

Environmental Conservation

Environmental issues are not only local issues of the region where our business bases are located but are also globally interconnected. Environmental accountability is a global-level social responsibility that affects the future of people. The Mitsubishi Logistics Group strengthens such environmental issues as the reduction of CO₂ emissions as a countermeasure for climate change, the use of renewable natural resources and contribution to recovery of the eco-system.



Reduction of CO₂ emissions as a measure for reducing climate change

Certified under the Logistics Efficiency Improvement Act*, we are integrating logistics bases and reducing the environmental burden.

Obtaining the same certification under the following six business plans, we made transportation and distribution systems more efficient by integrating logistics bases for customers who used to employ multiple logistics bases, thereby reducing the number of delivery trucks. By collecting customers' freight and implementing joint delivery, we reduce emissions of greenhouse gases (CO₂), contributing to a reduction of the environmental burden.

1. Osaka Branch, Sakurajima Warehouse No. 2, North Building (Started operation in November 2005)
2. Osaka Branch, Sakurajima Warehouse No. 3 (Started operation in April 2008)
3. Nagoya Branch, Tobishima Warehouse (Started operation in November 2008)
4. Tokyo Branch, Misato Warehouse No. 1 (Started operation in December 2008)
5. Osaka Branch, Ibaraki Warehouse No. 3 (Started operation in October 2012)
6. Tokyo Branch, Misato Warehouse No. 2 (Started operation in March 2013)

* The Logistics Efficiency Improvement Act (Act on Advancement of Integration and Streamlining of Distribution Business, implemented on October 1, 2005)
The purpose of this law is to promote operations conducive to efficient logistics and reducing the environmental burden by integrating logistics bases and conducting transportation, distribution, storage and logistics processing comprehensively. Business plans under this law are approved as a comprehensive efficiency plan and supported by the authority.

Through obtaining the Green Management Certification, we are promoting environment-friendly business activities.

The Group obtained the Green Management Certification, which pursues profitability and environmental conservation by promoting environment-friendly business activities from the certification registration organization Foundation for Promoting Personal Mobility and Ecological Transportation (abbreviated as "Eco-Mo Foundation").

1. Certification acquisition status of the Company

All offices of the Warehousing Business Division Port and Harbor Operations Division (Part of the container terminals of the Port of Yokohama and the Port of Kobe)

2. Certification acquisition status of the Group

Truck transportation business (Ryoso Transportation Co., Ltd., and Kyushu Ryoso Transportation Co., Ltd.) and warehousing business (Kusatsu Soko Co., Ltd., and the Warehousing Business Division of Monryo Transport Corporation)

We ensure compliance with the Law Concerning the Rational Use of Energy, etc.

As a "Designated Business Operator" under the Law Concerning the Rational Use of Energy, the Company is obliged to reduce per-basic unit energy use more than 1% on an annual average on a medium- to long-term basis at facilities we own and rent. Moreover, we submit a regular report on energy saving and a medium- to long-term energy-saving plan to the Ministry of Economy, Trade and Industry. The values we reported to the Ministry in fiscal 2014 (the actual results for fiscal 2013) show that our energy-saving measures resulted in a more than 10% reduction of per-basic unit energy use compared with the base year fiscal 2009. We are also striving to reduce CO₂ emissions at our real estate facilities subject to the Tokyo Metropolitan Environmental Security Ordinance.



▶ The actual results of our environmental conservation efforts and our total CO₂ emissions reduction directive under the Tokyo Metropolitan Environmental Security Ordinance can be viewed on Mitsubishi Logistics' Web site in "Extended version."

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We continue to achieve a significant energy-saving effect by improving our air-conditioning heat source system.

At the Ohi Cold Storage Warehouse of the Tokyo Branch, we renewed a chiller that was nearing the end of its life. The renewal work was completed and operation started in March 2015. For the renewal of chillers, we plan to change the heat source from city gas to electricity and introduce high-efficiency screw-type chillers, thereby reducing energy consumption by about 45% compared with the energy use before the renewal.

We are promoting renewal of the existing lighting system to LED lighting to achieve significant energy saving.

To save energy and reduce CO₂ emissions with regard to the lighting systems inside the Company's warehouses, we are promoting renewal of the existing lighting systems nearing the end of its life, to high-efficiency lighting equipment.

In fiscal 2013, the Company shifted a total of 3,100 existing lighting units to LED lighting at warehousing facilities (Tokyo Branch, Ohi Warehouse A; Yokohama Branch, Daikoku Warehouses A and D; Nagoya Branch, Tobishima Warehouse A; Osaka Branch, Sakurajima Warehouse No. 1, 1F and 3F; Kobe Branch, Rokko Warehouses A through C; and Fukuoka Branch, Chuo Futo Warehouse). In fiscal 2014, a total of 2,800 lighting units were converted to LED lighting at six facilities (Tokyo Branch, Ohi Warehouse B; Yokohama Branch, Atsugi Warehouse E; Nagoya Branch, Kinjoh Warehouse; Osaka Branch, Sakurajima Warehouse No. 1, 2F and 4F; Kobe Branch, Rokko Warehouse D; and Fukuoka Branch, Hakozaki Warehouse A).

A reduction of approximately 840 thousand kWh in electric energy, which corresponds to approximately 1.7% of the annual electric energy consumption at the Company's warehousing facilities, is expected by renewing the existing lighting to LED lighting (5,900 units in total).

We are promoting solar power generation.

In line with the government's policy of enhancing the use of renewable energy to cope with global warming and other issues, the Company is promoting the adoption of large-scale solar power generation facilities at the Company's existing warehousing facilities using the Renewable Electric Energy Feed-In-Tariff (or fixed-price purchase system of electricity from renewable energy).

In fiscal 2014, solar power generation facilities were completed and started operation at three facilities—Tosu Warehouse (started operation in June 2014; 760 kW), Rokko Cold Storage Warehouse (started operation in October 2014, 310 kW) and Sendai Warehouse (started operation in December 2014; 490 kW)—for total output of 1,560 kW.

The total output resulting from the adoption of large-scale solar power generation facilities at the Company's existing warehousing facilities using the Renewable Electric Energy Feed-In-Tariff is 2,030 kW, including the 470 kW output from Sakurajima Warehouse No. 2, which was completed and started operation in fiscal 2013.

The Company received the Good Lighting Award.

The Nihonbashi Dia Building and the Kobe Harborland commercial facility complex umie MOSAIC received the Good Lighting Award 2014, awarded by the Illuminating Engineering Institute of Japan.

The Good Lighting Award, initiated in 1957, is awarded to facilities that are evaluated by the Illuminating Engineering Institute of Japan to be superior in visual environment, lighting technique, and lighting effects, etc., from among the buildings completed during the year.

The Nihonbashi Dia Building was highly evaluated for creating

a new landmark with an LED lighting plan that distinguished the arch window on the fifth floor and the historic "captain's onboard cabin" sitting on the roof of the lower part of the building. This LED lighting plan includes highly energy-efficient point light source equipment at the ends of the warehouse exhausts, which were installed on the exterior walls of the preserved lower part of the building.

The Kobe Harborland commercial facility complex umie MOSAIC was selected for creating a splendid night view of its entire facility, which improved the capability to bring in more customers; using the color of LED lighting close to the ambience of gas light, thereby expressing an atmosphere of a port town; and converting existing overseas furniture lighting into LED to continue to cherish it in a more energy-efficient way with environmental considerations.

The Eitai Dia Building was certified as a "Top Level Facility" under the Tokyo Metropolitan Environmental Security Ordinance.

The Eitai Dia Building was certified as a "Top Level Facility" under the Tokyo Metropolitan Environmental Security Ordinance, in February 2015, under the Green Building Program for "Top-Level Business Facilities in Measures Against Global Warming" certification system.*1

The "Certified Top-Level Business Facilities in Measures Against Global Warming" are "business facilities that have made outstanding progress in the implementation of measures against global warming" recognized by the Tokyo Metropolitan Government as offices complying with the standards designated by the Tokyo Metropolitan Government under the Tokyo Metropolitan Environmental Security Ordinance. Under the mandatory targets for reduction in overall greenhouse gas emissions and an emissions trading program, less stringent reduction targets are applied for the certified facilities.*2

Although the Eitai Dia Building, which was completed in 1991, is quite aged, the proper renovations, renewal, and maintenance of the facilities and equipment were highly evaluated and certified as a Near-Top-Level Facility in fiscal 2010. After being certified as a Near-Top-Level Facility, the air-conditioning heat source for computer rooms has been updated to a high-efficiency version; inspection and verification of the performance of the adopted facilities and equipment (commissioning) has been conducted; and continual improvement of the building management has been made in cooperation with the residents of the building and a building management company of the group. These efforts were highly evaluated, and the Eitai Dia Building now is ranked a Top-Level Facility.

At the Tokyo Dia Building, which was certified as a Near-Top-Level Facility in fiscal 2011, and at other facilities of the company as well, we will make aggressive efforts to further reduce the environmental burden by promoting renovations and renewals of facilities and equipment to environment-friendly versions, and improving management and operation.

*1. The Tokyo Metropolitan Government certified five business facilities as Top-Level Facilities in fiscal 2014. Since the certification system started in fiscal 2010, a cumulative total of 87 business facilities have been certified (40 Top-Level Facilities and 47 Near-Top-Level Facilities).

*2. The mandatory targets for reduction in overall greenhouse gas emissions for Top-Level Facilities are reduced by half and those for Near-Top-Level Facilities by a quarter.

Ryoso Transportation Co., Ltd., obtained Green Management Certification in its trucking business, striving for environmental conservation.

For trucking business operators, addressing environmental issues is one of the highest priorities.

Ryoso Transportation Co., Ltd. ("Ryoso Transportation"), a specialized trucking company that is the center of the Company's trucking division, has obtained the Green Management Certification*1 at all six of its branches (seven operational bases) starting in 2005, striving to reduce environmental burden.

In fiscal 2014, Ryoso Transportation improved gas mileage by 3.2% compared with fiscal 2006.

Specifically, in our efforts to promote eco-driving to improve gas mileage and reduce emissions of air pollution substances, we are conducting vehicle inspections and maintenance with our own high standards. We also adopt low-pollution vehicles that meet the latest restriction regulations for gas emissions.

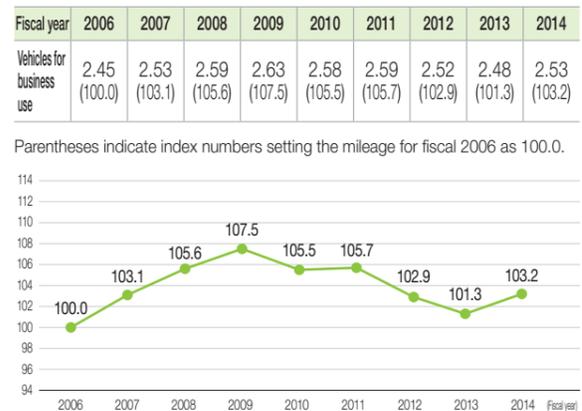
Promotion of "Green Purchasing"

Business operators are also facing demands to purchase products and services with less environmental burden. At Ryoso Transportation, we are aggressively purchasing retread tires,*2 eco-stationery, etc.

*1. The Foundation for Promoting Personal Mobility and Ecological Transportation is a public utility foundation that has been certifying and registering business operators making efforts to reduce the environmental burden at a level exceeding the standards outlined in the Green Management Promotion Manual since October 2003.

*2. A retread tire has new rubber pasted on a used base tire, thereby restoring the tire's original functionality. The commissioning of recapping to produce retread tires is listed as a "Designated Procurement Item" under "Services" in the Green Purchasing Law.

► Change of total gas mileage at all operational sites (fiscal 2006 to fiscal 2014) (Unit: km/L)



Parenttheses indicate index numbers setting the mileage for fiscal 2006 as 100.0.

We are promoting environmental conservation with regard to information system equipment.

In adopting information system equipment, we select models that use less energy. In fiscal 2014, we adopted 266 selected units at our operating bases.

We are promoting environmental conservation not only at our operational sites but also at our offices.

Promotion of summertime energy saving

We strove to save energy during the summertime (May through October 2014) by participating as a Group in the Cool Biz campaign, which calls for offices to set their air-conditioning thermostats at a warmer-than-usual temperature of 28°C.

Promotion of Green Purchasing of stationery and other office supplies

When we purchase office supplies, we not only consider quality and price but also choose products with less environmental impact—Green Purchasing.

Use of renewable resources

The construction of a Disaster-Resistant and Eco-Friendly Office building was completed and the operation started.

Nihonbashi Dia Building, a commercial building for rent with 18 aboveground floors, a basement and a total floor area of 30,000 m², is a Disaster-Resistant and Eco-Friendly Office Building completed in September 2014. The lower floors of this building are used as the Company's Head Office and trunk rooms.



Nihonbashi Dia Building

(1) Major disaster-prevention functions

- a. Earthquake-proof performance

The whole building is designed to ensure high earthquake performance 1.5 times superior to the requirements set by the Building Standards Act.

We adopted a seismic-isolation structure for the intermediate stories of the building by installing 22 seismic-isolation rubber units, four oil damper units and 11 steel dampers under the floor at the seventh floor of the building for the purpose of seismic isolation of higher stories and improving earthquake resistance of the lower stories of the building.
- b. Flood-control measures

Electricity rooms and other critical facilities are installed on the seventh floor and the rooftop, and the equipment rooms such as the water-receiving tank, which needs to be installed underground, are watertight. In addition, water shut plate has been installed on the exterior walls of the building.
- c. Power outage measures

To prepare for an emergency power supply system, two power supply systems (mainline and standby) are available to receive electricity from two different substations. For emergency power generation that operates in case of a power outage, the Dual Fuel system has been adopted, using two types of fuel—city gas (no limit of operation) and heavy oil (lasting 72 hours).
- d. Water supply and sewerage system measures

Equipped with a special well for use in case of a disaster and a system to filter flushed water from toilets, toilets can be used as usual even in case of a disaster when water supply and sewerage system is shut down. Well water taken from a special well is made drinkable by a filtering device.

(2) Major environmental functions

- a. Solar power generation system

Solar power generation facilities that can generate approximately 45 kW of energy are installed on the wall and rooftop surfaces and contribute to reducing CO₂ emissions by approximately seven tons per annum.
- b. LED lighting

The lighting of the entire building is now LED lighting. An advanced energy-saving lighting system, which combines daylight control and motion sensors, is adopted.
- c. Reduction of air-conditioning load

For the rental offices on the eighth to 17th floors, light shelves have been installed to shield sunlight; the south-facing core placement helps reduce the air-conditioning load; and the west-side windows have automatic electric blinds that adjust the slats' angle according to the movement of the sun.

The second to sixth floors, where the Head Office of the Company is located, have improved insulation functions at openings to reduce the air-conditioning load.
- d. Low-E Glass

Low-E Glass (heat-shielding high-insulation double-glazed glass), which has a high infrared thermal radiation reflection ratio and high insulation performance, has been adopted.
- e. Rooftop greening

To help address the urban heat island issue, greenery spreads across an approximately 300 m² area of the rooftop of the building to create an environment where people can enjoy nature.
- f. CASBEE

The building has obtained the highest "S" evaluation according to the Comprehensive Assessment System for Built Environment Efficiency (CASBEE) by implementing energy-saving systems and other measures.
- g. Energy-saving performance assessment

The building is expected to acquire the highest evaluation of "AAA" under the Tokyo Metropolitan Government Building Energy Performance Certificate program, significantly surpassing the standard values in terms of the Perimeter Annual Load (PAL), which is the annual burden coefficient, by approximately -37%, and the energy reduction rate (ERR) by approximately 45%.

We are expanding the use of the electric car i-MiEV manufactured by Mitsubishi Motors Corporation.

As one measure under the Environmental Voluntary Plan that the Company formulated, we are promoting the replacement of gasoline cars, which consume gasoline and emit much CO₂, with electric cars that emit no CO₂ exhaust. We have formulated an electric car introduction plan considering the use of various subsidies for electric cars and the completion status of the relevant infrastructure including high-speed charger equipment for adopting such cars. As a result, in fiscal 2014 we introduced five electric vehicles in our stores, with 27 electric vehicles now in use.



MINICAB MiEV at the Nagoya Branch



▶ The data on the status of introducing electric cars can be viewed on Mitsubishi Logistics' Web site in "Extended version."

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Contribution to the recovery of the eco-system

Conducting reforestation through volunteer activities and donations as a partner of reforestation of Kanagawa Prefecture

To address the global environment from the perspective of preservation of biodiversity, we participated in a partnership program of reforestation of Kanagawa Prefecture and initiated related activities in April 2011. (The reforestation activity that was scheduled in June 2014 was called off due to bad weather.)