### **Environmental Management**

The Mitsubishi Estate Group gives full respect to the global environment in its Mission and believes that it is a critical agenda item for management. In addition, the company's new Medium-Term Management Plan, "Action 2010," launched in February 2008, clearly mandates the company to contribute to society by reducing environmental impact in all aspects of its business.

Together with its customers, Mitsubishi Estate is actively engaged in sustainable urban development, applying its good understanding of climate change issues and playing a constructive role in building a low-carbon, recycling-oriented society.

#### **Basic Environmental Policy**

The Mitsubishi Estate Group has established the Mitsubishi Estate Group Basic Environmental Policy, based on its fundamental mission. This policy mandates environmental conservation activities in terms of a building's entire life cycle, from planning to management through dismantling, and commits the Group to reduce the environmental impact of its business activities in all areas.

#### Mitsubishi Estate Group Basic Environmental Policy

The Mitsubishi Estate Group strives to consider the environment and reduce environmental impact as it works to create a truly meaningful society through its unique style of urban development.

- Observe environmental laws and regulations
  We observe environmental laws and regulations and
  endeavor to protect the environment.
- Promote resource and energy conservation We actively promote the efficient use of resources and energy and use renewable energy.
- Contribute to building a society committed to recycling
  We strive to reduce waste, reuse and recycle at all stages of
  urban development, including planning, development,
  design, construction, management and dismantlement, in
  order to contribute to building a society committed
  to recycling.
- Develop an environmental management system
   We develop an environmental management system to ensure
   continuous improvements to our environmental activities.
- 5. Provide environmental education and awareness programs

We provide environmental education and awareness programs to improve employees' awareness of environmental conservation issues and ensure highly effective environmental activities.

Disclose environmental information
 We disclose the Mitsubishi Estate Group Basic Environmental Policy as well as other environment-related information.

Established on May 1, 2004 Revised on January 1, 2006

## **Operational Framework for Environmental Management**

The Mitsubishi Estate Group has tasked the Environmental Subcommittee with conducting deliberations prior to meetings of the CSR Committee, which discusses the environment and other CSR issues. This subcommittee met in July 2007 and January 2008 to discuss the status of organizations' environmental initiatives and environmental objectives.

In addition, an environment director is appointed 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.

#### 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 (EMS) corresponding to ISO14001 at organizations with relatively small environmental impact. As of April 2008, a total of seven organizations have earned the ISO14001 certification: 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., MEC Building Facilities Co., Ltd., and Hokuryo City Service Co., Ltd.); its Residential Development Group along with its core consolidated subsidiaries; 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., the last two of which are responsible for their own earnings.

The independent EMS is administered primarily for offices at Mitsubishi Estate Co., Ltd. (office activities), Mitsubishi Real Estate Services Co., Ltd., and MEC Information Development Co., Ltd. The figure on the next page shows the status of the environmental management system as of April 2008.

## **Environmental Education and Awareness Programs**

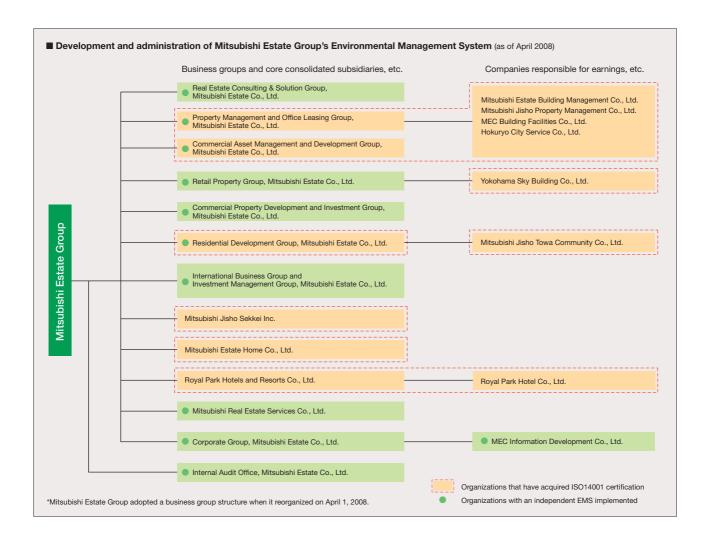
The Mitsubishi Estate Group invited Dr. Mika Takaoka, associate professor at Rikkyo University's College of Business, to give a lecture on the popularization of sustainable consumer behavior in an IT society. Many employees attended this environmental lecture program, which was intended to foster employees' environmental awareness.

In addition, on October 9, 2007 Takejiro Sueyoshi, special advisor to the UNEP Finance Initiatives in the

Asia Pacific Region, was invited to give a lecture to the Group's directors on climate change and the future of corporate management.



Takejiro Sueyoshi's lecture



### **Contributing to the Fight against Global Warming**

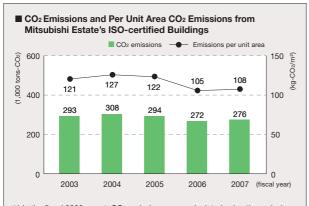
#### **Building Management**

## CO<sub>2</sub> Emissions and Energy Consumption in Buildings

In fiscal 2007, the energy consumption of Mitsubishi Estate's ISO-certified buildings stood at approximately 6,415,000 GJ, and CO<sub>2</sub> emissions\* totaled about 276,000 tons-CO<sub>2</sub>. Compared to fiscal 2006 results, the buildings' energy use decreased by 100,000 GJ, and CO<sub>2</sub> emissions increased by 4,000 tons-CO<sub>2</sub>.

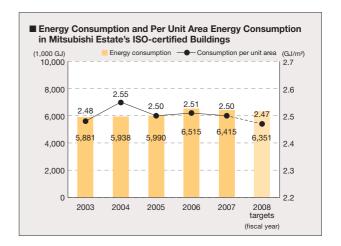
In fiscal 2006, the company had 32 ISO-certified buildings, but in 2007 the number decreased by two with the removal of the Harumi Park Building and the New Harumi Park Building. As a result, energy use and CO<sub>2</sub> emissions decreased compared to fiscal 2006. However, when comparing fiscal 2007 results to fiscal 2006 results for the same 30 buildings, energy use increased 0.08%. In the summer, the company promoted the Cool Biz campaign and other initiatives to meet its target for the building business of a 1.0% decline in energy use in fiscal 2007 from the previous fiscal year. Despite these efforts, however, energy use was almost unchanged as the 2007 summer temperatures were higher and the winter colder than in 2006 (1.5°C higher in August and 1.7°C higher in September, and 1.7°C lower in January and 3.1°C lower in February). When calculated using floor space as the basic unit, energy use decreased from 2.51GJ/m<sup>2</sup> to 2.50GJ/m<sup>2</sup>.

The company will renew its target of reducing energy consumption by 1.0% of fiscal 2007 levels in fiscal 2008, working together with tenants to reduce energy consumption and help to fight global warming.



\*1 In the fiscal 2006 report, CO<sub>2</sub> emissions were calculated using the emissions coefficient of 0.555 (kg-CO<sub>2</sub>/kWh) stipulated in Japan's Law Concerning the Promotion of the Measures to Cope with Global Warming to calculate the CO<sub>2</sub> equivalent. However, in accordance with revisions to this law, CO<sub>2</sub> emissions were calculated to better reflect the actual situation using the emissions coefficients determined for individual electrical power suppliers (0.339 kg-CO<sub>2</sub>/kWh for Tokyo Electric Power in 2007, and the default value of 0.555 kg-CO<sub>2</sub>/kWh for cases in which an emissions coefficient for the electrical power supplier was not available).

\*2 The number of ISO-certified buildings changes depending on the fiscal year due to renovations and sales/purchases.



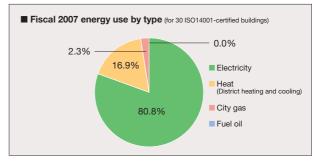
# Working With Tenants to Conserve Energy

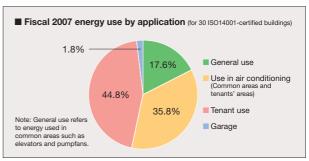
By type, electricity was the energy source used the most in Mitsubishi Estate's 30 ISO-certified buildings,

whereas by application, tenant use accounted for the majority of energy use. Given this, Mitsubishi Estate distributed a pamphlet on energy conservation entitled ECOBLDG STYLE to promote energy conservation initiatives with tenants.



ECOBLDG STYLE





#### **Using Natural Energy**

Mitsubishi Estate has encouraged the use of natural energy by introducing the Green Power Certification System, which supports wind power. In fiscal 2007, wind-power electricity procured through this system totaled 925,000 kWh, which is equivalent to 62.8% of the total electricity (1,472,772 kWh) used in the Mitsubishi Estate offices at its headquarters in the Otemachi Building.

Since April 2007, Mitsubishi Estate has also sponsored the Yokohama Wind Energy Project operated by Yokohama City at Mizuho Pier on the Yokohama

Harbor waterfront.
Power generation in fiscal 2007 (the portion allotted to Mitsubishi Estate) was 101,866 kWh, and was allocated toward Yokohama Landmark Tower's electricity use.



Power-generating windmill operated by the Yokohama Wind Energy Project (rated power output of 1,980 kW)

#### **Initiatives in the Residential Business**

#### Standard Specifications for Environmental Technologies in Condominiums

The following environmental technologies come standard with Mitsubishi Estate's condominiums in the Tokyo metropolitan region

### Standard specifications for environmental technologies

#### Non-CFC heat insulating materials

Mitsubishi Estate uses non-CFC heat-insulating materials by substituting CFCs with carbon dioxide gas, which is used as the foaming agent in the urethane-coated, heat-insulating materials.

### Latent heat-recovery gas-heated hot water supply equipment

Latent heat-recovery gas-heated hot water supply equipment that utilizes energy efficiently is used for hot water supply.

#### • Heat insulation grade: 3 or above

The heat insulation grade of all residences exceeds heat insulation grade 3 of the Japanese Housing Performance Certification System, the new energy conservation standard, in performance (use of double glass, reinforced application of heat insulation materials, etc.).

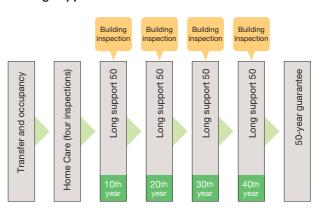
# Formaldehyde absorption and decomposition board Boards that can absorb and break down formaldehyde, which causes sick house syndrome, are used in the walls and ceilings.

#### **Initiatives in Custom-Built Housing Business**

## Mitsubishi Estate Begins Offering Long-Term Guarantee Program

In recognition of the trend toward a lower birthrate and an aging population, Mitsubishi Estate Home Co., Ltd., which runs the Group's custom-built housing business, is working to extend the life of homes in a shift toward a society that prioritizes its existing housing stock. Mitsubishi Estate introduced the Long Support 50 program in May 2008. Building upon its highly-durable Super 2x4 Aerotech housing, this program guarantees the structural durability of a home's major structural components as well as the water resistance of roofs and exteriors for up to 50 years. After regular inspections at four months, one year, two years and seven years, buildings are inspected four times after each ten-year period. By providing suitable maintenance (for a fee) at the right times, highly durable homes are always kept in prime condition, which leads to lower costs over the home's lifecycle.

#### ■ Long support 50



As part of its efforts to reduce energy consumption in its custom-built homes, the company is also working to expand use of Aerotech, a central heating and cooling ventilation system that has been proven to dramatically reduce CO<sub>2</sub> emissions and heating and cooling costs. The company has extended its Aerotech guarantee and the period for free regular inspections from five years to ten years.

Mitsubishi Estate Home is also using Aerotech in its renovation construction. This is an example of

the way in which Mitsubishi Estate Group considers the environment and builds more pleasant, secure homes that last for a lifetime.



### Helping to Build a Society Committed to Recycling

**Initiatives in the Custom-Built Home Business** 

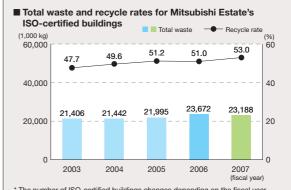
## Japanese Coniferous Trees Used For Structural Plywood in Homes

Mitsubishi Estate Home, which runs the Group's custom-built home business, began using structural plywood made of 100% domestically grown coniferous trees as its primary material for floors, walls and roofs in May 2008. Japan's forests are maintained with the necessary logging and replanting, and the company is thus committed to effectively using the raw timber (Sakhalin fir and Japanese larch from Hokkaido) that is logged. This has become the standard specification for custom-built homes. By promoting the use of structural plywood made of Japan's conifers in this way, urban development helps to maintain the health of Japan's forests. Moreover, softwood plywood used for walls is stronger than its imported counterpart, and softwood plywood used for floor and roof bases has improved durability.

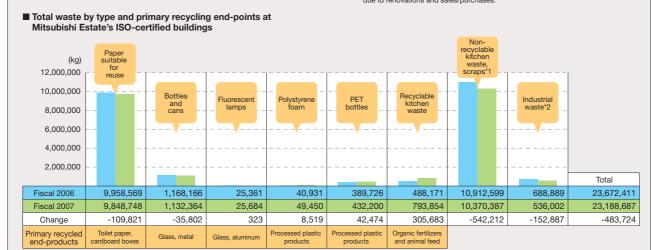
**Recycling Initiatives in Building Management** 

### **Efforts to Improve Recycle Rate** for Waste

Mitsubishi Estate strives to improve the waste recycling rate while managing and operating its buildings. Its efforts include educating tenants on how to sort waste, as well as recycling kitchen waste as pet food and fertilizer.



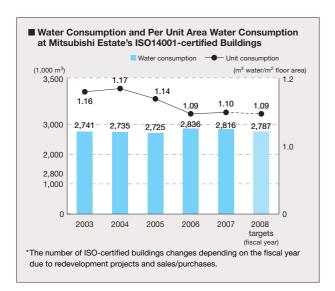
\* The number of ISO-certified buildings changes depending on the fiscal year due to renovations and sales/purchases.



<sup>\*1</sup> Non-recyclable kitchen waste and scraps includes paper and lunch boxes that are not suitable for reuse, and are ultimately incinerated.
\*2 Industrial waste includes plastic products, metal scraps, ceramics and plastics that are ultimately buried in landfill.

#### **Efficient Use of Water Resources**

Mitsubishi Estate considers measures to curb its buildings' water use such as controlling the volume of water used in toilets and hot water supply rooms and other endeavors to rationalize use. In fiscal 2007, water use at Mitsubishi Estate's ISO14001-certified buildings totaled about 2,816,000 m<sup>3</sup>, or 1.10 m<sup>3</sup> per square meter of floor space. This is a 0.7% decrease in total volume compared to fiscal 2006 results, and an increase of 0.01 m<sup>3</sup> per square meter of floor area. In 2007 the number of ISO-certified buildings decreased by two with the elimination of Harumi Park Building and New Harumi Park Building, so this accounted for some of the decreased water use. When comparing the same 30 buildings, water consumption was shown to have decreased by 0.1%, falling short of the fiscal 2007 goal of a 1.0% reduction compared to fiscal 2006. Mitsubishi Estate will continue to make improvements.



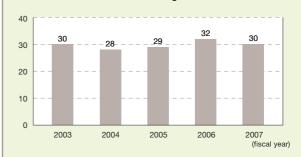
#### **Reuse of Wastewater**

Mitsubishi Estate reuses wastewater. For example, cooling tower blow water and kitchen wastewater can be purified and reused as toilet flush water. As of March 2008, the Landmark Tower Yokohama, Akasaka Park Building, Marunouchi Building, Mitsubishi UFJ Trust and Banking Building, Marunouchi Kitaguchi Building, Tokyo Building, Shin-Aoyama Building, Hibiya Kokusai Building, Shin-Marunouchi Building, and Hokkaido Building all reuse waste water, a total of about 520,041 m³ per year, thus helping to conserve water resources.

## Number of ISO-certified buildings used to calculate figures

ISO14001-certified buildings are used to calculate environmental performance of Mitsubishi Estate's buildings, and as a result, the number of buildings differs depending on the fiscal year. For convenience, comparable per unit area figures have also been calculated.

#### ■ Number of ISO-certified Buildings



■ ISO14001-certified Buildings in Fiscal 2007 (30 Buildings) Total floor area under management: 2,566,063.14m<sup>2</sup>

Marunouchi-Nakadori Building Mitsubishi Building Togin Building Shin-Tokvo Building Fuji Building Shin-Kokusai Building Kokusai Building Shin-Yurakucho Building Yurakucho Building Hibiya Kokusai Building Nippon Building

Marunouchi 2-chome Building\*

Nippon Steel Corporation Building Otemachi Building Shin-Otemachi Building JFE Shoji Building

Aoyama Building Mita Kokusai Building Shin-Aoyama Building Akasaka Park Building Marunouchi Building Mitsubishi UFJ Trust and Banking Buildina Marunouchi Kitaguchi Building

Tokyo Building Hokkaido Buildina Kakyoin Square

The Landmark Tower Yokohama Dai Nagoya Building Umeda Shinmichi Building Hiroshima Park Building

- \*The Ministry of Education, Culture, Sports, Science and Technology Building was renamed the Marunouchi 2-chome Building in January 2008.
- \*The Shin Marunouchi Building, which opened in April 2007, did not operate during the full fiscal year and is thus not included in the ISO-certified buildings for the year.

### **Efforts to Reduce Environmental Impact**

**Initiatives in Building Planning and Development** 

## **Environmentally-Conscious Building Planning and Development**

In constructing development projects, Mitsubishi Estate's Commercial Asset Management and Development Group involves all stakeholders in a cooperative system of business owners, architects and construction workers to ensure that plans and designs minimize the environmental impact after completion and that the environment is considered to the maximum extent possible during construction.

Efforts to reduce environmental impact at the planning development stage, such as energy conservation measures (adoption of district heating and cooling systems, efficient use of unused energy, adoption of highly efficient equipment), resources recycling and waste reduction (collection of separated garbage, use of recycled materials, reuse of waste and water resources), creation of green spaces and prevention of heat islands (roof and wall greenery, cool roofs, water-retaining pavement), are carried out in building management after completion using an integrated system.

As a developer striving to be the choice of an eco-friendly society, Mitsubishi Estate's Commercial Asset Management and Development Group is committed to sustainable urban development.

#### **Initiatives in Design Management**

## Proposals Using Environmental Technologies

Mitsubishi Jisho Sekkei Inc., which is in charge of design and construction management, considers it vital to conserve the global environment and is proactively addressing environmental issues in the conviction that the environmental impact generated during a building's lifecycle can be reduced at the planning stage.

In particular, environmental technology proposals to clients are at the core of the firm's ISO14001 environmental management system.

### Environmental technologies recommended by Mitsubishi Jisho Sekke

- Technology for long building life
   Building design with greater flexibility for long-term use, seismic reinforcement, etc.
- Technology conducive to living in harmony with nature and environmental protection

Greening the roof and walls, permeable pavement, biotopes, preservation of historical buildings, etc.

- Technology facilitating energy conservation Natural light, natural ventilation, night purge, solar power generation, thermal storage systems, building energy management systems (BEMS), more efficient lighting and air conditioning systems, air-flow windows, district heating and
- Technology facilitating resource conservation and
  waste reduction.

Reusable materials, reuse of rain water, resource-conserving technology such as unit construction for toilets, garbage disposal systems, etc.

#### **Other Efforts**

#### Removing Asbestos from Existing Buildings

Mitsubishi Estate conducts surveys on the use of asbestos and has provided all tenants with information on the status of asbestos use.

In accordance with the 2004 revision of Japan's Guidelines on Measures for Asbestos in Existing Buildings, the company implements renovations and manages asbestos by conducting regular inspections and monitoring ambient air concentration.

In 2007, the company conducted on-site visual inspections of 14 buildings and took countermeasures at 12 buildings. Inspections and surveys have verified that risk has been neutralized in all areas in which asbestos was used.

In February 2008, the company began surveying an additional three types of asbestos, including tremolite, an asbestos material that was recently confirmed to have been used at one point in Japan.

#### **Exhibit at Eco-Products 2007**

The Mitsubishi Estate Group put on an exhibit at Eco-Products 2007, Japan's largest environmental exhibition, in December 2007 at the Tokyo Big Sight. The exhibit included a video-aided presentation of the company's environmental programs in the Otemachi, Marunouchi and Yurakucho district, as well as initiatives at its condominiums, custom-built housing business and design and construction management business. The exhibit welcomed many visitors and served as an excellent opportunity for interaction and communication



Eco-Products 2007, Mitsubishi Estate Group booth

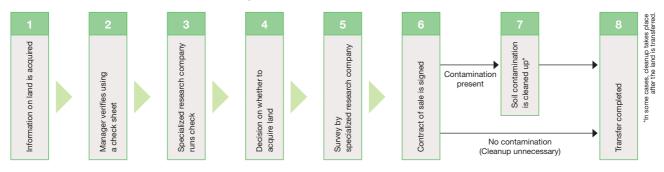
### Soil Contamination Countermeasures at Condominiums

Mitsubishi Estate's Residential Development Group pre-surveys the soil of all land acquired for development to check for possible contamination, and takes whatever measures are needed.

Before a site is acquired, the manager uses a check sheet to examine it (step 2 below), and a specialized research company examines the site (step 3 below). A survey report from the specialized research company must be attached and submitted when acquiring land (step 4 below), and after a decision is made on the land acquisition, a detailed survey is carried out by the specialized research company regardless of whether contamination risks are present (step 5 below).

When the contract of sale is signed, the seller's responsibility and obligations for any contamination are specified (step 6 below), and ameliorative measures are implemented when necessary.

#### ■ Process from Soil Contamination Survey to Transfer of Land



**Feature** 

### **Stakeholder Meetings**

### **Environmental initiatives and Mitsubishi Estate's** social responsibility

The Mitsubishi Estate Group is committed to developing environmental strategies befitting a comprehensive real estate company. The Group is determined to provide eco-friendly products and services to society.

In the residential business, the company is moving ahead with environmental initiatives such as enhancing the heat insulation properties of its buildings. However, customers today still tend to prioritize comfort and convenience over pure environmental performance. Given that the environment is not yet the highest priority for many customers, the Group held a stakeholders meeting to get input on how it can still find ways to provide more eco-friendly homes.



Board Member, Nippon Association of Consumer Specialists

Kikuko Tatsumi (moderator)

■ Time and place

January 15, 2008 (Tuesday) 15:00-18:00

Senior Analyst, Management Strategy Research Department, Daiwa Institute of Research Ltd.

Hiroo Garden Forest Gallery (1 Minami Aoyama, Minato-ku, Tokyo)

Members (position and office current as of meeting date)

Meeting themes [1] Environmental initiatives and

Mitsubishi Estate's social responsibility

environmentally friendly products

and services in the housing sector

Do eco-friendly products sell?

Market assessment of costs of environmental accommodations.

What type of eco-friendly products

do customers choose?

[2] Working to popularize

in particular

#### Nobuo Taniquchi

Deputy Director, Environmental Policy Division, Bureau of Environment, Tokyo Metropolitan Government

#### Kiyotaka Nakanishi

Senior Manager, EcoManagement Forum, and Editor of Nikkei Ecology, Nikkei Business Publications Inc.

#### Masayo Hasegawa

General Manager, CSR Dept., CSR & Environmental Affairs Div., Toyota Motor Corporation

Atsuo Kyono, General Manager, Residential Development Promotion Department, Mitsubishi Estate Co., Ltd.

Saburo Nakata, contracted employee in the Residential Development Promotion Department, Mitsubishi Estate Co., Ltd.

Shinichi Hirao, General Manager, Residential Design Planning and Marketing Department, Mitsubishi Estate Co., Ltd.

Makoto Koyasu, Executive Officer, Mitsubishi Estate Home Co., Ltd. Tomonori Uegaki, General Manager, CSR Department, Mitsubishi Estate Co., Ltd.

### **Excerpts of opinions**



Tatsumi: Mitsubishi Estate must provide information to help clients consider the whole building lifecycle when buying homes. Homes have a major environmental impact. Knowing that our homes are not hurting the environment with their CO2 emissions would be reassuring, and we would be even happier if the homes helped our lifestyles to reduce environmental impact, as well.



Taniquchi: This is all about how to capture a generation's demands, and not harming the environment is at the heart of this. Energy conservation alone is not enough, and there is a call for plans combining both passive and active technologies. You should set higher targets.



Hasegawa: There isn't just one answer. Toyota is not focusing exclusively on hybrid cars, but is trying to offer a variety of models to meet diverse needs. One idea would be for Mitsubishi Estate to build the ultimate ecocondominium reflecting the views of environmentalists



using air conditioners indiscriminately. I myself live in a condominium, and it is often the case that we cannot replace the equipment installed in them at will. I would like to see initial designs that are more eco-friendly.



Nakanishi: In condominium sales there is a need to offer more practical lifestyle proposals, rather than something distant from real life. Also, condominiums incorporating biodiversity plans would be a good idea. This can be done if conditions are met in light of customer needs



We have been supplying comfortable, high-quality homes that are also eco-friendly, but this meeting shows that we need to deepen our understanding of changes in clients' environmental awareness and more actively publicize our initiatives. In light of the opinions provided, we have started to develop a system for researching eco-friendly housing design. Atsuo Kyono, General Manager, Residential Development Planning