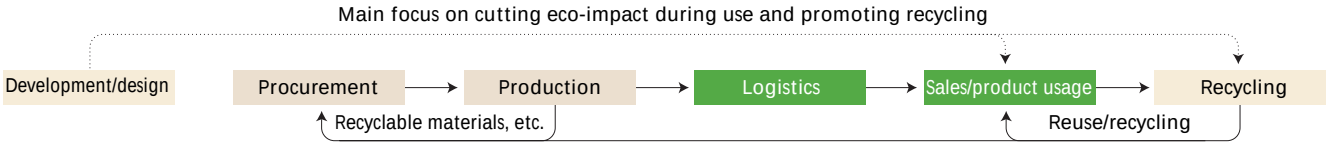
MMC is trying to reduce the amounts of packing and packaging materials used in shipping KD parts and service parts to overseas plants and distributors.

- Expanded use of returnable racks and boxes*4

  Due to the introduction of returnable racks for service parts to Australia, the proportion of returnable rack usage for service parts rose to 41% in fiscal 2004 (compared with 16% in fiscal 2003). MMC plans to expand the usage of returnable racks/boxes for KD parts and service parts shipments.
- Improvement/simplification of packing and packaging specifications

  MMC is promoting the usage of steel containers for shipping KD parts to China to reduce the amount of wood used in packing materials. MMC is also working on improving and simplifying packing specifications by expanding the usage of stretch films and other products to conserve resources.

*1. Knockdown (KD) parts:
Parts shipped to overseas plants for local assembly of finished vehicles
*2. Modal shifts:
Combined usage of different transportation modes (typically truckage and ocean or rail transport) for optimized transportation to reduce transportation costs and impact on the environment
*3. A digital tachograph:
A computer device fitted to trucks that collects detailed data on operational status (such as trip time, speed, distance and engine revolutions). The analyzed data can contribute to higher operating efficiency.
*4. Returnable racks/boxes:
Returnable racks and boxes can be folded up to one-tenth to one-third of their original size after unloading for efficient return to Japan.

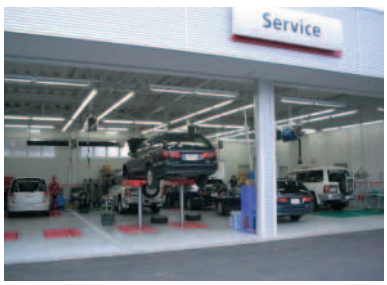


Sales

Role of MMC Dealers

MMC supplies products and services to its customers through dealers and service centers. These operations provide support to customers in all aspects of motoring, from the original vehicle sale to inspections, repairs and final collection. Dealers play a critical role in environmental protection activities such as vehicle recycling by ensuring the proper handling of industrial wastes and end-of-life vehicles, and by being a focal point for the collection and recycling of parts. MMC provides all of its dealers in Japan with support and guidance on environmental protection activities as part of general efforts to upgrade the environmental performance of the MMC Group.

Mitsubishi Motors dealership



Service center

Environmental Systems at MMC Dealers

Environmental protection efforts and systems to lower environmental impact are just as important as MMC's commitment to regulatory compliance. Indeed, the internal standards for MMC dealers formulated by MMC in 2002 stress the importance of a proactive approach in tackling environmental issues.

Having sought the cooperation of the Mitsubishi Motors Sales Association, MMC included methods for obtaining ISO 14001 certification in a manual on environmental protection activities that targeted MMC dealers in Japan. First published in 2000, this manual was revised in January 2003.

MMC environmental protection activities manual
Tackling Environmental Issues at Dealerships

Under the leadership of individual presidents, MMC dealers continue to develop environmental management systems, based on internal management structures with clearly defined responsibilities. Dealers in Japan are fully compliant with the requirements of the automobile recycling legislation that came into force in January 2005.

Environmental Activities at MMC Dealers

Passenger cars

MMC dealers continue to upgrade environmental activities such as recovery of hazardous substances, proper disposal of industrial wastes, storage of repaired or exchanged bumpers and ordinary trash separation. Many dealers are also participating actively in local community clean-up campaigns. The construction of environmental management systems and certification to the ISO 14001 standard are an ongoing focus across MMC dealerships.

Waste management at MMC dealer (1)

Waste management at MMC dealer (2)

Spare parts

Although parts dealers do not generate any industrial wastes directly, they are involved in the separation of trash created during operations. Many parts dealers also contribute actively to local communities.

Compliance With Automobile Recycling Law

The Automobile Recycling Law came into force in Japan on January 1, 2005. MMC is actively promoting the recycling and proper disposal of shredder dust, air bags and fluorocarbons.

Recycling

Recycling of End-of-Life Vehicles

Initiatives in Japan

Automobile recycling legislation came into force in Japan at the start of 2005. As an automaker, MMC is fully committed to promoting the recycling and proper disposal of materials collected from end-of-life vehicles (ELVs) such as shredder dust (ASR[*1]), air bags and fluorocarbons. The recycling fees that are charged to customers, which vary by vehicle type, were published on MMC's web site in July 2004. MMC plans to publish annual figures on the amounts of such materials recycled from collected vehicles along with financial details such as the income from recycling fees.

Note: Figures for January–March 2005 are shown in the tables below.

*ART[*2] of 12 automakers formed to promote shredder dust recycling*

ELVs pass through the hands of collection agents, fluorocarbon recovery specialists and vehicle dismantlers before the shells are finally crushed and shredded at various licensed facilities. Under the law, Japanese automakers are responsible for collecting and recycling the residual dust left over after the various contractors have extracted all the valuable metals.

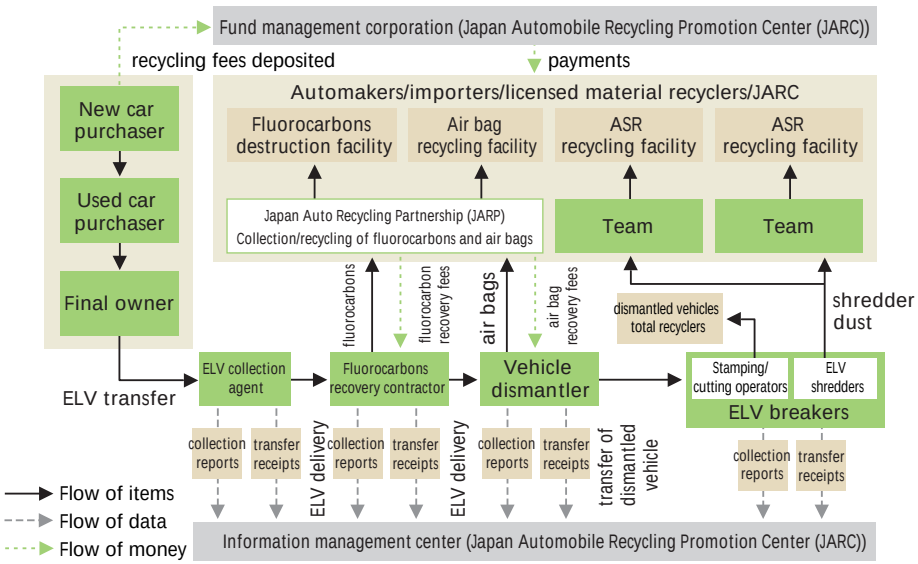
MMC has teamed up with other automakers to participate in ART. To minimize landfill disposal, participating automakers have signed contracts with ASR processing facilities, which use a combination of material and thermal recycling processes to extract value from the shredder dust. Automakers are also actively promoting an alternative process for recycling ELVs that does not generate any shredder dust. This involves reducing the vehicle hulks, which are pressed into a cube-like shape, to iron directly in an electric furnace or converter. This combination of approaches helps to ensure that ELVs are entirely recycled into usable resources.

The Japanese law sets a minimum statutory recycling rate for ASR. This increases in stages, from 30% in fiscal 2005 to 50% from fiscal 2010 and 70% from fiscal 2015. The corresponding effective recycling rates for ELVs that are required to achieve these targets are, respectively, 88%, 92% and 95%.

As a member of the ART consortium, MMC hopes to reduce shredder dust disposal costs as well as achieve mandatory recycling rates ahead of the legally imposed schedule. MMC is currently studying ways of promoting the recycling of glass and waste plastics.

The material recycling rates for ASR and air bags that MMC achieved in fiscal 2004 (January–March 2005) were both in excess of statutory minima.

Schematic for Automobile Recycling Law Processes



Results of ELV recycling and proper disposal

(Jan.-Mar. 2005)

	# ELVs	Amount
ASR	21,429	3,565 t
Air bags	2,334	4,107 items
Fluorocarbons	14,995	5,356 kg

Recycling rates

(Jan.-Mar. 2005)

	Rate achieved	Legal minimum
ASR	60.1%	30%*
Air bags	94.5%	85%

*FY2005-2009

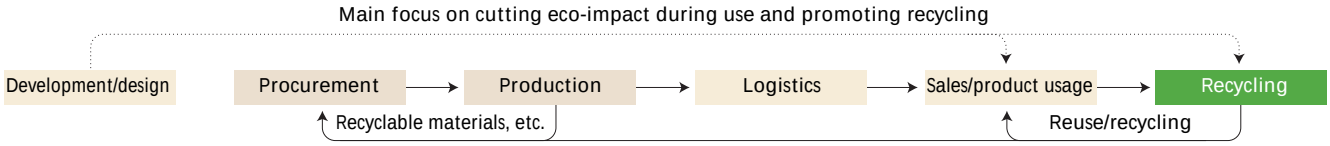
Recycling fees and costs

(Jan.-Mar. 2005)

	Amount (¥ million)
Payment of deposited fees	150.2
Recycling costs	171.9
Balance	–21.7

*1. Automobile Shredder Residue (ASR)
ASR is the residual waste once a vehicle has been crushed and cut in an industrial shredder and all the metals and other valuable materials have been extracted. Often called shredder dust, ASR is composed principally of plastics, glass and rubber.

*2. ASR Recycling promotion Team (ART) is a consortium that was formed in January 2004 to promote legal, smooth and efficient recycling of shredder dust. Including MMC, it has 11 domestic automaker members (the others being Isuzu Motors Ltd., Suzuki Motor Corp., DaimlerChrysler Japan Co., Ltd., Nissan Motor Co., Ltd., Nissan Diesel Motor Co., Ltd., Fuji Heavy Industries Ltd., PAG Import Inc., Ford Japan Ltd., Mazda Motor Corp. and Mitsubishi Fuso Truck and Bus Corporation). The Japan Automobile Recycling Promotion Center also joined the consortium in September 2004.



Statutory target air bag recycling rate of 85% in fiscal 2005

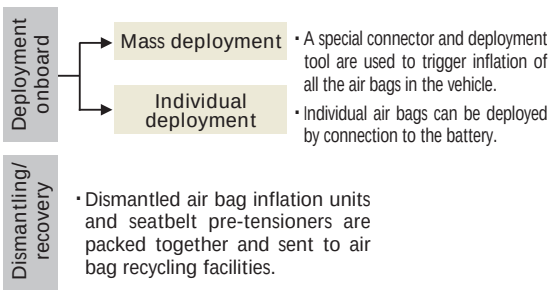
Japanese automakers and the Japan Automobile Importers' Association[*3] have jointly established the Japan Auto Recycling Partnership, a limited liability entity that is under contract to recycle air bags. Recycling methods involve either activating the air bags inside the vehicle (deployment onboard) or using an extraction and removal process to recover intact air bag modules in an undeployed state.

Deployment-onboard removal involves sending an electric signal to trigger air bag deployment. Since 1999, MMC has fitted its vehicles with a system that enables all the air bags to be deployed easily in this manner to simplify the recycling process.

In the case of the recovery of intact modules, vehicle dismantlers send the recovered units to designated air bag collection and recycling centers around Japan for processing. These centers use furnaces specially designed for air bags to heat the modules to eliminate the sodium azide used as the propellant in bag inflation. Once this explosive substance has been neutralized, the gas generators inside the air bags can be recovered and the units are recycled into metals. Air bag recycling rates reached 94.5% in fiscal 2004, against a target of 85% for fiscal 2005 (the initial year of the law's operation).

MMC supplies vehicle dismantlers with disassembly manuals for all models in printed and electronic form to enable the proper disposal of air bags.

Air Bag Processing Methods



Recovery and destruction of fluorocarbons to help prevent global warming

Fluorocarbons are used as the refrigerants inside vehicle air-conditioning systems. The main compound used in the past was CFC-12,[*4] which has since been replaced with the substitute fluorocarbon HFC-134a.[*5] MMC eliminated its use of CFC-12 worldwide by October 1998 through adoption of the following measures:

- Elimination of CFC-12 throughout production vehicles by January 1994
- Installation of fluorocarbon recovery and recycling equipment in all MMC dealers
- Development of recovery and destruction systems for CFC-12 in cooperation with related industries

As part of efforts to prevent global warming, MMC is now introducing new types of air-conditioning systems that use smaller quantities of refrigerant to reduce HFC-134a emissions. ▶▶▶P.22

In Japan, the enforcement of the Automobile Recycling Law in January 2005 superseded a law mandating the recovery and destruction of fluorocarbons, which had come into force in October 2002. Prior to 2005, JARC oversaw the collection of fluorocarbons from recovery operators and their destruction at designated facilities. Since January 2005, the Japan Auto Recycling Partnership has taken over the contract to recycle fluorocarbons, as it also does for air bags.

Development of recycling technology

The electrical wiring harnesses inside vehicles need to be removed prior to final metal recycling to avoid creating impurities in the iron due to copper from the wires (such impurities would lower the quality of the recycled metal). As part of its development program to simplify the dismantling of ELVs, MMC is working to create new structural designs that facilitate the removal of wiring harnesses from vehicles.

Harness dismantling test

*3. Under the Automobile Recycling Law, automakers and vehicle importers are legally responsible for the recovery and destruction of fluorocarbons as well as the collection and recycling of air bags from ELVs in Japan. The Japan Auto Recycling Partnership is a limited liability entity that was established in January 2004 with funds supplied by automakers and vehicle importers to undertake these two tasks in an integrated fashion.
*4. Besides contributing to ozone depletion, the chlorofluorocarbon CFC-12 is also an extremely potent greenhouse gas (the effect is approximately 7,100 times greater than that of CO_2).
*5. Although not an actual cause of ozone depletion, the hydrofluorocarbon HFC-134a is still a potent greenhouse gas (with an effect approximately 1,300 times greater than that of CO_2).

System of Electronic Manifests Used to Manage Proper ELV Disposal

MMC is cooperating with dealers to facilitate the recovery and recycling of fluorocarbons and smoke flares from vehicles. Whenever an ELV is collected as part of a trade-in, dealers can use the Internet to submit an electronic manifest *1 for the vehicle. This system provides an eco-friendly way of managing the proper disposal and recycling of vehicles.

Initiatives in Europe

The ELV Directive that came into force in October 2000 is now on the statute books of most EU member countries. Local sales and production subsidiary Mitsubishi Motors Europe B.V. (MME) is at the forefront of efforts to develop efficient ELV collection and recycling systems based on the conditions in each market. In several countries this effort is a cooperative one with DaimlerChrysler. MMC is monitoring in detail the situation with those components whose grace periods for compliance with EU directives on hazardous substances expired in July 2004 and January 2005. MMC is working to ensure full compliance with EU regulations for all vehicles and parts sold in European markets.

Domestic Dealer Activities

Playing a role in helping customers understand the Automobile Recycling Law

When any new vehicle is sold, MMC dealers in Japan provide customers with information on the operation of the Automobile Recycling Law and on the obligation to pay recycling fees (for vehicles in use, such information is provided at the time of vehicle inspection or final disposal). MMC organizes training seminars and also creates and distributes explanatory leaflets to support the efforts of MMC dealers in gaining the understanding of customers with regard to vehicle recycling legislation.

Reflecting the company's commitment to recycling, MMC's 166 domestic dealers are all officially registered as collection points for ELVs. Dealers stand ready to collect any ELV on the request of a customer to ensure that the vehicle enters the proper recycling channels.

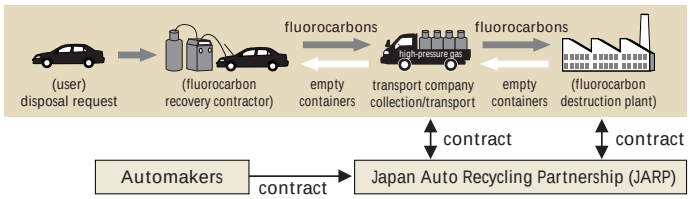
Trade manuals and explanatory charts

Proper recovery system for air-conditioner refrigerants

A total of 101 of MMC's 166 domestic dealers are officially registered under the Automobile Recycling Law to recover fluorocarbons from ELVs. Dealers extract and recover fluorocarbons as stipulated by the law and then send these chemicals to designated operators for destruction.

Recovery of fluorocarbons

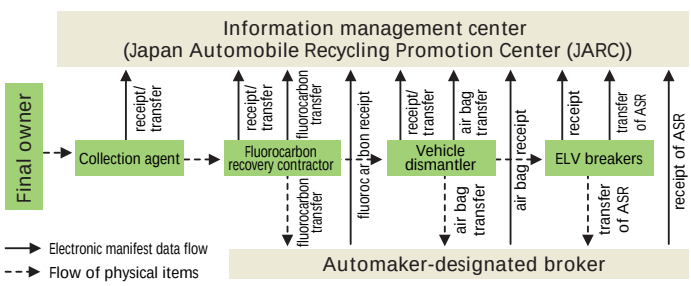
System for fluorocarbon recovery and destruction



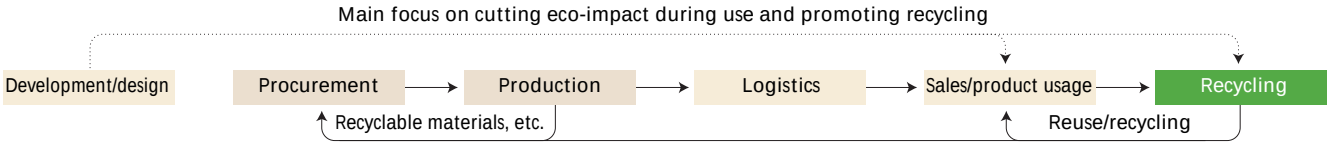
ELV management using electronic manifests

New car purchases frequently involve the trade-in of the customer's old vehicle. Once this ELV is collected, MMC dealers play an important role at the start of the recycling process. First, as the collection point for the vehicle, the dealer logs its receipt. Second, in some cases, as the designated fluorocarbon extractor, the dealer logs the collection and receipt of fluorocarbons. Both these duties involve the input of data about the vehicle onto an electronic manifest using the internet. This information aids proper management of the ELV within the recycling system.

Flow for electronic manifests



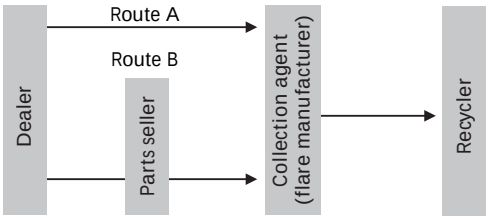
*1. Under the provisions of the Automobile Recycling Law, details of the ELV must be recorded precisely in the form of electronic data at the time of collection and transfer. These manifests act as management tools to show vehicle status and to help delineate responsibilities.



Collection and recycling of out-of-date smoke flares

In cooperation with related industries, in April 2002, MMC set up collection and recycling arrangements for any out-of-date smoke flares brought into MMC dealers for exchange.

Recovery/recycling routes for smoke flares



Parts Collection and Recycling

Recycling of recovered bumpers into automotive parts

Previously, waste bumpers generated during repairs were shredded and sent to landfill for disposal. As part of efforts to reduce waste and use resources more effectively, MMC's dealers initiated a program to recover and recycle used bumpers made of polypropylene in May 1997. MMC dealers in Japan recovered a total of 69,534 bumpers in fiscal 2004.

Once the metal brackets and other extraneous parts have been removed, the recovered bumpers are processed into pellets at resin recyclers. Automotive parts manufacturers can then use the recycled resin to make new parts. A wide variety of automotive components are now made from these recycled plastics, including battery cases, center ducts and filler neck protectors.

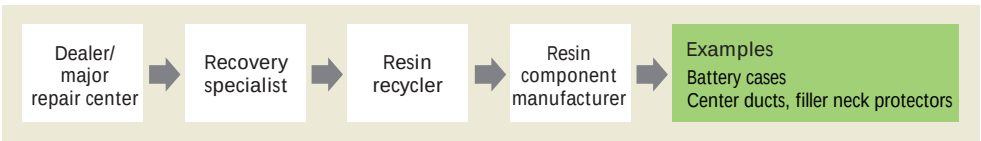
Reuse of recycled engine and transmission components

Some of the parts exchanged at dealers, including components from engines, transmissions, power steering units and gearboxes, can be reused and sold as new. MMC dealers are working to expand the range of parts for which this is a viable option to cut waste and to respond to user demand. In July 2003, turbochargers were added to this list.

Promotion of resource conservation via sale of reconditioned parts

Since July 2002, as part of the overall drive to promote more efficient use of resources, MMC has been reconditioning reusable parts that are recovered from ELVs and selling them in conjunction with leading networks for recycled auto parts. Customers can also ask MMC service centers to use any recycled parts that are available from user-researched networks in repairs.

Bumper collection and recycling



Collected bumpers

Examples:
Center duct (top)
Filler neck protector (bottom)

Working to Instill an Awareness of Corporate Ethics

To win the confidence of the general public and a reputation as a trustworthy company, MMC has actively pushed three basic principles since June 2004: “compliance first,” “safety first” and “customers first.” This is based on the resolve that without compliance, in particular, there will be no revitalization at MMC.

Business Ethics

Re-establishing Business Ethics

When the 2000 recall-related problem arose, we filed the necessary recall documentation and took countermeasures such as abolishing two-tier management of defect information and Repair Directives.[*1] However, having learnt that the period and scope of our investigation of defect information at that time was inadequate, we added 41 recall cases in 2004 relating to Repair Directives prior to 1999.

Learning from this, we launched the CSR Promotion Office in June 2004 to ensure that the Business Ethics of MMC[*2] (refer to the box below) were thoroughly adhered to. At the same time, an action program, as shown at bottom right, was executed to instill the “compliance first” mantra in our organization. Taking the initiatives of fiscal 2004 a step further, in fiscal 2005, our efforts are being guided by the theme of “turning awareness into action.” Activities to deepen the resolve of each and every employee will be ongoing at MMC so as not to repeat mistakes of the past that risk the loss of customer trust.

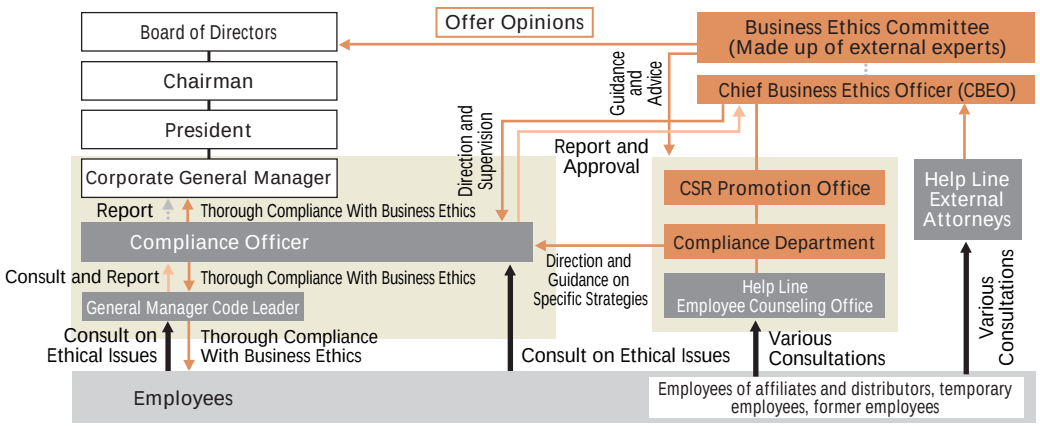
The status of progress with these action programs are reported to the Business Ethics Committee. Formed in June 2004, this committee is an advisory body to the Board of Directors and is made up of distinguished outside experts. MMC directors receive guidance and advice from members of this committee.

(Refer below for a schematic of the organizational framework for promoting adherence to business ethics)

Major Points Identified by the Business Ethics Committee

- “Compliance” doesn’t stop with employee awareness. It must be the basis for all employee actions.
- It is imperative that employees are aware of compliance so as to make correct judgments. Also, it is important to have a framework for reporting compliance-related information to the management.
- The opinions of women must be sought and used more.

Organizational Framework for Promoting Business Ethics



*General manager: Appointed within a department as a code leader to clarify responsibilities for thorough compliance with business ethics.
*In each office, a 'compliance officer' was newly appointed to assist the corporate general manager in achieving compliance with business ethics.

Business Ethics of MMC Outline

I. To observe laws and ordinances, corporate rules and social rules.

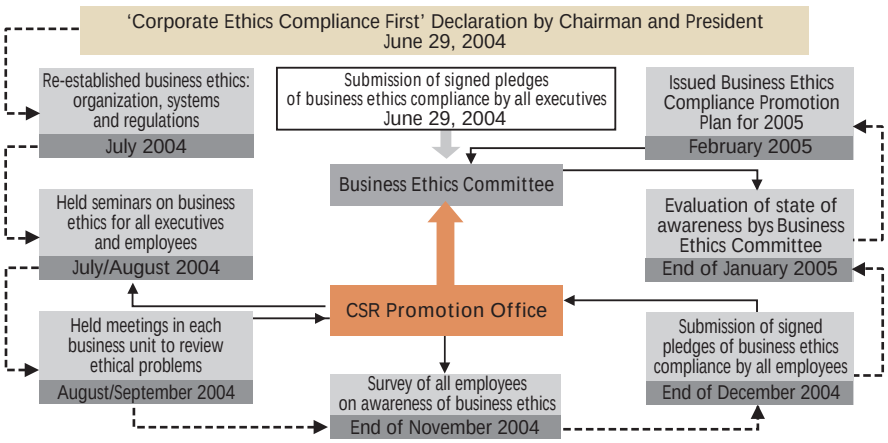
II. To improve communication with customers and society.

III. To engage in fair, just and transparent business activities.

IV. To create a working environment where human rights are respected and every employee can be fully motivated and demonstrate competence.

V. To aim at co-existence and co-prosperity with society.

Action Program for “Compliance First”



*1 Repair Directives: Dealers instructed to repair defects without notifying relevant ministry and users.
*2 Business Ethics of MMC: A 16-page booklet revised in October 2001 that contains points on adherence to business ethics and other matters.

Details of the Action Program

(Refer to the Action Program for "Compliance First" on the previous page)

"Corporate Ethics Compliance First" Declaration

The program was launched in June 2004 with the "Corporate Ethics Compliance First" Declaration by former chairman and chief executive officer Mr. Yoichiro Okazaki and former president and chief operating officer Mr. Hideyasu Tagaya. At the time of this declaration, all executives submitted a signed pledge of business ethics compliance. Top management thus pledged their commitment to taking the lead in this regard. Mr. Osamu Masuko, who was appointed president of MMC in January 2005, reaffirmed this compliance-first declaration on March 18, 2005 upon his appointment as Chief Business Ethics Officer (CBEO).

Re-establishing Business Ethics: Organization and Systems

In August 2004, under the direction of the CBEO 18 compliance officers were appointed in order to instill the importance of observing business ethics in each office. In a related move, general managers were appointed as code leaders under compliance officers, strengthening the organizational framework for ensuring the message will reach all employees.

Business Ethics Seminars

Seminars were held for all executives on CSR and corporate compliance training. In addition, 14 seminars on business ethics led by the head of the CSR Promotion Office were given to all 13,000 employees in 5 regions in Japan.

Meetings to Review Ethical Problems in Each Work Place

Meetings were held in each work place to study specific examples of ethical problems so as to deepen understanding of the Business Ethics of MMC and ensure staff could act on them. Led predominantly by code leaders, a total of 800 meetings were held. These meetings were also used to identify ethical issues at work places and discuss solutions.

Surveys on Awareness of Business Ethics

In November 2004, surveys were conducted to gauge employees' level of understanding of the Business Ethics of MMC after conducting the aforementioned seminars, meetings and other initiatives. The surveys also determined whether employees were actually following the Business Ethics of MMC in the course of their work. Findings pointed to the need to improve the practicality of the Business Ethics of MMC in order to foster greater awareness among employees.

Based on these findings, 50 cases identified during the course of meetings at work places were compiled into a booklet to help employees understand how to solve ethical issues better.

Submission of Signed Pledges of Business Ethics Compliance by All Employees

Employees who fully understood the Business Ethics of MMC and their importance, having gone through this action program, submitted a signed pledge of business ethics compliance. As of April 30, 2005, 98% of all employees had signed such a document.

Other Initiatives

Help Lines to Promote Self-government

In 2000, MMC established an internal Employee Counseling Office. This was augmented in fiscal 2004 with the establishment of an external hot line that connects employees with attorneys outside the company. Furthermore, standards were formulated as part of company regulations to protect internal whistle-blowers.

Measures to Safeguard Personal Information

Recognizing the importance of personal information handled in the course of business activities, MMC has formulated a policy concerning the protection of personal information and is implementing appropriate measures in this regard.

In accordance with this policy, MMC has appointed a person responsible for management of personal information and created a management system, in addition to establishing internal regulations and rules governing the safeguarding of personal information. MMC also holds seminars and educates staff on the subject through e-learning and other programs. Another initiative is to promote safety measures such as encrypting laptop computers. Since the beginning of fiscal 2005, MMC has been conducting internal audits as a voluntary check on the status of its various measures.

Web http://www.mitsubishi-motors.co.jp/privacy/index.html (Japanese only)

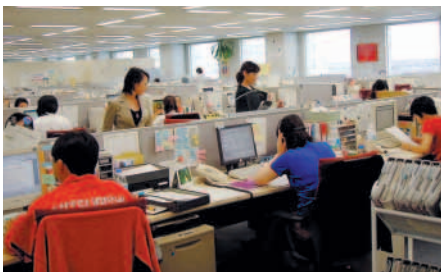
Heeding the Voice of the Customer

MMC has extended reception hours for customer inquiries and also strengthened the framework for feeding back internally the valued opinions of customers. Moreover, we attach a great deal of importance to the development of welfare vehicles that reflect customer needs and have exhibition facilities for customers to see these vehicles first hand in Tokyo and Osaka.

Customer Communications

Customer Advice Center

Since 1968, MMC has operated a Customer Advice Center as a point of contact for customer inquiries. Our motto is to "promptly, appropriately and kindly" respond to various inquiries to deliver the highest level of satisfaction to customers. To this end, we have implemented a number of initiatives. In October 2003, for example, we started to offer greater convenience to customers by operating the Customer Advice Center seven days a week, except for the period from December 31 to January 3 when the center is closed. Previously, the center was closed on Sundays.



Customer Advice Center

Customer Advice Center

☎0120-324-860 (Toll free in Japan)
Open 09:00–17:00
(Saturdays/Sundays: 09:00–12:00 and 13:00–17:00)

Disseminating "Customers' Voices"

MMC is promoting the establishment of a "Customers' Voice Cycle" with the aim of creating products and services from the viewpoint of customers. This is achieved by using various means to communicate the valued opinions of customers to relevant departments in the company.

Besides regular reports, we hold "Direct Opinion Seminars," group training for personnel from the quality, production and development departments, during which customers' opinions are presented. Held on several occasions throughout the year, these seminars are designed to expose a large number of employees to the "voice" of the customer to enable them to develop products and services from the customer's point of view.

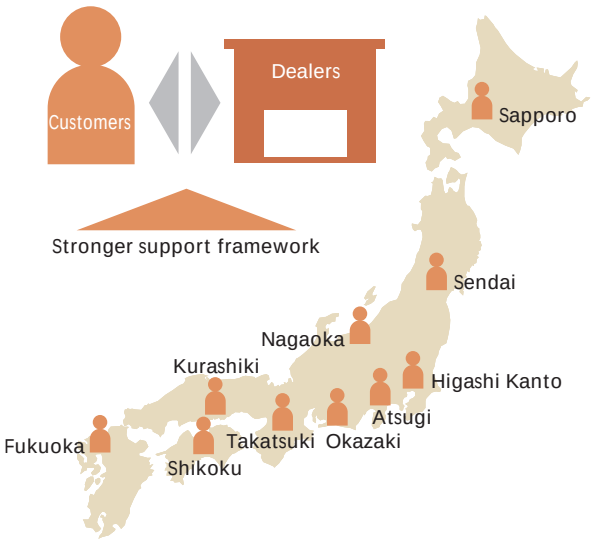
Customer-centric Dealer Support System

MMC has strengthened support for customers and dealers by establishing Technical Centers in 10 locations across Japan. This gives the company an advanced nationwide technology system for vehicle maintenance.

Drawing on the collective strengths of the MMC Group, we work to earn the support of customers by satisfying their needs. Specific actions include:

- Providing backup to dealers by responding to product defects where assessment is difficult and sophisticated technologies are required.
- Cooperating with dealers to directly gather information on repairs, complaints and products, which is used to help improve quality.
- Cooperating with dealers to examine maintainability and work efficiency with the goals of shortening work time and reducing repair expenses.

Technical Centers (10 locations)



Using our proprietary QIP system*1, we manage information on the quality of MMC products, including those of affiliates overseas, from the development stage to market in an integrated manner. Our aim is to increase customer satisfaction by accelerating the speed of dealing with information on quality.

*1 QIP system
The Quality Information Pool (QIP) system integrates management of information on product quality defects.

Welfare Vehicles

"Hearty Run" Series

Our "Hearty Run" series of welfare vehicles embodies the concept of driving in close companionship with others. These vehicles are equipped with devices to meet a wide range of special needs, for those in wheelchairs, or those who have difficulty walking or getting in or out of a car. The series includes wheelchair, boarding assistance and assisted-driving models.

MMC has been actively engaged in the development of welfare vehicles since 1991. In 1992, we launched the *Chariot*, a passenger car equipped to handle a wheelchair. This model won the Good Design Award from the then Ministry of International Trade and Industry. From the earliest stages, we have incorporated the views of volunteer groups in our development activities. Indeed, the "Hearty Run" series name incorporates this spirit of a car developed by listening to customers.

In May 2003, the welfare vehicle lineup was augmented with a new *Grandis* model featuring a movable, revolving passenger seat, making entry and exit easier. In October the same year, we added a new "self-transporter" *Lancer* to the lineup.

The wheelchair models of the *Minicab Van* and *Townbox* have proved to be particularly popular; while classed as mini-cars they offer the space of a small car.

In November 2003, a new lifting mechanism was introduced, offering even greater ease-of-use and winning praise from users.

To allow users to see vehicles and equipment firsthand, MMC has permanent showrooms and actively participates in exhibitions, test-driving and other events throughout Japan.

2004 International Home Care & Rehabilitation Exhibition

[Permanent Showroom]

Mitsubishi Barrier-free Lounge Tama
Tama New Town Store 2F
1-16-1, Karakida, Tama-shi, Tokyo
Tokyo Mitsubishi Motors Corporation
Tel: 042-337-8860
Store hours: 10:00–18:30;
closed on Mondays

(Please call beforehand because the showroom may be temporarily closed or there may be changes in the vehicles exhibited)

[Permanent Showroom]

Mitsubishi Barrier-free Lounge Osaka
Nishi-umeda Store 1F
7-20-1, Fukushima, Fukushima-ku, Osaka
Kinki Mitsubishi Motors Corporation
Tel: 06-6453-3961
Store hours: 10:00–18:30;
closed on Mondays

(Please call beforehand because the showroom may be temporarily closed or there may be changes in the vehicles exhibited)

Wheelchair model		Possible to get in and out while in a wheelchair	*Minicab Van and Townbox*
Boarding assistance model	Revolving passenger seat model	Fitted with a passenger seat that rotates and slides out from the car to make getting in and out easier	*eK WAGON, Colt, Colt Plus, Dion*
	Moving passenger seat model	Fitted with an electrically powered passenger seat that rotates and slides out and down from the car to make getting in and out easier	*eK WAGON, Dion, Grandis*
Assisted-driving model	'Self-transporter' model	Flip-of-a-switch storage of a wheelchair. Special controls allow the disabled to drive themselves.	*Lancer*

For the latest information, please visit the following web site:

Web http://www.mitsubishi-motors.co.jp/heartrun
(Japanese only)

Ongoing Efforts to Improve Quality

Having conducted extensive investigations regarding recall-related problems, MMC is taking measures to prevent a reoccurrence. We have introduced a process management system for producing high-quality products and there is now greater cooperation between departments. This allows the comprehensive solution of problems and has led to a steady improvement in quality.

Product Quality

Additional Measures to Prevent the Reoccurrence of Recall-related Problems

Based on the findings of investigations into the causes of the recall-related problems, MMC has reformed processes to abolish Repair Directives and speed up efforts to deal with recall work. MMC is now also implementing the following additional reform measures.

- **Measures to incorporate quality information in management systems**
  In addition to recall incidents, reports are also now made to the Board of Directors on product defects where recalls were adjudged to be unnecessary.
- **Strengthening of the Quality Assurance Division**
  Besides establishing the Quality Affairs Office in June 2004, MMC has bolstered Technical Centers by adding more staff and strengthened technical support for dealerships.
- **Increasing the awareness among staff of quality issues**
  Training has been given to all employees on laws and regulations relating to recalls and staff are now rotated to quality departments as part of career development.
- **Partial revision to employment rules**
  To raise awareness of recall-related problems work and prevent a reoccurrence of recalls, disciplinary rules have been revised to further clarify employee responsibility for product quality and customer safety.

Recall Information

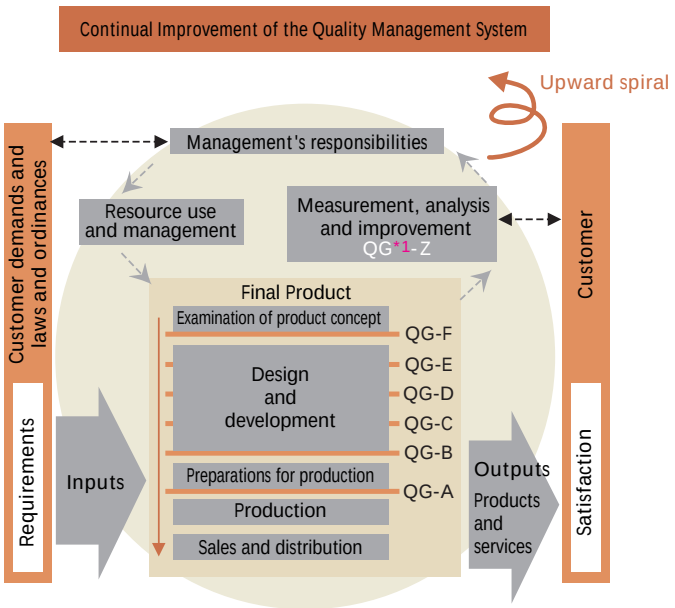
Readers wishing to find out what vehicles were subject to recall, can conduct a search by accessing the following link.

Web http://recall.mitsubishi-motors.co.jp/Recall/ListRecall.do (Japanese only)

Quality Management Systems and Quality Policy

MMC achieved uniform quality certification company-wide with the acquisition in 2003 of ISO 9001: 2000 certification; all plants had already acquired ISO 9002: 1994 certification. Our ISO 9001: 2000 certification was renewed by The Japan Accreditation Board for Conformity Assessment (JAB) and the United Kingdom Accreditation Service (UKAS) following surveys conducted by external certification bodies between July and September 2004.

ISO 9001: 2000 necessitates that a company fulfill various customer, legal and other requirements. Passing a surveillance visit audit is external confirmation of the excellence of our quality management system.



Quality Policy

- We devote ourselves to accomplish 'compliance first,' 'safety first' and 'customer first' –and to gain customers' trust in our company.
- All members of MMC take our responsibility for quality and spare no effort to make progress in quality improvement day by day.
- We utilize 'MMDS' as the management system to provide superior processes and product quality.

*1 A quality gate (QG) is a check point at the main stages in the process of manufacturing products. Before a product can pass through these "gates," it must fulfill the requisite conditions and achieve a required level in terms of product development. Quality gates function as a means of top management direction and control. (For further information, refer to Note on page 20).

MMDS (Mitsubishi Motors Development System)

The Mitsubishi Motors Development System (MMDS), which is built on the concept of quality gates, was adopted in 2001 in the product manufacturing process. Quality gates is a decision-making system for comprehensively checking and assessing the degree of attainment of predetermined standards with respect to manufacturing activities in all departments at various stages in a product's development.

The addition of top-management judgment at each of these quality gates ensures that production proceeds without any compromise in terms of quality or other aspects of a product.

The diagram below illustrates the main screening and evaluation items at three quality gates: QG D, where model specifications are determined; QG B, where development is completed; and QG A, where quality is approved before entering volume production. In practice, more detailed goals and parties responsible are specified for each item.

For example, at QG A, methods are employed to ensure an even higher level of quality, such as by reexamining cross-country endurance in the final production specifications.

The *eK WAGON* and other subsequent new models, including the *Colt* and *Grandis*, are products of this system, which continues to drive steady improvements in quality.

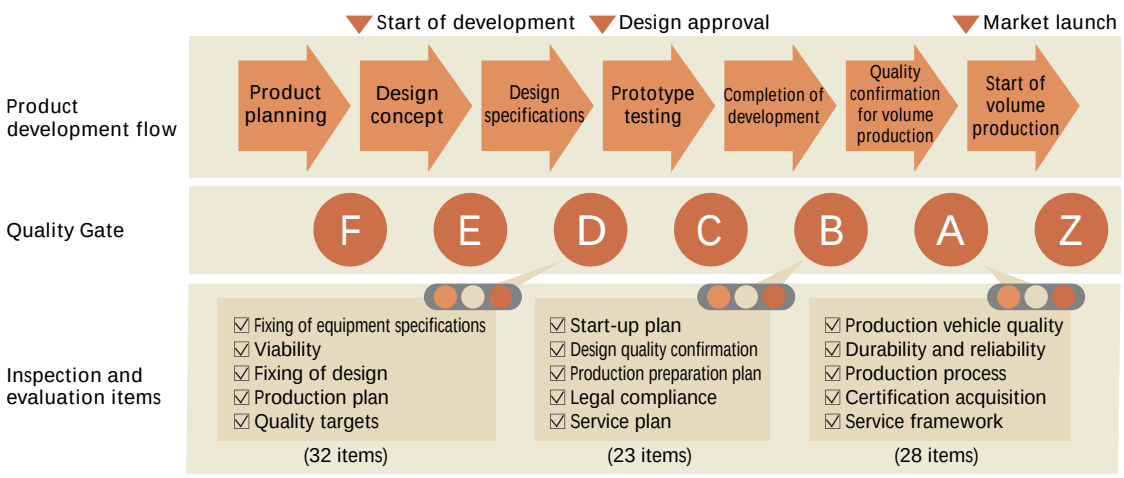
In-Stage Quality Creation (ISQC)

ISQC, activities to improve quality during production processes, has been introduced at all production plants. The basic thinking of ISQC is to implement high-level management through operation control procedures tailored to the requirements of the vehicle structure. Control procedures are specified with respect to the 4Ms (Material = structure, Machine = facilities and tools, Method = production methods and Men = workers) for operations such as fastening and spot welding, so that there are no defects.

Regarding fastening, for example, whereas conventional tools are used for non-critical places, torque wrenches are used after conventional tools or tools fitted with a torque transducer are used for critical places. Furthermore, critical places are double checked.

The combination of these procedures and guidelines covering tools, work instructions, the skill level of workers and other matters is designed to facilitate work without error. Moreover, because it is vital to clarify the improvement of structures and production management, in critical processes, our development division adopts structures easy to guarantee, and also indicates matters requiring attention in production in drawings.

MMDS (Mitsubishi Motors Development System)



Enhanced Initiatives to Reduce Traffic Accidents

At MMC, we are determined to help reduce traffic accidents and are promoting a number of initiatives to this end. These include improving the safety performance of vehicles, both in terms of active and passive safety, as well as running road safety programs and safe driving classes. We are thus active on many fronts in the battle to improve road safety.

Road Safety

Thinking on Road Safety

A total of 7,358 precious lives were lost in traffic accidents in 2004 in Japan. In January 2004, the Japanese government set a goal [*1] of lowering road traffic casualties to under 5,000 people within 10 years (by 2013), aiming to make Japanese roads the safest in the world. Recognizing that traffic accidents are the worst possible legacy left by a motor vehicle, we are engaged in efforts to reduce such incidents, thereby fulfilling our responsibility to society.

Three elements are important in the context of traffic safety: people, cars and the road environment. Naturally, MMC strives to develop and provide drivers with safer vehicles. But we are also active in promoting the safe use of cars.

Traffic Accidents and More Safety Devices in MMC Cars

The number of road fatalities in Japan has declined over the past few years. This is thought to show the benefits of safety measures such as air bags and stronger car bodies to protect occupants in a collision. However, injuries and fatalities combined are on the rise, with their number near 1.2 million. This underscores the necessity to further improve the active safety performance of vehicles to prevent accidents.

Aiming for a society in which there are no traffic accidents, MMC is enhancing the performance and functionality of safety devices as well as developing new technologies.

Initiatives to Reduce Traffic Deaths

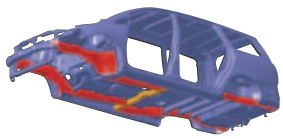
Improving Active Safety Performance

To prevent traffic accidents, a car must respond precisely to the driver's intentions in respect of the basic functions of an automobile: driving, steering and braking. At MMC, we are working to further enhance the active safety performance of vehicles by increasing the use of safety devices, such as ABS and brake assist, as well as increasing adoption of the Active Stability Control (ASC [*2]) System, drawing on our proprietary electronic control technologies.

Enhancing Passive Safety Performance

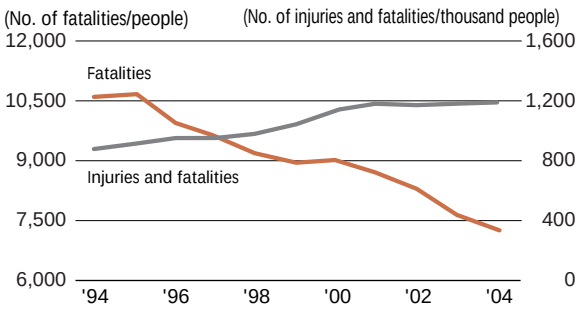
In the event of a collision, it is vital that the body structure lessens the impact on passengers and maintains sufficient space for survival in the passenger compartment. We are improving the passive safety performance of our vehicles in the front, rear and on the sides by making further enhancements to RISE [*3], our reinforced body system. In combination with improvements to the performance and function of devices that protect occupants, such as air bags, seat belt pretensioners and whiplash-reducing seats, we are striving to develop vehicles that reduce passenger injuries.

RISE refined body system



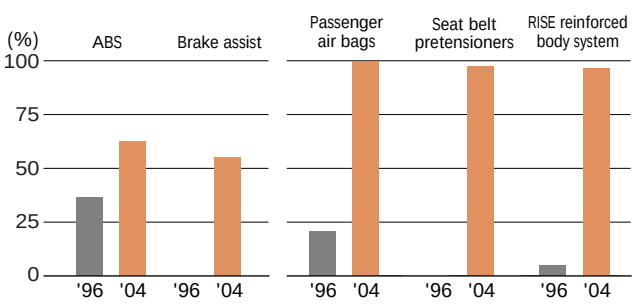
Straight frame construction

Traffic Injuries and Fatalities in Japan



(Compiled from National Police Agency data)

MMC's Increasing Use of Safety Equipment (Production unit basis)



*1 Government Goal
The Japanese government aims to lower traffic fatalities to less than 5,000 over the next decade (by 2013) (General Policy Speech by Prime Minister Junichiro Koizumi at the 159th Session of the Diet on January 19, 2004.)

*2 Active Stability Control
Improves vehicle stability by independently and automatically controlling the braking of all four wheels and engine horsepower when various on-board sensors detect instability on slippery road surfaces or due to sudden steering wheel movements.

*3 Refined Impact Safety Evolution
A passive safety reinforced body with a high-energy-absorbing front end and strong passenger compartment. This configuration achieves a high level of impact safety in an offset frontal or side collision.

Improving Pedestrian Protection

In addition to passenger safety, cars must be made with protecting pedestrians, cyclists, motorcyclists and other road users in mind. That's why MMC is increasingly equipping its vehicles with technology for improving the field of vision to quickly detect pedestrians and cyclists, including front- and rear-view cameras, and vehicle bodies that protect pedestrians.

Safe Driving Classes and Safety Information Dissemination

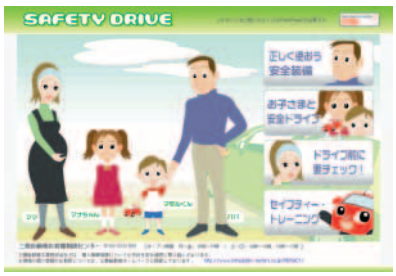
Handling a vehicle safely requires a driver to correctly understand the functions of safety equipment and acquire safe driving skills. MMC runs "Car School,[*4]" a safe driving program for beginners. Many drivers have participated in this program.

An MMC "Car School" event

Web http://www.lcomi.ne.jp/otoku/t/lcomi_car/ (Japanese only)

We also publish various pamphlets on safe driving and offer information on the subject through our web site. We will continue to actively engage in these educational activities to help raise awareness of traffic safety.

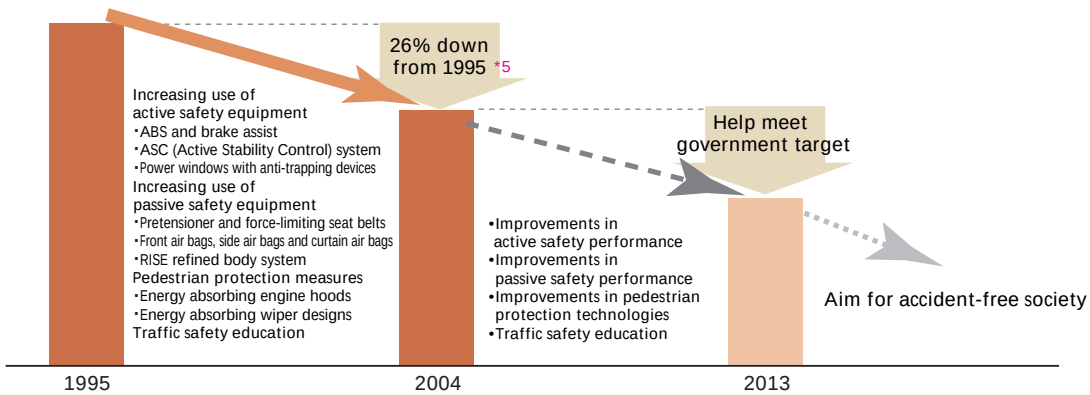
MMC safe driving pamphlets



Information on safe driving can be found on MMC's web site at:

Web http://www.mitsubishi-motors.co.jp/special/safety/index.html (Japanese only)

MMC Safety Measures and Annual Accidental Deaths Involving MMC Vehicles



The number of traffic deaths in Japan involving MMC vehicles declined 26% in 2004, compared with 1995. This is thought to show the benefits of vehicle safety measures. MMC is determined to continue working to improve the safety performance of its vehicles and educate drivers on safe driving, aiming for an accident-free society.

*4 Held at dealerships nationwide, MMC's "Car School" has been attended by more than 2,000 people since starting in 1995. MMC stages some of these events in partnership with Sankei Living Shimbun Inc.
*5 According to data collated by Japan's Institute for Traffic Accident Research and Data Analysis

Valuing Relationships With Society on Various Fronts

MMC attaches great importance to its various ties with local communities. We actively work to build ties with and contribute to local communities through factory tours and programs for local educational institutions as well as by ensuring areas surrounding our plants are kept clean and in other ways. In addition, we provide an automobile information service for elementary school children, cooperate with comprehensive study programs and are active in other ways in the education field.

Social Programs & Activities

Interaction With Local Communities

Each of our plants strives to deepen ties with local residents through such activities as factory tours and programs for local educational institutions.

Mizushima Plant

The Mizushima Plant is working to improve communication to make local residents aware of its environmental activities and engage communities. Furthermore, it opens its plant grounds to the local community and actively participates in volunteer activities to help areas badly affected by recent typhoons.

Cherry Blossom Festival
Plant grounds are opened to the public to enjoy cherry blossom viewing

Volunteering to help typhoon-affected communities
MMC helps communities to recover in the aftermath of typhoons

Volunteer planting of cosmos
MMC employees join local residents to plant cosmos along the Hakken River in preparation for Okayama's hosting of the National Athletics Meet

Nagoya Plant

Environmental activities at the Nagoya Plant extend beyond the confines of the plant to include cooperation with local residents. Employees from the plant cooperate in activities to improve the appearance of Okazaki City where the Nagoya Plant is located, such as a program sponsored by the city to pick up rubbish from streets. As a voluntary initiative, employees also ensure that areas surrounding the plant are kept free of trash.

Employees pick up rubbish around the Nagoya Plant in Okazaki City

Powertrain Plant

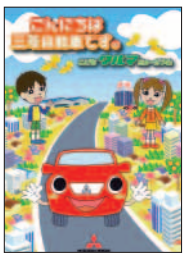
Employees use their lunch breaks to pick up rubbish on roads around the plant and get some exercise at the same time. This "walk and clean" initiative has proven popular with employees and also won kudos from local residents. In recent years, employees from every section of the plant have voluntarily cleaned surrounding areas on a regular basis.

Furthermore, MMC has taken an active part as a sponsor in activities of the Industrial Conference to clean the Mimuro and Tenjin rivers since its formation in 1978. Indeed, the plant is engaged in wide-ranging activities connected with keeping waterways clean, including twice yearly river patrols and voluntary analysis of water quality, clean-up campaigns, seminars on environmental problems and the publication of a public relations magazine.

Powertrain Plant environment patrols
The deputy manager of the Powertrain Plant, who is responsible for environmental management, leads patrols once every three to four months in and outside the plant. More than just an inspection, these patrols are also used to pick up litter

Automobile Information Service for Elementary School Children

Every year since 1993, we have provided a seasonal toll-free telephone information service for school children–an initiative that is unique in the auto industry. We also publish a pamphlet targeted at children that simply explains the car-making process using illustrations and introduces our environmental initiatives.



Automobile information service for schoolchildren

0120-175-250 (Toll-free in Japan)
(July–November)

On a web site specifically for children we have also added an environmental page called “Let’s Protect the Global Environment!” that explains in simple terms the relationship between cars and the environment.

Information for children is provided at the following link:

Web http://www.mitsubishi-motors.co.jp/social/exchange/kids/index.html (Japanese Only)

Cooperating With School Education

MMC cooperates with social studies classes at elementary schools. We visit four schools each in the area around our head office and Okazaki to give lessons on car manufacturing and the environment. We also give children the chance to ride in electric cars, exhibit recycled products and conduct other activities that deepen children’s understanding of the auto industry.

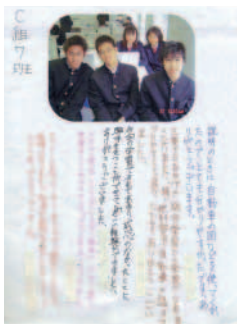
As part of comprehensive study programs, we also allow junior and senior high school students to visit MMC on their school excursions. Last year, 65 students visited us from 14 schools.

During these visits, we let students look at our showrooms, and hold information meetings to deepen students’ understanding of the auto industry via presentations of MMC’s environmental and safety initiatives.

We also field various questions from our student visitors.

Interested parties can contact us on 0120-324-860.

Students and MMC employees talk about the auto industry



Mitsubishi Auto Gallery

The Mitsubishi Auto Gallery opened in 1989 at MMC’s Passenger Car R&D Center in Okazaki City, Aichi Prefecture, giving the general public as well as employees a close-up look at the development of MMC passenger cars over the years. Models on display include “Mitsubishi Model A,” the very first car produced by MMC in 1917. Over 150,000 people have visited the gallery since its opening.

Please apply for admission before visiting.
- Open: 08:15-17:15
- Closed: Saturdays and Sundays (also closed for several days in May, August and during the year-end/New Year's period)
- Inquiries and reservations:
  Development Planning Department
  Research & Development Office
  Communication Support Group
  1, Aza Nakashinkiri, Hashime-cho,
  Okazaki, Aichi 444-8501, Japan
  TEL: 0564-32-5204

We value each and every one of our employees and aim to be a company that communicates well with them

We are creating a framework so that employees can get fulfillment from their work.

Employee Relations

Personnel Policies

At MMC, we believe that a workplace should enable an employee to realize their full potential and allow them to express creativity. Based on this belief, since 2002, we have reformed the personnel system for managerial and ordinary employees based on the stance of treating employees as independent individuals who share equal relationships and the same lofty aspirations for the company. At the same time, we place emphasis on staff education. The Personnel Department, which is responsible for promoting these initiatives, executes a PDCA cycle*1 with respect to all personnel policies and also supports staff.

Employee System

MMC evaluates, remunerates and promotes employees on the basis of market principles, not age or past achievements. The basis of this system is the concept that there is a role expected of each position and job, and employees are rewarded according to their performance and achievement of targets within that role.

Professional Development Policy

MMC supports employees in their professional development with the aim of fostering self-reliant professionals. We offer numerous training programs in this regard. These include “leadership training” to nurture future strategic business leaders, “management training” to equip employees with systematic managerial skills, and “professional and manufacturing training” designed to enhance and pass on specialist knowledge and technology. Support also extends to career development and job rotation to promote the sharing of information and ensure that employees become familiar with other parts of the organization.

Professional Development Policy
Respect individuality
Enhance skills and employability
Become a learning-oriented organization
Educational Philosophy (The 3Cs)
Challenge (strong will to achieve goals)
Change (higher skills to keep pace with innovation)
Career (independent mind to build a career)

In-house Communication

Seamless execution of our business revitalization plan demands that the company and employees share the same goals. In-house communication that keeps employees informed has a vital role to play here. At MMC, we use internal newsletters, intranets, meetings with management and other means to share internal and external information and top management policy, thereby ensuring healthy communication between employees and top management.

Internal Newsletter (REBORN–Domestic and Overseas Editions)

In September 2004, MMC’s internal newsletter was completely revamped with the publication of a journal to encourage employees to get behind the revitalization plan. An overseas edition was first published and distributed electronically the following month to MMC Group employees worldwide.

In-house Intranet Streaming Video (REBORN Video News Edition)

Since May 2005, MMC has been using its in-house intranet to post carefully selected information and news that cannot be communicated by print and photographs alone. This includes comments from customers and dealers and measures taken to improve manufacturing lines.

Both the newsletter version of REBORN and its video incarnation are planned, researched, written and edited entirely by employees. REBORN is popular throughout the company with employees also cooperating in supplying information, contributing articles, requesting articles and in numerous other ways.

*1 PDCA cycle
A management technique for promoting continuous improvement in business activities that involves a cycle (Plan, Do, Check and Action) that is repeated over and over.

Intranet

A wide range of information is posted on MMC's intranet that is compiled from internal and external sources, from recent events to basic information such as company work standards.

Meetings With the President

Through frank dialogue, these meetings allow the president to convey top management's convictions and beliefs directly to employees as well as to hear about frontline issues and concerns directly from employees.

The Ear of the President

All MMC employees have the "ear" of the president. MMC has a hotline that allows employees to present ideas and opinions directly to the president. In fiscal 2004, more than 1,400 submissions were received from employees and were used to change various aspects of the company.

Employee Welfare

Aware of diversifying needs, MMC has implemented a system to give employees time off work to participate in volunteer activities and offers a "menu" of welfare services that employees can select freely according to their particular requirements. For employees with children and dependent family members, MMC provides support including child-care leave and family-care leave, as part of efforts to develop systems that make allowance for flexible working hours and other needs.

We are currently working to establish a program to make it easier for employees to work and raise a family that is certified under the Law for Measures to Support the Development of the Next Generation. Regarding senior employees, we are working to enhance our employment system so that they will be able to work even after they reach the current mandatory retirement age.

The Business Ethics of MMC ▶▶▶P.40 make it clear that sexual harassment is a violation of those ethics. We go to great lengths to ensure everyone understands this, including running training programs on the subject and establishing points of contact in each region to counsel employees. MMC's employment regulations provide for disciplinary action against offenders.

Health and Safety

Occupational Safety

Safety comes first at MMC. Safety management and work-related accident prevention programs are diligently practiced and continually improved with the ultimate goal of having no workplace accidents.

Road Safety

Automaker employees have a particular obligation to follow traffic rules. To ensure this happens, we offer all employees safe-driving courses and general inspections of commuting vehicles, as well as undertaking hazard-awareness tests for new employees. Furthermore, employees are required to report any traffic accidents or infringements to share information and raise awareness of safety. We take a hard line on serious infringements and accidents and all members of MMC are working toward their elimination.

Positive Health

We conduct ongoing activities based on the concept that individual health is an individual responsibility.

- We offer voluntary proactive health-management campaigns
- We offer health guidance and consultation with hygienists and dieticians, disease prevention education and physical examinations

Mental Health

Communication with others has an important role to play in the early detection and treatment of mental health problems. We have therefore created an environment that makes it easy for employees to seek advice on these issues.

- On-site visits by psychiatrists and counselors
- Telephone counseling with a health insurance society
- Mental health education for managerial employees

Corporate Data

Corporate Profile (As of March 31, 2005)

Company name:
MITSUBISHI MOTORS CORPORATION
Established:
April 22, 1970
Head office:
2-16-4, Konan, Minato-ku, Tokyo 108-8410, Japan
Capital:
¥642,300 million
Shares of common stock issued:
4,254,521,405 (including preferred stock)

Web http://www.mitsubishi-motors.com

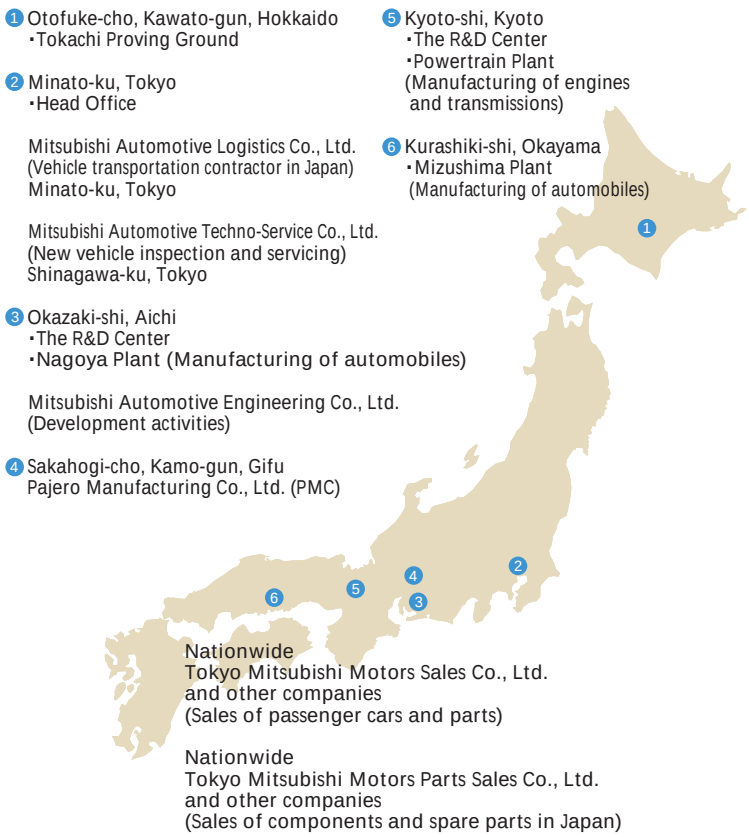
Purpose of incorporation

1. Development, design, manufacture, assembly, sales and purchase, export and import and other transactions relating to automobiles and to related component parts, replacement parts and accessories.
2. Development, design, manufacture, assembly, sales and purchase, export and import and other transactions relating to agricultural machinery and industrial engines and to related component parts, replacement parts and accessories.
3. Sales and purchase of used automobiles as well as related component parts, replacement parts and accessories.
4. Sales of measuring equipment.
5. Insurance agents in accordance with laws relating to property damage insurance and to automobile damage indemnity insurance.
6. Financing business.
7. Any other business related to the purposes set out above.

Note: MMC is not currently engaged in agricultural machinery-related business.

MMC Group

Made up of Mitsubishi Motors Corporation, 112 subsidiaries and 41 affiliates (as of March 31, 2005), MMC Group develops, manufactures and sells passenger cars and related parts.



1 Otofuke-cho, Kawato-gun, Hokkaido
・Tokachi Proving Ground

2 Minato-ku, Tokyo
・Head Office

Mitsubishi Automotive Logistics Co., Ltd.
(Vehicle transportation contractor in Japan)
Minato-ku, Tokyo

Mitsubishi Automotive Techno-Service Co., Ltd.
(New vehicle inspection and servicing)
Shinagawa-ku, Tokyo

3 Okazaki-shi, Aichi
・The R&D Center
・Nagoya Plant (Manufacturing of automobiles)

Mitsubishi Automotive Engineering Co., Ltd.
(Development activities)

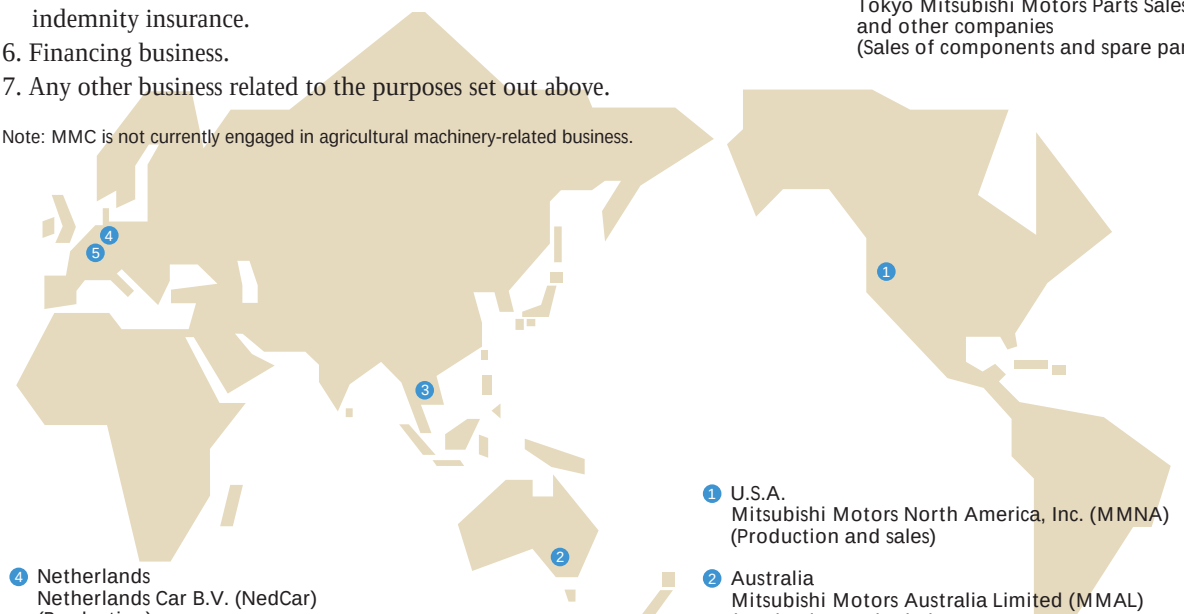
4 Sakahogi-cho, Kamo-gun, Gifu
Pajero Manufacturing Co., Ltd. (PMC)

5 Kyoto-shi, Kyoto
・The R&D Center
・Powertrain Plant
(Manufacturing of engines and transmissions)

6 Kurashiki-shi, Okayama
・Mizushima Plant
(Manufacturing of automobiles)

Nationwide
Tokyo Mitsubishi Motors Sales Co., Ltd.
and other companies
(Sales of passenger cars and parts)

Nationwide
Tokyo Mitsubishi Motors Parts Sales Co., Ltd.
and other companies
(Sales of components and spare parts in Japan)



1 U.S.A.
Mitsubishi Motors North America, Inc. (MMNA)
(Production and sales)

2 Australia
Mitsubishi Motors Australia Limited (MMAL)
(Production and sales)

3 Thailand
Mitsubishi Motors (Thailand) Co., Ltd. (MMTh)
(Production and sales)

4 Netherlands
Netherlands Car B.V. (NedCar)
(Production)

5 Europe
Mitsubishi Motors Europe B.V. (MME)
(Sales)

Fiscal 2004 Results

In fiscal 2004, consolidated net sales decreased 15.8% year on year to ¥2,122.6 billion and the operating loss worsened ¥31.6 billion to ¥128.5 billion.

Factors that affected earnings from the previous fiscal year included a ¥129.0 billion negative impact mainly from a decline in sales volume and a ¥18.4 billion increase in warranty expenses. In terms of factors that made a positive contribution to earnings, efforts to cut sales promotion expenses by cutting sales incentives in North America and reducing advertising expenses in Japan yielded savings of ¥53.4 billion. In addition, earnings were boosted by ¥31.3 billion due to the non-recurrence of credit losses from MMC's financial services operations in the U.S. and by other cost-cutting measures.

Main non-operating expenses included ¥12.9 billion in costs for issuing new shares relating to a capital increase in fiscal 2004 and ¥13.0 billion in equity-method losses, as well as ordinary net financial expenses. These and other factors resulted in an ordinary loss of ¥179.2 billion, ¥68.9 billion more than the previous fiscal year.

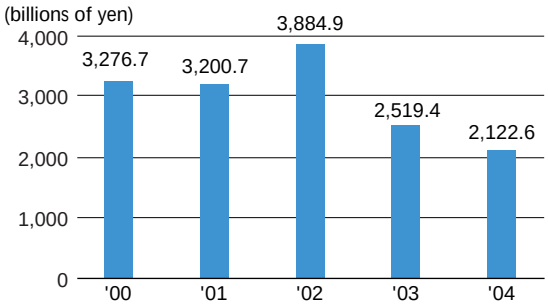
MMC booked asset-impairment accounting charges of ¥84.4 billion; compensation charges of ¥74.7 billion in accordance with a past transfer agreement of Mitsubishi Fuso Truck & Bus Corporation shares; structural reform charges of ¥29.5 billion; free inspection service campaign costs of ¥25.2 billion; and losses on the sale and disposal of property, plant and equipment of ¥14.5 billion. The result of these and other factors was a net loss of ¥474.8 billion.

	Non-consolidated	Consolidated
Net sales	¥1,163.5 billion	¥2,122.6 billion
Operating loss	¥62.2 billion	¥128.5 billion
Ordinary loss	¥85.2 billion	¥179.2 billion
Net loss	¥526.2 billion	¥474.8 billion
Total assets	¥1,123.4 billion	¥1,589.3 billion
Total shareholders' equity	¥330.1 billion	¥324.8 billion
Unit sales	625 thousand units	1,322 thousand units
Number of employees	12,094	36,970

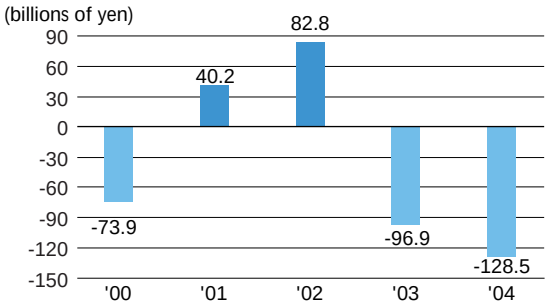
Mitsubishi Motors Corporation
Annual Report 2005
Please refer to this report for more details about our performance.

Web http://www.mitsubishi-motors.com/corporate/ir/irlibrary/e/anual.html

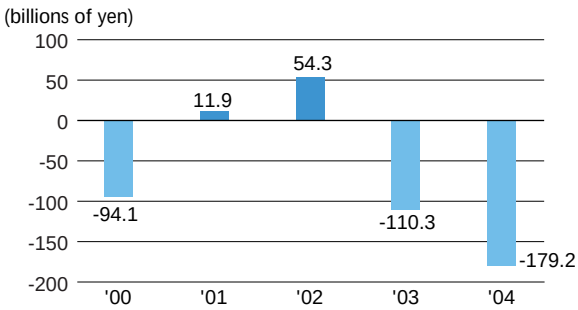
Net Sales



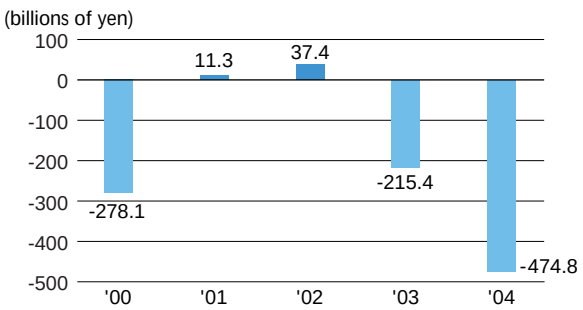
Operating Profit (Loss)



Ordinary Profit (Loss)



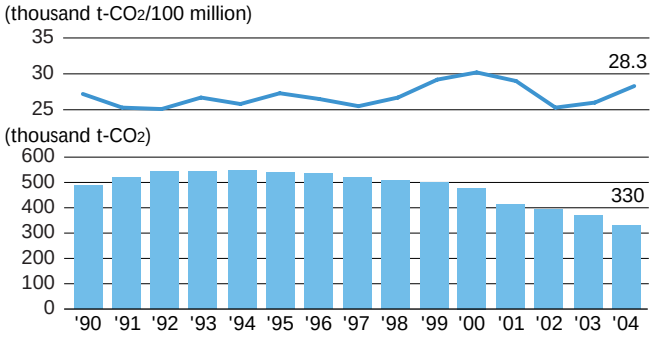
Net Income (Loss)



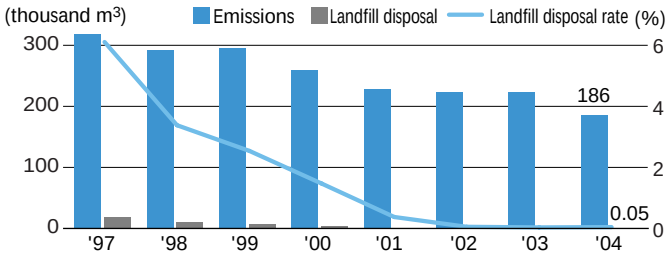
Note: Figures for fiscal 2000, 2001 and 2002 include results from truck and bus operations. Fiscal 2002 figures reflect the effect of a change of accounting period at certain overseas subsidiaries.

Plant Data

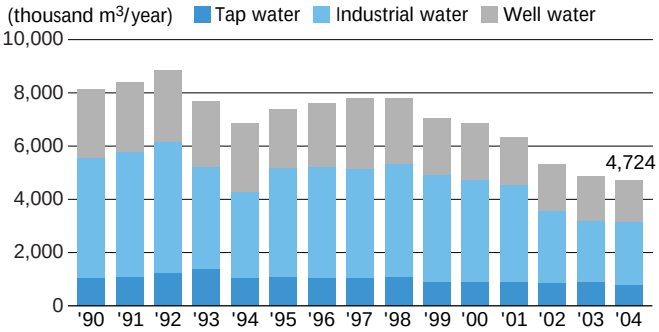
CO_2 Emissions per Production Unit (thousand t-CO_2/100 million)/ CO_2 Emissions (thousand t-CO_2)



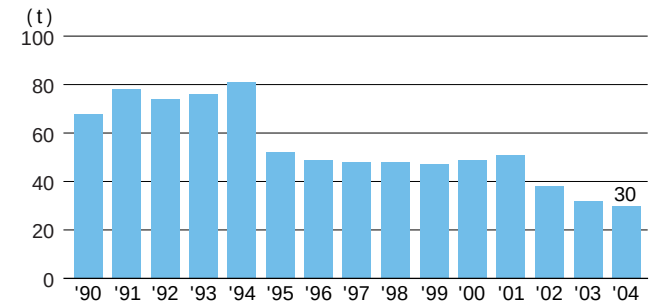
Total Waste Emissions/Landfill Disposal and Landfill Disposal Rate



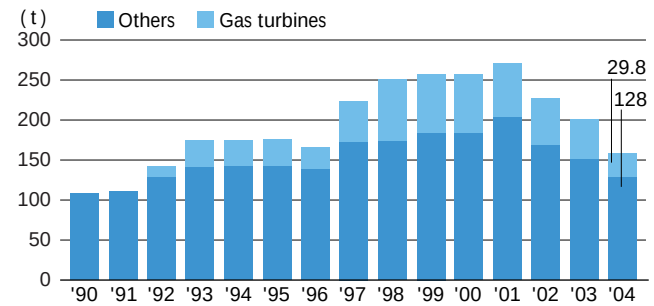
Water Consumption



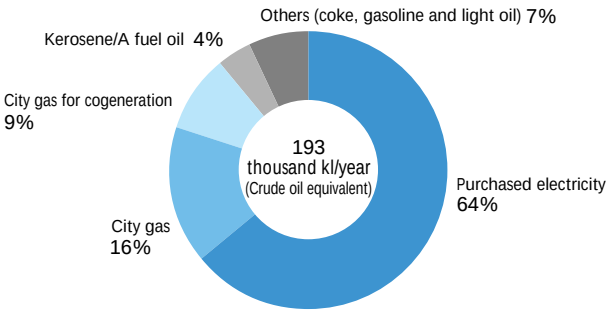
SOx Emissions



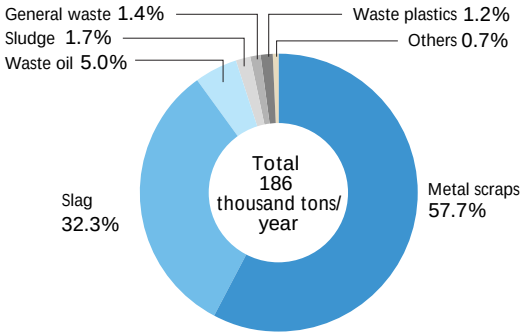
NOx Emissions



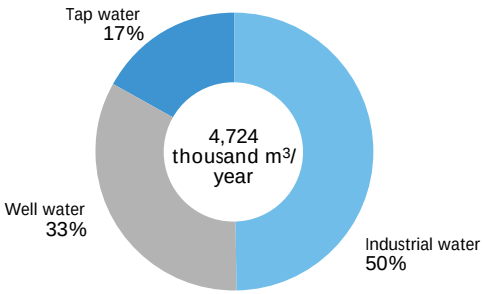
Breakdown of Energy Consumption in FY2004



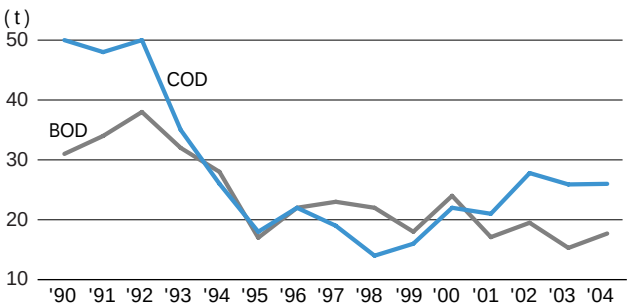
Breakdown of Waste in FY2004



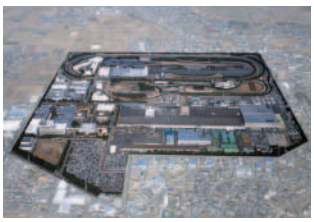
Breakdown of Water Use in FY2004



BOD/COD



Nagoya Plant–Okazaki (Obtained ISO 14001 certification in November 1998)



Location	1, Aza-Nakashinkiri, Hashime-cho, Okazaki, Aichi
Established	1977
Site/building areas	425,000/ 160,000m^2
No. of employees	2,000
Main products	Passenger cars
Production processes	Pressing, welding assembly, painting, assembly and plastic molding

Atmosphere

Substance	Facility	Unit	Regulated value	Emission volume
NOx	Small boiler	ppm	120	40
	Boiler	ppm	100	52
	Drying furnace	ppm	250	40
	Incinerator	ppm	200	90
Soot and dust	Small boiler	g/Nm3	0.1	0.008
	Boiler	g/Nm3	0.1	0.006
	Drying furnace	g/Nm3	0.1	0.026
	Incinerator	g/Nm3	0.1	0.053
SOx (Sulfur content in fuel)		wt%	1	0.001
Formaldehyde	Drying furnace	mg/Nm3	30	6.2*
Dioxin	Incinerator	ng-TEQ/Nm3	10	1.2

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
BOD	mg/l	20	4.1	1.2	2.5
COD	mg/l	20	9.0	2.6	4.0
SS	mg/l	20	1.0	1.0	1.0
Oil	mg/l	2	1.0	0.5	0.7
Total nitrogen	mg/l	15	11.0	6.2	8.1
Total phosphorus	mg/l	2	0.07	0.01	0.04
Copper	mg/l	0.5	0.03	0.01	0.02
Zinc	mg/l	1	0.1	0.01	0.04
Manganese	mg/l	3	0.3	0.1	0.16
Total chromium	mg/l	0.1	0.02	0.02	0.02
Lead	mg/l	0.1	0.011	0.005	0.09

*Regulations on concentrations of formaldehyde emissions from painting drying furnaces were applied from October 1, 2004 to reflect the Aichi Prefecture Ordinance on Pollution Prevention and Regulations for its Enforcement.

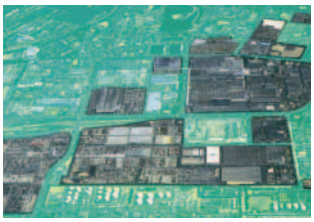
PRTR-designated Substances

(Unit for dioxins is g-TEQ/year; the unit for other substances is kg/year)

Substance	Volume handled	Emissions		Transferred		Recycled	Consumed	Eliminated
		Air	Public water bodies	To sewer	Waste			
Zinc compounds (water-soluble)	6,247	0	19	0	776	0	5,452	0
Bis (2-ehtylhexyl) adipate	12,076	0	0	0	362	0	11,701	12
Bisphenol A-type epoxy resin	9,839	0	0	0	333	0	9,495	11
Ethylbenzene	59,380	20,303	0	0	50	0	37,847	1,180
Ethylene glycol	165,989	0	567	0	0	0	161,596	3,826
Xylene	382,958	122,356	0	0	151	26,250	179,353	54,848
1,3,5-trimethylbenzene	18,142	3,211	0	0	0	0	14,544	387
Toluene	603,293	133,323	0	0	150	50,610	377,559	41,650
Nickel compounds	931	0	9	0	501	0	421	0
Benzene	13,864	95	0	0	0	0	13,769	0
Formaldehyde	81	81	0	0	0	0	0	0
Manganese and its compounds	1,874	0	93	0	615	0	1,165	0
Total	1,274,674	279,369	689	0	2,939	76,860	812,901	101,915
Dioxins	0.217	0.069	0.000	0.000	0.149	0.000	0.000	0.000

※Consumed: Volume converted to other substances due to chemical reactions or included in products that are removed from the site.
※Disposed: Volume converted to other substances by incineration, decomposition or chemical reaction.

Mizushima Plant (Obtained ISO 14001 certification in December 1998)



Location	1-1, Mizushima Kaigandori, Kurashiki, Okayama
Established	1943
Site/building areas	1,245,400/ 484,700m^2
No. of employees	4,200
Main products	Passenger cars, minicars, automobile engines and transmissions
Production processes	Casting, forging, machine processing, pressing, welding assembly, painting and assembly

Atmosphere

Substance	Facility	Unit	Regulated value	Emission volume
NOx	Boiler	ppm	150	55.2
	Drying furnace	ppm	230	33.7
Soot and dust	Boiler	g/Nm3	0.1	0.003
	Drying furnace	g/Nm3	0.1	0.002
SOx (Sulfur content in fuel)		wt%	0.5	0.06

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
BOD	mg/l	20	49.8	1.5	8.9
COD	mg/l	20	20	1.5	7.4
SS	mg/l	20	5.3	0.3	0.8
Oil	mg/l	1	0.3	0.3	0.3
Total nitrogen	mg/l	60	16	3.8	8.1
Total phosphorus	mg/l	8	10.9	0.1	1.6
Copper	mg/l	3	<0.01	<0.01	<0.01
Zinc	mg/l	5	0.04	0.04	0.04
Manganese	mg/l	10	0.19	0.01	0.1
Total chromium	mg/l	0.5	<0.005	<0.005	<0.005
Lead	mg/l	0.1	<0.005	<0.005	<0.005

PRTR-designated Substances

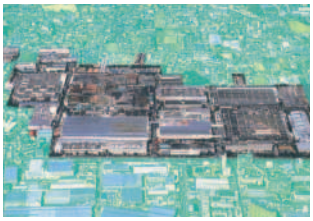
(Unit: kg/year)

Substance	Volume handled	Emissions		Transferred		Recycled	Consumed	Eliminated
		Air	Public water bodies	To sewer	Waste			
Zinc compounds (water-soluble)	30,539	0	570	0	5,194	0	24,776	0
2-aminoethanol	4,701	0	0	0	0	0	0	4,701
Bisphenol A-type epoxy resin	6,948	0	0	0	208	0	6,740	0
Ethylbenzene	175,010	107,062	0	0	5,276	22,352	31,756	8,564
Ethylene glycol	976,809	0	0	0	0	0	976,809	0
Xylene	733,174	393,532	0	0	14,573	108,634	189,810	26,625
2-ethoxyethyl acetate	701	617	0	0	49	0	0	35
Organic tin compounds	14,448	0	0	0	722	0	13,726	0
1,3,5-trimethylbenzene	11,968	9,800	0	0	771	0	0	1,397
Toluene	690,794	290,282	0	0	4,861	126,258	38,458	230,934
Nickel compounds	5,275	0	633	0	2,849	0	1,794	0
Phenol	1,392	0	0	0	0	0	0	1,392
Bis (2-ethylhexyl) phthalate	2,506	0	0	0	75	0	2,431	0
Benzene	12,955	39	0	0	0	0	12,917	0
Poly (oxyethylene) alkyl ether	6,122	0	61	0	6,061	0	0	0
Poly (oxyethylene) nonylphenyl ether	1,050	0	10	0	1,040	0	0	0
Formaldehyde	1,450	130	0	0	0	0	0	1,320
Manganese and manganese compounds	4,408	0	253	0	1,546	0	2,609	0
Total	2,680,252	801,462	1,527	0	43,226	257,244	1,301,826	274,968

※Consumed: Volume converted to other substances due to chemical reactions or included in products that are removed from the site.
※Disposed: Volume converted to other substances by incineration, decomposition or chemical reaction.

Plant Data

Powertrain Plant–Kyoto (Obtained ISO 14001 certification in November 1998)



Location	1, Uzumasa Tatsumi-cho, Ukyo-ku, Kyoto
Established	1944
Site/building areas	289,500/ 251,400m²
No. of employees	1,200
Main products	Automobile engines and transmissions
Production processes	Casting, machine processing and assembly

Atmosphere

Substance	Facility	Unit	Regulated value	Emission volume
NOx	Boiler	ppm	150	78
	Melting furnace	ppm	200	103
	Heating furnace	ppm	180	110
	Drying furnace	ppm	230	87
	Gas turbine	ppm	70	50
Soot and dust	Boiler	g/Nm3	0.1	0.004
	Melting furnace	g/Nm3	0.1	0.048
	Heating furnace	g/Nm3	0.2	0.087
	Drying furnace	g/Nm3	0.2	0.096
SOx (Sulfur content in fuel)		wt%	0.5	0.12
Dioxins Aluminum melting furnace		ng-TEQ/Nm3	5	<1.1

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
BOD	mg/l	600	24	2	9.2
COD	mg/l	–	15	10	12
SS	mg/l	600	11	<5	6.7
Oil	mg/l	5	1	<1	1
Total nitrogen	mg/l	240	10	0.9	5.4
Total phosphorus	mg/l	32	0.2	<0.1	0.1
Copper	mg/l	3	<0.05	<0.05	<0.05
Zinc	mg/l	5	<0.05	<0.05	0.3
Manganese	mg/l	10	0.3	<0.5	0.2
Total chromium	mg/l	2	<0.05	<0.05	<0.05

Note: Released into sewer

PRTR-designated Substances

(Unit for dioxins is g-TEQ/year; the unit for other substances is kg/year)

Substance	Volume handled	Emissions		Transferred		Recycled	Consumed	Eliminated
		Air	Public water bodies	To sewer	Waste			
Bisphenol A	492	290	0	0	6	0	196	0
Ethylbenzene	11,245	25	0	0	5	0	11,215	0
Ethylene glycol	4,246	0	0	0	127	0	4,118	0
Xylene	55,051	127	0	0	19	0	54,905	0
Chromium and chromium (âV) compounds	80,654	0	0	0	0	0	80,654	0
2-(diethylamino) ethanol	1,341	0	0	0	477	0	864	0
HCFC-225	1,050	0	0	0	32	0	1,019	0
Hexamethylenetetramine	15,932	0	0	0	15,932	0	0	0
Toluene	128,761	355	0	0	10	0	128,396	0
Phenol	77,495	0	0	0	64,692	0	0	12,803
Hydrogen fluoride and its water-soluble salts	3,480	0	0	0	0	0	3,480	0
Benzene	3,354	8	0	0	0	0	3,346	0
Formaldehyde	5,865	5,865	0	0	0	0	0	0
Methylenebis diisocyanate	27,391	0	0	0	2,739	0	24,652	0
Total	416,358	6,670	0	0	84,039	0	312,846	12,803
Dioxins	0.008	0.008	0.000	0.000	0.000	0.000	0.000	0.000

※ Consumed: Volume converted to other substances due to chemical reactions or included in products that are removed from the site.
※ Disposed: Volume converted to other substances by incineration, decomposition or chemical reaction.

Powertrain Plant Shiga (Obtained ISO 14001 certification in November 1998)

Location	2-1, Kosunacho, Konan-shi, Shiga
Established	1979
Site/building areas	172,800/ 78,300m²
No. of employees	500
Main products	Automobile engines
Production processes	Machine processing and assembly

Atmosphere

Substance	Facility	Unit	Regulated value	Emission volume
NOx	Boiler	ppm	150	91
Soot and dust	Boiler	g/Nm3	0.1	0.003

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
BOD	mg/l	20	5.5	1	2.7
COD	mg/l	20	6.9	1	3.4
SS	mg/l	20	4	0.5	1.4
Oil	mg/l	5	0.5	0.5	0.5
Total nitrogen*	mg/l	12/8	6.0/6.2	0.5/2.5	2.2/4.0
Total phosphorus *	mg/l	1.2/0.6	0.1/0.1	0.1/0.1	0.1/0.1
Copper	mg/l	1	<0.01	<0.01	<0.01
Zinc	mg/l	1	<0.01	<0.01	<0.01
Manganese	mg/l	10	<0.1	<0.1	<0.1
Total chromium	mg/l	0.1	<0.01	<0.01	<0.01

*The first of the two figures is for existing plants and the second is for newly established plants

PRTR-designated Substances

(Unit: kg/year)

Substance	Volume handled	Emissions		Transferred		Recycled	Consumed	Eliminated
		Air	Public water bodies	To sewer	Waste			
Xylene	1,321	2	0	0	17	0	1,303	0
Toluene	1,142	3	0	0	0	0	1,139	0
Total	2,463	5	0	0	17	0	2,442	0

※ Consumed: Volume converted to other substances due to chemical reactions or included in products that are removed from the site.
※ Disposed: Volume converted to other substances by incineration, decomposition or chemical reaction.

Explanation of Figures

Regulated values are the most stringent figures required by law, ordinances and pollution prevention agreements. Air emission volume shows the maximum value. Regarding PRTR, we have mostly shown class-one designated substances where we handle one or more tons per year.

Glossary

NOx : Nitrogen oxide
SOx : Sulfur oxide
BOD : Biochemical oxygen demand
COD : Chemical oxygen demand
SS : Suspended solids
ND : Not detectable

Major Domestic Affiliates' Plant Environmental Data (FY2004)

Pajero Manufacturing Co., Ltd. (Obtained ISO 14001 certification in July 1999)

Location	2079, Sakagura Sakahogi-cho, Kamo-gun, Gifu	No. of employees	1,380
Established	December 1943	Main products	Passenger cars
Site/building areas	189,183/127,524m^2	Production processes	Pressing, welding assembly, painting and assembly

Atmosphere

Substance	Facility	Unit	Regulated value	Emission volume
NOx	Boiler	ppm	180	69
	Drying furnace	ppm	230	39
Soot and dust	Boiler	g/Nm3	0.2*	< 0.01
	Drying furnace	g/Nm3	0.2	< 0.025

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
PH		5.8–8.6*	7.2	6.8	6.9
Total volume of COD	kg/day	39.3	24.5	16.0	19.5
BOD	mg/l	20*	4.1	0.5	1.1
SS	mg/l	50*	19	< 1.0	2.8
Oil	mg/l	5*	1.0	< 1.0	< 1.0
Total volume of nitrogen	kg/day	25.6	18.2	8.9	13.6
Total volume of phosphorus	kg/day	7.0	6.3	2.6	4.8

*Regulated value in accordance with a pollution prevention agreement with the town of Sakahogi, Kamo-gun.

Mizushima Industries Co., Ltd. (Obtained ISO 14001 certification in October 2001)

Location	2-1, Mizushima Takasago-cho, Kurashiki-shi, Okayama	No. of employees	295 (400, including temporary staff)
Established	February 1957	Main products	Automobile parts
Site/building areas	23,361/21,811m^2	Production processes	Welding assembly, painting and assembly

Atmosphere

N/A

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
PH		5.8～8.6	8.3	6.5	7.1
COD	mg/l	30(40)*	14.0	1.9	9.0
BOD	mg/l	30(40)*	21.0	1.7	10.1
SS	mg/l	50(60)*	17.0	ND	4.5
Oil	mg/l	5	ND	ND	Less than 0.3

*Extra regulated value according to agreement with Okayama Prefecture

Suiryo Plastics Co., Ltd. (Obtained ISO 14001 certification in June 2002)

Location	1424, Mizue, Kurashiki-shi, Okayama	No. of employees	602
Established	October 1968	Main products	Automobile parts
Site/building areas	67,600 / 39,000m^2	Production processes	Plastic molding, painting and assembly

Atmosphere

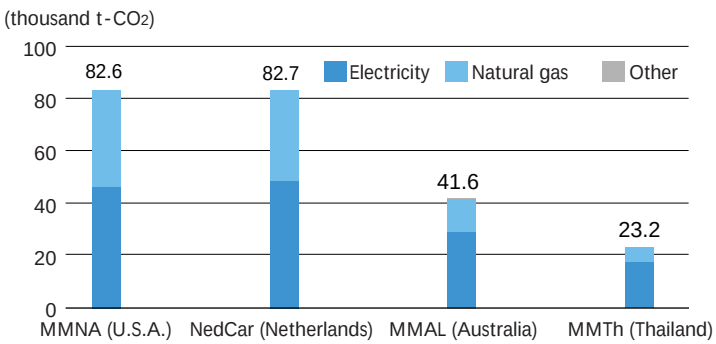
N/A

Water Quality

Substance	Unit	Regulated value	Max.	Min.	Avg.
PH		5.8–8.6	7.9	7.4	7.7
COD	mg/l	No more than 30*	4.5	0.7	2.4
BOD	mg/l	No more than 20*	6.9	ND	1.4
SS	mg/l	No more than 50*	6.7	ND	1.2
Oil	mg/l	Less than 0.3*	0.3	ND	Less than 0.3

*Extra regulated value according to agreement with Okayama Prefecture

CO_2 Data for Major Overseas Affiliates' Plants (FY2004)



*Natural gas includes city gas. To calculate CO_2 emissions for city gas, the same formula as for natural gas has been used.

Low Emission Vehicles

Major Certified LEVs (as of March 31, 2005)

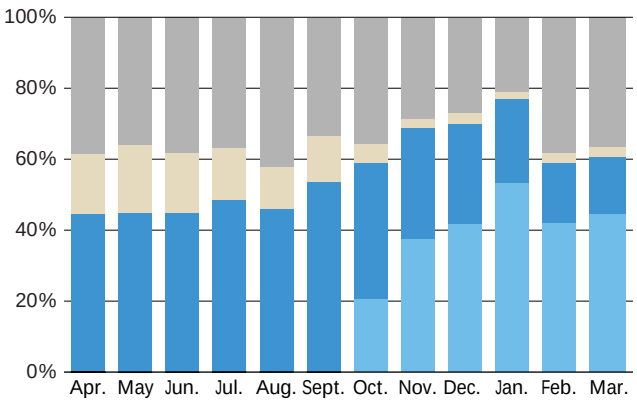
Exhaust emission level	Name
SULEV (Super Ultra Low Emission Vehicle) ☆☆☆☆	*Colt* *Colt Plus* *Lancer* *Lancer Wagon* *Lancer Cargo* *eK-WAGON* *eK-SPORT* *eK-CLASSY*
ULEV (Ultra Low Emission Vehicle) ☆☆☆	*Grandis* *eK-ACTIVE* *Minica* *Minica Van* *Townbox* *Minicab Van* *Minicab Truck*
ULEV ★★★	*Airtrek*

Shipments of LEVs (in FY2004)

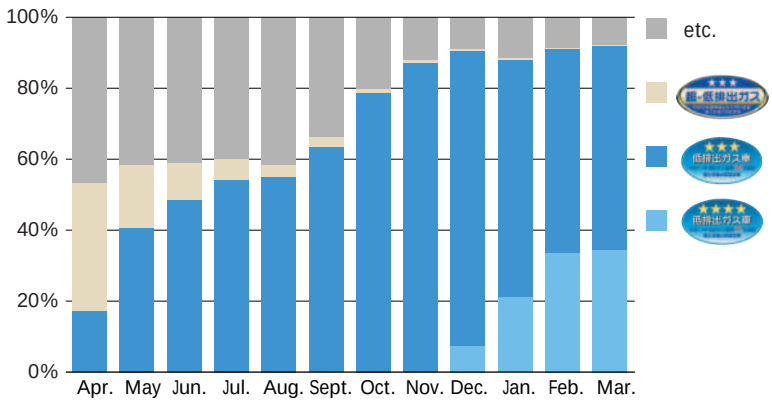
	Passenger cars		Commercial vehicles		Total
	Registered vehicles	Mini-cars	Registered vehicles	Mini-cars	
Natural gas vehicles	0	0	0	35	35
Certified high fuel efficiency LEV *1	21,694	20,791	1,487	0	43,972
	20,028	53,896	2,711	44,038	102,673
	1,478	3,799	0	0	5,277
LPG vehicles*2	62	0	0	52	114
Total	43,262	78,486	4,198	44,125	170,071

Note: No EVs, hybrid vehicles or methanol vehicles were shipped
*1 LEVs certified under the LEV certification program that also meet Energy Conservation Law fuel efficiency standards ahead of schedule
*2 LPG vehicles are not covered by the Green Purchasing Law

LEV Sales as Share of Registered Vehicle Sales

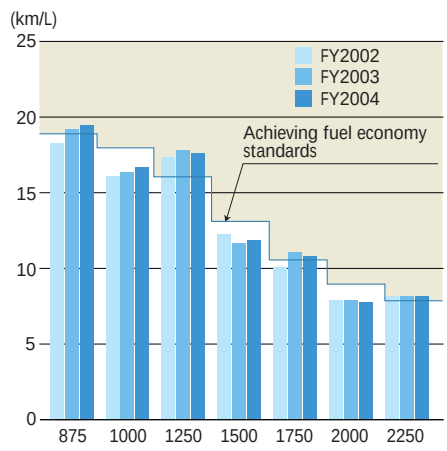


LEV Sales as Share of Mini-car Sales

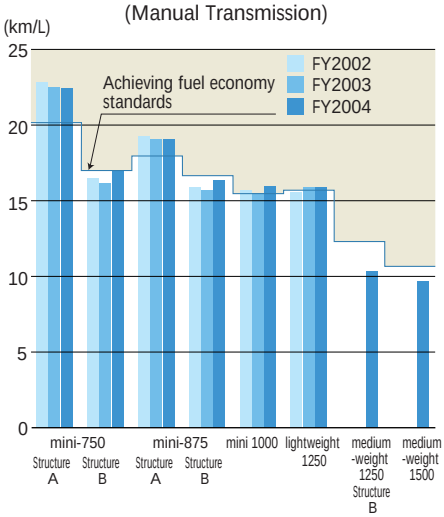


Average Fuel Economy by Weight Class

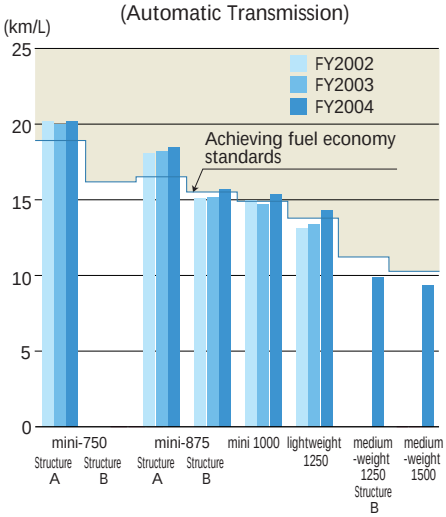
Gasoline Passenger Cars



Gasoline Commercial Vehicles (Manual Transmission)



Gasoline Commercial Vehicles (Automatic Transmission)



Key Environmental Data for Main Vehicles

Name			*eK-WAGON*	*Colt*	*Colt Plus*	*Lancer*	*Pajero Long*	*Lancer Cargo*
Category			M	Casual	Sport	MX-E	EXCEED- I	E
Vehicle Type			DBA-H81W	DBA-Z21A	DBA-Z23W	DBA-CS2A	LA-V73W	DBE-CS2V
Drivetrain		Type	2WD	2WD	2WD	2WD	Super Select 4WD II	2WD
		Transmission	3A/T	INVECS-III CVT	INVECS-III with Sport Mode 6-CVT	INVECS-III CVT	INVECS-II with Sport Mode 4A/T	INVECS-III CVT
Engine		Engine Type	3G83	4A90 MIVEC	4A91 MIVEC	4G15	6G72(MPI)	4G15
		Displacement (L)	0.657	1.332	1.499	1.468	2.972	1.468
		Maximum Horsepower (Net) (kw(PS)/rpm)	37(50) /6500	68(92) /6000	77(105) /6000	66(90) /5250	132(180) /5500	66(90) /5250
		Maximum Torque (N-m(kgfm)rpm)	62(6.3)/4000	124(12.6) /4000	141(14.4) /4000	133(13.6) /3750	265(27.0) /4000	133(13.6) /3750
Environmental Specifications	Fuel Economy	10/15 mode (km/L)	19.4	20.5	18.2	16.2	8.2	15.8
		CO_2 emissions (g/km)	120	113	128	143	283	147
		Achievement of FY2010 fuel economy standards + 5%		◎	◎		◎	◎
		Achievement of FY2010 fuel economy standards	○			○		
	Exhaust Emissions	75% lower than 2005 exhaust emission standards	☆☆☆☆	☆☆☆☆	☆☆☆☆	☆☆☆☆		☆☆☆☆
		50% lower than 2000 exhaust emission standards					★★	
		8LG LEV,*1 LEV-6*2 vehicle	○	○	○	○	○	○
	Sound Level -Outside Vehicle	Sound level during acceleration (dB)	76	76	76	76	76	76
	Air -conditioning	Amount of refrigerant for air conditioning (g)	415	550	550	500	760	500
	Amount of lead use (Compared to 1996)		Less than 1/3	Less than 1/10	Less than 1/10	Less than 1/3	Less than 1/3	Less than 1/3
	Parts including easily recyclable materials		Bumper, hood weather strip, instrument panel, internal trim, etc.	Bumper, instrument panel, internal trim, radiator grill, etc.	Bumper, instrument panel, internal trim, radiator grill, etc.	Bumper, instrument panel, internal trim, etc.	Roof liners, hood weather strip, dashboard, internal trim, etc.	Bumper, hood weather strip, instrument panel, internal trim, etc.
	Other recyclable materials		Air-cleaner case, floor carpet, sound insulating material, acoustic insulator, etc.	Air-cleaner case, sound insulating material, engine oil level gauge	Air-cleaner case, sound insulating material, engine oil level gauge	Air-cleaner case, sound insulating material, acoustic insulator, etc.	Carpet, sound insulating material, etc.	Air-cleaner case, resonator, sound insulating material, acoustic insulator, etc.

For information on vehicles other than the main vehicles listed, please refer to the following URL:

Web http://www.mitsubishi-motors.co.jp/social/environment/cartype/list.html (Japanese only)

*1 8LG LEV: LEV Certification System for 8 local governments
*2 LEV-6: Formerly the Low NOx Emission Vehicle Certification System of 6 local governments

Environmental Accounting

Basic Concept for Environmental Accounting in Fiscal 2004

The following terms were formulated with reference to the Ministry of the Environment's Environmental Accounting Guidelines (2002 version).

- The environment-related portion of combined costs, which include spending on other than environmental activities, was calculated using differential costing, i.e. by deducting costs not related to environmental protection from total costs. Where this was impractical, costs were calculated by estimating the proportion contributing to environmental protection.
- For capital expenditures, depreciation expenses were used.

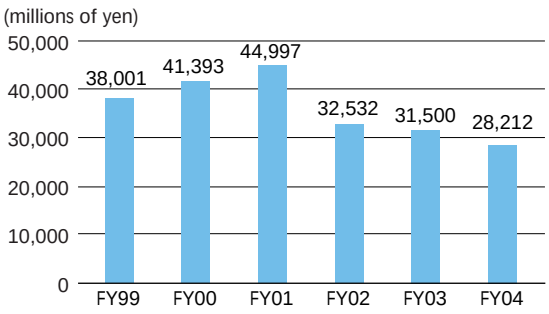
Environmental Protection Costs

(millions of yen)

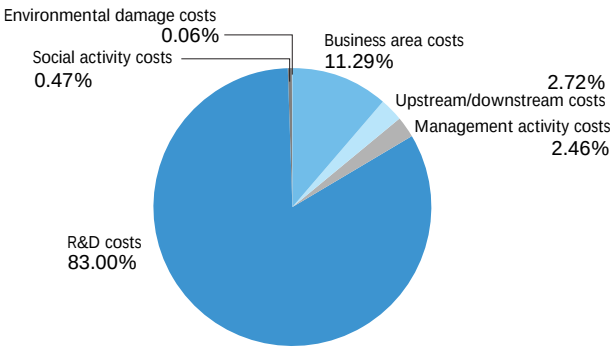
Category		FY99	FY00	FY01	FY02	FY03	FY04	YoY % change
(1) Business area costs		4,118	4,414	4,305	3,421	3,221	3,186	98.9%
Breakdown	(1) Pollution prevention	(2,299)	(2,109)	(2,116)	(1,503)	(1,458)	(1,603)	(109.9%)
	(2) Protection of the global environment	(109)	(122)	(120)	(58)	(110)	(86)	(78.2%)
	(3) Resource recycling	(1,710)	(2,183)	(2,069)	(1,860)	(1,653)	(1,497)	(90.6%)
(2) Upstream/downstream costs		83	87	140	103*	361	767	212.5%
(3) Management activity costs		1,068	942	1,113	1,165*	822	693	84.3%
(4) R&D costs		32,342	35,605	39,233	27,887	26,958	23,417	86.9%
(5) Social activity costs		335	279	157	132*	135	133	98.5%
(6) Environmental damage costs		55	66	49	37*	3	16	—
Total		38,001	41,393	44,997	32,532*	31,500	28,212	89.6%

Note: Figures through fiscal 2001 include MFTBC
* Combined total for MMC and MFTBC, which shared many costs.

Total Environmental Protection Costs



Breakdown of FY04 Environmental Protection Costs



Main environmental protection costs in each category:

(1) Costs of energy conservation, saving resources, waste disposal and other environmental countermeasures
(2) Costs of collecting used parts, etc.
(3) Costs of ISO 14001 certification and employee environmental education, etc.
(4) Costs of R&D related to improving fuel efficiency, reducing exhaust emissions, recycling and other activities
(5) Costs of donations and membership fees paid to external environmental organizations, etc.
(6) Taxes and other charges paid to national and local governments, etc.

A large majority of environmental protection costs were attributable to activities to reduce the environmental impact of products, something MMC emphasizes (R&D costs represented approx. 83% of the total). The second most significant constituent of costs was protection of the environment at the production stage (business area costs represented approximately 11.3% of the total). Environmental protection costs represented 2.4% of net sales.

Environmental Protection Effects

Category	Environmental Performance Indicator (unit)	FY03	FY04	YoY %	Reference page
Effects related to inputs	Total energy inputs (crude oil equivalent) (thousand kL)	214	193	90.2%	▶▶▶P.53
	Inputs of substances subject to specific management (ton)	6,014	4,374	72.7%	▶▶▶P.31,54,55
	Water use in production processes (thousand m^3)	4,870	4,724	97.0%	▶▶▶P.53
Effects related to environmental impact and waste from business activities	Greenhouse gas emissions (thousand tons–CO_2)	370	330	89.2%	▶▶▶P.53
	Emissions/transfers of specific chemical substances (ton)	2,136/97	1,090/130	51.0%/134.2%	▶▶▶P.31,54,55
	Waste quantity (thousand tons)	224	186	83.0%	▶▶P.29,53
	Quantity of waste for final disposal (thousand tons)	0.074	0.0925	125.0%	▶▶▶P.29
	Total wastewater volume (m^3)	4,287	3,812	88.9%	
	NOx/SOx emissions (ton)	201/32	158/30	78.6%/93.8%	▶▶▶P.53
Effects related to goods and services produced by business activities	Average fuel economy by weight class	—	—	—	▶▶▶P.57
	Number of old bumpers collected (thousand)	72.9	69.5	95.3%	▶▶▶P.38
Effects related to other environmental protection activities	Greenhouse gas emissions during transportation (thousand tons–CO_2)	27.5	17.0	61.8%	▶▶▶P.33

Environmental protection effects, as defined by the Ministry of the Environment's Environmental Accounting Guidelines, means "the quantitative impact on the environment of an organization's operating activities and the increase or decrease therein." Compared with the previous fiscal year, there was an overall decline, but there was an increase in comparison to sales.

For data other than that shown, please refer to the relevant reference page in this report.

Economic Benefits From Environmental Protection Measures (Actual Benefits)

(millions of yen)

	Benefit	
Income	Income from the recycling of industrial waste and/or recycling of used products	1,986
Expenditure reductions	Energy expense savings from conserving energy	233
	Reduction in expenses for waste disposal due to lower resource use and/or recycling	(94)
	Reduction in expenses for purchasing water	101

Economic benefits from environmental protection measures, as defined by the Ministry of the Environment's Environmental Accounting Guidelines, means "the returns and the reduction or avoidance of costs to an organization resulting from its environmental protection activities."

Regarding returns, this mostly represents income from the sale of metal scrap from production processes. Meanwhile, the waste disposal expenses category is intended to show the reduction in expenses from the previous fiscal year, but there was an increase in fiscal 2004. This was due to a sharp rise in expenses for recovery and parts disposal resulting from an increase in the collection of recalled parts and was despite efforts to reuse packaging boxes in parts transportation and to use recycled containers.

Environmental measures undoubtedly yield benefits in the form of reduced environmental risks, but it is not possible at this stage to quantify those benefits.

History of Environmental Activities

Chronology of Environmental Activities (Major Achievements and Technologies from the 1990s to the Present)

	Corporate Activities	Production /Recycling Activities	Advanced Technologies
1991		Plastic parts weighing at least 100g marked with identifying codes	MVV*1 engine announced
1992		Introduction of cogeneration system*2 at Oye Plant	MIVEC and MIVEC-MD engines*3 announced
1993	MMC Environmental Plan formulated and Basic Philosophy on the Environment established MMC Environmental Council established		CNG *Libero* cargo (natural gas vehicle) announced
1994		Elimination of CFC-12 refrigerant*4 from air conditioners in new models and switch to HFC-134a	*Libero* electric vehicle goes on general sale
1995		Total elimination of 1.1.1-trichloroethene from all production processes	Development and announcement of gasoline direct injection (GDI)*5 engine Development of Mitsubishi HEV and field trials by California Air Resources Board (CARB)
1996			Sale of vehicles powered by GDI engines (Gallant, Legnum)
1997	Environmental Liaison Council established to liaise between main affiliates and members of the MMC Group	Launch of collection and recycling of old bumpers by dealers Introduction of cogeneration system at Kyoto Plant	CNG Minicab van goes on sale
1998	Announcement of MMC's voluntary ELV Recycling Action Plan Nagoya, Kyoto and Mizushima plants acquire ISO 14001*6 certification	Completion of nationwide system for collection and destruction of CFC-12 refrigerant used in air conditioners Total elimination of use of tetrachloroethene and dichloromethane*7	MVV engine fitted as standard in all mini-cars built under the new mini-car standards
1999	MMC Environmental Guidelines established First MMC Environmental Report established		New *Pajero* model fitted with direct injection diesel engine Development of *Pistachio* GDI-ASG vehicle (automatically stops idling*8)
2000	Launch of Green Procurement*9		New *Lancer* Sedia and other models fitted with GDI-CVT
2001		Emissions of waste for landfill disposal eliminated at the Nagoya and Powertrain plants Development of air-cleaner case made from waste paper and recycled polypropylene*10 (recycled PP)	*Eclipse EV* prototype driven publicly around Shikoku, going more than 400km on a single charge
2002	MMC Environmental Sustainability Plan announced (medium-term action plan)	Emissions of waste for landfill disposal eliminated at the Mizushima Plant (all domestic plants have now achieved zero landfill emission status)	New *Colt* is first MMC car to be certified as a ULEV*11
2003		Developed the world's first canister case made using recycled cropped air bag material	Concept test car "*i*" becomes first vehicle to earn highest rating of five stars for both emissions and fuel economy in FIA EcoTest Fuel cell vehicle "MITSUBISHI FCV" (MFCV) certified by the Ministry of Land, Infrastructure and Transport
2004		Operations start at a new body painting shop using water-based paints*12 at the Mizushima Plant	

*1 The MVV (Mitsubishi Vertical Vortex) engine uses a lean-burning vertical vortex configuration to save energy.
*2 Cogeneration is an energy conserving system that effectively utilizes waste heat from electricity generation for HVAC and water heating systems.
*3 MIVEC (Mitsubishi Innovative Valve timing & lift Electronic Control system) achieves higher torque at low and medium speeds and greater horsepower at high speed thanks to a variable valve timing and lift structure. Modulated displacement, or variable displacement, yields a significant increase in fuel economy by using fewer cylinders when the engine operates in this mode.
*4 A refrigerant is a substance used for cooling. CFC-12 (R12) was subject to regulations governing the use of chlorofluorocarbons and replaced by HFC-134a (R134a). With HFC-134a now also being blamed for global warming, efforts are being made to reduce the use of this substance.
*5 GDI (Gasoline Direct Injection) yields high fuel economy and horsepower by injecting gasoline directly into cylinders.
*6 ISO 14001 is the international standard for environmental management systems
*7 Tetrachloroethene and dichloromethane are types of chlorine-based cleaning agents. They have been blamed for groundwater pollution because they are stable (hardly degrade) in the environment.
*8 A system that stops the engine when the vehicle halts for a traffic light to improve fuel economy and reduce exhaust gases.
*9 Green Procurement, as used here, refers to giving priority to the procurement of products and services with a low environmental impact. It does not include the purchase of office supplies and other materials for use in the office.
*10 Refers to the recycling of discarded food containers and other products made from polypropylene.
*11 Certification by the Ministry of Land, Infrastructure and Transport (MLIT) in accordance with LEV certification program. Refers to cars with emissions 75% lower than 2000 exhaust emission standards.
*12 Paints that use no organic solvents or dramatically cut the volume of solvents used by using water instead. Water-based paints have attracted attention as a means of combating atmospheric pollution because they lead to a reduction in volatile organic compounds.

Environmental Considerations in the Preparation of This Report

Paper Certified by FSC

This report is printed on paper certified by the FSC (Forest Stewardship Council), an international NGO. Paper certified by the FSC is made from trees harvested from so-called "sustainable forests," which are well managed and protected from illegal cutting. Trees are cut only in the quantities necessary and the effects on the eco-system around such forests are minimized.

MMC endorses such "sustainable forest" activities as it believes that the use of FSC-certified and recycled paper for appropriate purposes in a balanced way is a first step toward a sustainable society. Besides this report, MMC makes a point of using FSC-certified paper for its environmental pamphlets and vehicle catalogues. (ID No.: FSC-JPN-0008)

Ink and Printing

The printer of this report is ISO 14001-certified, uses soybean oil ink and prints without water.

Comparison With the Ministry of the Environment's "Environmental Reporting Guidelines" (FY2003 Version)

Items in Guidelines	Relevant Major Pages
Basic items	
Preface by CEO	P3-8
Basic requirements in reporting	P1, P17, P62 Back cover
Business outline	P51-52
Summary of policies, goals and results of environmental considerations in business activities	
Policies on environmental considerations in business activities	P11
Summary of targets, plans and results for environment-related initiatives in business activities	P13-14
Material balance of business activities	P19
Summary of environmental accounting information	P59-60
Status of environmental management	
Status of environmental management system	P12, P15-16 P18, P28
Status of supply chain management, etc., friendly to the environment	P27
Status of research and development of new technologies, etc., friendly to the environment	P20-26, P57
Status of disclosure of environmental information and environmental communications	P17, P41, Questionnaire
Status of observance of environment-related regulations	P15, P30-32, P53-56
Status of environmental contributions to society	P16-17, P47-48
Environmental impact from business activities and status of activities to reduce it	
Total amount of energy input and measures to reduce it	P28, P53
Total amount of materials input and measures to reduce it	P29, P53
Total amount of water input and measures to reduce it	P30, P53
Emissions of greenhouse gases and measures to reduce them	P21, P28, P33, P53, P57
Amounts emitted and movement of chemical materials, and status of control efforts	P31, P54, P55
Total production of products or sales	P52, P57
Total emissions of waste, etc., final disposal of waste, and measures to reduce them	P29, P53
Total amount of wastewater discharged and measures to reduce it	P30, P53
Status of environmental impact involved in transport and measures to reduce it	P33
State of green purchasing and measures to promote it	P27, P57-P58
Environmental impact of products and services through their lifecycles, and measures to reduce it	P20, P34-38
State of social activities	
State of social activities	P39-50

Third-party Review

All information in this report was carefully examined prior to publication by people inside MMC with every care taken to ensure its neutrality and reliability. However, it is believed that a third-party review could further improve that neutrality and reliability. MMC will therefore consider introducing such a review based on the findings of various studies. These include examining the form of the review, relevant guidelines and various other matters to ensure the review itself is neutral and reliable.

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