Environmental commitment is written specifically into the Mitsubishi Estate Group's mission statement. The Mitsubishi Estate Group Long-term Environmental Vision further commits the company to reducing the environmental impact of its business. Mitsubishi Estate aims to lead the way in sustainable urban development.

### **Basic Policy and Performance Highlights**

#### **Basic Environmental Policy**

The Mitsubishi Estate Group Basic Environmental Policy is based on the Group's fundamental mission.

#### Mitsubishi Estate Group Basic Environmental Policy

The Mitsubishi Estate Group has developed an environmental management system and strives to protect the environment by promoting environmental initiatives and reducing environmental impact, as well as complying with all environmental laws and regulations. Mitsubishi Estate is determined to ensure that its business activities play a leading role in the development of sustainable communities.

#### 1. Building a low-carbon society

We are proactive about the efficient use of resources and energy, and encourage the use of renewable energy to contribute to the creation of a low-carbon society.

### 2. Creating a sound material-cycle society

We strive to reduce, reuse, and recycle in every stage of our business, including planning, development, design, construction, management and dismantlement, in order to contribute to building a sound material-cycle society.

#### 3. Fostering harmony between nature and human society

We endeavor to foster new cultural values and to practice environmental responsibility by demonstrating concern for biodiversity and developing attractive urban spaces that harmonize with the surrounding natural environment, thus helping to build a society that lives in harmony with nature.

### 4. Promoting environmental communication

We proactively provide information on the environment and communicate with society on a broad range of issues in our efforts to coordinate and cooperate with a wide range of stakeholders.

### 5. Increasing employees' ecological awareness

In our efforts to increase employees' awareness of environmental conservation issues and ensure highly effective environmental activities, we provide environmental education and awareness programs, aiming to develop an ecologically aware workforce.

Established on May 1, 2004 Revised on January 1, 2006 and April 1, 2010

# Operational framework for environmental management

The Mitsubishi Estate Group has tasked the Environmental Subcommittee with conducting deliberations on CSR, including environmental issues, prior to meetings of the CSR Committee. This subcommittee met in July 2010 and January 2011 to discuss the status of various organizations' environmental initiatives and environmental objectives.

In addition, an environmental director is appointed at Mitsubishi Estate Co., Ltd. to take responsibility for the promotion of environmental management for the Group, and

environmental management officers are appointed for each of Mitsubishi Estate's business areas and Group companies.

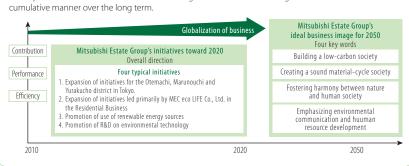
#### Mitsubishi Estate Group Longterm Environmental Vision

The Mitsubishi Estate Group has established the Mitsubishi Estate Group Long-term Environmental Vision, based on the Mitsubishi Estate Group Basic Environmental Policy, to proactively address environmental issues for the future. This vision clarifies the Group's commitment to actively contribute to society in order to reduce environmental impact.

# Mitsubishi Estate Group Long-term Environmental Vision For Environmental Sustainability 2050

The Mitsubishi Estate Group's growth strategy is to refine its advanced environmental technology and take up the challenge of creating new value in all of its business activities.

In order to contribute to the realization of a sustainable society through business activities, the Group develops innovative technology and readies it for practical application and dissemination. In addition, the Group proposes the adoption of work-style and lifestyle changes to its customers, and thus it actively takes initiatives with the aim of enhancing environmental technologies in a multifaceted and cumulative manner over the long term.



# Environmental slogan and logo developed

The Mitsubishi Estate Group developed an environmental slogan and logo in March 2011 to strengthen dissemination of information on environmental coexistence and to raise environmental awareness internally and outside the company.

The slogan "For Sustainable Cities, For the Sustainable Earth" reflects the Group's aspirations to build a truly meaningful society by developing areas in an environmentally conscious way, to create new value by offering environmental technology, and to work together with others in the community to achieve these goals.



Mitsubishi Estate environmental slogan and logo

# Development and administration of the environmental management system

The Mitsubishi Estate Group has acquired ISO14001 certification for organizations with relatively significant environmental impact, and has also developed and is administering an independent Environmental Management System corresponding to ISO14001 at organizations with relatively small environmental impact.

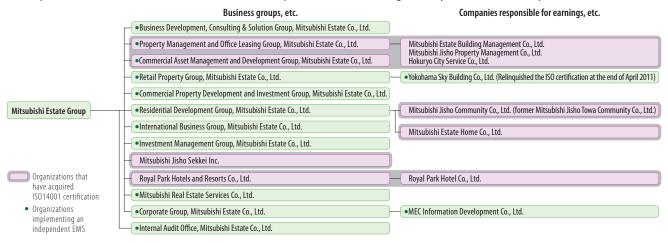
In fiscal 2010, six organizations\* from the Mitsubishi Estate Group operated an environmental management system certified under ISO14001 standards.

The independent EMS, which is primarily intended for office facilities, is used at Mitsubishi Estate Co., Ltd. (office activities), Mitsubishi Real Estate Services Co., Ltd., and MEC Information Development Co., Ltd.

\* Mitsubishi Estate's Property Management and Office Leasing Group and Commercial Asset Management and Development Group (concurrent certification with Mitsubishi Estate Building Management Co., Ltd., Mitsubishi Jisho Property Management Co., Ltd., and Hokuryo City Service Co., Ltd.); Mitsubishi Jisho Sekkei Inc; Mitsubishi Estate Home Co., Ltd.; Royal Park Hotels and Resorts Co., Ltd. (concurrent certification with Royal Park Hotel Co., Ltd.); Yokohama Sky Building Co., Ltd.; and Mitsubishi Jisho Towa Community Co., Ltd. (now Mitsubishi Jisho Community Co., Ltd. since April 2011)

Yokohama Sky Building Co., Ltd. relinquished its ISO certification at the end of April 2011. The company will continue to set environmental goals for each fiscal year and run and manage its environmental program under its own system.

#### Development and administration of Mitsubishi Estate Group's Environmental Management System (as of end of April 2011)



### **Building a Low-Carbon Society**

# Building management programs to reduce CO<sub>2</sub> emissions

In fiscal 2010, the energy consumption of Mitsubishi Estate's thirty ISO14001-certified buildings stood at 6,702,503 GJ, and CO<sub>2</sub> emissions totaled 279,130 tons-CO<sub>2</sub>. Compared to fiscal 2009 results, consumption decreased by 306,149 GJ, and CO<sub>2</sub> emissions decreased by 22,550 tons-CO<sub>2</sub>.

In fiscal 2010, compared to fiscal 2009, Mitsubishi Estate took steps such as setting air conditioners at warmer temperatures in the summer, partially stopping the hot-water supply, turning off some of the lights, and operating air conditioners/heaters more efficiently in ISO-certified buildings. As a result, energy consumption per unit of floor space in 2010 was reduced by 0.01 GJ/m² to 2.33 GJ/m², and CO2 emissions per unit of floor

space was reduced by 13kg-CO<sub>2</sub>/m<sup>2</sup> to 97kg-CO<sub>2</sub>/m<sup>2</sup> compared to the previous fiscal year. This was due to a decline in total CO<sub>2</sub> emissions because the CO<sub>2</sub> emission coefficient stood at zero for electricity used at the Shin-Marunouchi Building with the use of the Fresh Green Power, and the CO<sub>2</sub> emission coefficients issued by electricity companies were generally lower compared to 2009.

Mitsubishi Estate's fiscal 2011 target for reducing energy consumption in each building is the stricter of either a 1% reduction over the previous year per Japan's Energy Conservation Law or the reduction mandated by city regulations such as the Tokyo Metropolitan Ordinance on Environmental Preservation. The company strives to combat climate change through energy-saving programs conducted in cooperation with tenants.

#### CO<sub>2</sub> emissions and CO<sub>2</sub> emissions per unit of floor space from Mitsubishi Estate's ISO14001-certified buildings



- for individual electrical power suppliers, reflecting actual status.
- \* The number of ISO-certified buildings changes each fiscal year due to renovations and sales/purchases.
- \* The data for 1990 includes buildings prior to renovations (such as the former Marunouchi Building).

#### Energy consumption and energy consumption per unit of floor space in Mitsubishi Estate's ISO14001-certified buildings

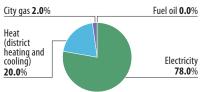


\* The number of ISO-certified buildings changes each fiscal year due to renovations and sales/purchases.

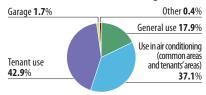
#### Global warming mitigation measures committees bring together tenants

By type of energy, electricity accounted for about 80% of the energy consumed in Mitsubishi Estate's thirty ISO14001certified buildings, whereas by application, tenant use accounted for the majority of energy consumption. Given this, Mitsubishi Estate established a Global Warming Mitigation Measures Committee in November 2008 at each of its buildings

#### Fiscal 2010 energy consumption by type (for 30 ISO14001-certified buildings)



#### Fiscal 2010 energy consumption by application (for 30 ISO14001-certified buildings)



in the Tokyo metropolitan area, including Yokohama, in an effort to work with tenants to reduce energy consumption.

Each committee meets twice a year, once in the spring and again in the fall. In fiscal 2010, the committees issued a pamphlet on energy conservation entitled ECOBLDG STYLE to provide an overview of revisions to the Tokyo Metropolitan Ordinance on Environmental Preservation and the Energy Conservation Law, explain energy conservation programs carried out in buildings and specific reduction targets, and introduce energy conservation initiatives practiced by tenants.

#### Efforts to reduce CO<sub>2</sub> emissions in the UK

The Central St Giles Redevelopment Project, in which Mitsubishi Estate and Legal & General, a major UK life insurance company, participated jointly, was completed in April 2010. This building was designed so that about 80% of heat comes from biomass boilers. While most buildings in London rely on gas for their heat, the building opted for biomass boilers, which are considered to be carbon neutral, since the CO<sub>2</sub> released as heat is generated and the CO<sub>2</sub> absorbed from the atmosphere as the tree (the raw material) grows offset each other. The pellets used as the fuel are also made from the mill ends and thinned wood left over from timber processing, making this system more environment friendly than systems using other fuels and facilitating the operations of lowcarbon emitting buildings.



Central St Giles

### **Creating a Sound Material-Cycle Society**

#### Recycling waste generated by buildings

Mitsubishi Estate Group strives to improve the waste-recycling rate in the buildings it manages and operates. Efforts include calling for tenants' cooperation in sorting waste, as well as recycling kitchen waste from some buildings as livestock food and fertilizer.

#### Total waste and recycle rates for Mitsubishi Estate's ISO-certified buildings



Number of buildings included in scope of data may differ by fiscal year due to rebuilding, sale and purchase

#### Total waste by type and primary recycling end-points at Mitsubishi Estate's ISO-certified buildings\*1

Туре	FY	Amount (kg)	Change from previous year (kg)	Primary recycled end-products
Paper suitable for reuse	2010	9,343,284	▲8,504	Recycled paper
	2009	9,351,788		
Bottles and cans	2010	1,338,542	33,456	Glass, metal
	2009	1,305,086		
Fluorescent lights	2010	20,430	<b>▲</b> 1,966	Glass, aluminum
	2009	22,396		
Polystyrene foam	2010	42,206	3,894	Processed plastic products
	2009	38,312		
PET bottles	2010	606,992	121,045	Processed plastic products
	2009	485,947		
Recyclable kitchen waste	2010	991,453	54,607	Organic fertilizers and animal feed
	2009	936,846		
Non-recyclable kitchen waste and scraps*2	2010	10,039,030	▲28,318	_
	2009	10,067,348		
Industrial waste*3	2010	<b>8</b> 16,347	212,792	_
	2009	<b>a</b> 603,555		
Total	2010	23,198,284	387,006	_
	2009	22,811,278		

- \*1 Number of buildings included in scope of data may differ by fiscal year due to rebuilding, sale and purchase.
  \*2 Non-recyclable kitchen waste and scraps includes paper and lunch boxes that are not suitable for reuse and are ultimately incinerated.

# Building's effective consumption of water resources

Mitsubishi Estate is working to curb water consumption at its buildings by taking measures to streamline water consumption such as adjusting the amount of water used in toilets and hot-water service rooms. Water consumption totaled 2,726,435 m³ in Mitsubishi Estate's ISO14001-certified buildings, up 1.9% compared to fiscal 2009, and water consumption per unit of floor space was 0.95 m³/m², down 0.03 m³/m² (this is because the water consumption per unit of floor space declined as a result of the ISO14001

certification of a newly built building with lower consumption per unit of floor space). Building on this achievement, the company is working to meet its fiscal 2011 target of reducing water consumption in every building by more than 1.0% from the previous year.

The company is also effectively using reclaimed water by treating used water such as cooling tower blow water and kitchen wastewater and reusing it as toilet flush water. As of March 2011, the Marunouchi Building, Mitsubishi UFJ Trust and Banking Building, Marunouchi Kitaguchi Building, Tokyo Building, Shin-Marunouchi Building, Landmark Tower

Yokohama, Hibiya Kokusai Building, Shin-Aoyama Building, Akasaka Park Building, and Marunouchi Park Building all use reclaimed water, a total of about 511,793 m³ per year, thus helping to conserve water resources.

Water consumption and water consumption per unit of floor space (1,000 m³) in Mitsubishi Estate's ISO14001-certified buildings



\* Number of buildings included in scope of data may differ by fiscal year due to rebuilding, sale and purchase.

### **Fostering Harmony between Nature and Human Society**

## Acquiring FSC-CoC certification

Mitsubishi Estate Housing Components Co., Ltd. (manufacturing, processing and sales of building materials) promotes the use of Japan-grown timber in the structural components of detached houses. This will lead to the appropriate and effective use of Japan's forest resources, which absorb CO<sub>2</sub>.

When procuring Japan-grown timber, the company not only makes sure that the timber has been legally harvested, but also uses timber that has been certified as having been grown in a forest planted according to a sustainable plan. In August 2010, the company obtained the Forest Stewardship Council's chain of custody (CoC) certification, an international standard that sets certified products apart from others in the processing and distribution stages.

In addition, the company is raising the percentage of pre-cut\* timber to improve its yield rate at its processing plants, which means a more efficient use of resources and reduction of waste materials generated at construction sites.

Mitsubishi Estate Housing
Components sells structural plywood
and base material used in wood-frame
construction not only to Mitsubishi
Estate Home Co., Ltd., but also to
customers outside of the Mitsubishi
Estate Group. The company will
continue to promote the use and
application of Japan-grown timber.

\* To finish and process timber needed for construction optimally and effectively.

#### Sustainable 2x4 Homes project to encourage use of Japan-grown timber

Mitsubishi Estate Home Co., Ltd. makes comprehensive proposals to encourage the use of Japan-grown timber by proactively utilizing wood from thinned, small-diameter trees in homes adopting 2x4 construction, which accounts for about 20% of all wood-construction homes. This is intended to expand the base for the use of Japan-grown timber in the field of wood-construction homes overall and enables the company to supply high-quality, long-life wood 2x4 homes that can be used cyclically over the long term. Japan-grown timber is used for

about 35% of the structural materials of these homes, the highest rate in the 2x4 housing industry.

Moreover, the company is pursuing links with the "Experience Nature" project, an initiative implemented by the Mitsubishi Estate Group in Masutomi, Hokuto City in Yamanashi Prefecture, to promote use and application of timber grown in that prefecture. Beginning in August 2011, Japan-grown I-joists and LVL (laminated veneer lumber) material\* using larch trees were adopted, and they will be used in structural plywood in the future, as well to boost the utilization rate to 50%.

\* Both materials are used in major structural components such as the beams and floor framing of wood-construction homes



Japan-grown I-joist and LVL newly adopted

### **Reducing Environmental Impact**

#### Eco-friendly proposals by the Architectural Design and Engineering Business

Mitsubishi Jisho Sekkei Inc., which is responsible for design and project supervision, recommends environmentfriendly technology in the belief that the environmental impact generated by a building during its lifecycle can be reduced effectively at the design stage. In April 2008, the company established the Environmental Technology Committee\* to rapidly and effectively recommend technology and provide information in response to customer requests. This committee also considers technical issues and shares information on reducing environmental impact, such as reducing CO<sub>2</sub> emissions (carbon offset) in building design. In addition, in April 2011 the Environmental Technology Promotion Office was established to design more environmentfriendly buildings and cities.

The company will continue to pursue sustainable architecture and urban development and offer rich and varied designs for secure and comfortable living spaces that also reflect environmental and urban considerations.

\*The Environmental Technology Committee is made up of a chairperson, deputy chairperson, 11 members, and 19 working group members (of which six are also members) and meets several times a year.

## Acquiring environmental certification in the U.S.

The Rockefeller Group, a Mitsubishi Estate subsidiary with headquarters in the U.S., seeks to obtain LEED\* certification for all newly developed buildings. The Group earned Gold status LEED certification in fiscal 2010 for its development of a logistics facility in Georgia for major food products company General Mills. This is the largest facility in the U.S. to receive

Gold status, earned for its energy efficiency and sustainability. The Group is also working to earn certification for its existing buildings and earned LEED certification for its McGraw-Hill Building in New York City. The Group is also endeavoring to improve its Energy Star rating (an energy conservation program) for the Time-Life Building, another New York City property.

\* Leadership in Energy and Environmental Design (LEED), a green building certification system developed by the U.S. Green Building Council



Logistics facility development project for General Mills

### **Increasing Ecological Awareness**

Winner of Minister of the Environment's Prize for Global Warming Prevention Activities in the Environmental Education and Dissemination Category

In December 2010, the Association for Creating Sustainability in Urban Development of the Otemachi, Marunouchi and Yurakucho District (the Ecozzeria Association), of which Mitsubishi Estate serves as the secretariat, won the Minister of the Environment's Fiscal 2010 Prize for Global Warming Prevention Activities in the Environmental Education and Dissemination Category.

The Ministry of the Environment has given this award to an individual or organization that has achieved remarkable results in preventing global warming in December, the month for the prevention of global warming, every year since 1998. This is intended to promote measures for the prevention of global warming. The Ecozzeria Association was recognized for its achievements in raising environmental awareness of urban lifestyles with its Water Sprinkling Project, environmental education program for children, the Marunouchi Morning University, which encourages

a shift to a morning lifestyle to save electricity at night, and information dissemination through its environment portal site.



Receiving Minister of the Environment's Prize for Global Warming Prevention Activities in the Environmental Education and Dissemination Category